PGDM/PGDM(IB), 2013-15
Managing WorldClass Operations
DM-442/IB-414
Trimester-IV, End-Term Examination: September 2014

Time allowed: 2Hrs 30 Min. **Max Marks: 50**

Roll No

Instructions: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work, please use answer sheet.
Closed Book System
Use of calculators is permitted

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 Marks each	2*10 = 20
C	Compulsory Case Study	15 Marks	15
		Total Marks	**50**

Section A

Q1. Discuss Enablers under EFQM.

Q2. Schonberger interprets performance excellence in words *citius, altius, forties.* Discuss.

Q3. Discuss importance of Results Triad under Malcolm Framework'?

Q4. Differentiate Effectiveness from Efficiency in a business organization.

Q5. NPD is considered vital for performance in world class operations. Discuss.

Section B

Q1. Werbach refers Darwin that species survive on principle of 'Diversify across generations' and recommends that business organizations should follow the nature. Please illustrate with five examples as to how organizations can survive through 'diversity'. (10 Marks)

Q2. You have recently joined Weston manufacturing household electrical Appliances(mixies grinders, toasters, electric irons, grillers etc.) as its General Manager-Quality. The market perceives its products to be of poor quality . Please draw a programme of improving quality. (10 Marks)

Q3. Leadership in an organization holds key for an organization to become world class. Discuss major areas as how do senior leaders lead a business organization to achieve excellence .

(10 Marks)

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Section C:
Case: Grameen Danone Foods Ltd.(GDFL)

Franck Riboud, MD, Group Danone and Muhammad Yunus, Promoter and Founder of Grameen, Nobel Laureate, met in Paris in October 2005 to explore possibilities of working together on a social business in Bangladesh. The synergy of thoughts between the two led to creation of Grameen Danone Foods Ltd. GDFL was designed as a social business joint venture, to be the first in a series of social business initiatives. Mohd. Yunus terms social business enterprise as ,

'Social benefit maximizing kind businesses which are created to do good to people , not paying any attention to making personal gain'

Mission: GDFL architectured its mission as, *'Reduce poverty by a unique proximity business model that brings healthy nutrition to the D and E class'.*

Objectives: GDFL adopted the following four objectives:

1. To bring health through nutrition at very affordable price for all Bangladeshi children
2. To improve living conditions of the poorest of the community by involving them in all stages of the business model (supply, production. sales), creating jobs and improving local competencies
3. To preserve non-renewable resources as much as possible
4. To be profitable to ensure economic sustainability.

Yoghurt: an obvious choice:
Malnutrition is the bane of developing economies. The *' mishti doi' (sweetened yoghurt)* which is an all time favourite with Bangla speaking people, both as a food item as also a poor man's dessert, made nutritious and made available at affordable prices to the poor, and creating avenues for employment suggested a plausible solution. GDFL chose the name of Shokti Doi (Energy Yoghurt) to be developed as a brand.

GDFL Operations

The Product:
The yoghurt was to be produced from fresh and pure whole-cream cow's milk, containing an average of 3.5 percent fat, and by additives such as corn starch, date-molasses, sugar and micro-nutrients as vitamins, iron, protein, iodine, zinc, calcium etc. Vitamin A was added as it was beneficial to the eyes, while iodine helped maintain normal thyroid function. A single 80 gram cup provided 30% of a child's daily requirement of vitamins, iron, zinc, and iodine.

The Plant
The first plant set up at Bogra, 250KM north of Dhaka, capital of Bangladesh started production from Feb.' 07. The factory has a milk receiving centre of capacity 6000 liters per day producing 3000 kilograms of yoghurt. The plant is designed to produce 83,000 cups per day. The plant was targeted to reach increased capacity of 10,000 kg. of yoghurt per day by the third year of operations. It has facilities of mixing, fermentation, filling, packaging, boiler, refrigeration

equipment, gas generator, and cold room along with supporting facilities of a laboratory, utilities, waste water and effluent treatment plant, income building and security arrangements. It uses technology which can be operated by local low skills. The plant is operated by a total of 35 staff.

The plant uses solar panels for its energy requirements. A bio-gas plant supplies energy to meet natural gas demand. The yoghurt is packed in containers made out of cornstarch, which is bio-degradable. The plant has its arrangements for recycling used containers. The plant meets its requirements of water from harvesting rain water.

Marketing

At the start, all the street beggars, numbering around 200 at Bogra were invited to be vendors. They gladly turned up to work on commission of 10% to become useful members of the society standing on their own feet. No one at the world level had ever thought of such an initiative to rehabilitate this section of society. The nations had always thought of them as vermin to be sent to jails or beggar homes.

Further, a unique marketing approach was designed to create easy access to the targeted consumers as well as to generate job opportunities. The consumers, the young poverty driven children were in the villages living in thatched huts. Shakti Doi had to reach their door steps. GDFL decided to establish two basic channels. An innovative scheme was designed to involve rural women folk to reach the customers. As per this scheme, man-pulled rickshaws carry Shakti Doi in ice-boxes to protect the product from the sweltering heat of Bangladesh, to Grameen Ladies(GL), ordinary village women folk at their homes, who in turn carry the cups in insulated bags for door to door sales on a commission basis. The total area is divided into blocks of villages. Each GL, dressed in a typical Bangladeshi white sari is expected to sell 100 cups a day, five days a week at a commission one taka per cup and thus make 2000 taka per month. The number of G.L has gone up gradually from 29 in 2007, to 270 in March 2008, and reaching a high figure of 900 ladies.

GDFL also organized a second channel of small shops to sell Shokti Doi but at a reduced commission of 0.5 taka per cup. GDFL (2010) refers to record sale of 95,000 units per day in April 2010

Performance

In line with objectives of an affordable price, Shokti Doi initially was marked in a cup of 80gms at 5 taka per cup to GL(6 taka for a consumer), at 'no loss'. It was an instant success. April 08 brought the first crisis, when the milk prices rose sharply by 100 percent. GDFL reacted to increase prices to 8tk per cup. The demand collapsed as the poor could not afford to pay. GDFL responded to reduce the cup to 60gm and bring down the price to 6tk . It retained the original 30% RDA in micronutrients in the smaller cup. To offset the rising cost of production, GDFL took to expansion of both production and market. It sold 80 gm cup at 12 tk in Dhaka, to compensate loss in rural market. It launched valorized mango Shokti at premium price of 8 tk for 60gm and 12 tk for 80g- for those who could afford to pay.

The cups sold per day went up to 86,250 in 2009 from 35,319 per day as recorded in 2008. Table 1 depicts the key performance figures for period 2007 to 2010. For profitable sales GDFL expanded its sales to more city markets as Rajshahi and Pabna, 50 km from the plant.

Table 1: Key Results

Item	2007	2008	2009	2010
Sales in Million tk	4.88	12,7	80,1	191,3
Cups sold/day	3414	6532	35319	86250

GDFL and its Stakeholders

Consumers:

Poor young children suffering from malnutrition in rural Bangladesh are the prime consumers of GDFL product. Cups sold per day shot up ten times just in two years and almost thirty times in three years. Shokti Doi was introduced in urban areas of Dhaka as well. Simultaneously, it also introduced the other varieties without micro-nutrients at higher prices to compensate for the low prices on Shokti Doi.

Employees:

The first set comprises of employees work in the plant. The yoghurt making technology is not labour intensive. The process is streamlined. Local competencies and low skills suffice to operate the plant. The larger set of employees is involved in marketing. It is the village ladies, who run the house, who need to be supported in developing life standards. It is the village ladies who understand the consequences of poverty, hunger, malnutrition disease, mental retardation and young dying in their laps. Village ladies accounted for 97 percent of people who came forward to ask for micro finance under Grameen Bank. The default in repayments was the lowest in case of village ladies. GDFL took the route of involving these simple ladies from the villages and offered lucrative incentive of one taka per cup sold as against 0.5 taka per cup as offered to a retail store

Suppliers

Milk, which comprises almost 65 percent of the cost, as also date molasses are from local sources. The milk supplies came from 370 small local farmers who already had an experience of being borrowers of microcredit from the Grameen Bank. The milk suppliers today stand on their own feet having been first helped by Grameen Bank to start business and now as suppliers of milk to GDFL.

Investors

It is a joint venture. Shareholding of GDFL in April 2010 comprises of:

- Grameen for 87,500,000tk collectively through its four subsidiaries: Grameen Business Promotion Services, Grameen Welfare, Grameen Energy and Grameen Telecom, and
- Danone Communities for 50, 000,000 tk and
- Danone Asia Pte Ltd. For 37,500,000 tk.

The board chaired by Prof. Mohd Yonus has three representatives from Grameen and four from Danone. It meets four times a year. It has not as yet reached the breakeven. A project of this type needs brand to be established and customer loyalty earned. Low technology has in-built low cost of production. Besides, the social commitment calls for low margins. Both of these compulsions call for high volumes of production and implied market. It is therefore apparent that a product of this type has low short term returns and a longer pay- back period. The future is promising as can be seen in the projections.

Society

GDFL produces nutritious food for the society at affordable cost. The entire value chain from procurement, processing and distribution has benefited the society to generate employment. The citizens are not beggars waiting for corruption infested state subsidy or road digging.They are proud citizens to stand on their own feet. GDFL has generated about 1600 jobs . Conscious of environment, it has adopted use of solar energy in the plant for heating water required for cleaning and for inputs to the boilers. The *mishti doi* cups are made of biodegradable corn.

The Challenges ahead

Risinig prices of inputs:

It hopes to reach breakeven in 2013. The principle reason is the steep rise in basic milk prices to have raised the cost of production. Unfortunately, the inflation in poor and developing countries does not mean proportionate rise in income of a consumer. The poor becomes poorer; the rich becomes richer. In such situations increase in prices of Shokti Doi to compensate for the rising milk cost will not allow meeting the social objectives of providing solution to malnutrition

Competition:

Yogurt making is not a high technology product. Every single home in the Indian sub-continent knows it since ages. Innovations such as fruit yogurts, flavoured yogurts are difficult to copy. When GDFL enters urban and the markets of affluent customers to make money to compensate for the low prices of Shokti Doi, a large number of existing local yogurts makers , are sure to enter and provide a tough competition.

Cost of production:

Yogurt and its derivatives are perishable and low shelf life items. Therefore, these have to reach consumers in time and get consumed. This needs investment in creating proper storage and transportation. Alternatively, a large number of small plants near areas of consumption will bring down the costs of storage and transportation. Other cost reductions are in areas of plant operations. It needs chilling centers for collection and preservation of milk to reduce the cost of milk.

Future Projections

GDFL provides projections till 2015 asunder:

Year	2009	2010	2011	2012	2013	2014	20 15
Volume in tons	696	1727	4400	6600	9600	11800	15150
% growth		148%	155%	50%	45%	23%	28%

- Number of sales outlets will go up from 8000 in 2010 to 22000 in 2015
- Shokti ladies will increase from 1500 in 2010 to 6500in 2015
- 3 new factories:- 7000 tons capacity near Dhaka, 9500 tons by 2013 and 15000 tons by 2015
- Milk sourcing through 9 chilling centers by 2015 creating 1000 small milk producers
- Capacity of cold chain distribution - for instance by going from 3 trucks in 2010 to 9 trucks in 2015 for urban distribution.

Questions:

1. Can GDFL be termed as a WCO? Identify parameters and discuss ?
2. How can GDFL reach economic sustainability while keeping to its promise of societal welfare.
3. Indentify areas where s GDFL approached issues of environmental sustainability?

(5,5,5 Marks)