Report On

Dairy Milk Collection & Food Processing

By

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An internship report submitted to the BRAC Institute of Governance and Development]in partial fulfillment of the requirements for the degree of MPSM

BRAC Institute of Governance and Development Brac University Spring 2021

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Declaration

It is hereby declare that

- The report submitted is my/our own original work while completing degree at Brac University.
- 2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
- 3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
- 4. I/We have acknowledged all main sources of help.

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Letter of Transmittal

Muhammad Azizur Rahman

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66 Mohakhali, Dhaka-1212

Subject: Submission of internship/practicum report on A study on "Ensuring the

sustainability of Brac Dairy in pandemic situations through risk identification

and advance planning of Strategic and leverage raw materials procurement of

BRAC Dairy & Food"

Dear Sir,

I would like to declare that I have completed my report on *Ensuring the sustainability of Brac Dairy in pandemic situations through risk identification and advance planning of Strategic and leverage raw materials procurement of BRAC Dairy &*

Food. It was a great opportunity to apply my academic knowledge in my professional field. The report was prepared based on my last six years work experience, practical knowledge, academic knowledge and research.

I think the report will give you a short overview on the subject which will also show that I also have gained a valuable information and experience through this report under your insightful supervision.

I have tried my best to prepare the report based on the selected topic and I am also little bit doubt how well I have completed the report.

Thanks a lot for motivating me to do the writing and requesting to accept the report.

Sincerely Yours

Signature

Md. Shohel Rana Student ID: 19382029 BRAC University 66, Mohakhali, Dhaka 1212

Non-Disclosure Agreement

This nondisclosure agreement (the "agreement") come into by and between your principle Md. Shohel Rana, Designation: Asst. Manager, Procurement, Procurement Department, BRAC Dairy & Food Project with BRAC University, located at 66 Mohakhali, Dhaka-1212, Bangladesh for preventing the unauthorized disclosure of confidential information as defined below.

The parties agree to enter into a confidential relationship with respect to the disclosure of certain proprietary and confidential information.

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DISCLOSING PARTY

Signature

Typed or Printed Name: Md. Shohel Rana, Date: 09.09.2021 RECEIVING PARTY

Signature...... date...... Typed or Printed Name date.....

Acknowledgement

First of all, I would like to express my gratitude to almighty Allah for helping me to complete the report on "Dairy Milk Collection and Food Processing" and the scope is " *Ensuring the sustainability of Brac Dairy in pandemic situations through risk identification and advance planning of Strategic and leverage raw materials procurement.*"

Successfully completion of any type of project requires helps from number of persons. I have also taken help from different people to prepare this report. Now there is a little effort to show my deep gratitude to that helpful person.

I convey my sincere gratitude to my academic supervisor Muhammad Azizur Rahman, faculty BRAC University for giving me to all the people that were involved both directly and indirectly to prepare the report. I apologize to the people whose names that I haven't mentioned and their contribution also highly appreciated by me.

I am also grateful to my department head & work place supervisor Nahid Parveen.

She helped me a lot to prepare the report.

Finally, my sincere gratitude to my family and friends as well the batch mates for sharing me the thoughts and giving me the moral support during the report writing.

Sincerely Yours

Md. Shohel Rana ID: 19382029 BRAC University 66 Mohakhali, Dhaka-1212

Executive Summary

Supply chain is the whole system of raw materials sourcing to reach it at customer end. From the beginning steps to sourcing of raw materials or services to the final user or customers. It includes all the activities, process, information, transformation, logistics everything.

And the sustainability of supply chain management begins the awareness of a company environmental, social, economical, healthy & matured labor and such as. The process should involve in everything from a warehouse source of power to the transportation of goods and beyond.

In this study I have discussed about the dairy sectors, its raw and packaging materials reason of crisis, planning for the Strategic, critical, leverage and other items. How to identify the risk of SCM during the pandemic and also how to mitigate the risks.

We can find the discussion of sustainability of a dairy firm during the global crisis. How to support the local agro business and the poor farmers.

I have shared some finding and based on the overall discussion also recommend some actions plan that will help any organization as well the dairy firms keep sustain during any situations.

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List of Acronyms

SCM	Supply Chain Management
BDFP	BRAC Dairy & Food Project
ERP	Enterprise Resource Planning
JIT	Just on Time

Chapter 1

Introduction

1.1 Back ground of the Study & Introduction of Supply Chain

During the covid situation the world is facing tremendous disruption of all raw & packaging materials. We all are concerned about the smooth operation of the supply chain of all sectors. All the procurement staffs, teams are working for risk identification, risk mitigation, remapping the supply chain networks also updating the data base for response in the crisis. The overall supply chain is driven with a good planning. So, the good planning helps to achieve the strategic fit.

This research will help anyone to understand the supply chain management during the crisis and the best possible ways to survive the stages.

1.2 Importance of the Study for BDFP

Brac Dairy and Food Project is one of the largest dairy milk collection and processing organization in Bangladesh. It works for the farmers and the rural people. Recently all the global dairy sectors are disrupted due to the covid 19. Demand and supply are also hampered. Due to reduction of dairy products consumption globally for lockdown of all hotels and restaurants. Farmers are still facing the same disruption. Besides, dairy milk collection and processing organizations are also facing raw milk supply shortage from the farmers last few months. Lots of farmers closed their farm due to cattle feed high price, lack of green grasses and other feed and most importantly low price of raw milk and less logistics and preservation facility in the remote areas.

In this situation the study is very much important for BDFP as well the dairy manufacturing organization.

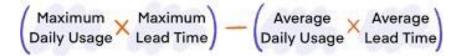
To overcome situation we may suggest some actions that may help to settle the disruption and streamline the supply chain.

Prepare a backup plan for emergency: No operation goes without any disruption or any risks. For the SCM also some probable risk, uncertainty, crisis may happen in any stage of the SCM operation. So, it's better to have a backup plan for each operation. If plan A fails then we may use plan B or C.

Enough Safety Stock: The most important thing of any manufacturing organization is Raw & Packaging materials. A smart supply chain professional always keep safety stock of all leverage, strategic, non- critical & bottleneck items. Especially during the crisis period.

To identify the optimal label of safety stock BDFP also use the basic rules as calculate the any items maximum daily use and multiple the maximum lead minus Average daily use multiple the average lead time.

Safety Stock Formula



BDFP maintains a safety stock and also reorder level calculation changes as follows

Reorder Level = Average Demand × Lead Time + Safety Stock

We know safety stock is a burden for any organization cause its hold the capital. So, if any organization can maintain the JIT it will be the best way but in practical it's not possible in all sectors and for all items.

Besides, our store manages also do some panning with his practical experience and also do coordination meeting with the entire cross functional team based on seasonal impact, crisis mitigation to meet the optimal label of stock and prevent stock out.

Alternative Suppliers and Sources: It is also important to have two or more supplier for all raw and packaging materials. Any can happen at the suppliers end like suppliers raw materials crisis, global impact, seasonal impact, environmental impact, fire attack or others.

BDFP always enlisted minimum three suppliers for all raw and packaging materials. A standard price is used to set for all items and rationally issuing PO to all. So, if any supplier faced difficulties to supply the alternative supplier will support the smooth supply chain.

Example for Packaging: We have developed Shajib Group (Hashem Food) as our u-Straw pipe supplier. Our another vendor is RFL. When Hashem Food factory totally burnt and the all productions stopped since then. If we don't have alternative supplier we had to face Straw pipe shortage.

Example for Raw Materials: BDFP produce Mango and Strawberry drink from concentrate which are imported from Orana India. But last month due to shipment crisis the raw materials been stock out. As Alternative plan BDFP collected mango pulp from Vegan agro to produce mango and strawberry drink.

Analysis for Risk Identification & Mitigation: A good organization should have a risk identification & risk mitigation team. They have also a strategic planning team as well. The team will analysis the Risk and take preventive actions.

1.2.1 Research questions & feedback

To know the dairy industry raw and packaging materials as well the global shipping line condition during the pandemic situation I have done a survey through google form and the summary as below.

Timest amp	Username	Do you think Dairy industry need more research & developmen t	Milk & Milk Product consump tion trends	Milk & Milk Product price trends	Raw Milk Supp ly	Lockd own impac t on Dairy sector	Lockd own impac t on Dairy Raw & packa ging materi als	Milk & Milk Product consum ption trends	Milk & Milk Prod uct price tren ds	Raw Milk Supp Iy	Lockd own impac t on Dairy sector
2021/0 9/07 4:08:30 PM GMT+6	jahangir01 982@gmail .com	Available but need more analysis	Slightly growing	Slightly growin g	Sligh tly grow ing	Badly	Badly	Slightly growing	Sligh tly grow ing	Sligh tly grow ing	Badly
2021/0 9/09 10:43:3 3 AM GMT+6	imran2611 91@gmail. com	Available but need more analysis	Slightly growing	Rapidly growin g up	Sligh tly grow ing	Slightl Y	Slightl y	Slightly growing	Rapi dly grow ing up	Sligh tly grow ing	Slightl Y
2021/0 9/13 12:43:1 8 PM GMT+6	cosmic.cti @gmail.co m	Badly Needed	Rapidly growing up	Rapidly growin g up	Rapi dly grow ing up	Very badly	Very badly	Rapidly growing up	Rapi dly grow ing up	Rapi dly grow ing up	Very badly
2021/0 9/14 12:57:5 6 PM GMT+6	sakib2say @gmail.co m	Badly Needed	Slightly growing	Rapidly growin g up	Sligh tly grow ing	Slightl Y	Badly	Slightly growing	Rapi dly grow ing up	Sligh tly grow ing	Slightl Y
2021/0 9/14 1:03:10 PM GMT+6	hafizur.rah m@brac.n et	Slightly Needed	Slightly growing	Slightly growin g	Sligh tly grow ing	Slightl Y	Very badly	Slightly growing	Sligh tly grow ing	Sligh tly grow ing	Badly

2021/0 9/14 1:22:17 PM GMT+6	kamrul_tti @yahoo.co m	Badly Needed	Rapidly growing up	Rapidly growin g up	Stabl e	Badly	Slightl Y	Rapidly growing up	Rapi dly grow ing up	Sligh tly grow ing	Badly
2021/0					_				Rapi	Rapi	
9/14					Gro				dly	dly	
1:52:49	halim.rome		Rapidly	Rapidly	wing	No		Rapidly	grow	grow	No
PM	l@gmail.co	Badly	growing	growin	dow	impac	Slightl	growing	ing	ing	impac
GMT+6	m	Needed	ир	g up	n	t	У	ир	up	up	t

In this table we can see that the dairy products consumption trend, raw materials supply condition, lockdown impact and others parameters. We can get a short view of dairy industry trend and covid impact also.

1.3 Objective of the Study

The overall objective of the plan is to look into how we can Ensure the sustainability of Brac Dairy in the pandemic situations through risk indentification and advance planning of Strtegic and Leverage raw materials procurement of BRAC Dairy & Food

1.4 Scope of the Study

Therefore I will highlight and discuss the following theoretical aspects and then establish through my on-field study how we can help overcome the disruption through advance planning. **To increase the overall value:** The study will help the overall value generated, the more the value increased the more the supply chain will be successful.

Cost & quality improvement: The study will help to improve the quality by minimizing the cost. Here one can improve the organization supply chain.

Risk Identification of Dairy & Food organization: The study will help to identify the risk of any dairy and food processing organization. Here we discussed BRAC Dairy & Food projects leverage items, its risk, risk mitigation. How the organization survive the covid situation.

Better demand planning and its benefit: A better planning can make an organization successful specially to survive in the critical situation under Force Majeure like covid or seasonal impact.

Benefits of identifying of leverage items and how to plan for smooth SCM: The study will help how to identify the leverage items of an organization. How to make a plan to survive the crisis moment with a good planning.

Inventory planning: Inventory planning is one of the core part of SCM. During the covid situation very much important cause globally all raw materials demand and supply is now unpredictable.

Manufacturing, warehousing, packaging, IT, logistics, etc.

Raw Milk Collection: In this study the major row material is Raw Milk. It also the leverage items of BDFP. Bangladesh has milk production of 9.92 million tons in 2018 (DLS, 2019). Recently it's been increased little bit but not enough to meet the local market demand. That's why we have to import huge amount of powder milk, Ghee, Butter and other dairy products. So, the more you can do efficient planning the more smoothly run the supply chain.

Manufacturing: Manufacturing is the heart of any organization, it creates the value of the supply chain inputs. In this study it also very much important cause after collecting the raw milk from the local farmers it needs to be pasteurized then go for production of others items.

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Transportation & Logistics: Transportation & logistics is an important part for moving goods and raw materials from one location to another. In this study, after collecting the raw milk its need urgently to chill then it brings to Dhaka-Gazipur factory then after value addition they distributed all over the country.

Packaging: Packaging is very much important part of Supply Chain. A good packaging can reach very easily to the remote area of the world. Sometimes the products and materials are damaged due to poor quality packaging materials.

It & Information System: It & Information is now the vital part of modern supply chain. ERP, SOP, SAP all are the core part of supply chain.

1.5 Limitations

Though in Bangladesh has not much developed dairy organization so there is some difficulties to collect enough data for the report. And besides, not much research report also available based on Dairy Supply Chain. But I have tried hard with my academic supervisor and workplace supervisor. So, availability of the related data is very limited and some of the date may questionable quality. Besides, Specific questions for the study related to the cost, production, marketing, raw materials & packaging materials sources are proved to be challenging because respondents are not willing to response in details.

Despite these limitations, the study has provided some important light on the dairy value chain in Bangladesh and one can find useful directions for future intervention to make the dairy value chain stronger.

Besides I have collected the data from my own organization ERP, previous record and practices.

1.7 Methodologies

The study was conducted on different primary and secondary sources, web sites, reports, case study, academic books, various national and international journals, office colleagues' experience, farmers, own organization. Used market survey, Google form to get the response from different stakeholder. Apply different theoretical and analytical tools from different authentic sources. The study was focused on dairy sectors and its demand, supply, production, raw materials, distributions.

Chapter 2

Problem Identification in the SCM & Disruption due to Pandemic

2.1 SCM VS Covid impact

The whole global supply chain is facing uncertainty & disruption due the covid-19. From the beginning every sector of each organization are facing the same. Lots of small industry and factories been closed as well the large one. International shipping lines also can't operate their shipments properly due to quarantine period on loading point, transshipment point and the unloading point. Since long container unavailability makes shipping cost too high and that is creating extra cost on every single finished goods.

In the aspect of BDFP, during the covid situation the major problems was raw milk over supply. At the time most of the hotels, restaurants, bakery, fast food shop and different home consumption are hampered due to lockdown. There are few milk collection and processing organization like Milk Vita, Brac Dairy, Pran, Akij, Aftab but they have also limited capacity to receive and process. Besides only Pran & BDFP has the powder manufacturing facilities. So, they limit their receiving. On the other side when the organizations receiving huge volume of raw milk but they are facing shortage of packaging materials, stock capacity, over stock at market cause people are reducing their consumptions. Besides every organization has the limitation of milk tanker and milk cooling facilities. BDFP also have the difficulties.

So overall a huge disruption happening from the last year. Every organization trying to balance the demand and supply. Also wanted to sustain in these difficulties.

2.2 SCM Sustainability during pandemic

Sustainability is based on a simple principle that everything is being for our survival and wellbeing. Sustainability creates and maintains the conditions which nature and human can

exists in a productive way that fulfill the natural, social, economic and others for present and future generation.

From the SCM perspective of sustainability all the stages of SCM should be well planned. What will be the first mile supply, what will be the second? Which items need to be done by on shoring, which will be off shoring, near shoring and out sourcing?

Inventory planning also should be well planned.

So, first of all one should have to establish smooth supply chain of leverage raw materials.

To identify the leverage raw materials & Strategic Items we can use the Kraljic Matrix.



Source: Kraljik Matrix

In this study our organization is a dairy milk collection & processing-oriented organization. So, it's mostly depends on local raw material (milk). We know there are huge farmers in local area and during the covid situation most of the hotels and restaurants business are kept limited to avoid mass gathering which in terns increase the supply of milk from local areas. And the purchaser has the power of price set and also abundant the supplier. So, I think for BDFP Raw milk is the leverage items.

To sustain during the covid situation BDFP have done the demand panning, first and second line supplier.

Demand planning is one of the most important part of supply chain specially during the covid situation. In that situation excess demand or excess supply both are very much harmful for any organization specially manufacturing organization of perishable items. The raw . materials and the finish goods has limited self-life so the calculation should be done perfectly.

The below table is the demand planning tools. Any technique can be followed. But BDFP usually follow the growth % and historical data. So they used Straight Line technique.

Technique	Use	Math involved	Data needed
1. Straight line	Constant growth rate	Minimum level	Historical data
2. Moving average	Repeated forecasts	Minimum level	Historical data
3. Simple linear regression	Compare one independent with one dependent variable	Statistical knowledge required	A sample of relevant observations
4. Multiple linear regression	Compare more than one independent variable with one dependent variable	Statistical knowledge required	A sample of relevant observations

But whatever the technic the demand planning must be more accurate. Cause over inventory or lack of raw and packaging materials both are impact on your profitability. Beside during covid no demand and supply going smooth, sometimes lockdown and sometimes limited movement also impact on demand planning. To crosscheck and scrutinize the planning, Supply Chain sat weekly demand- supply coordination meeting with all the cross functional team like sales, marketing, production, SCM department, finance team, production, store, distribution and others department and verify their data. (N-3) month basis for local items and (N-6) month basis for import raw materials planning were executed. Sometimes some planning needed to be remapping.

Example can be drawn; like during covid, customer's buying power reduces and they biased to buy small SKU's and Sales need to focus on more sale on (100-200)g ghee rather than (400-900)g ghee and whenever lockdown released and started opening the hotels and restaurants, demand of higher SKU's increased. So in connection of this supply chain also need to harmonize to supply raw materials, packaging materials and others support as well.

BDFP has own transport & distribution system. Besides it is highly perishable and short self life so after the delivery it has to delivery by each day from factory to retailer or wholesaler. And during the covid BDFP started home delivery services to support the customer directly. It was a great service for the customers, we got huge response during the lockdown. BDFP brought 5 motorbikes to support all over Dhaka which was divided into 5 zones.

A short reportneed to collect from Market research

Every organization has their own production capacity. Sometimes the demand raised, machine breakdown, overhead increased so many reason it need to go for offshoring, near shoring or out sourcing.

Most of the products BDFP manufacture at their own factory. Some products are manufactured as contract manufacturing. BDFP produces Pasteurized milk, UHT milk, Powder Milk, Sweets, Laban, Butter, Ghee and others. But they outsource process cheese from other county.

Inventory management during the covid situation is one of the tough work in supply chain. Global raw materials crisis, shipping container unavailability, local raw materials crisis and high price. Then the demand goes up and down very frequently.

BDFP also faced a huge difficulties for inventory management. BDFP has an own inventory management system, reorder level, safety stock level. ERP system will notify when any items reached its reorder level.

Though BDFP has a standard SOP for inventory but to sustain in the covid they have to change the inventory planning. The store manager has to stock the critical items which are not always available in market. He should plan for the imported packaging materials for 4/5 months.

BDFP has a customized ERP system which is very much effective for any organization. An IT team is supporting the whole ERP system. Besides we have a MIS team who are working for analyzing the present market situation, sales trend, market strategy.

In the ERP any user can see the specific information. According to the information the user can take initiative. Please see the ERP sample pic below.

Menu Barri						↓ ¹⁰⁷⁵ BDFP	SHOHEL RANA 🔺
lent • Purchase Request • Er	nquiry • Quotation Purcha	se Order 🛛 Material Receipts 🔹	Supplier Evaluation Reports •				
Dashboard							
rch Options om Date: 04/09/2021	To Date:	04/09/2021	STORES All V Find				
in Date: 04/09/2021		04/09/2021					
	Indents	Activity			Purchase	Activity	
9	23	0	129	0	3	31	0
Submitted	Dept. Head Approved	Accepted	Stores Issued	Verified	Approved	Completed	Rejected
0	39	1	0	0	0	0	0
Resubmitted	Completed	Cancelled	Raise Requirement	Budget Approved	Order Closed	DGM Approved	GM Approved
))		
	Description	and the			Store Issue and	Francfor Activity	
	Receipts	ACTIVITY			otore issue and		
4	21	69	0	0	0	83	19
Receipt Received	Receipt For QC	Receipt Accepted	Receipt Rejected	Issues-> Admin Store HO	Transfers-> Admin Store HO	Issues-> General Store	Transfers-> General Store
0	0	0	0	171	50		
Receipt Cancelled	Sub Standard	Rejected	Receipt adjustment	Issues-> Spares Store	Transfers-> Spares Store		
0	0	0	0				
Transfer to Production units	Salable Stock	Un Salable Stock	Dispose	_	_	_	_

Chapter 3 Risk Identification and Risk Mitigation

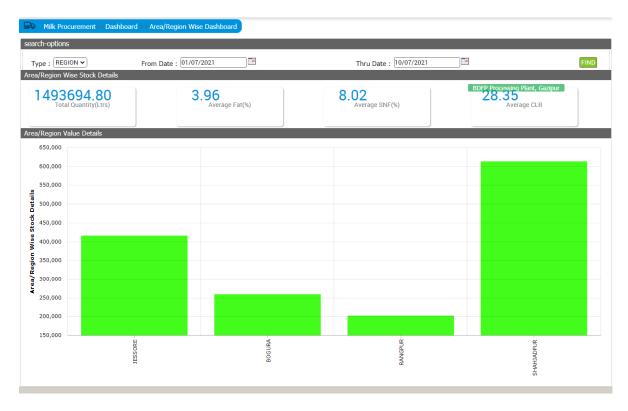
Simply the risk means that something may happen bad or wrong. It means the possibility of unexpected things that effects on your expected outcome.

3.1 Benefits of Risk Identification

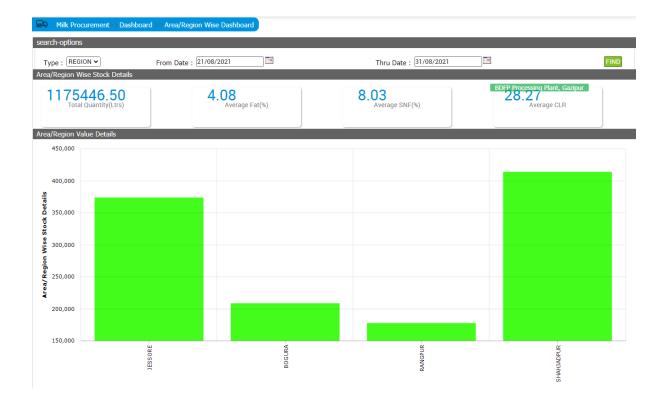
Risk identification is one of the best way to prevent the risks. It helps to develop the backup plane to protect or avoid the impact of risk. The main advantage of risk identification that it helps to analyze the risk and can make preventive measures. Actually some risk cannot be avoid but if we know the possible risk we can sometimes minimize the risk impact. 3.2 [Risk Identification and Advance Planning] During the covid situation one of the major risk is demand risk. Wrong forecasting, misunderstood the customer demand, wrong date collected from market may cause huge demand risk that may impact of the total SCM planning. BDFP an annual business plan. Based on the ABP (Annual Business Plan) all the stakeholder take initiative. It also verified by its own Market research team. There is also supply risk, local and global raw materials been badly disrupted last few months due to covid impact. To avoid the supply risk BDFP taken some preventive measures. Like enough stock or raw material, hire rental store also to keep raw materials and finished goods, did agreement with the suppliers. For packaging materials import they did 4/5 months before planning where previously it was done 2/3 months before. For environmental risk BDFP have taken some measures like, during lockdown restriction on movement, own transport facilities while need any movement, work at home facility, roaster duties, quarantine facility, OPD facility for infected family, 24/7 hours online doctor, sample collection booth for employees, mandatory vaccination, arrange special propaganda for keeping BRAC operation current etc. BDFP have taken some internal risk preventive planning. Strong monitor of productions, distributions, sales, marketing and maintenance, accounts and other department.

To motivate the employee during the crisis the management gave them good incentive, promotions. Last year BDFP provided 2-6 basic value as incentive.

3.2 Leverage Raw Materials Planning of BDFP : As we have discussed earlier Raw Milk is the leverage items of BDFP. So, they have done a lot for this. We know total raw milk production is limited in Bangladesh. BDFP have collected 1.6 lac liters of ram milk every day during the lockdown where regular time they can collect maximum 90-100K liters. In this time liquid milk and milk products demand decreased remarkably but, in that situation, BDFP did not stop the milk collection. BDFP has a limited capacity but they did a great job for the rural farmers. That time BDFP collected the huge amount of raw milk and produce powder, butter, ghee which have long self-life.



High milk collection during lockdown



Average milk collection except lockdown

During the covid satiation and the lockdown BDFP can stop excess amount of raw milk due to low demand, they also can reduce the raw milk purchase price as it has lots of supplier/ farmer and very low demand of raw milk in the market but BDFP didn't do that as a world largest NGO enterprise. Actually BDFP is a social enterprise. So every time they think about the farmers as well the social development.

3.3 Strategic items Planning of BDFP during Pandemic

These are the products and services you need that are critical to your business, because these products may be difficult to find, expensive, difficult to deliver, or directly affect the company's profit.

In case of BDFP Dairy processing plant might a strategic items. Cause plant need huge investment and after the establishment processing capacity increased dramatically and as well the sales growing us that will impact on organizations profit margin.

During the lockdown situation no organization plan for unplanned investment because there is a risk of healthy cash flow and revenue generation.

Chapter 4 Findings of the Study

4.1 Findings of the Studay

Lack of SCM knowledge among the organization as well the suppliers: In this study we have observed that there are lots of poor knowledge people are working as a cross functional team. They don't have the proper knowledge of global market and the local raw and packaging materials demand and supply impact as well the crises. When global shipments are getting fewer SCM department asked the other stakeholder to keep proper stock, increase the purchase price but sometimes they did not bother about it. So, BDFP had to face some raw materials shortage and also some packaging materials shortage.

Example:

Mango & Strawberry drink concentrate, that's why production schedule needed to be shifted and a market shortages also occurred.

Lack of Raw Milk collection & processing capacity: We observed that when the raw milk collection increased then BDFP faced a huge trouble to collect the milk from rural area to its processing plant. Also it has low capacity to process raw milk or manufacture other dairy products.

So, far the processing plant increased and it will fully start working soon. Previously BDFP has only 1 lac to 130 lac liters milk processing but the new plant will increased its capacity 130to 250 lac liters per day. Besides it has plan to make new milk collection center and to purchase milk tanker for carrying the milk from collection centers to BDFP factory.

Lack of storage capacity for Raw & packaging materials also the finish goods: During the crisis period a organization need to have the enough stock of raw and packaging materials. Specially the strategic and bottleneck items. We know leverage items has lots of supplier so no need to create much stock. But for other items need to have enough stock. Though BDFP has a separate warehouse at Jhajor, Board Bazar but it also not enough to make a safety stock for all strategic and bottleneck items.

But for the instant support BDFP hired a rental store for Butter at tejgoan and for packaging items at Tongi.

ERP System not streamlined yet: BDFP has a customized ERP system to make the strong data base for all. It started few months ago, some development still going on. BDFP's IT and ERP team are working hard to settle done all the issues.

Lack of forecast analysis and demand planning: There are also lack of historical data analysis, forecasting analysis and the demand planning. Sometimes BDFP face some packaging materials stock our due to wrong forecasting. There some impact on covid also.

Example: Last year Aarong ghee 100g sales almost 80,000 pcs where normally 50-60 thousands pics can sell. The main reason is during the lockdown most of the people staying at home and prepared different delicious food.

Chapter 5 Recommendation and Conclusion

5.1 Recommendation

Implementation of ERP full phase: By implementing the ERP software full phase one can get the actual data at any time. When sales department received the orders, they can also easily check the finish goods & raw materials stock at any time. Store department & Purchase department will also get the notification of all items when it reach at reorder label.

SCM Training: SCM training also recommended for the organization. It will help to make decision instantly when any crisis or special requirement. Various local and global certification can be done to develop SCM knowledge among the organization.

Demand planning, forecasting & smooth supply: A good forecasting and demand planning is a vital part of any organization. A wrong demand planning can make over stock and at the same time stock out also. Besides, during the crisis time, seasonal impact, environmental impact, global impact demand planning also very much important. More accurate demand planning is also recommended.

Increase store capacity: We observed that when we understand that some more raw and packaging materials need to keep stock but due to lack of store capacity it was not possible.

Increase milk processing capacity: We also observed that during the lockdown huge supply of leverage items available in local area but BDFP can't receive it due to limited processing capacity.

5.2 Conclusion

Smooth supply chain is one of the most important discussion all over the world. Demand planning, forecasting analysis, demand supply balance, risk identification and taking the measures is also a part of modern business era.

In this study we discussed the BDFP raw materials & packaging materials planning, risk identification way and its benefits. Here also discussed the leverage items planning and during the pandemic how to manage.

The covid issue is not only for the Bangladesh it also disrupted the global supply chain. Every raw and packaging materials are also need to analysis properly. Risk identification also help components also help the concern person.

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