



Inspiring Excellence

BUS400 – INTERNSHIP

Internship Report On

Extend Life of a Product with the Help of Cold Chain- What are stopping us?

Submitted to

Ms. Rahma Akhter

Lecturer

BRAC Business School

BRAC University

Submitted By

Md. Mahtab Uddin

ID: 14304064

Program: Bachelor of Business Administration

BRAC Business School

BRAC University

Date of Submission: 08.05.2019

***“Extend Life of a Product with the Help of
Cold Chain”- What are stopping us?***

Letter of Transmittal

29th April, 2019

Ms. Rahma Akhter
Lecturer
BRAC Business School
BRAC University

Subject: Submission of Internship Report on **“Extend Life of a Product with the Help of Cold Chain” - What are stopping us?**

Dear Mam,

It is really a great privilege for me to present my internship report on **“Extend Life of a Product with the Help of Cold Chain” - What are stopping us?** under your supervision, as per the requirement for the completion of BUS400. This report will provide insight about Jubilant Golden Harvest Limited from where I have completed my Internship. I have tried to merge both the academic and practical experience to make the report findings sustainable. I have tried to reflect all the major learnings throughout the internship period on this report. I really am grateful to you for giving the opportunities to complete my internship with your generous moral support and instruction.

I have collected information from the company superiors while working with them in a professional manner. So the authenticity of the information was highly emphasized. I really enjoyed my whole internship program. Each and every moment was very exciting and hectic at the same time. But I managed to take the best learning out of it as the authority from JGHL was very cooperative. So with all the quantitative and qualitative information, I have tried to make the report the very sincerely. However, if there is any confusion that needs to be clarified or rectification to be done, it will be my honor to do so.

Sincerely

Md. Mahtab Uddin
ID: 14304064
Bachelor of Business Administration
Supply Chain Management and Marketing

Letter of Endorsement

Md. Mahtab Uddin student of BBA program, ID: 14304064 has accomplished internship report on **“Extend Life of a Product with the Help of Cold Chain” - What are stopping us?** As a part of his BBA program. I have gone through the report very well and found out that the report meets with the standard of BBA Internship report. Moreover, Md. Mahtab Uddin has completed the report by himself under my supervision.

I wish him all the best and success in his future life.

Ms. Rahma Akhter
Lecturer
BRAC Business School
BRAC University

Acknowledgement

First of all, I would like to show my humble gratitude towards my honorable faculty for giving me instructions whenever needed as my Internship supervisor. Her cooperation will never be forgotten. Without her constant support, guidance and time flexibility, it would be very difficult for me to complete my Internship report properly. Moreover, I would also like to thank my on the job supervisor for giving me the permission to submit my official internship report on “How to Extend Life of a Product with the Help of Cold Chain.”

Furthermore, I am really thankful to the Jubilant Golden Harvest Limited family for giving me the opportunities to do my internship with them and for providing me a highly constructive and friendly working environment.

In addition to that I would like to mention the names of few very special people whom I will always cherish for their tremendous support and guidance. First of all, Mr. Afaque Jamal (Deputy Manager- SCM), who was and still is my mentor and he guided me throughout the whole internship program as well as he taught me the most important corporate skills while considering all of my queries. Whenever I asked any suggestions or seek any help from him, he tried to help me promptly. He also helped me to finish my internship report as well by giving convenient time and information. I am very thankful for his immense support and guidance as because without his guidance and cooperation I don't think that my report would be finished so efficiently. Moreover, Mr. Satender Singh Saini (Managing Director, Jubilant Golden Harvest Limited) also helped me a lot to make my internship report by sharing his own prospect and insight. The entire team was very supportive during my internship period. I really am privileged for getting such opportunities.

Executive Summary

The report begins with the organizational overview where I have done my internship. So while doing my internship I found the cold chain management process so interesting and ended up making report on this highly significant topic based on the present global marketplace. And Nowadays in Bangladesh it has become a significant competitive advantage to maintain a highly efficient cold chain management. As it gives the opportunities to save energy, working hour and most importantly value of the product. As being in the Quick Service Restaurant industry, it is most important to maintain the food value. And for that the value chain must be strong and efficient. There are many factors related to the topic. From the perspective of Bangladesh, many complications are there that hamper the process very badly. However, if the planning is being done properly, the chances of being in a faulty and risky position reduces by high percentages. So while planning factors like demand, shelf life, quality assurance, microbiology, logistics support need to be considered at the high context. As I work as a demand planning executive and being a planner I tried to emphasize on and analyze each and every factor that is inseparable from the cold chain process. Moreover, I have found a few key implications based on the Bangladesh perspective. And tried to come up with some sustainable solutions.

Furthermore, being a part of supply chain management, cold chain has become very important for so many industries like food, pharmaceuticals, fisheries and agro. And proper optimization of cold chain can help our economy grow faster. However, as there are few implications present for the time being, once these are solved it will increase the profit margin as well as the customer satisfaction by adding greater benefits by reducing total system cost and energy.

I have interviewed and done a survey on few corporates from Jubilant Golden Harvest Limited, Golden Harvest Agro Limited, Incepta Pharmaceuticals and Jubilant Foodworks India to know how cold chain is adding value to the product life cycle, what are the obstacles and what can be done to overcome the obstacles.

Table of Content

Organization Overview:	1
A. Introduction to Jubilant Golden Harvest Limited (JGHL)	1
B. Domino's in Bangladesh	2
C. Products provided by Jubilant Golden Harvest Limited	3
D. Location, Corporate Structure & Business Areas:	5
Research	6
1. Introduction to the Report/Study	6
<input type="checkbox"/> Rational of the study:	6
<input type="checkbox"/> Statement of the problems:	7
<input type="checkbox"/> Scope and delimitation of the study	8
<input type="checkbox"/> Limitations of the research	8
<input type="checkbox"/> Objectives of the report	9
2. Review of the Related Literature	10
3. Methodology of the Study	12
<input type="checkbox"/> Sources of data	12
<input type="checkbox"/> Survey Method	13
<input type="checkbox"/> Sample size of Survey	13
<input type="checkbox"/> Sample and Questionnaire Design	13
<input type="checkbox"/> Collecting Data	13
4. Analysis and Interpretation of the Data	14
5. Findings of the study	19
6. Recommendations	19
7. Conclusion	20
Appendix	21
Bibliography	24

Organization Overview:

A. Introduction to Jubilant Golden Harvest Limited (JGHL)

Before getting started with Jubilant golden harvest limited. I would like to share few words about Domino's Pizza International. Domino's Pizza is now present has 84 countries with one of the world's best supply chain.

It has it stores in 5,701 cities worldwide (2,900 international and 2,800 in the U.S.) In 2016, Domino's opened its 1,000th store in India. (Dominos, 2018). As of the first quarter of 2018, Domino's had approximately 15,000 stores, with 5,649 in the U.S., 1,127 in India, and 1,094 in the U.K. (*PR Newswire*. February 8, 2016).

However, most of the time what Domino's does is, it does master franchise contracts with one company per country, But there are other companies like Jubilant Foodworks who owns the franchise for several countries. Below there are few information regarding Dominos master franchise program,

- First of all, Australian Domino's Pizza Enterprises owns the sole right to operate, and franchise branches of the chain in Australia, New Zealand, France, Belgium, the Netherlands, and Monaco. They are the pioneer who bought the master franchises from the parent company in 1993 and 2006.
- Moreover, Domino's Pizza Group (DPG) bought the master franchises for the UK and Ireland in 1993. In addition to that they also purchased the master franchise for Germany in 2011 and Switzerland, Liechtenstein, and Luxembourg in 2012 through buying the Swiss master franchise holder. (*The Daily Telegraph*. London. Retrieved June 22, 2008, *Reuters*. Fletcher, Nick (August 29, 2012).
- The master franchises for India, Nepal, and Sri Lanka are currently owned by the Indian company Jubilant Food Works. Who made India the largest international market for Domino's outside its home market by opening over 1,000 Domino's outlets. (*Domino's Pizza*.) In all over India. The company operates approximately 1200 stores across 264 Indian cities as of 2019.
- Bangladesh, the franchises for Domino's Pizza is a joint venture of Jubilant Food Works and Golden Harvest QSR Limited naming Jubilant Golden Harvest Limited. In this entity, Jubilant Foodworks is the majority shareholder and owns 51% of the company, while the rest of the share is owned by Golden Harvest Limited. (*Dhaka Tribune*. March 15, 2019.)

B. Domino's in Bangladesh

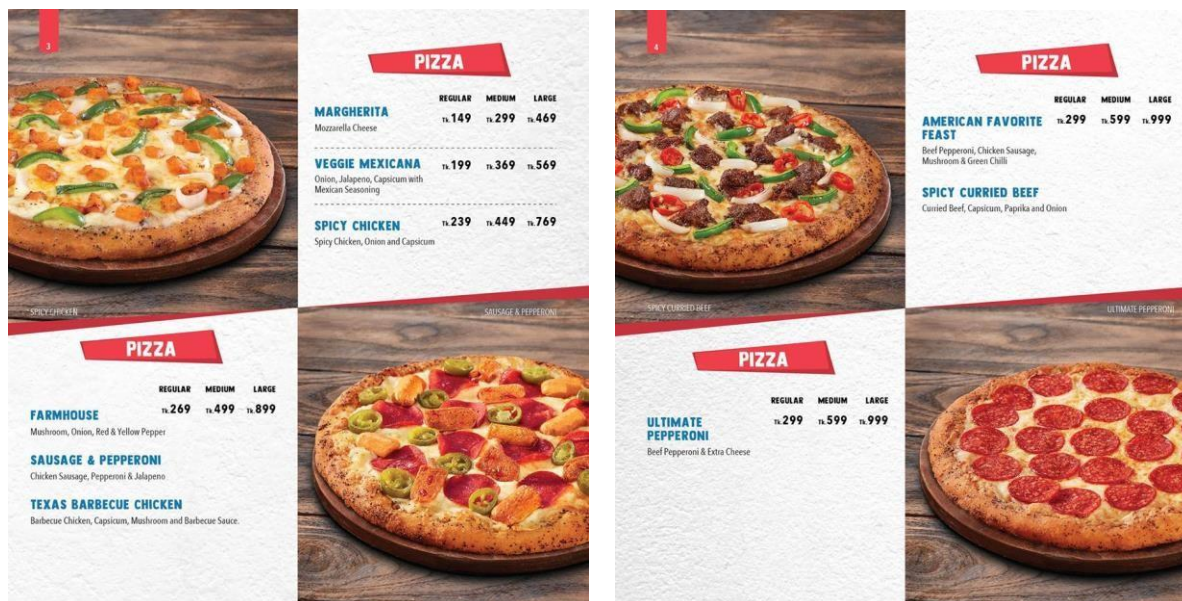
The master franchises for this south Asian continent is owned by Indian company named Jubilant Food Works. So, in order to do business in Bangladesh, getting acceptance from JFW was mandatory. Again, JFL was looking for a partner, here in Bangladesh, so that jointly they can start Domino's in Bangladesh. So, Golden Harvest QSR, a subsidiary of Golden Harvest Argo and Jubilant Food Works Limited jointly created a new venture Jubilant Golden Harvest LTD which represents Domino's Pizza in Bangladesh. According to this agreement, 51% share will be under control of Jubilant Food works Ltd and the rest 49% will be under control of Golden Harvest QSR.

Golden Harvest is Bangladesh's one of the market leaders with diversified interests in Food, Dairy, Commodity, Information Technology, Logistics, Real Estate, Aviation, Infrastructure Development and Insurance. Golden Harvest has been a pioneering force in the frozen food sector in Bangladesh and is the country's first company to develop its own Cold Chain network in collaboration with USAID.

Jubilant Food Works Limited (JFL) is a Jubilant Bhartiya Group Company. This company was incorporated in 1995 and initiated operations in 1996. Jubilant Food Works is India's largest and fastest growing food service company. JFL have the master franchise for Domino's Pizza in India, Nepal, Sri Lanka and Bangladesh, and also for Dunkin' Donuts in India.

On March, 2018. Golden harvest and Jubilant Food Works Limited (JFL) came to a common interest to deliver world class domino's Pizza taste here in Bangladesh. Domino's Bangladesh started its operation here in Bangladesh in February 28, 2019.

C. Products provided by Jubilant Golden Harvest Limited



Here is the menu for Bangladesh, they serve both beef and chicken at the same time.

Domino's mainly uses differentiated targeting strategy so that they can meet all types of customers' needs and wants. As everyone has unique taste and preference. That's why Dominos has made a strong position of a good pizza company in this industry and people actually feel that Dominos care about their customers. This helps Dominos to take a position in the industry in other word, Dominos have a positive position and reputation among the foodies. There are few more item like chicken meat ball, roasted chicken wings, Choco lava cake, Butterscotch mousse cake etc. Most of these item come through import yet in cold transportation mode.

However, moving to new market & product development, previewing the **Marketing Mix** is very crucial as the success of the product depends on these four decisions. 4p's consists of price, place, promotion and product. So, Dominos also worked on their marketing mix as it's very important before starting any new business. For the price, Dominos always have an upper hand over its rivals.

More Pizza for your Buck

(in ₹) Pizza Category	DOMINOS#					
	VEG			NON-VEG		
	Regular (7")	Medium (10")	Large (13")	Regular (7")	Medium (10")	Large (13")
Basic	75	165	305	115	240	395
Economy	115	240	395	165	300	460
Premium	165	300	460	200	345	495
Extravagant Feast	200	345	495	200	345	495

(in ₹) Pizza Category	Pizza Hut*					
	VEG			NON-VEG		
	Personal	Medium	Family	Personal	Medium	Family
Basic	95	205	365	135	280	455
Economy	135	280	455	185	340	520
Premium	185	340	520	220	385	555
Extravagant Feast	220	390	585	255	435	620

Premium of Pizza Hut over Dominos						
Basic	27%	24%	20%	17%	17%	15%
Economy	17%	17%	15%	12%	13%	13%
Premium	12%	13%	13%	10%	12%	12%
Extravagant Feast	10%	13%	18%	28%	26%	25%

D. Location, Corporate Structure & Business Areas:

After creating a new joint venture named Jubilant Golden Harvest Ltd, Golden Harvest QSR & Jubilant Food Works Ltd started working together and they planned to open the first Domino's outlet in Dhaka within the next three months. So, in order to do works, they needed to form an organizational structure. Here, one will be the Boss or country head and he will control everything and all the employees will be working under him directly and indirectly. One country head for the overall operations. Then, comes the individual department head or deputy managers of Supply Chain, Fin & Act and IT sector. The marketing part is directly under control of Jubilant Food Works Ltd.'s Delhi team. And under those managers, there are some officers, Sr executives and executives. They also hired some interns too. These employees are for the corporate office. For running the store, they hired other people too like team member, crew member, and 4/5 Guest Delight Managers. Those managers were sent to Thailand, India and America for training purposes. And for the HR department, one executive from Golden Harvest, managing the department of HR here. At first, the employee number was around 40 but right now it's likely to be around 70-75. The agreement took place in March, 2018 between Golden Harvest QSR and Jubilant Food Works Ltd. From then they formed a team in order to open the first Dominos outlet In Dhaka, Bangladesh. So, an office was needed for them and temporarily they started their activities in the sales office of Golden Harvest which is situated in Tejgaon Industrial Area. They worked there for some months and after that they took their own corporate office which is also placed in Tejgaon Industrial Area.

The country head here right now is Indian and the other employees are Bangladeshi. Indian deputy managers of Finance, Supply chain, IT came to Bangladesh to train up Bangladeshi managers. They stayed here for a long time and taught everything, so that Bangladeshi managers can perform their work smoothly. And now from India, they monitor the whole activities. The whole business is on SAP. SAP is an ERP software and it's owned by the Indians. Everything happens in the process of business goes to the SAP and the Indian mangers check the SAP daily and by checking the SAP, they can realize how well the business is running here, in Bangladesh.

Research

1. Introduction to the Report/Study

❖ Rational of the study:

Being in the QSR industry, Jubilant Golden Harvest limited gave me the opportunity to look very closely of the actual cold chain. As considering pizza as the prime product, the dough, seasonings, spices, condiments, topping and many other ingredients need to be in the temperature controlled zone to get the perfect taste and quality of the pizza. For the material storage, there are several steps that are followed to get the most efficient outcome. From planning to transportation to warehousing facility, cold chain must be considered all the time as it is directly related to food value. I could easily feel what would be the situation if there was no cold chain management. Consumer would never be able to feel the taste of the actual product. The shelf life and food value would decrease by almost 80%. Moreover, the ratio of loss would increase because of lower shelf life of the product. However, throughout my internship program, I get to learn the total process that how it extends life of a product. The consistency of the temperature of the transportation medium and storage facility have to be ensured irrespective of sea, air or road. As products or materials can be damaged if in imperfect temperature. There also period for defrosting that run with the system so if defrosting period is not monitored well, it can also damage the product as well.

Moreover, cold chain also helps by reducing warehouse space, we can easily stack more product in the storage. It also helps to reduce energy consumption. Transportation cost can be reduced by 40% if used cold chain as it become unnecessary to get delivery of products, as we can store it in cold storage.

However, apart from everything there are several obstacle in this process that are been overlooked from the very beginning. No such Committee or organisation is there to take care of those issues. For that massive use of cold chain is not happening in Bangladesh.

The current practices regarding cold chain is not performed well Bangladesh as standards are not maintained properly. For that we cannot get the value, quality of the products from different industries like food, agro, pharmaceuticals, fisheries, flower industry etc.

❖ **Statement of the problems:**

Cold chain is the pioneer of saving food supply chain. In most of the growing countries a huge portion of economic growing depends on this. Such food waste can be saved if cold chain is used. Though my experience is very limited and short but I can easily foresee the great future of cold chain in Bangladesh. Countries like Brazil, Philippines are supplying banana worldwide with the help of cold chain, and Bangladesh is still using toxic preservative to store fruits, vegetables, fish, meat everything. However, after seeing the process so closely, I have found few problems that is affecting yet demotivating the cold chain process in Bangladesh.

First of all, Low number of supplier and maintenance force, the number of cold storage supplier and their maintenance force is very low. For instance, A German refrigeration company Bluestar sell industrial chiller – freezer in Bangladesh. And people come to Bangladesh to install that machine. There is no affiliation or any service partner in Bangladesh for that the cost become pretty high. And if the machine malfunction, there is nothing to do except waiting to get a quality service for the company maintenance personal.

Moreover, the most discussed problem is, the process of export import is slow in our country and there is no sustainable storage system in the ports to handle sensitive product with specific temperature boundaries. So tons of products are being damaged while lying in the ports. And there is no one to take full responsibility. By road transportation for export import is cost efficient, but companies are highly demotivated to use this mode because of the high time consumption in assessment and custom procedure. Cold chain vulnerable products get damaged easily because of no temperature control.

Furthermore, very few perfect cold storage are available in Bangladesh and that are very costly as well. So it is not easy to find storage with all facilities and with good quality.

In addition to that there is still a myth that food value become less if stored in cold storage. Well, that is partially true. But if the products is stored in perfect temperature and used before particular period, then the food value remain as the same as fresh one.

❖ **Scope and delimitation of the study**

Scope for internship program is working with the professionals of Jubilant golden harvest limited and they have maintained proper cold chain which made me understand that what the actual process should. During my internship program I have been to many cold storage for sourcing propose along with QA which gave me the opportunities to learn technical modules that will add great value to my career. For instance, what should be the perfect temperature for chiller and freezer. How to avoid fungal damage inside the cold storage, how to ensure TQM in cold chain, How to achieve most shelf life of the product without any implications and many other things. In addition to that, as I have a great interest in cold chain, this organization immensely gave me the opportunities to attain in complete knowledge about all the steps, procedures and activities of cold chain management. Moreover, temperature controlled

❖ **Limitations of the research**

In any research it is obvious to have limitations. So in terms of my research, I also have few limitations. For instance, if I consider my research topic, it is so broad that few areas might left untouched because of the information access constraints and limited respondents constraints.

Moreover, there are several limitations that I want to emphasis on. Those are given below–

1. Firstly, I got very few respondents, who actually could share their valuable prospect.
2. Secondly, as all of my respondents are working corporates, most of them did not have that much time to discuss the issue properly.
3. Thirdly, I have taken interviews corporates from few companies, it would be better if I could interview few more leaders of cold chain industries
4. Fourthly, I could not take any interview of any custom officer or CNF agent.
5. Lastly, the workload and responsibilities was huge during my internship period as the company was just starting operation in Bangladesh. So it was difficult to concentrate on an academic manner.

However, limitations will always be there, we will have to pull out the best out of it and make it structured to do some further study. And who knows, I might get some interesting learning and findings for that study.

❖ Objectives of the report

The most important objective of the report is to find the solution of the problems that we are facing in Bangladesh regarding cold chain.

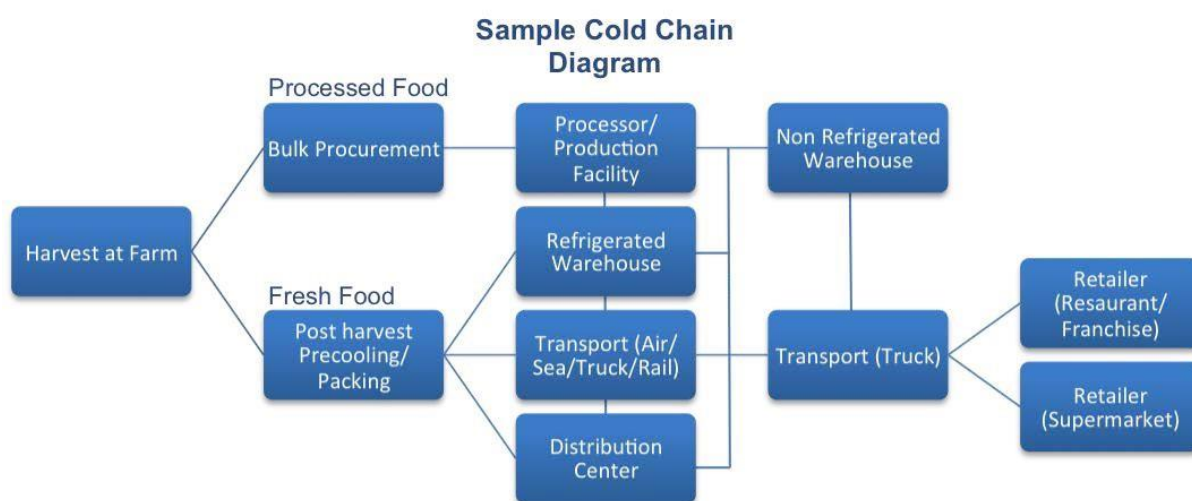
However, the specific objectives of my reports are given below,

- Creating supplier and maintenance base of cold storage in Bangladesh
- Finding a solution that can reduce custom process delay
- Finding the solution to organize necessary machineries and storage facilities in every ports while waiting for the assessment and custom Clearance.
- Use my learnings to add some value to the cold chain industry

Moreover, my prime objective was to analyse and find out the solution for the key reasons for which we are not able to use cold chain properly and efficiently. Furthermore, I have also plan to do further study and research on this topic and would like to continue working in this industry.

2. Review of the Related Literature

The global cold chain market is growing very rapidly in current years, and along with the industry many other industries like temperature controlled packaging, third party logistics etc. according to an industry trend report on cold chain market size, share and issues, the global cold chain market size was esteemed at USD 167.99 billion in 2018 and now it is projected to develop at a compound annual growth rate of 15.1% from 2018 to 2025. Increasing demand of connected devices and automation of refrigerated warehouses around the world is projected to continue the growth. Increasing number of structured retail stores in developing economies is leading to increased demand for cold chain managements. While few countries like Bangladesh is still deprived of the ultimate cold chain facilities. According to the 2016 ITA Cold Chain Top Markets report, the most growing sector would be the processed food industry which comes with a transformative behavior. So adding or altering few characteristics can increase the product shelf life by more than double sometimes. So what a nation can achieve with cold chain is huge. Many NGO's are organizing workshop on cold chain to create awareness. They are training young enthusiast to monitor and control international shipment.



Moreover, in the Asian economic zone and growing market, considering e-commerce, it has massive impact on delivery of retain items that including perishable and processed products. So as per the International trade administration it is having the largest impact on cold chain. And in next few years they are predicting that it can save high level of energy and reduce huge rate of product waste.

Furthermore, another report of National Bank of Agriculture and Rural development, India mentions that how we can increase shelf life of perishable goods through temperature control and cooling system.

Category	Temperature	Examples
Frozen	< -18°C	Frozen ingredients, processed fruits & vegetables, Ice Cream, frozen meats (fish, poultry, livestock), etc.
Chilled	0°C to 10°C	Fresh fruits & vegetables, fresh meats, milk, butter, etc.
Mild chilled	10°C to 20°C	Sub-tropical Fresh fruits & vegetables, chocolates and seeds and some milk products.
Normal	>20°C	Whole Onion, Dehydrated Foods, Pickle, Jams and Oils and extracts.

Temperature °C	Assumed Q10	Relative shelf life	Losses per day (%)
0	-	100%	1
10	2.0 to 3.0	33 to 50%	2 to 3
20	2.0 to 2.5	13 to 25%	7 to 8
30	2.0	7 to 10%	10 to 14
40	1.5	4 to 5%	20 to 25

So the necessity of the cold chain is having a deep impact on the economy.

3. Methodology of the Study

In this report I have tried to use both the primary data and secondary data to find out the research findings and recommendation. Moreover, this research is based on both quantitative analytical research as well as descriptive. For knowing about the factors behind why we are not getting the full I had to analyze some questions and data. I have also used descriptive research on my internship topic.

❖ Sources of data

I have used Primary and secondary and primary data to identify the gap and bring out recommendation.

1. Secondary data

Secondary data portrays the data that is collected by somebody other than me.

Considering the information that I received from secondary sources, I tried to use those information wisely and APA citation is given for those. One of the limitation during collecting secondary data was I could not find high range of data from Bangladesh. So I had to make the research depending on international data.

2. Primary Data:

Primary data is such data which is collected by the researches. For instance, I have done survey on 61 people and some other direct interview. Most of the data was collected from corporates from cold chain industries like frozen food, agro, QSR, pharmaceuticals and fisheries. However, Majority of the respondents was from QSR and frozen food industry. The answers that they provided seems pretty feasible to me. So hoping that the research will have a tremendous outcome.

❖ **Survey Method**

Few questionnaire was used to for the survey that are attached in the appendix. I tried to point out specific questionnaire that are most feasible to get the most possible findings of the research. I have also targeted the corporates who are currently working on this industry.

❖ **Sample size of Survey**

I have tried to do survey on 61 respondents who are working on the cold chain industry or worked before in demand planning, commercial, QA, and Business development. So I tried to get the most practical information based on their experience, however, there could be few

❖ **Sample and Questionnaire Design**

The sample size was 61 and non-probability sampling was used because the exact population size was unknown and the availability of the respondent was not that much easy because I wanted to get the most practical and answer for experienced personnel from corporate. The questions are given in the appendix. The types of question I used among 10 questions were:

- Likert Scale
- Nominal Scale
- Ordinal Scale
- Interval Scale

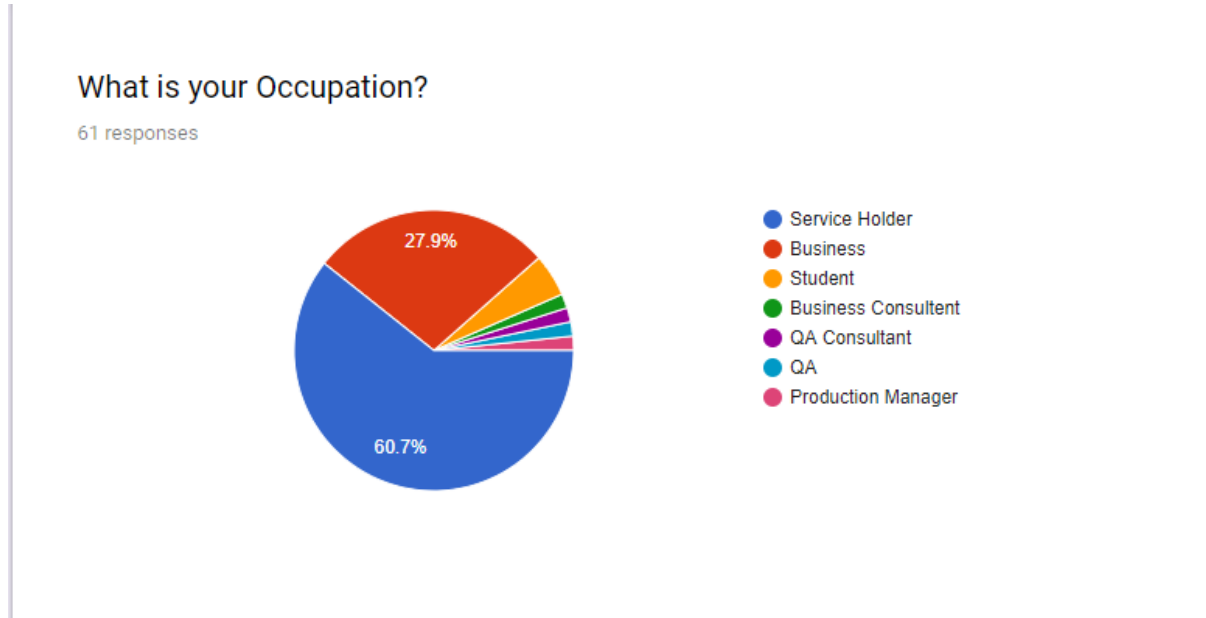
In Likert scale questionnaire I have used “strongly disagree to strongly agree”. Moreover, question with yes & no is also there. In addition to that I have used rating based question on basis of 1-5 where 1 decrypt the nether most value and 5 decrypt the upper most value.

❖ **Collecting Data**

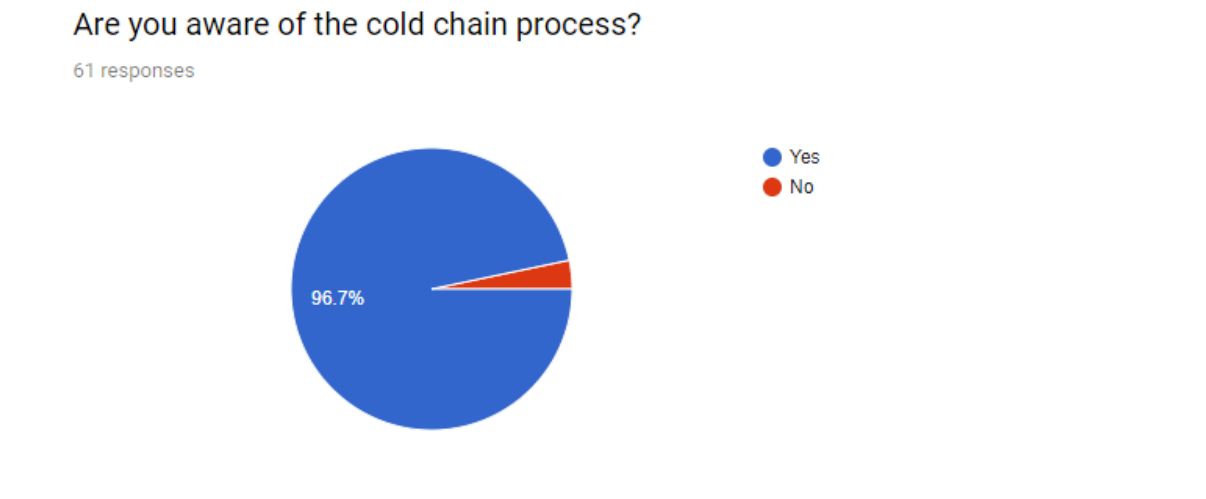
The data was primarily collected through Google doc forms and some data is collected from direct interviews. I have interviewed, supply chain manager of golden harvest, Jubilant golden harvest, Massive group, Eurasia, Agricare and few other company that are dealing with cold chain process. The response was good. However, there is a possibility that the result may vary as different company contains different perspective.

4. Analysis and Interpretation of the Data

Based on the survey Responses I have given interpretation below,



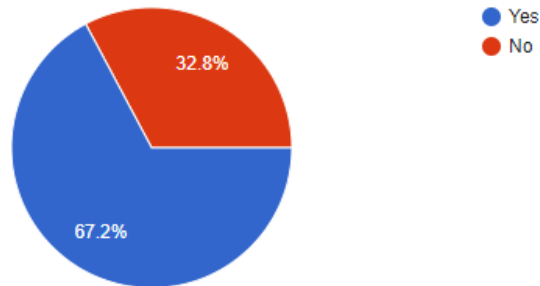
I asked this question to find out the enthusiasm from riverside field regarding Cold chain.



Almost 97% of the respondents are aware about the cold chain process. As my targeted sample as from the industry. So that they can give the practical and feasible answer.

Have you ever practiced cold chain process in your work life?

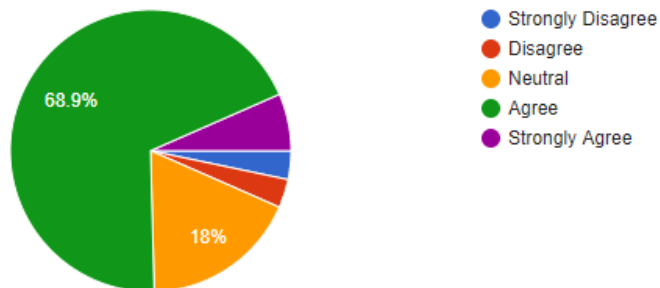
61 responses



67.2 percent of the respondents practiced and still practice cold chain in their work life. So they give us the outcome that are directly related to my research topic.

Do you agree that proper cold chain process can extend product shelf life without tempering the food value?

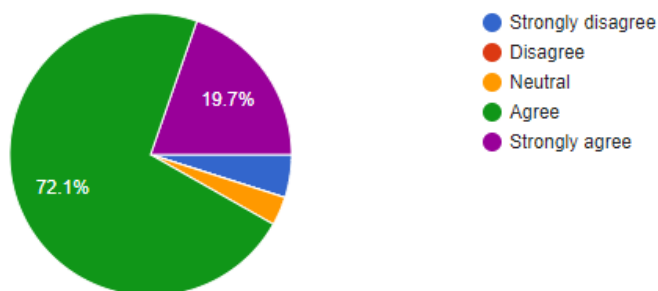
61 responses



About this question 68.9 percent respondent says that cold chain can extend the product shelf life without hampering the food value.

Cold chain gives the facility to store products for long period. So number of delivery may reduce if transported in single time. However, it may also increase the cost of storage as it requires temperature control. Do you agree that cold chain can reduce overall energy consumption from the perspective of Bangladesh?

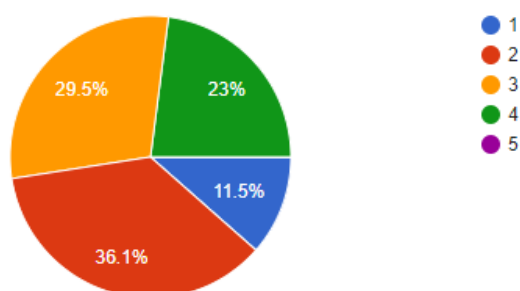
61 responses



In this question, calculating all the direct and indirect costing, 72.1 professionals directly agree that cold chain actually can reduce cost which will definitely reduce the food cost as well, ending up with a less operational expenditure.

How would you rate Bangladesh in terms of the being facilitated with cold chain process?

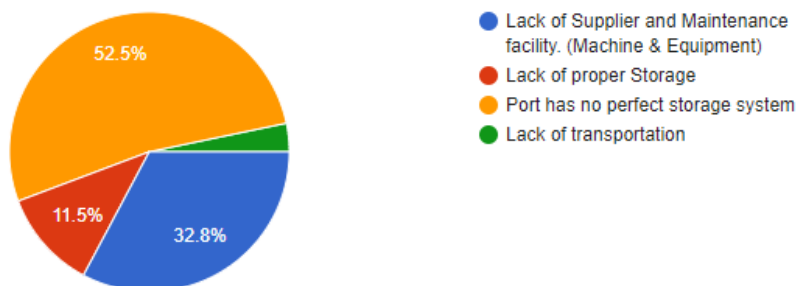
61 responses



This question gives us the current scenario of the cold chain facilities. So considering 3 as an average I can mention that most of the respondents are not happy with the cold chain facilities in Bangladesh. As almost 48 percent of respondent mentions that the facilities is below average.

Among the below problems, what is the major obstacle for not growing cold chain Industry?

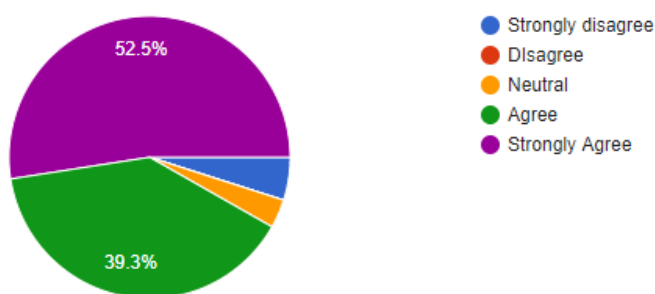
61 responses



Here in this question 52.5 percent respondents marked that our ports have no proper cold storage facility. Then second highest is 32.8 percent that is lack of cold storage supplier and maintenance force. So these are the key problems that we need to solve in the first place.

Export-Import process should be faster in terms of temperature vulnerable products and materials.

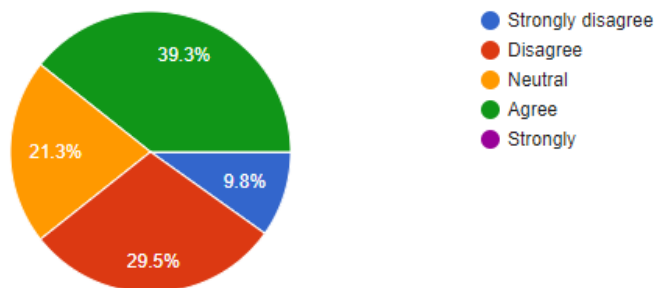
61 responses



Another important factor was that custom Clearance process is a bit slow compared to other countries. So there is a possibility that products get damaged during assessment. So I asked the question to know that if the respondents are okay with it or not. As a result, I tend to find out that 91.8 percent respondents want the process to be faster to avoid product damage.

Cold storage warehouses that are available currently, are maintained properly.

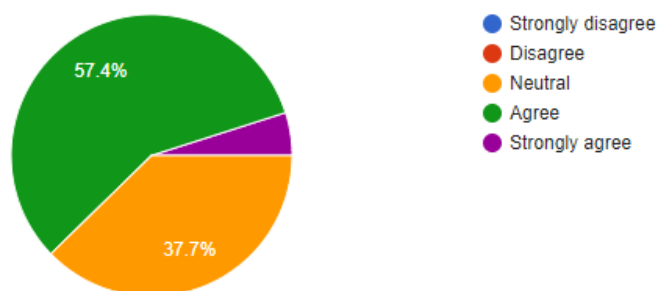
61 responses



This questions gives us the notion that the cold storage that are present in Bangladesh are maintained properly whatsoever. So my point is until there is at least 90% coverage, we will have to have necessary arrangements to make the situation better.

Growth of Cold chain industry will help the economy grow faster by saving resources like space, work hour etc. (Consider fuel Consumption)

61 responses



By this question we can easily get the idea that our economy will jump if the and growth will be faster.

5. Findings of the study

From the research I found out that the most vulnerable factors that are affecting the cold chain most. For instant, three major findings I got from this research,

- a. Ports of Bangladesh do not have the proper cold storage facilities as per majority of the respondents so we will have to work on that.
- b. Second vulnerable factor is there is a lack in standard supplier with proper maintenance force.
- c. In addition to that few respondents mentioned that the number of proper cold storage is very low, so we will have to facilitate that as well with proper costing.

So these are the factor that need to be emphasized in the first place. There might be some other factor that might not be present due to shortage of data but still need to be considered.

6. Recommendations

As per the key objective of my research, I have tried to find the reasons that are directly related with cold chain. Some major things are being discovered from the research. First of all, considering the Proper supplier and maintenance force of cold storage is not present there. So what I can recommend is getting affiliated with international refrigeration companies to start the process. Having international service franchisee would be the best. Companies should send their maintenance personal for workshop and full training. So by this what will happen is, we will get the international standard support in Bangladesh.

Moreover, considering the factor of port facilities, the process should be faster to avoid further damage. We should emphasize on beanpole port as this port contain the lowest facilities of storage.

In addition to that, as few of the respondents mentioned that the the number of proper cold storage is very low so we need to do necessary arrangements to expand the number of cold storage with proper cost structure.

7. Conclusion

The key purpose of this report was to find the reasons behind not getting the full privilege of cold chain. And how it can actually developed to the level where we can achieve the most feasible outcomes. So if the recommendations are being practiced immediately. I believe that Bangladesh will become one of the pioneer in this field. As we have so many products that can be exported if we have better cold chain management system. So if we can manage to align all the leaders with the findings and follow up with the extent to solution. Once the overall industry is ready, it will create so many employment as well as generating greater revenue. So from my point this is the right time that we stop thinking and start working on this industry.

Appendix

Questionnaire for Internship report on Extend life of a product with the help of cold chain –
what are stooping us?

1. What is your Occupation?

- Service Holder
- Business
- Student
- Other

2. Are you aware of the cold chain process?

- Yes
- No

3. Have you ever practiced cold chain process in your work life?

- Yes
- No

4. Do you agree that proper cold chain process can extend product shelf life without
tempering the food value?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Disagree

5. Cold chain gives the facility to store products for long period. So number of delivery may reduce if transported in single time. However, it may also increase the cost of storage as it requires temperature control. Do you agree that cold chain can reduce overall energy consumption from the perspective of Bangladesh?
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Disagree
6. How would you rate Bangladesh in terms of the being facilitated with cold chain process?
- 1
 - 2
 - 3
 - 4
 - 5
7. Among the below problems, what is the major obstacle for not growing cold chain Industry?
- Lack of Supplier and Maintenance facility. (Machine & Equipment)
 - Lack of proper Storage
 - Port has no perfect storage system
 - Lack of transportation
8. Export-Import process should be faster in terms of temperature vulnerable products and materials.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Disagree

9. Cold storage warehouses that are available currently, are maintained properly.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Disagree

10. Growth of Cold chain industry will help the economy grow faster by saving resources like space, work hour etc. (Consider fuel Consumption)

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Disagree

Bibliography

1. Antara.N. (2019, march15). Domino's vows to be top pizza chain in Bangladesh. *Dhaka Tribune*. Retrieved <https://www.dhakatribune.com/bangladesh/dhaka/2019/03/15/domino-s-pizza-vows-to-be-top-pizza-chain-in-bangladesh>
2. "Domino's Pizza - About Domino's / Fun Facts". *Domino's Pizza*. Retrieved from <https://biz.dominos.com/web/public/about-dominos/fun-facts>
3. Domino's® Opens 1,000th Store in India". *PR Newswire*. (February 8, 2016). Retrieved from <https://www.prnewswire.com/news-releases/dominos-opens-1000th-store-in-india-300216406.html>
4. Domino's® Opens 1,000th Store in India". *www.prnewswire.com*. February 8, 2016. Retrieved from <https://www.prnewswire.com/news-releases/dominos-opens-1000th-store-in-india-300216406.html>
5. "Domino's says new recipes, frank ad campaign help double profit". *Associated Press*. March 2, 2010. Retrieved from https://usatoday30.usatoday.com/money/companies/earnings/2010-03-02-dominos_N.htm
6. Zoe Bain. "Domino's Vegan Pizza — Soy Cheese Pizza". *Delish*. July 16, 2015. Retrieved from <https://www.delish.com/food/news/a39567/dominos-vegan-pizza/>
7. "Domino's Pizza Unveils First Ever Vegan Pizza". *Foodbeast*. July 16, 2015. Retrieved from <https://www.foodbeast.com/2013/12/18/dominos-pizza-unveils-first-ever-vegan-pizza/>
8. "Domino's Pizza our 2010 Chain of the Year". *Pizza Today*. May 18, 2010. Retrieved from <https://web.archive.org/web/20100613224151/http://www.pizzatoday.com/NewsViews/May182010/tabid/419/Default.aspx>
9. "End of Domino's Pizza Delivery Guarantee". *Snopes*. July 8, 2011. Retrieved from <https://www.snopes.com/fact-check/mush-vroom-pizza/>
10. Bhasin.H. Marketing Strategy of Dominos – Dominos strategy.*Marketing91*. Retrieved from <https://www.marketing91.com/marketing-strategy-of-dominos/>
11. Golden Harvest to launch Domino's Pizza in Bangladesh.*bdnews24.com*. Retrieved

- from <https://bdnews24.com/business/2018/03/06/golden-harvest-to-launch-dominos-pizza-in-bangladesh>
12. "Domino's Drops 30-minute Delivery Pledge". *Chicago Tribune*. December 22, 1993 Retrieved from <https://www.chicagotribune.com/news/ct-xpm-1993-12-22-9312220035-story.html>
 13. Tasreen.Z.(2018,7 March). Domino's Pizza to set foot in Bangladesh soon.*The Daily Star*. Retrieved from <https://www.thedailystar.net/business/retail/dominos-pizza-set-foot-bangladesh-soon-1544422>
 14. Bhushan.R.(2018,6 March). Jubilant FoodWorks announces JV with Golden Harvest, to launch Domino's Pizza in Bangladesh.*The Economics Times*. Retrieved from <https://economictimes.indiatimes.com/industry/cons-products/food/jubilant-foodworks-announces-jv-with-golden-harvest-to-launch-dominos-pizza-in-bangladesh/articleshow/63185518.cms?from=mdr>
 15. Cold Chain Technologies Transforming food and supply chain. (n.d.). *Cold Chain Technologies Transforming Food and Supply Chain*. Retrieved from https://www.trade.gov/topmarkets/pdf/Cold_Chain_Executive_Summary.pdf
 16. *Cold Chain Market Size, Share & Trends Analysis Report*. (n.d.). Retrieved from <https://www.grandviewresearch.com/industry-analysis/cold-chain-market>
 17. Cold Chain Technologies Transforming food and supply chain. (n.d.). *Cold Chain Technologies Transforming Food and Supply Chain*. Retrieved from https://www.trade.gov/topmarkets/pdf/Cold_Chain_Executive_Summary.pdf.