

The Strategy of Import Cost Minimization of Akij Ceramics Limited through
SCM Implementation

By

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A Dissertation submitted in partial fulfilment of the requirements for the Degree of
Masters in Procurement and Supply Management (MPSM)

BRAC Institute of Governance and Development (BIGD)
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Declaration

This is declared that - Declaration

1. This thesis is my own work while completing my degree at Brac University.
2. The thesis does not contain any materials that has been published previously or written by a third party, except where this is appropriately quoted through full and accurate referencing.
3. The thesis does not have materials that has been accepted, or submitted for any other degree or diploma at a university or other institution.
4. I have acknowledged all sources from where I got help.



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Ethics Statement

In order to ensure the research was conducted with honesty and transparency; as well as to avoid harming any participants, the thesis was regulated by the following ethical considerations:

- Participants could withdraw from participating at any given time
- Participants were briefed regarding the nature of the research and questionnaire and their full consent were obtained before the study
- Respondents' identities have been kept confidential
- Works of other authors used in the dissertation have been acknowledged with the use of APA referencing system
- Misinterpretation regarding the objective of the paper has been avoided
- All possible sources of conflict, affiliations and sources of funding has been declared
- All type of bias in the primary data findings has been avoided as best to the researcher's abilities
- All research related communication was conducted with honesty, integrity and Transparency



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Abstract

At present price of imported goods of the world are very high, that's why cost minimization is very much essential for every importer through supply chain management.

However, this paper aims to provide a comprehensive analysis of the import cost minimization by the of the strategy of import cost minimization of Akij Ceramics through SCM implementation for Bangladesh,

Identify their underlying causes, and propose effective import cost minimization strategies. By understanding these import cost appropriate mitigation measures, the Akij ceramics industry can achieve sustainable growth and ensure a reliable supply of import goods and raw materials of any country.

Keywords: Supply Chain Management, Import Cost Minimization Strategy, Cost Minimization process, Selection of Incoterms Rules 2020, Negotiation for Foreign Purchase. Import Raw Materials Process of for Customs Clearance. Knowledge About Ceramics Industry.

Dedication

My Father Md. Ashraf Ali, My Mother Samsun Nahar My Wife Mahbuba sultana, My Daughter Sabikun Nahar, My Son Mabruk Rahman Who share the Adventures of my life.

Acknowledgement

Thanks to the Almighty for giving me the strength, patience, and courage to undertake this study and complete It would be outright unfair if I take credit for this dissertation by myself. First and foremost, I would to express my heartfelt gratitude to my supervisor Dr. Md. Moniruzzaman Senior Trainer, BIGD, Brac university for the constant support and timely feedbacks on my paper. He has extended me wholehearted support and prudent guidance throughout the research and has provided me valuable suggestions, inspiration, and guidelines in my quest for knowledge. I am grateful to her for her precious assistance. I am also grateful to Rajmoni Singha PhD, Senior Manager, Academic and Training Program, BRAC Institute of Governance and Development (BIGD),

I express thankfulness to my family for their continuous support to complete my study. I would like to special thank my parents for always believing me that I am capable of attaining a Master's degree. I thank to my wife, for being my biggest fan, accommodating my research needs always pushing me to strive for the best. I am truly appreciative of the constant supply of coffee, no matter when I asked for it and always reminding me everything turns out fine in the end.

I would also like to thanks my colleague Mr. Samim, Jahangir & Nasif & for helping me find appropriate data collection, organizing and formatting the paper, using the correct variables and taking the time out to respond to any questions or surveys I needed for the paper. Lastly, I am thankful to my friends Suzon, Shafin, Shajib, Moshior & Mustahfiz for her constant excitement for everything, which made me excited to work on this dissertation.

Table of Contents

Declaration	i
Approval.....	ii
Ethics Statement.....	iii
Abstract.....	iv
Dedication	v
Acknowledgement.....	vi
Table of Contents.....	vii-viii
List of Table	ix
List of Figure	x
List of Acronyms	xi
Chapter-1: INTRODUCTION	1
1.1 Background of Study	1-2
1.2 Research Question	3
1.3 Objective of the Research.....	4
1.4 Significance of the study.....	4
1.5 Scope of Study	5
1.6 Limitation of Study	6
Chapter-2: LITERATURE REVIEW	7-8
Chapter-3: METHODOLOGY.....	9
3.1 Source and Method of Data Collection	9
3.2 Important of Supply Chain Management.....	10
3.3 Cost Minimization process for Import & procurement	11-18
3.4 Data Analysis and Presentation.....	18

Chapter-4: CERAMICS INDUSTRY IN BANGLADESH.....	19
4.1 Overview of Ceramics Sector in Bangladesh.....	19-21
4.2 About Akij Ceramics Ltd.....	22-25
4.3 Supply chain Management of Akij Ceramics.....	25
4.4 SWOT Analysis for Akij Ceramics	26-27
 Chapter-5: DATA ANALYSIS AND RESOULT.....	 28
5.1 Suppliers of Akij Ceramics Limited.....	28-29
5.2 Techniques of data analysis.....	29
5.3 Data Analysis and Result	30-32
 Chapter-6: FINDINGS, CONCLUTIONS AND RECOMMENDATION-.....	 33
6.1 Finding of the study.....	33
6.2 Recommendation.....	33
6.3 Conclusion	34-35
6.4 References.....	36

List of Tables

Table 5.1 Source of Major Raw Materials Procurement:	28-29
Table 5.2 Total Import Raw Materials During Last Five Years	29
Table 5.3 Total Import Cost reduce Data Base 2020.....	30
Table 5.4 Total Import Cost reduce Data Base 2021.....	31
Table 5.5 Total Import Cost reduce Data Base 2022.....	31

List of Figures

Figures 1.1 Diagram of Research Design.....	5
Figure: 3.1 Incoterms: Seller/Buyer Risks, Costs and Obligations Transfer.....	13
Figure: 3.2 Incoterms: Seller/Buyer Risks, Costs and Obligations Transfer.....	14
Figure: 4.1 Flow Ceramics Factory Trends/Destinations	23

List of Acronyms

BCMEA	: Bangladesh Ceramics Manufacturers & Export Association
SCM	: Supply chain management
SCMIS	: Supply chain management information system.
EPB	: Export promotion bureau
BIDA	: Bangladesh Investment Development Authority
CRM	: Customer Relationship Management.
CSR	: Customer service management
C& F	: Clearing and Forwarding
PI	: Proforma Invoice
RM	: Raw Materials
LC	: Letter of Credit
EXW	: Ex-Works
FOB	: Free on board
CFR	: Cost and freight
DDP	: Delivered duty paid
SAFTA	: South Asian Free Trade Area.
SRO	: Statutory Regulatory Orders.
SLAs	: Service level agreements

CHAPTER-1

INTRODCUTION

1.1 Background of The Study

Tiles are now widely used commodity. Over all man has common desire to beautify living spaces. They want durable and user-friendly house. Ceramics tiles was made by man for 4000 years (BC). Beautiful tiles were found in the oldest pyramids in Egypt, the shells of Babylon and ancient wrecks of Greek city. During the Islamic period it was beautified in Persia.

In Europe decorated tiles were used in Moorish Spain till the second half of the 12th centaury. After 12th centaury tiles were found in other European countries like Portugal, England, Netherlands, Germany and Italy. In the 19th century Britain stated mass production of tiles. English tiles making industry expanded rapidly during the industrial revolution and went peak in the late 1800s and stumped soon after the turn of the century. The ceramic industry is nor one of the expanding manufacturing sectors of Bangladesh. The sector grabbed to 85% of the local demand as the country and experiences steady economic growth and urbanization. This is now aiming to achieve the third largest export sector in the next five years.

The ceramics industry of Bangladesh was started its journey in 1958 and currently it currently It consists of around 65 producers such as tableware, tiles, sanitary ware, insulator, heavy clay etc. The total local market consumption for ceramics products is amounted to USD 660 million in FY 2017-18 and local production meets the demand of 95% of table ware, 78% of tiles and 89% of sanitaryware. All over the last decade, Bangladeshi ceramics industry has witnessed a multi-dimensional growth in both domestic (20% average annual Growth) and export markets (26% during the last three years). Approximately it has 200% growth in production capacity in the last 5 years. The sector has directly employed around 48,000 people and people and indirectly employed over 500,000 people. Akij ceramics limited. One of the largest

Manufacturers of ceramic and porcelain in Bangladesh. Akij Ceramics factory is a concern of Akij Bashir Group, one of the largest Conglomerates in Bangladesh. Since the beginning of Akij Ceramics' journey in 2012, rather than just creating tiles, it has been an effort to implement aesthetic development in lifestyle and a philosophy of pursuing perfection. Hard work and dedication has enabled Akij Ceramics to acquire a leading position in the Tiles industry of Bangladesh. Starting with a production capacity of 20,000 square meter tiles per day, the growing demand of the market has led Akij Ceramics to produce 49,500 square meter tiles per day. State-of-the-art technology combined with the superior brains in the tiles Industry have brought beautifully crafted wall and floor tiles to existence. Mirror Polished, Rustic, Satin Matt tiles and many more textures continued to give the consumers the experience of a lifetime. The consumers have been empowered not only with the best designs and various sizes, but also with impeccable durability that has become the market standard since. Using the latest European technologies in its facilities,

Akij Ceramics is working relentlessly to minimize its carbon footprint. Crafting the experience of a lifetime every day, Akij Ceramics is developing continuously with an unquenched thirst to remain the best in the tiles industry and to provide you with the very best. Perhaps Akij Group's most popular segment among Bangladeshi consumers is its ceramics business. At the same time, the company has been investing a significant amount of resources in innovating its tableware. Tableware is a premium segment because it is an artisan product and requires a lot of manual activity – it has to be handmade. Our country has a long history of making tableware, much longer than tiles or sanitaryware. We are able to demonstrate our excellence because we have congregated some of the best minds and talents in the country. The positive response from our local and foreign customers indicates that we have invested properly in this premium

segment and are creating products which are truly the best. Bangladeshi ceramics product is exported to more than 50 countries including developed countries like UK, USA, USA, Italy, Spain, Norway, France, Netherlands, Australia etc. According to Export Promotion Bureau (EPB) ceramics export earning amount is nearly USD 70million in FY 2018-19, that was USD 52 million in FY 2017-2018. Bangladesh is now seventh largest expert is forecasted to become third largest in the next five years .US-China trade tension and rising European demand have been the major catalyst for export growth. Global market for ceramic products is expected to be worth USD 408 billion by 2025 and the country's ceramic manufacturers are positioned to capture a slice of this expanding world mark

1.2 Research Questions

To achieve the research objectives, the following research questions will be addressed:

- 1.What potential import cost large does the Akij ceramics ltd face concerning supply chain disruptions?
- 2.How to reduce import cost minimization at Akij Ceramics industry through SCM implementation?
- 3.What are the underlying causes of the identified import cost minimization in Akij ceramics industry.?

1.3 Objectives of the Research

- The primary objective of this thesis is to conduct a comprehensive analysis of the import cost minimization associated with the supply and demand of ceramics industry in Bangladesh. The specific research objectives include:
- To identify the keys for import cost reduction of Akij ceramics industry through supply chain.
- analyze the causes and drivers of these import cost reduction, and
- To proposed import cost minimization strategies to be identified by valuating the effectiveness of existing strategies mitigation measures in the ceramics

1.4 Significance of the Study

This study holds significant importance for various stakeholders in the ceramics sector, including ceramics suppliers, distributors, policymakers, and consumers. By identifying and understanding the potential import cost minimization in the supply and demand of ceramics in Bangladesh, this research will contribute to the development of effective import cost management strategies.

The findings of this study will enable industry stakeholders to enhance the resilience of the ceramics sector, improve supply chain efficiency, minimize import cost, and ensure a consistent and reliable supply of ceramics raw materials to meet the smoot operation of the country in ceramics industry.

1.5 Scope of Study

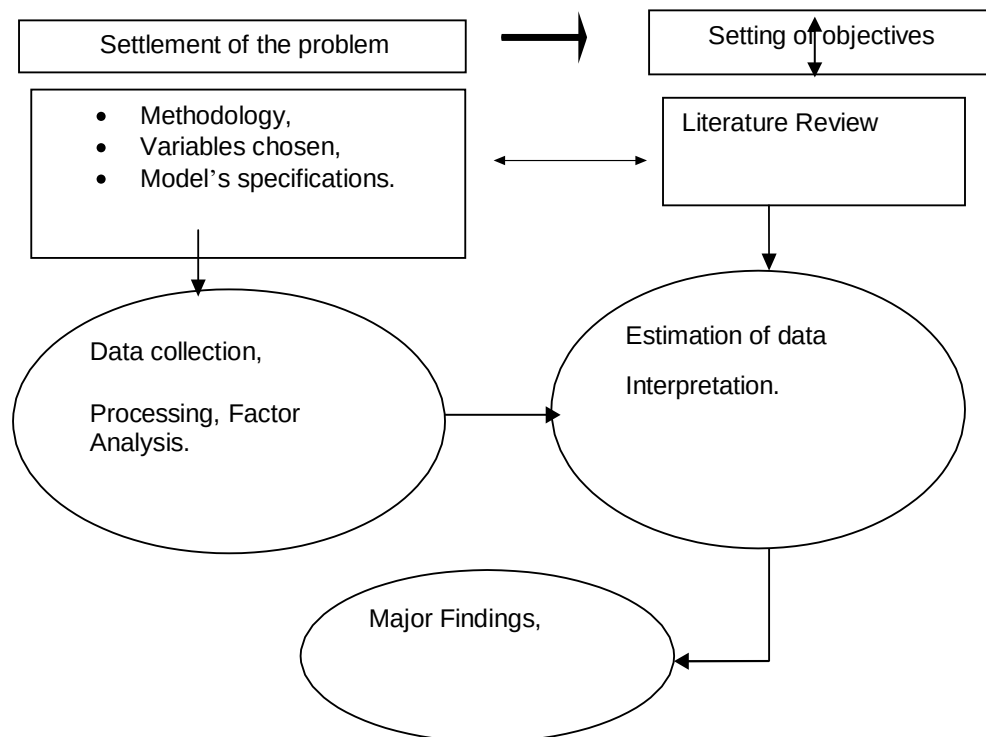
I have completed my thesis program at Akij Ceramic Industries Ltd. My thesis topic was “The Strategy of Import Cost Minimization of Akij Ceramics Through SCM Implementation”.

Hence the working area of my thesis was only in Head office, Dhaka. I have known by this study that what is the main marketing strategy of Akij ceramics and other ceramic industry to import cost reduce.

Diagram of Research Design

The research process of this study is shown in Chart 1¹.

Figure 1.1: Diagram of Research Design



¹ M. Zainul Abedin, *A Handbook of Research* (2nd Revised ed.; Dhaka: Book Syndicate, 2005), p. 50

1.6 Limitation of the Study

Setting limitations in our study helps to clarify the outcomes drawn from our research and enhance understanding of the subject. Moreover, it shows that the author has investigated all the weaknesses in the study. Limitation in research is an impact of a constraint on the research design in the overall study. They are the flaws or weaknesses in the study, which may influence the outcome of the research. Limitations are very important to understand inserting research findings in context, interpreting the validity scientific work, and assigning credibility level to conclusions of public research. This goes beyond listing the scale and direction of random and systematic errors and validity problems.

The annual report was the main secondary Information0source of information that was not enough to complete the report and private the reader a clear idea about the ceramic industry. While collecting data, they did not disclose much information due to the confidentiality of the organization.

CHAPTER-2

LITERATURE REVIEW

Literature Review

The current state of development of advanced ceramic materials abroad is reviewed. The volume of production of powders and parts from advanced ceramics in the world, North America, Japan, and Western Europe for 1989–1995, and the structure of their application are shown. Prospects for advanced ceramics development up to the year 2000 are discussed. Bangladesh's ceramics industry has experienced 200 percent growth in production in the last five years. This growth is expected to sustain for a considerable period of time. Thanks to the robust development of the real estate sector and rising living standard of the people in the country. The industry is also positioned to expand rapidly in the global market with its high-quality products, Low labor cost and creative entrepreneurs. Traditional manufacturers of ceramics such as Italy and Spain have been experiencing difficulties in remaining competitive due to rising labor cost and the ongoing global financial crisis. So that's why, more order are being placed to low cost countries as like Bangladesh. Bangladeshi item of quality in ceramics can easily compete with the products of its close competitions China and India. Now if the industry gets proper incentives and support from the government, it has all the potential to be one of the top ceramics-exporting countries in the world. Much like the garments industry this would be another manufacturing success for Bangladesh. The ceramic industry, a major backward linkage of the construction sector, is yet to fully bounce back from the shocks of the Covid-19 pandemic. Although there has been some improvement after the coronavirus shutdown, the ceramic industry has not been able to turn around as the construction sector has not fully recovered. Industry insiders say the demand for ceramic products at home and abroad has declined during the Covid-19 pandemic. In addition, the exports of the products have also dropped.

The ceramic sector suffered around a 30% decline in sales in the last fiscal year due to the coronavirus breakout in the country. Although the situation has improved a bit after the lockdown, the ceramic sector is still at a 10-15% decline in revenue.

Zahedi Hassan Chowdhury, secretary of the Bangladesh Ceramic Manufacturers and Exporters Association (BCMEA), told The Business Standard, "The demand for ceramic products is low in both domestic and international markets. Although the demand for tiles is high in the country, the demand for tableware and sanitary ware is low.

Bangladesh's ceramic industry earns more than Tk356 crore through export. Of the different ceramic products, tableware is exported to more than 50 countries including the US, Canada, European Union, Australia; tiles are exported to India, Nepal, and Bhutan; and sanitary ware is exported to the Middle East, especially to the UAE. Tableware accounts for more than 90% of Bangladesh's ceramics exports.

CHAPTER- 3

METHODOLOGY

Both descriptive and exploratory researches have been selected to analyze this paper. Comparison analysis has also been taken part in this study.

The paper is structured as follows: following this introduction, a literature review is provided first, on the theories adopted in this study, and then on the dimensions of supply chain management practices and their impact on customer satisfaction demonstrating the theoretical framework of the study. Next, in the methodology section, instrumentation of the measurement items concerning the SCM practices and customer satisfaction is provided by mentioning the articles that have been reviewed for this purpose. Besides, how data were collected and analyzed is also stated. In the findings section, first, the reliability measures of the pertinent variables are presented. Factor analysis for the dimensions representing the SCM practices is then highlighted.

3.1 Sources and Method of Data Collection

Data have been collected from both primary and secondary sources. Primary data have been collected from face-to-face interview with the company personnel of Great Wall Ceramic Industries Ltd. and other selected companies and secondary data have been collected from company annual report, different publications, newspapers, magazines and websites.

Primary Sources

- Practical Deskwork
- Face to face conversation with officers or Manager
- Questionnaire survey

Secondary Sources

- Files and Folders
- Various publication of Akij Ceramic Industries Ltd
- Website of distinguish tiles company
- Annual Report of Akij ceramics Industries Ltd

3.2 Important of Supply Chain Management

There are many reasons why SCM is so important, but here are a few key ones:

- 1. Increased Efficiency:** By managing your supply chain effectively, you can reduce waste, cut down on delivery times, and optimize your inventory levels. All of these factors can help you run a more efficient business.
- 2. Cost Savings:** By optimizing your supply chain, you can reduce your costs and improve your profit margins. This is because you'll be able to negotiate better deals with suppliers, reduce the costs of warehousing and transportation, and minimize waste.
- 3. Better Customer service:** By streamlining your supply chain, you'll be able to deliver products to your customers faster and more reliably. This can help you build a loyal customer base and boost your reputation.

3.3 Cost Minimization Process for Import & Procurement at Ceramics Ltd.:

There are a number of key principles we have follow to help us choose the right strategy Cost minimization in foreign purchase and procurement maintain through supply chain process. The incumbent will lead a team and collaborate with various stakeholders to optimize purchasing activities, negotiate contracts, manage supplier relationships, and drive cost savings while ensuring quality and timely delivery of goods and services for different kinds of business units.

(1) Vendor Management: Identify, evaluate, and onboard reliable suppliers/vendors. Negotiate contracts, terms, and pricing agreements while maintaining positive relationships with local key suppliers. Monitor vendor performance, conduct regular assessments, and address any issues to ensure adherence to service level agreements (SLAs) and quality standards.

(2) Purchase Planning: Collaborate with internal stakeholders to understand their purchase requirements and create procurement plans accordingly. Anticipate demand, conduct market research, and analyze pricing trends to optimize procurement decisions and achieve cost savings without compromising quality.

(3) Purchase Order Processing: Manage the end-to-end purchase order process, ensuring accurate and timely creation, review, approval, and placement of purchase orders. Coordinate with internal departments, such as Finance and Operations, to ensure proper budget allocation and alignment with organizational policies and procedures.

(4) Cost Control and Negotiation: Identify opportunities to reduce procurement costs through strategic sourcing, volume discounts, alternative suppliers, and process improvements. Negotiate favorable terms, prices, and contracts with vendors while maintaining quality standards and timely delivery.

(5) Inventory Management: Collaborate with relevant stakeholders to forecast demand, manage stock levels, and optimize inventory. Implement effective inventory control mechanisms, monitor stock movements, and address any inventory-related issues to avoid stockouts or excess inventory.

(6) Compliance and Risk Management: Ensure compliance with applicable laws, regulations, and company-approved procurement policies. Establish robust internal controls to mitigate risks related to procurement activities, such as fraud, corruption, and conflicts of interest. Stay updated on relevant regulations and implement necessary changes.

(7) Team Leadership and Development: Lead and manage a team of procurement professionals, providing guidance, coaching, and support. Set performance objectives, conduct regular performance evaluations, and foster a collaborative and high-performing team culture.

(8) Process Improvement: Evaluate and improve procurement processes and workflows to enhance efficiency, accuracy, and transparency. Leverage technology and automation tools to streamline processes, improve data analytics, and optimize procurement outcomes.

(9) Asked for Indent or Proforma Invoice: After the proper selection of source, they have to ask for the Indent or PI which is issued by the local agent or supplier or manufacturer.

(10) Avoiding LC Amendment Cost: First time we have to collect the draft LCc from our bank and send to supplier for checking purpose for avoiding LC amendment cost.

11) Reasons to Explore Alternate Suppliers: Businesses operate as part of a complex network within a greater economy. None of them are totally self-sufficient; they are interdependent. Every business is a supplier that has suppliers they depend on to provide them

with raw materials. In the same way, every business is a customer that has customers they depend on to buy their products.

12) Incoterms Selection: The Incoterms are a set of 11 individual rules issued by the International Chamber of Commerce (ICC) which define the responsibilities of sellers and buyers for the sale of goods in international transactions of primary importance is that each Incoterms rule clarifies the tasks, costs, and risks to be borne by buyers and sellers in these transactions. Familiarizing yourself with Incoterms will help improve smoother transactions by clearly defining who is responsible for what and each step of the transaction. The Incoterms 2020 rules are updated and grouped into two categories reflecting modes of transport. of the 11 rules, there are seven for ANY mode(s) of transport and four for SEA or LAND or INLAND WATERWAY transport.

The seven Incoterms® 2020 rules for any mode(s) of transport are:

Figure: 3.1 Incoterms: Seller/Buyer Risks, Costs and Obligations Transfer

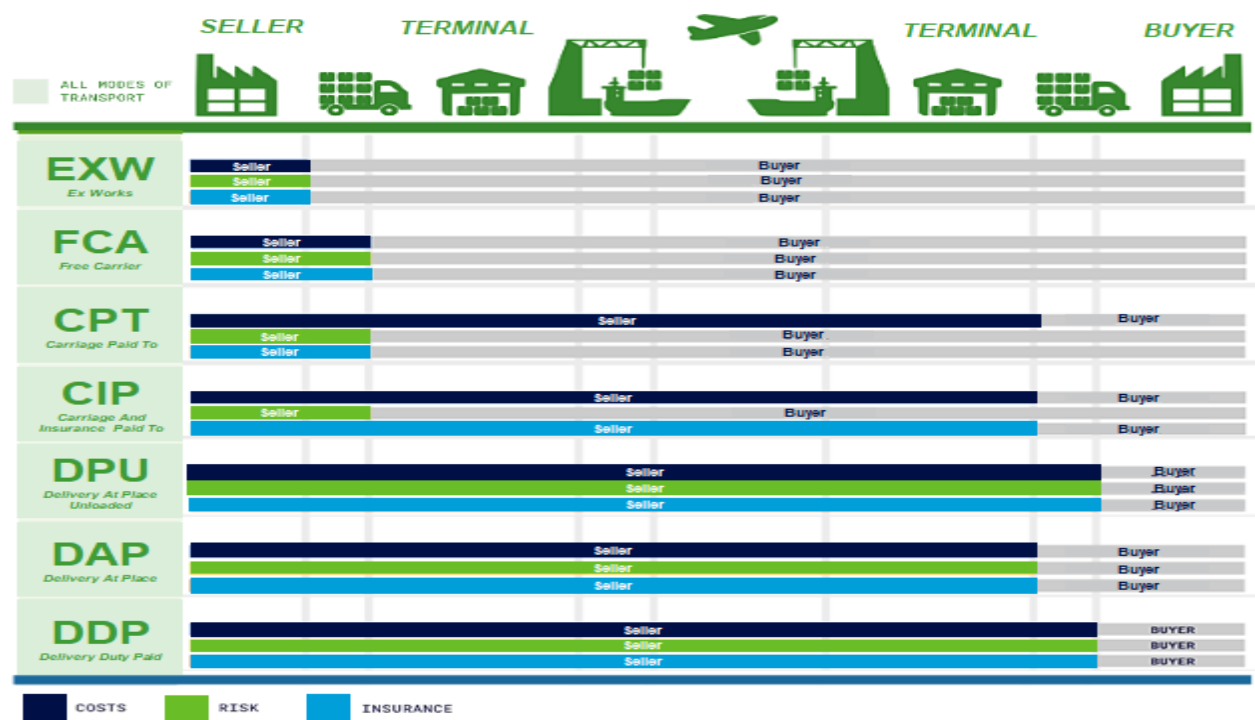


Figure: 3.1 The seven Incoterms® 2020 rules for any mode(s) of transport are:

EXW - Ex Works (insert place of delivery)

FCA - Free Carrier (Insert named place of delivery)

CPT - Carriage Paid to (insert place of destination)

CIP - Carriage and Insurance Paid To (insert place of destination)

DAP - Delivered at Place (insert named place of destination)

DPU - Delivered at Place Unloaded (insert of place of destination)

DDP - Delivered Duty Paid (Insert place of destination)

DPU Incoterms replaces the old DAT, with additional requirements for the seller to unload the goods from the arriving means of transport.

The four Incoterms 2020 rules for Sea and Inland Waterway Transport are:

Figure: 3.2 Incoterms: Seller/Buyer Risks, Costs and Obligations Transfer

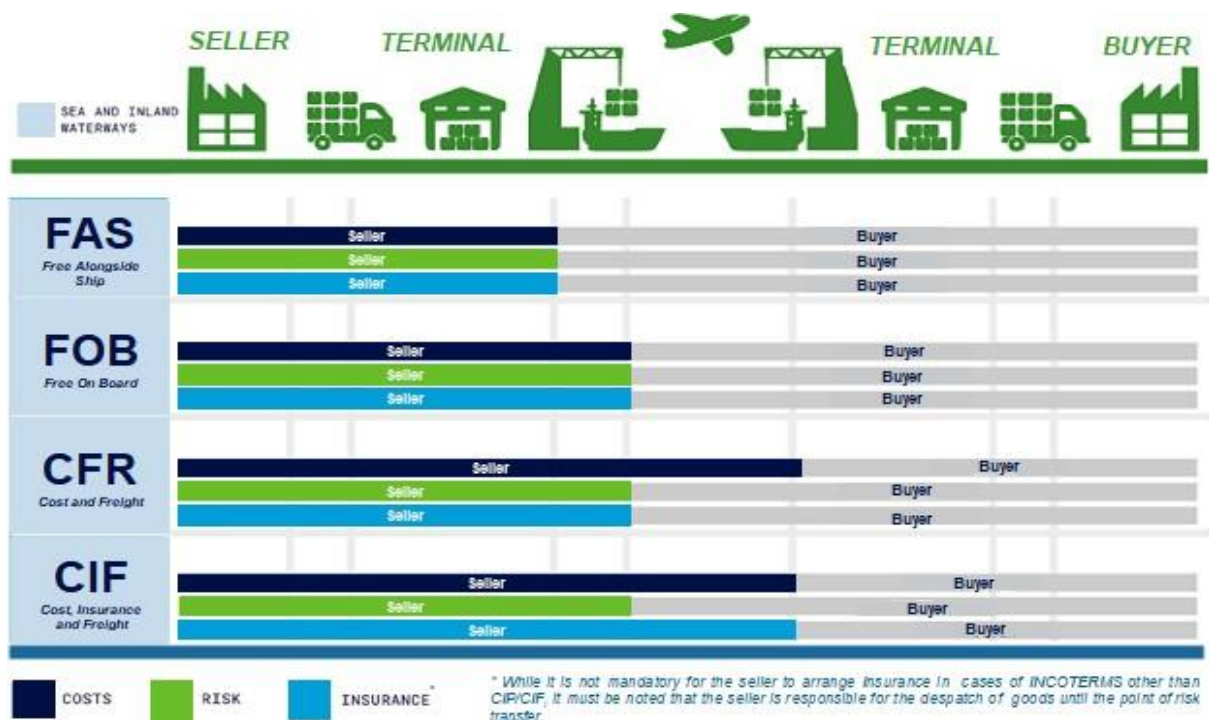


Figure: 3.2 The four Incoterms 2020 rules for Sea and Inland Waterway Transport are:

FAS - Free Alongside Ship (insert name of port of loading)

FOB - Free on Board (insert named port of loading)

CFR - Cost and Freight (insert named port of destination)

CIF - Cost Insurance and Freight (insert named port of destination)

For an international purchase operation, the most advantageous Incoterms for the importer will be DAT (Delivered at Terminal), DAP (Delivered at Place) and DDP (Delivered Duty Paid). The buyer is only responsible for customs formalities in the country of arrival, inland transport to his premises and unloading. On other hand if the importer selection incoterms FOB basis, then importer selection low cost Freight.

13) Port Selection: If the raw materials exported country of origin or shipment is India, district is Kolkata then we have to select port like Beanpole land port /Bhomra land port Instead of CTG or CPT Dhaka.

14) Minimization Freight Cost: We have to select Incoterms FOB if we want to negotiate with different shipping lines for FOB shipment and minimize freight cost against every shipment.

15) Insurance (c) Category: For Import LC opening purpose we have to select C category Insurance because this category is low cost. But in case of high value imported goods or project machineries then should not use C category insurance policy.

16) Right H.S Code Selection: Right HS Code & merchandiser description selection is the most important way to minimize import cost. Proper selection of right HS Code & merchandiser description can reduce the customs duties and goods can be released within free time without paying any port detention and shipping detention. Wrong HS Code & merchandiser description selection can also be reason for fine penalties.

17) Import Documents Collect: It's very important to ensure collect proper import documents from the supplier through banking channel with endorsement and providing the C&F agent to release the goods on time. In this stage imported must be ensured properly making import documents with all necessary information as per LC terms.

18) Best Clearing & Forwarding Selection (CNF):

C&F agent plays a vital role to reduce the importer cost. For selection the C&F agent importer must follow the following category:

- i. C&F agent belongs to valid licenses from government for acting on behalf of importer.
- ii. C&F agent has the enough financial ability to release goods.
- iii. C&F agent has enough personnel to do the work on time.
- iv. C&F agent must have the full knowledge about customs duties and HS Code and any other import functions.
- v. C&F agent must have strong communication with all parties.
- vi. C&F agent must have people management ability.

19) Best alternative Transport Selection:

Importer must ensure the availability of transportation for deliver the goods from the port to the factory on time.

20) Insurance Claim: If the short shipment against LC value, then we have to claim insurance amendment and return claim value for import documents.

(21) Reporting: Generate regular procurement reports, metrics, monitor key trends, and provide insights to senior management. Utilize data-driven approaches to drive decision-making and support strategic initiatives of the management.

(22) Pricing: Conventional wisdom tells us the more we buy, the lower the price will be. But if we're always buying from the same vendor, we know that we're getting the most competitive price. Even in a sole-sourcing situation, it's important to be certain that the prices you're paying are competitive. There should be a regular cycle for going to the market to identify any available alternatives.

23) Business Risk: What happens if your sole supplier suddenly runs into financial trouble, can't buy raw materials or make payroll, and is unable to supply for you? This risk is always present, but it is especially concerning during a pandemic and economic recession. Out of necessity, you might become a funding source for the supplier as well as a major customer. How long would it take you to find a new supplier, vet the company for quality and ramp up production. In this day of instant gratification, it won't take long for your customers to replace you if you're unable to deliver because of supplier issues.

(24) Delivery: Unless your critical supplier is right across the street, they need to ship your products and materials. Transportation bottlenecks can stall deliveries. In the case of imports, unforeseen problems can be created by customs holds, tariff issues or container shortages. Without an alternative, you could find yourself waiting helplessly for that delayed delivery while your nervous customers consider replacing you.

(25) Production Capacity: If you're not your supplier's only customer, what happens if another customer has needs that dominate production to your detriment? When you have a need and your inventory has hit your safety stock, how fast do you get a response? If your supplier's

capacity is allocated to favorite customers and you're not among them, you may end up waiting in line. If your primary products or raw materials all come from a single source, this creates serious risk. It's essential to beware of the risks that you face with your primary suppliers. Prepare for the unexpected

3.4 Data Analysis and Presentation:

Data processing: The collected data from secondary sources have been processed in an orderly manner so that it could be used for econometric modeling. The survey data from primary sources are arranged and scrutinized carefully on the basis of the completed questionnaire. Appropriate processing steps such as editing, coding, classification and tabulation are followed carefully.

Analysis plan: The collected data are analyzed by applying statistical tools and techniques such as correlation, Factor Analysis, Percentage Form etc.

Data presentation: Some suitable data have been presented in graphs, charts, and pictogram.

Interpretation of Results: Results are interpreted suitably and unambiguously.

CHAPTER-4

CERAMICS INDUSTRY IN BANGLADESH

4.1 Overview of Ceramics Sector in Bangladesh

Bangladesh's ceramics industry is one of the fastest growing manufacturing sectors in the country. Local demand for ceramic items continues to rise as the country's economy expands and urbanization accelerates. Following the COVID-19 outbreak in 2020, the industry faced a 30% sales drop. Four of the five listed ceramics companies reported profits in 2020, although at lower rates than in 2019, while one declared loss. For example, the revenue of RAK Ceramics, the market leader in tiles and bathroom fittings, fell by 9.82%, and profits fell by 58.81% in 2020, while in the case of Shimabukuro Ceramics, revenues fell by 4%, although profits increased 77%; at Standard Ceramics, revenue increased 17%, but profits dropped 71%; and in the case of Fu-Wang Ceramics, revenue increased by 26%, but profit slipped 0.99%. in the forward linkage of the construction sector. This underscores the market's fundamental characteristics, particularly the government's emphasis on affordable housing, which has allowed the sector to rebound. The country's tiles and sanitary ware business has also benefited from expanding disposable incomes, a growing desire for larger and roomier houses, competitive mortgage rates, and an overall young population.

The manufacturing capacity of Bangladesh's ceramics sector increased by approximately 200% between 2008 and 2018, a USAID study found. The companies produce 50 lakh pieces of sanitary ware, 15 crore square feet of tiles, and 25 crore pieces of tableware annually. Meanwhile, sales of ceramics reached BDT 6,000.00 crore in the 2020-21 fiscal year, as reported by the Bangladesh Ceramic Manufacturers and Exporters Association. Of that total, BDT 1,000.00 crore was spent on kitchen and bathroom accessories. Tiles were a big seller for

domestic producers that year, bringing in BDT 4,300.00 crore, while imports brought in BDT 700.00 crore.

Tiles and ceramics are widely used in Bangladesh for decorating homes, gardens, and offices. The addition of tiles and ceramics enhances the beauty and aesthetic appeal of buildings. Tajma Ceramic Industries, established in 1958, was the first ceramics industry in Bangladesh that produced porcelain tableware. Currently, there are over 60 tiles and ceramics companies in Bangladesh, with an additional 20 companies hitting the market in June 2018. Over the years, the tiles and ceramics industry in Bangladesh has experienced steady growth, with several companies emerging as top performers. With the economy on a consistent upward trajectory and a rise in consumer purchases, around 15 plants are expected to open soon, with an estimated investment of Tk 3,000.00 crore.

Ceramics have come a long way from their humble beginnings more than 26,000 years ago as primitive pottery and figures made from burnt clay and other minerals. From the tableware in our dining tables to the insulators in automotive parts, ceramics is more encompassing in our lives today than we perhaps realise. Starting its journey in the late '50s, when Tajma Ceramics Industries Ltd. started its business, the ceramics industry in Bangladesh has been one of the rapidly growing manufacturing industries, with around 68 producers currently (of which only five companies are listed), making ceramics products like heavy clay (e.g., pottery, terracotta), tiles, sanitary ware (e.g., basins, toilet bowls, plumbing fixtures), insulators (e.g., pin insulator, disc insulator), and tableware (e.g., dinner plates, bowls, etc.). Bangladesh's ceramics market has grown to more than BDT 6,000.00 crore with a multidimensional growth of 20% annual growth in the domestic market and 26% growth in the export market (2019), thanks to stable economic

growth coupled with an increase in people's disposable income, rapid urbanization, and a variety of housing options. Currently, the industry caters to around 80% of the local demand. About 95% of tableware, 75% of tiles, and 85% of sanitary ware demand are met through local production. About 48,000 people are employed directly by the industry, while it is believed that over 500,000 others are employed indirectly. The industry promises immense potential, but it is not without some major challenges to be overcome to sustain its growth, especially in the form of the ongoing energy crisis and raw material, shipping, and transportation prices all skyrocketing as a result of the Russia-Ukraine war.

According to Statista, the value of the world ceramics market in 2018 was estimated to be USD 229.13 billion. The size of the global ceramics market is expected to reach close to USD 408.00 billion by 2025. One of the most common uses for ceramics is in tiles, which come

Top 10 Tiles and Ceramics Companies in Bangladesh

1. RAK Ceramics (BD) Ltd
2. Great Wall Ceramic Industries Ltd
3. Fu-Wang Ceramic Industry Limited
4. Akij Ceramics Limited
5. DBL Ceramics Limited
6. X Ceramics Ltd
7. BRAVAT Bangladesh
8. MIR Ceramic Ltd
9. China-Bangla Ceramic Industries Ltd
10. Star Ceramics Bangladesh Limited

4.2 About Akij Ceramics Ltd

Established in 2012, Sheikh Bashir Uddin, managing director of Akij Bashir group. Akij Ceramics Ltd is one of the biggest ceramic and tile manufacturers in Bangladesh. The brand is currently producing 49,500 square meters of ceramic tiles every day. Mirror Polished, Rustic, Satin Matt, and other magnificent designs and textures are produced by Akij Ceramics to cater to its customers' every need. Since its inception, Akij Ceramics Ltd. has become a major player in the ceramics industry due to its perseverance, creativity, and excellent client support. Akij Ceramics has modernized its facilities with European technology in an effort to reduce its carbon footprint and has grown to be one of Bangladesh's top tile manufacturers. Akij ceramics crate innovative sanitary-ware brand 'Rosa it's valuable in sanitary ware market.

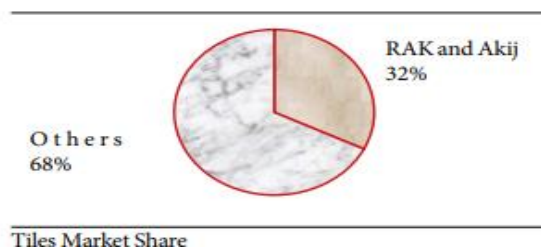
The brand has adopted some of the most advanced manufacturing technologies from Europe in order to maintain a high standard of quality for its products. The primary offerings include wall tiles, uniform floor tiles, ceramic floor tiles, and porcelain-printed floor tiles. The company also manufactures kitchen and bathroom tiles.

Figure: 4.1 Flow ceramics Factory Trends/Destinations According to The Business Standard, of the 68 ceramics manufacturing facilities in Bangladesh, 18 of them produce sanitary ware, 20 produce tableware, and the rest produce tiles



Tiles:

More than 60% of the market for tiles is controlled by five major manufacturers. RAK and Akij collectively control approximately 32.32% of the market for tiles, each



possessing around 16% of the market share, followed by strong competitors such as Great wall, Star, Abul Khair, and Mir Ceramics. Other regional brands and a few imported Chinese brands account for more than one-third of the tiles market. Among the other brands is DBL Ceramics Ltd., which began operations in its fully automated plant at the end of 2016. Modern equipment and technology have been installed by the company to increase its daily manufacturing capacity to 35,000 square meters. It also established a strong supply chain across the country

Tableware

Akij Group has recently started production of tableware products. This is a major investment in the sector in the country since 2009. The group is also expanding its ceramics business. Akij Tableware prides itself on a state-of-the-art factory located in Mymensingh, spanning a massive 13 acres or 566,280 square feet. The facility boasts a workforce of over 1,300 individuals, with a strong commitment to gender inclusion. Utilizing European technology, the factory has a production capacity of 2,40,000 pieces per 85 MT. Not only is the factory highly efficient and productive, but it also maintains strict adherence to environmental regulations, making it one of the most well-maintained and eco-friendly factories in all of Bangladesh. Akij Tableware, under the umbrella of Akij Ceramics Limited, a subsidiary of the esteemed Akij Bashir Group, is a leader in innovation and individuality, delivering unique and original styles. Committed to

quality and excellence, Akij Tableware strives to uphold the Group's reputation for distinction in Bangladesh.

In terms of the market share for ceramics products across the country, Shinepukur Ceramics, a subsidiary of the Beximco Group, holds 18% of the tableware market, estimated to be valued at over BDT 500 crore, and 24% of all exports during the 2018–19 fiscal year. One of the largest and oldest tableware producers, Monno Ceramics, founded in 1984, enjoys a solid reputation domestically and abroad. The business, which employs 2,000 people, can produce around 250,000 and 1.5 million pieces of porcelain and bone China each month, respectively.

Sanitary Ware

Nothing portrays one's class at a more personal level than the bathrooms and lavatories of their dwellings. These are the spaces that will instantly give your guests an idea of who you are. Keeping this in mind, Akij Ceramics has introduced their first designated range of innovative sanitary ware in Bangladesh by the name

About one-third (30%) of the BDT 1,000 crore sanitary ware market is held by RAK Ceramics, a UAE-Bangladesh joint venture enterprise that is listed on the Dhaka Stock Exchange and the Abu Dhabi Securities Exchange in the UAE. The company produces a wide range of goods, including ceramics and porcelain tiles, bathroom accessories, and all types of sanitary ware. It currently offers more than 2,500 models and often rolls out new styles to keep up with changing customer demands. As per New Vision, 18% of the market is controlled by Abul Khair Ceramics, a subsidiary of the regional conglomerate Abul Khair Group. Due to its affordability and accessibility, the company's "Stella" brand of sanitary ware goods is one of the most well-known in the local market. Abul Khair Ceramics has established itself as a significant contender in the sanitary ware market thanks to its broad distribution network and dealership network.

The industry has had tremendous growth over the past six years, especially in the export sector, relying on diversified tableware products. As opposed to the EPB's estimated goal of USD 35 million, export earnings in FY 2021–22 were USD 41.36 million. With exports exceeding USD 41 million in FY 2021–22, the sector has a presence in over 50 countries, including the UK, the USA, Italy, Spain Norway, France, the Netherlands, Australia, and more. The main drivers of growth, which have contributed more than USD 9 million in fortune to the business and are anticipated to continue the trend, are the US-China trade conflict and rising European demand.

4.3 Supply Chain Management of Akij Ceramics Limited

The Akij ceramics limited supply chain is the means through which sourcing the capital machine and raw materials for manufacturing the finished good for manufacturing sites; are transferred to wholesale distributors; stocked at retail, mail-order, and other types of ceramics product subject to price negotiations and processed through quality and utilization management screens by ceramic benefit management companies.

4.4 SWOT Analysis for Import Cost Minimization at Akij Ceramics Ltd:

Strength:

Strengths are the things that company does particularly well, or resources and assets that it owns that distinguish it from competitors.

- * Financially solvent, so any time we can make decision.
- * Positive reputation with every stakeholder.
- * An innovative mindset for minimizing cost.
- * Low purchasing costs & setup full new machine in our factory.
- * A strong online presence and following.
- * Best Service and reply within short time for every stakeholder.
- * A healthy company culture.

Weakness:

- Weaknesses are internal attributes and resources that company lacks. We need to know our weaknesses because they can make business vulnerable.
- Foreign purchase doesn't follow proper supplier chain rule.
- 70% of all official system are made manually.
- Employees Benefits are not ensured in accordance with factory act.
- Rigid structures and lack of agility.
- Poor employee engagement and retention.
- It would help if we made a list our own business' strengths and weaknesses, getting input from all staff including management as many of our employees as possible. Compare our strengths and weaknesses with those of our main competitors. Check whether company need to take corrective action to minimize weaknesses and identify where company can exploit strengths that our competitors don't have.

Opportunity

Opportunities are a set of external circumstances that, with the right decisions, can grow our company or put you in a favorable strategic position.

- new trade agreement—import possibilities
- new government support import policies & programs.
- work-from-home trend—can promote our communication app.
- we have to use SAFTA & SRO benefit against import raw materials.
- we have to use correct employee time management.
-

Threats:

Threats are external forces that constitute a risk to our business. our company should be on the lookout for external obstacles; it will have to overcome them if it is to flourish.

- Company has no standard Employees policy so any time they can switch.
- Due to Dollar Crisis product import price will be high.
- supply-chain problems
- new trade agreement—which can bring increased import price competition.

If new regulations increase the cost of competing in a market where Company has already weakness, Company might want to look for other opportunities. On the other hand, if Company have a good reputation and our key competitors are struggling, the regulations might present the opportunity to push aggressively for new customers.

CHAPTER-5

DATA ANALYSIS AND RESULT

5.1 Suppliers of Akij Ceramics Ltd.

Major raw materials of akij ceramics include many different types of dyes and chemicals. Suppliers of this company are Sacmi Imola S.C., Shounik Export, Torrecid, S.A. Spain, Impex Pvt.Ltd., Gimpex House, Gamma Oriental Traders, Foshan Xin Peng Industrial Service Co., Ltd, etc. provides these raw materials. Plant & machineries are imported from India, China, Thailand, Vietnam, Spain, Malaysia by akij ceramics ltd.

Table 5.1 source of Major Raw Materials Procurement

Name of Items	Suppliers	Quantity (KG)/MT Paryear
Potash Feldspar chips	Gimpex pvt Ltd. is a leading ceramics raw materials (Potash Feldspar chips) producer of in India. this company estimates that its ceramics products account for about 60% percent supplier in ceramics market Bangladesh.	72,000.00 MT
Ball clay	Productive Summit Sdn Bhd (PS) established in 2000 is a clay mining and processing company that is part of CCS Group of companies that specializes in industrial minerals for the ceramics and glass industries.	1,80,000.00 MT

Ceramic Digital Ink & glaze	in 1978, with the started marketing and producing frits, glazes and ceramic colors Esmalglass is established in Spain). most popular supplier for ceramics ink in Bangladesh.	45,000.00 KG
Soda Feldspar Chips	Imers Ceramics (India) Private Limited is majorly in Mining & Quarrying business from last 25 years and currently, company operations are active. doing business about 45% ceramic market in Bangladesh.	75,000.00 kg

Source: Akij Ceramic head office, Dhaka

No of Foreign Suppliers of Raw Materials and Major Items of Procurement

Table 5.2: Total Import Raw Materials during last Five Years.

Year	Import (in Million USD)	Growth rate (%)
2018	27.30	-
2019	32.27	14.13
2020	41.02	26.28
2021	34.68	7.25
2022	29.35	16.52

Source: Akij Ceramic head office, Dhaka

5.2 Techniques of Data Analysis:

To address the research objectives, this study utilizes a mixed methods approach comprised of quantitative and qualitative techniques. Questionnaire technique of survey method is used to collect primary data. Purposive and simple random sampling method are used to select

10 respondents who are directly involved in managing operations and supply chain of Akij Bangladesh Limited procurement.

A semi structured and pre-tested interview schedule has been used to collect data. Necessary correction, modification and alterations will be done accordingly. Data has been collected through personal interview Respondents were asked to indicate on a five-point scale ranging.

5.3 Data Analysis and Result:

Introduction:

Primary data has been collected through field survey with respect to the research objectives of the study.

Three years Import data base;

Import duty/import cost minimized using through SAFTA Benefit Under SRO :

Table 5.3 Data Base Year- 2020

SL NO	Import Item name	QTY MT	Unit price/MT	Total Qty in USD /EUR	Currency/@	Assessment value [CXD=EXF=? X1%landing+ 1%insurance. (G)	Under SAFTA (customs duty) CD 3% GX3%=H (H)	Without SAFTA (customs duty) CD 5% GX5%=(I) (I)	Import cost minimized Using SAFTA BDT (H-I)=(J) (J)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	potash feldspar chips	37,500.00	\$ 44.75	16,78,125.00	98	16,44,56,250.00	49,33,687.50	82,22,812.50	32,89,125.00
2	Quartz powder	40,800.00	\$ 63.00	25,70,400.00	98	25,18,99,200.00	75,56,976.00	1,25,94,960.00	50,37,984.00
3	'soda feldspar chips	21,500.00	\$45.00	9,67,500.00	98	9,48,15,000.00	28,44,450.00	47,40,750.00	18,96,300.00
4	Glaze	11,500.00	€ 565.00	64,97,500.00	101	65,62,47,500.00	1,96,87,425.00	3,28,12,375.00	1,31,24,950.00
Total import cost saving using SAFTA Benefit Under SRO year 2020 amount of BD Taka									2,33,48,359.00

Table 5.4 Data Base Year- 2021

SL NO (A)	Import Item name (B)	QTY MT (C)	Unit price/MT (D)	Total Qty in USD /EUR (E)	Cur ren cy/ @ (F)	Assessment value [CXD=EXF=? X1%landing+1 %insurance. =(G)	Under SAFTA (customs duty) CD 3% GX3%=(H) (H)	Without SAFTA (customs duty) CD 5% GX5%=(I) (I)	Import cost minimized Using SAFTA BDT (H-I)= (J) (J)
1	potash feldspar chips	34,500.00	\$ 48.75	16,81,875.00	99	16,65,05,625.00	49,95,168.75	83,25,281.25	33,30,112.50
2	Quartz powder	35,800.00	\$ 68.00	24,34,400.00	99	24,10,05,600.00	72,30,168.00	1,20,50,280.00	48,20,112.00
3	'soda feldspar chips	25,500.00	\$55.00	14,02,500.00	99	13,88,47,500.00	41,65,425.00	69,42,375.00	27,76,950.00
4	Glaze	12,500.00	€ 575.00	71,87,500.00	109	78,34,37,500.00	2,35,03,125.00	3,91,71,875.00	1,56,68,750.00
Total import cost saving using SAFTA Benefit Under SRO year 2021 amount of BD taka									2,65,95,924.50

Table 5.5 Data Base Year- 2022

SL NO (A)	Import Item name (B)	QTY MT (C)	Unit price/MT (D)	Total Qty in USD /EUR (E)	Cur ren cy/ @ (F)	Assessment value [CXD=EXF=? X1%landing+1 %insurance. =(G)	Under SAFTA (customs duty) CD 3% GX3%=(H) (H)	Without SAFTA (customs duty) CD 5% GX5%=(I) (I)	Import cost minimized Using SAFTA BDT (H-I)= (J) (J)
1	potash feldspar chips	36,500.00	\$ 42.75	15,60,375.00	103	16,07,18,625.00	48,21,558.75	80,35,931.25	32,14,372.50
2	Quartz powder	45,500.00	\$ 65.00	29,57,500.00	103	30,46,22,500.00	91,38,675.00	1,52,31,125.00	60,92,450.00
3	'soda feldspar chips	26,500.00	\$58.00	15,37,000.00	103	15,83,11,000.00	47,49,330.00	79,15,550.00	31,66,220.00
4	Glaze	13,500.00	€ 585.00	78,97,500.00	112	88,45,20,000.00	2,65,35,600.00	4,42,26,000.00	1,76,90,400.00
Total import cost saving using SAFTA Benefit Under SRO year 2022 amount of BD taka									3,00,63,442.50

Assessment value calculation for Example:

Quantity \$7,000.00X \$ 42.75 (Per. MT)

= \$2,99,250.00X\$109 (Exchange Rate)

= BDT 3,26,18,250.00X1% (+) (landing charge)

= BDT 3,29,44,432.50X1% (+) Insurance)

= BDT 3,32,73,876.83 Assessment value X3% CD (Customs duty) = BDT 9,98,216.31 with SAFTA

= BDT 3,32,73,876.83 Assessment value X5% CD (Customs duty) = BDT 16,63,693.85 without SAFTA

(BDT 16,63,693.85 - BDT 9,98,216.31)

= BDT 6,65,477.54

As per above sample Finally cost minimization with benefit BDT 6,65,477.54 under SAFTA benefit.

Analysis: From the analysis, we have to gain SAFTA benefit and its depends on under SRO Govt. rule & raw materials imported must be from south Asian country like Afghanistan, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. SAFTA recognizes the need for special and differential treatment for LDCs in its preamble. The agreement came into force in 2006, succeeding the 1993 SAARC Preferential Trading Arrangement. SAFTA signatory countries. Above 3 years data analysis shows how to minimize cost for imported raw material by using SAFTA benefit under SRO got role. So the trend analysis I have seen that Akij ceramics continuously doing well than other tiles companies. On the other hand if you have to shipment BULK qty then cost saving benefit large.

CHAPTER- 6

FINDINGS, CONCLUTIONS AND RECOMNEDATION

6.1 Finding of The Study

The primary objective of this dissertation is to examine the implementation of different technologies and processes in order to increase efficiency. Automated customer service may account for reduced import cost through supply chain. So I think that manually we need to check proper Govt. rule and procedure for import.

6.2 Recommendation

- 1) To use SAFTA benefit under SRO
- 2) Select proper HS code use for opening LC & correction documents.
- 3) Release the goods on due time.
- 4) Follow up clearing and forwarding for customs assessment purpose.
- 5) Different type of supplier sourcing and negotiation.
- 6) Incoterms selection which benefits applicant/importer.
- 7) Need One stop banking service for import documents endorsement.

Natural inducement of the target groups to Akij ceramics Industries Limited is that customers must perceive greater degree of satisfaction from the offered services. The qualitative improvement and development of cutting-edge products precipitate in higher degree of customer's satisfaction and Akij ceramics Ceramic Industries Limited to plan for improvement of services, adding flair to the products.

6.3 Conclusion

The final quality of the ceramics raw materials import cost minimization depends on company management behavior, management working process & manpower selection, Ultimately, it is the main factor above discussed cost analysis any other benefit gain for every import that will decide how cost is reduced in import thought implementation of supply chain management.

In the preceding pages, the status and position of the customer as the nucleus if markets have been discussed in a general manner. The principal theme of the discussion holds equally true in case all companies. Reflection on the history of ceramics implies a clear understanding of the two related industries, technology and aesthetics. Ceramic technology has developed advanced materials over the years for greater aesthetics. The original hand-rolled coils do not have time to evolve to create economic glazes that were developed in special ovens. Aesthetics of the material developed in parallel with the technological processes involved in producing materials.

So that ceramics industry is suffering from being dependent on foreign raw materials. More than 85% of the raw materials are purchased from abroad and the duty structure for this import is not favorable at all. For example, clay (Semi plastic, High plastic Non plastic) is the main ingredient for ceramic products and Ceramics Industry have to pay duty on the total volume of our purchase. But the clay we are bringing in contains more than 30% moisture. Which means we have to pay duty for 100% of the import of which only 70% is usable. This is a huge loss that adversely impacts our production cost. This gap needs to be rectified. also, our government should rethink the tariff value of imported tiles to protect the local tiles industry. It was at 6-12 taka/S.Ft but in this budget, it came down to 5-11tk/S.Ft which will reduce the price of foreign

Tiles by 10% and increase competition for the locally produced tiles. This is not a good decision for our industry. Besides, the government has imposed 10% SD on sanitary items which are a huge blow to the ceramics industry. We hope that the government will withdraw this SD to save the industry. Natural gas is the lifeline for the ceramics industry as it is important for burning the ceramic items at a very high temperature. An uninterrupted flow of natural gas is a must to maintain quality but we hardly get our desired supply of natural gas which forces the companies to invest in their own CNG and coal facilities increasing their production costs significantly.

The government should ensure a consistent supply of natural gas and revise the duty structure to encourage the growth of the ceramics industry. As the global economy is experiencing drastic change due to the current COVID-19 pandemic, we are seeing promising opportunities to compete against China in the international market. If our government looks into the duty issue of raw materials with a positive mindset and increases the export incentive, we can gain an impressive market share and bring invaluable foreign currency for our country.

Akij Ceramics has empowered its consumers not only with the best designs and various sizes, but also with impeccable durability which has now become the market standard. Using the latest European technologies in its facilities, Akij Ceramics is now striving to minimize its carbon footprint. Crafting better every day, Akij Ceramics aims to develop continuously with an unquenched thirst to remain the best in the tiles industry and to provide you with a unique experience of ceramic tiles.

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