

Impact of withdrawal of cash incentive as export subsidy on export earning in Bangladesh upon LDC graduation

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Abstract

Bangladesh is poised to graduate into a developing economy later in 2026 according to the UN declaration as all criteria were met. However, the new economic environment will bring up new challenges, especially for export-oriented industries. Our critical economic catalyst export will encounter facility loss, business loss and tariff hike above all local fiscal benefits which solidified our export business like cash incentive and lowered tax rate and benefits. This study aimed to analyse whether major export friendly factor incentives can reduce and cut export earnings or now with negative impacts. Above all, how graduating and developing economies coped and offset export loss while they graduated. Based on primary survey data the relevance of cash incentive could not be quantitatively proved in the two variables regression test. It indicates that there is virtually no significant relationship between cash incentives and export earnings of Bangladesh. Alongside, this study also found on qualitative and quantitative assessment based on Likert scale result that Developing a business environment and reducing doing business cost are the most important alternative to cash incentive loss for sustaining export market competitiveness.

Keywords: Cash Incentive, export Subsidy, export Earning, LDC graduation, FTA.

1. Introduction

Bangladesh's stride towards graduation from Least Developed Countries (LDC) is a great pride for the nation. Bangladesh is the first country to meet all the three criteria [i.e., national income per capita, human asset index (HAI), economic vulnerability index (EVI)] for graduating from LDC status having some implication on economy. Upon LDC graduation of Bangladesh, many export-oriented industries of Bangladesh, the lifeline of Bangladesh economy, will face various challenges including loss of International Support Measures (ISM) and withdrawals of cash incentives. These will definitely put the export-oriented industries of Bangladesh in a little disadvantaged state. On the other hand, Duty Free Quota Free (DFQF) facilities will also be gradually phased out. Therefore, Bangladesh needs to ensure export competitiveness following her graduation in 2026. It is seen that cash incentive has become an influential factor to expedite the exports of the country. But, in the post LDC graduation time we need to ensure strategies, which will replace the existing cash incentive system and yet have the potential to sustain export potential of Bangladesh in the post LDC graduation era. It is presumed that export earnings will be lost due to the fact that our counterparts will charge higher tariffs than before. Hence, to ensure overall export competitiveness, post cash incentive regime is critical for export sustenance of the country.

After LDC graduation, we will lose some preferential treatments which we are enjoying now. This new regime won't allow us to provide export subsidies like cash incentive and tax exemption to the export of traditional and non-traditional items in export basket. Bangladesh government is supporting export growth through cash incentive/export subsidies based on realized export proceeds. Approximately 42 items, including five sub-sectors of textile goods, are currently eligible for cash incentives ranging from 2% to 20% which will not be available after graduation unless graduating LDCs are given specific consideration by members. In a word, phasing-out of preferences like cash incentive may substantially impact on our export growth. Core sectors in export basket apart from RMG, Leather, Jute goods, Pharmaceutical, Agro-processing, Light engineering, ITES may be affected. Since export earnings are instrumental for our local industrialisation and economic growth for upcoming economic transformation, we need to see whether loss of incentive and export earnings are closely associated in core 5 sectors.

The link between a financial incentive and increased exports is somewhat tenuous. Textile goods made from local yarn received a 25% cash incentive in the 1980s. Apart from RMG sector, other export items like Jute, Pharmaceuticals, Agro processing, Light-Engineering, leather goods, IT & ITES will also face the consequences of subsidy loss. To sustain our export-oriented industrialization and investment in post LDC graduation time, we need to assess the impact on export market and sustenance of export market while cash incentive will phase-out. Huge competition combined with a lack of financial incentives discourages entrepreneurs from investing in this field. For this, it is very important from the private sector perspective as well as for the national economy to determine the export loss we will face after losing this preferential treatment which may help us to make a smoother transition.

The main objective of this research is to examine the potential loss in export earnings resulting from the withdrawal of export subsidies (cash incentives) following Bangladesh's graduation from LDC status, analyzing the potential contraction of various sectors and the broader economy if this facility is discontinued, and exploring strategies adopted by other graduated countries to address

similar challenges, focusing on the extent of export earnings loss and approaches to managing benefit erosion.

2. Literature review

A country attempting to retaliate against a trade partner's export subsidies by adopting its own export subsidies will only injure itself under perfect competition (Panagariya, 2003). In Bangladesh, Cash incentive facilities have been available at a 15% rate since 1986 to stimulate exports and build backward linkages (Hossain, 2019). Taxes are another problem in receiving the cash subsidies, as tax offices calculate directly as profit, and cut corporate tax on it (Hossain, 2019). The high production cost of products such as local yarn, most exporters are no longer interested in and some have even stated that they lose money after getting the Cash Incentive facility. As a result, the Cash Incentive Facility will not be able to compensate these losses (Hossain, 2019). Deriving information from national authorities, it appears that, with the exception of Bangladesh and Nepal, graduating LDCs do not have export subsidy programmes in force (Trade Impacts of LDC Graduation, 2020).

Export subsidies and their impact on the exports of different countries have been thoroughly studied by several prior researchers. A review of the prior literature suggests that there are mixed effects of fiscal incentives on export earnings of different countries. As found by one of the research studies conducted by the World Bank Group in the Nepalese context, export subsidies do not significantly affect exports (Defever et al., 2018).

However, there is a significant positive impact of such an incentive program for ensuring export diversification (Defever et al., 2018). Moreover, Panagariya (2000) implied that the export subsidies of India do not have any significant impact on its exports. It rather magnifies the cost of the already costly subsidy programs aimed at achieving export diversification. The same reality is evident in the case of Brazil (Panagariya, 2000). These findings raise questions regarding the justifications of offering export subsidies. However, the opposite of these findings is also available in several other studies. For example, another research study on Nepal found that export subsidies, when extended to selected firms for exporting countries other than India, positively influenced export (Roy, 1993).

Furthermore, dissimilarities of the impact of export subsidy among industries in the Bangladeshi context had been found by Deb & Bairagi (2009). They found that cash incentives positively influenced the exports of frozen shrimp/prawn, frozen fish and vegetable products (Deb & Bairagi, 2009). They also found that the income of fish and shrimp farmers significantly magnified due to cash incentives (Deb & Bairagi, 2009).

These facts were found when the earnings of the aforesaid sectors were compared against their pre-incentive earnings. It is also important to mention here that export is not only influenced by subsidies. Other variables, such as exchange rate, relative price, export performance benefit, rate of interest, foreign income, custom duty, sales tax, excise taxes, and refunds also influence exports in the expected directions (Roy, 1993). However, studies to explore the relationship between cash incentives and export performance in the major thrust sectors of the country are still scarce. Moreover, export subsidies are considered to trade distortive. Therefore, except for a few selected developing countries and the LDCs, other countries are not allowed to offer this sort of incentive

to the exporters to ensure the continuation of the free flow of goods (Hegde & Wouters, 2021). Bangladesh is poised to graduate from the LDC group of countries in 2026. Hence, cash incentives are bound to gradually phase-out. In view of the LDC graduation and the aforementioned evidence gap, it is only rationale to conduct some studies to see the impact of the loss of export subsidies on potential export earnings and for identifying viable alternatives to cash incentives in the post-LDC graduation era in which Bangladesh is soon to enter. This study fulfills both of these objectives.

3. Research Methodology:

This study is exploratory in nature, designed to gain an in-depth understanding of the effectiveness of cash incentives as export subsidies. The government introduced cash incentives with the goal of boosting the country's export earnings. However, the effectiveness of this initiative remains uncertain. Given that no cash incentives will be available in the post-LDC era, the study focused on current incentives, their role in covering business expenses, and the potential revenue loss following their withdrawal.

The report provides unique insights into the cash incentives provided to export-oriented businesses in Bangladesh. To achieve this, primary data were collected from 176 businesses across sectors including Textile & Readymade Garments, Agro-processing, Pharmaceuticals, Jute & Jute Goods, Leather & Leather Goods, IT & IT-enabled services, and Light Engineering. For qualitative data, KIIs were conducted with 3 representatives from RMG, 1 from IT, 1 from Leather, and 2 each from Agro, Pharmaceuticals, Light Engineering, and Jute sectors. A structured questionnaire was developed for the study, and relevant agencies and sector associations were approached to encourage participation. Additionally, DCCI members involved in international business were invited to participate in the survey.

A non-probability convenience sampling technique was used to select 176 samples from a population of approximately 6,146 listed goods exporters and around 400 IT & ITES service exporters (BASIS, 2017; Export Promotion Bureau, Government of Bangladesh). The choice of non-probability sampling was driven by time and resource constraints, as well as the impact of COVID-19, which limited the researchers' ability to reach randomly selected businesses. Data were collected virtually using Kobo Toolbox, and MS Excel and SPSS were used for data analysis.

This study employed mixed (both qualitative and quantitative) research approach. The first phase involved a primary survey of 176 businesses and complemented KIIs by purposive sampling that explored the challenges and potential strategies associated with the withdrawal of cash incentives/export subsidies. Respondents were asked to rank alternative support measures using a 5-point Likert scale. Their responses were analyzed to identify viable alternatives to cash incentives from the perspective of affected businesses. The findings are summarized in the 'Analysis and Findings' section of the report. The study was completed in approximately 2.5 months.

4. Analysis and Findings

A total of 176 respondents answered this question. Among them, 68.2% feel that their cash incentives will be withdrawn after LDC graduation and 31.8% said that they do not know about it.

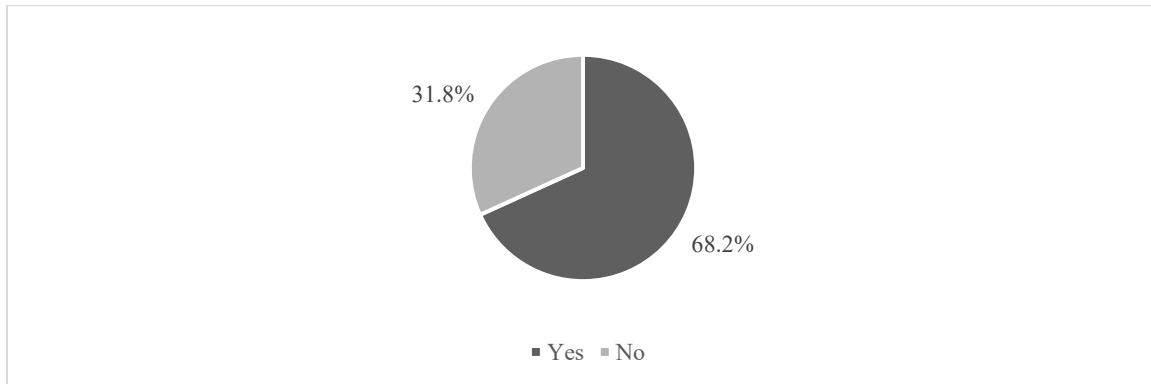


Figure 1: Perception on withdrawn cash incentive after LDC Graduation.

Source: Field Survey, 2022

Among the respondents, 27.3% are export businesses in the Leather & Leather goods sector, 22.7% are in the Textile & Readymade Garments sector, 19.3% Agro-processing sector, 11.9% Pharmaceuticals sector, 9.1% Jute & Jute Goods sector, 6.3% IT & IT enabled service sector and 3.4% Light Engineering sector.

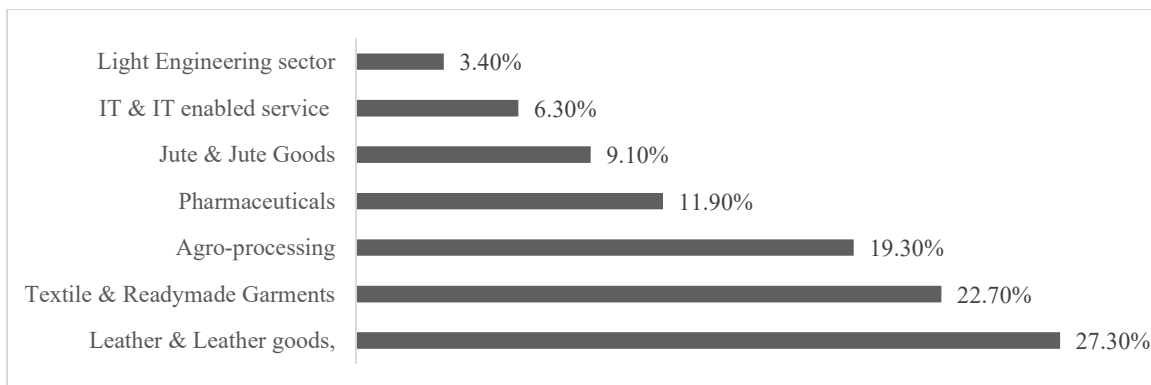


Figure 2: Export Sector of Business Operation

Source: Field Survey, 2022

Regarding total export earnings in a year (USD), respondents said that 63.1% export earnings are below 5 million, 29.5% are 5 million to 100 million, 4% are 100 million to 200 million, 1.7% are 200 million to 300 million, 1.1% is 300 million to 400 million and 0.6% is 1 billion to 5 billion.

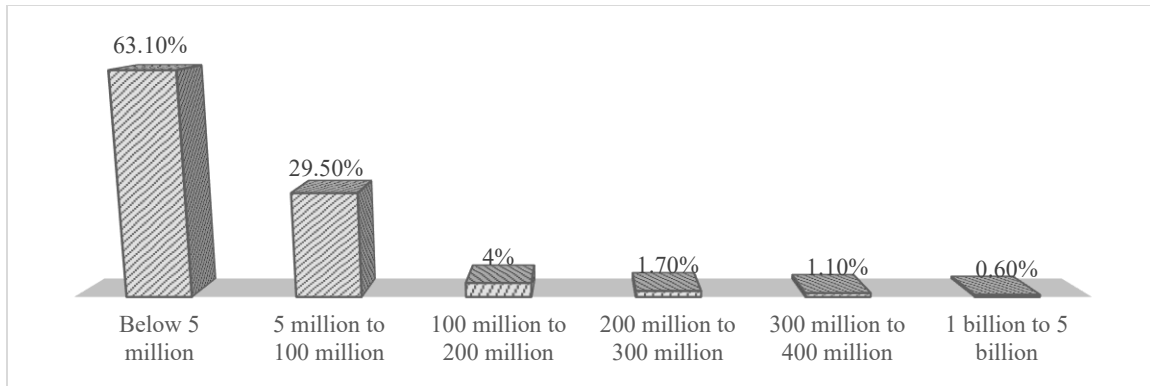


Figure 3: Total yearly export earnings (USD)

Source: Field Survey, 2022

74.4% respondents said that they are getting cash incentives against export earnings whereas 25.6% informed that they are not getting any cash incentives.

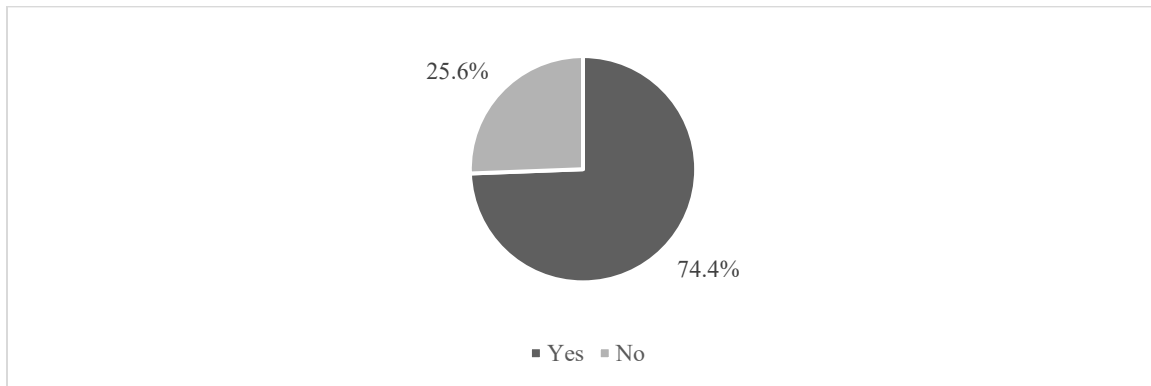


Figure 4: Getting cash incentives against export earnings

Source: Field Survey, 2022

A total of 131 respondents informed that they are getting cash incentives against export earnings. Among them 71.8% are getting cash incentives below 1 million against export earnings, 27.5% are getting 1 million to 100 million and 0.8% are getting 300 million to 400 million.

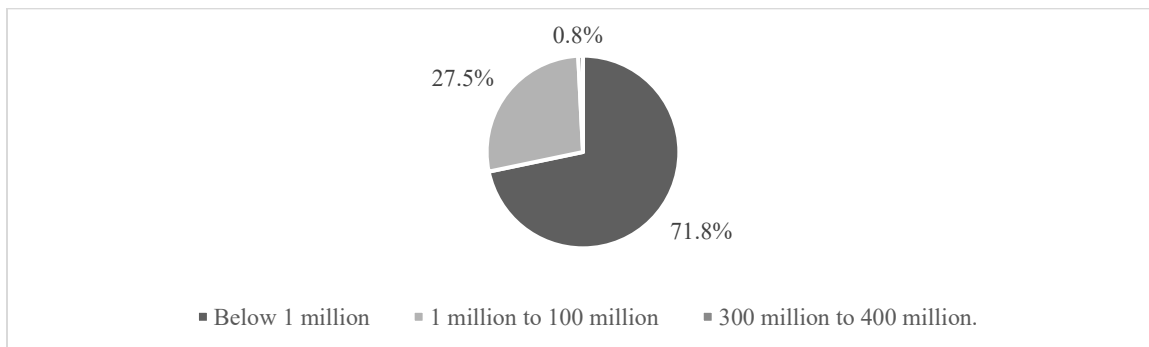


Figure 5: Getting cash incentives in a year

Source: Field Survey, 2022

In response to the need for cash incentive program for reducing the production cost, most (53.4%) of the respondents have opined that cash incentive program is reducing their production cost by 1-5%. whereas, 24.4% of the respondents have reported that it reduced by 5-10%, 5.3%, 3.8%, 2.3% and 0.8% respondents have reported that their production cost reduced by 10-15%, 20-25% and 25-30% respectively. 9.9% of the respondents said that cash incentive program does not reduce their production cost at all.

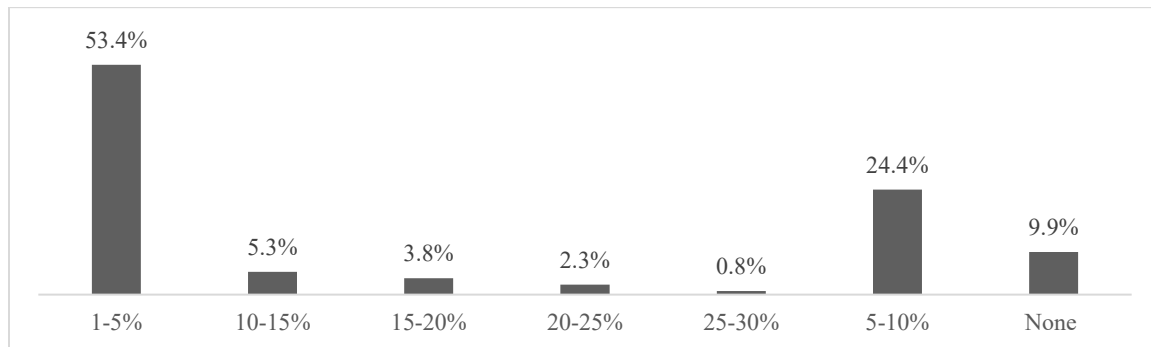


Figure 6: Percentage of production cost reduced by cash incentive programme

Source: Field Survey, 2022

Among the respondents, 57.3% stated that they export would decrease by less than \$1 mn in a year. 31.3% respondents said that export would decrease by \$1-5 mn. 6.9% respondent reported that it would decrease by \$5-\$10mn, 3.1% respondents said that export would decrease by above 20mn and 1.5% respondents said that export would decrease by less than \$15-\$20 mn in a year.

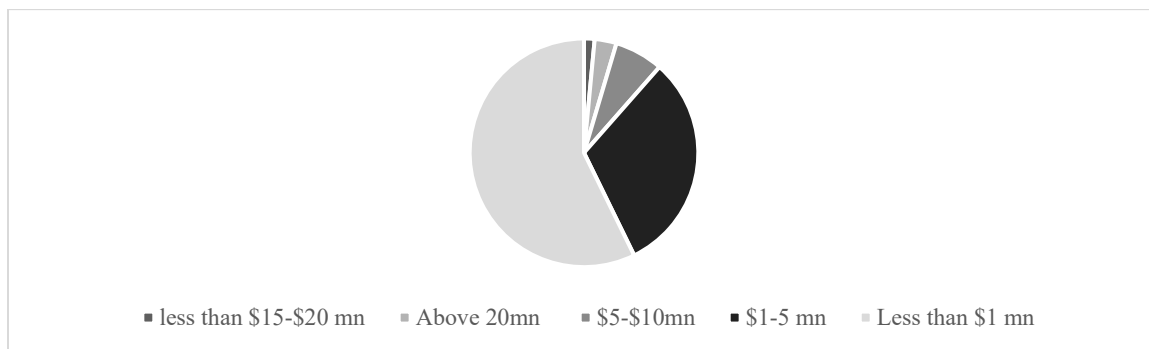


Figure 7: The decreased export earnings due to stopping the cash incentives

Source: Field Survey, 2022

Among the respondents, 87.8% stated that business will lose the competitiveness in the world export market due to withdrawn of cash incentive and 12.2% respondents said opposite view on in absence of cash incentives.

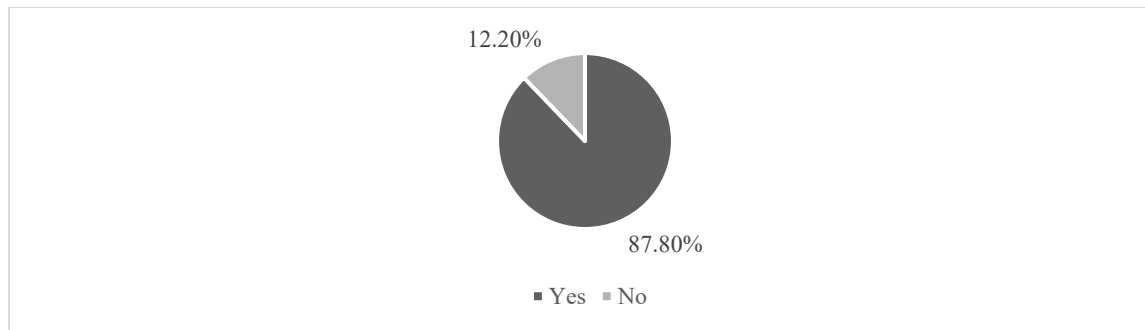


Figure 8: Competitiveness loses due to withdraw of cash incentive

Source: Field Survey, 2022

Regarding easy access to Low-cost financing from govt and developed countries including EDF Factors, 73.3% responded that Low-cost financing and others is highly important in response to the withdrawn of cash incentive. 19.8% respondents said that low-cost financing and others is important in response to the withdrawn of cash incentive. 3.1% respondents reported that it's neither important nor unimportant. 3.1% respondents said that Low-cost financing and others are unimportant and 0.8% said that it's totally unimportant.

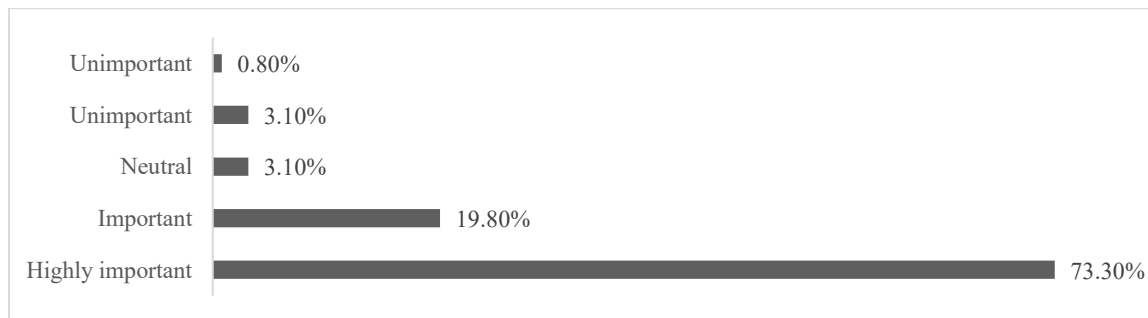


Figure 9: Easy access to low-cost financing from govt, and others

Source: Field Survey, 2022

When the respondents were asked about the level of importance of reduction of corporate tax rate and Easing Administrative Process to cash incentive as the alternative to cash incentive, most of the respondents (71.8%) opined that this is highly important. 24.4% of respondents said that this is important. 3.1% respondents were neutral about this alternative. On the other hand, only 0.8% of respondents said that this alternative is highly unimportant.

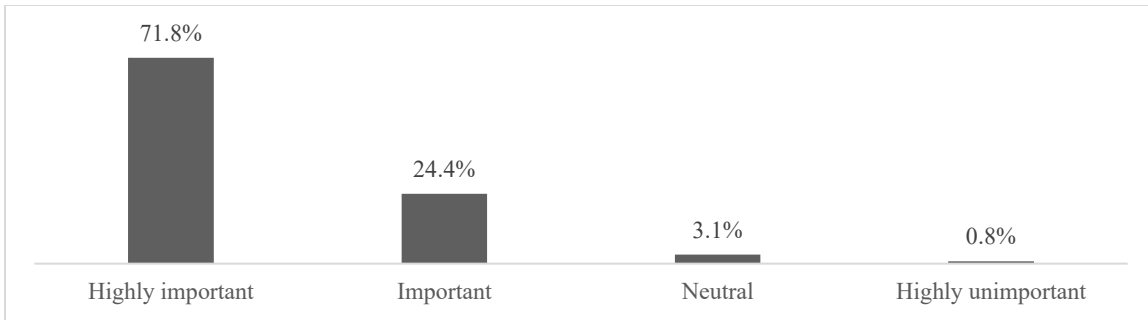


Figure 10: Reduction of corporate tax rate and easing administrative process

Source: Field Survey, 2022

As the alternative to cash incentive, easy access to Disaster Risk Management insurance from the international disaster fund is important to most of the respondents (44.3%). 32.8% of respondents opined that this is highly important. Interestingly, 10.7% of respondents said that this is unimportant. Neutral responses came from 9.2% of respondents. Another interesting finding is that 3.1% of respondents expressed their opinion that this alternative is highly unimportant to them.

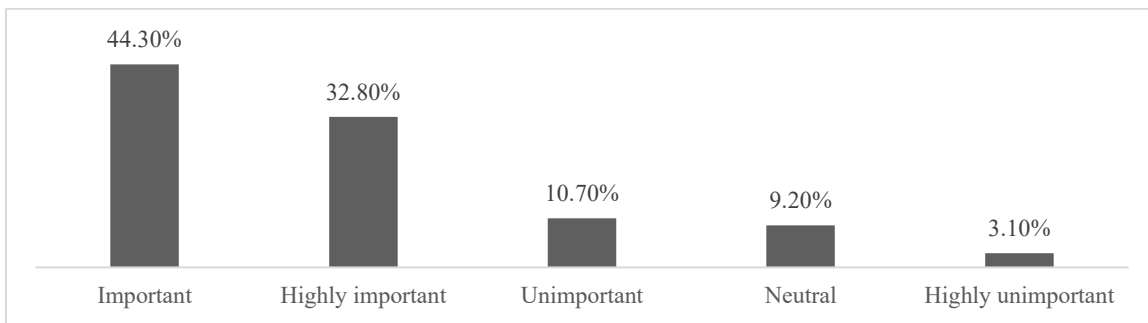


Figure 11: Easy access to disaster risk management insurance from international disaster fund

Source: Field Survey, 2022

Most of the respondents (45%) expressed their opinion that signing FTA/PTA/RTAs is highly important as the alternative to a cash incentive. On the other hand, this alternative is important to 39.7% of respondents. 10.7% of respondents were neutral about this alternative. 3.8% and 0.8% of respondents opined that this alternative is unimportant and highly unimportant respectively.

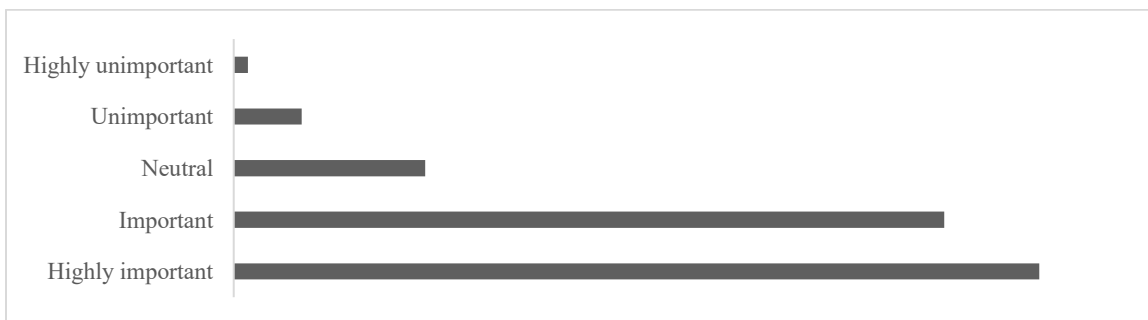


Figure 12: Signing FTA/PTA/RTAs

Source: Field Survey, 2022

Regarding Market Development Most of the respondents (75.6%) opined that this is highly important as the alternative to a cash incentive whereas, this alternative is important to 22.9% of respondents. On the other hand, 0.8% of respondents said that Market Development is highly unimportant as an alternative. Another 0.8% of respondents were neutral about this alternative.

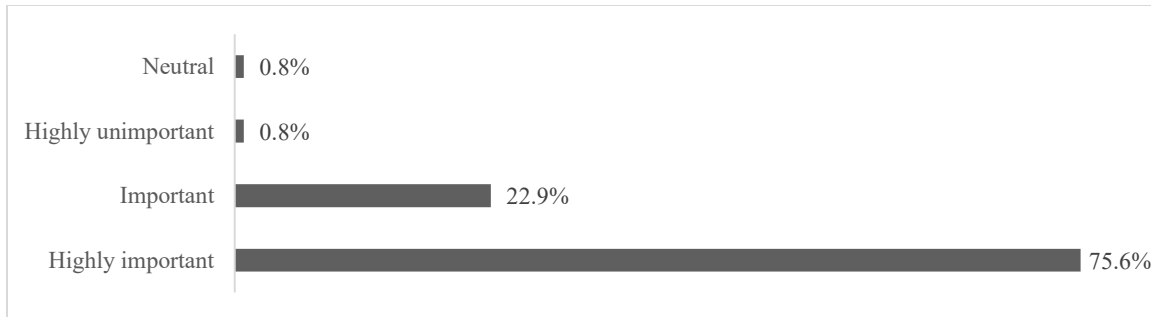


Figure 13: Market Development

Source: Field Survey, 2022

Most of the respondents (59.5%) expressed their opinion that this is a highly important alternative to a cash incentive. 38.2% of respondents said that this alternative is important. 1.5% of respondents were neutral about this alternative. Only 0.8% of respondents opined that this is a highly unimportant alternative to a cash incentive.

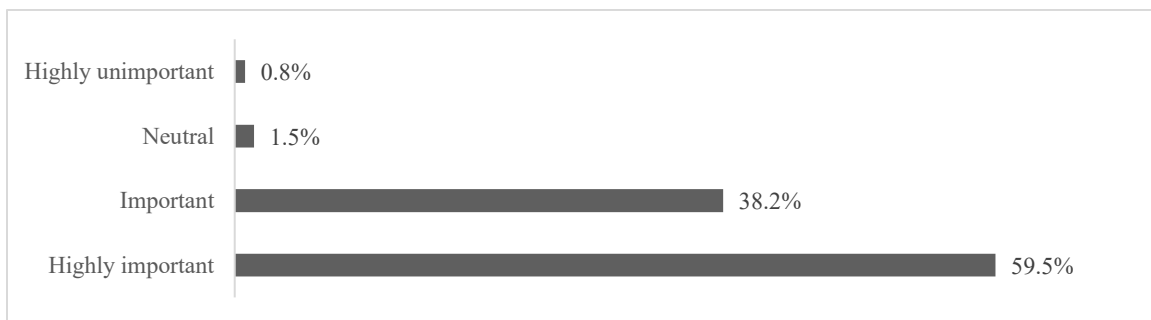


Figure 14: Supporting product diversification, Automation and quality assurance activities

Source: Field Survey, 2022

Regarding this alternative to a cash incentive, most of the respondents (47.3%) said that this is highly important. 39.7% of respondents opined that this alternative is important. Neutral responses came from 11.5% of respondents. Only 0.8% of respondents opined that this is a highly unimportant alternative to a cash incentive. On the other hand, 0.8% of respondents said that this is highly unimportant as an alternative. Another 0.8% of respondents expressed their opinion that this is unimportant.

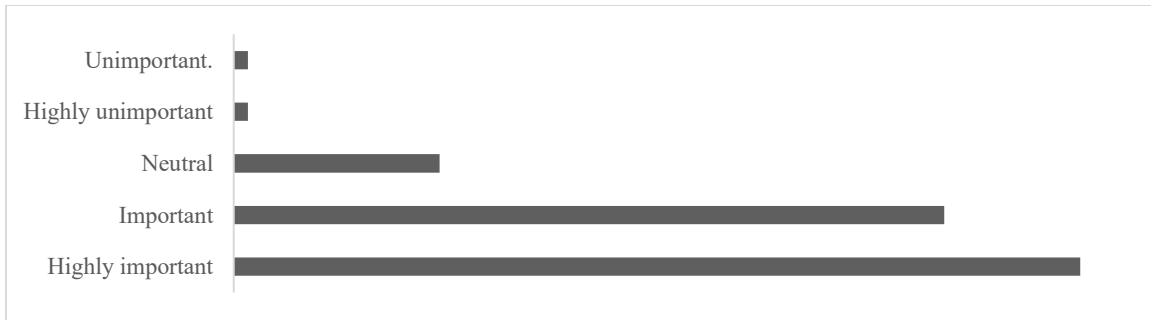


Figure 15: Strengthening backward and forward linkage Industry

Source: Field Survey, 2022

Most of the respondents (71%) opined that this is a highly important alternative to a cash incentive. 14.5% of respondents said that this alternative is important. 9.9% of respondents were neutral about this alternative. 3.8% and 0.8% responded as unimportant and highly unimportant alternatives to a cash incentive respectively.

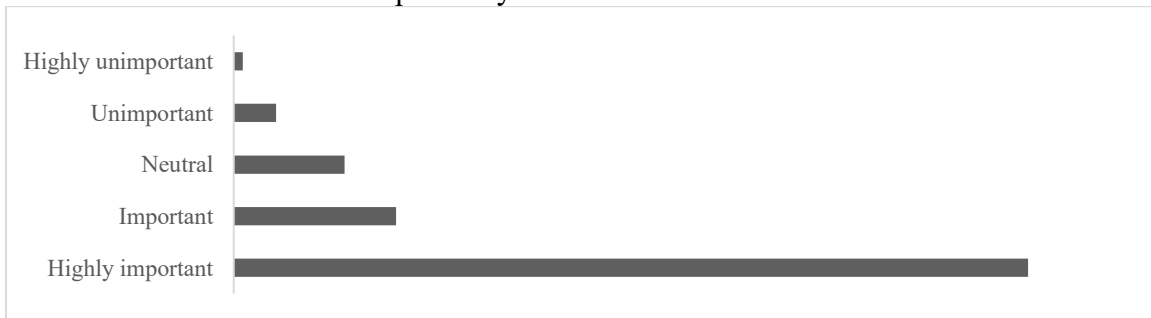


Figure 16: Developing transportation facility to connect global market

Source: Field Survey, 2022

When the respondents were asked about this alternative to a cash incentive, most of the respondents (73.3%) said that this is a highly important alternative to a cash incentive. 22.9% of respondents expressed their opinion that this alternative is important. Neutral responses came from 2.3% of respondents. Only 1.5% of respondents opined that this is highly unimportant alternative to a cash incentive.

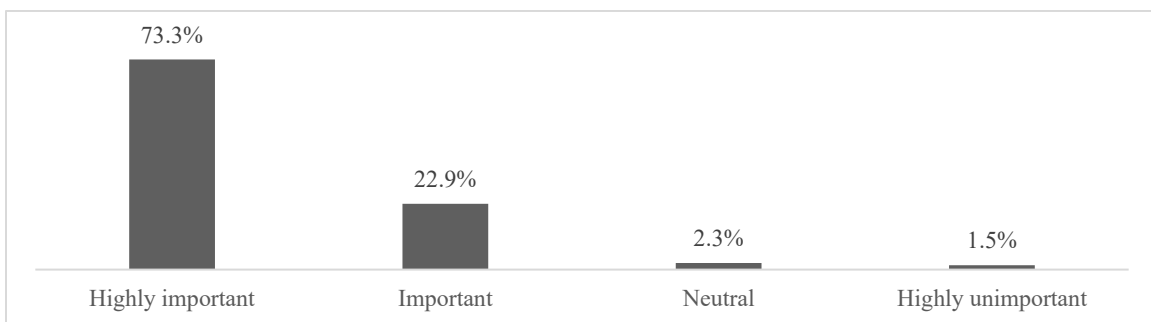


Figure 17: Capacity development assistance

Source: Field Survey, 2022

Most of the respondents (78.6%) opined that this is a highly important alternative to a cash incentive. 20.6% of respondents expressed their opinion that this alternative is important. Only 0.8% of respondents said that this is highly unimportant alternative to a cash incentive.

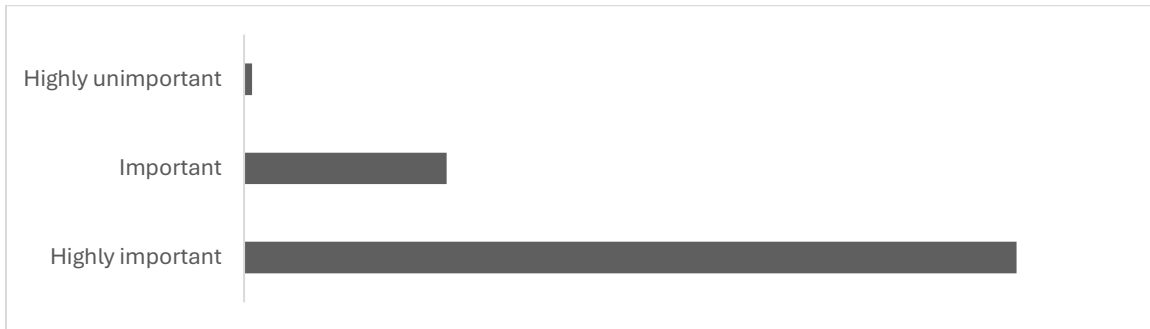


Figure 18: Developing business environment and reducing doing business cost

Source: Field Survey, 2022

One of the most important dimensions of this study is to identify the alternatives to cash incentives in the post LDC era. A list of alternatives has been given to the respondents to assess their attractiveness as viable alternatives to export subsidy. The list contains 5-point Likert Scale responses.

Findings from these responses are as follows:

Table: 1 Summary of Responses for different alternatives to cash incentives

S l.	Variable	Obs	Mean	Sum	Std. Dev.	Min	Max	Sum of Maximum Value	Sum of Minimum Value
1	Easy access to Low-cost financing from govt, and developed countries including EDF	131	4.62	605.00	0.7591	1	5	655	131
2	Reduction of corporate tax rate and Easing Administrative Process	131	4.66	611.00	0.6153	1	5	655	131
3	Easy access to Disaster Risk Manageme	131	3.93	515.00	1.0611	1	5	655	131

	nt insurance from international disaster fund								
4	Signing FTA/PTA/RTAs	131	4.24	556.00	0.8512	1	5	655	131
5	Market Development	131	4.73	619.00	0.5554	1	5	655	131
6	Supporting product diversification, Automation and quality assurance activities	131	4.56	597.00	0.6097	1	5	655	131
7	Strengthening backward and forward linkage Industry	131	4.32	566.00	0.7673	1	5	655	131
8	Developing transportation facility to connect global market	131	4.51	591.00	0.8803	1	5	655	131
9	Capacity development assistance	131	4.66	611.00	0.6749	1	5	655	131
10	Developing business environment and reducing doing business cost	131	4.76	624.00	0.5238	1	5	655	131
	Overall			5895.00				6550	1310

Table: 2 Summary of Responses for different alternatives to DFQF facility

Issues	Highly Important (%)	Important (%)	Total (%)
Ease of doing business	78.60	20.60	99.20
Corporate tax reduction	71.80	27.40	99.20
Market development	75.60	22.90	98.50
Product diversification, automation and quality assurance	59.50	38.20	97.70
Capacity development	73.30	22.90	96.20

Easy access to low-cost financing	73.30	19.80	93.10
Backward and forward linkage	47.30	39.70	87.00
Transportation facility	71.00	14.50	85.50

As table 2 shows, “Ease of doing business” has the highest percentage in term of “Highly Important” and “Important”. In other words, among the listed alternatives, “Ease of doing business” has the highest priority among the exporters. More importantly, if Bangladesh can ensure these through relevant policies, cash incentives will not be required. It is, however, important to remember that this is not the only alternative to cash incentives. The respondents identified “Corporate tax reduction”, “Market development”, “Product diversification, automation and quality assurance”, “Capacity development”, “Easy access to low-cost financing”, “Backward and forward linkage”, “Transportation facility” as the alternatives based on their importance. However, it must be mentioned here that this study only contains information and alternatives related to the cash incentive or export subsidy policies of the Government. Individual and firm-level variables are not studied here. Therefore, the findings of the study will offer policy recommendations and guidelines for the Government, not individual businesses.

4.1. Qualitative Analysis:

On RMG and Textile, agro-processing industry, light engineering, leather and leather goods, pharmaceuticals, jute and jute goods, IT and IETS, KIIs opined different views. Major opinions from the KIIs are represented in a tabular form below:

Table:3 Major findings from KIIS

Sectors	Findings
RMG and Textile	<ul style="list-style-type: none"> ▪ Primary concern for the RMG & Textile sectors is the taxation system. It is highly recommended that the government streamlines the taxation systems in a manner which reduces any opportunity of double or triple taxation on same earnings (for example, AIT, VAT, Turnover tax, income tax on same income) in the post-LDC graduation period. Otherwise, businesses will lose their competitiveness at the world stage. ▪ This sector is frequently held down by bureaucratic complexities and inefficiencies. These must be improved. ▪ Efficient supply chain management and resource utilization are another key area of concern. ▪ Weaknesses in contractual agreements among global commercial partners have been identified and legislative reforms are required to resolve insolvency and protect companies as well as investments. ▪ It is vital to investigate the possibilities of negotiating free trade agreements with countries those provide preferential treatments to Bangladesh. ▪ Product diversification inside RMG and textile sector along with diversification into further export industries will be vital strategies to Bangladesh’s RMG and textile sectors to continue industrial progress.

<p>Agro-processing industry</p>	<ul style="list-style-type: none"> ▪ It is critical to cultivate high-value, export-ready crops through diversification. ▪ Government’s extension services should be improved at the grassroots level. ▪ Plan for varied crop production and increase the commercialization of agriculture, including its sub-sectors are equally important tasks for survival in the post LDC graduation era. ▪ Developing a strategy for navigating the worldwide market for agro-processed foods. ▪ Increasing investment in research for agriculture, agricultural extension, and human resource development for promoting technology creation and growth. ▪ Making essential reforms to the export-import policies to create an export-friendly policy regime.
<p>Light engineering</p>	<ul style="list-style-type: none"> ▪ A sensible taxation approach is essential for this burgeoning industry to improve even further as a promising sector. ▪ A lack of planned industrial zones and regulations for promoting its expansion is already evident. ▪ Scarcity of skilled and competitive labour force has also pushed this industry backward. ▪ Customs duties on raw materials used in LE machines are higher than ideal, and they must be reduced. ▪ Effectively assisting light engineering industry, and its backward and forward linkages would be extremely cost - efficient for the primary industries, and would also be appropriate import substitutions.
<p>Leather and leather goods</p>	<ul style="list-style-type: none"> ▪ Post-LDC competition will be really fierce. ▪ The value added tax (VAT) on raw materials should be cut in half for survival. ▪ Improving port delivery, handling and processing procedure will boost this sector’s potential; ▪ Deep sea port transshipment is desperately needed for export and import.
<p>Pharmaceuticals</p>	<ul style="list-style-type: none"> ▪ This sector is currently one of the most advanced industries of the country. Abilities and competences of the Human resources of this sector as well as innovative ideas are critical aspects of business growth. ▪ Once the ongoing TRIPS waiver is lost, businesses must ensure TRIPS compliance, and invest more in research and innovation to ensure growth through innovation and compliance. ▪ Total originality, ever-greening, and a high level of openness are necessary to avoid bio- piracy. ▪ Port complexities for product release should be eliminated. ▪ Corporate tax should be cut in a sensible manner to retain competitiveness of this emerging sector.

<p>Jute and Jute Goods</p>	<ul style="list-style-type: none"> ▪ The government should guarantee timely implementation of flexible policies and agreements in order to preserve international market access, maintain production quality, reduce costs, and maximize trade gains. ▪ Ensure equitable treatment to the Jute industries (similar to the RMG sectors) in order to keep the country’s competitiveness in exporting Jute and Jute Goods once it graduates from the LDC. Branding, marketing and product promotion activities must be enhanced. It is to be remembered that the reliance of the consumers on greener products in the world market has significantly increased. Focus on product and market diversity are among the top priorities of this sector. ▪ Billion Dollar in global climate change and sustainable development pledges can be earned from this industry alone. ▪ There is a significant demand for Jute items in Asia, Africa, and North America. Bangladeshi Jute industries have the opportunity to get access to Asian and African markets. However, ensuring access to other markets require improved product quality. Survival and growth of this sector demands that product quality is improved.
<p>IT and ITES</p>	<ul style="list-style-type: none"> ▪ If adequate measures are not put in place, the IT sector would lose market competitiveness upon LDC graduation. ▪ Research and development funding, with an emphasis on the information technology industry, should be introduced. ▪ A government-recognized authority for IT valuation should be established, many neighbouring countries have already done so. ▪ Appropriate education and training program should be implemented. ▪ Other businesses, such as agro-processing and light engineering, are receiving financing assistance. Easy access to Finance is also essential for the ICT industry.

4.2 Quantitative Analysis

A simple linear regression between the two variables- yearly export earnings and Cash incentive has been run. As Cash Incentives is offered against the export earnings, in our regression model, we have considered the former as dependent and the latter as the independent variable. We find that the value of Adjusted R-Square of the model is only 0.004 or 0.4%. It indicates that the model can explain only 0.4% of the variations in Cash incentives.

The unstandardized BETA is 0.015 and the standardized BETA of the model is 0.109. Constant or Coefficient is 16033984.728. The BETA of the model indicates that if Export Earning increases by 1 USD, Cash Incentive increases by 0.015 USD. However, as per the statistical standard, the P value results higher than .05 which is insignificant ($p=0.217$). We cannot reject the Null hypothesis of the study and cannot show any relationship between cash incentive and export earnings (*Please see Tables A2 – A4 for details*).

The relevance of cash incentives could not be quantitatively proved. It indicates that there is virtually no significant relationship between cash incentives and export earnings in Bangladesh.

Developing a business environment and reducing doing business costs has found to be the most important alternative to cash incentives or, export subsidies. All the alternatives listed in this research are important.

As far as sectoral major findings are concerned, it can be said that, RMG sector's prime concern is the taxation system. Leather sector's primary concern is the post-LDC international competition. Agriculture and processing sector's major concern is the challenge to cultivate high- value, export-ready crops through diversification. Other side scarcity of skilled and competitive labour force added with customs duty on raw materials for LE machine are major concerns for the Light Engineering sector. Loss of TRIPS waiver is one of the major challenges of the pharmaceutical industries. Lack of adequate measures to promote the interests of the IT and ITES business is a major worry for the competitiveness of firms in this sector. Lack of acceptable quality is a major concern for the Jute industry to access Asian, African and North American markets.

5. Experience of graduated Economies for export market competitiveness

Several developing countries, while graduated from LDC tag, have taken significant measures or steps for their export market competitiveness. For example, India has already concluded 37 agreements like FTA, PTA, CEPA, MOU and General Trade agreement. Merchandise Exports from India Scheme (MEIS) offers freely transferable duty credit scrips on realized FOB value of exports in free foreign exchange at a specified rate. Such duty credit scrips can be used for payment of basic custom duties for import of inputs or goods to notified markets. A new Scheme called Remission of Duties and Taxes on Exported Products (RoDTEP) has been introduced which shall refund the embedded duties suffered in export goods. Units undertaking to export their entire production of goods and services may be set up under the EOU/EHTP/STP & BTP scheme for import/procurement domestically without Duty payment. Under the Market Access Initiative (MAI) Scheme, financial assistance is provided for export promotion activities on focus country, Industry & Trade Associations, etc. The activities are like market studies, setting up showroom/warehouse, participation in international trade fairs, publicity campaigns, brand promotion, reimbursement of registration charges for pharmaceuticals, testing charges for engineering products abroad, etc. Facilities like 24X7 customs clearance, single window in customs, self-assessment of customs duty, prior filing facility of shipping bills etc. are available to facilitate exports.

Vietnam partners to 11 FTAs and Bilateral and multilateral negotiations for expanding markets of Vietnamese commodities. Organizing effective and synchronous information for activities on goods predictions of domestic and world market and information about laws, policies and business practices of these markets so that enterprises can improve their competitiveness and success in market penetration. Giving credit and capital priorities to production, agriculture, export and supporting industries. Promoting credit insurance for exporters to create favorable conditions for taking loans from credit organizations in order to increase exports. Flexibly applying monetary and foreign exchange management policies and reviewing investment policies to attract domestic and foreign investments in export production. Investing and upgrading transportation infrastructure, warehouses, and wharfs at seaports and customs clearance sites for imports and exports.

In Philippines Businesses operating in Special Economic Zones (SEZs) or free port zones are not required to pay taxes and tariffs. Philippines is a member of six regional free trade agreements (FTAs) as well as one bilateral FTA with Japan apart from being a member of the ASEAN. PEZA offers both fiscal and non-fiscal incentives as well as ready to occupy business locations, in excellent Economic zones as well as IT parks and buildings. Fiscal incentives include income tax holidays for a certain number of years, which translates to 100 percent exemption from corporate income tax and duty-free import of raw materials, capital machineries and spare parts, exemption from wharfage dues and export tax, import or related fees, zero VAT of local purchases, exemption from payment of any and all local government, fees, license, exemption from withholding tax.

Malaysia has 13 Free Industrial Zones (FIZs) and 12 Free Commercial Zones (FCZs). Companies operating in FIZs and FCZs may import raw material and equipment without tariffs. Malaysia is a partner to 7 bilateral free trade agreements (FTAs) with Australia; Chile; India; Japan; New Zealand; Pakistan; and Turkey and six regional FTAs. Malaysia is a partner to the ASEAN Trade in Goods Agreement and a member of five regional FTAs through the ASEAN with Australia, China, India, Japan and Korea. Malaysia continues to liberalize its customs regulations and improve the ease of importing and exporting out of the country.

Thailand offers the rewards of tariff-free trade with 18 different nations, including major global economies such as Australia, China, New Zealand and South Korea and ASEAN community. Thailand has signed 14 FTAs including the Regional Comprehensive Economic Partnership (RCEP). The government of Thailand has been emphasizing its digital development through its focus on the Thailand 4.0 economic model which seeks to transform Thailand into a value and innovation based digital economy through combination of promoting industrial transformation. Government develops the Eastern Economic Corridor (EEC) to become the ASEAN- leading economic zone for industrial, infrastructure and urban development prioritizing connectivity.

Based on the quantitative and qualitative findings, following recommendations can be offered Developing business environment and reducing doing business cost, Offering Capacity development assistance, Developing transportation facility to connect global market, Strengthening backward and forward linkage Industry, Supporting product diversification, Automation and quality assurance activities, Offering Market Development assistance and taking initiatives to do the same, Signing FTA/PTA/RTAs with important trade partners, Ensuring Easy access to Disaster Risk Management insurance from international disaster fund, Reduction of corporate tax rate and Easing Administrative Process, Ensuring Easy access to low-cost financing from the government and developed countries including EDF.

Beside required essential reforms to the export-import policies to promote an export-friendly policy regime, Reduction of indirect tax such as the value-added tax (VAT) on raw materials purchase, Removal of port complexities, Ensuring equitable treatment for major export industries (the sectors mentioned in the study), Emphasizing R&D funding and initiatives, Several schemes from international instances, such as Thailand's 4.0 economic model, India's Merchandise, Exports from India Scheme (MEIS); Market Access Initiative (MAI) Scheme of India; liberalizing customs regulations (Malaysia) and giving credit and capital priorities to production, agriculture, export and supporting industries are some of the major policy measures of other nations which can be tested in Bangladesh for promoting export earnings. It can be expected that once these

recommendations are implemented, the country will be able to create and sustain competitiveness in the global export market for attaining a sizable export market share.

6. Conclusion

The main objective of this research is to find out the probable loss of export earnings upon withdrawal of Export subsidy (cash incentive) after graduation. To find out how the sectors along with the economy may shrink if we lose the facility. To learn how the other graduated countries cope with this situation.

Against of this context, it can be said that the amount of cash incentives offered to the exporter were really insignificant although secondary data shows that there is correlation between cash incentives and export earnings. However, it helped the businesses to reduce costs, maintain competitiveness and motivated them to continue exporting despite difficult competition from their international counterparts. Extraordinary economic achievement of the country brought about the pride of LDC Graduation of Bangladesh to the nation. This graduation, however, has come at a cost for the businesses. Export subsidies or cash incentives following exports are offered to Bangladeshi exporters to ensure competitiveness and sustainability of the export market of the country. LDC graduation will force the government to gradually phase out/ withdraw this benefit completely. Therefore, it is imperative that the relationship between incentives and exports is explored. Moreover, a list of alternatives to the existing export subsidy or, cash incentive system is also required to be prepared. In addition, international instances are also to be studied to summarize major policies that the recently graduated LDCs/ developing countries have adopted to make the aforementioned list of alternatives to subsidies even more extensive. This study is conducted on 176 export-oriented businesses to fulfill all of these objectives. The findings suggest that exports and subsidies are not related in Bangladeshi context. Moreover, lack of skilled manpower, inappropriate taxation system, port complexities, increased competition following LDC graduation, low/no investment in R&D, lack of enabling business environment are among some of the major challenges of the country.

A list of effective alternatives including creating an enabling business environment and reduction of cost of doing business, reduction of tax (direct and indirect), signing trade agreements, removing port complexities, strengthening backward and Forward Linkage industries, initiating R&D activities, etc. is created. Moreover, a few international instances such as Merchandise Exports from India Scheme (MEIS), Market Access Initiative (MAI) Scheme, offering financial assistance for export promotion activities, promoting credit insurance for exporters, liberalized customs regulations are some of instances that Thailand has been emphasizing its digital development through its focus on the Thailand 4.0 economic model which seeks to transform Thailand into a value and innovation based digital economy. This can be lessons for Bangladesh to develop export market sustainability and competitiveness of the country.

It is, however, important to note here that post effect (Ex-post) analysis is required to verify if the perceptions of the Government and the private sectors are correct about effectiveness of the alternatives of cash incentives and if the solutions listed here are feasible to be applied in the country.

References

- BASIS. (2017). IT AND ITES INDUSTRY OVERVIEW. [http://epb.gov.bd/site/files/aca7df47-0d5B-4ebb-84eb-42790727acb0/Exporter-List-\(Goods\)](http://epb.gov.bd/site/files/aca7df47-0d5B-4ebb-84eb-42790727acb0/Exporter-List-(Goods))
- Deb, U., & Bairagi, S. K. (2009). Cash Incentives for Agricultural Export: Impact on Farm Level Income and Employment in Bangladesh. 2–3.
- Defever, F., Reyes, J.-D., Riano, A., & Varela, G. (2018). All These Worlds are Yours, Except India: The Effectiveness of Export Cash Subsidies in Nepal.
- Export Promotion Bureau, GoB. (2022, February 24). Exporters Database: Exporter List (Goods). [http://epb.gov.bd/site/files/aca7df47-0d5B-4ebb-84eb-42790727acb0/Exporter-List-\(Goods\)](http://epb.gov.bd/site/files/aca7df47-0d5B-4ebb-84eb-42790727acb0/Exporter-List-(Goods))
- Hegde, V., & Wouters, J. (2021). Special and Differential Treatment Under the World Trade Organization: A Legal Typology. *Journal of International Economic Law*, 24(3), 551–571.
- Hossain, M. A. (2019). The Procedure of Cash Incentive and Its Role in the RMG Sector in Bangladesh: Evidence from Bangladesh. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3334383>
- Panagariya, A. (2000). Evaluating the case for export subsidies. Available at SSRN 629126.
- Panagariya, A. (2003). Evaluating the Case for Export Subsidies.
- Roy, D. K. (1993). Impact of incentives on export performance of Bangladesh: A preliminary assessment. *The Bangladesh Development Studies*, 25–44.
- WTO ((2020). Trade Impacts of LDC Graduation. https://www.wto.org/english/res_e/booksp_e/trade_impacts_of_ldc_graduation.pdf

Appendix

Table: A1 Thresholds

Degree of Importance	Threshold of Scores for each variable	Threshold for all 10 variables
Highly Important	525-655	5241-6550
Important	394-524	3931-5240
Neutral	263-393	2621-3930
Unimportant	132-262	1311-2620
Highly unimportant	Below 131	Below 1310

Table: A2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.109 ^a	.012	.004	36809851.796

a. Predictors: (Constant), Question_3_New

Table: A3 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2089891353855512.000	1	2089891353855512.000	1.542	.217 ^b
	Residual	174790509409502688.000	129	1354965189220951.000		
	Total	176880400763358208.000	130			

a. Dependent Variable: Question_5_New

b. Predictors: (Constant), Question_3_New

Table: A4 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16033984.728	3292258.526		4.870	.000
	Question_3_New	.015	.012	.109	1.242	.217

a. Dependent Variable: Question_5_New

Question 1: Do you know that Cash incentive will be withdrawn after LDC Graduation of Bangladesh?

<i>A5</i>	<i>Number</i>	<i>Percent</i>
No	56	31.8
Yes	120	68.2
<i>Total</i>	<i>176</i>	<i>100.0</i>

Question 2: Which export sector does your business belong to?

<i>A6</i>	<i>Number</i>	<i>Percent</i>
Textile & RMG	40	22.7
Agro-Processing	34	19.3
Light Engineering	6	3.4
Leather & Leather goods	48	27.3
Pharmaceuticals	21	11.9
Jute & Jute Goods	16	9.1
IT & ITES	11	6.3
<i>Total</i>	<i>176</i>	<i>100.0</i>

Question3: What are your total yearly export earnings? (In USD)

<i>A7</i>	<i>Number</i>	<i>Percent</i>
Below 5 million	111	63.1
5 Mn to 100 Mn	52	29.5
100 Mn to 200 Mn	7	4.0
200 Mn to 300 Mn	3	1.7
300 Mn to 400 Mn	2	1.1
1 Bn to 5 Bn	1	.6
<i>Total</i>	<i>176</i>	<i>100.0</i>

Question 4: Are you getting any cash incentives against your export?

<i>A8</i>	<i>Number</i>	<i>Percent</i>
No	45	25.6
Yes	131	74.4
<i>Total</i>	<i>176</i>	<i>100.0</i>

Question 5: If yes, how much cash incentive do you get in a year (in USD)?

<i>A9</i>	<i>Number</i>	<i>Percent</i>
below 1 mn	94	71.8
1-100 mn	36	27.5
300-400 mn	1	.8
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 6: What percentage of production cost reduction is supported by this cash incentive program?

<i>A10</i>	<i>Number</i>	<i>Percent</i>
<i>None</i>	13	9.9
<i>1%-5%</i>	70	53.4
<i>5%-10%</i>	32	24.4
<i>10%-15%</i>	7	5.3
<i>15%-20%</i>	5	3.8
<i>20%-25%</i>	3	2.3
<i>25%-30%</i>	1	.8
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 7: How much export earnings will decrease, in a year, if the cash incentive stops (in USD)?

<i>A11</i>	<i>Number</i>	<i>Percent</i>
<i>less than 1 mn</i>	75	57.3
<i>1-5 mn</i>	41	31.3
<i>5-10 mn</i>	9	6.9
<i>15-20 mn</i>	2	1.5
<i>above 20 mn</i>	4	3.1
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 8: “If cash incentive is withdrawn, my business will lose competitiveness in the world export market”. Do you agree with this statement?

<i>A12</i>	<i>Number</i>	<i>Percent</i>
<i>No</i>	16	12.2
<i>Yes</i>	115	87.8
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Easy access to Low-cost financing from govt, and developed countries including EDF

<i>A13</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	1	.8
<i>Unimportant</i>	4	3.1
<i>Neutral</i>	4	3.1
<i>Important</i>	26	19.8
<i>Highly important</i>	96	73.3
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Reduction of corporate tax rate and Easing Administrative Process

<i>A14</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	1	.8
<i>Neutral</i>	4	3.1
<i>Important</i>	32	24.4
<i>Highly important</i>	94	71.8
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Easy access to Disaster Risk Management insurance from international disaster fund

<i>A15</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	4	3.1
<i>Unimportant</i>	14	10.7
<i>Neutral</i>	12	9.2
<i>Important</i>	58	44.3
<i>Highly important</i>	43	32.8
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Signing FTA/PTA/RTAs

<i>A16</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	1	.8
<i>Unimportant</i>	5	3.8
<i>Neutral</i>	14	10.7
<i>Important</i>	52	39.7
<i>Highly important</i>	59	45.0
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Market Development

<i>A17</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	1	.8
<i>Neutral</i>	1	.8
<i>Important</i>	30	22.9
<i>Highly important</i>	99	75.6
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Supporting product diversification, Automation and quality assurance activities

<i>A18</i>	<i>Number</i>	<i>Percent</i>
<i>Highly unimportant</i>	1	.8
<i>Neutral</i>	2	1.5
<i>Important</i>	50	38.2
<i>Highly important</i>	78	59.5
<i>Total</i>	<i>131</i>	<i>100.0</i>

Question 9: Strengthening backward and forward linkage Industry

A19	Number	Percent
Highly unimportant	1	.8
Unimportant	1	.8
Neutral	15	11.5
Important	52	39.7
Highly important	62	47.3
Total	131	100.0

Question 9: Developing transportation facility to connect global market

A20	Number	Percent
Highly unimportant	1	.8
Unimportant	5	3.8
Neutral	13	9.9
Important	19	14.5
Highly important	93	71.0
Total	131	100.0

Question 9: Capacity development assistance

A21	Number	Percent
Highly unimportant	2	1.5
Neutral	3	2.3
Important	30	22.9
Highly important	96	73.3
Total	131	100.0

Question 9: Developing business environment and reducing doing business cost

A22	Number	Percent
Highly unimportant	1	.8
Important	27	20.6
Highly important	103	78.6
Total	131	100.0

[Crosstab] Question 2: Which export sector does your business belong to? by Question-5: If yes, how much cash incentive do you get in a year (in USD)?

A23	below 1 mn		1-100 mn		300-400 mn		Total	
Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Textile & RMG	13	54.2%	10	41.7%	1	4.2%	24	100.0%
Agro-Processing	19	76.0%	6	24.0%	0	0.0%	25	100.0%
Light Engineering	1	50.0%	1	50.0%	0	0.0%	2	100.0%
Leather & Leather goods	36	81.8%	8	18.2%	0	0.0%	44	100.0%

<i>Pharmaceuticals</i>	11	61.1%	7	38.9%	0	0.0%	18	100.0%
<i>Jute & Jute Goods</i>	11	78.6%	3	21.4%	0	0.0%	14	100.0%
<i>IT & ITES</i>	3	75.0%	1	25.0%	0	0.0%	4	100.0%
<i>Total</i>	94	71.8%	36	27.5%	1	0.8%	131	100.0%

[Crosstab] Question 2: Which export sector does your business belong to? by Question-8: “If cash incentive is withdrawn, my business will lose competitiveness in the world export market”. Do you agree with this statement?

<i>A24</i>	<i>No</i>		<i>Yes</i>		<i>Total</i>	
<i>Number</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
<i>Textile & RMG</i>	5	20.8%	19	79.2%	24	100.0%
<i>Agro-Processing</i>	1	4.0%	24	96.0%	25	100.0%
<i>Light Engineering</i>	0	0.0%	2	100.0%	2	100.0%
<i>Leather & Leather goods</i>	4	9.1%	40	90.9%	44	100.0%
<i>Pharmaceuticals</i>	5	27.8%	13	72.2%	18	100.0%
<i>Jute & Jute Goods</i>	1	7.1%	13	92.9%	14	100.0%
<i>IT & ITES</i>	0	0.0%	4	100.0%	4	100.0%
<i>Total</i>	16	12.2%	115	87.8%	131	100.0%