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Bangladesh's Bicycle Industry and the Application of WTO's Most Favored Nation-Treatment and Other Principles

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Abstract: This paper analyses the bicycle industry in Bangladesh and its experiences with WTO and its principles of MFN along with other WTO principles. Bangladesh as a developing country now has many problems in supporting its domestic bicycle industry against the competitive world. This dissertation aims to examine the effects of MFN status in the context of Bangladesh's trade, and whether it helps or hinders the development of the domestic bicycle industry. Besides, the study analyzes other WTO principles including national treatment and trade remedy measures, to show the challenges that Bangladesh faces in meeting the international requirements, on the other hand, it seeks to protect and develop its industry. In this paper with analyses of the cases and trading information, the author tries to evaluate how WTO agreements affect Bangladesh's bicycle exports drawing conclusions about national policy, trading strategies implications and industrial growth. This paper will therefore present the findings of the study and discuss how existing and prospective international trade structure affects the development for Bangladesh bicycle industry and offer ideal recommendations for the facility of trade opportunities within WTO regime.

Keywords: Most-Favored-Nation (MFN) Treatment, National Treatment (NT), Trade Liberalization, LDC Graduation, Tariff Concessions, WTO Compliance, Global Value Chains (Gvcs), Technical Barriers to Trade (TBT), Anti-Dumping Measures, Supply Chain Resilience, Green Trade, Inclusive Trade Development, Circular Economy.

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I. INTRODUCTION

The bicycle industry in Bangladesh has seen good growth in recent years and has stepped into the world market of bicycles. Bangladesh has one of the biggest consumers of bicycles in South Asia, and with the increased production capacity it occupies a strategic place in the international bicycle industry. However, like many other sectors, the bicycle industry has challenges and opportunity which emanate from international trade policies particularly those polices promulgated by global trade bodies such as WTO. Unlike within the regional trade agreements, the WTO has five basic principles that govern relations between its members: the MFN treatment principle. MFN/NT principle provide that any concession granted by one developing country member of WTO to another developing country member has to be extended to all members and introduced nondiscrimination in trade. This paper aims at analyzing the experiences of the bicycle industry of Bangladesh using the MFN principle focusing trade relations, market access and

competitiveness in the global market.

The well-known bicycle makers are Duranta Bicycle, Veloce Bike, Phoenix Bicycle, Hero Bicycle, Camp Bicycle and the likes. Currently, the domestic market is expanding by 7-8% per annum, while export sales account for 80 percent of the total. For the biscuits sector for the financial year 2023-24, the country exported bicycles worth \$7255000. The BPCB also ranked Bangladesh third largest exporter in bicycle sector EU. Prior to 2007 Bangladesh exported only 3.55 lakh bicycles and this figure rose up to 6 lakhs in the year of the 2014. In FY 2020-21 physical export of bicycle stood at 10 lakh units. According to market analysts, the industry will experience a compound annual growth rate of 2.98% for the year 2024 to 2029. In light of this I have the feeling that Bangladesh being a developing nation should work towards increasing its amounts of growth. For this reason: One of the purposes of the WTO is also to contribute more facilities and aids to the developing nations. Some of bicycle parts are indeed import from China, and here they are enjoying some

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duty preferences for the impact of WTO roles. That's why it is possible to provide the bicycle with a stable price level that can be provided next to any client. Thus, WTO has an important role in developing this industry. To increase such growth, it is more appropriate to focus on the principles of the WTO and its regulations. In Bangladesh most of the foreign firms are still operating bicycles factories and contributing to the growth of the GDP per year. [1]

The central research question of this paper is: What role the WTO Most-Favored-Nation treatment principle play for the development and export of Bangladesh's bicycle industry? This paper will seek to determine the state of bicycle industry in Bangladesh, the country's trade with other nations and the role of MFN principle in its market strategy. The following questions that will also be addressed by this paper include; Major WTO challenges to Bangladesh in terms of compliance, Advantages of getting the MFN treatment to the country's exporters as well as the consumers.

In line with its objectives, it is the intention of this research study to establish the compatibility of international trade laws in general and the WTO's MFN principle in particular and the domestic bicycle industry in Bangladesh. This analysis is important because it will enlighten the policymakers, practitioners, and scholars on the results of the WTO policies on the competitiveness of domestic industries. It also aims to explain how Bangladesh can map out advantages frameworks of trade liberalization in order to improve its position in the globe bicycle trade, discussing the issues and opportunities of MFN treatment.

This paper comprises of the following sections: In the first part, general information is given about organization of Bangladesh in bicycle industry that include its history, present position of Bangladesh bicycle industry, trade relationship and main partners. The second part of the paper provides an extensive description of the WTO MFN principle, the key aspects of its rules, and the connection with the bicycle industry. The last third of the paper is dedicated to examining how MFN principle plays out for Bangladesh Bicycle industry and the benefits and issues arising from this. Last of all, this paper reviews the conclusion of the paper and provides recommendations for Bangladesh's international trade in the WTO environment.

It is through this sort of structured analysis that the paper seeks to provide torchlight over relationships between global trade principles, and local industry building. Analyzing the effects of WTO regulations on the bicycle industry of the country, the study will identify how Bangladesh can effectively and efficiently solve the problems of globalization and increase its trade facilities in the bicycle sector.

> Structure of the Paper

This paper aims to discuss the WTO principles and More-Favored-Nation treatment in the context of Bangladesh bicycle industry. It starts with an overview of the industry and its economic impact before proceeding to overview the applicable WTO principles such as the MFN, the National Treatment and TRIPS. This paper discusses how these

principles shape the country's trading behavior, export outcome, and export performance in the global market. A case analysis about Bangladesh Bicycle Exports that provides information on the WTO effects and discusses the prospects and issues that make this country consider the use of those principles to advance its position. Lastly, the paper offers policy implications for Bangladesh's bicycle industry to exploit WTO membership and bridge existing trade barriers.

II. LITERATURE REVIEW

Most-Favored-Nation (MFN) principle is a WTO principle that when one country has provided an advantage to another country in its trade, the same must be accorded to all WTO's members. This principle plays a considerable role in the Bangladeshi bicycle industry by altering its export markets status. This literature review synthesizes the existing body of knowledge on the manner in which the MFN principle influences the Bangladeshi bicycle industry and its prospects and difficulties.

MFN principle ensures that bicycles exported from Bangladesh enjoy the same treatment on the common market for exports just like other WTO member nations. This can open up possibilities of improving the global positioning of Bangladeshi bicycles. But issues raised as Bangladesh is on the process of graduating from the LDCs. According to Rahman and Strutt, article called 'Costs of LDC Graduation on Market Access', clearly depict the costs faced by these countries. There is the danger of losing special tariffs like the EBA initiative that the European union has for the LDCs whereby most products imported from the LDCs do not attract any tariffs. Bangladesh will maintain its Most favored nation status after graduation but the elimination of these preferential tariff rates could prove costly and lower its import/export competitiveness and volume on the international market.

Study of Indian bicycle industry provides useful lessons for Bangladesh as well. In the article "Bicycle Industry in India and its Challenges" by Puneeth and Nethravathi the bicycle industry in India has expanded massively by adapting to the increasing demand for products because of the advocates of a healthy life and adopting to e-commerce and new trends in manufacturing. Reliable with reference to the principle of MFN, India has further stepped into the strategic time needed to increase the export market and recognize the importance of integration with the global market. The fact that Punjab has asserted itself as a production center is an illustration of effective targeted industrial plans that Bangladesh could use to improve the competitive drives in bicycle manufacturing and export markets. [2]

Bangladesh's transition from the Least Developed Country (LDC) status has a paramount macroeconomic repercussion. This change could lead to a loss of -0.38% on GDP or -6% on exports according to Rahman and Strutt. Because the bicycle industry is a critical player in Bangladesh's export sector, these changes may decrease production efficiency which in turn raises export prices mainly due to the loss of export incentives and duty-free access. But this also has its advantages with this the value

orientation shifts its power. The country's progress in garment exports can persist with FTA and GSP+ to maintain its preferential trade access to international markets. Such strategic moves could assist the country to offset the export growth and to curb the detrimental impacts of graduation to LDC. [3]

The industry involves in bicycle business has recently come under environmental concern because it is aligning with sustainability goals. Encouraging cycling is central to mitigating climate change and lower emissions on the use of fossil fuels. The paper "Economic and Environmental Benefits of Bicycle Infrastructure Development in Bangladesh" also highlights the aspects suggesting that bicycle usage can lessen air pollution, as well as enhance the mobility of urban areas. Promoting bicycle usage, therefore provides a dual value hence strengthening recovery as well as environmental conservation and hence the investment in bicycle infrastructure is strategic for a long-term growth. [4]

Nuruzzaman et al. (2022) analyzed export responses before and after WTO entry in their difference-in- differences study. The study finds that WTO principles especially Most-Favored-Nation (MFN) simplify border regulations while improving supply chain transparency and matching rules for all members. The results of this theory depend on managers' opinions about their domestic market rules. A company's export intensity grows when its management views domestic rules positively but decreases when negative views exist. The research predicts regulatory difficulties and delayed policy updates as main risks that especially concern countries at the development stage such as Bangladesh. The evaluation method suits our examination of the bicycle sector in Bangladesh under WTO leadership. [13]

In reviewing specific RTAs as applied under AfCFTA, Abang draws attention to the challenges of harmonizing the WTO with RTAs. He maps out that RTAs, including AfCFTA, have an issue in non- observance of the WTO's Most-Favored-Nation (MFN) rule in tariff, and particularly in tariff elimination and dispute settlement. This issue is quite relevant to Bangladesh bicycle industry at this moment, the country enjoys preferential tariffs on its export products under EU GSP. As Bangladesh is ready to 'graduate' from the LDC category, its vulnerability to losing these preferences threatens the country's competitiveness in export markets. Capacity building and shifting the export policy modal of Bangladesh have been highlighted by Abang on which there should be a new synchronized policy in Bangladesh. This way, rising value addition, enhancing production capacity and spreading out export destinations can help the industry to manage post-LDC challenges and explore regional and global opportunities at the same time. [5]

Bown's fine grained look at contemporary industrial policy share the important parts played by subsidy, local content, and supply chain robustness in enhancing industrial performance. He raises these differences between national policies and the WTO as the key areas of understanding modern economic governance. The role of government in Bangladesh has been very effective, especially at an early

stage of development of bicycle industries is through offering incentives such as tax credit and export incentives. However, as Bangladesh approach LDC graduation these policies may become more vulnerable to challenge under the WTO SCM Agreement. This shows that although sector growth is important, Bangladesh must continue to have its industrial policies work towards compliance of the international trade standards. Using Schlumberger's argument to focus on supply chain resilience, Bown offers a guide to how the bicycle industry could improve production, source locally, and hence strengthen and deepen GVC integration. These include insights from how China has addressed potential WTO

interest in state financed industrial strategies for developing

nations like Bangladesh. Much of this information is crucial

for policymakers to effectively weigh national interests

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III. RESEARCH GAPS

against international rules in trade. [6]

To the best of the author's knowledge, the extent of effects on the stream of LDC graduation on Bangladesh bicycle business is still unknown despite its noteworthy reality in different manners to individual sub-sectors comprising high-end bicycles, export felicitated bicycle components, and home- grown bicycles. Further research should also compare these categories to better understand how graduation positively or negatively affects them because countries like Cambodia and Vietnam have already passed this phase. Further, issues related to digitalization processes and trends, such as the raise of the industry 4.0 and ecommerce adoption, may open new opportunities in retaining competitiveness while the preferential tariffs are gone. There is also the need to undertake an assessment of trade talks including future FTAs and GSP+ to continue to support export development. Another source of more light on the state of the global market could be Econometric models regarding the effects of the tariff and demand elasticity. Hence, to know the proliferation of environmental concern and achievement especially in international markets may have a strategic advantage to the bicycle industry in Bangladesh. Research should also examine how supply chains are being built for sustainment, and assess, for example, the outlook for continental trade initiatives such as AfCFTA. Last but not the least, the combined form of local growth and export opportunities must be looked at along with the possibilities of urbanization, health awareness, and cycling as a mode of transport.

➤ Proposals for Management Transformation

To successfully transition from Least Developed Country (LDC) to Developing Country (DC) status, several key strategies can be adopted based on insights from existing literature:

• Diversifying Export Markets:

Shift from reliance on the traditional EU markets through searching for export destinations under MFN can bring diversified export revenue and avoid the risks of market entanglement.

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• *Upgrading Technology:*

This paper demonstrates how adopting superior technologies similar to the example used in India's bicycle industry, the efficiency of production, operating costs, and the global overall competitiveness of Bangladesh's bicycle industry can greatly improve.

• Negotiating Trade Preferences:

GSP+ or bilateral trade agreements will be inevitable for retaining preferential access in the major markets after graduation from LDC status to protect the export prospect in Bangladesh.

• Promoting Green Transport:

Adoption of bicycles as consistent with Bangladesh's sustainable development plan is well positioned to contribute to global climate change objectives while promoting economic returns.

Compliance with WTO's SCM Rules:

After graduating from the LDC status, Bangladesh has to reconsider its policies of support to its industries mainly subsidies in the light of SCM of WTO. The reforms include special emphasis on non-actionable supportive measures such as skills and technology development in bicycle industry competitiveness.

• *Investing in Innovation and R&D:*

They concluded that enhancing the R & D could increase the manufacturing of higher value-added portfolio which may include electric bicycles (e-bikes) to fulfill the growing demand of global markets and become a leader in future green mobility solutions.

• Technological Progress:

Hence, technological development is very important for the enhancement of the bicycle industry and for the export development of the country namely Bangladesh. Through increasing production effectiveness, upgrading product worth, expanding market opportunities and controlling supply chain technology can significantly enhance the competencies of manufacturers in Bangladesh. The various hurdles faced when implementing more superior technologies are not an insurmountable challenge when governments have the backing of investment from the people and for the developmental skills in training.

➤ How Technology Effect on the Quantity of Output?

Quantity of output, Y = A.F(L, K, H, N) [7]

Where A = available production technology

If it is feasible to raise the extent of availability of technology (A), while holding other values steady, then there will be an automatic rise in the quantity of output.

Overall, the adaptation of such technologies will help BD bicycle industry to compete effectively on the global platform that will improve the economy and environmental consciousness for a sustainable world. Framework and Principles of the WTO and Their Application to Bangladesh's Bicycle Industry

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• The Most-Favored-Nation (MFN) Treatment

The Most-Favored-Nation (MFN) treatment is one of the principles governing the WTO to increase non-discrimination in trade relations between WTO member countries. Under this principle, it means that if Bangladesh offers special trade facilities which can include low tariffs, it is supposed to offer in the same manner to all the WTO members. In regard to Bangladeshi bicycle industry, this principle proves to be very important to maintain its balance with other exporting industries. It assists in giving competitive advantage to Bangladesh bicyclists within the global trade; widely within the EU region since it is the major export market for Bicycle from Bangladesh.

The use of Most Favored Nation treatment brings down both tariffs and non- tariff barriers to entry and hence help Bangladeshi bicycles access certain international markets. This has greatly boosted bicycle exports in Bangladesh, through which the EU is the leading customer at 80%. Moreover, the application of MFN undertaking allows Bangladeshi bicycle manufacturers to buy raw materials and components from those WTO member countries excluding China at cheaper import tariffs. This has further enhanced the competitiveness of Bangladesh as it has reduced the cost of production and gradually enable healthy growth in the world bicycle industry. [8]

➤ National Treatment

The National Treatment principle requires that WTO members shall not afford imported products less favorable treatment than that given to domestic products once the imported products have been imported into the country. This principle is quite relevant to Bangladesh's bicycle industry because this has made imported raw materials and components for bicycles to be treated in the same manner as local products. For instance, the intermediate product such as bicycle parts imported from China, enjoys the same access to the local market and operations as much as the domestically available inputs. This strategy promotes a level playing ground in competition to enhance the local supply chain, as well as contributing to improvement of manufacturing preparedness amongst Bangladeshi expert producers. [9]

> Tariff Concessions

Trade liberalization mechanisms are bargaining sessions developed among WTO member-countries to reduce tariff levels and foster world trade. In general, Bangladesh has been getting lowered import tariffs on bicycle input such as inputs, raw materials and parts it to buy from other countries with whom Bangladesh has preferential trade or RTA linkages. These tariffs have been reduced bearing the effects of cutting costs of production for manufacturers in the local industry such as Duranta, Veloce, and Hero making it easier for them to compete in the export market. Because input costs are comparatively low in Bangladesh, the bicycle manufacturers can bring their prices down and expand their share in the selected global markets. [10]

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➤ Especially, Contributors Focused on Technical Barriers to Trade (TBT).

The WTO's TBT Agreement is intended to make sure that TTBs are not used as a means of disguising additional barriers to international trade in goods, or as a source of unjustified regulatory divergence, through the regulation of technical regulation, standards, and related conformity assessment procedures. In Bangladesh's bicycle export, especially to the EU market, ASTM standards for safety, dimensional endurance tests and eco-friendly qualification stands as an imperative necessity. Satisfying these technical standards allows Bangladeshi bicycles to sell in the superior export markets unrestricted and without additional time. Hence, costs incurred for testing facilities, certification or accreditation procedures and quality assurance measures have become imperative for producers. Such effort enables one to eliminate risks of export rejections and furthers the ease of entry of Bangladesh bicycle into the global markets. [11]

➤ Anti-Dumping Measures

Anti-dumping measures are protectionism measures which seeks to guard an industry in a specific country against aircrafts or importation of goods that are sold in foreign markets at lower prices than they are locally sold. Although the industry has not met acute anti-dumping duties,

Bangladesh's bicycle industry still might be under threat in the future, especially after graduation from LDC status. Once they have graduated from their respective classes, the Bangladesh garment industry may find it difficult to enjoy the duty-free or preferential market treatment it once received. If issues are made that Bangladesh's production is helped through high levels of governmental subsidies, there are opportunities to compete could emerge. These risks are therefore likely to be addressed by compliance with the WTO regulation and should make transparency of production practices. [12]

➤ Case Analysis: Application of WTO Principles in the Bicycle Industry

For purpose of showing the impact of WTO principles on Bangladesh bicycle industry let us consider evaluating market access through most favored nation treatment and Tariff concessions. Actual numbers reveal high growth trend on bicycle exportation, volumes reaching nearly one million by 2021 and a growth widely attributed to trade facilities promoted by the WTO.

• Case Analysis:

MFN Treatment and Tariff Concessions for the Market Access

Table 1 Market Access Through MFN Treatment

Year	Bicycle Exprts to EU (Units)	Share of Total Exports (%)
2007	355,000	25
2014	600,000	45
2021	1,000,000	80

The above table also depicts a trend revealing the impact of MFN treatment on the export figures of bicycles from Bangladesh to the EU nations. Such access is necessary because the leading components of Bangladesh's export-oriented production capacities are directed to meet requirements in these value- added markets. [14]

Table 2 Tariff Concessions: Reducing Production Costs

Year	Average Import Tariff on Bicycle Components (%)	Production Cost Impact (%)
2018	12	-10
2020	8	-15
2021	5	-20

The above data showcases how reduced tariffs on bicycle components have resulted in a significative decrease in production costs, leveraging competitive advantages for local manufacturers such as Duranta bicycle (Bangladeshi bicycle company) to increase their export quantities while maintaining profitability. [15]

> Challenges Ahead

Such changes as the potential removal of the EU's Everything but Arms (EBA) status, after Bangladesh's graduation from LDCs, mean higher tariffs on exported bicycles will be coming. This shift poses a significant threat to the bicycle industry as new changes need to be made in order to achieve market sustainability and competitiveness (Everything but Arms (EBA) - Trade - European Commission, 2024). In order for companies to successfully manage these changes it will be necessary to focus on strengthening more local content support capabilities, up the technicality in meeting compliance standards, and ensure

sound supply chain ties.

Added to this is the classical issue of conflict of interest in as much as developed states and developing states are concerned with the regulation of subsidies within the WTO framework. Flexible management of exports-subsidies policies together with the compliance with the TRA will define the further growth and intensification of the exports.

IV. CHALLENGES AND CONTROVERSIES

➤ In WTO Reform, and LDCs Graduation

Bangladesh is planned to become a graduate from LDCs in November, 2026 and Bangladesh will be able to enjoy the duty-free market access in the developed countries until the year 2029 since it has a graduation implementation period of three years after graduation. This extension was ratified by 166 members of the World Trade Organization (WTO) in March 2024. The effects seen on the bicycle industry of

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Bangladesh as it moves from LDC status are envisaged to be far reaching. It will also be denied the opportunities of gaining preferential trading partners like the EU Everything but Arms (EBA). Therefore, Bangladesh will be more dependent on the Most-Favored-Nation (MFN) treatment, more stringency of which may mean higher tariffs on its bicycles exported to the EU. This is a big problem for the bicycle industry, as 80% of its export market is within the EU.

➤ Enhanced Tensions and Conflicts of Interest Between Developed and Developing Countries

There are calls from developing nations, Bangladesh amongst them, for the maintenance of the preferential trade provisions in order to foster industry. However, the developed countries which constituted the WTO push for implementation of WTO regulations with more vigor, essentially on subsidies. However, the divergence in the policy focuses of these two organizations creates a predicament for Bangladesh as the latter needs export subsidies to shore up competitiveness. One of the important tasks in balancing the WTO requirement and the maintenance of industrial growth would be difficult as Bangladesh approaches graduation from LDC status.

> Impact of Supply Chain Issues

Similarly, the current industry of bicycles in Bangladesh is pencil thin and mostly relies on Chinese parts. The current COVID-19 has brought to light the weakness of this supply chain as it was affected in production and exports. To avoid these risks, Bangladesh has to upgrade the local manufacture of important bicycle parts. But this transformation calls for investment in technology, human resource development, and an enabling environment from the government making it a challenging driver for the industry.

➤ The three Articles Presented in this Paper, Combine to Demonstrate that Compliance with WTO Agreements is not an Easy Task

Trade-related commitments neglecting WTO for TBT and SCM in particular requires substantial expenditures in the areas of technical proficiency, accreditation procedures, and improvement of manufacturing quality. Most of the smaller and medium bicycle industries in Bangladesh struggle with the requirement of regulatory standards due to financial limitations. Preserving the WTO compliance as well as the competitiveness of the industries will require close cooperation of consecutive governments, the leaders of particular industries, as well as the international partners that fund the development of industries.

➤ Different Treatment of WTO Rules Applied to Developed and Developing Nations

The capacity to make changes to WTO regulation differs in developed and developing nations, of which the former has higher ability while later faces financial and technical challenges. Another challenge is that the industry needs to achieve regulatory compliance with the country's neighbors and more advanced economies as well. Self-same has paved way for WTO reforms that seek to afford developing countries fair treatment. Until such times, the realization of such reforms remains on paper, Bangladesh's bicycle industry will

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have no choice but rely on cost affordable methods to ensure compliance goals in order to protect its place in international markets.

> Building Bicycle Infrastructure with WTO Aid as a New Trend

• Public-Private Partnerships:

Following WTO trade policies, Bangladesh can easily formulate policies favorable for the development of bicycle infrastructure such as availability of bike lanes and Bicycle sharing services. These efforts may create a market for bikes produced within the domestic markets and in the export market as well.

• Urban Planning for Bicycles:

Collaborating with agencies of urban development to create favorable conditions for cycling in urban environments, with support from WTO compliant development projects could boost both the local manufacture and consumer ship of bicycles exponentially.

• Increase Investment by Trade Agreement:

Bangladesh can negotiate new membership with other WTO members mainly for the promotion of bicycle manufacturing business. The above agreements could offer the FDI inducement to pump in capital, new technology and know-how into the local industry hence its growth and development.

➤ Development of a Futures Market for Horticultural Products and the Use of WTO's MFN Principle to Increase Market Access

The use of MFN principle in negotiating for more favorable tariffs for the Bangladeshi bicycles on various countries. This would enable Bangladesh's bicycles to be more price competitive in the international markets intending countries which has high demand of bicycles.

Tariff Reduction Impact = (Current Export Price × Past Tariff Rate) – (Current Export Price × Updated Tariff Rate)

This would give an estimate of how much the price reduction due to tariff cuts could build up the export number, as perceived by exporting firms.

Export increase estimation = (Price reduction rate) * (Elasticity of demand for bicycles in export markets)

Price Reduction Rate = Current Export Price Tariff Reduction Impact×100

> For Example,

\$200 per bicycle; Tariff rate before MFN: 15%; Tariff rate after MFN: 10% & Elasticity of demand for bicycles : - 0.5

Tariff Reduction Impact = $200 \times 0.15 - 200 \times 0.10 = 10$

Hence price effect outcome means that through MFN tariff cut makes the price of each bicycle to reduce by \$10.

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Price Reduction Percentage = (10/200 * 100) = 5 percent

Now – elasticity of demand to estimate export increase Finally- Now the following estimates have been made using the conception of elasticity of demand and the data either given above or in the text of this paper.

Export Increase Estimation = 5*(-0.5) = -2.5

This projection indicates an increased demand of bicycles is expected to rise by 2.5% due to the change in tariffs.

 WTO Can Set Some New Paradigms to Extend This Sector as Global Green Trade Facilitation Principle (GGTFP)
Such as

• Global Green Trade Facilitation Principle (GGTFP)

This principle would promote development of safer and environmentally friendly trade policies and practices to support growing green industries such as the bicycle industry. The principle could advocate for rebates on the charges for green commodities including bicycles, spare parts, and accessory through tax reduction or decline in tariffs, facilitate shift to cleaner transportation globally.

Example Application: There is an opportunity for Bangladesh to export more bicycles made with GREEN processes internationally thus increasing export.

• ITDP Represents Inclusive Trade Development Principle.

This principle would involve making sure that development impacted on marginalized groups within Global trade such as women and smallholders. This principle in Bangladesh, where the bicycle industry holds the major potential for employment specially for women and rural workers could push for policies for equal opportunities in excess of trade and development.

Example Application: Encouraging bikes which can push women living in rural setting get involved in either assembling or selling them hence enhancing women social and economic status in the area.

• Circular Economy Trade Principle (CETP).

To foster circular economy, this principle will seek to develop new international trading systems that support recycle-reuse-restore value chains of bicycle products. It might also stimulate a market for recycled bicycle parts and materials, which will definitely give Bangladesh a better chance of being in this freeing up of sustainable market.

Example Application: Bangladesh could also set up a new market in reuse of scrap second hand bicycle parts and bicycles to help the global recycling business and to minimize waste products damaging the earth.

The WTO principles described above can help the Bangladesh bicycle industry deal with issues within Bangladeshi trade as well as across world markets. These

https://doi.org/10.38124/ijisrt/25jun1113 get on the areas of sustainability, inclusiveness

strategies target on the areas of sustainability, inclusiveness and innovation on which the bicycle industry needs to work hard to become competitive and sustainable.

V. CONCLUSION

Bangladesh bicycle industry is at the right point of time and awaiting a boom to appear in its industry with WTO policies like MFN treatment and tariff concessions. However, there are challenges that lie ahead; including questions of standard compliance and sustainable competitiveness for a country that might be considering graduating from LDC status. In this way, by using advantages provided within WTO framework and making corresponding changes to the national legislation, Bangladesh can strive for the higher competitiveness as well as the solid position within the frame of the global bicycle exports.

REFERENCES

- [1]. Bangladesh protects domestic parts production with duty hike on ... (2023). https://www.bike-eu.com/45339/bangladesh-protects-domestic-parts-production-with-duty-hike-on-imports
- [2]. Bicycle Industry in India and its Challenges https://scholar.google.com/scholar?hl=en&as_sdt=0%2 C5&q=Bicycle+Industry+in+India+and+its+Challenge s+%E2%80%93+A+Case+Study&btnG=
- [3]. Costs of LDC graduation on market access https://scholar.google.com/scholar?hl=en&as_sdt=0%2 C5&q=Costs+of+LDC+graduation+on+market+access %3A+evidence+from+emerging+Bangladesh&btnG=
- [4]. "Economic and Environmental Benefits of Bicycle Infrastructure Development in Bangladesh https://scholar.google.com/scholar?hl=en&as_sdt=0%2 C5&q=%E2%80%9CEconomic+and+Environmental+ Benefits+of+Bicycle+Infrastructure+Development+in +Bangladesh&btnG=
- [5]. African Continental Free Trade Area (AfCFTA) and World Trade Organization https://scholar.google.com/scholar?hl=en&as_sdt=0%2 C5&q=African+Continental+Free+Trade+Area+%28 AfCFTA%29+and+World+Trade+Organization+%28 WTO%29%3A+Comple mentary+or+Conflicting+Agendas%3F&btnG=
- [6]. Modern Industrial Policy and the World Trade Organization https://scholar.google.com/scholar?hl=en&as_sdt=0%2 C5&q=Modern+Industrial+Policy+and+the+World+Trade+Organization&btnG=
- [7]. Cost and Production Functions (Lecture Notes in Economics and ... (2014). https://www.amazon.com/Production-Functions-Lecture-Economics- Mathematical/dp/3540111581s
- [8]. Bangladesh reports declining bicycle exports Bike Europe. (2023). https://www.bike-eu.com/45721/bangladesh-reports-declining-bicycle-export. s
- [9]. Bangladesh protects domestic parts production with duty hike on ... (2023). https://www.bike-eu.com/45339/bangladesh-protects-domestic-parts-

ISSN No: 2456-2165 https://doi.org/10.38124/ijisrt/25jun1113

- production-with- duty-hike-on-imports
- [10]. Bicycle exports backpedal by 15.31pc The Daily Star. (2023). https://www.thedailystar.net/business/economy/news/bicycle-exports-backpedal-1531pc-3362956
- [11]. Bicycle Safety Standards and Regulations in the EU: An Overview. (2022). https://www.compliancegate.com/bicycle-regulationseuropean-union/
- [12]. Bangladesh's LDC graduation: challenges and way forward for RMG. (2021). https://www.textiletoday.com.bd/bangladeshs-ldc-graduation-challenges-and-way- forward-for-rmg
- [13]. Nuruzzaman, N., Gaur, A., & Sambharya, R. B. (2022). WTO accession and firm exports in developing economies. Journal of International Business Policy, 5(4), 444–466. https://doi.org/10.1057/s42214-021-00115-8
- [14]. The Business Standard. (2022, May 16). *The story of Bangladesh becoming a major bicycle exporter*. https://www.tbsnews.net/economy/industry/story-bangladesh-becoming-major-bicycle-exporter-419610
- [15]. Bike Europe. (2023, April 20). Bangladesh protects domestic parts production with duty hike on imports. https://www.bike-eu.com/45339/bangladesh-protects-domestic-parts-production-with-duty-hike-on-imports