

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Trade and Finance



Bachelor Thesis

**The Impact of International Trade on the Global
Environment**

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BACHELOR THESIS ASSIGNMENT

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Business Administration

Thesis title

The Impact of International Trade on the Global Environment

Objectives of thesis

The objective of the thesis is to evaluate the issue of global international trade, including positive and negative impacts on economic aspects and the natural environment.

The sub-objective of the bachelor's thesis will be to understand the general awareness of consumers about the way in which international trade affects the world and the environment.

Another sub-objective will be, based on an analysis of current consumer behavior, to suggest ways to reduce the negative environmental impacts of global trade.

Methodology

The theoretical part of the paper will consist of secondary research work,

which will be focused on reviewing the historical background of international trade. In addition to that, the thesis will consider the positive and negative social and environmental externalities of engagement in international trade.

The practical part of the thesis, will be developed through quantitative and qualitative research methods, utilizing a consumer survey to understand the general attitude and level of social awareness of how international trade affects society and the global environment in various ways. And SWOT analyses will be drawn up to assess the strengths, weaknesses, opportunities and threats for international trade between countries.

The proposed extent of the thesis

30-40 pages

Keywords

international trade, environment, positive externalities, negative externalities

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Copeland, B., & Taylor, M. (2001, October). International Trade and the Environment: A Framework for Analysis. NATIONAL BUREAU OF ECONOMIC RESEARCH, Cambridge.

Dellink, R., Hwang, H., Lanzi, E., & Chateau, J. (2017). International trade consequences of climate change. OECD. Paris: OECD Publishing.

Harris, J. (2004). Trade and the Environment. Medford, United States: Global Development And Environment Institute, Tufts University.

Xu, Z., Li, Y., Chau, S., Dietz et al. (2020). Impacts of international trade on global sustainable development. Nature Sustainability

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Declaration

I declare that I have worked on my bachelor thesis titled "The Impact of International Trade on the Global Environment" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2023

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The Impact of International Trade on the Global Environment

Abstract

The current bachelor thesis is designed to evaluate both negative and positive effects of international trade from the economic, social and environmental perspective. Aside from that, the research has other sub-objectives.

First is to assess consumers' general level of awareness regarding the harmful effects on the world and our environment. The second sub-objective is to understand what measures can be taken by consumers, in order to minimize the negative impact of international trade.

The theoretical part of the thesis covers general introduction to international trade, along with its brief historical background. It further studies various literature to identify the advantages and disadvantages of international trade.

At last, the practical part of the bachelor thesis will study whether people are aware of the social and environmental damage of international trade. And will focus on consumers' opinions on the benefits and drawbacks of global trade. Additionally, a SWOT analysis is utilized to summarize the findings and evaluate the strengths, weaknesses, opportunities and threats of international trade.

Keywords: International Trade, Environment, Positive Externalities, Negative Externalities

Dopad mezinárodního obchodu na globální životní prostředí

Abstrakt

Současná bakalářská práce je určena k vyhodnocení negativních i pozitivních dopadů mezinárodního obchodu z ekonomického, sociálního a environmentálního hlediska. Kromě toho má výzkum další dílčí cíle.

Zprv je třeba posoudit obecnou úroveň povědomí spotřebitelů o škodlivých účincích na svět a naše životní prostředí. Druhým dílčím cílem je pochopit, jaká opatření mohou spotřebitelé přijmout, aby se minimalizoval negativní dopad mezinárodního obchodu.

Teoretická část práce se zabývá obecným úvodem do mezinárodního obchodu a jeho stručným historickým pozadím. Dále studuje různé literatury, aby identifikovala výhody a nevýhody mezinárodního obchodu.

V praktické části bakalářské práce se konečně bude studovat, zda si lidé uvědomují sociální a environmentální škody mezinárodního obchodu. A zaměří se na názory spotřebitelů na výhody a nevýhody globálního obchodu. Kromě toho se využívá SWOT analýza, která shrnuje zjištění a hodnotí silné, slabé stránky, příležitosti a hrozby mezinárodního obchodu.

Klíčová slova: Mezinárodní obchod, životní prostředí, pozitivní externality, negativní externality

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List of Abbreviations

FDI – Foreign Direct Investment

GATT – General Agreement on Tariffs and Trade

WTO – World Trade Organization

UN – United Nations

SDGs – Sustainable Development Goals

BOP – Balance of Payment

EOS – Economies of Scale

LDCs – Least Developed Countries

FAO – Food and Agriculture Organization

VSS – Voluntary Sustainability Standards

NGOs – Non-Governmental Organizations

1 Introduction

The exchange of goods and services is fundamental for any nation and global politics. It has direct influence on society's development, quality of life, international relations between different states and their economic development. However, there is much more to that, as international trade has great impact on our environmental and surroundings.

This idea works in both ways, just as much as our trade and economic activities can harm the environment and add up to the existing problem of climate change and global warming, the climate and temperature can similarly pose a great risk to trade venture in the near future. Thus, it is important to raise awareness of the impact that international or global trade has on our environment and natural surroundings. (Dellink, Hwang, Lanzi, & Chateau, 2017)

There is an urgent need to find balance or rather, establish balance between cross-cultural trade and the impact that it has on our environment and social well-being. Sustainable Development must be the goal to strive for, as it enables economies to prosper without compromising our nature and its resources, or that it would at least minimize the possible negative externalities of trade and business activities of nations. (Xu, et al., 2020)

One outstanding example of Sustainable Development initiatives is the 17 Sustainable Development Goals (SDGs) of the UN adopted in 2015. The United Nations has over 190 member states who pledge to commit themselves and their politics to these set 17 targets, which aim to conserve our environment and natural resources, promote economic prosperity and development, as well as strive for social inclusivity. (Xu, et al., 2020)

2 Objectives and Methodology

2.1 Objectives

The objective of the thesis is to evaluate the issue of global international trade, including its positive and negative impacts on economic aspects and the natural environment.

The sub-objective of the Bachelor's thesis will be understanding the general awareness of consumers about the way in which international trade affects the world and the environment.

The second sub-objective will be based on the analysis of current consumer behaviour to suggest ways to reduce the negative environmental impacts of global trade.

2.2 Methodology

The theoretical part of the thesis will consist of secondary research work, which will be focused on reviewing the historical background of international trade. In addition to that, the thesis will consider the positive and negative social and environmental externalities of engaging in international trade.

The practical part of the thesis will be developed through quantitative and qualitative research methods, utilizing a consumer survey to understand the general attitude and level of social awareness of how international trade affects society and the global environment in various ways.

And SWOT will be drawn up to assess the strengths, weaknesses, opportunities and threats for international trade between countries.

3 Literature Review

3.1 Introduction to International Trade

Our daily activities and the quality of life, or the so-called standards of living highly depend on the variety and availability of goods and services that we can purchase as consumers. One country's production capacity is definitely limited due to a number of reasons, such as the scarcity or uneven division of resources or lack of capital technology and innovation, and so on. Therefore, there is a clear need for countries to exchange or trade different goods and services best produced at each other's production potential.

The above-mentioned exchange or trade of goods and services between two or more economies or countries, is known as "International Trade". International trade is an important contributing factor to modern day consumerism, global politics and can become a powerful drive for an economy. (Barasat Government College, 2021)

Evidently, International Trade is a very broad concept as various transactions take place between different economic agents across the globe. We can split the categories of global trade into three subgroups:

1. **International Trade Operations**, which directly relates to the import and export of goods and services between businesses of each trading nation. Such business transactions must be based on mutual agreement between the trading parties, and be drawn up upon legal sales contracts. (Terzea, 2016)
2. **Strategic Alliance**, as mentioned before, International Trade plays a major role in the world of world politics and relations between different states and international businesses. Such alliances often mean the sharing of technological advancements, business initiatives such as franchise or joint ventures and etc. (Terzea, 2016)
3. **FDI**, which stands for **Foreign Direct Investments**, is the third subcategory of International Trade. (Terzea, 2016) FDI can be defined as a long-term interest and

an ownership stake of an investor from one country, at a business venture or a project established or residing in another country. (Hayes, 2022)

3.1.1 Types of International Trade

There are a few ways to categorize different types of International Trade, by Bilateral and Multi-Lateral, as well as by Import, Export and Entrepot trade.

- **Bilateral** trade, as the name suggests is trading agreements between two states. Where one country purchases a given commodity of its partner, while selling another good or service in exchange. (NCERT, 2022)
- And the second type is **multi-lateral** trade, where one can country can engage in trade with more than one country. (NCERT, 2022)

One the other hand, we can divide International Trade into Import, Export and Entrepot Trade.

- **Import** trade simply means the purchasing of goods or services from one country, for reasons such insufficient levels of domestic production or cost disadvantage. (Barasat Government College, 2021)
- **Export** trade is the selling of commodities to other nations for reasons such as abundance of the given good or service or comparative advantage in production, as the exporting country is able to produce the commodity more efficiently and at a lower cost. (Barasat Government College, 2021)
- **Entrepot** trade is the third type, when a country purchases or imports a commodity with the purpose of selling or exporting it to another nation. (Barasat Government College, 2021)

3.1.2 Historical Background of International Trade

First of all, it is important to understand that trade is essentially a simple exchange of commodities between people. In ancient times, before the invention of the most efficient medium of exchange, money, people had to rely on the Barter System. This was a direct exchange of the thing or service an individual needed, with another person who was able to provide it in return for something else. (NCERT, 2022)

However, people realized that such form of trade is impractical, thus items with higher value such as shells, grains, furs, then gold and silver or other more useful or practical objects became the first medium of exchange. For obvious reasons, trade was often limited to local areas such as village or cities, at most to neighbouring tribes or cities. Absence of actual infrastructure, proper transportation methods and routes hindered the trade between larger areas. (NCERT, 2022)

Regardless, the well-known Silk Road can be referred to as the first advancement in formation of international trade which was opened in 13 B.C. It was a 6,000 km route which connected Asia and Europe for about 2,000 years, as it passed through the Middle East. (American Trading International, 2022) Often items such as Chinese Silk, wool, paintings, spices and precious metals were transported through Central Asia, Persia and India. (NCERT, 2022)

The next stage of International Trade is Mercantilism which appeared in the 16th century and dominated the economic world up until the middle of 18th century. Mercantilism is a theory which focused on the country's abundance of precious metals because they made up the wealth of a nation, as money was forged from these precious metals. It was further centred around the idea of increasing exports and limiting country's imports to accumulate more wealth and achieve a positive Balance of Payment (BOP). (Terzea, 2016)

During the Industrial Evolution, the world witnessed an increase in trade of essential commodities such as grains, meat, wool and raw materials. The raw materials were an essential resource for industrialized nations, who were able to produce or manufacture

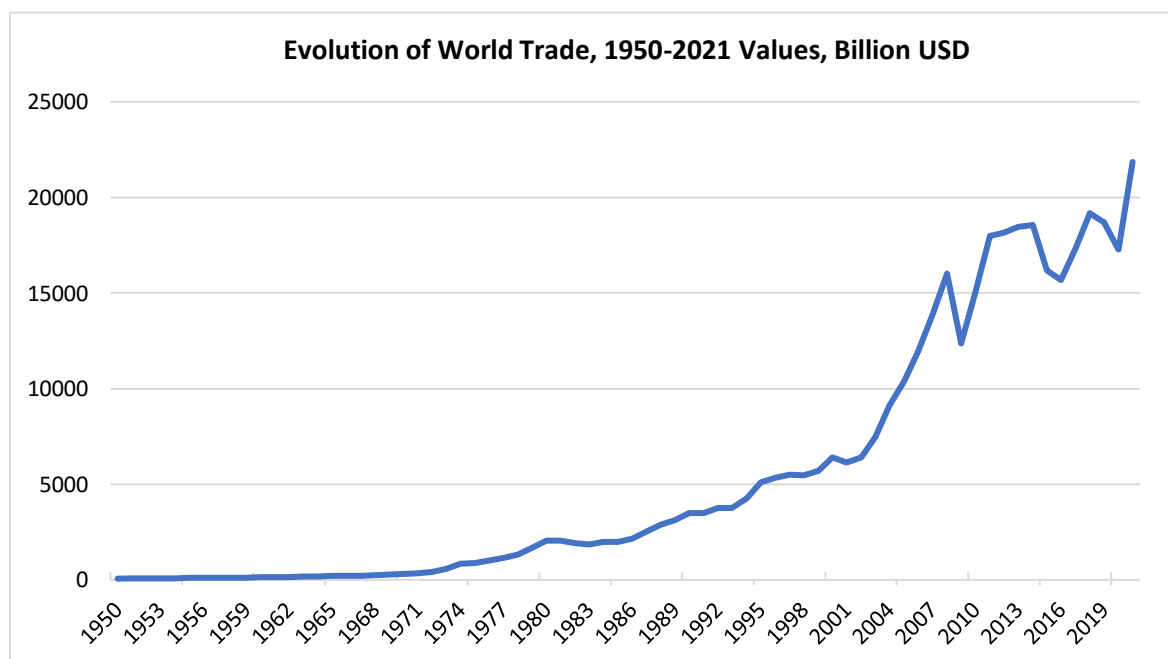
various finished consumer goods. Those were further sold or exported to nations which lacked in the production capacity of the secondary sector. (NCERT, 2022)

At last, other significant events in the history of International Trade were the World War I and II. This is because as the consequence of war, countries were forced to introduce trade tariffs and quotas, to have control over the taxes, value and the quantity of exported and imported goods. During those periods many global organizations were established and trade agreements between nations were signed, such as the General Agreement on Tariffs and Trade (GATT), now known as World Trade Organization (WTO) and more countries have become members of the United Nations (UN). (American Trading International, 2022)

3.1.3 Current Global Overview of International Trade

Some important aspects of global trade are its Volume and Composition. The volume refers to the total value of the trade, as it is preferred to keep account of the monetary value of both goods and services traded, rather than its weight. While the composition refers to the type of goods and services traded, whether those are agricultural products or manufactured goods, or natural resources. (NCERT, 2022)

Figure 1: Value of Global Trade from 1950 to 2021



Source: WTO Statistics

Some of the important nations involved in international trade are China and EU, as the world's largest exporters and the US, as the biggest importer of goods from other countries. The total global trade was equivalent to approximately US \$22.3 trillion in 2021. This is 347 times more than the value of international trade back in 1950s, as we can see the rapid growth of the global exports and imports throughout the last 70 years. Prior to the establishment of WTO, the growth has been rather steady. And after 1995, the growth increases dramatically with the foundation of such an important regulatory body. Aside from that we can observe severe contractions in periods such as the 2008/2009 economic crisis and the spread of the COVID-19 pandemic in 2020. (WTO, 2023)

Aside from the growing value and volume of the global trade, its composition has been changing through the years, too. As mentioned in Section 3.1.2, different commodities were demanded in different periods, such as valuable goods or luxury silk during the Silk Road or basic needs and edible products like meat, grains and various raw materials during the Industrialization era.

Source: UNCTAD, 2022

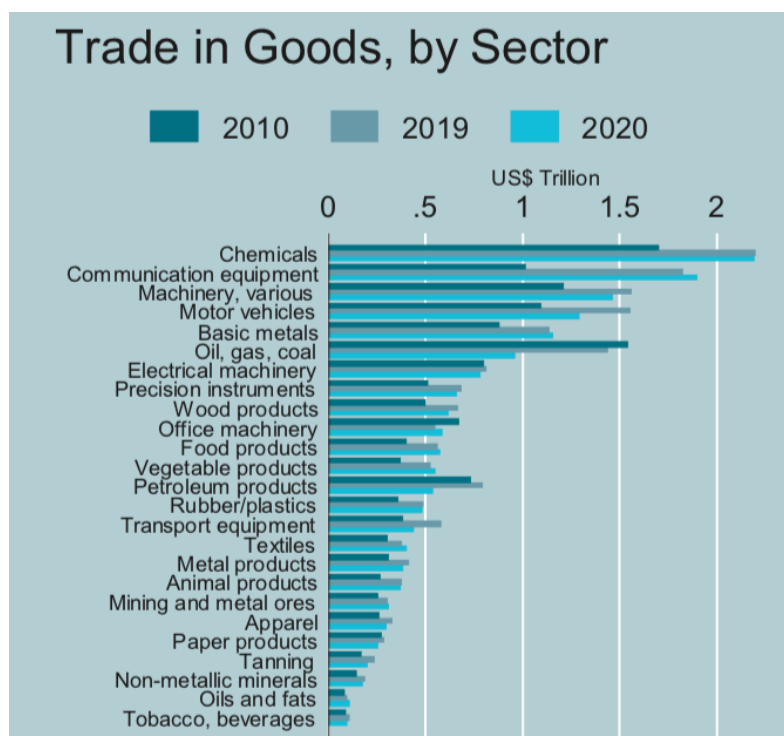


Figure 2: Trade in Goods 2010 to 2020

Today both services and goods, also known as merchandise are highly demanded across the world. Some of the most traded merchandise includes a variety of chemicals, machinery and equipment, cars and motor vehicles. Natural resources such as oil, gas, coal and petroleum remain a staple for many nations, being a significant energy source. Meanwhile, we can see that the trade in

agricultural products such as food and vegetable products is relatively smaller in the 21st

century, as there is an increased exports and imports of communication, production and office equipment as well as machinery. Altogether the agricultural sector goods made up about US \$1.7 trillion, which is less than one-tenth (10%) of the total international trade of 2020. (United Nations , 2022)

Source: UNCTAD, 2022

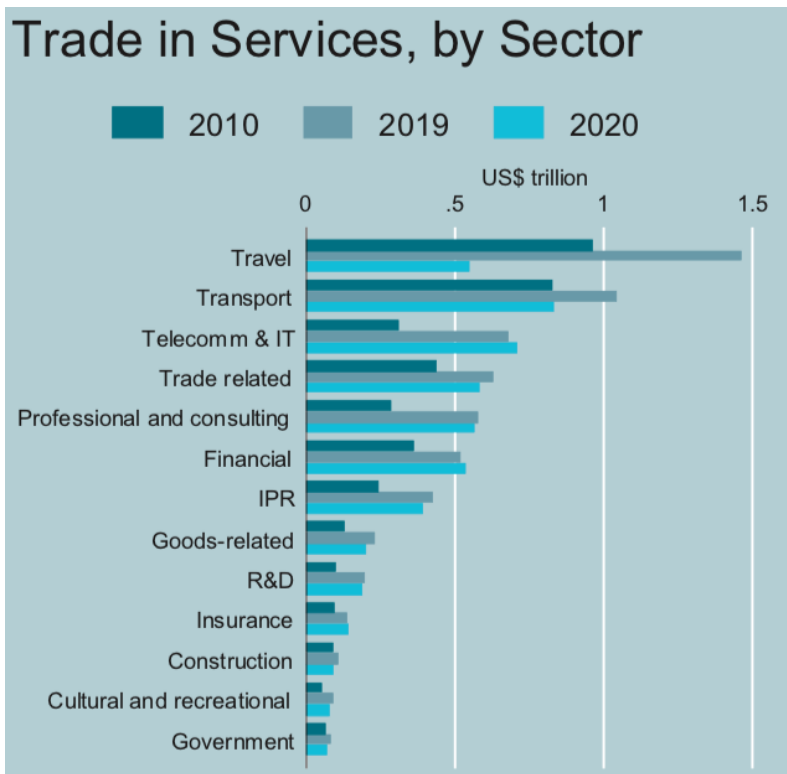


Figure 3: Trade in Services 2010 to 2020

Services are as essential for modern consumers as the logistics and transportation sector have developed significantly with the growth of globalization. Therefore, tourism and transportation, along with IT and Telecommunication are the top traded services among global states. (United Nations , 2022)

It is understandable that with lockdowns introduced in every country, and endless

travel restrictions, tourism and transportation have drastically declined during 2020. However, Telecommunications and IT, insurance and financial services have greatly benefitted from the pandemic. Moreover, more investments have been pooled into professional and consulting as well as Research and Development as a result of COVID-19. (United Nations , 2022)

3.2 Impact of International Trade on the Economy

Imports and exports are essential for any nation, to support their development and economic growth within the country. However, there is always two sides to everything. International trade can both benefit and harm the country's economic state.

With growing trade between countries, more and more agreements and pacts are made between the countries to lower the export and import restrictions to promote free trade. Just as much as international trade can benefit boost the economy of the state and grant it access to foreign markets, there is a risk of increasing unemployment due to high levels of global competition while outsourcing can become a more cost-efficient option for domestic businesses. (Amadeo, International Trade: Pros, Cons, and Effect on the Economy, 2021)

3.2.1 Positive effects on the Economy

One major argument in support of international trade is that it can promote better efficiency and **specialization** by focusing on production of a good or service of the industry where it has the **comparative advantage**, allowing it increase the total output of the economy and its exports levels, creating a surplus in the economy's BOP. (Farisatuddiniyah, 2022)

International trade leads to **open access to international markets**, it becomes much easier to transfer labour skills, knowledge and expertise, as well as **scientific and technological advancements** such as various equipment and machinery, which is essential in Research and Development, production and much more. Domestic businesses of an economy can import high-quality machinery or have the state-of-the-art technology at competitive prices, which can further improve overall quality of their goods and the revenues. (Farisatuddiniyah, 2022)

Increased exports in the country can lower the unemployment levels by **creating more jobs** due to increased demand and the need for the supply to keep up with it. It further establishes more **favourable investment environment**, as cross-national trading spurs trading opportunities.

The above-mentioned factors lead to overall improvement of **economic or consumer welfare** in the country. Domestic consumers have a wider variety of goods and services available to them at lower prices due to the competitive nature of international markets which consequentially **prevents monopolies**. Created jobs and more affordable necessities

can improve the standards of living in the country, while the domestic producers can benefit from **economies of scale** (EOS). (Drozdz & Miškinis, 2011)

3.2.2 Negative Effects on the Economy

Regardless, international trade can become harmful for the economy if it isn't sufficiently regulated. One of such disadvantages was mentioned earlier, that domestic firms can choose to employ professionals from abroad due to lower market salaries or National Minimum Wage (NMW) in other states, posing a risk of **increased unemployment rate**. (Amadeo, International Trade: Pros, Cons, and Effect on the Economy, 2021)

Furthermore, it can **harm domestic producers** if they are unable to put up with competition from foreign producers. It can further **decrease the demand for domestic goods** and services. (Farisatuddiniyah, 2022)

It can encourage **unfair and unhealthy competition** practices such as Dumping, where states with excess output levels of certain goods can dump them to other countries at very low prices, they may even be goods of lower quality. (Drozdz & Miškinis, 2011)

At last, the country's population may become overly dependent on imported goods, threatening domestic businesses and creating **a trade deficit** as imports would exceed the total exports, also known as **trade imbalance** in economy's BOP, which is especially common for weaker economies with little to no diversification. (Drozdz & Miškinis, 2011)

3.2.3 Impact on Developing nations

International trade can often turn out to be more beneficial for developed nations who get to enjoy the wide variety of goods, better options and quality and so on. However, a different perspective is observed by the population of developing states, as a consequence of an increasing number of developing states loosen their trade barriers to participate in the global markets.

It is true that global trade can help create more jobs in developing countries as more multinational firms choose to establish their factories or call centres in developing nations, it can further increase income per capita in the country and help improve their quality of life.

At the same time, it creates economic instability since the developing states, who often known for ensuring the supply of primary or agricultural goods, textiles and so on, can become overly- dependant on the demand from developed countries. Thus, the producers in LDCs are exposed to the risk of any downturns in the economies of their trading partner states. (Drozd & Miškinis, 2011)

Aside from that, exploitation and poor working conditions can become another concern for labour force in developing nations. This is because many LDCs lack adequate labour protection laws and regulations. Practices such as child labour can become common, while thousands of women are known to work under unsanitary conditions in textile factories. (Amadeo & Boyle, 2022)

Furthermore, as more factories and production relocate to developing nations due to reduced costs, it poses a risk of environmental damage to those states, while depleting their natural resources and increasing the levels of water, air and land pollution and contributing to deforestation. Once again, this is common due to the reason of few laws and regulations to address such issues. (Amadeo & Boyle, 2022)

3.3 Impact of International Trade on the Environment

As more and more goods are manufactured, traded and transported across the world, an increasing number of resources is required to satisfy the growing global demand. This in turn takes a toll on our natural surroundings, as we witness deforestation, droughts and rising levels of pollution in many countries.

Production based on comparative advantage only considers economic gains for the state, however it doesn't oversee the environmental costs of it. Environmental issues occur as a

consequence of many trading activities, one of the biggest examples is fishing, as other marine **inhabitants suffer** from violent fishing practices. Such case was discussed in 1991, during the tuna trade between the U.S. and Mexico, as many dolphins were killed by accident while trying to capture tuna. (Harris, 2004)

One of the biggest issues is **water pollution**, as many industries rely on massive volumes of water to carry out the production processes. Industries like agriculture and meat production, fashion and textiles, energy, mining and construction are responsible for most freshwater consumption. It is no secret that that crops and animal production requires tons of water, therefore 70% of world's available freshwater allocated to **agriculture** as it is the most water intensive industry. (Negru, 2021)

A number of developing countries like China, India and Brazil are the biggest producers of agricultural commodities such as grains, beans, milk and dairy, vegetables and sugarcane. The United States is another global producer of the above-mentioned goods. (Ross & Boyle, 2022) All of them make use of various chemicals such as pesticides, insecticides and fertilizers to maximize their yield. However, these chemicals are toxic for the soil and water, thus resulting in water pollution and soil contamination. (Negru, 2021)

The next disruptive field is the fashion industry, which uses almost 80 billion cubic metres of freshwater. And we all know how rapidly changing are fashion trends, with new collections presented every season, as fast fashion grows continually. It is estimated that a single pair of jeans requires at least 7,000 litres of water and that is enough to last a single person for up to 5 years. (Negru, 2021) India is known to be one of the world's largest producers of cotton, which demands an enormous amount of water to grow.

Many farms and clothing factories just as any industrial producers in both, developing and developed nations, fail to establish and follow adequate waste water management. They discharge their wastewater filled with harmful chemicals and metals into lakes, rivers and seas. As a consequence, many ecosystems, marine life and even human health are damaged as they are exposed to such contaminated water. (Mateo-Sagasta, Zadeh, & Turrall, 2017)

Such terrible misallocation of a valuable resource, freshwater, elevates the global water crisis, as more nitrate is found in groundwater across the world, especially in China. It is known to **lead to serious illnesses** such as Blue Baby Syndrome, where skin of infants appears blueish due to low level of oxygen in blood. Research shows that almost 40% of EU's waterbodies face pollution from the agricultural sector. (Mateo-Sagasta, Zadeh, & Turrall, 2017)

Another observation made by research is the link between international trade and **deforestation**, which is also caused by the global agricultural market. Numerous countries with comparative advantage in wood and timber production such as Thailand, Brazil, Mexico, Costa Rica, Australia and more, have observed an increase in cut down trees as the local prices increased after trade liberalization. The opposite effect is observed once local prices decline; deforestation has been known to subside. (WTO, 2023)

Just as pollution, deforestation is a serious environmental issue, highly influenced by global trade and it needs to be addressed. Conservation efforts and other ways to control the production need to be put in place, as deforestation too leads to **climate change**, increase in greenhouse gas emissions, crops reduction and soil erosion, along with **habitat loss and animal extinction**. (Pachamama Alliance, 2023)

3.4 Trade Policies and Sustainable Development

Economic development is an important macroeconomic objective of any nation, which is meant to build good standards of living for country's citizens. However, the welfare of our surroundings must not be compromised to achieve this comfort. This is the role of Sustainable Development. It is defined as development which meets the needs of the present population, without compromising the resources and abilities to meet those needs of future generations to come. (UN, 2016)

Global unions and organizations such as UN cater for setting standards and proposing ideas for achieving inclusive economic sustainability. One example is the 17 Sustainable Development Goals proposed by UN which were briefly mentioned in the previous section of the thesis.

These are 17 different goals to the member states which are meant to address crucial social, environmental and economic aspects for any state. Non-mandatory SDGs address areas such as education, poverty, healthcare, equality, access to clean water and protection and conservation of environment. (UN, 2016)

One of the tools of the UN is the use of Voluntary Sustainability Standards (VSS), which is the use of certification and labelling standards for farmers, producers, manufacturers and retailers, which is meant to ensure that social and environmental costs are considered in the production process and in value chains. VSS helps control and monitor the compliance with basic human rights, labour rights, health and safety conditions, measure and limit environmental impact of manufacturers and producers and much more. (UNCTAD, 2021)

VSS certification and labelling can aid trade and the global competitiveness of the economy. This is due to the increased demand, VSS provides a competitive advantage for any domestic producers as they are able to showcase their actions towards environmental protection and inclusive production practices. Furthermore, such labels and certificates win over consumers' trust because they serve as a proof of product safety and quality. And they also promote information transparency. (UNCTAD, 2021)

A few reasons for producers or manufacturers to adopt VSS can be the rising **Conscious Consumption** as global consumers are becoming more mindful of the things they buy. Another reason is the **Brand Protection** from possible strikes, protests and other actions or initiatives by various Non-Governmental Organizations (NGOs) such as Amnesty International, Greenpeace, WWF and more. **Government Regulations** are another main driver of VSS adoption to avoid penalties and fines for non-compliance with social, labour and environmental regulations and restrictions. (UNCTAD, 2021)

Research of two contributors at the National Bureau of Economic Research, suggests that it is essential for producers and manufacturers to treat their pollution and

emissions as an input in the production process. This is to permit the general prices of goods and services to reflect their level of pollution and environmental harm. Thus, a price of a commodity is meant to cover both the cost of labour and capital, as well as the pollution regulation, utilizing the indirect demand relationship. Thus, harmful and more costly products will face lower demand and vice versa for commodities with lower environmental impact and helps us directly see the marginal benefit of pollution. (Copeland & Taylor, 2001)

Overall, it is first important to internalize the social and environmental responsibility on the state or national level, to ensure each country is ready to take a step towards global sustainable development and is able to engage in responsible and conscious cross-national trade.

4 Practical Part

4.1 Research Design

The research of the current Bachelor thesis is based on two sections, consisting of quantitative and qualitative analysis with the aim of the to better understand the link between international trade and its impact on the environment from consumer perspective. Furthermore. Possible strengths, weaknesses, threats and future opportunities of international trade in relation to our natural environment will be investigated.

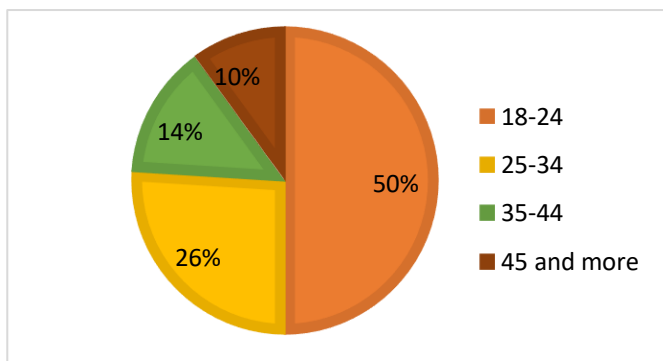
Research Methods used:

1. Consumer Survey, distributed to a random sample of 100 respondents to study consumer's awareness of trade's social and environmental impact.
2. SWOT Analysis to evaluate the potential effects of international trade on the environment.

4.2 Part 1: Survey

Part One of the research is based on the data from a survey with a total of 13 questions, which was distributed to a random sample of 100 respondents. The respondents' age varied from at least 18 years to 45 years and more, and it was separated into 4 age groups.

Figure 4: Respondents' Age



Source: Own work

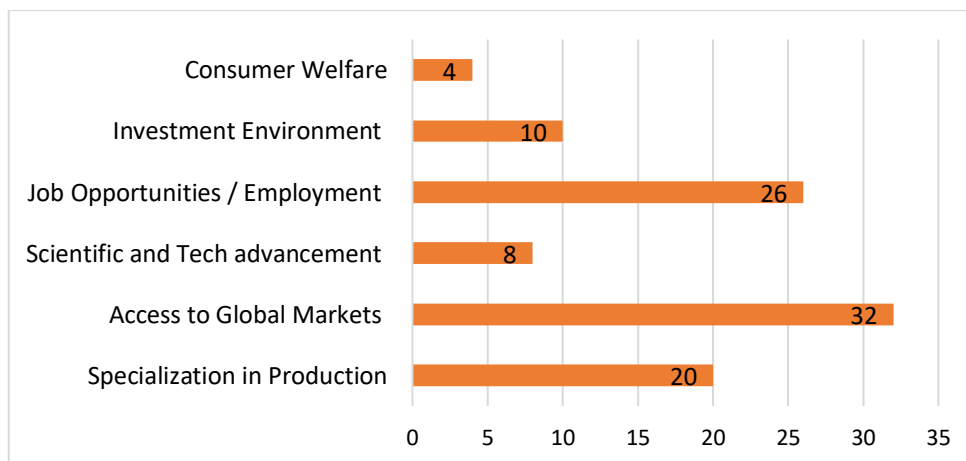
The first question of the survey is a demographic factor, aiming to understand age of those who participated in the research.

Respondents whose age varied from 18 to 24 represent exactly half of the total responses. While the next largest group belongs to the individuals between 25 to 34 years, with a total of 26 responses. Therefore, the two “youngest” groups represent slightly over $\frac{3}{4}$ of the total number of surveyed. The older groups of 35 to 44 and 45 and older, account for 14 and 10 percent of the responses.

4.2.1 Survey Output

The rest of the 12 questions are designed to understand 5 different aspects of the research, and to provide possible solutions from the consumers’ standpoint. Starting with questions 2 and 3, this set aims to understand consumers’ view on the level of importance of international trade and which of its positive effects discussed in Section 3.2.1 result in beneficial contribution to the economy. Overall, 50% of the respondents claim that International Trade is “very important” for economic development. Meanwhile, 44% consider it “important” and only 6% believe that global trade is “slightly important” in the development of the state. None of the respondents are of the opinion that international trade is unimportant for the country’s economy.

Figure 5: Economic Benefits of International Trade



Source: Own work

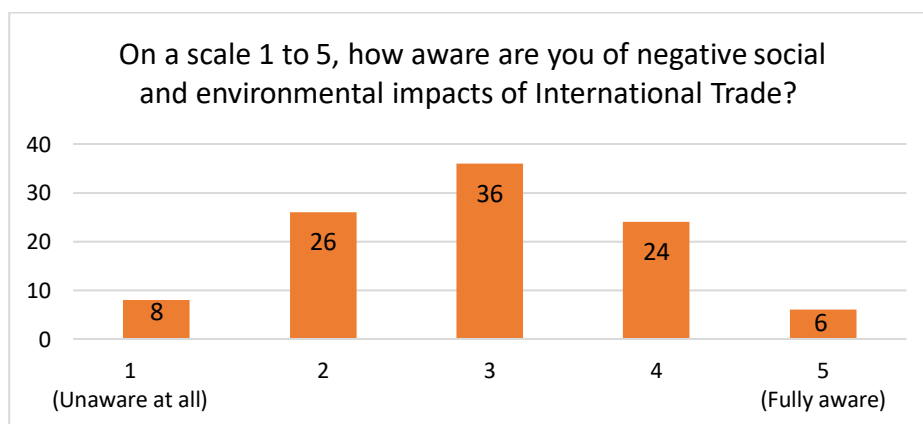
Figure 5 represents the previously discussed advantages that a country may enjoy as a result of engaging in international trade, and the number of votes given to each “benefit”.

These factors represent possible arguments in support of international trade between countries. Overall, the biggest advantage gathered from the survey is “**Open access to global markets**”, as it has gained almost 1/3 of the total votes. These findings explain the expansion of globalization and the society’s desire to have easy access to a wide range of markets, resources and opportunities.

The second biggest benefit identified from the survey is “**Increased job opportunities and employment**”, with 26% of the responses. And the third spot with 20% is held by “**Increased specialization in production**”. Overall, the first three benefits highlight the fact that the biggest advantage of increased global trade is that trade can create better standards of living within the country. As there is opportunity for higher income, increased variety of goods and services, more job opportunities within foreign and domestic firms, as well as overall improved quality of available goods and commodities.

This pair of questions (4 and 5) are designed to assess the level of social awareness regarding the environmental harm and other social disadvantages of global trade. When asked whether they are concerned about environmental issues, the majority or more than half of the responses (56%) were positive. However, 38% of surveyed were unsure whether environmental crisis is an issue that concerns them. At last, 6 respondents stated that it is not an issue that would cause any interest or worries to them.

Figure 6: Scale of Social Awareness



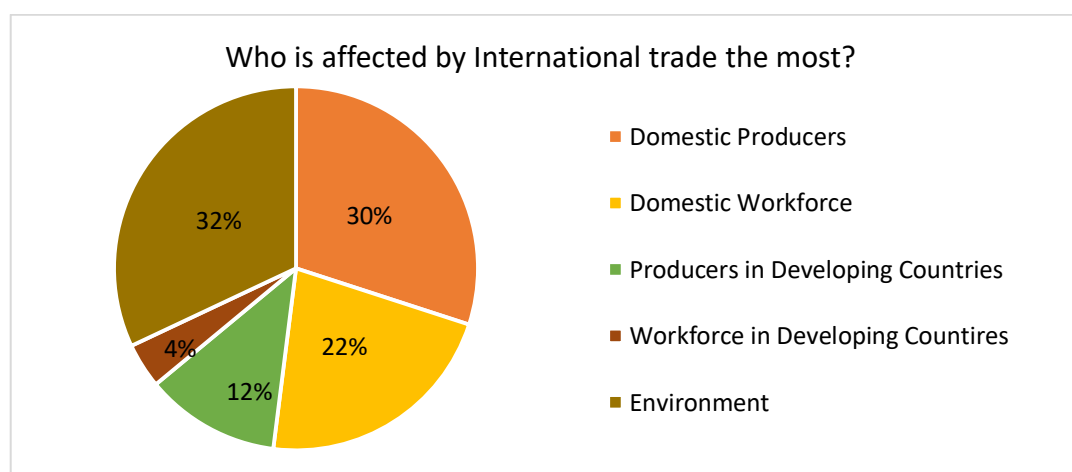
Source: Own work

Figure 6 represents the sample responses, when individuals were asked to evaluate how well informed or aware are they of the negative side of international trade. We can observe that there is about an equal distribution of individuals who consider themselves more and

less informed of the harmful consequences. Over a third of the surveyed (36%) consider themselves somewhat aware at an average level. Furthermore 30% consider themselves well informed of how global production and trade affect different social groups and our natural habitat.

Firstly, questions 6 to 9 intend to understand whether consumers view international trade as a harmful venture. Furthermore, the survey aims to identify what is the biggest social, environmental, economic disadvantage of international trade, and which one of the economic agents is harmed the most. When asked if they agree that international trade harms developing nations and our environment, 10% have stated that they Disagree. Meanwhile, only 40% were able to clearly state that they Agree with the idea, and 50% have remained Neutral in their answer.

Figure 7: Who is affected by international trade the most?



Source: Own work

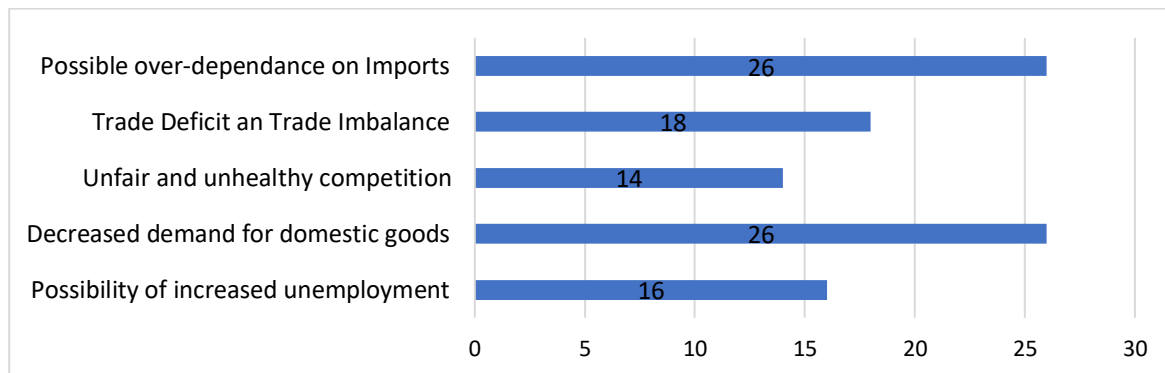
From the chart above, we can see that overall, consumers worry about how international trade can mostly harm the environment and pose risk to domestic producers. The findings prove that there is a rising public concern about the current environmental crisis, which is reflected through the 32% (almost one-third) of votes. Moreover, we can see that many individuals have a “protectionist” stance, where they are concerned about the performance of local or domestic businesses, with 30% of all responses, as open markets and international trade are known to fuel competition in the market. The third group, which can potentially be harmed by international trade, is domestic workforce, as it has gained almost

a quarter (22%) of all responses. Once again, both reasons have been previously explained **Section 3.2.2** of Literature Review.

The economic harm experienced by developing nations, both their businesses and labour market is of a lesser concern to public. Hence, only 12% of respondents believe that international trade mostly harms Producers and Manufacturers in Developing countries, while only 4 surveyed voted for workforce of developing states.

The chart below, represents the findings from Question 8 of the survey. It utilizes disadvantages discussed in **Section 3.2.2** to identify the biggest economic drawback of engaging in international trade.

Figure 8: Economic Disadvantages of International Trade



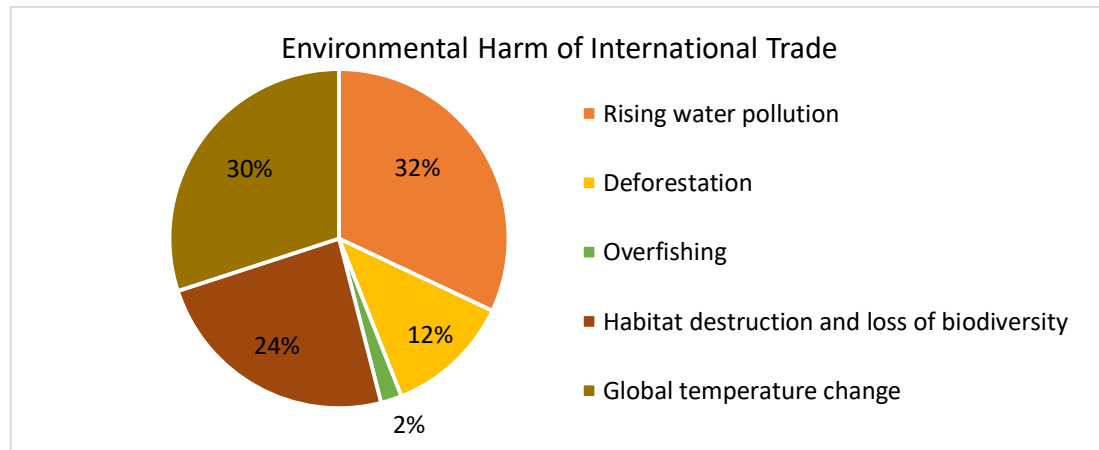
Source: Own work

Overall, the two biggest risks of cross-country trade are “Possible over-dependance on Imports” and “Decreased demand for domestic goods”, each with 26% of total votes. The two drawbacks are essentially linked to one another, as international trade can alter behavior and preferences of domestic consumers to favor the commodities from foreign manufacturers and producers, due to reasons such as more affordable prices or better quality. This will essentially reduce the demand for products of local businesses. Furthermore, if not handled or controlled, the country may even become overly dependent on supplies from the state’s trading partners.

Although, there is approximately same level of concern regarding unhealthy competition practices in the market, rise of unemployment and any discrepancies in the state’s BOP, as the votes range from 14% to 18% of total responses.

The last question of this subset is based on the knowledge gathered in **Section 3.3**, to identify the biggest environmental disaster caused by modern trade and business activities.

Figure 9: Biggest environmental problem caused by international trade



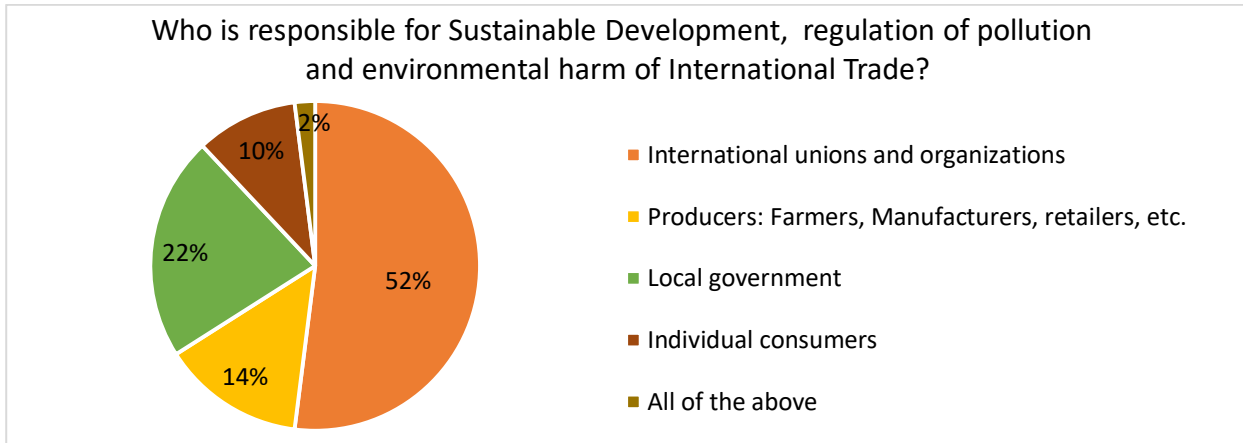
Source: Own work

The current paper largely focused on water pollution as a major environmental cost of increased global trade and production levels. As mentioned before, almost three-fourths of all available freshwater, are allocated to the agricultural industry, which is known for creating high levels of water and soil pollution. Therefore, it is no surprise that the survey findings, 32% of votes, coincide with the theory discussed in **Section 3.3** that rising water pollution is the biggest environmental downside of international trade.

The next problem, almost at the same level, is the increasing global temperatures, with 30% of total responses. Global warming and climate change are the most widely discussed environmental issues, as many worldwide organizations, researchers and scientists work towards finding a solution. And the third possibly worst consequence of modern commercial activities is habitat destruction and loss of biodiversity with 24% of votes. It is essentially a result of the previous two problems, as with pollution and changing temperatures, we lose tropical islands, face melting glaciers and ruined forests and other habitats along with their inhabitants, which further leads to species endangerment and even extinction.

After covering general awareness, good and bad sides of international trade, fourth set of questions, 10 and 11, have an objective to settle who holds the responsibility to oversee pollution and sustainable development. 3

Figure 10: Responsibility for pollution regulation and Sustainable development



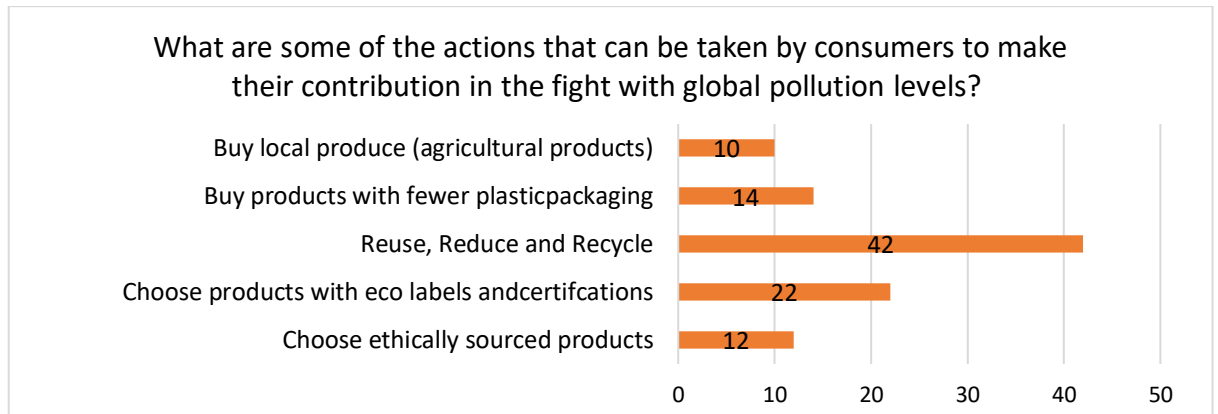
Source: Own work

More than a half (52%) of respondents believe that international organizations such as UN or WTO, should be the ones responsible for taking action in environmental control and setting sustainable development goals and regulations. A much smaller proportion falls upon local governments of each state, with 22% of votes. And only 10 to 14% of individuals believe that they as consumers or producers have to be the ones held responsible for commercial and trade waste and pollution management, as well as the implementation of any measures in alignment with sustainable business practices. At last, only 2 respondents agree that this is a shared responsibility of all global economic agents.

The next question focuses on consumers perspective, whether they believe that a change in their consumption habits can help achieve the above mentioned environmental and sustainable goals. A great result has been observed as none of the surveyed responded with a “No”. Four-fifths (80%) of the surveyed believe that they can contribute towards reducing the environmental harm, however 20% were unsure if their purchases can help make any difference on a large scale.

The fifth and the last pair of questions (12 and 13) focus on the possible solutions or actions that can be take in order to alleviate the environmental damage of international trade, from both the consumers’, and government - businesses’ side.

Figure 11: Consumer side actions for Sustainable development

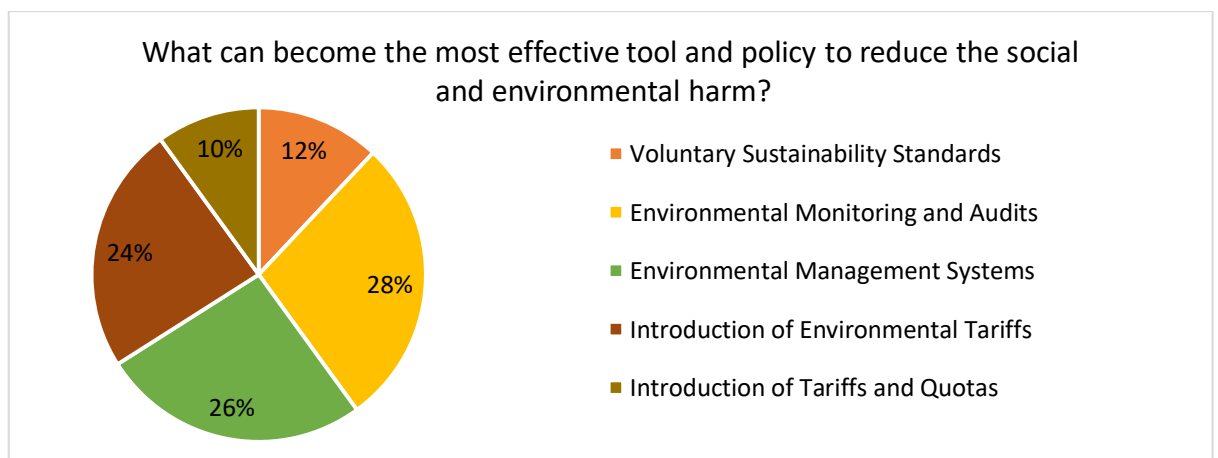


Source: Own work

To reuse, reduce and recycle, is one of the simplest but very helpful actions that can be taken by any consumer in order to reduce their household waste and carbon footprint. Therefore, this option has gained 42 votes out of the total 100. The next important effort that can be contributed by today’s consumers, is choosing to buy products with trustworthy eco labels and certifications, as it has gained 22% of votes. This is a clear example of how efficient VSS initiatives can be, and they were previously explained in **Section 3.4** along with the rise of conscious consumption practices.

The other suggested consumer actions such as buying produce of local or domestic farmers, goods made of ethically sourced ingredients and components, and reduced plastic packaging, have gained somewhere between 10% to 14% respectively.

Figure 12: Government measures and policies for Sustainable development



Source: Own work

At last, Question 13 focuses on possible actions that can be enforced by government or adopted by businesses in order to reduce their factory or farm waste and help create better, environmentally friendly production and business management practices. From the perspective of the surveyed sample, the most efficient measure or policy would be establishment of clear compulsory Environmental Monitoring and Audits, with 28% of total votes.

The next two highest voted options are Environmental Management Systems, with 26%, which refer to a number of practices that businesses implement to improve their overall environmental performance. They can range from simple employee training, spreading of valuable information, using energy saving processes, better waste management and so on. And the third option is Environmental tariffs, with 24% of votes. Which is essentially a tax on goods imported from countries with fewer or less strict environmental regulations. This is supportive of the idea of Copeland and Taylor, that prices of goods should reflect their environmental damage. (Copeland & Taylor, 2001)

At last, the less welcomed options to control social and environmental harm from international trade, were VSS and general tariffs and quotas on imports and exports, with 12% and 10% respectively.

4.3 Part 2: SWOT Analysis

The second part of the practical research is represented through qualitative analysis, which comprises of the potential strengths, weaknesses, opportunities and threats of international trade.

The SWOT analysis is based on the data regarding the social, environmental and economic benefits and drawbacks of international trade, discussed in the theoretical part of the thesis. Furthermore, the analysis will include data gathered from the previously conducted survey.

Table 1: SWOT analysis of International trade

| Strengths | Weaknesses |
|--|---|
| <ul style="list-style-type: none"> ○ Global trade helps create close international relations and political ties between states. ○ It aids in the exchange of essential modern knowledge and technological advancements for the benefit of production processes and scientific research. ○ If properly planned and monitored, it can help achieve Sustainable development and economic prosperity for the state. ○ Cross-country trade provides employment opportunity, increased consumer choices, access to better resources and potential EOS for domestic businesses. | <ul style="list-style-type: none"> ○ Without adequate policies and regulations, International trade can pose a great risk to the domestic economy such as over- dependence on imports and trade imbalance in BOP. ○ There is danger of exposing its domestic producers to unhealthy competition, and lowering the demand for domestic goods. ○ Similar situation may arise in the labour market, if it is essentially more cost-efficient to relocate the factory and employ individuals outside the country. ○ In such cases, many developing states lack environmental regulations or labour protection |

| | |
|---|---|
| <p>Rise of global trade improved overall consumer welfare with higher quality, better variety, improved logistics and etc.</p> | <p>laws, thus increasing chances of child labour, or failure to provide proper working conditions.</p> <ul style="list-style-type: none"> ○ The rise of trade between countries has significantly harmed the global environment with water pollution, soil erosion and destruction of animals' habitat. |
| <p>Opportunities</p> | <p>Threats</p> |
| <ul style="list-style-type: none"> ○ Global trade has grown massively over the past 30 years, and its total value has increased by almost 350% since 1950s. ○ After the COVID-19 pandemic, there has been a drastic increase in demand for various Telecommunication and IT technologies, which will continue to grow in demand in the upcoming years. ○ Conscious consumption is on the rise over the recent years, while growing number of consumers seek ethically sourced products with eco labels and certifications. | <ul style="list-style-type: none"> ○ Cross-country trade is highly susceptible or volatile to the spread pandemics. Global trade volume can decline excessively in times of contagious outbreaks. ○ Environment and International trade are closely interconnected. Just as trade harms our environment, climate change can greatly affect many industries and disrupt trade, especially agriculture and logistics. ○ Imposing trade tariffs and quotas can significantly increase prices of imported goods, thus lowering their demand and competitiveness in global markets. |

Source: Own work

4.4 Results and Discussion

According to the conducted research, consumers and the general public evaluate the access to global markets and increased job opportunities as the main advantages of international trade. Yet, many remain unaware of the cost of social and environmental damage, in the chase of economic benefit, as only 40% of respondents were able to agree that international trade harms our nature and developing nations.

Furthermore, a major part of the surveyed (in total 52%, or 22% and 30% respectively) believe that the biggest cost of international trade is paid by domestic workforce and local businesses. Our environment is essentially the biggest victim of international commercial activities (yet only 33% have voted for “Environment”), as it was stated in the theoretical review, agricultural sector alone consumes over three-fourth of global freshwater, being the biggest contributor to water pollution.

Many respondents seem to have a protectionist view, as their biggest economic fear of global trade engagement is becoming overly-dependant on imports and thus lowering the demand for commodities of local manufacturers.

Additionally, most of those who participated in the survey (80%) realize that their individual consumption choices can help the Sustainable development goals. Although, they still consider that most of the social and environmental responsibility is in the hands of international organizations, as over 52% of votes were allocated to that option. While local government held a much smaller proportion of 22%, and even smaller share of 10% was “taken” by consumers themselves.

At last, in order to reduce the pollution levels and the overall harm to environment and different species, 42% respondents believe that the best way would be to promote the reuse, reduce and recycle mindset. The next best alternative, with 22% of votes was to purchase goods that have passed ecological testing and earned legitimate eco-labels and certifications. While government would be best to set mandatory monitoring and auditing (28%) for any manufactures and producers.

Another solution advised both in theory and practical part of thesis was to ensure that the environmental damage produced within the production or selling of the good or service be reflected in the price of that commodity. Henceforth, almost a quarter (24%) of surveyed believe that imposing environmental tariffs can become an effective way in reducing the harm to the nature. Such measures can help raise public awareness and create more transparency about the harmful production process of various goods, whether imported or locally produced.

5 Conclusion

Multi-lateral international trade is present in almost every part of the world, as countries aim to maximize their benefits for consumer welfare and economic prosperity. All of this while building strategic alliances, and accessing a greater number of human, technological, scientific and natural resources. Such drive forced global trade to expand immensely over the past decades since 1950s.

Today, some of the biggest suppliers and importers in the world are countries such as China, the United State and the European Union, along with India, Brazil, Russia and many more. As they import and export tons of agricultural produce, machinery, textiles, and chemicals, the state of our natural environment continues to decline on daily basis and often compromises the well-being of some of the developing nations across the globe.

In order to enjoy the maximum of benefits such as decrease in unemployment, specialization in production, access to a wider range of both business and consumer goods and services, and lower the negative externalities of international trade, all parties must contribute their efforts to achieve sustainable economic growth across the world.

As mentioned before, international organizations do play an important role in sustainable development and global trade agreements, however many of their policies remain voluntary for the member states. Therefore, it is essential for each country's authorities to establish tax or tariffs on goods that create more environmental damage in their production process, set regular mandatory monitoring and auditing of factories to ensure that modern machinery is used in production process and that producers have adequate Environmental Management Systems and waste disposal plans.

This is particularly important for developing countries, as many of them lack strict or clear laws and regulation on environmental conservation. On top of that, it is urgent for businesses to realize the potential of Voluntary Sustainability Standards in the times of rising conscious purchasing habits and choices.

This is because VSS not only covers the environmental protection policies, but also social and labour protection measures. Often VSS certifications or labels can help gain trust of modern consumers because they serve as proof of ethical sourcing of ingredients, protection of human and labour rights. They showcase that a business acts responsibly towards our natural environment, trying to control and minimize their levels of pollution, waste disposal, energy consumption and so on.

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Appendix

1. What is your age?

18 - 24 years

25 - 34 years

35 - 44 years

45 years and older

2. How important is International Trade for country's economic development?

Very important

Important

Slightly Important

Unimportant

3. What is the most valuable benefit of international trade for the country?

Increased specialisation in production

Open access to global markets

Opportunity for scientific and technological advancement

Increased job opportunities and employment

Favourable investment environment

Improved consumer welfare

Other

4. Are you concerned about the global environmental problems?

Yes

No

Maybe

5. On a scale of 1 to 5, how aware are you of negative social and environmental impacts of International Trade?

1 – Unaware at all

5 – Fully Aware

6. Do you agree with the statement that International trade harms developing nations and the environment?

Disagree

Neutral

Agree

7. Which of the following is negatively affected by International Trade the most?

Domestic producers

Domestic Workforce

Producers and Manufacturers in Developing Countries

Workforce in Developing countries

The Environment

Other

8. What is the most harmful consequence of engaging in international trade for the economy?

Possibility of increased unemployment

Decreased demand for domestic goods

Unfair and unhealthy competition

Trade Deficit an Trade Imbalance

Possible over-dependence on Imports

other

9. What is the biggest environmental problem caused by international trade ?

Rising water pollution

Deforestation

Overfishing

Habitat destruction and loss of biodiversity

Global temperature change

Other

10. Who is responsible for Sustainable development, regulation of pollution and environmental harm of International Trade ?

Local Government

Producers: Farmers, Manufacturers, Retailers, etc.

International unions and organisations (ex. WTO, UN, etc.)

Individual consumers and their purchasing habits

Other

11. Can consumer choices play a role in reducing the environmental damage and contributing to Sustainable development ?

Yes

No

Maybe

12. What are some of the actions that can be taken by consumers to make their contribution in the fight with global pollution levels?

Choose ethically sourced products

Choose products with eco labels and certifications

Reuse, Reduce and Recycle

Buy products with fewer plastic packaging

Buy local produce (agricultural products)

13. What can become the most effective tool and policy to reduce the social and environmental harm?

Voluntary Sustainability Standards

Environmental Monitoring and Audits

Environmental Management Systems

Introduction of Environmental Tariffs

Introduction of Tariffs and Quotas