

Study Guide G20



Topic A: Restoration of International Supply Chains to guarantee Food Security

Topic B: Improving Sustainable Resource Mobilisation

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Word of Welcome

Distinguished Delegates,

We are honoured to welcome you to the G20 and delighted to be your chairs during SGMUN 2022. After profound research, we have prepared this study guide for you to have a general understanding of the functioning of the committee, as well as of the two topics that we will be discussing. You can use this guide to learn about the topics' history, the main block positions that exist, and you can of course look up the references.

The COVID-19 pandemic threw into sharp relief the levels of inequality that exist both within and between countries. Low-income countries were the most vulnerable to the effects of the pandemic. As lockdowns were lifted and economies began to recover in 2021, global demands rebounded, but supply chains in many sectors struggled to keep up. Adding to this, the ongoing war between the Ukraine and Russia amplified the cost-of-living as price pressures hit consumers from multiple directions. Furthermore, countries are facing the possibility of an insufficient amount of energy due to the war, returning their focus to the debate of sustainable resources. With this in mind, we are excited to introduce you to the two topics we will debate:

The restoration of international supply chains to guarantee food security
 Improving sustainable resource mobilisation

This Study Guide is a great starting point for your investigation and further research. We really hope that you find it useful and that you enjoy it as much as we did writing it. It is a pleasure for us to chair this committee and we are really excited to meet you all.

Yours truly,

Lorena Díaz, Jutta Kempeneer and Jule Mau, Chairs of the G20.

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List of Abbreviations

ASEAN	Association of Southeast Asian Nations
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
EU	European Union :')
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Administration (U.S.)
G20	Group of Twenty
G7	Group of Seven
GHG	Greenhouse Gases
GMO	Genetically Modified Organism
GNI	Gross National Income
IMO	International Maritime Organization
LDCs	Least Developed Countries
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
RELAC	Renewable Energy for Latin America and the Caribbean
SDGs	Sustainable Development Goals
UNEP	United Nations Environment Programme
WHO	World Health Organization

About the Committee

1. History of the Committee

Founded in September 1999, the G20 is an intergovernmental forum that was established to increase dialogue on global economic growth and prosperity issues after the Asian financial crisis. It followed the meeting of the Group of Seven's (G7) Ministers of Finance and Governors of Central Banks, and was initially launched to focus on the international financial instability that had found its roots in Asia in 1997. After the international community's disappointment with the G7 and how they handled the problems of the global economy, the G20 was supposed to include middle–income countries and those with systemic economic influence in finding solutions to economic problems affecting everyone.¹

Since its establishment, however, the G20's mandate has shifted from focusing on preventing and resolving financial crises to longer-term economic issues. Following the financial crisis of 2007-2008 and subsequent improvements of world economic conditions in 2009, the G20 objectives were formulated more explicitly. As of the 2009 G20 Summit in Pittsburgh (U.S.), the objectives are now to create strong, sustainable and balanced economic growth. To reach this goal, the 2011 G20 Summit in Cannes agreed that the G20 has the responsibility to "coordinate their policies and produce political agreements that are very important in addressing challenges due to conditions of global economic interdependence".²

2. Mandate of the G20

Although the G20 represents economies that make up more than 80% of world GDP, 75% of international trade and 60% of the world population, its discussions and decisions have no legal impact.³ The result of a G20 summit is a comminiqué, which encapsulates the members' commitments and visions for the future.

The main focus of the G20 is macroeconomic policy, but the topics discussed may change based on the needs and concerns of member countries. Therefore, although economic and financial coordination remain the focus of the summits, fair and sustainable development, the future of work, terrorism and global health have been recurring topics as well.⁴







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¹G20 Indonesia, 2022

²G20 Indonesia, 2022

³G20, 2022

⁴McBride, Siripurapu, 2021

⁵G20 Indonesia, 2022

3. G20 Working Procedure

The members of the G20 are Argentina, Australia, Brazil, Canada, China, France, Germany, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union (EU). Although Spain is not an official member of the G20, it is considered a permanent guest to the summits. The Presidency also invites guest countries and several international and regional organisations, to grant the forum an even broader representation. Each year, the G20 Summit is chaired by a different member country, selected from a different regional grouping of countries. Known as the Troika, the chair of a summit is part of a three-member management group containing the past, present and future chairs of the summits.⁶ This year, the Troika countries are Indonesia (present), Italy (past), and India (future).

For every summit, the organising country establishes its own temporary Secretariat. The Secretariat is responsible for organising meetings, whereas the agenda and the coordination of work is done by the G20 leaders' personal representatives (sherpas), and finance ministers and central bank governors.

The G20 has two different tracks, known as the Sherpa Track and the Finance Track. The Finance Track focuses on key questions of the global financial and economic system. Therefore, it looks into ways in which crises can be detected more effectively and at an earlier stage. It also tries to prevent the development of global imbalances, whilst making the international financial, economic and monetary system more stable. The Sherpa track, on the other hand, focuses on non-economic and financial issues and meets separately from the Finance Track. They focus on issues such as anti-corruption, development and food security. The overarching goal of both tracks is to prepare recommendations and deliverables that can be included in the final comminiqué, which expresses the member countries' commitments and visions for the future. Both topics of this G20 committee fall generally under the Sherpa Track, however topic B could be discussed in both Tracks.

4. The G20 Presidency of Indonesia

The 17th G20 Summit will be held in Bali, Indonesia from the 15.-16. November 2022.⁷ Although at the time that we convene the Summit will be in the past, we hope that you will follow the events to be all the more prepared for our committee.

The 2022 Summit will follow the topic "Recover Together, Recover Stronger" and lays its focus on post-pandemic developments towards an inclusive and sustainable foundation for growth. To that extent, Indonesia has identified three main pillars: Global Health Architecture, Sustainable Energy Transition, and Digital Transformation. By doing so, Indonesia hopes to address the equitable distribution of vaccines, encourage Micro, Small & Medium Enterprises to promote sustainable and inclusive economic development, and propose various reform efforts. Furthermore, the summit hopes to continue to secure and share prosperity among nations, especially through discussions about reforms in global taxation, anti-corruption measures, expanding infrastructure spending and aiming for a more inclusive and representative international cooperation.⁸

⁷G20, 2012 ⁸G20, 2022 ⁹G20, 2022

Topic A: Restoration of International Supply Chains to Guarantee Food Security

1. Key Terms

Food security: the measure of an individual's ability to at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.⁹

Food safety: assurance that food stays safe at every stage of the food chain - from production to harvest, processing, storage, distribution, all the way to preparation and consumption - avoiding the possibility of bacteria, viruses, parasites or chemical substances to enter the body through contaminated food or water.¹⁰

Supply chains: a system of organisations, people, activities, information and resources involved in moving a good or service from the initial supplier to the final customer. A supply chain is well managed when it integrates the multiplicity of functions along the chain to deliver end-to-end solutions and establishes clear roles and responsibilities.¹¹ Food supply chains thrive on logistics and consist of a series of linked activities that occur while moving food from producer to consumer. Modern supply chains are complex systems, juggling many intermediate steps, and depend on stable environments without disruptions to continue.¹²

Stockpiles: The practice of storing a large supply of something for future use.¹³

Trade restrictions/sanctions: coercive measures, usually commercial and financial penalties, applied by one or more countries against a targeted state, non-state entity or individual that poses a threat to international peace and security.

2. Introduction to the Topic

The food supply chain constitutes the important stages that food passes through before reaching a consumer. Due to the growth facing the supply chain, it is becoming a fragmented system leaving a feeling of disconnection from the main source of food. The easiest way to explain the various stages of the food supply chain is by reviewing each section starting with production.

- 1. Production: Food supply begins at the production level where food is obtained. The food product is grown or developed following local and international guidelines. There are also laws to ensure the quality, appearance and safety of food.
- 2. Handling and storage: when the product has been harvested, it is prepared with any last-minute steps. For example, some potatoes need to be washed before being packed for shipment, whereas others will go directly into bags and be sent on their way. Others are sent to a food processing plant where they are made into chips or French fries. The method of handling will depend on the food source and its final destination.
- 3. Processing and Packaging: Food products must meet all food safety requirements before proceeding to the packaging stage. Once given the green light, they are packed and shipped on their way to the next step in the food supply chain.
- 4. Distribution: Packaged and ready, the food is sent from the packaging plant to its final destination. Food usually ends up in markets, but it can travel to other segments of the food industry. Most of the time food products are transported by ship, but some will travel by air. The distance between the producer and the consumer is called a thousand foods and is used as a measure of the environmental foot print of the food production sheets.¹⁴

The key to meeting consumer demand for high-quality food products begins with a solid food supply chain. The goal is to have quality food available at competitive costs so that the grocer or restaurant and suppliers can maintain their profits while keeping consumers satisfied. Problems arise when raw materials contribute to food waste during some part of the supply chain process. Most food processing meets consumer expectations, but some incidents are still reported. This can negatively affect the performance of the food supply chain when issuing recalls.¹⁵

The food administration examining each area of the supply chain will regulate any loss and waste of food. This type of management will monitor the quality and safety of all food products throughout their journey in the supply chain. Food inspectors have a responsibility to locate possible contamination in food. Once they pinpoint the source, they can pull it before it results in a loss of food product and, subsequently, profit. A well-managed food supply chain will deter problems from arising and causing losses down the line.

The global food supply chain is a complex mix of food processing and distribution working together to provide sustainable food around the world. This food system is an effective solution for keeping a fresh food supply readily available to consume without worrying about food safety. At the beginning of any supply chain, the food leaves multiple farms and begins a complicated journey of processing, transportation, and distribution. Once the food leaves the farm, it is diverted based on its raw source. Paths are not always linear. If the food is intended to be sold fresh, it is usually shipped directly to the packaging. While others will undergo food processing, it has its own specifics to follow.¹⁶

During the COVID-19 pandemic, the Food and Agriculture Organization of the United Nations (FAO) declared that food systems would be challenged in myriad ways. The impact of COVID was felt in food production,

¹⁴ Vespia, 2021

¹⁵ Vespia, 2021

¹⁶ FAO, 2018

processing, and distribution. Every part of the process, from field to consumer, was affected. Restrictions placed on workers and growing demand from consumers, who were panicked by lack of information, saw some food sources become vulnerable to depletion. The closure of food production facilities and the restriction of commercial food policies added to the complications. They forced the facilities to change working conditions with an extra vigilant watchdog on food safety for both products and employees.¹⁷

Even though the COVID crisis put great stress on food systems, supply chains were able to make a quick turnaround and take action. To date, they have reorganised existing supply systems to maintain food production and distribution. Some of the same properties still exist, but new regulations are emerging in response to the pandemic. The complexities of COVID-19 have highlighted the importance of international business environments remaining open. This allows new resources to become available when existing ones are exhausted. So far, many steps have been taken by policymakers to ensure that food supply chains continue to function as normal as possible.¹⁸

For you to know, these are some challenges that the food supply chain could face in the future:

1. Increased demand for traceability

With outbreaks becoming a struggle for the food industry, having transparency between suppliers and retailers is a must when shipments are delivered. Food safety regulations must be followed every step of the way to deter the spread of viruses. The public is becoming aware of how contaminated food can cause health problems. Having greater traceability will protect a brand's assets in the event of another outbreak.



2. Improving communication within the food supply chain

Communication gaps between supply chain partners can have adverse effects. If bits and pieces of information are lost, it can wreak havoc on the chain causing delays or even risks to food safety. Improving communication efforts is high on the list of things that need to change for the future.

3. The potential for food fraud

Food fraud is a real source of crime within the global food supply. Counterfeit shipments or food products have been used to store drugs and other illicit goods. This leads to a direct impact on the food supply chain. The problem is so vast that the FDA recently announced a section of the Food Defense division that investiga-

¹⁷ OECD, 2020

¹⁸ OECD, 2020

¹⁹ Aung, Myo Min, and Yoon Seok Chang, 2014

tes these sources of food fraud. This has led to more FDA regulations, causing vendors to jump through many more hoops to get the product out on time.²⁰

With more measures taken to prevent suspected problems, you can only help keep food supply chains on track. All nations should work together despite their problems to guarantee food security around the world with a special focus on restoring food supply chains.²¹

3. Problem Statements and Possible Solutions

The FAO has already expressed its opinion, declaring in its latest issue of Food Security and Nutrition in the World that the distance to reach many of the Sustainable Development Goal (SDG) 2's targets are growing wider every year.²² After decades of steady decline, the number of people who suffer from hunger has slowly begun to increase again since 2015. According to the World Food Programme, 135 million people suffer from acute hunger caused by disruptions in the food supply chain due to man-made conflict, climate change and economic downturns.²³



Some important SDG2 targets include, however are not limited to:

• By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

• By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

²³ UN, 2020

²⁰ FAO, 2022

²¹G20 insights

²² FAO, IFAD, UNICEF, WFP and WHO, 2022

• Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.

• Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

• Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

Food security depends on four pillars according to the International Food Policy Research Institute: Availability, Acces, Utilization and Stability.²⁴ Food availability has become a global vulnerability in the past years. Global food trade accounts for a quarter of all food produced for human consumption, it allows to buffer against domestic food shortfalls and gain access to larger markets. Food trade has become an essential component of meeting caloric and nutritional adequacy, however has also opened economies up to shocks and extraction of food resources.²⁵ Examples of current shortages due to supply chain disruptions can be found in the distribution of baby formula²⁶ and CO₂ for fizzy drinks.²⁷ Due to changing environments, resources, technology and conflicts, there will be a rise in supply chain disruptions and food shortages if no actions are taken.

Firstly, the Covid-19 pandemic had a huge indirect impact on the food production supply chains, as it does not spread directly through livestock or agricultural products. However, governments around the world made significant restrictions regarding transportation, as well as in migration of labour. Many food companies had major concerns about food safety and the inability to sustain production with less employees, many businesses had to temporarily stop the production or indefinitely quit. These restrictions and concerns hindered or halted food supply chains from flowing through the normal paths and companies, instead many companies needed to find new suppliers and buyers to continue the supply chain. A pandemic is not a new event encountered in the history of humanity, however the World Health Organisation (WHO) did admit that this pandemic is the first in many to come to have such an impact on every sector. As previously stated, many supply chains have quite well recovered from the pandemic, however because of the possible threat of a new pandemic it might be strategically wise to prepare important supply chains for future shocks.

Secondly, the Russo-Ukrainian war has highlighted old and new vulnerabilities in the food supply chain. The Ukraine–Russia region itself is responsible for roughly 30 percent of global exports of wheat and 65 percent of sunflower.²⁸ Further, the global wheat trade is concentrated within a handful of countries whereby disruption in only a few countries can have global impacts.²⁹ With Russia and Ukraine exporting less than normal, the pillar food availability is under pressure again.

²⁴ Committee on World Food security, 2014

²⁵ Raj, Brinkley and Ulimwengu, 2022

²⁶ The White House, 2022

²⁷ Marsh, 2022

²⁸Aminetzah and Denis, 2022

²⁹ Nikos, 2022

In early March, Ukraine introduced a ban on the export of wheat and other goods; though, by this time, shipments out of the country had already ground to a halt with the closure of the country's ports.³⁰ Ukraine and Russia have also both banned fertiliser exports, causing many companies to scale back on food production due to high prices and insufficient stock. An increased delay of deliveries and higher prices of production and output resulted from the logistic challenges companies moving goods in and out of the Black Sea region face, particularly with the closing of Ukraine's ports. In addition, the surrounding ports have undertaken additional customs checks to ensure that no sanctions imposed are being infringed.³¹ The price increases have affected food supply chains globally, however especially having an effect on the Global South where countries rely on cereal imports.³² Compared to the January 2021 average, both maize and wheat price indices are 20% higher, while the rice price index is 16% lower.³³ However, since the landmark deal was signed between Russia and Ukraine in July 2022, the exports from Black Sea ports have been unblocked and the international food crisis has eased down.³⁴

Thirdly, the influence of climate change on the agricultural landscape has urged the agricultural sector to either leave the sector or innovate. Many companies, mostly operating from within the United States of America have voiced their positive opinions about the use of Genetically Modified Organisms to grow important foods cheaply in countries where they would not historically grow. Genetically modified crops can impact food security in three ways: 1) it could contribute to food production increases and thus improve the availability of food globally and locally, making crops higher yields and more robust to biotic and abiotic stresses, essentially stabilising and increasing food supplies; 2) it could have an effect on food safety and food quality; and 3) it could influence the economic and social situation of farmers, improving or worsening their economic access to food.³⁵

The uncertainty of this third possibility of GM crops is one argument against GM technology, however at the core of the anti-GMO argument is the role large corporations play in the development, implementation, and profit from GMO products. Furthermore, many governments are not in an amicable relationship with their agriculture sector, leading to many protests and boycotts against new policies limiting the agricultural sector to grow in unstable times. A current example being the protests in Belgium and the Netherlands against the new nitrogen policy that aims to mitigate nitrogen emissions, however because of this many farms will get into debts or will have to close down.³⁶ A proposal to import or change crops to GM crops could disrupt the agricultural sector even more and might lead to higher prices and less stock all if relations between governments and the sector aren't improved.

Lastly, the budget for investments in the agricultural sector and innovations to improve the supply chain has declined severely in the past years. In the past 100 years the budget for common agricultural policy and fisheries has fallen from 56% to 29%.³⁷ However this budget does not necessarily impact the amount of support the EU gives to the sector. In light of rising food prices and input costs, such as energy and fertilisers, the European Commission has presented a range of actions to enhance food security and to support farmers and consumers in the EU. It has also created the new Farm to Fork strategy that strives to make the agriculture and food supply chains more resilient and sustainable. This strategy aims to enable the transition to a sustainable EU food system that safeguards food security and ensures access to healthy diets sourced from a healthy planet.³⁸ "European farmers, fishers and aquaculture producers play a key role in the transition to a more equitable

³⁰Benton, Tim G., et al.

³¹Benton, Tim G., et al.

³² Raj, Brinkley and Ulimwengu, 2022

³³ The World Bank, 2022a

³⁴ Erkoyun et al., 2022

³⁵ Qaim and Kouser, 2013

³⁶ Bounds, 2022

³⁷ Moës and Darvas, 2018

³⁸ European Commission, 2022b

and sustainable food system. They will get support from the Common Agricultural Policy and the Common Fisheries Policy through new streams of funding and eco-schemes to take up sustainable practices."³⁹ This strategy will need budgets for this sector to rise again and will ask for more innovative technologies which also calls upon its own budget.

4. Block Positions

The issue of food insecurity applies especially to LDCs. These countries are commonly unable to meet their domestic demand for food and are therefore highly dependent on international trade. This is highlighted by the fact that LDCs import almost twice of the world's average, with cereals being almost three times greater. Furthermore, of all the countries that are classified as LDCs, every single one of them is a net food importing country, according to the World Trade Organisation. This situation has not been improved by the war in the Ukraine, which, alongside Russia, exports higher than average food products to LDCs. Not only does this reduce the amount of food imports in LDCs, but it also means that domestic agricultural production is affected by the disruption in trade. Russia and the Ukraine export fertilisers to LDCs and with China's extended ban on fertiliser exports, LDCs are facing a lack of alternative sources of supply.⁴⁰

European Countries and Northern America

The United States and European Union have expressed their intent on launching a dialogue aimed at promoting more diversified trade in agricultural commodities and inputs addressing over-reliance on certain tradingpartners, with the goal of increasing the resilience of global food production.⁴¹

Some countries in the European Union have individually started (debating about) sowing more seeds of wheat or different types of food that will sustain in the countries' climate. These countries believe that a short supply chain will be the most efficient and sustainable in the long run.⁴²

Latin America

In Latin America and the Caribbean, extreme weather events and COVID related impacts on food supply chains have been undermining the production of food and exerting an upward pressure on food prices. These increasing price trends have been destabilising global agri-food systems.⁴³ In addition to this, a negative trend in food security and spiralling inflation is forcing people to migrate north. Moving food has become more expensive in recent years, giving people little option but to head to a different region to be able to feed their families.⁴⁴

African countries

African Union: Before the conflict between Ukraine and Russia, the two countries were supplying 100 percent of Somalia's wheat imports, 80 percent of Egypt's and 75 percent of Sudan's. The war has shrunk this year's harvest and thus the supply to these countries.⁴⁵

⁴¹U.S.-EU - TTC, 2022

³⁹ European Commission, 2022b

⁴⁰ OECD, 2022

^{42v}Van Gaal, 2022

⁴³ World Economic Forum, 2022

⁴⁴ UN News, 2022

⁴⁵ Wellesley, 2022

A worsening drought in the horn of Africa has prohibited the region from growing the necessary foods, which is why the African Union urges farmers of all African Countries to increase agriculture productivity.⁴⁶ However, African agriculture is plagued by low productivity, under-investment, urban-biased policies and bottlenecks, preventing women's access to productive capital, including secure land tenure.⁴⁷ African countries remain dependent on imports and need a secure supply chain to reach any goals.

Asia-Pacific

Over the past 18 months, the Trade and Supply Chain Finance Program of the Asian Development Bank has supported more than 1.900 food and agriculture-related imports to 10 developing Asian countries, with most assistance going to Bangladesh, Vietnam and Pakistan.⁴⁸

The Association of Southeast Asian Nations (ASEAN) Economic Community is putting its hopes on the support of advancing technological innovations to contribute to food and nutrition security and to transform the agriculture and food system to be more resilient and sustainable. However, the varying capacities among the ASEAN Member States create digital divides in the adoption of digital technologies.⁴⁹

5. Guiding Questions

What warning mechanisms can be set in place to share information internationally when disruptions occur in the future?

How can current disruptions be communicated more internationally? How can these disruptions be resolved by international cooperation?

How can the private sector, more specifically global food and agriculture businesses, be included to improve the environmental and social impact of global food supply chains?

How can budgets for food supply chain enhancement be enlarged, which resources can be mobilized to reach the SDG2 targets?

Which foods are imported the most (by your country/block) but are controlled by only a few unstable companies of countries? How can these uncertainties be countered or captured in the future to ensure food security?

6. Further Reading

The state of food security and nutrition in the world - FAO SDG2: Zero hunger World Food Programme: annual review 2021 Facilitating progress towards SDG2: Zero Hunger Addressing food security and climate change at the G20 Summit

⁴⁶ Deutsche Welle, 2022

⁴⁷African Union, 2022

⁴⁸Asian Development Bank, 2022

⁴⁹ SEARCA, 2022

Topic B: Improving Sustainable Resource Mobilisation

1. Introduction to the Topic

The global spread of the Covid-19 virus has left many economies struggling to grow. This has been especially pronounced in tourism-dependent countries, which were impacted the most by the ongoing pandemic.⁵⁰ The World Bank estimates that although many countries have been rebounding in 2022, global growth is expected to further decline due to inflation and threats of new Covid-19 variants. For example, growth of 5.5% in 2021 is expected to decelerate to 4.1% in 2022 and 3.2% in 2023. In developing and emerging economies, growth is expected to be slightly higher, however, their output will be 4% below the pre-pandemic trend by 2023.⁵¹ This lack of sufficient growth will further complicate the issue of reaching the SDGs.

One of the SDGs, namely SDG 17.1, aims to "strengthen domestic resource mobilisation, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection".⁵² This mobilisation of domestic resources refers to "the process through which countries raise and spend their own funds for their people".⁵³ Not only has this mobilisation been made more difficult by the ongoing Covid-19 pandemic, but the desire and need for the world to combat climate change has brought forward the demand to mobilise resources that are sustainable.⁵⁴ These sustainable resources refer to raw materials with a long-term availability that is not harmful for the environment in the long-run.

Despite the consensus that the use of non-renewable resources for fuel production, which has been the source of economic growth in previous decades, should be restricted significantly, developing countries are arguing that they should be allowed to exploit the same resources that developed countries used for their development. Given the pressure for these least developed countries (LDCs) to grow sustainably, they have no leeway to strand their non-renewable assets, when they could be used for industrial growth instead.⁵⁵ This raises the issue of how sustainable resources can be mobilised, without putting LDCs in a no-win situation. It also raises the question of how other areas of life can be developed/made more sustainable, including infrastructure and transportation, to raise funds for their people.

2. Historical Background

a. The Kyoto Protocol

The Kyoto Protocol was adopted in December 1997 and entered into force in February 2005, after a complex ratification process⁵⁶. At the moment, there are 192 Parties to the Kyoto Protocol. The Protocol sets limits to industrialised countries' emissions of greenhouse gasses (GHG) in accordance with agreed individual targets. The emission targets are binding and only hold for developed countries (as set out in Annex I of the Kyoto Protocol). Periodically, these countries report their policies and measures adopted to mitigate GHG emissions.

- ⁵² Sustainable Development, n.d.
- ⁵³ USAID, 2022
- ⁵⁴ Fjeldstad et al., 2021
- ⁵⁵Akiwumi, 2021
- ⁵⁶ UNFCCC, 2022

⁵⁰ Fjeldstad et al., 2021

⁵¹ The World Bank, 2022b



In 2012, Parties to the Kyoto Protocol (see figure above) agreed on adopting the Doha Amendment, which adds new commitments to parties in Annex I. Additionally, the list of GHG to be reported on was revised and a new commitment period from 01 January 2013 to 31 December 2020 was realised.

For countries to reach their emission targets, the Kyoto Protocol makes use of three market-based mechanisms:

- International Emissions Trading
- Clean Development Mechanism
- Joint Implementation

These, amongst other things, allow countries to trade GHG emission cards to ensure that although a country might not be able to reach its national GHG emission limit, the global level of GHG emissions is restricted and not exceeded. This 'common but differentiated responsibilities', ultimately meant that industrialised countries were primarily responsible in reducing GHG emissions and could do so with green investments in LDCs.⁵⁸

b. The 2030 Agenda for Sustainable Development and the Addis Agenda

In September 2015, the United Nations adopted the 2030 Agenda for Sustainable Development and formulated 17 SDGs to reach the 17 objectives of the 2030 Agenda. This Agenda is the successor to the Millenium Development Goals and includes 169 targets on a vast array of issues, including the commitment to include everyone in the process of international development. One of these SDGs also included the need to improve domestic resource mobilisation.

⁵⁷ Wikipedia, 2022 ⁵⁸ UNFCCC, 2022

The Addis Ababa Action Agenda was adopted by world leaders on 16 July 2015 in Ethiopia, and provides a comprehensive set of policies to support the implementation of the 2030 Agenda. Under the subsection of Action areas, it recognises that "the mobilisation and effective use of domestic resources [...] are central to our common pursuit of sustainable development".⁵⁹ It goes on to highlight the importance of economic growth and an enabling environment to generate domestic resources. In terms of sustainable resource mobilisation, the Addis Agenda encourages the mobilisation of financial resources to maintain and sustainably use biodiversity and ecosystems, and recognises the need for multi-stakeholder partnerships for sustainable development.⁶⁰

3. Problem Statements

Ever since the covid-19 pandemic started, the topic of mobilising resources in LDCs that suffered the most from severe debt, economics and health crises has been especially prevalent. LDCs have been struggling to independently mobilise enough financial resources to combat the pandemic, as external financing is not readily available and public revenue is insufficient to cope with the challenges faced. Additionally, many of the LDCs were already indebted prior to the crisis and therefore had little to no means to reduce their overall indebtedness. This is also reflected in the World Bank's Debt Sustainability Framework, which indicated that prior to the crisis, of 45 LDCs, five were in debt distress and an additional thirteen countries were at a high risk of debt distress.⁶¹ According to the International Monetary Fund, debt distress occurs where "a country is unable to fulfil its financial obligations and debt restructuring is required".⁶²

Given these circumstances, countries facing financial uncertainty have to come up with ways to reach the SDGs and pay off their debt, without defaulting on said debt. These countries are facing difficulties in coming up with funds because of an inefficiency in appropriating taxes and other domestic revenue. As such, countries with a well-functioning system can provide public services, such as vaccines, clean water or electricity, to their communities. Countries that do not have a well-functioning system are struggling to mobilise sufficient resources to support their people and are reliant on foreign funding to minimise or eliminate any gaps. This primarily means that, to support systems that are not functioning properly, developing nations receive assistance from developed nations to ensure that the mobilisation of resources is not only improved, but that it is also sustainable in the long-run.

The mobilisation of resources looks into ways in which governments can find funding; green energy, sustainable infrastructure and transportation networks are but a few of the many ways that funds can be generated from sustainable resources. Nonetheless, mobilising these through development aid can create an interdependency between those that can spare the funds and those that desperately need them. This raises the question of how aid-dependent countries can raise funds for economic growth and development, whilst simultaneously ensuring that the money actually reaches the designated project. Although data by the World Bank has shown that the amount of net official development assistance and official aid received has seen a positive trend since 1970, countries have not been able acquire sufficient funds to make significant progress towards reaching all the SDGs.⁶³ These difficulties, which are already challenging to overcome, have not seen improvements since the beginning of the pandemic; the pandemic saw tourism-dependent countries, many of which are developing countries, missing out on an important source of income, further deteriorating their outlook on reaching the SDGs.

In order to encourage LDCs and developed countries to make full use of their sustainable resources and mobilise them efficiently, countries may look into the aforementioned areas of green energy, sustainable infrastructure and transportation networks.

⁵⁹United Nations, 2015

⁶⁰ Committee of Experts on International Cooperation in Tax Matters, 2018

⁶¹Berensmann, 2021

⁶² IMF, 2020

⁶³ The World Bank, 2022c

Additionally, to measure the degree to which economies are able to develop a sustainable, low-carbon future, the Massachusetts Institute of Technology developed the "The Green Future Index". It measures the degree to which economies are moving towards "clean energy, industry, agriculture, and society through investment in renewables, innovation, and green policy."⁶⁴ The following is a depiction of the 2021 findings of the index:



a. Green energy

Green and renewable energy have the potential of not only being sustainable, but also of generating employment and freeing a country of relying on the very volatile prices of non-renewable energy. Therefore, in countries that have an abundance of renewable resources, encouraging the use of renewable energy will prove to be a driver of economic growth.

Support schemes are the primary incentive to encourage countries to invest in green energy and improve its competitiveness in the market. Already, the EU has developed guidelines for support schemes for renewable energy programmes. It encourages the following:

- financial support for renewable energy should only be provided to make renewables competitiveness in the market and should only be given where necessary
- support schemes should respond to production cost trends and should be gradually removed as technologies mature
- investor confidence and future investment should be protected by avoiding retroactive and unannounced changes to support schemes⁶⁵

Additionally, the EU has developed a cooperation mechanism that allows EU countries "to agree on a framework to jointly support their renewable energy production and incorporate it to their national targets".⁶⁶ Nonetheless, this cooperation exists for EU countries only, and does not allow for cooperation between EU and non-EU countries. Therefore, it does not act as a support mechanism for developing countries outside of the EU.

⁶⁴ MIT, 2022

⁶⁵ European Commission, 2022b

⁶⁶ European Commission, 2022a

Developing countries that lack the funding to promote their own support schemes may rely on development assistance from organisations or other countries. Examples of such organisations include the International Renewable Energy Agency and the Abu Dhabi Fund for Development, which have provided funds to co-finance the implementation of government-supported renewable energy projects in developing countries.⁶⁷ This is all good and well for countries possessing renewable resources, but the question remains how countries that do not have an abundance of these resources, but that do have an abundance of non-renewables can be encouraged and supported.

b. Sustainable infrastructure and transportation networks

According to the UN Environment Programme (UNEP), sustainable infrastructure is anything that is "planned, designed, constructed, operated and decommissioned" and is sustainable in its economic, financial, social, environmental and institutional context.⁶⁸ This also includes transportation networks within the country. This sustainable infrastructure, although full of potential to increase economic growth in many countries, has not been and will likely not be financed sufficiently to meet the SDGs. Already, the Organisation for Economic Co-operation and Development (OECD) predicted that an annual investment of USD 6.9 trillion will be needed to support economic growth and meet the SDGs. Just for reference, the annual economic cost of inadequate water supply and sanitation has an estimated size of USD 260 billion. Additionally, 940 million (or 13% of the world) do not have access to electricity.⁶⁹

Despite these issues, there still exist many investments that follow the "business-as-usual" approach and that do not see the importance of investing in sustainable infrastructure. Those investments that do happen in sustainable infrastructure face major obstacles in their implementation and delivery. According to the OECD, these challenges stem from "inadequate national strategies and frameworks, ineffective governance, weak capacity, poor standardisation, limited transparency in processes and methodologies, and a lack of financing capabilities."⁷⁰ To support countries in coming up with a combined policy of instruments, the OECD has launched the Sustainable Infrastructure Policy Initiative, which provides stakeholders with guidance to implement infrastructure investment.

The OECD, the UNEP and the UN Environmental Assembly are but a few of the advocates for sustainable infrastructure investments. Nonetheless, the question remains what should be done with ageing infrastructure that can no longer be used, or where it is difficult to repurpose it. Furthermore, for transportation networks, developing countries with harsh environmental prerequisites face constraints in the building process and the maintenance of their infrastructure. It therefore raises the question how the longevity of sustainable infrastructure can be ensured.

4. Bloc positions

European countries

The EU is the world's largest donor, providing a combined €58 billion in official development assistance (ODA) in 2014. It has committed to reaching the UN target of mobilising a level of ODA equivalent to 0.7% of gross national income (GNI) over the post-2015 agenda period. The EU also commits to jointly reaching the 0.15-0.20% of GNI target in the short term for ODA to LDCs and to reach 0.20% of GNI for ODA to least developed countries in the post-2015 agenda period.⁷¹

⁶⁷ IRENA ADFD, 2019
⁶⁸ UNEP, 2022
⁶⁹ OECD, 2015
⁷⁰ OECD, 2015
⁷¹ OECD, n.d.

By 2020, the EU will mobilise blended finance and will leverage more development finance through collaboration with the private sector, amounting to a total of \in 100 billion. Of the aid provided by the EU, 20% or \in 14 billion is dedicated to combat climate change.

The EU is the most open market in the world, providing tariff-free and quota-free market access for least developed countries, and these countries currently export more than €35 billion to the EU annually. In addition, the EU is the largest provider of aid for trade. Adding to this openness, Horizon 2020, the Framework Program for Research and Innovation (€77 billion) is open to the participation of researchers from developing countries.

Predictions indicate that the EU will help free 500 million people from hunger and malnutrition by 2030 by supporting sustainable food and agriculture. Additionally, the EU will help lift 500 million people out of energy poverty by 2030.

In terms of Peaceful Societies: The EU supports improving governance and enabling people to lead safe and secure lives. More than half of EU bilateral development funding will continue to go to fragile and conflict-affected states.

Asia-Pacific countries

The Asia-Pacific region, with its plurality and extensive territory, has experienced great demographic and economic development in recent decades, while it has made great progress in terms of reducing the population living in multidimensional poverty, access to the Internet, improvements in sanitation, education or child reduction among others. However, this development has meant greater exploitation of resources and degradation of the environment, a fact that is corroborated thanks to the follow-up work of the SDGs carried out by the United Nations Economic and Social Commission for Asia. and the Pacific (ESCAP).

There have been setbacks in achieving the goals of the Sustainable Development Goals regarding sustainable cities and communities (11), responsible production and consumption (12), climate action (13), underwater life (14) and ecosystem life terrestrial (15). These SDGs, together with the number 7 concerning affordable and non-polluting energy, are those identified in direct relation to the environment.

Even though the consumption of renewable energy decreased between 2000 and 2016, reaching only 17% of consumption in 2015, SDG 7 has experienced moderate progress, especially in North and Central Asia. This progress is mainly due to improved access to energy services and their efficiency, in addition to a slight increase in investment in renewable energy. However, there are still 3 billion people dependent on polluting and unhealthy energy sources such as coal, kerosene or wood for domestic use.

On the other hand, there has been a setback in waste management and air quality, especially in urban areas. There has been an increase in emissions of carbon dioxide (CO2), sulphur dioxide (SO2) and greenhouse gases, causing air pollution to exceed the maximum safe level recommended by the WHO.

The International Maritime Organisation (IMO) has signed a partnership agreement with ESCAP. The agreement will help promote sustainable shipping through a series of capacity-building and knowledge-sharing activities in the Asia-Pacific region.

The agreement brings together IMO, the United Nations specialised agency that sets global standards for safe, secure, efficient and environmentally friendly international shipping, and ESCAP, the United Nations regional commission for Asia and the Pacific, which provides a regional intergovernmental platform and think tank, generating action-oriented knowledge, and for the provision of technical assistance and capacity building in support of national development goals, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

American countries

The United States intends to boost the clean energy economy on the continent, promoting trade and investment in that area and fostering regional collaboration through the Renewable Energy for Latin America and the Caribbean (RELAC) initiative. Five new countries will work together with the 15 current members of RELAC to achieve the goal of having 70% installed capacity for renewable energy generation in the region's electricity sector by 2030. Guyana, Jamaica and Barbados assume the goals and Brazil and Argentina will support collaboration through this platform. The idea of the United States is to provide financial support for RELAC's technical cooperation and to work with regional development banks, private financial institutions and other partners to mobilise additional resources.

Although the sources of domestic private financing can be easily identified to mobilise resources towards infrastructure, there exist five structural factors that in some cases are absent or present weaknesses in LAC countries and that are key to promoting investment in infrastructure by the country:

- 1. A good macroeconomic environment,
- 2. The definition of clear rules that facilitate investment,
- 3. Have legal-financial instruments that reduce risks associated with the project,
- 4. Institutional capacity for execution,
- 5. Eliminate corruption.

In LAC, there are specific cases that illustrate how countries have effectively addressed these structural factors and have managed to boost investment in infrastructure by domestic actors and the private sector. An example of this is Chile, which was the first country in the region to implement an individually funded pension scheme. Currently, the Pension Fund Administrators ("AFPs") have accumulated resources in excess of 80% of GDP, increasing the availability of domestic capital to finance investments.

5. Guiding Questions

- 1. What are some mechanisms that can improve the flow of development assistance from aid-giving countries to aid-receiving countries?
- 2. How can tools of the financial markets channel the immense reserve of regional savings towards the development of sustainable infrastructure? What conditions can be placed on national budgets, institutional and risk management frameworks (e.g. climate considerations)?
- 3. How can the special needs of least developed countries, landlocked developing countries and small island developing states be addressed?
- 4. What means of transportation can be used to reduce pollution and increase sustainability?
- 5. What can be done in countries that do not have an abundance of sustainable/renewable resources?
- 6. How can existing unsustainable infrastructure be repurposed to remain useful?

6. Further reading

IRENA ADFD: Advancing Renewable in Developing Countries UNEP Resolution on Sustainable and Resilient Infrastructure

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