SRMUN ATLANTA 2022

November 17 - 19, 2022

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Dear Delegates,

Welcome to SRMUN Atlanta 2022 and the United Nations (UN) General Assembly (GA) Plenary. My name is Des Woods, and I have the pleasure of serving as your Director for the GA Plenary. This will be my fifth time serving on SRMUN staff. Most recently, I served as the Director of the GA Plenary for SRMUN Charlotte 2022, so I feel right at home guiding our committee. I am currently a second-year graduate student studying Higher Education Administration. It is an honor to introduce your Assistant Directors: Claudia Bonney Amamoo and Paige Stephens. Claudia holds a bachelor's degree in Political Science and Spanish. This will be her fourth year participating at SRMUN Atlanta, but first year serving as a staff member. Paige is a currently a graduate student, working towards her master's degree in Global Affairs. Paige holds a bachelor's degree in Political Science and Environmental Studies. This will be Paige's first year on staff, having participated at SRMUN Atlanta as a delegate since 2020.

The United Nations General Assembly, or UNGA, is comprised of all 193 Member States of the UN, which provides a unique forum for multilateral discussion of the full spectrum of international issues. The UNGA occupies itself as the chief deliberative, policymaking, and representative organ of the United Nations. It also plays a significant role in the process of standard-setting and the codification of international law. The overarching mission of the UNGA is to recommend diplomatic and multilateral solutions to issues involving peace and security, human rights, development, international law and justice, and social, economic, and political unrest.

Focusing on the mission of the GA Plenary, we will be discussing the following topics:

I. Strengthening Safeguards to Protect Natural Resources
II. Managing Disruptions and Vulnerabilities in the Global Supply Chain

This background guide introduces the committee and the topics that will be debated at SRMUN Atlanta 2022. It should be utilized as a starting point for a delegate's research in the following topics. However, while we have attempted to provide a holistic analysis of the issues, the background guide should not be used as a delegate's sole understanding of these complex topics. Delegates are expected to go beyond the background guide and engage in research exploration. The position papers for the committee should reflect the complexity of these issues and their externalities. Delegations are expected to submit a position paper and be prepared for a vigorous discussion at the conference. Position papers should be no longer than two pages in length (single spaced) and demonstrate your Member State's position, policies, and recommendations on each of the two topics. For more detailed information about formatting and how to write position papers, delegates can visit srmun.org. ***All position papers MUST be submitted no later than Friday, October 28th, by 11:59pm EST via the SRMUN website in order to be eligible for Outstanding Position Paper Awards.***

Paige, Claudia, and I are very excited to be serving as your dais for the GA Plenary. We wish you all the best of luck in your conference preparation and look forward to working with you in the near future.

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History of the General Assembly Plenary

The United Nations (UN) was founded in 1945 to maintain international peace and security, develop diplomatic relations, foster social progress, and promote human rights.[1] Through its founding charter, the UN wields the power to undertake a variety of global issues and provide a forum for all Member States to express their views through six principal organs: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat.[2] As the chief deliberative, policymaking, and representative organ of the UN, the United Nations General Assembly (UNGA) plays a significant role in the process of standard-setting and the codification of international law.[3]

Intrinsically, the mandate of the UNGA is outlined in Chapter IV (Articles 10-22) of the *Charter of the United Nations*.[4] Article 10 stipulates the UNGA is tasked with discussing "any questions or any matters within the scope or relating to the powers and functions of any organs provided for in the [Charter]."[5] Article 15 asserts the UNGA "shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security."[6] In addition, the UNGA shall consider reports from other organs of the UN and make recommendations to the Security Council and all Member States.[7] The UNGA also serves to elect the UN Secretary-General based on recommendations from the Security Council.[8]

The UNGA is comprised of six Main Committees, organized around the body's main fields of responsibility: the Disarmament and International Security Committee (First Committee), the Economic and Financial Committee (Second Committee), the Social, Humanitarian and Cultural Committee (Third Committee), the Special Political and Decolonization Committee (Fourth Committee), the Administrative and Budgetary Committee (Fifth Committee), and the Legal Committee (Sixth Committee).[9] The UNGA and the six main committees can mandate a subsidiary body to consider a particular issue and to submit reports to the UNGA.[10] The six Main Committees and subsidiary bodies discuss agenda items assigned to them, present their recommendations, usually in the form of draft resolutions and decisions, and submit a report to the UNGA.[11]

The UNGA has universal membership, with each of the 193 Member States attaining one equal vote.[12] Non-Member States, non-governmental organizations (NGOs), and intergovernmental organizations (IGOs) can participate in UNGA sessions with the status of Observer; however, these groups do not have voting rights.[13] Most resolutions in the UNGA Plenary are decided by a simple majority.[14] However, a two-thirds majority is required in the Plenary on essential issues, such as maintenance of international peace and security, the admission of new members, the suspension and expulsion of members, and all budgetary questions.[15]

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[1] United Nations. "History of the UN." United Nations, 2015. https://www.un.org/un70/en/content/history/index.html, (accessed June 1, 2022).
[2] United Nations. "History of the UN."
[3] United Nations. "Functions and Powers of the General Assembly." United Nations. United Nations, 2022. https://www.un.org/en/ga/about/background.shtml, (accessed June 2, 2022).
[4] United Nations, *Charter of the United Nations*, October 24, 1945, 1 UNTS XIV, available at https://treaties.un.org/doc/publication/ctc/uncharter.pdf (accessed June 1, 2022), Chapter IV.
[5] *Charter of the United Nations*, Chapter IV.
[6] *Charter of the United Nations*, Chapter IV.
[7] *Charter of the United Nations*, Chapter IV.
[8] "The GA Handbook: A Practical Guide to the United Nations General Assembly." Permanent Mission of Switzerland to the United Nations, 2017. https://www.unitar.org/sites/default/files/media/publication/doc/un_pga_new_handbook_0.pdf, (accessed June 2, 2022), pg.13.
[9] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.18.
[10] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.19.
[11] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.18.
[12] United Nations. "General Assembly of the United Nations." United Nations. United Nations, 2022. https://www.un.org/en/ga/, (accessed June 1, 2022).
[13] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.30.
[14] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.68.
[15] "The GA Handbook: A practical guide to the United Nations General Assembly." pg.54.

All assessments on the regular UN budget are considered and approved by the UNGA.[16] The Fifth Committee of the UNGA is responsible for preparing how much each Member State pays to the UN and how these resources are allocated.[17] Draft resolutions with budget implications must be examined by the Fifth Committee before they can be adopted in the UNGA.[18] The UNGA budget covers UN activities across a range of areas, including political affairs, international justice and law, regional cooperation for development, human rights and humanitarian affairs, and public information.[19] During the 72nd session, the UNGA approved a nearly USD 5.4 Billion program budget for the biennium 2018-2019 and endorsed the proposal to move from a biennial planning and budgeting period to annual program budget on a trial basis, as of 2020.[20] In December 2021, the Fifth Committee wrapped up the 76th session by approving a USD 3.12 Billion budget for the 2022 fiscal year, the third annual budget in 50 years.[21]

The UNGA meets in regular annual sessions and in special sessions, which consist of formal and informal meetings.[22] All UNGA sessions are numbered consecutively and open on Tuesday of the third week of September.[23] Since UNGA's 44th session (1989–90), the UNGA has been formally regarded as being "in session" for the entire year.[24] Additionally, the UNGA may also hold special sessions, which can be convened either at the request of the Security Council or a majority of Member States.[25] There have been 32 UNGA Special Sessions as of 2022.[26] The last two special sessions addressed the coronavirus pandemic (31st session) and challenges and measures to prevent and combat corruption and strengthen international cooperation (32nd session).[27] The UNGA can also hold emergency special sessions, in which UNGA can make decisions on issues that are under the exclusive mandate of the Security Council if the Security Council fails to decide on an issue due to a lack of consensus among its permanent members.[28] There have been 11 emergency special sessions as of 2022.[29]

The 76th Session of the UNGA commenced on September 14, 2021, under the leadership of Foreign Minister Abdulla Shahid of the Republic of Maldives.[30] During his open remarks at the 76th session of the UN General Assembly, Shahid expressed that he intends to pursue measures focused on recovering from the coronavirus (COVID-19) pandemic, rebuilding sustainably, responding to the needs of the planet, respecting the human rights of all citizens, and revitalizing the UN.[31] In December 2021, the UNGA adopted 59 resolutions and one decision recommended by the Third Committee covering a range of issues, from the rights of refugees to the provision of universal and equitable access to COVID-19 vaccines.[32] The UNGA adopted a resolution in response to COVID-19 vaccines distribution, encouraging Member States and international organizations to commit to transparency in all matters relating to the production, distribution and fair pricing of vaccines, in accordance with national and regional

[16] United Nations. "General Assembly of the United Nations." United Nations. United Nations, 2022. https://www.un.org/en/ga/, (accessed June 1, 2022).
[17] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.77.
[18] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.77.
[19] United Nations Information Center Washington DC. "UN Budget for 2018-2019." United Nations Information Center Washington DC, December 28, 2017. https://unicwash.org/budget_2018-19/, (accessed June 3, 2022)
[20] United Nations Information Center Washington DC. "UN Budget for 2018-2019."
[21] United Nations. "Fifth Committee Approves Secretary-General's Proposed $3.12 Billion Programme Budget for 2022, Concluding Main Part of Seventy-Sixth Session." United Nations, December 23, 2021. https://www.un.org/press/en/2021/gaab4378.doc.htm, (accessed June 3, 2022).
[22] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.14-15.
[23] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.14.
[24] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.14.
[25] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.14.
[26] General Assembly of the United Nations. "Special Sessions." United Nations. United Nations, 2022. https://www.un.org/en/ga/sessions/special.shtml, (accessed June 3rd, 2022)
[27] General Assembly of the United Nations. "Special Sessions."
[28] "The GA Handbook: A Practical Guide to the United Nations General Assembly." pg.15.
[29] General Assembly of the United Nations. "Emergency Special Sessions." United Nations. United Nations, 2022. https://www.un.org/en/ga/sessions/emergency.shtml, (accessed June 3, 2022).
[30] International Institute for Sustainable Development. "Vaccinations, Climate Action Among 5 Sources of Hope for UNGA76," September 20, 2021. https://sdg.iisd.org:443/news/vaccinations-climate-action-among-5-sources-of-hope-for-unga76/, (accessed June 1, 2022).
[31] International Institute for Sustainable Development. "Vaccinations, Climate Action Among 5 Sources of Hope for UNGA76."
[32] United Nations. "General Assembly Adopts 59 Third Committee Texts on Trafficking in Persons, Equitable Access to COVID-19 Vaccines, as Delegates Spar over Language." United Nations, December 16, 2021. https://www.un.org/press/en/2021/ga12396.doc.htm, (accessed June 3, 2022).

legal frameworks.[33] Additionally, UNGA held its 11th emergency special session in UN history on May 12, 2022, where 47 Member States convened to discuss the ongoing Russo-Ukrainian conflict.[34]

[33] United Nations. "General Assembly Adopts 59 Third Committee Texts on Trafficking in Persons, Equitable Access to COVID-19 Vaccines, as Delegates Spar over Language." United Nations, December 16, 2021. https://www.un.org/press/en/2021/ga12396.doc.htm, (accessed June 3, 2022).

[34] General Assembly of the United Nations. "Emergency Special Sessions." United Nations. United Nations, 2022. https://www.un.org/en/ga/sessions/emergency.shtml, (accessed June 3, 2022).

I. Strengthening Safeguards to Protect Natural Resources

"The United Nations attaches great importance to ensuring that action on the environment is part of conflict prevention, peacekeeping, and peacebuilding strategies because there can be no durable peace if the natural resources that sustain livelihoods and ecosystems are destroyed."[35]

Introduction

Natural resources refer to anything generated by the planet without human intervention, such as plants, minerals, and water.[36] The use of natural resources has long been considered an element of both human rights and economic development, leading the United Nations (UN) to declare that "the right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned."[37] Natural resources represent a significant and growing share of world trade and, if properly managed, can provide a variety of products that contribute greatly to the quality of human life.[38] Over-exploiting these natural resources, however, has grave implications for geopolitics, since it is the root of much economic activity.[39] Thus, the rate at which natural resources are extracted is crucial, as some natural resources, like forests, can be rendered finite by overexploitation.[40] The work of the UN is pivotal in strengthening safeguards to protect both renewable and non-renewable resources from overexploitation by any and all actors.[41]

History

Humans have perpetually participated in the exploitation of natural resources, as natural resources are vital to sustaining life through food production and economic prosperity.[42] As such, natural resources became key instruments of national capital.[43] Natural resources have provided fiscal revenue and jobs for many Member States throughout history.[44] The globe's poorest communities have often relied on the natural resource sector of the economy for their economic survival.[45] As such, natural resources have been primed for overexploitation for monetary gains and therefore need to be managed sustainably by all Member States.[46]

The first industrial revolution of the late 18th century started a sharp increase in overexploitation of oil and minerals, as advancements in technology has allowed mineral extraction to become easier and faster.[47] Technology advancements have led to more industries that need to over consume natural resources for economic survival.[48] Since the end of World War II, the world's economies have seen convergence through expanding trade deals and

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[35] United Nations. "International Day for Preventing the Exploitation of the Environment in War and Armed Conflict." *United Nations.* 2022. https://www.un.org/en/observances/environment-in-war-protection-day, (accessed May 2, 2022).
[36] Brooks, Emilie. "Consequences Of Overexploitation Of Natural Resources." Eco Jungle, April 20, 2021. https://ecojungle.net/post/consequences-of-overexploitation-of-natural-resources/, (accessed June 22, 2022).
[37] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge." *The International Institute for Sustainable Development*. April 15, 2021. https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge, (accessed April 20, 2022).
[38] World Trade Organization. "World Trade Report 2010: Trade in natural resources." WTO. 2010. https://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report10_e.pdf, (accessed May 2, 2022)
[39] World Trade Organization. "World Trade Report 2010: Trade in natural resources."
[40] World Trade Organization. "World Trade Report 2010: Trade in natural resources."
[41] World Trade Organization. "World Trade Report 2010: Trade in natural resources."
[42] Emilie Brooks. "Consequences Of Overexploitation Of Natural Resources." Eco Jungle, April 20, 2021. https://ecojungle.net/post/consequences-of-overexploitation-of-natural-resources/, (accessed June 22, 2022).
[43] Organisation for Economic Co-operation and Development. "The Economic Significance of Natural Resources: Key Points for Reformers in Eastern Europe, Caucasus and Central Asia," 2011. https://www.oecd.org/env/outreach/2011_AB_Economic%20significance%20of%20NR%20in%20EECCA_ENG.pdf, (accessed June 22, 2022).
[44] Organisation for Economic Co-operation and Development. "The Economic Significance of Natural Resources"
[45] Organisation for Economic Co-operation and Development. "The Economic Significance of Natural Resources"
[46] Organisation for Economic Co-operation and Development. "The Economic Significance of Natural Resources"
[47] Emilie Brooks. "Consequences Of Overexploitation Of Natural Resources."
[48] Emilie Brooks. "Consequences Of Overexploitation Of Natural Resources."

economic investments in other Member States.[49] As industrialization and technology advanced, Member States were able to use their natural resources as an asset for favorable trade deals and economic ties.[50] Thus, Member States were prone to overexploitation of theirs and other Member States' supply of natural resources to maintain their status in the global economy.[51] This overexploitation was particularly prevalent in developing Member States where a majority of the economy has been tied to their natural resource supply.[52] The developing and resource-rich Member States utilized their natural resource supply as leverage in deals with more affluent trading partners.[53] Additionally, citizens in developing Member States with valuable natural resources rely on those resources not only as products vital to life, but also as a source of income.[54] However, as many developing Member States rely solely on the international trade of natural resources for state revenue, these natural resources are often exploited by the trade deals Member States make with foreign companies extracting the resource.[55] Citizens of resource-rich developing Member States have often been excluded from employment by the multinational corporations brought in for resource extraction, creating economic instability among local populations, particularly in Africa.[56] As such, with the globe's population doubling since the 1970s and more natural resources are needed for sustenance and income, the extraction of natural resources has tripled, and the process of extracting those resources has led to over 90 percent of biodiversity loss globally.[57]

When Member States have relied on natural resources as its main source of economic prosperity, the environmental impact of resource extraction has often been overlooked in national policy on social and economic development.[58] The most notable environmental impact of unsustainable consumption and production practices is the depletion of natural resources.[59] Unchecked exploitation of natural resources results in the loss of biodiversity, as the increased population requires more land for agriculture, raw material extraction, forestry, and infrastructure production.[60] Additionally, the increased need for natural resources in advancing technology has resulted in an increased amount of pollution.[61] Chemical extraction in particular has seen devastating pollution effects, such as water and soil contamination.[62] Deforestation has taken a toll on ecosystems around the globe, as the UN Food and Agriculture Organization (FAO) estimates roughly 420 million hectares have been lost since 1990, with Africa and South America being affected the most.[63] While the FAO reports nearly 726 million hectares of forest areas are under national or international protection, global targets related to sustainable forest management remain at risk.[64]

[49] Frontiers. "Globalization, Human Capital, Natural Resources and Environmental Quality," April 2022. https://www.frontiersin.org/research-topics/37857/globalization-human-capital-natural-resources-and-environmental-quality#overview, (accessed June 22, 2022).
[50] Frontiers. "Globalization, Human Capital, Natural Resources and Environmental Quality."
[51] Frontiers. "Globalization, Human Capital, Natural Resources and Environmental Quality."
[52] Frontiers. "Globalization, Human Capital, Natural Resources and Environmental Quality."
[53] Frontiers. "Globalization, Human Capital, Natural Resources and Environmental Quality."
[54] United Nations Environment Programme, ed. *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment*. Policy Paper, no. 1. Nairobi: United Nations Environment Programme, 2009, https://wedocs.unep.org/bitstream/handle/20.500.11822/7867/pcdmb_policy_01.pdf?sequence=4&isAllowed=y, (accessed June 18, 2022).
[55] Cyril Obi. "Oil as the 'Curse' of Conflict in Africa: Peering through the Smoke and Mirrors." *Review of African Political Economy* 37, no. 126 (December 2010): 483–95. https://www.jstor.org/stable/25767298, (accessed June 22, 2022).
[56] Cyril Obi. "Oil as the 'Curse' of Conflict in Africa."
[57] Emilie Brooks. "Consequences Of Overexploitation Of Natural Resources." Eco Jungle, April 20, 2021. https://ecojungle.net/post/consequences-of-overexploitation-of-natural-resources/, (accessed June 22, 2022).
[58] Emilie Brooks. "Consequences Of Overexploitation Of Natural Resources."
[59] One Planet Network. "Natural-Resource Use and Environmental Impacts," October 5, 2021. https://www.oneplanetnetwork.org/SDG-12/natural-resource-use-environmental-impacts, (accessed June 22, 2022).
[60] One Planet Network. "Natural-Resource Use and Environmental Impacts."
[61] One Planet Network. "Natural-Resource Use and Environmental Impacts."
[62] One Planet Network. "Natural-Resource Use and Environmental Impacts."
[63] United Nations. "Deforestation Has Slowed down but Still Remains a Concern, New UN Report Reveals." UN News, July 21, 2020. https://news.un.org/en/story/2020/07/1068761, (accessed June 22, 2022).
[64] Food and Agriculture Organization. *Global Forest Resources Assessment 2020: Main Report*. Rome, Italy: FAO, 2020. https://doi.org/10.4060/ca9825en, (accessed June 22, 2022).

Natural resource overexploitation not only impacts the economic and environmental well-being of a Member State, but also the Member State's security.[65] The UN Environmental Programme (UNEP) and UN Peacekeeping reported that at least 40 percent of intrastate conflicts since the 1960s have been linked to natural resources.[66] Natural resource exploitation has been identified as a threat multiplier of conflict globally, meaning while it is not the sole source of conflict, natural resources aggravate existing tensions.[67] When combined with rising populations and adverse economic conditions, Member States may experience violence in response to the exploitation of and unequal access to natural resources, particularly within developing Member States.[68] Competition for the available supply of natural resources creates tension within the Member State.[69] Since 1990, the world has experienced at least 18 violent conflicts with links to natural resource exploitation, particularly in Member States with high-value resources like oil or gold.[70] For example, the longstanding crisis in the Democratic Republic of the Congo continues to be worsened by both legal and illegal mining of mineral resources and the scramble for the Member State's rich coltan and diamond resources, perpetrated by government officials, rebel warlords, and multinational corporations.[71] The exploitation of these natural resources has contributed to the continuation of the 77-year civil war, resulting in millions of lives lost.[72]

Current Situation

The management of natural resources is one of the most critical challenges facing governments in developing and fragile Member States with emerging economies due to increasing pressure to sustainably manage natural resources and resolve conflicts.[73] The importance of this challenge lies not only in the need to manage resources sustainably, but also in fulfilling economically motivated desires, such as reducing poverty and increasing development.[74] In order to safeguard resources, there must be global consensus on the threat that resource depletion has long-term effects as the world population grows and the climate changes.[75]

Demographic changes continue to place unsustainable demands on land, water, fisheries, and other natural resources.[76] Current land productivity for crops and livestock fail to meet the needs of a growing world population.[77] Many rural populations rely on agricultural production for their livelihood.[78] In many developing Member States,

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[65] United Nations Environment Programme. "Global Resources Outlook 2019: Natural Resources for the Future We Want," 2019. https://wedocs.unep.org/bitstream/handle/20.500.11822/27517/GRO_2019.pdf?sequence=3&isAllowed=y, (accessed June 22, 2022).

[66] United Nations Peacekeeping. "Conflict and Natural Resources." United Nations Peacekeeping, 2022. https://peacekeeping.un.org/en/conflict-and-natural-resources, (accessed June 18, 2022).

[67] United Nations Peacekeeping. "Conflict and Natural Resources."

[68] United Nations Environment Programme, ed. *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment*. Policy Paper, no. 1. Nairobi: United Nations Environment Programme, 2009, https://wedocs.unep.org/bitstream/handle/20.500.11822/7867/pcdmb_policy_01.pdf?sequence=4&isAllowed=y, (accessed June 18, 2022).

[69] UNEP, ed. *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment*.

[70] United Nations Peacekeeping. "Conflict and Natural Resources."

[71] Joseph Barao Bongomin. "Natural Resources: A Major Cause Of Conflict In The Democratic Republic Of Congo (DRC) From 1960-2009." Thesis, United States International University - Africa, 2010. http://erepo.usiu.ac.ke:8080/xmlui/handle/11732/3646, (accessed June 18, 2022).

[72] Joseph Barao Bongomin. "Natural Resources: A Major Cause Of Conflict In The Democratic Republic Of Congo…"

[73] Ariel Casarin, Sergio Lazzarini, & Roberto Vassolo. "The Forgotten Competitive Arena: Strategy in Natural Resource Industries." *Academy of Management Perspectives*, 34(3). January 2019. https://www.researchgate.net/publication/330637607_The_Forgotten_Competitive_Arena_Strategy_in_Natural_Resource_Industries, (accessed April 20, 2022).

[74] United Nations Interagency Framework Team for Preventive Action. "Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resource." United Nations, 2012. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf, (accessed June 19, 2022).

[75] United Nations Interagency Framework Team for Preventive Action. "Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict."

[76] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources." United Nations, April 2013. https://www.un.org/en/chronicle/article/sustainable-exploitation-oceans-minerals-and-resources, (accessed June 21, 2022).

[77] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[78] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

livestock accounts for half of agricultural output.[79] Sustainable land management (SLM) policies include long-term institutional support and incentive mechanisms at the local level, as well as multi-stakeholder partnerships between land owners, policy makers and experts.[80]

In addition, current land productivity places constraints on freshwater resources, as some of the dominant global fishing markets struggle with transparency and accountability as it relates to international fishing regulations.[81] To protect water resources and raise fishing stocks, regional fisheries management organizations are being used to overcome resource challenges and promote a reduction in subsidies, and in illegal, unreported, and unregulated (IUU) fishing.[82] A regional framework for the management of oceans (RFMO) is an organization composed of states in a particular region that have an interest in managing and conserving fish stocks for many developing Member States.[83] Small island developing states in particular will benefit from the use of resources such as RFMOs to improve accountability and develop new policies and to make frameworks more comprehensive.[84] As a result of improving these management plans, there is a tradeoff between sustainable development and necessary economic progress for developing Member States.[85] The lack of better resource management plans will continue to lead to chronic hunger and declining health of the planet as populations increase and degradation of resources from unsustainable practices, overexploitation, and inequitable distribution becomes irreversible.[86] In response, in 2004, the UNGA passed the Johannesburg Plan in Art. 66 of A/RES/59/25, calling upon Members States and RFMO's to prohibit destructive marine fishing practices.[87] In 2008, following the adoption of A/RES/59/25, the Food and Agriculture Organization developed the International Guidelines for the Management of Deep-sea Fisheries in the High Seas (Deep-sea Fisheries Guidelines).[88] The Deep-sea Fisheries Guidelines helped provide governance recommendations for deep-sea fisheries, and promoted conservation of vulnerable marine ecosystems (VMEs). These frameworks specifically set criteria for identifying VMEs and made suggestions for management of these recognized ecosystems.[89] In addition, the Deep-sea Fisheries Guidelines recommend the development of new FRMOs, continuous data collection, assessment, and surveillance for new VMEs that are documented by commercial vessels.[90]

Furthermore, degradation, population growth, and climate change are intensifying competition for increasingly scarce resources, driving new conflicts globally and obstructing the peaceful resolution of existing ones.[91] The challenges facing natural resource management are heightened by the complex interplay between natural resources

[79] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources." United Nations, April 2013. https://www.un.org/en/chronicle/article/sustainable-exploitation-oceans-minerals-and-resources, (accessed June 21, 2022).

[80] Food and Agriculture Organization. "Sustainable Land Management." United Nations, 2022. https://www.fao.org/land-water/land/sustainable-land-management/en/, (accessed August 2, 2022).

[81] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources." United Nations, April 2013. https://www.un.org/en/chronicle/article/sustainable-exploitation-oceans-minerals-and-resources, (accessed June 21, 2022).

[82] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[83] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[84] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[85] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[86] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources."

[87] United Nations General Assembly resolution 59/25, *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments*, A/RES/59/25, (January 17, 2005), http://www.worldlii.org/int/other/UNGA/2004/67.pdf.

[88] Food and Agriculture Organization. "International Guidelines for the Management of Deep-Sea Fisheries in the High Seas." United Nations, September 2008, https://www.sprfmo.int/assets/Meetings/Meetings-before-2013/Scientific-Working-Group/SWG-06-2008/SPRFMO6-SWG-INF01-FAO-Deepwater-Guidelines-Final-Sep20.pdf, (accessed August 2, 2022).

[89] Food and Agriculture Organization. "International Guidelines for the Management of Deep-Sea Fisheries in the High Seas."

[90] Food and Agriculture Organization. "International Guidelines for the Management of Deep-Sea Fisheries in the High Seas."

[91] United Nations Interagency Framework Team for Preventive Action. "Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict." United Nations, 2012. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf, (accessed June 19, 2022).

and economic, political, cultural, and social dynamics.[92] Depletion of renewable resources continues to disrupt development, and harm ecosystems, especially in Member States most dependent on natural resources for the livelihoods of their people.[93] Peace continues to be undermined by disputes over natural resources.[94] The challenges associated with access to scarce resources are causing affected populations to migrate in search of more reliable access to essential resources, and others to come into conflict.[95] Conflict over natural resources can be a result of a want for resource control, and sustained revenue protection.[96]

Natural resource use relates to all three dimensions of sustainability: social justice, environmental health, and economic development.[97] Natural resource industries are among the most important sectors of the world economy.[98] Export shares of commodities produced by natural resource industries have grown faster than typical manufactured products, such as pharmaceuticals and computers.[99] Activists working to safeguard rights linked to natural resources have proposed more inclusive decision-making as a key to sustainable resource governance.[100] Women, youth, Indigenous People, and local community groups in various Member States are working to ensure environmental knowledge is inclusive, and accessible.[101] This process reiterates how essential environmental knowledge is for promoting sustainable practices, as well as protecting human rights concerned with economic prosperity.[102]

Actions Taken by the United Nations

The 1972 UN Conference on the Human Environment was the first UN conference on environmental issues.[103] Held in Stockholm, Sweden, the Conference adopted fundamental principles to regulate natural resource use to better preserve resources and ecosystems, known as the Stockholm Declaration.[104] The Stockholm Declaration addresses resource depletion and benefit-sharing, with the goal of ensuring that the benefits of natural resources are spread equally and not concentrated in the hands of a few, both within and across Member States.[105] The Declaration also speaks to the principle of intergenerational equity: ensuring today's resource use does not compromise the availability of natural resources for future generations.[106]

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[92] United Nations Interagency Framework Team for Preventive Action. "Renewable Resources and Conflict: Toolkit And Guidance For Preventing and Managing Land and Natural Resources Conflict." United Nations, 2012. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf, (accessed June 19, 2022).

[93] United Nations Interagency Framework Team for Preventive Action. "Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict."

[94] The United Nations Interagency Framework Team for Preventive Action. "Toolkit And Guidance For Preventing And Managing Land And Natural Resources Conflict."

[95] The United Nations Interagency Framework Team for Preventive Action. "Toolkit And Guidance For Preventing And Managing Land And Natural Resources Conflict."

[96] The United Nations Interagency Framework Team for Preventive Action. "Toolkit And Guidance For Preventing And Managing Land And Natural Resources Conflict."

[97] Ariel Casarin, Sergio Lazzarini, & Roberto Vassolo. "The Forgotten Competitive Arena: Strategy in Natural Resource Industries." *Academy of Management Perspectives*, 34(3). January 2019. https://www.researchgate.net/publication/330637607_The_Forgotten_Competitive_Arena_Strategy_in_Natural_Resource_Industries, (accessed April 20, 2022).

[98] Ariel Casarin, et al. "The Forgotten Competitive Arena: Strategy in Natural Resource Industries."

[99] Ariel Casarin, et al. "The Forgotten Competitive Arena: Strategy in Natural Resource Industries."

[100] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge." *The International Institute for Sustainable Development*. April 15, 2021. https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge, (accessed April 20, 2022).

[101] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge."

[102] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge."

[103] United Nations. "United Nations Conference on the Human Environment, Stockholm 1972." United Nations, 2022. https://www.un.org/en/conferences/environment/stockholm1972, (accessed June 22, 2022).

[104] United Nations. "United Nations Conference on the Human Environment, Stockholm 1972."

[105] United Nations Conference on the Human Environment. *Report of the United Nations Conference on the Human Environment*. Stockholm, SE: June 16, 1972, https://documents-dds-ny.un.org/doc/UNDOC/GEN/NL7/300/05/IMG/NL730005.pdf?OpenElement,

[106] United Nations Conference on the Human Environment. *Report of the United Nations Conference on the Human Environment*.

In 1993, the UN entered into force the UN Convention on Biological Diversity (CBD), the legal instrument designed to conserve the sustainable use of the global environmental and equitable sharing of resources.[107] The CBD is the UN's source for research on ecosystems, species, genetic resources, and biotechnology, all linked to aiding in sustainable development of science, agriculture, and business practices.[108] In July 2021, the CBD released its *Global Biodiversity Framework 2021*, a guide to preserve and protect nature and natural resource service through 2030.[109] Comprising 21 targets and ten milestones, the new global framework pledges to ensure at least 30 percent of land and sea area with biodiversity importance is conserved effectively and equitably.[110] The CBD presented the *Global Biodiversity Framework 2021* to its members in October 2021, where the report was approved for discussion of implementation in May 2022.[111]

In 2015, the UN released the 2030 Agenda for Sustainable Development.[112] As part of the 2030 Agenda, Member States resolve to "ensure the lasting protection of the planet and its natural resources" and to create "A world in which consumption and production patterns and use of all natural resources – from air to land, from rivers, lakes and aquifers to oceans and seas – are sustainable."[113] Notably, the 2030 Agenda created the UN Sustainable Development Goals (SDGs), targets for the 2030 Agenda designed to create and implement a plan for global peace and prosperity.[114] Two SDGs are vital to safeguarding natural resources: Goal 14 and Goal 15.[115] SDG 14 focused on conserving and sustainably using marine resources, including the regulation of fishing and water resources.[116] SDG 15 focuses on sustainably managing forests, combating desertification, reversing land degradation, and halting biodiversity loss.[117] Despite efforts at sustainable forest management, forest loss continued to decline, from forests covering 31.9 percent of the total global land area to 31.2 percent in 2020.[118] Forest loss remains an increasing issue in Southeast Asia, Africa, landlocked states, and small island developing states, due to the conversion of forests into agricultural land.[119] The UN has called for funding for natural resource legislation in almost all Member States to prevent natural biodiversity loss causes, namely combating invasive species.[120]

Case Study

Canada and the Clayoquot Biosphere Reserve

The Clayoquot Biosphere Reserve is one of 19 UN Educational, Scientific and Cultural Organization (UNESCO) biospheres in Canada.[121] Biosphere reserves are international designated sites for the sake of biodiversity and natural

[107] United Nations. "Convention on Biodiversity." United Nations. United Nations, 2022. https://www.un.org/en/observances/biological-diversity-day/convention, (accessed May 25, 2022).
[108] United Nations. "Convention on Biodiversity." United Nations.
[109] Convention on Biological Diversity. "A New Global Framework for Managing Nature through 2030: First Detailed Draft Agreement Debuts." Convention on Biological Diversity, July 6, 2021. https://www.cbd.int/article/draft-1-global-biodiversity-framework, (accessed May 25, 2022).
[110] Convention on Biological Diversity. "A New Global Framework for Managing Nature through 2030."
[111] Convention on Biological Diversity. *Report Of the Conference Of The Parties To The Convention On Biological Diversity On Its Fifteenth Meeting (Part I).* CBD/COP/15/4. October 15, 2021. https://www.cbd.int/doc/c/d707/6fca/f76569ac6b47ae9930a3b251/cop-15-04-en.pdf.
[112] United Nations General Assembly resolution 70, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, (October 21, 2015), https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.
[113] United Nations General Assembly resolution 70, *Transforming our world: the 2030 Agenda for Sustainable Development.*
[114] United Nations. "The 17 Goals: Sustainable Development." UN Department of Economic and Social Affairs, 2022. https://sdgs.un.org/goals, (accessed May 20, 2022).
[115] United Nations. "The 17 Goals: Sustainable Development."
[116] United Nations Statistics Division. "Sustainable Development Goal 14." United Nations Statistics Division, 2022. https://unstats.un.org/sdgs/report/2021/goal-14/, (accessed May 25, 2022).
[117] United Nations Statistics Division. "Sustainable Development Goal 15." United Nations Statistics Division, 2022. https://unstats.un.org/sdgs/report/2021/Goal-15/, (accessed May 25, 2022).
[118] United Nations Statistics Division. "Sustainable Development Goal 15."
[119] United Nations Statistics Division. "Sustainable Development Goal 15."
[120] United Nations Statistics Division. "Sustainable Development Goal 15."
[121] Clayoquot Biosphere Trust. "Biosphere Region." Clayoquot Biosphere Trust, 2022. https://clayoquotbiosphere.org/about-us/overview, (accessed August 7, 2022).

resource management.[122] The sites provide sustainable local solutions that can be applied on the international scale and are managed under strict sovereignty by the Member States they are located in.[123] The Clayoquot Sound consists of a 300,000 hectare old-growth coastal rainforest.[124] The Clayoquot Biosphere Trust (CBT) is the designated community-based organization that provides funding and other forms of support to encourage research, education, and training to promote conservation and sustainable practices.[125] In 2000, the Clayoquot Sound was designated as a biosphere by UNESCO.[126]

Prior to the UNESCO biosphere designation, a twenty-year dispute ensued between multiple stakeholders that began with the proposed logging on Meares Island within the Clayquot Sound in 1979.[127] Throughout the 20-year controversy, the different stakeholders engaged in a series of public consultation forums and mediations that eventually resulted in a consensus for the Clayoquot Sound.[128] The first of these consultant units was the creation of the Meares Island Planning Team in 1980, following the announcement that Meares Island would be clear-cut.[129] The planning team was created by multiple different stakeholders with several eventually dropping out of the planning process, including MacMillan-Bloedel (MB) in 1983, the largest logging company in the sound.[130] In 1984, the British-Columbia Government (BC) announced that 90 percent of Meares Island would be logged.[131] In response, Canada's first anti-logging blockades occurred, and an eventual injunction filed by the First Nations indigenous communities resulted in the pausing of the logging.[132] Despite the injunction, logging companies focused on the rest of the Clayoquot Sound.[133] The peak of the controversy arose later in 1993 after the BC Government authorized the logging of two-thirds of the Clayoquot Sound in its Clayoquot Land Use Decision.[134] In response to the Land Use Decision, over 10,000 people from different Environmental NGOs participated in anti-logging blockades, protests, and boycotts.[135] The protests garnered international support and exposure, leading to an international marketing campaign opposed to the Land Use Decision and clear-cut logging.[136] The campaign was led by several ENGOs and influenced the development towards the biosphere.[137]

Three necessary concepts developed out of these consultations that eventually led to the sustainable compromise in the use of the Clayoquot Sound: enhancing stakeholder participation, power balancing, and coalition building.[138] Much of the outcomes after the BC Government's 1993 Land Use Decision came from consistent coalition building between the First Nations indigenous peoples, the involved Environmental NGOs, and other stakeholders, who used open communication and available lines of public consultation, and other forms of protest that eventually allowed all stakeholders an even footing of influence and understanding.[139] Some of the other forms of protests, in an effort to compete in power with MB and other logging entities, involved mass media coverage, blockades, and international boycotts.[140] As a result of the integration of these concepts, the Clayoquot Sound was designated as a UNESCO World Biosphere Reserve, and First Nations-MB logging company, Iisaak, was created for the Clayoquot Sound.[141]

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[122] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves." United Nations, 2021. https://en.unesco.org/node/314143, (accessed August 7, 2022).
[123] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves."
[124] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies: An Analysis of Power, Participation and Protected Areas*. pp. 163-183. 2003, https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/39/natural_resource_conflict.pdf?sequence.
[125] Clayoquot Biosphere Trust. "Biosphere Region." Clayoquot Biosphere Trust, 2022. https://clayoquotbiosphere.org/about-us/overview, (accessed August 7, 2022).
[126] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[127] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[128] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[129] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies*.
[130] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[131] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[132] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[133] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[134] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[135] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[136] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies*.
[137] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies*.
[138] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[139] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*
[140] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies*.
[141] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*

Both represent sustainable solutions that prioritize a community-first use of the natural resources in a highly critical ecosystem based area.[142]

While biosphere reserves are only under UNESCO designation and under the sovereignty of the Member State the site is located in, biosphere reserves serve as specific locations for safeguarding natural resources.[143] Through the designation of a World Biosphere Reserve, Member States create three conservation zones: core areas or strictly protected areas of the biosphere, buffer zones for the purpose of sustainable ecological practices, and transition zones to foster sustainable development.[144] Protected areas in biosphere reserves are also not excluded from development or use.[145] Currently, there are 257 million people living in biosphere reserves around the world, in 129 Member States.[146] Biosphere reserves then can serve as a structured model for Member States to establish and develop a series of safeguards for their natural resources.[147]

Conclusion

Global insecurity is compounded by the overuse and exploitation of natural resources.[148] As natural resources are depleted, the international community has experienced decreased financial stability, increase food insecurity, and more conflict as populations compete for vital natural resources.[149] When habitats are lost, life-sustaining systems for food, water, and air are damaged, affecting the quality of life for all life on the planet.[150] It is pertinent that Member States of the GA Plenary strengthen existing frameworks and safeguards to protect natural resources, as concerns for biodiversity, economic stability, and international security continue to rise with the degradation of natural resources.[151]

Committee Directive

While in committee, delegates should be mindful of their Member State's natural resource consumption and how such consumption balances with other concerns within the Member State, such as economic or security concerns. Delegates should consider their Member State's domestic safeguards in natural resource protection, and how that has affected the biodiversity of their Member State. In doing so, delegates should ask themselves: What initiatives in current domestic, regional, and international protection programs have seen positive change in preserving biodiversity, and which have not? What incentives, if any, can be made to convince Member States to strengthen safeguard for natural resource protection? What social, political, economic, and security issues prevent Member States and private corporations from strengthening natural resource protection safeguard? Are there current international agreements on the topic that could be improved upon? Overall, delegates should address these questions with realistic solutions for implementing their goals. Delegates should focus on building upon what the current UN-established bodies are already working on rather than creating new bodies within the UN system. Delegates should also focus on the issue as a whole and not specific situations of any single Member State.

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[142] Office of Assistant Director-General (Forestry Department). *Natural Resource Conflict Management Case Studies.*

[143] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves." United Nations, 2021. https://en.unesco.org/node/314143, (accessed August 7, 2022).

[144] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves."

[145] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves."

[146] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves."

[147] United Nations Educational, Scientific, and Cultural Organization. "Biosphere Reserves."

[148] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge." *The International Institute for Sustainable Development*. April 15, 2021. https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge, (accessed April 20, 2022).

[149] Jennifer Bansard and Mika Schröder. "The Sustainable Use of Natural Resources: The Governance Challenge."

[150] One Planet Network. "Natural-Resource Use and Environmental Impacts," October 5, 2021. https://www.oneplanetnetwork.org/SDG-12/natural-resource-use-environmental-impacts, (accessed June 22, 2022).

[151] United Nations. "The Sustainable Exploitation of the Ocean's Minerals and Resources." United Nations, April 2013. https://www.un.org/en/chronicle/article/sustainable-exploitation-oceans-minerals-and-resources, (accessed June 21, 2022).

II. Managing Disruptions and Vulnerabilities in the Global Supply Chain

"Our livelihoods – food, jobs, energy – depend on functioning and resilient global supply chains. Unfortunately, the uncertainty caused by the progress of the COVID-19 pandemic from region to region has made it difficult to resume business on a global scale."
- Rebeca Grynspan, Secretary-General of United Nations Conference on Trade and Development (UNCTAD)[152]

Introduction

The globalization of production has fostered the integration of Member States' economies and the prevalence of multinational corporations (MNCs), which are dominant agents of commercial flows of goods and services.[153] Consequently, the production of goods and services transcends state borders and depends on a global supply chain that can respond to market demands.[154] The United Nations Department of Operational Support (UNDOS) defined a supply chain as "a system of organizations, people, activities, information, and resources involved in moving a good or service from the initial supplier to the final customer."[155] Because of the integrated nature of these systems, any disruptions to them have negative multiplier effects on the global economy and are especially detrimental to developing and least developed countries (LDCs) most distant from global production hubs.[156]

The manufacturing of goods and services involves different agents and components, forming a broader network known as the global supply chain.[157] For instance, the global supply chain of Apple's iPhone involves sourcing components from different regions.[158] Although the engineering and design of Apple's iPhone are borne out of the United States (US) of America, the final point of assembly occurs in The People's Republic of China (PRC) and is then distributed globally.[159] Lockdowns and manufacturing plant closures amid the 2020 coronavirus (COVID-19) pandemic have accentuated pre-existing strains on the various components of global supply chains, resulting in longer deliveries and supply shortages.[160] Production strains are alarming, as global supply chains play a critical role in many environmental and social issues outlined in the UN Sustainable Development Goals (SDGs).[161]

History

Before the 1900s, most supply chains were local and regional.[162] However, the Industrial Revolutions of various Member States significantly transformed the production and transportation of goods, inducing the advent of global

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[152] Grynspan, Rebeca. "Here's How We Can Resolve the Global Supply Chain Crisis." *United Nations Conference on Trade and Development*. 2022, https://unctad.org/news/blog-heres-how-we-can-resolve-global-supply-chain-crisis, (accessed April 20, 2022).
[153] Blanton, Shannon and Kegley, Charles. *World politics: Trend and transformation.* Wadsworth Publishing, 356-357. 2017.
[154] Blanton, Shannon and Kegley, Charles. *World politics: Trend and transformation.*
[155] The United Nations Department of Operational Support. "Supply Chain." *United Nations,* https://operationalsupport.un.org/en/supply-chain#:~:text=The%20wider%20office%20of%20supply,the%20UN%20conducts%20peace%20operations, (accessed April 20, 2022).
[156] Grynspan, Rebeca. "Here's How We Can Resolve the Global Supply Chain Crisis."
[157] Rainnie, Al et al. "Review and positions: Global Production Networks and Labour." *Competition and Change*, 15, 155–169. 2011. https://journals.sagepub.com/doi/10.1179/102452911X13025292603714
[158] Xing, Yuqing and Detert, Neal. "How the iPhone Widens the United States Trade Deficit with the People's Republic of China." ADBI Working Paper 257. Tokyo: *Asian Development Bank Institute*. 2010. https://www.adb.org/adbi/main, (accessed June 25, 2022).
[159] Xing, Yuqing and Detert, Neal. "How the iPhone Widens the United States Trade Deficit with the People's Republic of China."
[160] Sako, Mari. "Global Supply Chain Disruption and Resilience." *Communications of the ACM* 65, no. 4: 18–21. 2022. https://cacm.acm.org/magazines/2022/4/259394-global-supply-chain-disruption-and-resilience/fulltext, (accessed May 5, 2022).
[161] Thorlakson, Tannis et. al. "Companies' Contribution to Sustainability through Global Supply Chains." *Proceedings of the National Academy of Sciences,* 115, pp. 2072-2077. 2018. https://www.pnas.org/doi/10.1073/pnas.1716695115,
[162] Blume Global. "The History and Evolution of the Global Supply Chain." *Blume Global*. 2022. https://www.blumeglobal.com/learning/history-of-supply-chain/, (accessed May 12, 2022).

supply chains.[163] Furthermore, the development of railroads and the steam engine facilitated the transport of goods over thousands of miles, both within and beyond state borders.[164] By the 1960s, container shipping for goods and intermodal freight transport improvements – which refers to the combination of trucks and railroads to move freight in shipping container – reduced the cost of transferring cargo and facilitated the shipment of goods.[165] In 1975, a real-time warehouse management system was developed, making it easier to track orders, inventory, and distributions.[166] Additionally, improved communications allowed the production process to be neatly modularized (separation and recombination of goods) and contracted out (employ other companies).[167]

In 1982, British logistician Keith Oliver coined the term supply chain management, defining it as a "process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible."[168] Between the 1990s and 2000s, the global supply chain grew exponentially, increasing global imports and exports.[169] The East Asian region accounted for over 40 percent of the total increase in world exports with this period, marking its rise as a center of global production.[170]

In 2010, there was an exponential increase in the use of artificial intelligence (AI) in managing supply chains.[171] The machine learning component of AI helps to manage the flow of goods throughout the supply chain, ensuring that raw materials and products are in the right place at the right time.[172] Furthermore, AI can gather and interpret data from various sources and forecast future demand based on extraneous variables, which can be instrumental in detecting vulnerabilities in the global supply chain.[173] With the rise of AI and other digital technologies making production easier, companies began to see an economical benefit to implementing near-sourcing strategies, which involve moving all production operations within proximity of where the end-product is sold.[174]

Recently, global supply chains were disrupted by the shrinking of production value chains and protectionism, an economic policy dependent on restricting imports from other Member through methods such as tariffs on imported goods.[175] For example, in 2018, the United States placed 25 percent tariffs on semiconductors and capital goods from the PRC, which increased the cost of production for US businesses [176] In 2019, businesses in the US were prohibited from collaborating with or purchasing telecommunications equipment from companies that were regarded to pose a national security threat.[177] In 2020, the COVID-19 pandemic revealed underlying structural problems within the current global supply chain, such as market concentration in specific components and materials, just-in-time inventory management, full capacity utilization, and geographic concentration of manufacturing, which exposes production to natural disasters and geopolitical risks.[178] The impacts of significant demand shocks down the supply chain were visible in various industries, including the semiconductor industry and the pharmaceuticals in the

[163] Blume Global. "The History and Evolution of the Global Supply Chain."
[164] Blume Global. "The History and Evolution of the Global Supply Chain." *Blume Global*. 2022. https://www.blumeglobal.com/learning/history-of-supply-chain/, (accessed May 12, 2022).
[165] Sako, Mari. "Global Supply Chain Disruption and Resilience." *Communications of the ACM* 65, no. 4: 18–21. 2022. https://cacm.acm.org/magazines/2022/4/259394-global-supply-chain-disruption-and-resilience/fulltext, (accessed June 25, 2022).
[166] Blume Global. "The History and Evolution of the Global Supply Chain."
[167] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[168] Ashcroft, Sean. "The History of Supply Chain Management." Supply Chain Digital 2021. https://supplychaindigital.com/supply-chain-risk-management/history-supply-chain-management, (accessed June 25, 2022).
[169] Ashcroft, Sean. "The History of Supply Chain Management."
[170] Athukorala, Prema-chandra. "Production Networks and Trade Patterns in East Asia: Regionalization or Globalization?" Asian Development Bank, Working Paper Series on Regional Economic Integration: No. 56. 2010. https://www.adb.org/sites/default/files/publication/28530/wp56-trade-patterns-east-asia.pdf, (accessed June 25, 2022).
[171] Blume Global. "The History and Evolution of the Global Supply Chain."
[172] Blume Global. "How Artificial Intelligence Improves the Supply Chain." *Blume Global. 2022,* https://www.blumeglobal.com/learning/artificial-intelligence/, (accessed June 25, 2022).
[173] Blume Global. "How Artificial Intelligence Improves the Supply Chain."
[174] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[175] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[176] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[177] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[178] Sako, Mari. "Global Supply Chain Disruption and Resilience."

second quarter of 2020.[179] Thus, there is great urgency for global corporations to increase their investments in supply chain resilience, which involves adding some flexibility and buffers to deal with supply chain interruptions.[180]

Current Situation

The COVID-19 pandemic has produced a deep economic crisis and unprecedented supply chain vulnerabilities in lead times, demand fluctuations, and disruptions in network structures.[181] The manufacturing industry struggled to keep up with increased demand for consumer packaged goods, medical equipment, and electronics.[182] Additionally, industries such as accommodation, food services, air travel, retail, and recreational services, were negatively impacted by the pandemic.[183] The global supply chain continues to face numerous challenges in the wake of the COVID-19 pandemic, including raw material shortages due to decreasing supplier capacity, disruptions in global transportation and international trade, and labor shortages due to nationwide lockdowns.[184]

In 2020, 94 percent of Fortune 1,000 companies reported coronavirus-driven supply chain disruptions.[185] For example, the automobile manufacturer Hyundai suspended its production lines in the Republic of Korea due to disruptions in the supply of parts from the PRC.[186] In late February 2020, almost nine percent of container shipping fleets were inactive, and due to the suspension of production activities to stop the spread of COVID-19, Chinese manufacturing indexes fell to their lowest level since the Great Recession.[187] Improving supply chain resilience is necessary to enable rapid measures in different risk environments.[188] One way for individual companies to mitigate supply chain disruptions is to develop a production recovery model for high-demand products.[189] Companies that experience supply chain disruptions could either make emergency purchases from suppliers that have not experienced disruptions, delay deliveries, compensate customers with price reductions or consider a product change in the life cycle of high-demand products to minimize the revenue losses after supply chain disruptions.[190]

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[179] Sako, Mari. "Global Supply Chain Disruption and Resilience." *Communications of the ACM* 65, no. 4: 18–21. 2022. https://cacm.acm.org/magazines/2022/4/259394-global-supply-chain-disruption-and-resilience/fulltext, (accessed June 25, 2022).

[180] Sako, Mari. "Global Supply Chain Disruption and Resilience."

[181] Ivanov, Dmitry and Dolgui, Alexander. "OR-methods for coping with the ripple effect in supply chains during COVID-19 pandemic: Managerial insights and research implications." *International journal of production economics*, 232, 2021. https://www.sciencedirect.com/science/article/pii/S0925527320302784?via%3Dihub

[182] Vidovic, Luka. "Industries Most and Least Impacted by COVID-19 from a Probability of Default Perspective - January 2022 Update." *S&P Global Market Intelligence*. 2022. https://www.spglobal.com/marketintelligence/en/news-insights/blog/industries-most-and-least-impacted-by-covid-19-from-a-probability-of-default-perspective-january-2022-update, (accessed July 22, 2022).

[183] Vidovic, Luka. "Industries Most and Least Impacted by COVID-19 from a Probability of Default Perspective - January 2022 Update."

[184] Chen, Jingze, Wang, Hongfeng, and Fu, Yaping. "A multi-stage supply chain disruption mitigation strategy considering product life cycle during COVID-19." *Environmental Science and Pollution Research*, pp. 1–15. 2022. https://doi.org/10.1007/s11356-022-18931-7.

[185] Ivanov, Dmitry and Dolgui, Alexander. "OR-methods for coping with the ripple effect in supply chains during COVID-19 pandemic: Managerial insights and research implications."

[186] Ivanov, Dmitry and Dolgui, Alexander. "OR-methods for coping with the ripple effect in supply chains during COVID-19 pandemic: Managerial insights and research implications."

[187] Ivanov, Dmitry."Predicting the impacts of epidemic outbreaks on global supply chains: a simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case." *Transportation Research Part E: Logistics and Transportation Review*, 136, 101922.2020. https://www.sciencedirect.com/science/article/pii/S1366554520304300, (accessed July 22, 2022).

[188] Chen, Jingze, et. al. "A multi-stage supply chain disruption mitigation strategy considering product life cycle during COVID-19."

[189] Chen, Jingze, et. al. "A multi-stage supply chain disruption mitigation strategy considering product life cycle during COVID-19."

[190] Chen, Jingze, et. al. "A multi-stage supply chain disruption mitigation strategy considering product life cycle during COVID-19."

In response to the pandemic's effect on the global economy, Member States have increased protectionist economic policies.[191] This protectionism has taken a non-traditional form, as concerns over ensuring adequate supplies of goods for their national populations have caused Member States to focus more on export barriers and less on import tariffs.[192] The World Bank has warned against protectionist policies as a solution to COVID-19 economic disruptions.[193] In a 2022 study, the World Bank found Member States with deeper integrated global value chains recovered from pandemic economic disruptions faster than Member States with protectionist policies.[194] Developing Member States can resolve supply chain disruptions by strengthening regional value chains through regional pacts.[195] These can ensure that small firms cooperate to reduce transaction costs and benefit from economies of scale.[196]

Actions Taken by the United Nations

UN committees have worked to continue the implementation of the Sustainable Development Goals (SDGs) throughout the difficulties of the COVID-19 pandemic.[197] The 2015 UN Sustainable Development Goals were designed to create a plan for global peace and prosperity.[198] Two Goals are particularly important to the well-being of global supply chains: SDG 8 and SDG 9. Goal 8 promotes economic growth and productive employment in a sustained and inclusive manner.[199] With historic levels of unemployment and economic deprivation, COVID-19 has created a devastating socio-economic crisis among workers and consumers.[200] Disruptions to industrial production and insecurity in the global markets have derailed economic growth, with nearly half of the workforce at risk of losing employment at the height of the pandemic.[201] Goal 9 focuses on sustainable and inclusive industrialization to build resilient infrastructure and foster innovation.[202] According to the *Sustainable Development Goals Report 2021*, with global manufacturing production falling 6.8 percent in 2020, supply chain recovery relied on medium and high-technological production to begin revitalizing the global economy for industrialized economies, leaving LDCs behind in production recovery.[203]

In 2015, the United Nations General Assembly (UNGA) endorsed the Third UN World Conference on Disaster Risk Reduction (WCDRR), held in Sendai, Japan.[204] During the conference, member states adopted the Sendai Framework for Disaster Risk Reduction 2015-2030, which reaffirmed the importance of tackling disaster risk

[191] Burnson, Patrick. "COVID-19 Exposes Vulnerabilities in the Global Supply Chain." 2020. https://www.scmr.com/article/covid_19_exposes_vulnerabilities_in_the_global_supply_chain1, (accessed May 20, 2022).

[192] Kersan-Škabić, Ines. "The COVID-19 Pandemic and the Internationalization of Production: A Review of the Literature." *Development Policy Review* 40, no. 2 (2022): 1–15. https://doi.org/10.1111/dpr.12560.

[193] Brenton, Paul, Michael J. Ferrantino, and Maryla Maliszewska. *Reshaping Global Value Chains in Light of COVID-19: Implications for Trade and Poverty Reduction in Developing Countries*. Washington, DC: World Bank, 2022. https://doi.org/10.1596/978-1-4648-1821-9.

[194] Brenton, Paul, et. al. *Reshaping Global Value Chains in Light of COVID-19.*

[195] Grynspan, Rebeca. "Here's How We Can Resolve the Global Supply Chain Crisis." *United Nations Conference on Trade and Development*. 2022, https://unctad.org/news/blog-heres-how-we-can-resolve-global-supply-chain-crisis, (accessed April 20, 2022).

[196] Grynspan, Rebeca. "Here's how we can resolve the global supply chain crisis."

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[198] United Nations. "The 17 Goals: Sustainable Development." UN Department of Economic and Social Affairs, 2022. https://sdgs.un.org/goals, (accessed May 20, 2022).

[199] United Nations. "Goal 8 | Department of Economic and Social Affairs." UN Department of Economic and Social Affairs, 2022. https://sdgs.un.org/goals/goal8, (accessed May 20, 2022).

[200] United Nations. "Goal 8: Decent Work and Economic Growth." United Nations Sustainable Development Goals, 2022. https://www.un.org/sustainabledevelopment/economic-growth/, (accessed May 20, 2022).

[201] United Nations. "Goal 8: Decent Work and Economic Growth."

[202] United Nations. "Goal 9 | Department of Economic and Social Affairs." UN Department of Economic and Social Affairs, 2022. https://sdgs.un.org/goals/goal9, (accessed May 20, 2022).

[203] United Nations. "Goal 9. Industry, Innovation and Infrastructure." In *The Sustainable Development Goals Report 2021,* 44-45. New York, NY, 2021. https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf, (accessed May 22, 2022).

[204] United Nations Office for Disaster Risk Reduction. "Sendai Framework for Disaster Risk Reduction 2015 - 2030." *United Nations.* 2015. https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030, (accessed May 28, 2022).

drivers, such as complex supply chains, limited availability of technology, unsustainable uses of natural resources, declining ecosystems, pandemics, and epidemics.[205] Subsequently, in 2019, as part of the Secretary-General's Management Reform, the Department of Operational Support (UNDOS) was created to provide supply chain management, including logistics, procurement, and support for uniformed capabilities.[206] Subsequently, the Office of Supply Chain Management in the UNDOS was created to provide support to departments, offices, regional commissions, tribunals, and field operations across the Secretariat.[207] The Office of Supply Chain Management is working deliberately to support UN efforts to achieve the Sustainable Development Goals by 2030.[208] For instance, the Office of Supply Chain Management is actively contributing to achieving SDG 5: women's empowerment and gender equality by providing greater opportunities to women-owned businesses, especially small and medium-sized enterprises from developing Member States.[209] Furthermore, in 2019, the Assistant Secretary-General for Supply Chain Management announced the UN is actively looking for new sources of supply due to the effects of the COVID-19 pandemic.[210]

The UNGA has made strides to rectify the damage the COVID- 19 pandemic caused to supply chains. At the beginning stages of the pandemic, the supply chain for personal protective equipment (PPE), ventilators, and testing supplies experienced disruptions due to increased demand.[211] Since the PRC is a major manufacturer of PPEs, when the Member State initiated lockdowns in 2020, it caused a ripple effect of disruptions in the PPE supply chain.[212] Furthermore, the PRC's government limited its PPE exports in response to demand and bought a sizable share of the world supply, severely disrupting the global supply chain.[213] In early April 2020, the UN launched the COVID-19 Supply Chain Taskforce to increase the acquisition and supply of personal protection equipment, testing and diagnostic supplies, and biomedical equipment such as ventilators and oxygen concentrators.[214] The Taskforce operates by leveraging the expertise of each partner (World Health Organization, the World Food Programme, the World Bank, United Nations International Children's Emergency Fund, and the Global Fund) to identify procurement needs and improve supplier negotiations.[215] It is composed of senior representatives from each participating agency and the Department of Operational Support to coordinate Secretariat requirements.[216]

Additionally, in September 2020, acting UNGA President Volkan Bozkir authored the omnibus resolution A/RES/74/306 *Comprehensive and Coordinated Response to the COVID-19 Pandemic*.[217] The resolution, which focused on addressing supply chain disruptions and managing vulnerabilities, was adopted by the UNGA with a vote

[205] United Nations Office for Disaster Risk Reduction. "Sendai Framework for Disaster Risk Reduction 2015 - 2030."
[206] UN Department of Operational Support. "About US: Background." *United Nations*, 2022, https://operationalsupport.un.org/en/background-0, (accessed May 13, 2022).
[207] UN Department of Operational Support. "Chief of Supply Chain Management interviewed by Africa Renewal Magazine for UNTV." *United Nations*, May 2019, https://operationalsupport.un.org/en/chief-of-supply-chain-management-interviewed-africa-renewal-magazine-untv, (accessed May 1, 2022).
[208] UN Department of Operational Support. "Chief of Supply Chain Management interviewed by Africa Renewal Magazine for UNTV."
[209] UN Department of Operational Support. "Chief of Supply Chain Management interviewed by Africa Renewal Magazine for UNTV."
[210] UN Department of Operational Support. "Chief of Supply Chain Management interviewed by Africa Renewal Magazine for UNTV."
[211] Cohen, Jennifer, and Rodgers, Yana van der Meulen. "Contributing factors to personal protective equipment shortages during the COVID-19 pandemic," *Preventive medicine*, 141, December 2022, https://doi.org/10.1016/j.ypmed.2020.106263, (accessed June 25, 2022).
[212] Cohen, Jennifer, et. al. "Contributing factors to personal protective equipment shortages during the COVID-19 pandemic."
[213] Cohen, Jennifer, et. al. "Contributing factors to personal protective equipment shortages during the COVID-19 pandemic."
[214] UN Department of Global Communications. "Supply Chain and COVID-19: UN rushes to move vital equipment to frontlines." *United Nations.* 2020. https://www.un.org/en/coronavirus/supply-chain-and-covid-19-un-rushes-move-vital-equipment-frontlines, (accessed May 12, 2022).
[215] UN Department of Global Communications. "Supply Chain and COVID-19: UN rushes to move vital equipment to frontlines."
[216] World Health Organization. "UN COVID-19 Supply Chain Task Force," April 28, 2020, https://interagencystandingcommittee.org/system/files/2020-05/COVID-19%20SupplyChainTaskForce_28.04.2020.pdf, (accessed May 12, 2022).
[217] "General Assembly Adopts Omnibus Resolution Calling for Holistic COVID-19 Response, among 3 Passed on Global Health Threats, Malaria," UN News, United Nations. https://press.un.org/en/2020/ga12262.doc.htm, (accessed June 24, 2022).

of 169 in favor, two against, and two abstentions.[218] A/RES/74/306 emphasized the COVID-19 pandemic has disrupted the normal functioning of open markets, global supply chains, and the flow of essential goods.[219] These disruptions hinder the fight against poverty, hunger, and inequality, undermining efforts to achieve the 2030 Agenda for Sustainable Development.[220]A/RES/74/306 also reaffirmed that emergency measures must be transparent, temporary, and not create unnecessary barriers to trade or disruption to global supply chains. The resolution called upon Member States and other relevant stakeholders to keep food and agriculture supply chains functioning by supporting workers and farmers, particularly women farmers.[221] The UNGA has demonstrated its commitment to managing disruptions in the global supply chain, paving the way for more work to be completed.[222]

Case Study

Global Semiconductor Chip Supply Disruption

Microchips are computer chips used to function many items, including mobile phones, computers, and automobiles.[223] In 2011, many automobile companies experienced supply chain disruptions due to a shortage of semiconductors (microchips) after the Tōhoku earthquake and tsunami in Japan.[224] Many Japanese car manufacturers were forced to close down most of their manufacturing plants globally because the disaster directly affected Renesas, a major microchip designer.[225] The microchip shortage resulted in production delays and global supply chain disruptions for the automobile industry. [226]

A similar supply chain issue has re-emerged amid the COVID-19 pandemic.[227] Due to lockdowns, plant closures, and other COVID-19 related restrictions, many manufacturers and suppliers have experienced production delays, including the manufacturing of semiconductors.[228] The global market for semiconductor chips is projected to grow from USD 452.2 Billion in 2021 to USD 803.1 Billion in 2028.[229] However, semiconductor manufacturers have not been able to keep up with increased demand for microchips.[230] At the height of the pandemic, increased demand for electronic devices and the digital infrastructure to support online activity resulted in semiconductor suppliers shifting production away from automotive-grade chips towards electronics chips.[231] The increase in microchip demand revealed many vulnerabilities within the semiconductor supply chain, including the concentration of most suppliers in one region and the long lead times in manufacturing microchips.[232]

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[218] "General Assembly Adopts Omnibus Resolution Calling for Holistic COVID-19 Response…" UN News.
[219] "General Assembly Adopts Omnibus Resolution Calling for Holistic COVID-19 Response…" UN News.
[220] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic,* A/RES/74/306, (September 15, 2020), https://www.un.org/pga/74/wp-content/uploads/sites/99/2020/09/Omnibus_Final-clean.pdf, (accessed June 24, 2022).
[221] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic.*
[222] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic.*
[223] Sako, Mari. 2022. "Global Supply Chain Disruption and Resilience." Communications of the ACM 65, no. 4: 18–21. 2022. https://cacm.acm.org/magazines/2022/4/259394-global-supply-chain-disruption-and-resilience/fulltext, (accessed June 25, 2022).
[224] Ye, Linghe and Abe, Masato. "The Impacts of Natural Disasters on Global Supply Chains." A*sia-Pacific Research and Training Network on Trade*. Working Paper Series, No. 115. 2012. https://artnet.unescap.org/publications/working-papers/impacts-natural-disasters-global-supply-chains, (accessed May 12, 2022).
[225] Endo, Koji. "Viewpoint: How Japan's Car Industry Almost Shut Down." *British Broadcasting Corporation.* 2011. https://www.bbc.com/news/business-13421065, (accessed May 28, 2022).
[226] Ye, Linghe and Abe, Masato. "The Impacts of Natural Disasters on Global Supply Chains."
[227] Eldem, Burak et.al. "The COVID-19 Impact on Supply Chain Operations of Automotive Industry: A Case Study of Sustainability 4.0 Based on Sense–Adapt–Transform Framework." *Sustainability*, 14, 5855. 2022. https://doi.org/10.3390/su14105855, (accessed June 25, 2022).
[228] Eldem, Burak et.al. "The COVID-19 Impact on Supply Chain Operations of Automotive Industry."
[229] Murray, Bill and Bradley, Stephen. 2021. "The Semiconductor Chip Shortage Hits MedTech: Strategies to Build Resilient Supply Chains." *Advanced Medical Technology Association*, https://www.advamed.org/2021/09/23/the-semiconductor-chip-shortage-hits-medtech-strategies-to-build-resilient-supply-chains/, (accessed June 25, 2022).
[230] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[231] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[232] Sako, Mari. "Global Supply Chain Disruption and Resilience."

Semiconductor production requires a six-month lead time because manufacturing computer chips from design to packaging can take up to 26 weeks.[233] Therefore, increase in production volumes induced delays in manufacturing other essential products.[234] In addition, many key suppliers of semiconductor chips are concentrated geographically in East Asia.[235] A natural disaster or geopolitical event could easily unravel the vulnerabilities associated with such concentration, as seen with the COVID-19 pandemic.[236] In 2021, after a COVID-19 outbreak at King Yuan Electronics, a major supplier of microchips in Taiwan, one representative confirmed the supplier would reduce its June 2021 output and revenue by up to 35 percent.[237] Notably, the medical technology industry has also been impacted by the disruption of the semiconductor supply chain, which has delayed the manufacturing of life-saving medical devices and systems during the COVID-19 pandemic.[238] Semiconductor chips are essential components in vital medical equipment and systems, such as ultrasound devices, defibrillators, and patient monitors that assess a patient's vital signs.[239] The demand for semiconductor chips is anticipated to increase between 2021 and 2028 as healthcare systems deal with pandemic-related patient backlogs.[240]

Conclusion

Disruptions in the supply chains induce production suspension, supply shortages, and market crashes.[241] High-risk circumstances such as natural disasters, pandemics, and economic shocks gravely impact supply chains, particularly those that rely on few sources or a single source for a certain input.[242] The UNGA must focus on managing disruptions and vulnerabilities in the global supply chain to ensure the unimpeded flow of vital medical and food supplies and other essential goods and services across borders.[243] Supply chain disruptions have a devastating impact on sustainable development and humanitarian needs, particularly for populations and Member States already vulnerable to the economic effects of COVID-19 and other environmental factors.[244] These needs include poverty eradication, food security and nutrition, education, environmentally responsible waste management, and access to healthcare.[245] With supply chain disruptions predicted to persist through 2022 and the foreseeable future, finding ways to manage those disruptions and address vulnerabilities in the global supply chain is vital to mitigating the supply chain's insufficient resilience to natural and economic shocks.[246]

Committee Directive

The GA Plenary must take effective action to ensure that global supply chains are sustainable and more resilient to future disruptions. Delegates should be mindful of the effects of the COVID-19 pandemic and how it has disrupted the global supply chain of various industries. Questions delegates should consider are: What are some setbacks or obstacles that hinder the global supply chain? What role can the UN, and the GA Plenary specifically, play in managing supply chain disruptions? How can improving the resiliency of the global supply chain aid in achieving

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[233] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[234] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[235] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[236] Sako, Mari. "Global Supply Chain Disruption and Resilience."
[237] Hille, Kathrin. 2021. "Taiwan's Covid-19 Outbreak Spreads To Chip Companies." *The Financial Times Ltd*. https://www.ft.com/content/ce18b201-551c-4fb6-bd82-766e4d453dbc, (accessed June 25, 2022)
[238] Houten, Frans van. "Global Chip Shortages: Why Supplies Must Be Prioritized For Healthcare Capabilities." World Economic Forum, May 24, 2022. https://www.weforum.org/agenda/2022/05/global-chip-shortages-put-life-saving-medical-devices-at-risk/, (accessed June 25, 2022).
[239] Houten, Frans van. "Global Chip Shortages: Why Supplies Must Be Prioritized For Healthcare Capabilities."
[240] Houten, Frans van. "Global Chip Shortages: Why Supplies Must Be Prioritized For Healthcare Capabilities."
[241] Ye, Linghe and Abe, Masato. "The Impacts of Natural Disasters on Global Supply Chains." A*sia-Pacific Research and Training Network on Trade*. Working Paper Series, No. 115. 2012, https://artnet.unescap.org/publications/working-papers/impacts-natural-disasters-global-supply-chains, (accessed May 12, 2022).
[242] Ye, Linghe and Abe, Masato. "The Impacts of Natural Disasters on Global Supply Chains."
[243] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic*, A/RES/74/306, (September 15, 2020), https://www.un.org/pga/74/wp-content/uploads/sites/99/2020/09/Omnibus_Final-clean.pdf, (accessed May 5, 2022).
[244] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic.*
[245] United Nations General Assembly resolution 306, *Comprehensive and Coordinated Response to the COVID-19 Pandemic.*
[246] Dunn, Julianne. "Disruptions Are Expected to Persist, Prompting Some Firms to Rethink Supply Chain Management." *Federal Reserve Bank of Cleveland.* 2022, https://www.clevelandfed.org/newsroom-and-events/publications/cfed-district-data-briefs/cfddb-20220420-disruptions-are-expected-to-persist.aspx,(accessed May 5, 2022).

the UN Sustainable Development Goals? How can Member States effectively and appropriately partner with multinational corporations and national production and manufacturing industries to help build a sustainable global supply chain? How can the GA Plenary create effective and enthusiastic participation from Member States to confront global supply chain vulnerabilities?

Annotated Bibliography:

I: Strengthening Safeguards to Protect Natural Resources

United Nations Economic Commission for Europe. *United Nations Resource Management System: An Overview of Concepts, Objectives and Requirements*. ECE Energy Series. Geneva: United Nations, 2021. https://doi.org/10.18356/9789210053099.

> The United Nations Economic Commission for Europe (UNECE) is the UN regional body tasked with promoting pan-European economic integration. The UNECE's report *United Nations Resource Management System: An Overview of Concepts, Objectives and Requirements* outlines the United Nations Resource Management System. The UN Resource Management System provides a detailed concept of the system and objectives Member States should us when dealing with natural resource management. The report provides a way for stakeholders from the international level, regional, civil, and private levels to utilize the management system for the improved use of natural resources. Created by the UNECE's Expert Group on Resource Management (EGRM), this report provides a substantial toolkit for all major stakeholders in their development of sustainable natural resource management.

World Wildlife Fund. "Safeguard Projects." World Wildlife Fund, 2022. https://www.worldwildlife.org/safeguards-resources.

> The World Wildlife Fund (WWF) is the leading global conservation organization, with the goal of developing and implementing innovative solutions to natural resource conversation and sustainability to nearly 100 Member States. The WWF Safeguard Projects are fieldwork on conservation and natural resource sustainability within individual Member States. The WWF provides policies and procedures for these individual projects, from protection of natural habitats to dam safety. WWF Safeguard Projects include sustainability of the Luangwa valley in Zambia and biodiversity conservation in Ecuador's Amazon region. The WWF Safeguard Projects provide examples of different environmental and natural resource safeguards, based on the needs of individual Member States and implemented by the global community.

United Nations Environmental Programme and International Resource Panel. *Sustainable Trade in Resources: Global Material Flows, Circularity and Trade*. United Nations Environmental Programme, November 16, 2020. https://www.unep.org/resources/publication/sustainable-trade-resources-global-material-flows-circularity-and-trade.

> The United Nations Environmental Programme (UNEP) is the UN body tasked with promoting the implementation of sustainable initiatives for environmental protection and use. In coordination with the International Resource Panel, a scientific panel of environmental experts within the UNEP, the UNEP published *Sustainable Trade in Resources: Global Material Flows, Circularity and Trade*. This report acknowledges the economic considerations involved in natural resource policy. A major impact in the way Member States think about environmental policy is the economic impact of those policies. As such, natural resources influence how Member States engage in global trade and the overall development of economic globalism. The report discusses the importance of Earth-friendly trade rules and changes in global trade can drive economic growth while saving the planet and natural resources.

Roe, Stephanie, Charlotte Streck, Luke Pritchard, and John Costenbader. "Safeguards in REDD+ and Forest Carbon Standards: A Review of Social, Environmental and Procedural Concepts and Application." Climate Focus, May 2013. https://climatefocus.com/publications/safeguards-redd-and-forest-carbon-standards-review-social-environmental-and-procedural/.

> The *Safeguards in REDD+ and Forest Carbon Standards* report provides a substantial analysis of implemented safeguards within REDD+ Member States. REDD+ (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) is a program under the UN Framework Convention on Climate Change (UNFCCC). The report provides examples of various natural resource safeguards and principles and the implementation of those safeguards. The report emphasizes the importance of streamlining safeguards across multiple levels of governance to achieve global sustainability.

II: Managing Disruptions and Vulnerabilities in the Global Supply Chain

Rainnie, Al et al. "Review and Positions: Global Production Networks and Labour." *Competition and Change*, 15, 155–169. 2011. https://www.researchgate.net/publication/233597864_Review_and_Positions_Global_Production_Networks_and_Labour.

> *Competition and Change* is a peer-reviewed journal that publishes policy-oriented research to better understand the causes and consequences of competition and change in the context of globalization and financialization. This 2011 publication considers labor as an active agent capable of shaping global value chains' structure and geographical organization. The article provides further perspective on global value chains and production networks, including where economists believed the global economy would head in the 2010s compared to what the global economy is currently experiencing.

Sako, Mari. "Global Supply Chain Disruption and Resilience." *Communications of the ACM* 65, no. 4: 18–21. 2022. https://cacm.acm.org/magazines/2022/4/259394-global-supply-chain-disruption-and-resilience/fulltext.

> *Communications of the ACM* is an Association for Computing Machinery flagship magazine covering the latest discoveries, innovations, and research that inspire and influence the field of technology. The themes present in this magazine include computer science, public policies, engineering challenges, and market trends. The article "Global Supply Chain Disruption and Riesilience" provides the historical context of supply chains, vulnerabilities in supply chains and economic policies before COVID-19, and supply chain risks exposed by the pandemic. The article gives context to the current supply chain issues facing Member States, will explaining how economic policies could not account for the disruptions experienced during the COVID-19 pandemic.

Thorlakson, Tannis et. al. "Companies' Contribution to Sustainability through Global Supply Chains." *Proceedings of the National Academy of Sciences*, 115, pp. 2072-2077. 2018. https://www.pnas.org/doi/full/10.1073/pnas.1716695115.

> *Proceedings of the National Academy of Sciences* (PNAS) is a peer-reviewed journal of the National Academy of Sciences (NAS), a source of high-impact research that broadly spans the biological, physical, and social sciences. The article "Companies' Contribution to Sustainability through Global Supply Chains." shares information about how companies are adopting a variety of voluntary practices to improve the environmental and social management of their suppliers' activities. The article further explains the connection between managing disruptions and vulnerabilities in the Global Supply Chain, and how private businesses and Member States were attempting to mitigate supply chain disruptions prior to the COVID-19 pandemic.

Organisation for Economic Co-operation and Development. *Global Value Chains: Efficiency and Risks in the Context of COVID-19.* OECD, February 11, 2021. https://www.oecd.org/coronavirus/policy-responses/global-value-chains-efficiency-and-risks-in-the-context-of-covid-19-67c75fdc/.

> The Organsation for Economic Co-operation and Development (OECD) is an intergovernmental organization aiming to establish evidence-based standards and solutions for social, economic, and environmental challenges globally. In the wake of the COVID-19 pandemic, OCED published a report *Global Value Chains: Efficiency and Risks in the Context of COVID-19*, discussing the pandemic's effect on trade and production efficiencies and the risks of the pandemic on global value chains. Global value chains are vital parts of the international market, as production of goods becomes spread across several Member States. The report examines how the pandemic has disrupted this vital aspect of global manufacturing and the consequences of this breakdown and provides further research on the unusual nature of COVID-19 on the global economy.