SECOND COMMITTEE

70th SESSION ISSUES BOOK

IMPROVING WORKER'S RIGHTS, INCLUDING MIGRANTS AND YOUTH

PROVIDING SUSTAINABLE AND RESILIENT INFRASTRUCTURE

MANAGING AND PRESERVING NATURAL RESOURCES WHILE REDUCING WASTE GENERATION

MODEL UNITED NATIONS OF THE FAR WEST

MODEL UNITED NATIONS OF THE FAR WEST

70TH ANNUAL SESSION
THE SUSTAINABLE DEVELOPMENT GOALS: LEAVE NO ONE BEHIND

The Main Committees of the UN General Assembly consider agenda items referred to them by the General Assembly and prepare recommendations and draft resolutions for submission to the General Assembly plenary. The Committees correspond with the General Assembly's major fields of responsibility.

The General Assembly's Second Committee focuses on topics relating to economic growth and development such as macroeconomic policy questions; financing for development; sustainable development; human settlements; globalization and interdependence; eradication of poverty; operational activities for development; agriculture development, food security and nutrition; information and communications technologies for development; and towards global partnerships.
(UN HANDBOOK, 2017-18)

THE SECOND COMMITTEE ISSUES BOOK WAS PREPARED BY THE STUDENTS OF WHITTIER COLLEGE FOR THE 70TH SESSION OF MODEL UNITED NATIONS OF THE FAR WEST

MODEL UNITED NATIONS OF THE FAR WEST

SECOND COMMITTEE
ISSUES BOOK

1. Improving worker's rights, including migrants and youth
2. Providing sustainable and resilient infrastructure
3. Managing and preserving natural resources while reducing waste generation

THE SECOND COMMITTEE ISSUES BOOK WAS PREPARED BY THE STUDENTS OF WHITTIER COLLEGE FOR THE 70TH SESSION OF MODEL UNITED NATIONS OF THE FAR WEST

IMPROVING WORKERS RIGHTS, INCLUDING MIGRANTS AND YOUTH

Teresa Baranowski, Whittier College
MUNFW 70th Session – Second Committee

Announced at the annual high-level meetings of the United Nations General Assembly in 2015, the Sustainable Development Goals (SDGs) were intended to free the human race from the tyranny of poverty.[1] The SDGs envision a world which ensures that all human beings can fulfill their potential in dignity and equality.[2] The 17 SDGs focus on 3 dimensions -- economic, social and environmental[3] -- and are a set of "universal goals and targets which involve the entire world,[4]" both developed and developing countries. By including the global population, regardless of economic status, it is hoped these goals will ensure a prosperous and fulfilling life for all.

More specifically, Goal 8 of the SDGs aims to "create conditions for sustainable, inclusive, and sustained economic growth, shared prosperity and decent work for all."[5] Four of the twelve targets created to measure the achievement of this goal pertain to this issue:[6]

- Target 8.5: by 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities;
- Target 8.6: by 2020, substantially reduce the proportion of youth not in employment, education or training (NEET);
- Target 8.7: by 2025, end child labor in all its forms;
- Target 8.8: protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants.

Unfortunately, while progress toward Goal 8 has been made, it "is slowing down in many areas of the world."[7] Unemployment is far too high in many countries and gender wage gaps continue to persist around the world.[8] As many of the SDGs are linked, failure to make progress on Goal 8 can severely impact progress on other key goals, including Goals, 1, 3, 6, 10 and 16.[9] The following looks at

[1] UN: *Transforming Our World: the 2030 Agenda for Sustainable Development*, General Assembly, 70th Session, A/RES/70/1, 21 October 2015, pg. 1.
[2] UN: *Transforming Our World: the 2030 Agenda for Sustainable Development*, General Assembly, 70th Session, A/RES/70/1, 21 October 2015, pg. 2.
[3] UN: *Transforming Our World: the 2030 Agenda for Sustainable Development*, General Assembly, 70th Session, A/RES/70/1, 21 October 2015, pg. 1.
[4] UN: *Transforming Our World: the 2030 Agenda for Sustainable Development*, General Assembly, 70th Session, A/RES/70/1, 21 October 2015, pg. 2.
[5] UN: *Transforming Our World: the 2030 Agenda for Sustainable Development*, General Assembly, 70th Session, A/RES/70/1, 21 October 2015, pg. 1.
[6] ILO, *The 2030 Development Agenda: Targets for Goal #8: Decent Work and Economic Growth.*
[7] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. X.
[8] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. X.
[9] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. XI.

key issues, progress made and steps taken to achieve Goal 8 as it applies to three key groups: youth, women and migrants.

YOUTH

Target 8.6 of Goal 8 states "by 2020, substantially reduce the proportion of youth not in employment, education or training (NEET)."[10] However, despite the best efforts of the international community, progress has been slow to achieve this target. As of 2018, 64 million young men and women aged 15-24 were unemployed – a rate of 12.6% - which is three times higher than the unemployment rate of adults.[11] Globally, young people aged 15-29 years face major decent work deficits and are disproportionately affected by unemployment and low-quality jobs. In 2018, one fifth of youth were not in employment, education or training (NEET), meaning they were not gaining any professional experience or acquiring skills through educational or vocational programmes,[12] which reduces their future chances of finding employment. Unfortunately, the global NEET rate has only reduced by 2% since 2005, meaning there is a long way to go to secure sustainable work for all youth.

WOMEN

Young women face substantially higher rates of unemployment than young men, at a rate of 30% compared to 13% for men in 2018[13]. These rates vary by region but while NEET rates for young men remain constant, NEET rates for women vary drastically. For example, in Southern Asia and Arab States, the female NEET rate is more than 40% compared to less than 15% for men[14]. While NEET rates for young men are typically a problem of unemployment, the reason for high NEET rates for young women are more complicated. Women in many regions are still battling decades-old social or cultural norms that pressure young women into early marriage or prevent married women from entering into or continuing, paid employment[15].

[10] 2030 Development Agenda, *Targets for Goal 8*.
[11] HLPF on Sustainable Development, *Discussion on SDG 8 – Decent Work & Economic Growth*.
[12] "Progress of Goal 8 in 2019"
[13] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. 19.
[14] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. 19.
[15] ILO, *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*, pg. 19.

Women of all ages face numerous challenges in achieving full and productive employment. In 2018, 1.3 billion women were employed compared to 2 billion men; women are 26% less likely to be employed than are men.[16] Unpaid care work is the main reason why women are not part of the global labor force; currently, 21.7% of women perform unpaid care work on a full-time basis, compared to 1.5% of men.[17] Millions of women who are willing and able to engage in employment are remaining at home to act as caregivers, eliminating them from the global economy. The second reason for the large difference in employment rates is education. Globally, 31.6% of adult women have less than a primary level education, compared to 21.9% of men; in low-income countries, these rates are doubled.[18] Education is critical to strengthening key skills and competencies that are needed for employment and a lack of these skills is a major hindrance in finding decent work. Countries need to focus on increasing access to education for women, and providing lifelong learning initiatives such as training programs to ensure women are equipped with the skills and knowledge needed to succeed in the workforce.

Women also continue to be victims of a gender wage gap, on average earning only 80% of men for performing the same work[19]. Reasons for this abound but include social and cultural norms and lack of access to education. Women also face significant "motherhood penalties"; for example, in 2015, 45.8% of mothers with young children (ages 0-5 years) were employed compared to 53.2% of women without children.[20]

Compared to men, women are more likely to be engaged in informal employment -- 90% of countries in Sub-Saharan Africa, 89% of countries in Southern Asia, and 75% of Latin American countries.[21] Moreover, women in informal employment, such as domestic or care-based work are not afforded the same protections and rights as if they were in full-time employment.

To protect the rights of women in the workplace, countries should work toward enacting legislation that establishes equal rights for women and prohibits discrimination. Countries that have not

[16] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 12.
[17] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 13.
[18] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 32.
[19] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 22.
[20] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 14.
[21] ILO, *A Quantum Leap for Gender Equality: For a Better Future of Work for All*, 7 March 2019, pg. 12.

done so should ratify ILO Convention No. 111 of 1958 which prohibits employment discrimination on the basis of sex,[22] and ILO Convention No. 100 of 1953, which calls for equal pay for women and men workers for work of equal value.[23]

MIGRANTS

The combination of increased conflicts and a growing economic divide around the world has led to a steep rise in migration. In 2015, there were 244 million international migrants, a massive 41% increase since 2000.[24] The majority of this increase – 57% - stems from higher levels of South-South migration,[25] or migration between developing countries. There are many reasons why migrants uproot themselves and their families in search of a better life, but the most critical is the search for decent work. Of the 244 million international migrants in 2015, 73% were workers, representing 4.4% of the global workforce.[26]

Migrants play a critical role in the global workforce, particularly in countries with aging populations or a declining national workforce. For example, in large economies such as the United States, migrants represent 47% of the increase in the labor force. In some European countries, migrant workers represent up to 70% of an increase in the labor force.[27] In regions such as the Arab States and North America, migrants represent one-third and one-fifth of all worker,[28] respectively. These numbers provide the justification for the 2030 Development Agenda recognition of the positive contribution of migrants toward inclusive growth and sustainable development;[29] however, much remains to be done to ensure they enjoy the same rights while employed.

---

[22] ILO, *C111 – Discrimination (Employment and Occupation) Convention, 1958 (No. 111).*
[23] ILO, *C100 – Equal Remuneration Convention, 1951 (No. 100).*
[24] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 6.
[25] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 6.
[26] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 18.
[27] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 9.
[28] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 7.
[29] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pgs. 1-2.

Migrant workers are classified into two categories – skill based, who account for about one-third of all migrant workers, and non-skill based, who account for remaining two-thirds.[30] While migrant workers often suffer from inadequate social protection and are vulnerable to exploitation and human trafficking, non-skill based migrant workers are even more likely to suffer from decent work deficits, including violations of fundamental principles and rights at work. Non-skilled positions are usually associated with lower wages and, low-wage workers are more likely to experience restrictions in exercising the right to freedom of association and collective bargaining.

Countries are encouraged, as laid out in Resolution A/RES/72/179 of 29 January 2018, to establish or strengthen already existing mechanisms which allow migrants to report cases of abuse without fear of reprisal.[31] Countries that have not yet done so should consider ratifying and adhering to several ILO conventions regarding employment rights for migrant workers. Convention 97 of 1949 instructs countries to take steps to provide a free service to assist migrants with finding jobs,[32] while Convention 143 of 1975 reinforces the need to respect the basic human rights of all migrant workers.[33]

TARGET YOUTH UNEMPLOYMENT IN MOROCCO

Morocco is a prime example of a country battling high youth unemployment rates. While the overall employment rate is a moderate 10%, youth ages 15-29 are twice as likely to be unemployed[34]. The country is having a tough time keeping up with a growing workforce – each year, 240,000 people enter the workforce but only 129,000 new jobs are created[35]. As youth account for one third of the country's population and are disproportionately affected by unemployment, it was imperative for the country to create programs to decrease the rate of unemployment amongst youth.

The United States Agency for International Development (USAID), working with the Moroccan government, provided funding to create six career centers in major cities such as Tangier, Casablanca

[30] ILC.106/IV, International Labour Conference 2017, Report IV, *Addressing Governance Challenges in a Changing Labour Migration Landscape*, pg. 9.
[31] UN: *Protection of Migrants,* General Assembly, 72nd Session, A/RES/72/179, 29 January 2018.
[32] ILO, *C097 – Migration for Employment Convention, 1949 (No. 97).*
[33] ILO, *C143 – Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143).*
[34] USAID, "Employability of Youth Enhanced."
[35] USAID, "Employability of Youth Enhanced."

and Marrakech,[36] along with a virtual career center for youth who cannot visit the physical locations.[37] These career centers are designed to assist youth in their transition from education to employment while providing vocational training, work readiness training and career counseling.[38] To date, over 100,000 youth have benefitted from services provided by the Career Centers, and over 33,000 youth have received work readiness training.[39] Additionally, the Virtual Career Center has over 32,000 registered users, proving it can reach youth throughout the country.[40] Finally, and perhaps most importantly, 92% of employers are satisfied with the youth employees they have recruited through the Career Centers,[41] proving this program is sustainable and has the tools to assist youth in finding long-term employment for many years.

PROTECTING WOMEN MIGRANT WORKERS RIGHTS IN ASEAN COUNTRIES

In ASEAN countries, the European Union (EU), International Labour Organization (ILO) and UN women collaborated to launch "Safe and Fair," a program which aims to achieve safe and fair labor migration for all women in the ASEAN region.[42] Given that women and girls comprise over 70% of all victims of human trafficking,[43] it is vital to create programs that protect their human rights and allow them to achieve safe and fair employment. Safe and Fair will "strengthen rights-based and gender-responsive approaches to labour migration governance, address women migrant workers' vulnerabilities to violence and trafficking, and support access to essential services for women migrants who experienced abuse."[44] Studies have shown that migrants who migrate through irregular channels, as is common in that region, are more vulnerable to abuse, exploitation and violence; creating programs to help stop those abuses is vital.

[36] USAID, "Employability of Youth Enhanced."
[37] USAID, "USAID Career Center | Fact Sheet | Morocco"
[38] USAID, "USAID Career Center | Fact Sheet | Morocco"
[39] USAID, "USAID Career Center | Fact Sheet | Morocco"
[40] USAID, "USAID Career Center | Fact Sheet | Morocco"
[41] USAID, "USAID Career Center | Fact Sheet | Morocco"
[42] ILO, "EU, ILO and UN Women join forces to realize women migrant workers' rights and opportunities in the ASEAN region", 17 November 2017.
[43] ILO, "EU, ILO and UN Women join forces to realize women migrant workers' rights and opportunities in the ASEAN region", 17 November 2017.
[44] ILO, "EU, ILO and UN Women join forces to realize women migrant workers' rights and opportunities in the ASEAN region", 17 November 2017.

CONCLUSION

Achieving the targets of SDG 8 are more important than ever. There is substantial evidence that the presence of decent work is strongly linked to economic growth – that is, more people in decent jobs can lead to stronger and more inclusive economic growth.[45] In order for the international community's goal of shared prosperity to become a reality, larger numbers of youth, women and migrants need to find long-term, sustainable employment and enjoy the same rights once employed. Member states need to adopt legislation and/or implement programs to help bring this about.

QUESTIONS TO CONSIDER

1. What has your country done to help increase employment rates for the above at-risk populations? Can any of these policies be implemented at an international level?

2. How do the unemployment rates and trends by population group – youth, women, and migrants – in your country compare to the international trends listed above?

3. How has your country progressed toward achieving SDG 8 based on the targets outlined above? What are some challenges that remain?

4. How can your country harness NGOs, the private sector and other national organizations to make progress toward these goals?

5. In 2016, 61% of workers globally were engaged in informal employment that lacks adequate protections for basic rights at work. What steps has or can your country take to reduce the rate of informal employment?

[45] *SDG 8: Draft Concept Note*, 15 February 2019.

BIBLIOGRAPHY

USAID, "USAID Career Center | Fact Sheet | Morocco" https://www.usaid.gov/morocco/fact-sheets/career-center-increase-moroccan-youth-employability

USAID, "Employability of Youth Enhanced." https://www.usaid.gov/morocco/fact-sheets/employability-youth-enhanced

ILO, SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, Draft Concept Note, 15 February 2019.

ILO, C143 – Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143).

ILO, C097 – Migration for Employment Convention, 1949 (No. 97).

UN: Protection of Migrants, General Assembly, 72nd Session, A/RES/72/179, 29 January 2018.

ILC.106/IV, International Labour Conference 2017, Report IV, Addressing Governance Challenges in a Changing Labour Migration Landscape.

ILO, C100 – Equal Remuneration Convention, 1951 (No. 100).

ILO, C111 – Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

ILO, A Quantum Leap for Gender Equality: For a Better Future of Work for All, 7 March 2019.

ILO, Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity.

ILO, 2030 Development Agenda, Targets for Goal 8. https://www.ilo.org/global/topics/sdg-2030/goal-8/WCMS_403787/lang--en/index.htm

United Nations, Sustainable Development Goals Knowledge Platform, Progress of Goal 8 in 2019. https://sustainabledevelopment.un.org/sdg8

HLPF on Sustainable Development, Discussion on SDG 8 – Decent Work & Economic Growth.

ILO, The 2030 Development Agenda: Targets for Goal #8: Decent Work and Economic Growth.

UN: Transforming Our World: the 2030 Agenda for Sustainable Development, General Assembly, 70th Session, A/RES/70/1, 21 October 2015.

ILO, "EU, ILO and UN Women join forces to realize women migrant workers' rights and opportunities in the ASEAN region", 17 November 2017. https://www.ilo.org/asia/media-centre/news/WCMS_598466/lang--en/index.htm

PROVIDING SUSTAINABLE AND RESILIENT INFRASTRUCTURE

Paris Thomas, Whittier College
MUNFW 70th Session – Second Committee

As the developed world continues to lead the race towards progressive social, technological, and economic advancement, the developing world and their dire needs are being forgotten. Sustainable Development Goal 9 (SDG 9) calls on the international community to build resilient infrastructure, promote sustainable industrialization, and foster innovation for their global neighbors who are struggling to achieve these basic human necessities. Infrastructure provides the essential physical systems and structures required to operate society and enterprises. Industrialization strengthens and promotes economic growth, allows for the creation of jobs, and thus reduces poverty. Innovation allows for the advancement of technological capabilities within the industrial sectors and expands the development of new skills.

The facts and figures[1] reflecting this global crisis are notable. Currently, 2.3 billion people lack access to basic sanitation. Four billion people do not have access to the internet, ninety percent of this population is found in the developing world. 2.6 billion global citizens are without constant and consistent access to electricity. Thirty per cent of agricultural products in developing countries undergo industrial processing in comparison to 98 per cent in high income countries. As it stands, the world-wide renewable energy sector employs 2.3 million people, yet this employment number could easily reach 20 million by the year 2030. In low income countries, particularly African countries, infrastructure constraints cut business productivity by 40 per cent.

Sustainable Development Goal 9[2] has laid out several key targets that will promote progress over the next several years:

[1] "Goal 9: Industry, innovation and infrastructure": United Nations Development Program https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-9-industry-innovation-and-infrastructure.html

[2] "SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation": SDG Compass https://sdgcompass.org/sdgs/sdg-9/

- 9.1 Pursue the development of quality, reliable, sustainable and resilient infrastructure, both regional and transborder which will aid in supporting developing economies, preserve human well-being, and contribute to the development of affordable and equitable access for all.
- 9.2 Promote inclusive and sustainable industrialization, and by 2030 raise industry's share of employment and gross domestic product (GDP) while remaining in line with national circumstances and doubling its share in least developed countries (LDCs).
- 9.3 Aim to increase access to financial services, such as affordable credit and integration into value chains and markets, for small-scale industries and enterprises.
- 9.4 By 2030 make infrastructure and industries sustainable by upgrading and retrofitting, as well as increase resource use efficiency and adopt cleaner and more environmentally friendly technologies and industrial processes. Each country acting may do so in accordance with their individual capabilities.
- 9.5 Enhance scientific research by 2030 by increasing the technological capabilities of industrial sectors in all affected countries through encouraging innovation and multiplying the number of Research and Development workers as well as multiplying the public and private research and development spending allowance.
- 9.6 Expand financial, technological and technical support to African countries, least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS), as a means of facilitating the development of sustainable and resilient infrastructure.
- 9.7 Prioritize the development of domestic technology and growth of research and innovation in developing countries by ensuring beneficial policies for, inter alia, industrial diversification and value addition to commodities.
- 9.8 Increase equitable access to information and communications technology, while delivering universal and affordable Internet access to LDCs by 2020.

Addressing the infrastructure, industrialization and innovation shortcomings in low-income countries through the goals of SDG 9 can have a great impact on the social and financial capital of developing international communities.

LEAST DEVELOPED COUNTRIES (LDCS)

The Least Developed Countries[3] (LDCs), a category established by the United Nations in 1971, are the poorest and most vulnerable members of the international community. LDCs are home to approximately 880 million people, making up 12 per cent of the world population. Yet, LDCs are responsible for contributing less than 2 per cent of the world's GDP and about 1 per cent of trade.

Currently, 47 countries are recognized as LDCs. This includes 33 African countries, 13 in Asia and the Pacific, and 1 Latin American country. South Sudan was recently added to this community. A few notable LDCs[4] include Afghanistan (also categorized as an LLDC), Bangladesh, the Democratic Republic of the Congo, Haiti (also categorized as a SIDS) Liberia, Myanmar, and theUnited Republic of Tanzania.

Fragile institutional capacities, high levels of income inequality, and a scarcity of domestic financial resources contribute to the low level of socio-economic development within these countries. LDCs often suffer from political instability and internal and external conflict and are increasingly dependent on natural resources, further increasing instability and limiting development. Along with slow economic growth, poverty and other social disparities, hunger and malnutrition are some of the most widespread humanitarian crises found in LDCs.

The First United Nations Conference on LDCs was held in Paris in 1981. United Nations delegates met with the intent to bring awareness and an action plan to the socio-economic conditions of the most vulnerable LDCs. The "Substantial New Programme for Action for the 1980s for the LDCs" was adopted, granting the United Nations and involved parties authority to continue pursuing efforts

[3] "About LDCs": UN-OHRLLS http://unohrlls.org/about-ldcs/
[4] "LDCs At A Glance": Economic Analysis & Policy Division https://www.un.org/development/desa/dpad/least-developed-country-category/ldcs-at-a-glance.html

to enact special measures for LDCs. The Second United Nations Conference on the LDCs," held in Paris in 1990, adopted the "Paris Declaration" and the "Programme of Action for the LDCs for the 1990s," granting further permissions.

In 2001, the first long-term action plan, the "Brussels Programme of Action for the LDCs for the Decade 2001 – 2010" alongside the "Brussels Declaration," were adopted at the Third United Nations Conference on the LDCs, hosted by the European Union. Under General Assembly Resolution 56/227, the United Nations Office of the High Representative for LDCs, LLDCs and SIDS was established. The office's original mission was to monitor follow-up, implementation and review of the goals established in the "Brussels Programme of Action for the LCDs for the Decade 2001 – 2010."

The United Nations held its fourth conference on the LCDs in Istanbul in 2011, where the "Istanbul Programme of Action"[5] was adopted. This result-oriented 10-year plan established ambitious goals for LDCs to graduate from their category by 2020. With attendance from over 8,900 individuals, the Istanbul Conference represented the global community's largest gathering around LDCs, supporting necessary developments in infrastructure, innovation and industrialization. The LDC conferences and programme adoptions have created a strong foundation for the framework of Sustainable Development Goal 9.

LANDLOCKED DEVELOPING COUNTRIES (LLDCS)

Landlocked Developing Countries[6] (LLDCs) are defined by their lack of access to the sea, which causes isolation from world markets and high transit costs, resulting in constraints on socio-economic development. Due to this geographic disadvantage, LLDCs are among the poorest, most vulnerable, and highly dependent developing countries. To date, 32 countries are categorized as LLDCs, with 17 of them also falling under the LDC category.[7]

[5] "A/CONF.219/3/Rev.1" Fourth United Nations Conference on the Least Developed Countries http://unohrlls.org/UserFiles/File/IPoA.pdf
[6] "About the Landlocked Developing Countries (LLDCs)": UN-OHRLLS http://unohrlls.org/about-lldcs/
[7] "Country Profiles": UN-OHRLLS http://unohrlls.org/about-lldcs/country-profiles/

Kazakhstan is the most distant LLDC with a location of 3,750 kilometers from the nearest coast. Afghanistan, Chad, Niger, Zambia and Zimbabwe are next to Kazakhstan with a 2,000 kilometer journey. Transit times are excessively long, especially when met with difficult terrain, unsatisfactory road and railway conditions, and inefficient transport options. According to the United Nations Conference on Trade and Development (UNCTAD), based on a report done by the International Monetary Fund (IMF), transit costs are higher and less affordable than tariffs for LLDCs.

The International Ministerial Conference of Landlocked and Transit Developing Countries and Donor Countries met in Kazakhstan in 2003 with the International Financial and Development Institutions on Transit Transportation Cooperation to discuss the geographical and financial constraints on the socio-economic development of LLDCs. The conference established the "Almaty Programme of Action: Addressing the Special Needs of Landlocked Developing Countries within a New Global Framework for Transit Transport Cooperation for Landlocked and Transit Developing Countries" and the "Almaty Ministerial Declaration."

Much of the United Nations support for LLDCs falls under the jurisdiction of the United Nations Office of the High Representative for LDCs, LLDCs and SIDS, established by the General Assembly Resolution 56/227. However, the United Nations also maintains the Bureau of the Group of Landlocked Developing Countries to handle the local pressing issues of LLDCs[8].

SMALL ISLAND DEVELOPING STATES (SIDS)

Small Island Developing States[9] (SIDS) are another group of developing countries facing social, economic and environmental disadvantages. In June of 1992, at the United Nations Conference on Environment and Development[10] (UNCED), otherwise known as the Earth Summit, SIDS were first recognized by the United Nations in an official capacity. Agenda 21, Chapter 17 G,[11] declares the United Nations recognition of the Alliance of Small Island States (AOSIS), a body composed of 38 Member

[8] "Bureau of the Group of Landlocked Developing Countries": UN-OHRLLS http://unohrlls.org/about-lldcs/bureau-of-the-lldc-group/
[9] "About the Small Island Developing States" UN-OHRLLS http://unohrlls.org/about-sids/
[10] "UN Conference on Environment and Development (1992)" Earth Summit https://www.un.org/geninfo/bp/enviro.html
[11] "A/CONF.151/26 (Vol.II)" Conference on Environment and Development" https://www.un.org/Depts/los/consultative_process/documents/A21-Ch17.htm

States. Other members of AOSIS include non-United Nations Member States that are either non-self-governing or non independent territories.

Individual SIDS belong to three different geographic locations, with each represented by its own regional body. The Caribbean region is represented by the Caribbean Community (CARICOM); the Pacific region by the Pacific Island Forum (PIF); and the Atlantic Ocean, Indian Ocean, Mediterranean Sea and China Sea (AIMS) by the Indian Ocean Commision (IOC). There are further sub-regional divisions with similar operations concentrated at the local level. The Bahamas, Fiji, Jamaica, Singapore, and Tonga are a few of the United Nations recognized SIDS.[12]

SIDS face many of the same constraints as LLDCs due to their remote and subdued locations. Their resource bases are narrow leaving their economies and markets reliant on external and remote sources. Costs for energy, transportation, communication services, and infrastructure continue to increase as they are limited in their ability to stay parallel with the modernizing world. Not only are SIDS vulnerable to their dependence on the public sector with limited advancements in the private sphere, but they are the most affected by natural disasters. High costs for infrastructure plays a detrimental role in SIDS' capacity to combat prevalent environmental distress. SDG 9 stresses the urgency to create resilient infrastructure, largely due to worsening environmental factors and the increasingly traumatic impacts on SIDS.

Since 1992 the United Nations has dedicated programmes and assistance to aid SIDS in their efforts to increase development and independent socio-economic security. The "Programme of Action for Sustainable Development of Small Island Developing States" (BPOA)[13] was adopted at the 1994 Global Conference in Barbados. BPOA symbolized the United Nations resolve to assist and extend cooperation to SIDS as they strive to achieve their respective sustainable development goals. The BPOA was revisited and revised at the 22nd Special Session of the General Assembly. Later, the

[12] "UN Members": UN-OHRLLS http://unohrlls.org/about-sids/country-profiles/
[13] "Programme of Action for the Sustainable Development of Small Island Developing States": Barbados Programme of Action http://unohrlls.org/UserFiles/File/SIDS%20documents/Barbados.pdf

ten year review held in 2005 in Mauritius, changed the programme name to the "Mauritius Strategy for Implementation of the Programme of Action for the Sustainable Development of SIDS" (MIS).[14]

In 2014, the United Nations commitment to the sustainable development of SIDS was reaffirmed at the Third International Conference on SIDS. The international community created the "SIDS Accelerated Modalities of Action Pathway" (SAMOA),[15] a plan that relates to many of the SDG 9 goals directly affecting the progress of SIDS. Like the LDCs and LLDCs, SIDS are represented on a macro scale within the international community by the United Nations Office of the High Representative for LDCs, LLDCs and SIDS.

PROGRESS OF SDG 9

Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, the heart of Sustainable Development Goal 9, seem to be moving at a slow pace. Developing a strong socio-economic foundation for the most vulnerable places within the international community is a process that will take time, consistency and tenacity. Since the conception of the SDGs in 2015, Goal 9 has met great vicissitude.

Despite some shortcomings, there were still several points of progress in 2016. Manufacturing was found to contribute 10 to 30 per cent to the GDPs of developing countries, and employment through manufacturing has been steadily increasing. In LDCs, agriculture and other traditional sectors have remained reliable as the main source of employment. Further, global carbon dioxide emissions have continued to show a 30 per cent decrease since 1990. Additionally, the official flows for economic infrastructure in developing regions reached 59.5 billion dollars, with transport and energy receiving the most financial assistance. Information and communications infrastructure continued to spread rapidly with greater access to mobile cellular phones and services.

[14] "A/CONF.207/11": Report of the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of SIDS http://unohrlls.org/UserFiles/File/SIDS%20documents/mauritius.pdf
[15] "SIDS Accelerated Modalities of Action (S.A.M.O.A.) Pathway": UN-OHRLLS https://unohrlls.org/custom-content/uploads/2015/01/SAMOA-Pathway.pdf

The 2017 report found a continuation of improvements, particularly in manufacturing. The United Nations recommitted to investment in LDCs to build the necessary infrastructure to ensure the doubling of industry's shares of GDP by 2030.[16]

LDCs, LLDCs, and SIDS had contributed 1 to 2.7 per cent of the 2.7-billion-dollar industry of global transportation services; this grew to 3.5 per cent of the global GDP. As manufacturing increased to 16.2 per cent of the global GDP, LDCs continued their efforts to lessen the equity gap, closing it from 4,621 dollars (Europe and North America) to 100 dollars (LDCs) per capita. Production of technologically complex commodities reached 10 per cent of total manufacturing output in LDCs. Global emissions of carbon dioxide maintained their general decline, with Europe and North America reaching 36 per cent decreases in their emissions intensity level. Investments in research and development, as well as official development assistance for economic infrastructure exhibited modest growth. Mobile cellular services prevailed in their efforts to provide unconnected areas with access to the global information community by bringing mobile cellular signals to 85 per cent of people in LDCs and other vulnerable regions.

2018 witnessed continuous progress in manufacturing, technology and decreasing carbon intensity. To achieve the inclusive and sustainable industrialization outlined in the goals of SDG 9 for developing countries, the United Nations stressed the need for competitive economic forces to drive up employment and income, facilitate international trade, and commission the efficient use of resources.[17]

The global economic environment of 2019 has not proved favorable for Sustainable Development Goal 9's expeditious growth. Most pressing are the concerns about the ability of LDCs, LLDCs, SIDS, and other developing countries who are disadvantaged, to double their manufacturing

[16] "Progress of Goal 9 in 2017": United Nations Sustainable Development Goals' Knowledge Platform https://sustainabledevelopment.un.org/SDG9
[17] "Progress of Goal 9 in 2018": United Nations Sustainable Development Goals' Knowledge Platform https://sustainabledevelopment.un.org/SDG9

industry's share of GDP by 2030 and increase investments in scientific research and innovation to the global average, where it currently remains far below.[18]

Manufacturing has noticeably slowed in both developing and developed countries. For the last year, the global share of GDP regarding manufacturing fomr developing countries has been stalled at 16.5 per cent due in large to emerging trade and tariff barriers constricting investment and economic growth. With LDCs already bringing in the lowest share of the global GDP, this is the most prominent concern for SDG 9's 2030 manufacturing goals. Additionally, the share of manufacturing employment in total employment has been consistently declining and currently stands at 14.2 per cent. Developing countries have struggled to keep up with the increasing average global investment of GDP in research and development. Presently, the average stands at 1.68 per cent. Europe and North America are above average, contributing 2.21 per cent, while developing regions fell short of the average, allocating approximately 1.2 per cent.[19]

Though there has been a slow down in manufacturing and unsatisfactory investments in research and development, there are several positive signs for SDG 9. With manufacturing stalled, the intensity of global carbon dioxide emissions from manufacturing industry has continued its decline. GDP has experienced growth from this environmental achievement. Developing regions have moved away from agriculture and low -value added manufacturing productions towards high-value added productions like technology. LCDs have since generated 10.4 per cent of the global manufacturing value added in this market. Despite the limited fiscal endowment in research and development, employment within this field has been steadily rising, especially in developing regions. In sub-Saharan Africa, researchers per million inhabitants is currently 91, while previously the rate was 63.

International maritime freight transport has increased to an estimated 3.7 per cent globally, with more than 80 per cent of world merchandise trade by volume transported by sea. This represents tangible hope for economic development in SIDS particularly, as efficient transportation services are

[18] "Progress of Goal 9 in 2019": United Nations Sustainable Development Goals' Knowledge Platform https://sustainabledevelopment.un.org/SDG9
[19] Ibid.

key drivers of these efforts. Growth of international maritime transit will provide new capacities for socio-economic forward movement in these dependent areas. Moreover, progress for communication and mobile connectivity equality is making rapid strides. 90 per cent of people in the world are living within range of 3G – quality or higher mobile network. Mobile cellular services are growing at a rate more rapidly than the internet. While Sustainable Development Goal 9 may be facing serious challenges to key goals due to the vulnerabilities and disadvantages of the regions they serve, significant progress has been made.

WHAT WE CAN DO

The Sustainable Development Goals call on the international community to leave no one behind. Despite the progress in global socio-economic development, humanitarian crises continue and climate change is presenting new challenges. The Secretary-General's annual report (A/74/81–E/2019/60)[20] reemphasizes the need to address food insecurity, famine, forced displacement, and environmental impacts and disasters. The commitment of Goal 9 to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation is essential to the future of long-term promotion of human rights, humanitarian assistance and human independence.

Climate-change related impacts and disasters are major contributors to humanitarian crises that continue to affect vulnerable and disadvantaged regions. To achieve the primary goals of SDG 9, the international community will need to get ahead on preventative and reactive responses to the socio-economic fallouts caused by climate change disasters. SDG 9 calls on the international community to implement more protocols and frameworks for environmental protection keeping in mind the The Kyoto Protocol,[21] which committed the global community to reduce gas emissions in

[20] "A/74/81–E/2019/60": Strengthening of the coordination of emergency humanitarian assistance of the United Nations - Report of the Secretary-General https://reliefweb.int/report/world/strengthening-coordination-emergency-humanitarian-assistance-united-nations-report-13
[21] "Kyoto Protocol - Targets for the first commitment period": United Nations Climate Change https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period

1992, and the Sendai Framework for Disaster Risk Reduction,[22] which recognizes the State as the primary party responsible for disaster risk reduction.

Building new markets in developing nations that are not commodity based will play a crucial role in LDCs, LLDCs, and SIDS. Manufacturing is a key factor in achieving socio-economic stability in developing nations; however, their markets need to be sustainable. With the pressing crises of climate-change, agricultural, oil, or fish dependent markets in disadvantaged regions are in a predicament. By devising economic strategies that promote industries without a commodity, such as transit or outsourced manufacturing arrangements as seen in Ethiopia, developing countries can become more active in the global economy. In order to build these strategies and networks, investments in research and development will have to come first.

Encouraging a more inclusive global economy through accessible trade options and international investments will ensure the growth of developing economies and markets. The endorsement of Free Trade (monitored by the World Trade Organizations)[23] breaks down financially derailing trade barriers. Trade barriers can be detrimental to the developing world's economies' need to grow faster and have the poor benefit from this growth. Free trade removes the financial barriers underdeveloped economies and populations cannot afford, while allowing for these economies to grow at a faster rate. China and India are two examples of nations seeing positive effects on their economic growth as a result of this trading trend. Economists concur that free trade provides the opportunity for direct nonpolitical investment of rich countries into regions in need.

Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation requires trial and error, consistency, and international cooperation. Progress has been made thus far, but as the world evolves both physically and socially, there is always more to be done. The time has come, now more pressing than ever, for the international community to fully embrace the challenge with unremitting dedication and service.

[22] "Sendai Framework for Disaster Risk Reduction": United Nations Office for Disaster Risk Reduction https://www.unisdr.org/we/coordinate/sendai-framework
[23] "Overview": World Trade Organization https://www.wto.org/english/thewto_e/whatis_e/wto_dg_stat_e.htm

QUESTIONS TO CONSIDER

1.How can Member States increase affordable transporting options for SIDS and LLDCs?

2. What markets have the greatest potential to bring sustainable economic solutions?

3. In what ways can Sustainable Development Goal 9 be revised to make sure "no one is left behind?"

4. Are there pressing concerns related to Goal 9 that have gone unaddressed?

5. What incentives can the United Nations provide to increase the international community's investment in building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation?

6. With the climate-change crisis becoming more impactful on the well being and independence of societies and economies in LDCs, LLDCs, and SIDS, how can the international community better support and protect them?

7. How has your country assisted in supporting the achievement of the key targets of SDG 9? What more can it do?

BIBLIOGRAPHY

"Goal 9: Industry, innovation and infrastructure." UNDP, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-9-industry-innovation-and-infrastructure.html.

"SDG 9: Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation." SDG Compass, sdgcompass.org/sdgs/sdg-9/.

"About LDCs - UN-OHRLLS." UN, unohrlls.org/about-ldcs/.

"LDCs at a Glance | Economic Analysis & Policy Division." United Nations, United Nations, www.un.org/development/desa/dpad/least-developed-country-category/ldcs-at-a-glance.html.

"'A/CONF.219/3/Rev.1' Fourth United Nations Conference on the Least Developed Countries." United Nations, unohrlls.org/UserFiles/File/IPoA.pdf.

"About LLDCs - UN-OHRLLS." UN, unohrlls.org/about-lldcs/.

"Country Profiles - UN-OHRLLS." UN, unohrlls.org/about-lldcs/country-profiles/.

"Bureau of the Group of Landlocked Developing Countries - UN-OHRLLS." UN, unohrlls.org/about-lldcs/bureau-of-the-lldc-group/.

"About SIDS - UN-OHRLLS." UN, unohrlls.org/about-sids/.

"Earth_Summit." United Nations, United Nations, www.un.org/geninfo/bp/enviro.html.

"Agenda 21 - Chapter 17." United Nations, United Nations, www.un.org/Depts/los/consultative_process/documents/A21-Ch17.htm.
"Country Profiles - UN-OHRLLS." UN, unohrlls.org/about-sids/country-profiles/.

"Programme of Action for the Sustainable Development of Small Island Developing State." UN Barbados Programme of Action, unohrlls.org/UserFiles/File/SIDS%20documents/Barbados.pdf.

"Report of the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of SIDS." UN , unohrlls.org/UserFiles/File/SIDS%20documents/mauritius.pdf.

"SIDS Accelerated Modalities of Action (S.A.M.O.A.) Pathway." UN-OHRLLS, unohrlls.org/custom-content/uploads/2015/01/SAMOA-Pathway.pdf.

"Progress of Goal 9 in 2016: Sustainable Development Knowledge Platform." United Nations, United Nations, sustainabledevelopment.un.org/sdg9.

"Progress of Goal 9 in 2017: Sustainable Development Knowledge Platform." United Nations, United Nations, sustainabledevelopment.un.org/sdg9.

"Progress of Goal 9 in 2018: Sustainable Development Knowledge Platform." United Nations, United Nations, sustainabledevelopment.un.org/sdg9.

"Progress of Goal 9 in 2019: Sustainable Development Knowledge Platform." United Nations, United Nations, sustainabledevelopment.un.org/sdg9.

"Strengthening of the Coordination of Emergency Humanitarian Assistance of the United Nations - Report of the Secretary-General (A/74/81–E/2019/60) [EN/AR/RU] - World." ReliefWeb, reliefweb.int/report/world/strengthening-coordination-emergency-humanitarian-assistance-united-nations-report-13.

"Kyoto Protocol - Targets for the First Commitment Period." UNFCCC, unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period.

"Sendai Framework for Disaster Risk Reduction." UNDRR News, www.unisdr.org/we/coordinate/sendai-framework.

"WORLD TRADE ORGANIZATION." WTO, www.wto.org/english/thewto_e/whatis_e/wto_dg_stat_e.htm.

MANAGING AND PRESERVING NATURAL RESOURCES WHILE REDUCING WASTE GENERATION

Eliott Bergerson, Whittier College
MUNFW 70th Session – Second Committee

During your lifetime, it is possible that the world may run out of some nonrenewable resources, especially as the population passes eight then nine billion people. So it is necessary to try to make these resources last as long as possible.

Achieving economic growth and sustainable development requires that we urgently reduce our ecological footprint by changing the way we produce and consume goods and resources. Across the world, countries use different resources with a varying degree of extraction, use, and management. The most prominent resources that this paper will focus on will be, oil, natural gas, timber, and water as they are the most vital and consumed resources in the world today. By focusing on these four major resources, we can develop a more ethical approach to extracting, using, and managing how we use the world's resources. However, it is encouraged to go beyond these four resources and research other important impacts that countries have caused due to natural resource extractions.

OIL

Global oil demand rose by 1.3% in 2018,[1] led by strong growth in the United States. The United States and China showed the largest overall growth, while demand fell in areas like Japan and Korea and was stagnant in parts of Europe.

The United States showed the largest overall growth at 540 kb/d (thousand barrels per day).[2] The strong expansion of petrochemical demand in the United States boosted consumption, which also benefited from a rise in industrial production and very strong demand for trucking services.

Oil demand in China was up by 445 kb/d, or 3.5%,[3] with the rate of growth slowing down as the country moved toward a less oil-intensive model of development and curbed vehicle use to improve

[1] "Global Energy & CO2 Status Report." *GECO 2019*, https://www.iea.org/geco/.
[2] "Global Energy & CO2 Status Report." *GECO 2019*, https://www.iea.org/geco/.
[3] Ibid.

urban air quality. Environmental policies have reduced diesel demands, as provincial governments are keen to develop cleaner transport fuels or electric buses. As the world's largest auto market, total passenger car sales in China fell 4.1% in 2018 from the previous year's record sales. Meanwhile, electric passenger car sales have more than doubled from around 600,000 in 2017 to over 1.2 million in 2018.[4]

Indian oil demand grew 5% in 2018 compared to 2017,[5] a year when demand was lower due to the impact of the implementation of the Goods and Service Tax and demonetisation. However, the sharp increase in oil prices in 2018, which was amplified by currency deterioration, contributed to a slowing of growth. Rapid industrialisation and the fast pace of growth in vehicle fleets have caused severe air quality problems, and policies are being put in place to try to tackle the problem.

Oil demand in Japan continued to contract, assisted by energy efficiency efforts in industry and transport and the reduced use of oil-based electricity generators as four nuclear reactors came back online for the first time since the Fukushima Daiichi accident in 2011. Demand also contracted in Korea, especially in the power sector where there was a significant shift in generation from oil to gas.

European oil demand remained stagnant due to slowing economic activity and rising prices. Germany saw an important decline in oil demand, falling by 135 kb/d or 5.4% in 2018. But oil demand in Eurasia rose strongly on a rebound in Russian oil demand, comprising more than 80% of the Eurasia total in 2018. Helped by strong car sales, Russian gasoline demand rose slightly in 2018 after three years of decline. Kerosene demand grew as a result of increased air traffic.[6]

In Africa, low economic growth in South Africa and a switch to natural gas in Egypt put a cap on demand growth in 2018. Egypt started production at Eni's supergiant Zohr gas field in December 2017, displacing oil used in the power sector.

Oil demand in Latin America continues to suffer from economic difficulties in Argentina, Venezuela and Brazil. After two years of steady decline, Brazil's oil demand returned to modest

[4] Ibid.
[5] Ibid.
[6] "Global Energy & CO2 Status Report." *GECO 2019*, https://www.iea.org/geco/.

growth in 2017 as the economy emerged from a deep recession. Argentina's oil demand collapsed in 2018 as GDP fell by 2.6%, and Venezuela's GDP fell by 18% in 2018 with oil demands also declining.[7]

The Middle East saw a large decline in oil demand in 2018 mainly due to the sharp drop in Saudi Arabia's demand, which resulted from less construction activity, a price reform, a switch to natural gas in the power sector, and high emigration. In January 2018, the government more than doubled the price of gasoline.

NATURAL GAS

Natural gas consumption grew by an estimated 4.6% in 2018[8], its largest increase since 2010 when gas demand bounced back from the global financial crisis. This second consecutive year of strong growth, following a 3% rise in 2017, was driven by growing energy demand and substitution from coal. The switch from coal to gas accounted for over one-fifth of the rise in gas demand. Even though global coal demand grew for a second year in 2018, its role in the global mix continued to decline.

The United States and China together accounted for 70% of the global growth, which was driven by a strong global economy and by substitution from coal. The switch from coal to gas was responsible for nearly 40 bcm (billion cubic meters) of the increase in gas, more than one-fifth of the total extra demand.

The United States was the single largest driver of higher demand, with a gain of 80 bcm or up 10.5%[9] from the previous year, its highest increase since the early 1950s. This higher consumption absorbed the majority of the growth in domestic gas production, which also hit record levels in 2018.

Gas demand in China increased by almost 18%, or 42 bcm, the fastest growth rate since the introduction of its 13th Five-Year Plan (2016-2020)[10] due to its more ambitious promotion of the use of natural gas relative to previous plans. Gas now accounts for 8% of primary demand in China, double its

[7] Ibid.
[8] "Global Energy & CO2 Status Report." *GECO 2019*. https://www.iea.org/geco/.
[9] Ibid.
[10] Ibid.

share at the start of the decade. The country became the world's largest natural gas importer in 2018, ahead of Japan, and was the second-largest contributor in volume to global demand growth after the United States. This results from the country's policy framework in favor of cleaner energies (known as the "Three-Year Action Plan for Winning the Blue Sky War") and by restricting the use of coal boilers for industrial and residential use. Across all sectors, the switch from coal to gas contributed 17 bcm to demand growth.

In the Asia-Pacific region, natural gas demand was also pushed by growing industry and power generation needs in South Asia as well as by nuclear reactor shutdowns in South Korea.

In the Middle Eastern and North African oil and gas producing countries, reducing oil burn for power generation through the development of natural gas-fired combined cycles contributed to the global gas demand trend. Egypt achieved self-sufficiency in its gas supply in late 2018 and inaugurated the world's largest combined cycle gas-fired power plant, with a capacity of 14.4 GW.[11] In Iran, the region's largest natural gas consumer, consumption growth is driven by power generation growth and the phasing out of fuel oil burn.

After several years of decline, consumption rose in Russia for a third consecutive year. The increase in gas sales was driven mainly by power generation as the use of coal for power decreased slightly. Europe as a whole experienced a decline in natural gas consumption in 2018 after two years of growth. This is partly due to the temperature sensitivity of gas demand.

Such historic demand growth in Europe was mainly driven by power generation and buildings. A colder winter and hotter summer than average was responsible for around half of the extra gas demand in both sectors. The ongoing switch from coal to gas in power generation also contributed strongly to the growth, adding 18 bcm to gas demand. The share of gas in power generation hit an all-time record of 34%.[12]

[11] "Global Energy & CO2 Status Report." *GECO 2019*, https://www.iea.org/geco/.
[12] Ibid.

DEFORESTATION

Forests cover about 30% of the planet. And the ecosystems they create play an essential role in supporting life on earth. But deforestation is clearing Earth's forests on a massive scale. At the current rate of destruction, the world's rainforest can completely disappear within 100 years. Why should we care about deforestation?

Together deforestation and agriculture are responsible for 24% of greenhouse gas emissions, making deforestation a significant contributor to climate change.[13] Deforestation impacts the amount of greenhouse gases in the atmosphere in two ways. First, when trees are cut down they release the carbon they are storing into the atmosphere. Second, trees play a critical role in absorbing the greenhouse gases that fuel global warming. Fewer forests means larger amounts of greenhouse gases entering the atmosphere, and an increased speed and severity of global warming.

In addition to helping regulate the earth's climate, forests provide habitats for over 80% of the plants and animals that live on land. But deforestation destroys these habitats, diminishing biodiversity. Some experts estimate that four to six thousand rainforest species go extinct each year. This also affects the more than two billion people who rely on forests as sources of food and shelter.

The biggest driver of deforestation is agriculture. Farmers chop down trees in order to plant crops or to make room to raise livestock. Logging operations, which provide the world's wood and paper products, also cut countless trees each year. Forests are also destroyed as a result of expanding urban living spaces. The effects of deforestation are grave, but not irreversible. Efforts such as managing forest resources, eliminating clear-cutting and planting new trees to replace those removed, are already ongoing to reduce deforestation's environmental impact on our planet. However, the recent fires in the Amazon region and parts of Africa remind us of how complex this issue is. This was reflected in the most recent address to the General Assembly by Brazil's president at

[13] Nunez, Christina. "Deforestation and Its Effect on the Planet." *Deforestation Facts and Information*, 25 Feb. 2019, https://www.nationalgeographic.com/environment/global-warming/deforestation/.

the GA's opening plenary session in which he defended Brazil's approach to the fires (See GA plenary records).

WATER

The Earth might seem like it has abundant water, but in fact less than 1% is available for human use. The rest is either salt water found in oceans, fresh water frozen in the polar ice caps, or too inaccessible for practical usage. While the demand on freshwater resources is increasing, supply will always remain constant. And although it's true that the water cycle continuously returns water to earth, it is not always returned to the same place, or in the same quantity and quality. The global demand for water has been increasing at a rate of about 1% per year over the past decades as a function of population growth, economic development, and changing consumption patterns, among other factors. It will continue to grow significantly over the foreseeable future. Industrial and domestic demand for water will increase much faster than agricultural demand, although agriculture will remain the largest user overall. The vast majority of the growth in demand for water will occur in countries with developing or emerging economies. At the same time, the global water cycle is intensifying due to climate change, with wetter regions generally becoming wetter and drier regions becoming even drier. Other global changes, like urbanisation, de-forestation, and the intensification of agriculture, add to these challenges.

The United Nations World Water Development Report, nature-based solutions for water, launched 19 March 2018, during the 8th World Water Forum, and in conjunction with World Water Day, demonstrates how nature-based solutions (NBS) offer a vital means of addressing many of the world's water challenges while simultaneously delivering additional benefits vital to all aspects of sustainable development.[14] NBS use and mimic natural processes to enhance water availability (soil moisture retention or groundwater recharge), improve water quality (natural and constructed wetlands

[14] "Water: Coordinating the UN's Work on Water and Sanitation." *UN*, https://www.unwater.org/.

or riparian buffer strips), and reduce risks associated with water-related disasters and climate change (floodplain restoration or green roofs).

Currently, water management remains heavily dominated by traditional, human-built infrastructure and the enormous potential for NBS remains unutilized. NBS include green infrastructure that can substitute, augment or work in parallel with man-made infrastructure in a cost-effective manner. The goal is to find the most appropriate blend of natural and man-made investments to maximize benefits and system efficiency while minimizing costs and trade-offs.

WASTE

Environmentally sound management of toxic chemicals is a major issue. It is essential to meet the social and economic goals of the international community. These chemicals can be used with a high degree of safety when best practices are followed. However, much remains to be done.

Two of the major problems, particularly in developing countries, are a lack of sufficient scientific information for risk assessment and a lack of resources to deal with chemicals for which data are at hand. Gross chemical contamination, with grave damage to human health, genetic structures, reproductive outcomes, and the environment, has been continuing within some of the world's most important industrial areas. Restoration will require major investment as well as the development of new techniques.

In "The Future We Want," the outcome document of Rio+20 (2012), Member States reaffirmed their commitment to achieve the sound management of chemicals throughout their life cycle and of hazardous waste in ways that lead to minimization of significant adverse effects to human health and the environment by 2020. [15]

In "Transforming our world: the 2030 Agenda for Sustainable Development," Member States re-committed to "reduce the negative impacts of urban activities and of chemicals which are hazardous for human health and the environment, including through the environmentally sound

[15] "Goal 12: Responsible Consumption and Production." *UNDP*, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-12-responsible-consumption-and-production.html.

management and safe use of chemicals, the reduction and recycling of waste and the more efficient use of water and energy."[16]

In Sustainable Development Goal 3, "Ensure healthy lives and promote well being for all at all ages," Member States decided to "by 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination." In Goal 6, "Ensure availability and sustainable management of water and sanitation for all," Member States decided to "by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally." In Goal 12, "Ensure sustainable consumption and production patterns," Member States reiterated to by 2020, "achieve the environmentally sound management of chemicals and wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment."[17]

Management of solid wastes and sewage is also an issue of concern. Solid wastes include all domestic refuse and non-hazardous wastes such as commercial and institutional wastes, street sweepings and construction debris and, in some countries, human wastes. Hazardous waste is frequently intermixed with other waste, posing particular management challenges. At the World Summit on Sustainable Development in 2002, Governments reaffirmed the importance of solid waste management.[18] They called for priority attention to be given to waste prevention and minimization, reuse and recycling. They also called for the development of environmentally sound disposal facilities, including technology to convert waste into energy.

[16] Ibid.
[17] "Goal 12: Responsible Consumption and Production." *UNDP*, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-12-responsible-consumption-and-production.html.
[18] Ibid.

CONCLUSION

Overall, why does it matter? More people globally are expected to join the middle class over the next two decades. This is good for individual prosperity but it will increase demand for already constrained natural resources. If we don't act to change our consumption and production patterns, we will cause irreversible damage to our environment. When we release carbon, for example, burning coal or driving a car, all of us pay for that in the form of things like fires, floods, and crop failures. Coming up with a solution to reduce emissions, like putting a fee on carbon, creates incentives to emit less carbon. More importantly, it also incentivizes the development of low carbon technology. By the end of this century, if emissions keep rising, the average temperature on earth could go up another four to eight degrees. There are a lot of things we could do to fix it, but none of them are free and we have to put in the work to do it.

One response of the UN has been to emphasize the need for "Ensuring access to affordable, reliable, sustainable, and modern energy for all," the title of GA resolution A/73/236. In this resolution's second operative paragraph, Member States strongly encouraged

> Governments and other relevant stakeholders to take actions to achieve universal access to affordable, reliable, sustainable and modern energy, increase the global share of new and renewable energy, improve the inclusiong of developing countries in energy sector cooperation, where relevant, and increase the rate of improvement in energy efficiency for a clean, low-emission, low-carbon, climate-resilient, safe, efficient, modern, affordable and sustainable energy system.[19]

In subsequent paragraphs the resolution stressed, inter alia, expanding the use of renewable energy, cooperation and sharing of best practices at the regional and international levels, and "integrated resource planning and management in their energy strategies" (OPs 7, 9, 11,12).[20] Delegates at this conference then cmay want to explore how to make the use of current resources more efficient and sustainable, whether resources other than those discussed in this paper should be addressed,

[19] GA A/RES/73/236
[20] Ibid.

and/or how to promote the development of renewable energy resources and provide access to these, in particular to developing countries.

QUESTIONS TO CONSIDER

1.Do you feel any other natural resources need to be addressed? (Coal, mining of valuable minerals)

2. Should the UN regulate what resources countries use?

3. How can we promote cleaner and more efficient energy sources (renewable sources, nuclear energy)? What is your country doing in this regard?

4. How should we deal with the world's increasing trash production, especially in our oceans?

5. How would these actions affect Climate Change?

BIBLIOGRAPHY

"Global Energy & CO2 Status Report." GECO 2019, https://www.iea.org/geco/.

"Goal 12: Responsible Consumption and Production." UNDP, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-12-responsible-consumption-and-production.html.

Nunez, Christina. "Deforestation and Its Effect on the Planet." Deforestation Facts and Information, 25 Feb. 2019, https://www.nationalgeographic.com/environment/global-warming/deforestation/.

"Topics .:. Sustainable Development Knowledge Platform." United Nations, United Nations, https://sustainabledevelopment.un.org/topics.

United Nations General Assembly Resolution A/RES/73/236

"Water: Coordinating the UN's Work on Water and Sanitation." UN, https://www.unwater.org/.

Other Readings:

"2020 United Nations Conference to Support the Implementation of Sustainable Development

Goal 14: Conserve and Sustainably Use the Oceans, Seas and Marine Resources for Sustainable Development." A/RES/73/292, https://undocs.org/en/A/RES/73/292.

"Oil Slick on Lebanese Shores ." A/RES/73/224 - E - A/RES/73/224, https://undocs.org/en/A/RES/73/224.

"Towards the Sustainable Development of the Caribbean Sea for Present and Future Generations." A/RES/73/229, https://undocs.org/en/A/RES/73/229.