



# General Assemblies *Topic Guide*

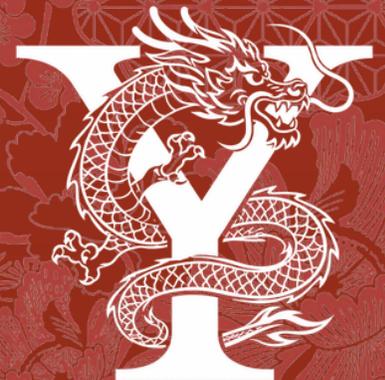
# UNIDO

## United Nations Industrial Development Organization

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*Yale Model United Nations China III*

May 15-17, 2026



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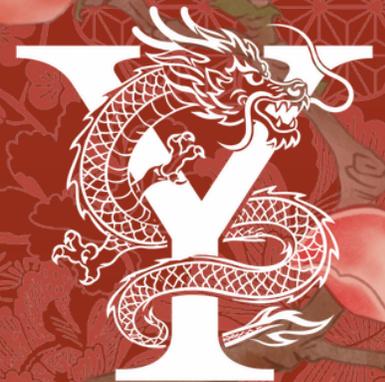
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# Better from the Dais

Dear Delegates,

Welcome to YMUN China 2026! We are so excited to have you here, and I am thrilled to welcome you to the **United Nations Industrial Development Organization**, also known as UNIDO! UNIDO is composed of 173 Member States with a unique purpose of promoting inclusive and sustainable industrial development. UNIDO functions simultaneously as a global platform for knowledge and technology transfer, acting as a liaison between developing countries and fostering partnerships.

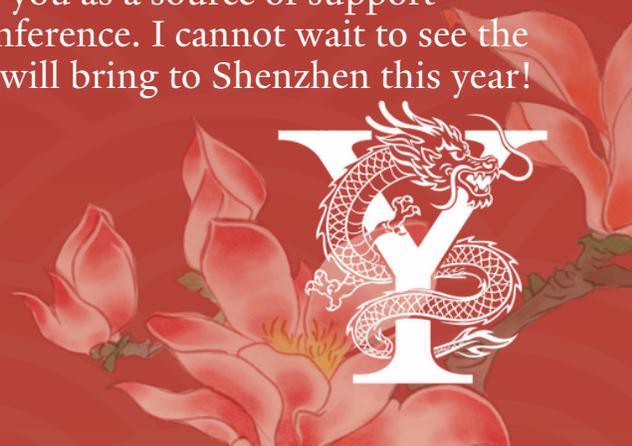
This year, the commission will focus on the future of the global energy supply and nuclear energy development. You will make inquiries into nuclear energy as a sustainable solution and a decarbonization tool for industrial development, alternative nuclear options for developing states, and the uncertain economics and financing for such technology, amongst other concerns.

In addition, we will look at the reformation of global food systems. This topic challenges you to examine the ways in which we can implement agro-industrialization and how local value addition boosts economic returns. Simultaneously, you'll investigate the logistical concerns of post-harvest losses and cold-chain infrastructure, oftentimes as it relates to climate change, energy use, and sustainable food production.

As a delegate, you are expected to brainstorm strategic and innovative solutions your countries can implement to adapt to shifting global energy and food systems within the constraints of real-world industrial capacity and international cooperation.

With that settled, my name is Mandy Chen, and I am absolutely thrilled to be chairing UNIDO at our conference this year! I'm a first-year student at Yale University studying Molecular Biophysics and Biochemistry on the pre-professional track for academia and professorship. I'm from Las Vegas, Nevada (Viva Las Vegas!). I consider myself a bubble tea enthusiast, where throughout high school, I worked at three different bubble tea cafés. On campus, I am involved in a number of scientific organizations, volunteer groups, and recreational sports. Throughout this period, if you have any questions at all, do not hesitate to reach out to me! I will be here for you as a source of support beyond the scope of this topic guide throughout the conference. I cannot wait to see the thoughtful debate, creativity, and collaboration you all will bring to Shenzhen this year!

With much excitement,  
Min Mandy Chen  
minmandy.chen@yale.edu



# Committee History

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The United Nations Industrial Development Organization (UNIDO) was founded in 1966 as an autonomous body within the United Nations. Just a decade later, the General Assembly endorsed the recommendation that UNIDO be converted into a specialized agency, where it now stands 60 years later as a committee that promotes and accelerates the industrialization of developing countries.

UNIDO seeks to promote development for poverty reduction, inclusive globalization, and environmental sustainability. Their work is concentrated on the basis of three priority areas: advancing agro-industries and local value addition to strengthen food systems, driving clean and sustainable energy, efficiency, and climate action, and building fair and sustainable supply chains. They stand as the only international organization mandated to support countries in pursuing inclusive and sustainable industrial development (ISID) in member states, with an emphasis on least developed countries (LDCs). Since 2022, UNIDO has been leading the way on the Doha Plan of Action for LDCs, which has six focus areas: human capital, technology, economic transformation, trade, climate resilience, and partnerships.

UNIDO does not function as a regulatory body, impose binding regulations, or authorize enforcement actions. Instead, the organization adopts a comprehensive approach to promoting the improvement of industrial energy efficiency in developing countries and emerging economies. This presents itself in the form of policy support, capacity-building, technology transfer, and a global forum. UNIDO offers collaboration between governments and industry, providing technical assistance for the adoption of energy management standards, and advising policymakers on the design of energy-efficiency policies.

As of current, UNIDO is part of the UN development system, which plays a key role in the agenda for the Sustainable Development Goals (SDGs). The Sustainable Development Goals were adopted in 2015 by the United Nations as part of the 2030 Agenda for Sustainable Development. The 2030 Agenda is a broad framework for how development is supposed to happen with the guiding principles of universality, indivisibility, integrated development and the principle of “Leave No One Behind,” with a focus on the less developed, vulnerable nations. UNIDO’s commitment to achieving ISID is a proponent of UNIDO’s involvement in more than one SDG. Specifically, SDG 9, as the organization affiliates itself with the role of Industry, Innovation, and

Infrastructure for sustainable development. Additional SDGs (but not limited to) include: SDG 7 (Affordable and Clean Energy), SDG 2 (Zero Hunger), and SDG 12 & 13 (Responsible Consumption and Climate Action).

UNIDO has played a notable role in the approach to achieving net-zero emissions through industrial decarbonization. Moreover, it has overseen the implementation of the Montreal Protocol, which has phased out ozone-depleting substances in industrial processes. The Montreal Protocol is widely recognized as one of the most successful environmental treaties. It had measurable environmental success, while still preserving industrial development. This protocol was a milestone and indicator that decarbonization and commercial growth were both possible.

Although UNIDO has not passed formal legislation in the traditional sense for energy and nuclear development as well as global food systems and agro-industrialization, it has adopted resolutions and frameworks relevant to both. In both 2012 and 2020, UNIDO formalized a cooperation through Practical Arrangements with the International Atomic Energy Agency (IAEA), supporting their common Member States in using nuclear technology for peace. UNIDO has also supported agro-industrialization and the integration of energy-efficient food systems into its SDG plans.



**General Assemblies**  
*Topic Guide*

1



**Topic**  
**One**



# Global Energy Supply

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## *Introduction*

The global demand for energy continues to rise as states face surmounting pressures to adapt power sources that are both reliable and environmentally sustainable. In this context, nuclear energy has reemerged as a potential low-carbon solution but is complicated by economic uncertainty, governance, and safety concerns, amongst other issues.

## *Glossary*

- **Baseload Power:** The minimum, continuous amount of electric power that a utility grid must be able to supply 24/7 to meet constant demand.
- **Decarbonization:** The process of reducing and ultimately eliminating human-caused carbon dioxide and greenhouse gas emissions.
- **Global Energy Supply:** The total amount of primary energy (all inclusive) that is produced, traded, and made available to meet worldwide demand.
- **Greenhouse Gases:** Gases that trap heat in the atmosphere that maintains Earth's temperature.
- **Inclusive and Sustainable Industrial Development (ISID):** UNIDO's approach that drives economic growth and reduces environmental impact while simultaneously ensuring no one is left behind.
- **Levelized Cost of Electricity (LCOE):** The measure of the average minimum price per unit required to build and operate a power plant over its assumed lifetime.
- **Low-Carbon Energy:** Power generation methods that significantly lower greenhouse gas emissions over their lifecycle, directly compared to fossil fuels.
- **Nuclear Energy:** Power derived from nuclear fission, releasing immense amounts of energy used for low-carbon electricity generation.

- **Renewable Energy:** Energy derived from natural sources that are replenishable at a higher rate than they are consumed.
- **Small Modular Reactors (SMRs):** Advanced, factory-built nuclear reactors with a lower power capacity that are designed for lower capital costs, safety, and export deployment.
- **Technology Transfer:** The process of moving scientific findings, knowledge, and intellectual property to private industry for commercialization into broader products and services.
- **Temporal Mismatch:** A misalignment in timing between two or more processes; in this context, the timeline of nuclear construction and conventional political cycles.

## *Topic History*

When we hear nuclear energy, we think of Oppenheimer, Chernobyl, Fukushima, and an exhaustive list of equal parts scientific prowess and public anxiety. The founding of nuclear energy as we know it today can be attributed to several key moments, most notably, the discovery of nuclear fission by German chemists Otto Hahn and Fritz Strassmann. Hahn and Strassman, along with their team, revealed how uranium atoms could split to release massive amounts of energy, leading to controlled chain reactions and eventually powering nuclear plants in the 1950s. The history of nuclear energy is the story of a centuries-old dream becoming a reality, offering an emission-free baseload power source.

The first municipal nuclear power plants were developed in the 1950s, providing reliable electricity sources to fuel postwar industrialization. Nuclear energy, however, has maintained its relevance due to its ability to provide stable, high-output electricity with minimal carbon emissions. Periodic concerns over energy and climate have repeatedly revived interest in nuclear power as a long-term option. Every era kept returning to the same core dilemma: rising electricity demand with the need for energy that is reliable, scalable, and politically acceptable.

The global energy demand has increased concurrently alongside population growth, urbanization, and industrialization. Over 600 million terajoules are needed to supply the world with energy, showing a near 50% increased trend since 2000. With nuclear energy acting as the largest source of clean power in the United States, it provides nearly 775 billion kilowatthours of electricity each year to the country.

Most early atomic research focused on developing an effective weapon for use in World War II. It wasn't until 1946, when the U.S. government pushed for peaceful civilian purposes with nuclear energy, that Congress created the Atomic Energy Commission (AEC) in 1946. The AEC was created in hopes of centralizing control over nuclear technology to redirect atomic research away from military use. At the core of its commission, the United States hoped to prevent nuclear proliferation and maintain long term federal oversight over the technology. Nuclear energy has stayed on the table because it offers stable, low-carbon electricity. It is, however, inhibited by enduring concerns around safety and public trust. Since the biggest shift, especially in the modern era, has been the high capital and maintenance costs of nuclear energy, now competing with rapidly falling renewable prices, the investment case has become harder. The governance over nuclear energy has also run into problems regarding the timeline, as the construction of nuclear projects exceeds electoral cycles, policymakers are expected

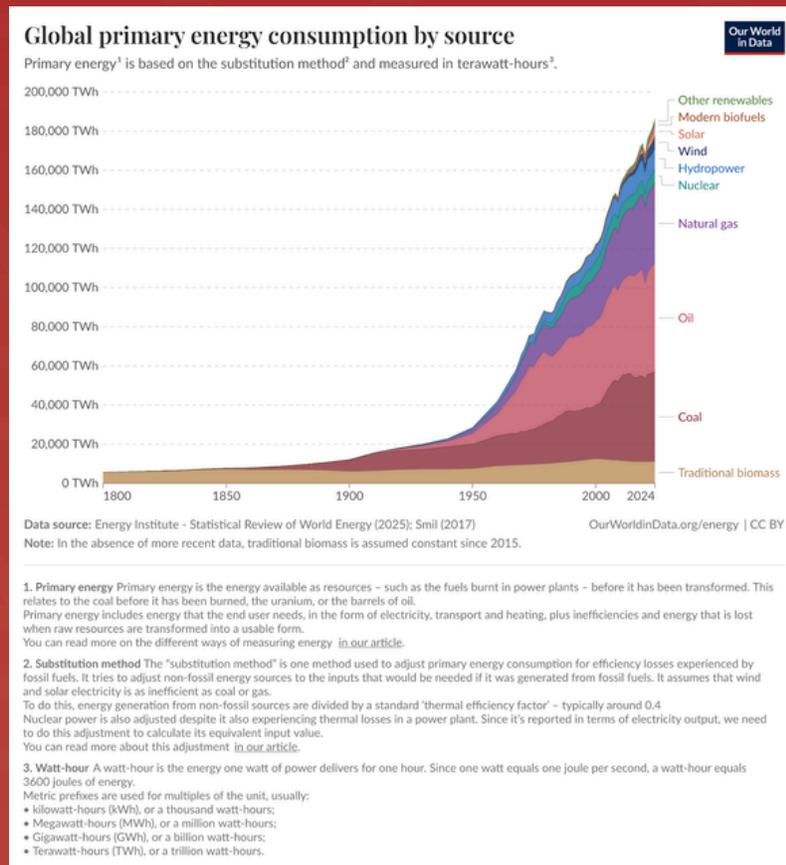
to commit to benefits that arrive long after they leave office. Lastly, public expectations have taken a shift towards a stronger transparency culture and accountability.

The truth is, energy choices today lock in infrastructure for decades. The reason why nuclear energy has been revisited numerous times is that the same core dilemma recurs. The question then becomes, under what circumstances can nuclear energy be safe, financeable, and publicly acceptable?

# Current Situation

Since the discovery of nuclear fission, nations that were once locked in a nuclear arms race have now shifted their attention toward civilian nuclear power as nations now enter the nuclear race for clean energy. Over the last few centuries, the availability of energy has fundamentally changed the trajectory of humanity. Not only in the way of having new energy sources being adopted, but also in the quantity we produce and consume.

As charted below by the Energy Institute, the increase is substantial. The demand for energy is growing across many countries in the world as populations increase. It's observed that global energy consumption has increased nearly every year for more than half a century; the only exceptions to this are in the early 1980s, 2009, following the financial crisis, and 2020 due to the COVID-19 pandemic. If this increased demand is not offset by improvements in energy efficiency elsewhere, then the challenge of transitioning our energy systems away from fossil fuels will only become more difficult.



**Figure 1.** Global primary energy consumption by source (1800-2024) Primary energy use has increased drastically since the 1950s, fossil fuels (coal, oil, and natural gas) remain the dominant sources despite recent growth in nuclear and renewables. Temporary declines are visible in the early 1980s, 2009, and 2020. Values are measured in terawatt-hours (TWh).  
**Source:** Energy Institute, Statistical Review of World Energy (2025)

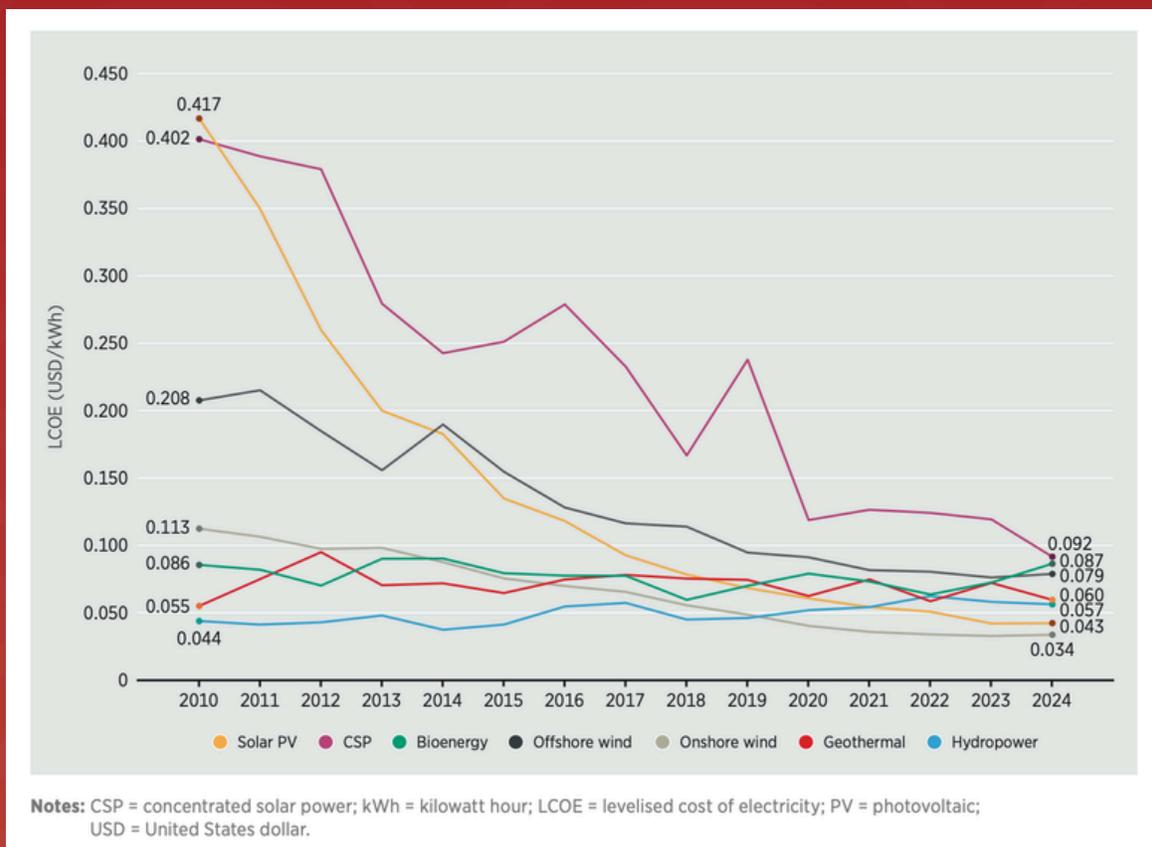
When looking towards where energy consumption is the most severe, it often reflects the population sizes of countries. Since the 1950s, the world's population has increased dramatically, leading to the growth of energy demand. The overwhelming majority of this growth can be attributed to Low Income Countries (LICs) and Newly Emerging Economies (NEEs), where energy deficits already exist. Population growth is most significant on the African continent, where there remains a considerable energy insecurity. Energy provision will be a significant challenge for African states in the future as rapid population growth is occurring concurrently with limited generation capacity, underdeveloped infrastructure, and limited access to capital for large-scale energy investments.

Conversely, economic development also leads to higher energy demand. Currently, the greatest demand for energy comes from high-income countries such as the United States and Australia, as well as rapidly developing NEEs such as Brazil, China, and Nigeria. Rapid industrialization and urbanization lead to the need for processing and manufacturing industries as well as more urban spaces. The demand for industrialization in NEEs and energy in urban areas has and will strain current LICs as they develop, as well as regions such as Africa and parts of Asia. This is the case for LICs because of increased competition for finite energy resources that ultimately drive global price as well as supply prioritization, where energy producers and investors tend to prioritize larger, fast-growing markets. It is undeniable that the complete and worldwide demand for global energy has only increased.

That being said, since the late 20th century, decarbonization efforts began with international climate agreements—specifically the 1997 Kyoto Protocol, which was among the first to outline reduced greenhouse gases in our future. Early localized decarbonization can, however, be tracked to Sweden and France since the mid 1970s-1980s. Now more than ever, in a world confronted by the urgent need to address climate change, there's nothing more pressing for governments, societies, and organizations than decarbonization. Decarbonization describes the active efforts to reduce, and ultimately eliminate, the carbon emissions produced from running businesses and living our daily lives. CO<sub>2</sub>, among other greenhouse gases in the atmosphere, are warming the world's climate, causing extreme weather and the depletion of natural resources and biodiversity.

In conjunction with the aforementioned matter, a report in 2025 by the International Renewable Energy Agency (IRENA), renewables have reached a new all-time low as the current cheapest source of power for over 90% of the world. Renewables encompass energy sources that are derived from natural and self-replenishing resources that regenerate faster than they are consumed. At enticing low rates that have only declined in the last decade, they have become significantly cheaper than fossil fuels. This dramatic cost decline is driven by technological advancements and scaling production. High efficiency solar photovoltaics mark

improvements in solar design, allowing cell panels to more efficiently convert sunlight into electricity. Wind turbines are being built with taller towers and better blade designs that enhance capture, which significantly increases energy output per turbine. Yet despite these features, renewables still have a difficult time outcompeting nuclear energy sources. Downsides to renewables include the dependency on the weather. Solar and wind output fluctuate constantly—seasons, weather conditions, and time of day affect the supply of energy. The lack of baseload power also means that large-scale storage or backup generation is needed, while nuclear provides constant output. Material constraints, resulting energy losses, and a menagerie of other intrinsic requirements significantly diminish the appeal of renewables. There's a reason why nuclear energy is revisited despite the alternatives available; the continuous, high-capacity, and zero-emission baseload power makes it a reliable and stable source that helps meet rising demands.



**Figure 2.** Global weighted-average levelized cost of electricity (LCOE) for major renewable technologies, 2010-2024 (USD/kWh), showing sharp cost declines, especially for solar PV and onshore wind, over the past decade.

**Source:** International Renewable Energy Agency (IRENA), Renewable Power Generation Costs in 2024

UNIDO's interest in nuclear energy comes from the fact that industrial development depends on reliable, affordable energy. One of UNIDO's main mandates is to promote inclusive and sustainable industrial development (ISID). As global pressure mounts to decarbonize industry while simultaneously meeting rising energy demand, nuclear energy has emerged as a potential tool to support

the long term industrial growth without increasing greenhouse gas emissions. UNIDO does not singularly advocate for nuclear energy as a universal solution, but rather as a prominent option amongst the diverse industrial energy mix. UNIDO recognizes that nuclear energy's high capacity factor and low operational emissions make it a prime candidate for UNIDO's mission. Energy choices now will directly shape the industrial, economic, and political landscape of the future.

To reiterate, the role of nuclear energy in the current global energy mix is that it is, in theory, a sufficient baseload power source. Unlike its renewable counterparts, it provides consistent and reliable energy. In practice, it has the capabilities of supporting energy-intensive industries and nations. HICs, LICs, and NEEs consume enormous amounts of energy for their own reasons. HICs consume energy due to their advanced industrial sectors, high per-capita electricity consumption, and, in recent developments, digital infrastructure, namely data centers, cloud storage, and the rise of AI computing. NEEs find themselves at a stage of rapid industrialization and urbanization. The expansion of manufacturing that requires export industry pipelines and expansion on all fronts requires rising energy consumption. LICs generally consume less per capita but are characterized by population growth, and goals in development and modernization that require reliable power. Globally, there is also a shift toward decarbonization and near-zero operational greenhouse gas emissions. Nuclear energy is a step in the direction of helping nations meet climate targets. These features make the technology seem flawless, but the current global nuclear landscape presents inequities and suboptimal operating conditions. Nuclear power generation is highly concentrated in a small number of countries. According to the U.S Energy Information Administration, nearly 71% of the world's total nuclear electricity generation capacity can be accounted for in five countries. As of 2025, over 400 nuclear reactors are in operation in over 30 countries, yet the vast majority of these reactors are driven by a small number of nations. Unequal access between LICs and HICs due to high upfront costs, regulatory gaps, and technology transfer all present their own degree of partiality. Tensions, particularly with economic barriers, governance, and public trust, all become relevant issues with the application of nuclear energy.

## **Economic and Financial Barriers**

The basic economic metric for any generating plant is the levelized cost of electricity (LCOE). This is the total cost required to build and operate a power plant over its lifespan, divided by the total electricity output generated from that plant over that period, hence accounting for the financing costs of the capital component and not just the 'overnight' cost. Despite nuclear power being an economic option on a levelized basis and existing with a high degree of predictability, the high upfront costs are undeniably a turn-off for most nations. According to the World Nuclear Association, a report in 2017 noted that the

economics of new nuclear power plants are heavily influenced by their capital costs, which account for at least 60% of their LCOE. Although it is to be said that once a nuclear plant has been constructed, the production cost of electricity is low and consistently stable. The truth is, these costs become an operational barrier for most nations, especially LICs, where these upfront costs are simply burdensome and difficult.

That being said, costs tend to decrease in countries with standardized designs and streamlined processes, such as South Korea, where continuous building programs help sustain construction cost reductions throughout its nuclear experience. The same cannot be said for “first-of-a-kind” projects in Europe and the United States, where they have faced significant delays and overruns. This is largely due to the absence of a continuous construction pipeline. Evolving safety requirements and more complex financing structures further fragment the process. This learning curve tends to come at a higher cost. Connecting these provisions, nuclear energy is often a high-stakes gamble for developing nations, despite its long-term benefits. LICs and NEEs are also on the up in regard to anticipated energy consumption.

The difficulties they will experience can be broken down into three primary categories: high upfront costs, infrastructure costs, and institutional barriers. For any LIC, a single nuclear project (often \$5-10 billion dollars) will represent a staggering percentage of their total GDP. The cost of borrowing and debt burdens also disincentivize nations to invest in this technology. Nuclear costs are hypersensitive to interest rates; a 10% interest rate (which is common for LICs) can make nuclear electricity twice as expensive as if it were a 3% rate.

System and infrastructure costs also introduce adversity to newly industrialized economies (NIEs) and LICs. Nuclear power plants require robust and high-volume transmission lines. Even developing these systems adds billions to the project price tag that LCOEs often ignore. Industrial bases such as local steel, high-grade concrete, or specialized labor and equipment introduce additional costs, where nations are often forced to import almost everything. This leads to capital flight, a phenomenon where the investment money leaves the country rather than boosting the local economy. The purpose of LCOEs is helpful to nations already equipped to handle nuclear energy, but the benefits of this technology are desirable in all nations. This creates a disconnect between places that want this technology versus places that are actually able to install it.

Lastly, institutional barriers which encompass licensing costs, timeline, and the payback period. Licensing can often cost hundreds of millions of dollars. LICs lack this mature and regulatory network and building such will require highly paid and specialized experts. The timeline of this technology and its construction also poses

a massive political risk. Nuclear power projects often run on a century-long timeline, with construction, approximately 60 years of operation, and decommissioning. Nations with political instability or frequent changes in government are bound to encounter issues in funding for such a large project.

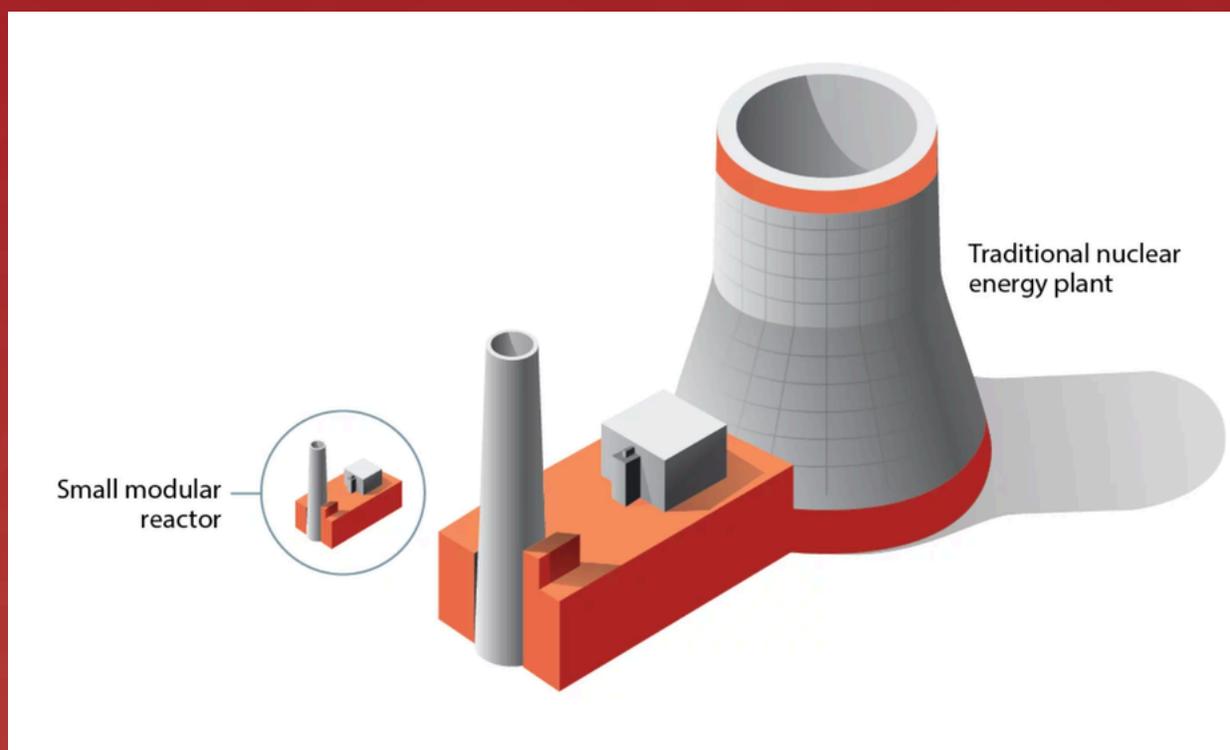
## **Governance**

Small Modular Reactors (SMRs) are a category of nuclear fission reactors that are significantly more compact and flexible in comparison to traditional nuclear plants. Operating at a capacity of up to 300 MWe (megawatts electric) per unit compared to the traditional 1,000 MWe, they are designed to be factory-built and transported for installation. SMRs have skyrocketed in popularity due to their compact and advanced nature. Recent studies have shown that the primary hurdles for these advanced nuclear systems actually rest in governance and politics rather than purely technical barriers. Without proactive and democratic oversight, new technology will likely repeat and potentially worsen historical injustice. In this context, governance fails when it prioritizes market interest and rapid deployment over vulnerable populations.

A governance model centered on equity and accountability is critical in the employment of nuclear technology. Regulatory capture describes a form of corruption where regulatory agencies that are tasked with protecting the public become controlled by the corporations they claim to govern. In SMRs, this becomes a significant risk and highly plausible because of its specialization and proprietary nature. Regulators end up seeking advice and reliance on the industry itself for technical data and safety assessments. This effectively creates a loophole where the experts who are being regulated are the ones providing information for said rules. With governing bodies being tied so closely to the companies themselves, there becomes a serious overlap in imposing policies and the incorrect equivalent of nuclear success to “public good.” Essentially, when governments invest heavily in the success of nuclear energy to meet climate goals, regulators also feel this pressure to fast-track approvals and bypass essential protections.

The design of government systems disfavors local communities. The top-down political system inevitably clashes with marginalized communities that may offer vital information that is excluded from the formal decision-making process. With SMRs, this issue only becomes more apparent as they are marketed as being deployable anywhere. There is a risk that, especially in cultural and indigenous communities, SMRs will compromise the safety and comfort of the residents nearby. Local consent, land rights, and culturally significant territories are not among the priorities in national energy goals and on the broad political scale. Communities may bear the disproportionate safety risks due to limited consultation.

SMRs are seen as a democratizing energy source, notably its accessibility and efforts at equalizing the playing field. The truth is, the economic structure surrounding SMRs can actually reinforce the global disparities that the nations face. HICs own the patents and manufacturing facilities for SMRs. LICs are then forced into a long-term dependency on foreign corporations for production, technology, and products, rather than sustaining their own energy sovereignty. These projects also often bring a temporary influx of foreign workers, creating shadow populations that strain local resources. Once installed, SMRs often require far fewer staff to operate traditional plants and thus leave locals with the promise of occupational opportunities but not of the sustained economic rewards.



Source: Climate Insider

Between the actual passing and installation of nuclear reactors, there is a temporal mismatch in the timelines of both cycles. Short-term political actors are often the decision makers behind this technology. As noted, a reactor can take 10-15 years to build, and 60-80 years to operate; it becomes a generational project managed by various people and groups. Local and national officials more often than not find themselves in a dead zone of political credit. Governors, mayors, and others may spend their term ratifying, advocating, and enduring years of construction traffic only to leave office before their project comes to fruition. This degree of uncertainty and even policy whiplash discourages the installation of nuclear plants on an individual political level. At the same time, the officials who negotiated the original agreements, like hiring quotas or tax breaks, are often not the ones in office after the plants finally open. Such projects require heavy government backing, yet at every level (national, local, individual), we encounter problems and setbacks that make these projects difficult.

## Safety & Public Trust

Even with advanced nuclear systems like SMRs, the challenges they experience remain rooted in safety and public perception. The nuclear industry boasts over 18,000 cumulative reactor years of experience, yet the mainstream transition to SMRs introduces new safety risks and variables. Historically, Loss of Cooling Accidents (LOCA) were the primary cause of public fear. An LOCA is a nuclear failure in which cooling systems fail, preventing sufficient heat removal from the reactor core. Subsequent fuel damage is a catalyst for hydrogen explosions or core meltdowns. For instance, the Fukushima Daiichi plant experienced an LOCA leading to a core meltdown and went down in history as one of the most notorious accidents. With over 150,000 residents evacuated, and explosions that destroyed reactor buildings, it was classified as a Level 7 (highest level) on the International Nuclear Event Scale. It completely displaced communities, contaminated an environmental radius, and cost hundreds of billions of dollars for the Fukushima Prefecture. Moreover, Chernobyl, the Three Mile Accident, and others have become mainstreamed as cautionary case studies of catastrophic reactor failure. Currently, SMRs introduce a new set of variables and independent risks. SMRs, due to their smaller nature and factory production to transportation, may increase the area for security risks compared to traditional centralized and heavily guarded large-scale plants.

Regardless of whether the nuclear reactors are traditional or small modular reactors, nuclear energy is unusual in that it internalizes its waste cost. The concentration of hazard that the waste produces is uniquely hazardous. High Level Waste (HLW) accounts for only 3% of volume with respect to the products and reactants in a nuclear reactor, but is responsible for nearly 95% of total reactivity. Thus far, geological disposal is the international consensus; however, this challenge lies in the temporal mismatch, as mentioned earlier in governance, where political cycles last only 4-8 years, whereas waste remains hazardous for over 100,000 years. This gap must be addressed, especially coupled with the overwhelming distrust of the public.

The spectacular nature of past reactor failures has harmed the public's trust in how all sectors, stakeholders, governments, and specialists handle nuclear technology. Nuclear accidents like Chernobyl and Fukushima have created a permanent novelty value in the media, making transparency difficult and amplifying any minor accidents. Although nuclear remains statistically safer than fossil fuels, it becomes difficult to overcome this misconception.

Regulatory capacities for handling issues such as waste and byproducts vary widely between states and nations. SMRs are markets towards global exports to nations that are incapable or face difficulties in establishing traditional nuclear plants or building their own SMR factories. This often includes exportation to nations that

are LIC's or NEE's. This comes with the risk that SMRs are deployed in regions with weaker nuclear safety inspectors and a degradation of the safety culture that is necessary to prevent accidents. This also begins to parallel governance, where we see issues such as regulatory capture revisited.

The pursuit of nuclear energy presents a paradox. On one hand, this technology is highly desirable for its capabilities, stability, and advancement in the direction of decarbonization. It's evident that the global energy demands are only increasing on all fronts of HICs, LICs, and NEEs. The world needs power. To meet these urgent energy deficits in a way that is also environmentally friendly, nuclear energy emerges as an all-around solution. On the other hand, the transition to installment and practice of nuclear energy faces significant economic, political, and logistical hurdles that a purely technical focus cannot resolve. As the data suggests, the barriers to entry remain steeply difficult to overcome. Even pioneering technologies such as SMRs fuel their own set of constraints and considerations unique to each nation. Temporal mismatch, technological dependency, and regulatory capacity are all issues that require tailored and absolute solutions at the national, local, and individual levels. Only by addressing this unassuming injustice can humanity ensure that the race for clean energy does not leave vulnerable populations behind in the industrial divide.

## *Questions to consider:*

1. What is your country's biggest energy constraint right now, and how does that shape your stance on nuclear energy?
2. What is the biggest barrier your country needs to overcome to pursue nuclear energy?
3. Where does nuclear fit into your country's existing energy mix?
4. What is the main motivation for your country's consideration of nuclear power?
5. How should UNIDO go about supporting LICs/NEEs that want nuclear energy without creating a long-term dependency on foreign companies/nations?
6. What conditions should be mandated and regulated before nuclear technology transfer or exports occur?
7. What financing models would your country support for nuclear projects?
8. How should local communities be incorporated in siting decisions and involved in nuclear projects?
9. Should SMRs be handled differently than traditional large reactors in regulation and oversight? If so, what standards should stay identical and what should change?

## *Additional Resources:*

<https://www.unido.org/about-us/who-we-are>

[https://www.unido.org/sites/default/files/files/2023-11/LDCMC10\\_Brochure.pdf?\\_token=1356135409](https://www.unido.org/sites/default/files/files/2023-11/LDCMC10_Brochure.pdf?_token=1356135409)

<https://www.mopan.org/en/our-work/performance-evidence/unido.html>

<https://www.unido.org/unido-sdgs> <https://decarbonization.unido.org/>

<https://www.iea.org/world/energy-mix>

<https://online.ucpress.edu/cse/article/4/1/1112327/110746/Small-Scale-Nuclear-EnergyEnvironmental-and-Other>

<https://www.energy.gov/ne/articles/history-nuclear-energy>

<https://www.energy.gov/ne/articles/advantages-and-challenges-nuclear-energy>

<https://ourworldindata.org/energy-production-consumption>

[https://www.internetgeography.net/topics/why-is-energy-consumption-increasing/#google\\_vignette](https://www.internetgeography.net/topics/why-is-energy-consumption-increasing/#google_vignette) <https://jns.edu.af/jns/article/view/394>

<https://www.climateimpact.com/news-insights/insights/decarbonization-delivering-climate-action/>

<https://world-nuclear.org/information-library/economic-aspects/economics-of-nuclear-power>

<https://news.engin.umich.edu/2025/12/new-nuclear-requires-strong-governance-to-avoid-making-old-mistakes/>

<https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/safety-of-nuclear-power-reactors>

<https://world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-waste/radioactive-waste-management>

<https://www.irena.org/Publications/2025/Jun/Renewable-Power-Generation-Costs-in-2024>



General Assmeblies  
*Topic Guide*

2

Topic  
Two



# Reformation of Global Food Systems

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## *Introduction*

As climate change worsens and supply chains weaken, global food insecurity has taken a shift from only an agricultural challenge to also an industrial one. How nations choose to strengthen agro-industrial capacity and learning how international cooperation safeguards global food security becomes imperative.

## *Glossary*

- **Agriculture:** The science and practice of cultivating the soil, planting, raising, and harvesting both food and non-food crops, as well as livestock production
- **Agro-Industrialization:** The transformation of farming into a high-volume, capital-intensive system using advanced machinery, synthetic inputs, and biotechnology. Marks a shift from traditional, small-scale farming to industrialized, efficient, large-scale production.
- **Climate Change:** Long term changes in temperatures and weather patterns, namely global warming and its wider effects on Earth's climate system.
- **Cold-Chain Infrastructure:** Temperature-controlled supply chain consisting of specialized storage, refrigerated transportation, and monitoring technology to preserve perishable goods.
- **Commodity Prices:** The cost at which a particular commodity good can be traded at a given moment in the market.
- **FAO Food Price Index (FFPI):** A measure of the monthly change in international prices of a basket of food commodities.
- **Food and Agriculture Organization (FAO):** A specialized United Nations agency dedicated to achieving food security for all, eradicating hunger, and promoting sustainable agriculture.
- **Global Agricultural Trade System (GATS):** The complex, interconnected network of worldwide food production, distribution, and consumption, linking farmers to markets across borders and is headed by the United States Department of Agriculture.

- **Local Value Addition:** Process of increasing the economic worth of raw materials or products within a specific geographic region through local processing, manufacturing, and labor.
- **Post-Harvest Losses:** The reduction in quantity and quality of agricultural produce after harvest and before it reaches the consumer.
- **Public-Private Partnerships (PPP):** Long-term, contractual agreements between government entities and private firms to finance, build, and operate public infrastructure or services.
- **Raw Goods:** Unprocessed or minimally processed primary materials used to manufacture or assemble finished products.
- **Supply Chains:** Complex, coordinated network of organizations, technology, and activities, that convert raw materials into finished products for end customers.

## *Topic History*

Agricultural practices solely drove the establishment and growth of civilizations. The transition from hunter-gatherer societies to settled agricultural communities is believed to have occurred independently and in several parts of the world. The origins of the global food system parallel the idea that it is the foundation of civilization. Around circa 10,000 BCE, nomadic societies began settling from the domestication of crops and livestock, which then allowed for long term settlement, division of labor, and trade networks..

Food security has always been a precursor for political stability and economic development. As the food systems formed, early trade and industrialization became tied to the same land. The Silk Road was a network of routes used by traders for over 1,500 years as an exchange for goods and ideas. At the same time, maritime trade routes began connecting continents through canals and creating chokepoints that were key economic hubs. There also became a distinction between cash crops and subsistence farming. Subsistence farming focused on growing food for direct household consumption, whereas cash crops were agricultural products meant to generate a profit. On the economic front, the evolution of cash crops also led to the early dependency relationships between exporting and importing goods.

The Neolithic transition from nomadic “hunting-gathering” to farming circa 10,000 BC is regarded as the First Agricultural Revolution. The Second Agricultural Revolution (also known as the British Revolution) spanned the 17th-19th century of industrial development. Increased productivity through the mechanization of agriculture from steam power and tractors allowed cash crops to be carried out on a larger scale. The expansion of railroads and cold-chain infrastructure/transportation allowed for an increased reliance on centralized food systems.

The Green Revolution is regarded as the third agricultural revolution from the 1940s to the 1970s, which took a sharp focus on drastically increasing food yields through scientific advancements. Agrochemicals refer to the synthetic, nitrogen-based fertilizers and pesticides that significantly boost crop productivity. This shift towards scientific advances was designed to combat hunger, particularly in developing nations. Additionally, the continued mechanization of agricultural practices, such as tractors and exhaustive irrigation systems, marked a shift to an industrialized and chemical-dependent agricultural system. This was, however, also the first time structural vulnerabilities were introduced. The dependence on chemical inputs, environmental degradation, and monocropping were only the start of the dilemmas that agriculture would experience.

Currently, a plethora of vulnerabilities threatens the global food system. The scientific consensus on climate change is that it is undeniably real and is likely to disrupt the continued progress on global food security, such as limited availability, price increases, interrupted transport, and diminished food safety. Rising temperatures make up only a small part of the issue. Increasing droughts and extreme weather events lead to inconsistent crop yields and shifted growing seasons that are unpredictable. These shifts, although not yet detrimental, severely impact downstream processing in the vast global food supply. Additionally, natural resource degradation caused by the nature of farming practices, such as soil depletion, desertification, and biodiversity loss, all impact the global food supply.

Food security is not solely about production but also about industrial capacity and distribution. Supply chain fragility caused by geopolitical conflicts, export bans, and trade restrictions, and the recent case study of COVID-19, supports how delicate this process truly is. Logistical challenges relevant to post-harvest losses include inadequate cold chain infrastructure and storage logistics, as well as limited food processing capacity in LICs and NEEs.

This topic remains prevalent as food security underpins political stability and is a good metric for international relations and economic development. Climate change and logistical issues further accelerate this vulnerability and exacerbate existing global insecurities.

# *Current Situation*

Across thousands of languages and cultures, there is perhaps nothing more unanimous than one thing: food. The global food supply refers to the total amount of food available for consumption around the world, including production, distribution, and the accessibility of food resources. A plethora of issues threaten this complex network and directly affect the millions of people in severe food insecurity. Climate-related disasters, geopolitical conflicts, and economic instability only begin to scratch the surface of the vulnerabilities in the system.

## **Climate Change**

Climate change remains the biggest and most lasting danger. Warming temperatures and sudden weather events risk crops for heat stress, water scarcity, and erratic rainfall. Warmer and more volatile weather also accelerates the spread of agricultural pests and diseases. Efforts to mitigate the issues in the past have caused a series of related problems. The overuse of agricultural pesticides to manage pests and diseases severely degrades the quality of the soil, contaminates nearby water sources, and significantly reduces biodiversity by often also killing non-target species. This reliance sets itself in a vicious circle of pest resistance requiring stronger chemicals. The use of fertilizer to replenish nutrients in depleted soil also drives significant environmental degradation, including eutrophication. According to a recent report by the Union of Concerned Scientists (UCS), the excessive use of nitrogen fertilizer by Iowa corn-soy farmers emits between 1.7 million and 4 million metric tons of heat-trapping emissions a year. This volume of emissions is directly equivalent to the annual greenhouse gas output of hundreds of thousands of passenger vehicles, significantly contributing to climate change while undermining the long-term sustainability of the agricultural systems it is meant to support. Efforts to improve the same existing network have proven to be difficult and, for the most part, pretty unsuccessful. Perhaps it is time for nations to reconsider the network at large for a longer, more sustainable fix to the problem.

## **Geopolitical Conflict**

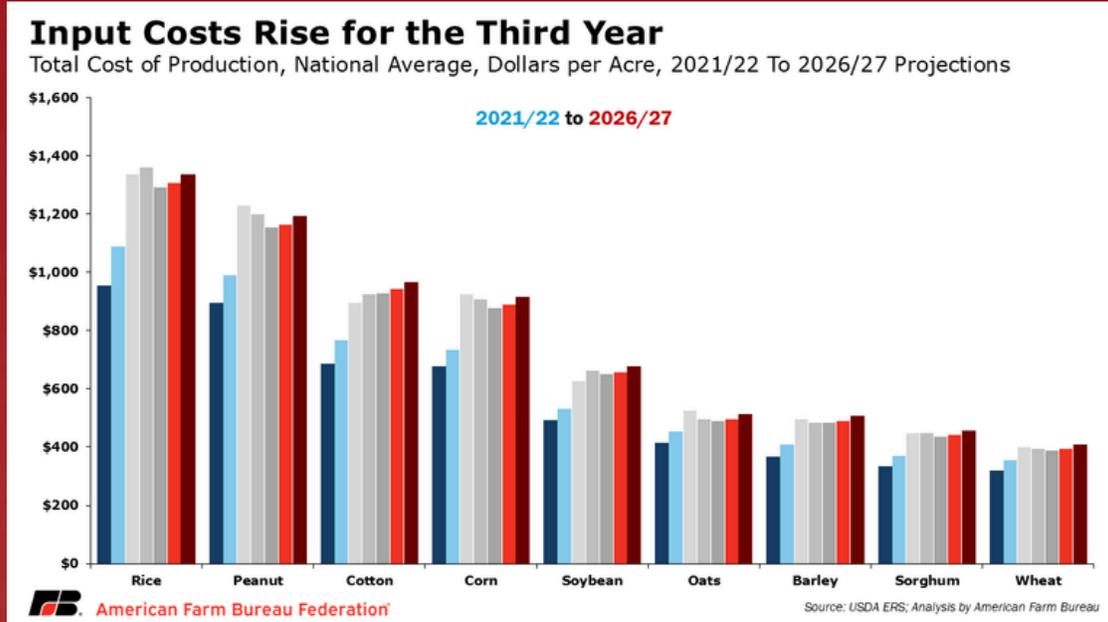
To feed the world, geopolitical conflicts significantly disrupt this process at an untouchable scale for civilians. The global export-import system for agriculture is impressive. It is a complex, digitized tracking network that operates in nearly 200 countries. With the system being primarily monitored by the United States Department of Agriculture's (USDA's) Global Agricultural Trade System (GATS), it facilitates the exchange of goods under the frameworks of international trade policies, World Trade Organization (WTO) agreements, and Sanitary and Phytosanitary Measures. The key regulatory bodies are the WTO, which includes the Agreement on Agriculture and sets the legal framework for international trade

disputes. The USDA Foreign Agricultural Services (FAS) promotes exports in over 180 countries, while the USDA Animal and Plant Health Inspection Service (APHIS) and Food Safety Inspection Service (FSIS) enforce requirements for imports. This system is a complex, highly integrated, and trillion-dollar network reliant on international trade for economic growth, and mainly, food security. Geopolitical conflicts have severely impacted this global agricultural network by creating bottlenecks, shortages, and price volatility. Conflict often weaponizes food security, and nearly 30% of global trade is affected. Looking at the recent and still ongoing case study of Russia-Ukraine, it is impossible to understand the war in Ukraine if no one acknowledges the agricultural division. Conflicts in the black sea region and armed conflicts restrict shipping routes, close ports, and drive up costs. Ukraine has well established itself as a major global export country, with agricultural products accounting for over 40% of its exports; it is a key agricultural powerhouse. This conflict with Russia has crippled global agriculture with increased farmland fires in Ukraine's Kherson region. This disruption has caused record-high prices for fertilizers and grain, creating a deeper reliance on Black Sea imports. Conversely, from Russia's perspective, Western sanctions targeting its financial institutions, shipping access, and agricultural exports have constrained its ability to sell grain and fertilizers on the global market. Russia argues that this has similar effects on supply disruptions and rising prices. Moscow maintains that restrictions on Russian exports, rather than its military actions alone, have exacerbated the volatility in global food and fertilizer markets. The fragility of the global agricultural trade system reveals how deeply food security is intertwined with geopolitical stability.

## **Economic Instability**

The agricultural sector is undergoing significant economic instability driven by a sharp decline in commodity prices from 2022 highs and stubbornly high production costs and interest rates. 2022 saw significant record-high increases due to supply chain disruptions marked by the aforementioned reasons. Geopolitical conflicts, high energy costs, and post-pandemic-related disruptions created one of the global food spikes in modern times. The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities by the Food and Agriculture Organization (FAO). The FFPI stood 0.8 points (0.6 percent) below its level one year ago and nearly 36.4 points (22.7 percent) below the peak from March of 2022. This implies that the acute global food crisis peak has eased, but food prices are not necessarily cheap, just lower than the 2022 spike. This also implies that farmers now face falling output prices while input prices remain high. According to an analysis by the American Farm Bureau below, evidence suggests that input costs may even be increasing, as output prices decrease. Farmers are increasingly reliant on loans to manage operations, and total farm debt has already hit record levels. Unpredictable weather conditions, in combination with volatile global markets for agricultural products

such as fertilizers and pesticides create a near \$20 billion increase in production costs from 2016 to 2024 according to the American Farm Bureau Federation (AFBF).



**Figure 1.** National average production input cost per acre for major U.S. crops, 2021/22-2026/27 projections, showing sustained cost increases across commodities despite declining output prices.  
**Source:** American Farm Bureau Federation analysis of USDA ERS data

Taken together, environmental degradation, geopolitical conflicts, and economic instability expose a food system that is highly dependent on but equally unstable in its current form. Rather than continuing to patch weaknesses within the same fragile network, nations should consider a structural transformation. Beginning with a shift toward agro-industrialization as a strategy to strengthen local value addition, diversify supply chains, and build an actual, resistant, and sustainable food economy.

Agro-industrialization is the processing, transformation, and preservation of agricultural raw materials into finished or intermediate goods through industrial processes. Taking on a sustainable outlook and global lens, this approach connects agriculture with manufacturing involving large-scale and capital-intensive methods that have the potential to address the growing demand for global food supply.

First and foremost, agro-industrialization itself holds a strong focus on strengthening local value addition—the process of moving from raw commodity exports to processed goods. This process commands a higher price in global markets and enhances profitability, ultimately allowing farmers and local firms to capture a larger share of the final consumer price. Agro-industrialization also focuses on reducing post harvest losses. Up to 40-44% of fresh produce is lost due to post-harvest handling with poor storage and transportation. Agro-processing extends the shelf life of perishable products, and in conjunction with improved

cold-chain infrastructure, it means reduced waste and increased produce hitting the market, ultimately stabilizing supply and increasing food safety. Developing domestic processes and reducing the dependence on imported processed foods makes the food supply more resilient to external shocks. Agro-industrialization provides a stable pathway for LICs and NEEs to navigate as it enhances the quality and quantity of products, improves income for farmers, and fosters a more robust and self-sustaining structure.

## Improvements in Infrastructure

Nations can strengthen their agro-industrial capacity by targeting improvements in a few areas: infrastructure, modernization of technology, and financial policy operations. Agro-industrialization infrastructure investment focuses heavily on developing processing facilities to convert raw agricultural goods into value-added products. UNIDO has worked towards Integrated Agro-Industrial Parks (IAIPs), which are crucial for advancing the notion of inclusive and sustainable industrial development (ISID). IAIPs are centrally managed platforms offering high-quality services to a community of tenants, including agro-industries, agribusinesses, and research institutions to support agro-processing. They are typically located in agriculture and agribusiness growth corridors and facilitate the transformation of agricultural products. IAIPs have found success in Ethiopia and Nigeria, where they linked farmers with processors and facilitated value addition. Moreover, the development of rural roads, cold chain logistics, and specialized transportation networks requires reformation to connect remote production areas to urban and international markets. On the business side of things, Public-Private Partnerships (PPPs) are governmental bodies such as the World Bank, which have been used increasingly to fund such large-scale infrastructure projects. Initiatives like the Common African Agro-Parks Programme (CAAPs) also seek to boost regional trade and reduce Africa's annual \$50 billion food import bill.



**Figure 2.** Example of an Integrated Agro-Industrial Park  
**Source:** United Nations Industrial Development Council

## Technological

Technological modernization sits at the cornerstone of agro-industrialization developments into a sustainability-driven industry. Precision agriculture (PA) is a resource management technique that utilizes cutting-edge farming technology, such as global positioning systems (GPS) and drones, to provide real-time data on soil moisture, nutrient levels, and crop health. The adoption of these technologies has the potential to enhance yield by nearly 20-30% and reduce inputs by 40-60%, according to the National Institute of Health. The mechanization of the agricultural process involves replacing manual labor with machinery that improves efficiency and productivity. Automated harvesters, planters, and sprayers can cut production costs by nearly 25% in the long term and enhance labor and land productivity. Biotechnology and improved seed variants may also be a worthwhile investment of resources. HICs find themselves providing solutions for food insecurity through biotechnology and developing crops that are more resilient to environmental stressors. Genetic editing (CRISPR) and genetically modified organisms (GMOs) can develop crops with higher yields and improved nutritional value.

## Financial and Policy

Financial and policy mechanisms underscore a significant amount of the logistics that nations go through to implement agro-industrialization. As mentioned earlier, Public-Private Partnerships (PPPs) are used increasingly in agricultural innovation to leverage public funds to improve the adoption of innovation to meet demand. Governments have since put in place policies and regulatory frameworks for the development of PPPs for innovation, including financing mechanisms and Intellectual Property (IP) protection. PPPs are popular as they aim to improve agricultural research, development, and commercialization. They are partnered with key government agencies, research institutions, non-governmental organizations (NGOs), and farmers' organizations. Projects involving PPPs often focus on precision agriculture, biotechnology, and sustainable practices such as the World Banana Forum. The World Banana Forum was a space created where the main stakeholders of the global banana supply chain worked together to achieve consensus on the best practices for sustainable production and trade, bringing together retailers, importers, producers, etc. Ultimately, it's evident that the coordination to structure PPPs demonstrates that agro-industrialization is not a simple policy shift but a deep logistical undertaking that demands long-term commitment and systemic governance capacity.



**Source:** Banana Link, World Banana Forum

The role of international cooperation is substantial; technological transfer and sharing sustainable agricultural processes are an extension of the motivations for technology exchange. Multilateral institutions such as UNIDO, FAO, WTO, and the World Bank serve as facilitators by providing holistic assistance. These institutions help lower the barriers to agro-industrial development, particularly for LICs and NEEs, while simultaneously promoting sustainability, equity, and long-term food security.

### **Low-Income Countries**

The challenges to agro-industrialization vary greatly by country status. For low-income countries (LICs), the primary barriers are economic and political. Existing LICs currently depend on labor-intensive and small-scale operations rather than larger capital-intensive farming. In these nations, smallholder farmers lack the collateral needed for loans, restricting their access to the process of agro-industrialization. Post-harvest losses are difficult to mitigate due to the lack of technology and cold chain infrastructure at the national level. Many LICs, particularly in Sub-Saharan Africa, remain trapped in low-value commodity exports rather than higher-value processed goods. Weak existing infrastructure gives little incentive for the nation to reinvest in cold-chain technologies and create accessible pathways to urban areas. Risks that LICs take on in attempts to transition include an over-reliance on foreign investment. Foreign Direct Investment (FDI) and multinational corporations (MNCs), while intended to drive economic growth, often create a structure of associated dependent

development. FDIs also often disadvantage local smallholder farmers by favoring large-scale operations. What ends up happening is that foreign multinational corporations often control major segments of the supply chain, such as in Brazil, where foreign multinational corporations manage 76.1% of the soybean supply chain according to *Frontiers in Sustainable Food Systems*. Developing towards agro-industrialization is a noble effort, however, if done hastily and without the proper resources, it can very easily lead to environmental degradation and unequal rural development. This shift often presents the risks as being greater than the possible positive outcomes.

## **Newly Emerging Economies**

Newly emerging economies (NEEs) find the transition to agro-industrialization most justified. Primary barriers however, include transitioning from export-oriented raw commodity models to processed goods and balancing industrialization with sustainability. Risks include rapid industrialization without environmental safeguards. In the past, this phenomena is best exemplified by 19th-century Britain during its period of rapid industrialization. Cities like Manchester and London had unregulated coal combustion and industrial waste dumping from rapid mechanization and industrial growth. This caused severe air pollution, such as the Great Smog of 1952, and pollution to nearby water sources. The unplanned growth without environmental safeguards created long-term environmental impact and widespread ecosystem damage.

## **High-Income Countries**

In this process, high-income countries (HICs) face another set of challenges and risks. Primary barriers include high labor costs, market saturation, and environmental constraints. HICs face rising labor costs as a result of aging populations, lack of interest in the agricultural sector, and high labor markets. For instance, in the United States, hired farm labor expenses are actually a major input cost, making up nearly 39% of total cash expenses. With agricultural growth in HICs being relatively slow, this is due to low income elasticity of food demand and slow population growth. HICs are also expected to advance in sustainability, in which strict regulations on chemical fertilizers, pesticides, etc., impose high compliance costs. Beyond more concrete challenges, HICs simply experience lower productivity growth. Unlike middle-income countries, HICs are experiencing a slowing in total agricultural growth, which in some cases is compounded by a decline in public agricultural research and development spending. The ongoing consolidation of land into larger, capital-intensive farms also makes it harder for smaller independent farmers to compete.

The challenges faced by each nation and economic tier vary greatly. For low-income countries, their priority lies in building the foundation infrastructure, improving access to credit, and protecting smallholder inclusion to avoid

dependent development. Objectively, they face the highest barriers to agro-industrialization and take on the highest risks. Newly emerging economies must balance rapid growth with environmental regulation and long-term sustainability planning. High-income countries, on the other hand, navigate labor costs, regulatory pressures, and a mature market while also facing stress for higher efficiency and sustainability.

The future of global food systems depends on not merely increasing output, but reconstructing how value is assigned, distributed, and sustained globally. Environmental degradation, geopolitical instability, and economic volatility expose the vulnerabilities of a system overly dependent on raw commodity exports and fragmented supply chains. Agro-industrialization begins to address these issues and carve a path towards a resilient global food network, but its success ultimately hinges on coordinated infrastructure investment, technological modernization, and financial and political frameworks. UNIDO's mandate for inclusive and sustainable development becomes critical. It ultimately bridges agriculture in a way that prioritizes economic growth and sustainability, and in doing so, UNIDO advances a structural transformation of food systems that align with longevity and long-term global food security.

## *Questions to consider:*

1. How can Low Income Countries (LICs) build agro-industrial capacity without becoming overly dependent on FDI or multinational corporations?
2. What is the responsibility that HICs and even NEEs have on LICs' shift toward agro-industrialization?
3. To what extent should nations prioritize domestic agro-industrialization over reliance on global agricultural trade networks?
4. What role should government intervention play in stabilizing domestic food systems during global shocks?
5. Should existing international institutions such as UNIDO, FAO, or the World Bank take a stronger role in financing agro-industrial parks and infrastructure in developing regions?
6. What policies can be implemented to stabilize commodity price volatility for import-dependent nations?
7. How can countries strengthen supply chain resilience to better withstand geopolitical conflicts and trade disruptions?

## *Additional Resources:*

<https://www.sciencedirect.com/science/article/pii/S2590332221005285#:~:text=For%20example%2C%20for%20Spain's%20region,soy%2C%20fruits%2C%20and%20vegetables.&text=Although%20certain%20staple%20crops%20such,impacts%20embodied%20in%20international%20trade.&text=An%20analysis%20focusing%20on%20the,share%20of%20their%20biodiversity%20footprints.>

<https://www.fao.org/worldfoodsituation/foodpricesindex/en>

<https://www.sei.org/about-sei/press-room/climate-and-geopolitical-division-pose-risks-to-food-security/>

<https://www.rutgers.edu/news/researchers-find-climate-change-threatens-global-food-supply>

<https://www.growingproduce.com/vegetables/extreme-weather-in-2024-cost-farmers-more-than-20-billion/>

<https://faraafrica.org/caaps/>

[https://pmc.ncbi.nlm.nih.gov/articles/PMC11483651/#:~:text=Precision%20agriculture%20technologies%20\(PATs\)%20transform,runoff%20and%20greenhouse%20gas%20emissions.](https://pmc.ncbi.nlm.nih.gov/articles/PMC11483651/#:~:text=Precision%20agriculture%20technologies%20(PATs)%20transform,runoff%20and%20greenhouse%20gas%20emissions.)

<https://www.fao.org/world-banana-forum/en/>

<https://www.frontiersin.org/journals/sustainable-food-systems/articles/10.3389/fsufs.2021.796845/full>



# General Assemblies *Topic Guide*

# UNIDO

## United Nations Industrial Development Organization

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*Yale Model United Nations China III*

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