



Food and Agriculture Organization (FAO)

# FACTORY FARMING

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## **Factory Farming – U.N. Food and Agriculture Organization (FAO) Background Guide for 2024 Southwest Florida Model United Nations**

Food insecurity has become a distinct international crisis within recent years as events such as COVID-19 and the war in Ukraine largely affect supply chains that are distinctively vulnerable to shock factors. One of the methods used to combat food insecurity includes factory farming. Factory farming, or concentrated animal feeding operations (CAFOs), is a form of industrial farming used with the intent of maximizing profits with minimal resources. By focusing on profit maximization, companies ~~are able to can~~ produce cheap products on a massive scale which ultimately grants consumers greater food accessibility. This background guide however reviews some of the negative consequences ~~in relation to~~ of factory and industrial farming. Members of this committee should formulate responses centered around industrial farming and ways to negate some of its effects on an international and national scale while being respectful to their own country's historical and political alignments. The notable consequences that this committee and paper will discuss include: 1) environmental degradation, 2) population displacement, 3) labor exploitation, and 4) competition suppression. This guide concludes by examining various approaches different scholars and organizations have explored.

### **1. The Effects of Factory Farming**

#### *1.1 Environmental Degradation and the Demand for Land*

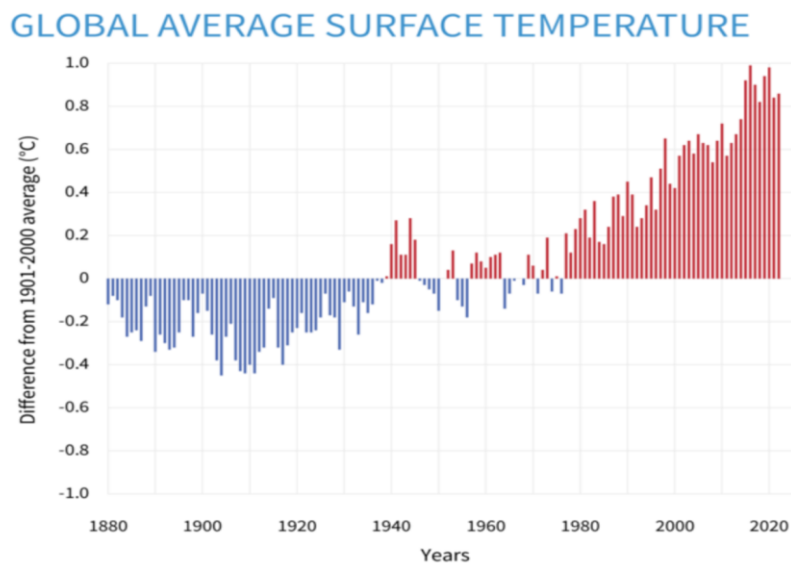
Industrial agriculture has become the primary method used to facilitate the global food production system with countries such as the U.S., Brazil, India, Mexico, and China serving as the main producers. With each country being in [World Data's top 10 biggest population list](#), and the globe's total population estimated to reach [9 billion by the year 2050](#), industrial farming has allowed population-dense countries the ability to provide for their population and others at a minimal cost. Yet, this current method of food production is not expected to keep up with the future demand especially when one considers current trends regarding food insecurity and accessibility. While low production costs allow consumers to have low-priced grocery hauls and greater food accessibility, these cheap prices have drastically affected production output rates across the globe as [90% of Americans include meat within their daily diets](#) and only [13% in Europe avoid red meat and beef](#). Thus, there is an apparent demand for animal products, and this apparent demand consequently creates a detrimental and overwhelming demand for land and natural resources which tend to be exploited in the process.

From agricultural to livestock farming, over five billion hectares of land is being used with [1/3<sup>rd</sup> being used for crops and 2/3<sup>rd</sup> being used for livestock grazing](#), and with livestock increasing from [7.3 billion to 24.2 billion between 1974 and 2011](#), the demand for land is a great concern that this committee should discuss. This issue becomes increasingly apparent considering that

[13% of global soil and 34% of all agricultural land has become completely degraded](#) due to environmental degradation. Environmental degradation is the process of land becoming deteriorated due to man-made and non-man-made practices. When it comes to non-made practices, extreme storms, and weather can rapidly deteriorate ecosystems and soil health. Yet land degradation, or environmental degradation, is primarily caused by man-made actions as modern agricultural practices are causing erosion up to [100 times faster than natural processes](#). Natural processes and typical weather, however, have been affected by the rise in global temperatures, and these rise in numbers, as depicted in Figure 1, have been largely caused by the actions of mankind.

**Figure 1**

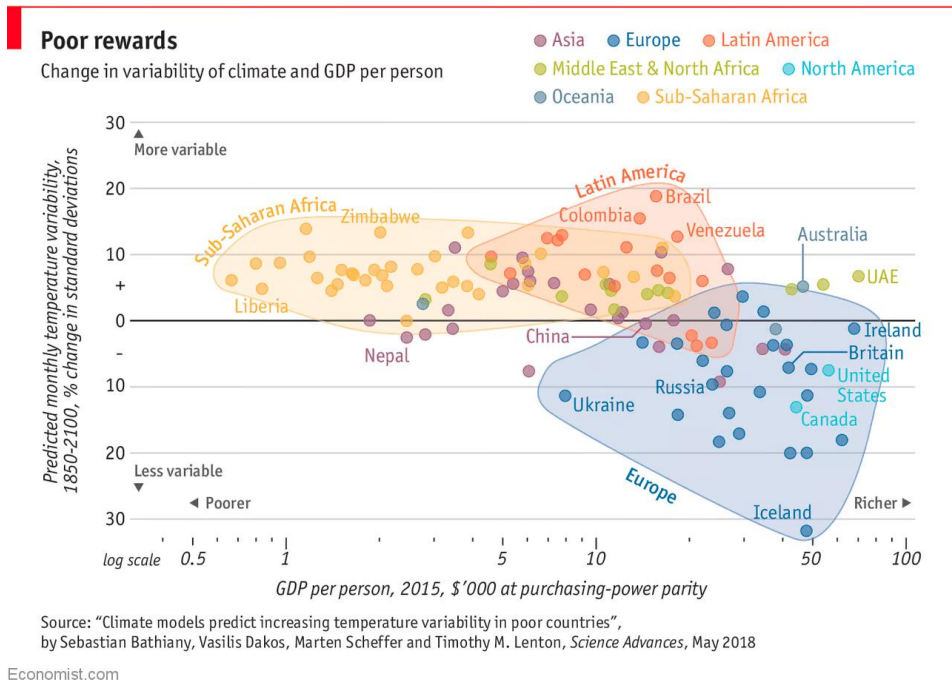
*Yearly surface temperatures from 1880-2022.*



Yearly surface temperature compared to the 20<sup>th</sup>-century average from 1880–2022. Blue bars indicate cooler-than-average years; red bars show warmer-than-average years. NOAA Climate.gov graph, based on [data](#) from the National Centers for Environmental Information.

Therefore, extreme temperatures and heavy rainfall are becoming more common, which is leading to land deteriorating even quicker. However, some areas are deteriorating faster than others, as depicted in Figure 2, and therefore this committee should also consider how each country individually contributes to climate change, and what actions can be taken to help countries that are disproportionately affected by industry farming and climate change.

**Figure 2**  
*GDP vs. predicted temperature variability*



For example, [75% of Brazil's Amazon rainforest has been destroyed](#) for animal agricultural production, and from the years 2000 to 2014, the [Congo Basin lost an area the size of Bangladesh](#) due to deforestation. Therefore, while factory farming and climate change pose a threat to everyone globally, some nations may need more help than others.

### 1.2 Population Displacement and Unemployment

With the demand and lack of land, there is also the issue of housing and displacement. [Close to 45% of the globe's population lives in rural areas](#)[Over 75% of the world's population lives in rural areas\\_ whose economies are dependent on agriculture](#) and this number is expected to decline in upcoming years given the rise in urbanization. However, [over 1.4 billion people directly depend on agriculture](#) for food, income, and shelter. Despite this dependency, the [1% of farm owners have total control over 70% of global farmlands](#). Land inequality is therefore becoming a major point of discussion as coalitions such as [Land Coalition](#) explain that

“Smallholders and family farms, indigenous peoples, rural women, youth, and landless rural communities are being squeezed into smaller parcels of land or forced off the land altogether, while more and more land is concentrated in fewer hands, mainly serving the interests of corporate agribusiness and distant investors, ~~utilising~~ utilizing industrial models of production that employ fewer and fewer people.”

While corporations can uproot and begin new farming projects elsewhere, the people living in these degraded areas cannot do the same and thus they are forced to move elsewhere as they can no longer work and live in unfarmable and degraded areas. As of now, over 500 million hectares of land—roughly half the size of China—have been abandoned because of land degradation. This number is expected to grow so rapidly within the next few decades that over 135 million people are at risk of being displaced permanently. This means more and more people, especially historically discriminated and oppressed groups, are increasingly likely to be forcefully uprooted and forced into unemployment. Job instability and unemployment can also pose ~~as~~ a concern when it comes to combatting extremist groups. Monique Barbut, the Executive Secretary of the United Nations Convention To Combat Desertification, believes that it is important to protect our land ~~in an effort to~~ protect our youth and other vulnerable communities from violence. Therefore, land degradation can create political instability via a rise in extremism, economic turmoil, unemployment, and land inequality.

Pollution and its associated health risks are also a major concern within this sector as America for example produces 1.4 billion tons of manure from 9.8 billion heads of livestock. Excessive manure creates a rise in greenhouse gases which increases global temperatures; 12% of all greenhouse gases come from U.S. agriculture alone which only heightens the intensity of climate change. However, manure isn't the only air pollutant within factory farms as nitrogen gas from freezing poultry and ammonia from excessive manure waste are common. Consequently, waterways are affected by the runoff from farms leaving agricultural runoff to be the biggest cause of water pollution in the U.S. Such runoff can create dead zones and a buildup of algae which can kill marine wildlife and negatively affect surrounding ecosystems.

#### 1.4 Competition Suppression

From an economic viewpoint, factory farming can also be posed as a threat to the open market. With small farmers owning less and less of the food industry, major corporations ~~are able to~~ can minimize competition and dictate agriculture prices and output levels leaving billions dependent on concentrated markets that are ultimately susceptible to shock factors. Factors such as unfavorable weather or disease outbreaks—exemplified by the effects of rising global temperatures and COVID-19—can create disruptions within demand and supply chains. COVID-19 specifically urged states to undergo lockdowns which halted the movements of people, raw materials, and manufactured goods. These halts shifted both the demand and supply of necessary

food supplies throughout the globe and low- and middle-income countries and cities were harmed by these shifts the most. For example, during the early start of the pandemic consumers engaged in stockpiling behaviors that consequently created significant demand for bread, toilet paper, etc. and this demand surge increased prices and lowered food accessibility for lower-income communities. And as the pandemic continued, prices continued to increase, even afterward as well. According to Reuters data from last year, [the overall price of food has gone up by 58.5%](#) as an effect of COVID-19, climate change, and conflict such as the war in Ukraine. When it comes to the challenges of suppliers, they believe these price increases are valid due to the limitations and difficulties in transporting products, mandatory quarantines for workers, and additional measures for health and sanitation.

For small farms, shocks as such are especially difficult as ~~it~~they can lead to them going out of business due to them not being able to produce products at the same price and volume as major corporations during times of high demand. It doesn't help as well when major corporations ~~have the ability to~~can lower prices whenever they believe it is needed. Therefore, the issue of food pricing is a critical concern this committee should analyze when discussing competition suppression. While there have been programs implemented to regulate prices during crises, as noted by the New Deal during the Great Depression, modern policies surrounding agriculture have advocated for profits over sustainability. An environmental awareness organization named ~~The Food Print~~ the FoodPrint has discussed the New Deal in greater detail ~~in order to~~to exemplify historical examples of market sustainability programs:

“A key feature was a program that managed agricultural supply and kept farm prices from falling too low on commodity goods (e.g., grains, dairy, and some other storable crops). Because harvest comes at roughly the same time for everyone, another unique feature of agriculture is that the price farmers get for their goods drops at the peak of harvest, because the market is suddenly flooded. Ironically, the better the harvest is, the lower the price is likely to go for the farmers who produce it.

The New Deal programs, called supply management, stabilized these swings by keeping the supply of commodity goods constant. Crop harvests vary from year to year, so keeping a steady amount on the market requires some structure. A floor price — essentially a minimum wage — ensured farmer prices would not drop too far below the cost of production; a grain reserve allowed the government to purchase surplus commodities to keep them off the market; and conservation incentives kept marginal land out of production. When the program was in full effect from 1941 to 1953, businesses ~~who~~that bought commodities paid those commodities' full cost of production. The federal government, meanwhile, only had to buy the surplus, so the cost to the taxpayer was much lower...”

Therefore, there is the possibility of limiting corporate control within the farming sector and as noted by the New Deal, setting stable commodity prices encourages fair wages which is a factor that would gear workers back to farming. The modern application of this approach would encourage production in local and regional markets within urban communities that depend greatly on food imports. By encouraging regional market growth states can protect their own and other dependent states from food inaccessibility and vulnerability. However, by encouraging corporate and market sustainability, member states should also discuss financial assistance which would allow member states the ability to fund soil replenishment projects, fluctuating food prices, and any other disruptive effect created by factory farming.

## 2. Solutions to Factory Farming

### 2.1 Corporations and Agroecology

When it comes to plausible solutions, the most common response is agroecology. As discussed within the effects of factory farming, industrial farming is extremely harmful to the land and sustainability of global food systems. Therefore, small farmers are talked about often because they practice sustainable farming practices such as agroecology. The FAO has already highlighted crucial factors of agroecology during their Second FAO International Symposium on Agroecology in 2018 under a framework titled "[The 10 Elements of Agroecology](#)." This framework was composed in 2015 and was approved in 2019 by 197 members during the 163<sup>rd</sup> council session, ~~with the purpose of evolving to evolve~~ sustainability past stereotypical "Go Green" practices such as recycling, crop diversity, efficiency, and resiliency. This new development includes topics such as economy building, the sharing of knowledge, and human and social values.

Therefore, this committee should discuss some of these recent adaptations and solutions when developing their working papers. Some key characteristics this committee may like to prioritize include crop diversification, sharing of knowledge, economy building, and human and social values. The diversification of crops is notably one of the main solutions the FAO proposes when it comes to combatting harmful industrial agriculture as enforcing crop diversity forces farms to transition from monocultures to polycultures. Studies such as the ones in [Malawi, Zambia, and Mozambique](#) show the positive effects of polycultures as the majority of farmers within these countries adhere to one to seven different cropping systems which include a combination of four different crops: dominate staples, alternative staples, legumes, and cash crops. These systems are shown to increase yields by [17-38% in comparison to monocultural systems](#). Along with greater yields, crop diversity provides farmers with a plethora of soil benefits due to the enhancement of nitrogen fixation and an increase in phosphorus. Nitrogen fixation is an important process in farming as it supports crops' growth and development. And because monocultures lack significant nitrogen availability, they opt for fertilizers to maintain this process. However,

fertilizers have a large carbon footprint [which contributes to the rapid rise in global temperatures](#). Yet if agroecological practices are adopted, excessive carbon within the atmosphere can be sequestered as case studies in India have shown to [remove up to 25% and enhance soil health by 63%](#). These studies were conducted by Dr. Vandana Shiva through their organization called Navdanya which focuses on teaching organic and sustainable farming.

Spreading knowledge about the importance of sustainable agriculture to those in both rural and urban settings allows for the possibility of more sustainability-focused policies to be implemented; by not raising awareness about harmful agriculture, industrial producers ~~are able to~~ create more barriers within the market to discourage crop diversity, seed investment, land reforms, and worker rights. An increase in awareness also promotes private investments within the marketplace which thus creates competition in the farming sector. This is because investments such as seed donations allow farmers to diversify their crops and keep them from having to buy overpriced seeds from large competitors. Non-profit organizations such as [Crop Trust](#) were established in 2004 by FAO and the U.N. to help protect and library seeds, specifically climate-resilient seeds, ~~in order to~~ protect farmers and the global food chain from suffering from poor yields amidst drastic weather changes. Other organizations such as [Slow Food USA](#) help provide local farmers and individuals with seeds and educate them on sustainable farming. This organization also places importance on social values by raising awareness about land and labor exploitation, especially within indigenous and low-income communities.

## 2.2 Worker Rights-Based Approach and Economy Building

Similarly to Slow Food USA, delegates could approach their working papers with the perspective of protecting worker rights and expanding opportunities for vulnerable and marginalized groups. As expressed in the first section, factory farming has allowed labor exploitation to take place ~~in order to~~ maintain profits and thus ~~it is vital for international organizations to address~~ [address international organizations need to address](#) the importance of worker rights. This is why in 2018 the U.N. developed a resolution titled “[United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas](#).” Within this declaration, they re-emphasized the importance of farmworker rights and condemned discrimination;

“Peasants and other people working in rural areas have the right to the full enjoyment of all human rights and fundamental freedoms recognized in the Charter of the United Nations, the Universal Declaration of Human Rights 2 and all other international human rights instruments, free from any kind of discrimination in the exercise of their rights based on any grounds such as origin, nationality, race, ~~colour~~ [color](#), descent, sex, language,



culture, marital status, property, disability, age, political opinion, religion, birth or economic, social or ~~other~~ another status.”

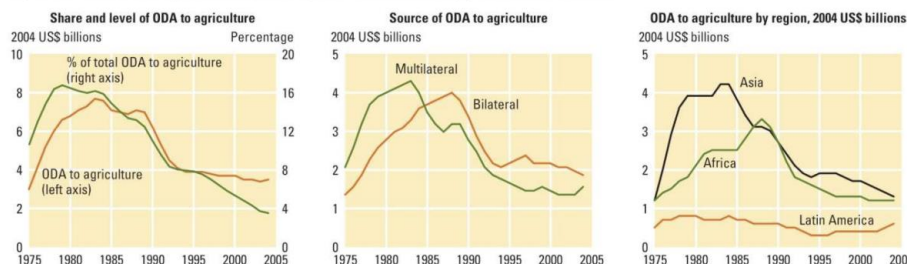
By having set standards as to what constitutes ~~as~~ labor exploitation and discrimination, other international organizations such as [La Via Campesina](#) or the “International Peasants’ Movement” ~~are able to~~ continue the fight by applying pressure on policymakers and spreading awareness to exploited farmworkers. This organization also acts as a news source for international labor rights as for 30 years now the organization has documented cases of labor exploitation. Thus, worker strikes that are happening currently in [Haiti](#) and [Niger](#) ~~are able to~~ generate larger support systems and hopefully prompt change.

~~T~~ ~~And as well,~~ there is also the possibility of international funding from major international organizations. Popular international funding organizations such as the World Bank provide funding to developing nations ~~with the goal of boosting~~ boosting growth and development. Financial support allows states to decrease any costs farmers may have when transitioning away from factory farming and create better working environments for farm workers. Yet, within these donations, funding is rarely set aside for agriculture and environmental development, as depicted by Figure 3.

**Figure 3**  
*Agricultural Development Assistance is Declining*

**Figure 2.7 Official development assistance to agriculture declines**

Figure 1.8 Official development assistance to agriculture declined sharply between 1975 and 2004



Source: OECD 2006a.  
Note: Data smoothed by locally weighted regressions.

This is why early this year the World Bank announced that [\\$220 million has been raised](#) solely for agricultural grants and...

“...these grants will help countries design and implement solutions in line with their current agriculture and food security strategies, providing additional financing and co-financing of existing projects prioritized by the country with support from GAFSP’s implementing

partners - the African Development Bank, Asian Development Bank, Food and Agriculture Organization of the United Nations, Inter-American Development Bank, International Fund for Agricultural Development, World Bank, and the World Food Programme.”

These funds are granted to countries that suffer from dire food insecurity and poverty with the hopes of building state sustainability.

### *Delegate Preparation*

While the issue of factory farming tackles a multitude of issues this committee should focus on the major topics discussed so far: climate change, job exploitation, unfair markets, and supply chain vulnerability. In response to these concerns, the delegates for SWFLMUN’s 2024 FAO Committee should consider the following:

1. Delegates should review current U.N. actions regarding factory farming and its effects. Proposals such as the U.N.’s Sustainability Goals and other key documents highlighted within this paper are important to analyze for structure building and writing.
2. Delegates should review their own nation’s policies regarding agricultural sustainability and industrial farming. Does your state include policies surrounding land reform? Do your state politics advocate for small farmers? Does your state have a lot of migrant workers or farmworkers who are potentially vulnerable?
3. Delegates should consider the importance of climate change ~~in relation to~~ in the previous step. Should there be an emphasis on agroecology or should members of this committee place greater importance on job exploitation?
4. Delegates should consider what barriers have major corporations created within the open market and how can states minimize competition suppression. Should members encourage antitrust action that would break up monopolies? Should there be barriers placed on businesses via agricultural price fixes or has a concentrated market created greater class gaps and fewer job opportunities?
5. Delegates should consider what should be done to combat profit losses when transitioning from factory farming to sustainable farming. Should businesses receive grants or financial compensation for transitioning?
6. Delegates should consider what financial arrangements will take place and if grants are given, what are the requirements for countries that are receiving them? Should only overly degraded and climate-impacted nations receive financial support?

7. Delegates should consider implementing ODA (official development assistance) to encourage economic growth in developing countries via sustainable agricultural growth.
- 6-8. Delegates should discuss supply chain management and what can be done to combat supply chain vulnerability. How can small farmers be protected from these challenges and what can be done to protect consumers from price spikes about supply chain vulnerability?

#### *Suggested Readings*

- Alkon, A. H., & Agyeman, J. (2011). *Cultivating Food Justice.: Race, Class, and Sustainability*. MIT Press.
- Hauter, W. (2014) *Foodopoly: The Battle Over the Future of Food and Farming in America*, Agroecology and Sustainable Food Systems.
- "Agriculture and Food." (2022). *The World Bank*.  
<https://www.worldbank.org/en/topic/agriculture/overview>.
- "Food Security & Agriculture." (2022). *UNCCD*. <https://www.unccd.int/land-and-life/food-security-agriculture/overview>.
- "Sustainable Agri-Food Supply Chains." (2017). *UNEP - UN Environment Programme*.  
<https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-lifestyles/sustainable-agri-food-supply>.
- "Climate Impacts on Agriculture And Food Supply | Climate Change Impacts | US EPA". (2022). *Climatechange.Chicago.Gov*. <https://climatechange.chicago.gov/climate-impacts/climate-impacts-agriculture-and-food-supply>.

#### *Suggested Databases*

[International Institute for Environment and Development](#): Works to build a more sustainable world for all by providing others with evidence and partnership.

[Climate Action Network](#): The largest climate network consists of over 1,500 civil society groups from over 130 countries working to combat climate change.

[Global Trade Watch](#): A watchdog for global trade agreements and their effects on human rights, democratic, and environmental concerns.

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[Dollars and Sense](#): Political economists analyze social justice-based solutions through political economy concerns such as trade, investment, and migration issues.

[Future of Development](#): The focus of this blog is to hold governments more accountable related to their proposed solutions and ~~its~~ [their](#) effects on poor populations and developmental growth.

[Rainforest Action Network Blog](#) - The Understory - [The](#) Blog focused on campaigns against the corporations and banks that are engaged in the destruction of rainforests and the acceleration of climate change.

[Planet Policy](#): A Brookings Institution blog exploring environment and natural resources policy—from climate change to energy to water, and from the local to the national to the global.