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Agriculture as the cornerstone of geopolitics

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Abstract:

For years, agriculture has played a secondary role in shaping the geopolitical landscape. Technology and energy monopolized this debate. Agriculture, perceived as a traditional sector lacking innovation, seemed detached from the major balances of global power. This reality has changed. In modern geopolitics, agriculture is regaining prominence as a source of influence, a tool of foreign policy, a key pillar of domestic stability, and consequently, a relevant factor in electoral outcomes and political legitimacy. From this perspective, the reshaping of the international order and the emergence of a new multipolar order are pushing major powers to reassess their positions in a context where food security, as in past crises, is once again becoming central to power and survival.

Keywords:

Agriculture, food sovereignty, geopolitics, nodes and vectors of power

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Introduction

For decades, agriculture played a secondary role in shaping the geopolitical landscape. Technology and energy dominated international relations, while agriculture—often perceived as a traditional sector lacking innovation—appeared largely detached from global power dynamics. The prevailing narrative placed technological innovation in Silicon Valley, energy in the Middle East, raw materials in Africa and Latin America, and manufacturing in Asia. Farming, by contrast, seemed to remain in the background as a silent and stable supplier.

In recent years, however, this reality is gradually changing. Agriculture has moved to the centre of global geopolitical competition. It has done so in a context in which major powers increasingly compete not primarily for territory, but for the structural pillars that sustain modern civilizations: energy, data, and—increasingly—food.

Several disruptions have accelerated this transformation. The COVID-19 pandemic exposed the fragility of global supply chains, while armed conflicts, recurring trade tensions, and the growing pressures of climate change have further reshaped the global economic landscape. As a result, agriculture is gaining importance not only as an economic sector but also as a geopolitical instrument, a tool of foreign policy, and a key pillar to domestic stability, since food security increasingly intersects with elements such as social cohesion, electoral behaviour, and the perceived legitimacy of political institutions.

In this new environment, the implications are tangible. A shipment of soybeans can move global markets, a trade agreement can trigger large-scale social protests, and an algorithm applied to irrigation management or genetic crop development can influence which countries maintain strategic advantages and which fall behind.

This is the ground on which the emergence of the so called food geopolitics is taking shape, and each country is discovering its implications in different ways: the United States through its relationship with China, the European Union through widespread agricultural protests, and countries such as Argentina and Brazil[1] through their growing role in supplying food security for third countries.

[1] Bloomberg, January 6, 2026. “Brazil achieves record exports in 2025 despite Trump’s tariffs”. https://www.bloomberg.com/news/articles/2026-01-06/brasil-logra-exportaciones-record-en-2025-pese-a-aranceles-

In this context, the ongoing reconfiguration of the international order and the emergence of a new multipolar system are pushing major powers to redefine their positions in a scenario where food, once again, becomes—as in major crises of the past—a critical factor for economic resilience and national security.

From this perspective, geopolitics appears to be entering a transitional phase, moving from a model primarily shaped by technological and energy competition towards one in which agricultural commodities increasingly influence global power dynamics.

Agriculture as a diplomatic instrument and shaper of the balance of power

Soybeans offer a particularly revealing example of this transformation. What was once considered primarily an industrial crop has evolved into a strategic instrument in international relations. This became especially evident in 2018, during the trade war initiated under Donald Trump's first administration. When Washington imposed restrictions on Chinese trade, Beijing responded by adjusting its soybean imports, inflicting direct economic damage on American farmers, an electoral constituency that forms a crucial base of support for the Republican Party.

What initially appeared to be a limited retaliatory measure soon revealed a broader pattern of strategic economic behaviour. China understood that food could be used as an instrument of geopolitical influence. By redirecting soybean purchases towards other producers, such as Brazil or Argentina, Beijing was able to exert indirect economic pressure on the U.S. economy.

This pattern has continued in recent years. The renewed tariff confrontation announced by Donald Trump in 2025 has once again prompted Beijing to suspend purchases of American soybeans[2]. Although this move received less international attention than China's restrictions on rare earth exports, its consequences for the U.S agricultural sector have been significant. Soybean prices fell, farm bankruptcies increased, and despite

de-trump

[2] Peterson Institute for International Economics, March 3, 2026. *"China no longer buys US exports: Drawing the right lessons for the next Trump-Xi deal."* https://www.piie.com/blogs/realtime-economics/2026/china-no-longer-buys-us-exports-drawing-right-lessons-next-trump-xi

efforts by the White House to cushion the impact, market conditions have yet to fully stabilize[3].

Even the meeting between Xi Jinping and Donald Trump in Busan—where China announced it would resume purchases of American soybeans[4]—has not fully restored market confidence. The meeting itself was largely driven by pressure from U.S. agricultural organizations[5] and the approaching midterm elections, since, for the Republican Party, maintaining congressional representation depends in large part on securing farmers support.

Recognizing that agriculture is not only a pillar for the U.S. economy but also a decisive electoral factor, the Trump administration has devoted significant attention after his comeback to the White House to renegotiate and expand trade agreements designed to protect and strengthen the U.S. agricultural sector. These include: (1) a joint declaration establishing a framework for a reciprocal trade and investment agreement between the United States and Argentina, granting preferential access for U.S. agricultural products to the Argentine market[6]; (2) a tariff agreement between the United States and the European Union that imposes a 15 percent tariff on most European agricultural exports to the United States while granting preferential access to the European market for a wide range of American agricultural products[7]; (3) the White House's announcement that tariffs will be removed on certain food imports from Argentina, Brazil, Ecuador, Guatemala, and El Salvador under framework agreements designed to expand market access for U.S. companies[8]; (4) the lifting of sanctions on

[3] Reuters. November 17, 2025. *China buys at least 14 cargoes of U.S. soybeans for Dec–Jan shipment, traders say*. https://www.reuters.com/world/asia-pacific/china-buys-least-14-cargoes-us-soybeans-dec-jan-shipment-traders-say-2025-11-17/

[4] The Daily Star. November 23, 2025. *China's largest US soybean buy in two years buoys prices*. https://www.thedailystar.net/business/global-economy/news/chinas-largest-us-soybean-buy-two-years-buoys-prices-4042016

[5] Belsie, Laurent. October 15, 2025. "*Soybean bailout? Hard-hit farmers want China trade more than Trump aid*." *The Christian Science Monitor*. https://www.csmonitor.com/Business/2025/1015/soybean-farmers-trump-bailout-china

[6] The White House. November 13, 2025. *Joint statement on framework for a United States-Argentina agreement on reciprocal trade and investment*. https://www.whitehouse.gov/briefings-statements/2025/11/joint-statement-on-framework-for-a-united-states-argentina-agreement-on-reciprocal-trade-and-investment/

[7] Directorate-General for Trade and Economic Security. *Joint statement on a United States-European Union framework on an agreement on reciprocal, fair and balanced trade*. 21 Aug. 2025, European Commission, https://policy.trade.ec.europa.eu/news/joint-statement-united-states-european-union-framework-agreement-reciprocal-fair-and-balanced-trade-2025-08-21_en

[8] Reuters. November 14, 2025. "*Trump cuts tariffs on beef, coffee and other foods as inflation concerns mount*."https://www.reuters.com/business/trump-cuts-tariffs-beef-coffee-other-foods-inflation-concerns-mount-2025-11-14/

Belarusian potash fertilizers, a measure linked to the release of political prisoners by Belarus, a strategic ally of Russia[9]; (5) and the approval of a $12 billion financial support program for American farmers aimed at mitigating the economic impact of trade disruptions[10].

Europe: regulatory and strategic tensions

In this evolving landscape, the European Union faces an increasingly complex institutional and commercial environment. The erosion of multilateralism and the rise of global protectionism have prompted Brussels to intensify its pursuit of bilateral trade agreements designed to secure preferential access to key markets. Agreements such as the Comprehensive Economic and Trade Agreement (CETA) with Canada, the EU–Japan Economic Partnership Agreement (JEFTA), and the interim trade arrangement between the EU and Mercosur reflect an effort to consolidate Europe's position within an increasingly fragmented global trade system.

However, this strategy has also generated internal tensions. The recent tariff agreement negotiated between the United States and the European Union has been widely perceived by segments of the agricultural sector as a unilateral concession that sacrifices European farmers in exchange for advantages in other economic sectors[11]. As a result, discontent among farmers' unions and rural organizations has intensified across the continent.

At the heart of these concerns lies the potential loss of competitiveness for European agri-food products when compared with U.S. imports that are not subject to the same sanitary and environmental standards. Farmers also fear the broader social consequences of declining competitiveness, including the erosion of rural economies and the relocation of food production outside the EU. These anxieties have already spilled onto the streets. Recent farmers' protests in France, Poland, Belgium, Italy, and Spain

[9] Bloomberg. December 13, 2025. "*Belarus pardons 123 prisoners as US lifts potash sanctions*." https://www.bloomberg.com/news/articles/2025-12-13/belarus-pardons-123-prisoners-as-us-lifts-potash-sanctions

[10] U.S. Department of Agriculture. December 8, 2025. *Trump Administration announces $12 billion farmer bridge payments for American farmers impacted by unfair market disruptions*. https://www.usda.gov/about-usda/news/press-releases/2025/12/08/trump-administration-announces-12-billion-farmer-bridge-payments-american-farmers-impacted-unfair

[11] Velinger, Jan. August 22, 2025. "*EU farmers slam US trade deal, saying agriculture is 'left behind'*." *EU Perspectives*. https://euperspectives.eu/2025/08/eu-farmers-slam-us-trade-deal-saying-agriculture-is-left-behind/

are not isolated events, they reflect a growing wave of social mobilization that could eventually affect political stability within the EU.

Additionally, political pressure on European institutions may intensify further if Brussels lacks the resources needed to compensate the producers most affected by these changes. Such resources are already under strain. The EU's financial commitments to support Ukraine have contributed to an expected reduction of approximately 20 percent in funding for the Common Agricultural Policy beginning in 2027. In the meantime, European farmers have voiced increasing criticism of what they perceive as unfair competition from Ukrainian agricultural products entering the EU market[12].

Strategic relations with Morocco add another layer of complexity. Agreements involving agricultural trade—particularly those affecting Western Sahara—highlight the EU's growing need to secure reliable food supplies from external partners. Yet each step in this direction carries legal and diplomatic risks that could eventually translate into political tensions within the EU.

The debate surrounding the Mercosur agreement illustrates another complex front. Its recent reactivation, driven partly by Europe's need to diversify export markets and respond to shifting global trade dynamics, has reignited longstanding divisions among EU member states. Many agricultural producers perceive the agreement as a trade-off within Europe's broader industrial strategy, a reality that has been summarized by critics as exchanging "cows for cars."[13]

This situation is compounded by the possibility of regulatory asymmetries between the two blocs, as differences in environmental, sanitary, and labour standards could create competitive disadvantages for European producers.

[12] Corlin, Peggy. *Euronews*, October 29, 2025. "*EU inks agriculture deal with Ukraine even as political divisions remain over vast exports*."https://www.euronews.com/business/2025/10/29/eu-inks-agriculture-deal-with-ukraine-even-as-political-divisions-remain-over-vast-exports

[13] France 24. January 15, 2026. "*Is the EU-Mercosur trade agreement more than a 'cows for cars' deal?*" *People & Profit*,. https://www.france24.com/en/tv-shows/people-profit/20260115-is-the-eu-mercosur-trade-agreement-more-than-a-cows-for-cars-deal

More broadly, the renewed push for the Mercosur agreement may also be interpreted as a reflection of the weakening European economy and the Union's need to open itself to new markets.

It should also be noted that Mercosur's strategic weight as a global food supplier has not gone unnoticed by major superpowers. Since the region is capable of supplying up to 60 percent of the protein consumed worldwide, both China and the United Sates have already developed extensive networks of economic and political partnerships across the region, securing long-term access to agricultural production while encouraging their corporations and institutions to establish a direct presence within these countries. By doing so, they have positioned themselves in order to benefit from future trade agreements that the Mercosur may conclude with third parties.

Food prices as a political thermometer: inflation, social discontent, and the cost of ecological transition

Food prices have emerged as an increasingly important social and economic indicator. Where major geopolitical, climate, and regulatory transformations once seemed abstract, the rising cost of groceries translates these dynamics into an everyday experience for households.

The consequences are already visible. The agricultural sector has gained greater visibility in public debate—not by design but by necessity—forcing governments to respond with emergency subsidies[14], regulatory adjustments[15], and hurried revisions of trade agreements that directly affect the competitiveness of European agriculture.

Although overall inflation in the eurozone has gradually returned towards the European Central Bank's 2 percent target, food inflation continues to exceed that benchmark[16]. Today, placing a meal on the table costs nearly one-third more than it did before the pandemic.

[14] European Commission. March 15, 2024. "*Commission Proposes Targeted Review of the Common Agricultural Policy to Support EU Farmers*."https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1493

[15] Sipka, Stefan, Brooke Moore y Marialena Stagianni. February 14, 2024. "*From Protests to Policy: What Is the Future for EU Agriculture in the Green Transition?*" European Policy Centre. https://www.epc.eu/publication/From-protests-to-policy-What-is-the-future-for-EU-agriculture-57f788/

[16] EsadeEcPol. 22 de enero de 2026. "*Cómo fue la inflación en 2025 para los hogares pobres y ricos en España*." https://www.esade.edu/ecpol/en/blog/como-fue-la-inflacion-en-2025-para-los-hogares-pobres-y-ricos-en-espana/

This trend is the result of several overlapping pressures on the agri-food system.

The first was energy. Russia's invasion of Ukraine triggered a sharp increase in the prices of hydrocarbons and fertilizers—both essential inputs for agricultural production—transmitting cost shocks throughout the entire food supply chain[17].

The second factor is a structural one. Rising labour costs and higher global prices for agricultural commodities have steadily increased production expenses. At the same time, these commodities have become more exposed to climate volatility, further amplifying price fluctuations[18].

In this sense, it can be assumed that climate change itself is no longer a distant or external variable in this process, yet an increasingly direct contributor of food price inflation. Each failed harvest, water restriction, and logistical disruption caused by extreme weather events acts as an indirect cost that ultimately reaches consumers.

A third layer of pressure comes from political and regulatory dynamics. Europe's ambition to lead the decarbonization of the food sector introduces additional costs which, while consistent with climate objectives, risk undermining the competitiveness of the European's Union agri-food sector.

The introduction of the Carbon Border Adjustment Mechanism (CBAM) illustrates this tension. Designed to price emissions embedded in carbon-intensive products such as fertilizers, CBAM is expected to add additional costs onto fertilizer importers. According to a recent report by S&P Global Ratings, import prices could rise between 2 and 3 percent annually, accumulating increases of up to 39 percent by the end of the next decade[19].

At the same time, debates about structural solutions to the climate change challenge are gaining traction. Proposals such as diversifying protein sources, promoting plant-based

[17] Council of the European Union. January 22, 2026. "*How the Russian Invasion of Ukraine Has Further Aggravated the Global Food Crisis*." https://www.consilium.europa.eu/en/infographics/how-the-russian-invasion-of-ukraine-has-further-aggravated-the-global-food-crisis/

[18] Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, United Nations Children's Fund, World Food Programme, and World Health Organization. 2025. "*High Food Price Inflation*." In *The State of Food Security and Nutrition in the World 2025: Addressing High Food Price Inflation for Food Security and Nutrition*. https://openknowledge.fao.org/server/api/core/bitstreams/de95e011-1af9-4b28-9a07-d8ce61f8aa6c/content/state-food-security-and-nutrition-2025/high-food-price-inflation.html

[19] S&P Global Ratings. November 13, 2025. "*Scenario analysis: CBAM could add at least $15 billion to Europe's yearly import bill*." https://www.spglobal.com/ratings/en/regulatory/article/scenario-analysis-cbam-could-add-at-least-15-billion-to-europes-yearly-import-bill-s101648859?utm_medium=organic&utm_source=social

diets, or reducing meat consumption in high-consumption regions are increasingly presented as alternatives to reduce emissions[20] and ease climate pressure.

These proposals, however, carry significant political and cultural implications. While supported by international organizations and parts of the scientific community, they often clash with deeply rooted nutritional habits, established production systems, and the socioeconomic fabric of rural communities. Changing diets ultimately implies transforming the agricultural model itself, a process that inevitably generates political friction.

In this context, food prices become a point of convergence where environmental, economic, and social variables intersect. Every increase in grocery bills is interpreted by many citizens as a signal of system failure, while each new environmental regulation is perceived by farmers as an additional burden on an already strained sector. For Europe, the risk is not only economic but political too. If the ecological transition is widely perceived as a process that raises the cost of living without delivering tangible benefits, public support for climate policy may gradually erode.

As a result, food prices are no longer merely a technical indicator of market conditions. They are becoming a political battleground where the broader legitimacy of the economic and environmental model currently under construction is being tested.

Meanwhile, at the global level, this debate is also reshaping climate diplomacy. A growing consensus is emerging that the food system must move from the margins to the centre of international climate negotiations. As the Food and Agriculture Organization of the United Nations (FAO) recently stated during the 2025 United Nations Climate Change Conference (COP30)[21] held in Belém, Brazil, achieving the objectives of the Paris Agreement will be very difficult without actually transforming the way food is produced and consumed.

[20] Morach, Benjamin, et al. "*Food system emissions: Alternative proteins can help climate*." *World Economic Forum*, 13 July 2022. https://www.weforum.org/agenda/2022/07/protein-diet-vegan-climate-food-system-decarbonization/

[21] Food and Agriculture Organization of the United Nations. November 21, 2025. *COP30: FAO brings agrifood systems to the forefront of climate action*. https://www.fao.org/newsroom/detail/cop30--fao-brings-agrifood-systems-to-the-forefront-of-climate-action/es

The financialization of the agricultural sector

Beyond the production of food, the contemporary agri-food system increasingly depends on a global financial architecture that determines what is cultivated, how it is financed, and which producers are able to survive periods of crisis[22]. At this level, control over financial risk directly influences the conditions of agricultural production. Those who manage risk ultimately determine the viability of producers. In this regard, it can be stated that financial control becomes a distinct node of power within the global food system.

Access to risk-management instruments plays a decisive role in determining which farms can withstand a poor harvest, a prolonged drought, or a major logistical disruption. Where insurance disappears or becomes prohibitively expensive, production tends to contract. Where access to credit is constrained, farmers lose much of their decision-making autonomy. In this context, food sovereignty no longer depends exclusively on access to land or water, but increasingly on the capacity to finance uncertainty.

Another important pillar of this structure is the strategic role played by multinational agribusiness corporations specializing in phytosanitary products. These companies do far more than supply agricultural inputs, they concentrate intellectual property, define production standards, and shape yields at a global scale.

Faced with this situation, China has accelerated the acquisition of these types of multinationals[23] in recent years, incorporating them into its broader food security strategy. These actions can be interpreted as a form of indirect agricultural expansion: rather than acquiring farmland, China gains influence over the productive capacity of millions of hectares worldwide through its control of key inputs, technologies, and the financial structures associated with them.

Taken together, finance and insurance constitute a silent but structurally powerful node within the global food system. Those who control capital and risk do not need to own the land in order to determine what is grown, how it is produced, and which producers remain economically viable.

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[22] S. Ryan Isakson & Jennifer Clapp & Phoebe Stephens, 2023. "The financialization of agricultural commodities: implications for food security," Chapters, in: Martin Caraher & John Coveney & Mickey Chopra (ed.), Handbook of Food Security and Society, chapter 14, pages 202-214, Edward Elgar Publishing

[23] *EL PAÍS*. April 12, 2017. *China approves ChemChina's acquisition of the Swiss seed and pesticide firm Syngenta*. https://elpais.com/economia/2017/04/12/actualidad/1492005616_684779.html

Biotechnology and AI: the new terrain of competition

Biotechnology and artificial intelligence are becoming increasingly central to international agricultural competition[24]. The future of agriculture will be determined not only by the size of cultivated land or access to water, but by the ability to incorporate knowledge, data, and technology into every hectare. In this sense, the contest is no longer confined to fields and supply chains, it is increasingly unfolding in research laboratories, data centres, and digital platforms that determine what is produced, how it is produced, and at what cost.

China has moved early to adapt to this strategic reality. Long perceived as structurally vulnerable on food security, it is now reconfiguring its agricultural system along industrial and technological lines designed to reduce uncertainty and manage price volatility[25]. The United States is moving in a similar direction, reorganizing its productive base around digital and biotechnological tools in order to preserve its competitive edge[26]. Europe, by contrast, has proceeded more cautiously. Caught between the need to innovate and a regulatory framework that slows the adoption of disruptive technologies, the European Union has lagged behind other major powers. Yet recent initiatives—including the Biotech Act[27], related legislative measures, and the European Investment Bank's growing support for agriculture and the bioeconomy[28]—suggest that this trajectory may be beginning to change.

Several technologies are driving this transformation. Gene editing, the automation of tasks that previously required large numbers of workers in the fields, digital systems applied to water management, the use of crop protection products and fertilizers[29], and predictive crop monitoring are emerging as key levers of change. Countries that successfully integrate these systems are likely to strengthen their competitive position;

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[24] World Economic Forum. January 2026. *How agricultural intelligence can revolutionize farming*. https://www.weforum.org/stories/2026/01/ai-agricultural-intelligence-revolutionize-farming/

[25] Innovation Centre Denmark. (2025). *How China protects food security amid global challenges*. https://icdk.dk/insights-ogamp-cases/chinas-grain-production-and-food-security

[26] U.S. Department of Agriculture. *Biotechnology*. USDA, https://www.usda.gov/farming-and-ranching/plants-and-crops/biotechnology

[27] European Commission, Directorate-General for Health and Food Safety. December 16, 2025. *Proposal for a Regulation to establish measures to strengthen the Union's biotechnology and biomanufacturing sectors (European Biotech Act)*. https://health.ec.europa.eu/publications/proposal-regulation-establish-measures-strengthen-unions-biotechnology-and-biomanufacturing-sectors_en

[28] European Investment Bank. 2024. *€3 billion of EIB Group financing announced for farmers and bioeconomy*. https://www.eib.org/en/press/all/2024-497-eur3-billion-of-eib-group-financing-announced-for-farmers-and-bioeconomy?lang=es

[29] The Fertilizer Institute. November 6, 2025. *TFI celebrates recognition of phosphate and potash as critical minerals*. https://www.tfi.org/media-center/2025/11/06/tfi-celebrates-recognition-of-phosphate-and-potash-as-critical-minerals/

those that don't will become increasingly dependent on external technologies, with all the strategic vulnerabilities that such dependence entails.

China offers a particularly important example. By integrating these technologies into its agricultural sector, Beijing has been able to mitigate some of the inflationary pressures affecting food prices across much of the OECD countries[30]. The logic is straightforward: produce more, and produce more cheaply. In doing so, China is moving towards partial self-sufficiency in key food categories while also increasing its capacity to influence international prices. What was once a vulnerability is being transformed into an instrument of power.

This is occurring precisely as Europe faces the opposite dynamic: rising production costs, strict regulation, and persistent food inflation that is eroding public confidence. For the European Union, the strategic implication is clear: it must intensify efforts to strengthen the competitiveness of its agricultural sector. Yet adopting new production technologies does not automatically translate into greater sovereignty. Technological innovation enhances the resilience of the food value chain when it reduces vulnerabilities, but it can also undermine that resilience when it creates dependencies that are difficult to reverse.

The rapid deployment of drones, sensors, agricultural AI systems, advanced machinery, and improved seeds has undoubtedly increased productivity. But it has also shifted control over critical inputs away from the farm itself. Additionally, much of this technology is imported. Its components, maintenance, software, and—perhaps, most importantly—the data it generates often remain under the control of external suppliers. When an agricultural system depends on foreign technology, it also becomes exposed to the crises, political decisions, and strategic priorities of those who control it.

History offers repeated warnings about the risks of intervening in complex productive systems without understanding their full interdependencies. One illustrative example is China's mass campaign in the late 1950s to eliminate sparrows, which were viewed as pests consuming grain. The policy appeared rational from a production point of view, but it ignored a critical ecological reality: sparrows also acted as natural pest control by

[30] *Financial Times*, October 7, 2025. "*Food prices have risen a lot more than other stuff since Covid…*" https://www.ft.com/content/de31dc95-a0cd-432a-b403-f2ff26a6cdb8

feeding on insects. Their elimination contributed to a surge in pest populations, crop collapse, and ultimately, one of the worst famines of the twentieth century.

This episode illustrates a principle that remains fully relevant today: when an ecosystem—whether natural or technological—is altered without control over all of its interlocking variables, short-term gains in efficiency can produce long-term losses in resilience. In the European case, replacing biological dependencies with external technological ones, without retaining sovereignty over them, carries a similar risk, less visible, but potentially just as consequential.

On top of this, a further layer of vulnerability is also emerging: the erosion of agricultural diversity. For centuries, societies cultivated a broad range of staple crops adapted to local climates, soils, and social needs. By contrast, today the global food system depends on a remarkably narrow set of crops that dominate production, trade, and research. This concentration has increased efficiency, but it has also reduced resilience. Less diversity means greater exposure to pests, extreme weather events, and supply disruptions[31].

The deeper risk is therefore not merely technical but systemic. When a territory loses genuine productive capacity and becomes structurally dependent on external sources to feed its population, vulnerability extends well beyond economics. It becomes political, social, and strategic.

In this case, the comparison with the decline of the Roman Empire is also instructive. From the second century AD onward, Rome progressively reduced agricultural production in the Italian peninsula and much of its western provinces, relying instead on grain imports from North Africa. That dependence sustained urban populations for a time, but it also created structural fragility. When trade routes were disrupted, producing provinces destabilized or political control over those territories weakened, Rome's food security—and with it, its wider stability—was exposed.

Yet this logic is not confined to history. The European Union already faces significant dependencies across several critical points in its food system. It relies on soybeans and animal feed from Brazil and the United States to sustain its livestock sector, on imported fertilizers—historically from Russia and Algeria—to maintain crop yields, and on fruits and

[31] Anderson, Teresa. 2013. *Seed diversity key to weathering the storms ahead*. Thomson Reuters Foundation, October 25, 2013. https://news.trust.org/item/20131025114724-s9iqt

vegetables from third countries, especially Morocco, to supply its markets during key seasons. These dependencies are not politically neutral. They shape trade policy, constrain diplomatic flexibility, and weaken Europe's strategic autonomy.

As a result, it can be stated that biotechnology and artificial intelligence are no longer simply technical issues; they have become matters of power, resilience, and sovereignty. In that sense, they are among the foundational drivers of the emerging geopolitics of food.

Conclusion and Outlook

Food Sovereignty as National Policy

In the wake of the disruptions experienced during the pandemic and the shortages of certain products caused by recent geopolitical shocks, national governments have realized that the absence of strategic food reserves could potentially turn any interruption in production or distribution into a social crisis. In an international environment where uncertainty has become structural, the capacity to produce and stockpile essential food supply has once again become—much as it was in earlier historical eras—an instrument of sovereignty and political legitimacy, central to domestic stability[32].

It is therefore no coincidence that the United States has moved to incorporate the Department of Agriculture (USDA) into the Committee on Foreign Investment in the United States (CFIUS), effectively treating farmland, biotechnology, and agri-food supply chains as strategic assets subject to national security scrutiny. The Trump administration's approval of the National Farm Security Action Plan[33] further consolidates this approach. Agriculture is no longer treated simply as a sectoral concern, it is increasingly framed as a matter of state policy, on a par with defence and energy.

This logic is not unique to Washington. In October 2025, the Fourth Plenum of the 20th Central Committee of the Chinese Communist Party identified agricultural and rural modernization as a central pillar of the 15th Five-Year Plan (2026–2030)[34], linking it

[32] World Bank, FAO, and WFP. 2025. Strengthening Strategic Grain Reserves to Enhance Food Security. https://documents1.worldbank.org/curated/en/099042625211562573/pdf/P504545-488431b2-0565-40f9-852c-e8db32d22559.pdf

[33] U.S. Department of Agriculture. July 10, 2025. "Secretary Rollins continues effort to strengthen national security by defending farm security." https://www.usda.gov/about-usda/news/press-releases/2025/07/10/secretary-rollins-continues-effort-strengthen-national-security-defending-farm-security

[34] China Daily. October 28, 2025. *Full text: Recommendations of the Central Committee of the Communist Party of*

directly to China's broader modernization agenda, social stability, and long-term security. Meanwhile, the Eurasian Economic Union has also achieved a level of food self-sufficiency exceeding 90 percent[35], underscoring the strategic importance these states attach to controlling their own food production capacity.

Sustainable Investment

In this context, Europe cannot remain tied to an approach in which sustainability is understood primarily in terms of restriction. The emphasis must shift towards efficient production. As numerous studies have shown, investment in agricultural productivity—through technology, genetic improvement, soil management, digitalization, and more efficient resource use—not only raises profitability and productive capacity, but also constitutes one of the most effective ways to slow the growth of agricultural emissions[36].

Nevertheless, the implications extend well beyond economics and climate policy. History shows that major advances in agricultural productivity have repeatedly transformed the societies that achieved them. When a civilization succeeds in releasing labour from the countryside through sustained gains in productivity, it does more than expand food output: it reshapes its social structure, increases specialization, and ultimately strengthens its capacity to exert power.

The Neolithic transition offers the clearest historical example[37]. The introduction of agriculture made it possible to generate and store surpluses, reduce dependence on direct food procurement, and redirect labour toward increasingly specialized functions—including military organization.

From this perspective, Europe should promote agricultural entrepreneurship with the same strategic ambition that has guided support for the start-up ecosystem over the past decade. If innovation-driven enterprise has been treated as a pillar of economic modernization in urban and digital sectors, the same logic must now be applied to the

China for Formulating the 15th Five-Year Plan for National Economic and Social Development. https://www.chinadaily.com.cn/a/202510/28/WS69009c73a310f735438b76b6.html

[35] TASS. 2025. "EAEU countries cover 90% of agriculture production demand — Russian PM." September 30, 2025. https://tass.com/economy/2023159

[36] Cornell Chronicle. January 2026. "More productive farming lowers global emissions." https://news.cornell.edu/stories/2026/01/more-productive-farming-lowers-global-emissions

[37] Aznar Fernández-Montesinos, Federico. *Las generaciones de guerras: guerras de primera generación (I)*. Documento de Análisis No. 54/2015, Instituto Español de Estudios Estratégicos, 25 de noviembre de 2015. https://www.ieee.es/Galerias/fichero/docs_analisis/2015/DIEEEA54-2015_GeneracionesdeGuerras_xIx_FAFM.pdf

countryside. Agriculture needs capital, talent, narrative, and prestige. Making agricultural entrepreneurship innovative and attractive is therefore not a matter of image, but also a strategic requirement for ensuring food sovereignty in the twenty-first century.

Local Politics and the Electoral Factor

The return of food to the centre of geopolitics coincides with a quieter but equally significant transformation in developed societies. Sustained increases in food prices, combined with growing public awareness of the importance of healthy diets, are beginning to reshape patterns of consumption[38].

Across both urban and rural communities, more citizens are seeking to recover at least a degree of productive autonomy through home gardens, community agriculture, rooftop cultivation, and other forms of shared urban farming. Far from representing a marginal lifestyle trend, this shift is increasingly being understood by regional and local authorities as a political opportunity.

This reality has led municipal governments to begin incorporating urban agriculture into their electoral platforms and public policy agendas. These initiatives typically combine several objectives at once: improving access to fresh food, regenerating green spaces, and strengthening social cohesion across communities[39].

Deregulation

At both the national and European levels, there are growing signs that the coming years will bring a push for administrative simplification across the food sector, with the dual aim of reducing costs and containing consumer food prices. This shift reflects not only mounting social pressure driven by inflation, but also the political need to preserve the competitiveness of the agricultural sector in an increasingly strained environment.

This trend could deepen and take on a more explicitly geopolitical dimension if the United States moves towards further deregulation of genetically modified organisms (GMOs). It would not be surprising if the Trump administration sought to roll back a significant share

[38] PwC España. October 15, 2025. "*Consumidores: mayor compatibilidad entre alimentación saludable, cercana y sostenible*." https://www.pwc.es/es/sala-prensa/notas-prensa/2025/consumidores-compatibilidad-alimentacion-saludable-cercana-sostenible.html

[39] Farmonaut. 2025. "*Urban Agriculture Europe 2025: Essential trends*." https://farmonaut.com/europe/urban-agriculture-europe-2025-essential-trends

of environmental regulation[40] while actively promoting agricultural biotechnology as a pillar of both competitiveness and national security. Such a move would further strengthen the position of the large American multinationals that already dominate key segments of the sector.

Dependencies

This shift, while potentially effective in enhancing productivity and reducing costs in the short term, entails a strategic risk that should not be underestimated. The widespread adoption of genetically modified seeds—protected by intellectual property rights and embedded within closed technological ecosystems—risks creating a new form of structural dependency for farmers.

What initially appears as a gain in efficiency may, over time, translate into a loss of productive autonomy. As reliance on proprietary inputs deepens, farmers' decision-making capacity narrows, and control over key elements of the food system shifts toward the actors that dominate seed development and distribution.

Thus, in a context where food sovereignty is once again emerging as a core dimension of power, this dynamic highlights a fundamental strategic dilemma: the trade-off between short-term competitiveness and long-term resilience. How governments and producers navigate this tension will be one of the defining challenges of the coming decade.

Water Management

Finally, water must be understood as a central vector of power. The hydraulic civilizations of Egypt and Mesopotamia rose in large part because of their ability to control and distribute river resources, thereby securing harvests, sustaining population centres, and preserving social stability.

That logic remains highly relevant today. Efficient water management is still a decisive factor in both food security and geopolitical influence. States that exercise effective control over their water systems—whether through advanced irrigation infrastructure, large-scale storage capacity, or technological optimization—enjoy clear strategic advantages over those that depend on external supplies or face chronic scarcity. Israel,

[40] Kroll, Eric. February 11, 2025. "*Deregulation in 2025: What food, beverage companies need to know*." *SupplySide Food & Beverage Journal*. https://www.supplysidefbj.com/food-beverage-regulations/deregulation-in-2025-what-food-beverage-companies-need-to-know

in key irrigation systems, and China, through its large-scale water management and irrigation projects, illustrate how control over water can be translated into broader economic and geopolitical leverage.

From this perspective, the return of food as a node of power is not an anomaly but a recurring feature of periods of systemic transition. As in earlier eras, the price, availability, and control of food are once again helping to define the boundaries of what is politically feasible.

It is on this terrain—shaped by inflation, climate change, technological transformation, and geopolitical rivalry—that a significant share of twenty-first-century power will be determined.

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