

Futures of Agrifood Systems

FOUR SCENARIOS IN 2035



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EXECUTIVE SUMMARY

This report presents the findings of a structured foresight process conducted by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) between July and December 2025, in collaboration with internal and external sector experts. Global agrifood systems are under unprecedented and interconnected pressure: climate change and biodiversity loss are destabilising the ecological foundations of food production; population growth and shifting dietary patterns are driving demand in new directions; geopolitical instability is fracturing the trade relationships that underpin global food supply; and rapid technological advances are reshaping who controls production, distribution, and access to food. At the same time, German development cooperation is navigating its own period of disruption, with declining budgets, shifting EU strategic priorities, an uncertain future for US development cooperation, and growing geoeconomic competition all reshaping what GIZ can do and how. To address these compounding uncertainties and strengthen GIZ's strategic orientation in agriculture and food systems, this foresight process sought to identify the key forces shaping the transformation of global agrifood systems toward 2035, map plausible alternative futures, and derive strategic implications for German development cooperation. The process followed the Copenhagen Method, structured across six phases — Scope, Explore, Discover, Build, Understand, and Decide — and identified 57 drivers, which were clustered and prioritised into eight key factors as the basis for scenario development. The four scenarios draw on the Manoa School of Futures Studies and the

archetypes developed by Jim Dator — Growth, Collapse, Discipline, and Transformation — which represent recurrent developmental paths observed across human civilisations. Scenarios are not predictions: they are plausible, internally coherent models of possible futures whose value lies in supporting more resilient strategies, future-oriented programming, and stronger institutional positioning.

The Four Scenarios

Feeding Growth

A growth scenario for 2035

By 2035, agrifood systems will be defined by relentless economic competition and deepening geopolitical rivalry. Global food production has reorganised around three dominant food blocs — centred on the EU and post-war Ukraine, on the US and Canada, and on the BRICS countries led by China — while nations outside these blocs face growing marginalisation and persistent food insecurity. Within the food cores, automation, AI-driven agriculture, and consolidated agribusiness have fuelled rapid productivity gains, celebrated by governments and corporations as a Fourth Agricultural Revolution. Algorithms manage planting, irrigation, and harvesting; drones and driverless machinery dominate fields; and profits flow upward to a small number of corporate clusters while rural employment collapses and young people leave the land. In the global periphery, technology transfers remain limited to areas where corporations see strategic advantage. Energy scarcity and a new land rush — driven by competition between

agricultural production and green energy — intensify pressures on ecosystems and communities alike. Consumption patterns are sharply divided: elites in the food cores design personalised longevity diets, while low-income households depend on cheap ultra-processed food, and large parts of the periphery face both hunger and rising obesity. Environmental governance has effectively collapsed: deforestation continues, carbon markets are manipulated, multilateral frameworks are barely functioning, and climate resilience has become a commercial service available only to the highest bidder. The system feeds the world today but erodes the foundations for doing so tomorrow.

Fractured Futures

A collapse scenario for 2035

The global agrifood system has fractured. Decades of extraction, geopolitical competition, and climate denial have pushed the planet beyond irreversible tipping points. Robust scientific data indicate a rapid slowdown of the Atlantic Meridional Overturning Circulation, making dramatic cooling across major agrarian regions in Northern Europe and parts of the US increasingly inevitable over the coming decades. Simultaneously, shifting monsoon patterns are rendering large parts of the Sahel and South Asia increasingly uninhabitable. The looming collapse of entire breadbasket regions is triggering hasty, desperate, and often violent responses from affected nations.

Governments have turned inward, hardening borders and freezing exports. Multilateral institutions such as the WFP and FAO persist in name only, crippled by donor fatigue and conflicting national interests. Food has become both a weapon and a currency:

land and freshwater are traded for political loyalty; armed groups in the Sahel and Central America compete for control over remaining fertile land; and cities swell with refugees. The US and Russia deploy military and economic leverage to control emerging breadbaskets, while the EU attempts a more diplomatic approach with limited success. Synthetic nutrient pastes and processed proteins replace fresh food for much of the global population. Health systems crumble, ecosystems continue to collapse, and informal barter networks replace formal trade. Small grassroots food movements offer symbolic resistance, but face persecution. The world is in profound peril.

Controlled Stability

A discipline scenario for 2035

Individual food choice has been replaced by government-managed nutrition systems. A decade of recurring avian flu and zoonotic influenza outbreaks shattered public trust in traditional agriculture, open markets, and long supply chains, prompting governments to conclude that food was too essential — and too dangerous — to be left to farmers, markets, and consumers. States have established sophisticated systems of managed scarcity, in which annual carbon and calorie budgets define what nations and individuals may consume. Citizens receive monthly digital food credits calculated based on CO₂ emissions, health metrics, age, and political conformity. Every purchase is tracked; luxury items such as chocolate and beef are reserved for elites who can purchase additional credits on secondary markets.

Multilateral institutions like the FAO now function primarily as inspection and standardisation agencies. Private certification

companies and data analytics firms have become powerful brokers in global food governance. Smallholders unable to afford compliance audits and sensors are absorbed into state-corporate farming zones or displaced to urban peripheries. Informal food markets — long the backbone of access for the urban poor — are criminalised as biosecurity risks. Some Global South countries successfully reposition themselves as certified climate-secure food zones, attracting investment and long-term supply agreements. Innovation flourishes but only within tightly controlled, state-approved parameters, and intellectual property is bound to national security law. Hunger has largely been eliminated, but at the cost of freedom, cultural diversity, and individual dignity. The more efficient the system becomes at disciplining people, the less human it feels.

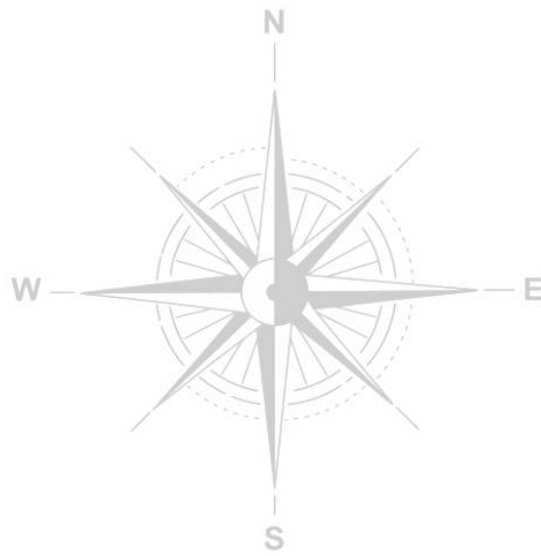
Regenerative Transformation *A transformation scenario for 2035*

Agrifood systems have undergone a rapid and far-reaching transformation. A convergence of crises — most critically, widespread contamination of food and water supplies that triggered a sharp and visible decline in human fertility rates across industrialised regions — exposed decades of weak regulation and corporate negligence. This sparked a broad coalition of outraged citizens, farmers, rural communities, and a new generation of female leaders, whose mobilisation profoundly shaped the multilateral preparations for the post-SDG agenda in the late 2020s. The resulting framework positioned agrifood systems at the centre of global development cooperation, generating unprecedented

momentum for public and private investment in transformation.

By 2035, agrifood systems are governed by highly coherent, mission-driven, and inclusive policies. Regenerative and agroecological farming has become the norm across many regions. Restored landscapes across Africa and Latin America have emerged as new centres of highly productive, sustainable farming, while formerly overproducing regions such as Europe and the US have reduced output in favour of improved environmental performance. Data once monopolised by corporations now flows through open digital cooperatives. Knowledge alliances between indigenous communities and scientists guide regenerative practices. True-cost accounting is reshaping market incentives, making unhealthy and high-emission foods more expensive while sustainable alternatives become increasingly affordable. Plant-based and low-carbon cuisines have become aspirational lifestyle symbols. Food insecurity has become a thing of the past in many regions. The agrifood system not only feeds the planet — it is actively helping to repair it.

CHAPTER 1



Introduction

Context

Methodology

Context

Global agri-food systems need to undergo profound transformation due to interconnected pressures, including climate change, biodiversity loss, population growth, shifting diets, geopolitical instability, and rapid technological advances.

Against this backdrop, the international development community faces increasing urgency to support the transition toward more sustainable, resilient, and equitable agrifood systems — systems that ensure food security while operating within planetary boundaries.

For German development cooperation (DC), the transformation of agri-food systems represents a core thematic priority, reflecting both the scale of global need and Germany's strategic commitment to sustainable development. At the same time, German DC is navigating a period of significant disruption. Declining budgets, shifting geopolitical dynamics, geoeconomic competition, an

uncertain future for U.S. development cooperation, and evolving EU strategic priorities are collectively reshaping the operating environment. These shifts raise fundamental questions about how Germany and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) can most effectively position themselves in the future.

To address these uncertainties and ensure a robust strategic orientation for the work on agriculture and food systems, GIZ conducted a structured foresight process between July and December 2025, developed in collaboration with internal and external sector experts. The process sought to identify key factors shaping the transformation of global agri-food systems towards 2035, map plausible alternative futures, and derive strategic implications for German DC — to support more resilient strategies, future-oriented programming, and stronger positioning for GIZ in this field.

Methodological approach

Strategic foresight is a systematic, multidisciplinary approach to analysing medium- to long-term trends under conditions of uncertainty. Rather than predicting the future, foresight explores alternative scenarios that support early anticipation, helping organisations navigate complexity and, where possible, shape the future with a more informed strategic vision.

This foresight process followed the Copenhagen Method developed by the Copenhagen Institute for Futures Studies, structuring the analysis across six phases — Scope, Explore, Discover, Build, Understand, and Strategic implications and action options were then derived and categorised into "no-

Decide — with a time horizon to 2035. Based on defined research questions, 57 drivers and an initial set of wild cards were identified and subsequently discussed in a workshop with internal and external experts. As a participatory process, representatives from science, non-governmental organisations, and the private sector served as external experts. In the workshop, drivers were clustered thematically and prioritised into eight key factors as a basis for scenario development. The scenarios were validated for plausibility and internal coherence, refined against five quality criteria, and finalised through iterative expert review. "regret" measures — beneficial across all scenarios — and "high-risk, high-reward"

approaches characterised by greater uncertainty but potentially significant impact.

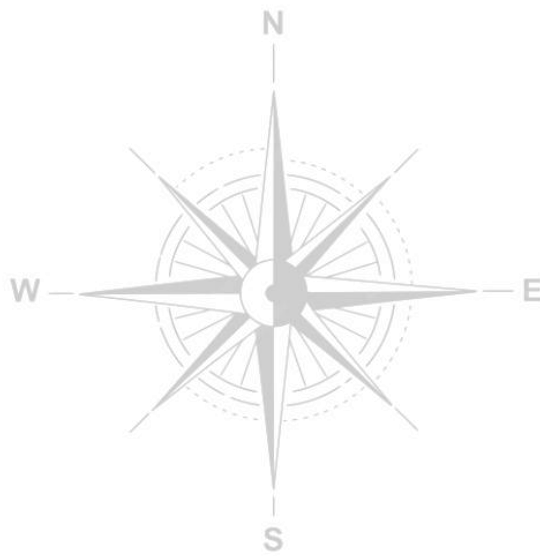
The four scenarios draw on the Manoa School of Futures Studies and the archetypes developed by Jim Dator — Growth, Collapse, Discipline, and Transformation — which represent recurrent development paths observed across human civilisations. In the Growth scenario, existing trends become self-reinforcing. Collapse is characterised by systemic decline and dysfunction. Discipline reflects a stabilisation in which competing forces are managed through compromise and restraint. Transformation involves radical technological, social, and political change, giving rise to a fundamentally new system. Unchecked growth in the face of

systemic limits is likely to lead towards collapse unless a far-reaching transformation occurs.

What are the scenarios, and how should they be read?

Scenarios should be understood as plausible but non-predictive models of possible futures — not forecasts. By simplifying complexity, they help highlight potential shifts and future decision points. Since the actual future will likely combine elements of multiple scenarios, their value lies not in predictive accuracy but in usefulness as a guide for strategic thinking. Each scenario also includes wild cards — low-probability, high-impact events that could fundamentally alter its trajectory.

CHAPTER 2



Scenarios

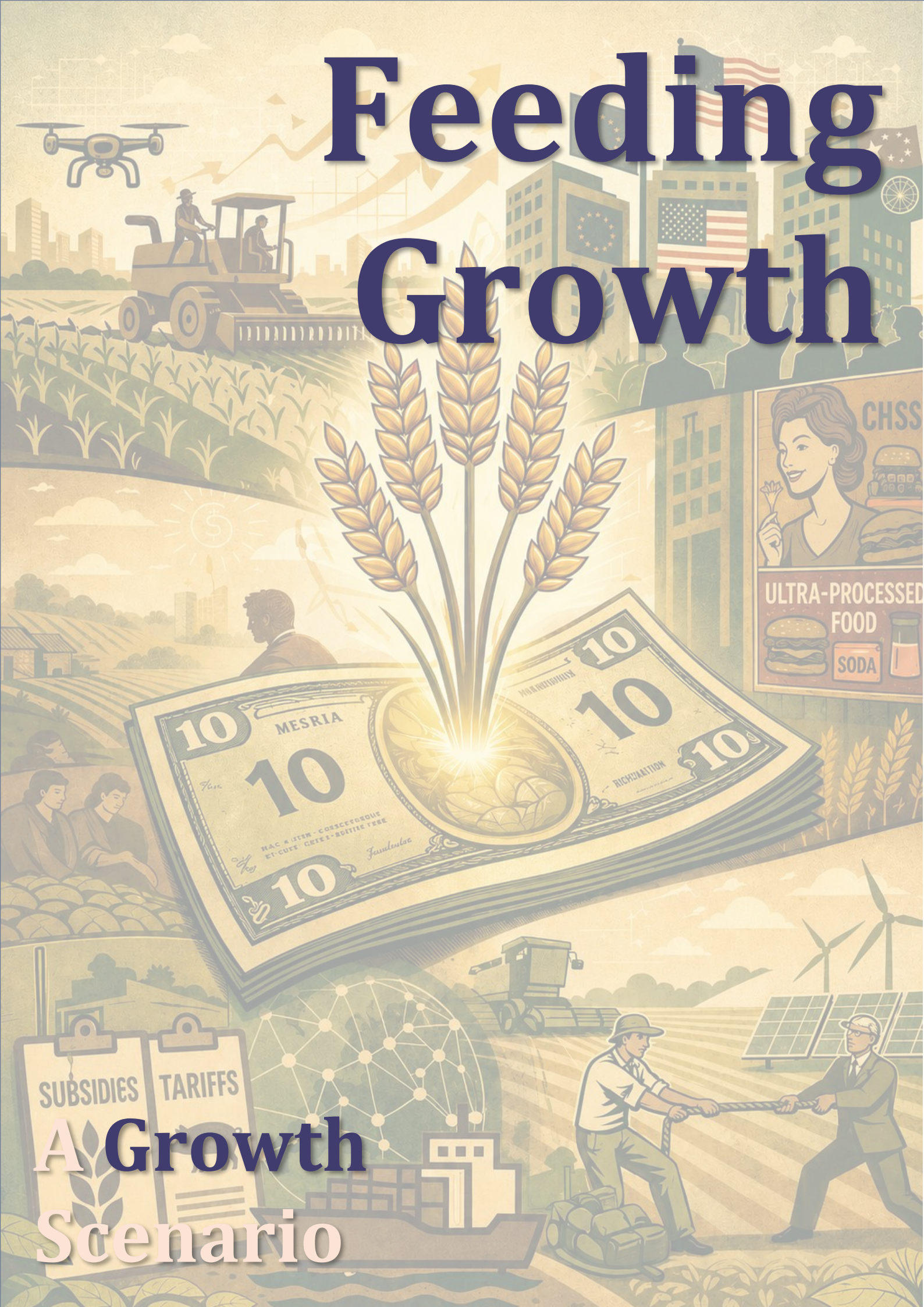
Growth

Collapse

Discipline

Transformation

Feeding Growth



**A Growth
Scenario**

SUBSIDIES

TARIFFS

Feeding Growth - Agrifood Systems in 2035

By 2035, **economic competition and growing geopolitical rivalry** are driving agricultural production and consumption patterns, but rising costs, degraded soils, and accelerating climate impacts are eroding their foundations. The dominant narrative celebrates unfettered competition and agricultural productivity at all costs – success is measured in monetary and calorie output, not in broader societal outcomes. “Feeding the world” has become both a rallying cry and a justification for widening inequalities within agrifood systems.

Global food governance has reorganised into three regional food cores that supply and shape most of the world’s food production. The first food core is centred around the European Union, closely aligned with post-war Ukraine. The second core is led by the United States and Canada. The third core brings together the BRICS countries, with China at the forefront. Meanwhile, countries not aligned with any of these food cores are becoming increasingly marginalised, with persistent food insecurity becoming the new normal.

In the **food core regions, agricultural production is expanding rapidly** through automation, AI-based agriculture, and consolidated agribusiness. Governments and corporations call it the Fourth Agricultural Revolution, proof that human ingenuity can outpace scarcity. Fields hum with drones and driverless harvesters; decisions about planting, fertilisation, and irrigation are made by algorithms. But profits flow upward into a handful of corporate clusters, while rural employment withers both in the food cores and across the global periphery. Young people and women leave the countryside for precarious urban jobs or risky migration routes. Efficiency grows, inclusion fades.

In the **global periphery, major technological advances remain largely unavailable**. Only in a few areas have technology transfers been facilitated by corporations with an explicit interest in making use of productive land and remaining ecosystems. The packaging, cold-chain systems, transport networks, and automation required to maintain fresh-produce supply chains for the food core regions consume vast amounts of energy. This creates both pressure and opportunity in the periphery: energy becomes increasingly scarce and expensive, yet green energy investments are expanding rapidly. Intensifying competition between agricultural production and green energy is triggering a new land rush in several regions.

Meanwhile, **consumption patterns** are dividing regions and societies within them. In the food cores, low- and middle-income households depend on cheap, ultra-processed food, while elites design personalised diets aimed at extending life expectancy to 120 years or more. Private insurers and food-tech investors are benefiting from emerging health and longevity markets. Local cuisines and seed varieties are disappearing as corporate brands dominate supermarket shelves. In the global periphery, not only are food security and acute hunger widespread, but obesity is also becoming a major burden on health, well-being, and productivity. Development programmes promoting nutrition-sensitive agriculture remain a drop in the ocean as marketing for ultra-processed foods dominates the public sphere. Even large-scale fortification programmes, funded in close collaboration with the biotech industry, cannot prevent widespread malnutrition.

Across the tropics, deforestation continues as demand for cheap meat and animal feed rises in growing markets in Africa and Asia. Watered-down EU deforestation regulations fail to deliver their intended **environmental impact**. Competitive carbon credit markets lead to rainforests being used simultaneously as carbon sinks and potential farmland reserves, creating conflicts between local communities, environmental ministries and agribusiness. Rather than implementing structural reforms, governments respond with either violence or short-term subsidies and emergency insurance schemes. Natural and human-made disasters increasingly affect agricultural production and vice versa. Disaster relief has become a permanent budget item to secure affordable food supplies for the core regions and to contain violent unrest in the periphery. Climate resilience, once a collective policy goal, has become a commercial service available only to the highest bidder. An environmental race to the bottom continues across the global periphery.

In this world of intensifying competition, **multilateral policy frameworks designed to protect global public goods are barely functioning**. Although the United Nations agreed at the last minute to extend the Sustainable Development Goals to 2050, political realities are increasingly shaped by nationalism, self-interest, and strategic sovereignty. The call for food sovereignty is frequently used to justify new subsidies and tariffs that favour national and regional industries. While leaders frame these policies as a way of safeguarding their citizens, in practice they protect vested interests, drive up food prices, and deepen inequality – primarily to the detriment of the global periphery. Crucial investments in the periphery are channelled and de-risked exclusively toward high-yield production zones and export corridors, while rural areas lose population, services, representation, and future opportunities.

Civil society remains active across the world, but fragmented and under constant economic pressure. Online campaigns for food justice flare up and quickly fade again, overwhelmed by algorithmic noise and the prevailing ideology of self-interest. Meanwhile, land grabbing intensifies, and the rights of indigenous peoples and smallholder farmers erode as the language of competitiveness is used to justify further consolidation in the agribusiness sector.

By 2035, the cracks in the world's agrifood system have widened. A relentless drive for competition – often at the expense of sustainability and the public interest – has maintained productivity sufficient to feed the world, but the future remains bleak as environmental pressures intensify, and social unrest grows. **It is a world that feeds itself but not its future**: a civilisation that measures success in terms of output while its foundations quietly erode.

Fractured Futures

A Collapse
Scenario

Fractured Futures – Agrifood Systems in 2035

By 2035, the global agrifood system has fallen apart. Decades of extraction, geopolitical competition, and climate denial have pushed the planet **beyond irreversible critical tipping points**. Increasingly robust data indicate a rapid slowdown of the Atlantic Meridional Overturning Circulation, making dramatic cooling across major agrarian regions inevitable. At this point, the science is clear: Northern Europe and parts of the US will no longer remain productive or globally competitive. At the same time, large parts of the Sahel and South Asia are becoming increasingly uninhabitable as monsoon patterns shift. The looming collapse of entire breadbasket regions over the next two decades is triggering hasty, desperate, and often violent responses from the countries most affected. The global agrifood system – once a web of interdependence – is shrinking into a fragmented and militarised patchwork of survival zones.

Governments turn inward rather than outward, attempting to safeguard their own populations and infrastructure. Borders harden, exports freeze, and **the spirit of multilateral cooperation falls silent**. Under these conditions, agreement on a post-SDG agenda proves impossible. Development organisations rapidly withdraw from crisis-prone regions, along with long-term investments in global public goods. By 2035, institutions such as the World Food Programme (WFP) and the Food and Agriculture Organization (FAO) persist in name only, their logistics crippled by donor fatigue and the conflicting interests of the United Nations member states. Logistics and AgTech companies have been nationalised or militarised in preparation for what many consider inevitable wars over food, blurring the lines between state and corporate power. Citizens in wealthy countries increasingly demand food

security at home and accept hunger elsewhere as an unfortunate but unavoidable reality.

The **shifting of agroclimatic zones fuels fear, violence, and conflict**. The United States and Russia rely on military power to gain control over future bread baskets. The US uses its economic leverage and military influence to pressure Central and South American countries into dedicating vast areas of farmland to US-controlled production. Meanwhile, Russia occupies parts of Kazakhstan and Georgia to gain control over emerging agricultural regions and strategic trade routes alongside large areas of Ukraine. In contrast, the EU attempts a more diplomatic approach, seeking food partnerships with Southern African nations. Yet diplomacy has its limits. As African nations have turned away from Western allies and deepened their partnerships with China and other BRICS countries, the EU finds itself with limited leverage to secure favourable agreements. The resulting diplomatic stalemate fuels frustration and political unrest across Europe. Growing anxiety about future food supplies creates a pervasive sense of being 'left behind'.

Food has effectively become **both a weapon and a currency**. Land and freshwater are traded for political loyalty or leased to foreign powers in exchange for debt relief. In the Sahel and parts of Central America, armed groups compete for control over the remaining fertile land. Crops are sold at exorbitant prices or deliberately destroyed to manipulate markets and extract windfall profits from ordinary people. Cities swell with refugees fleeing the countryside. Large parts of both new arrivals and long-term residents depend on rationed food supplies.

Inequality deepens, and global health deteriorates. Processed nutrient pastes and synthetic proteins become the primary food source for much of the global population, while fresh food turns into an increasingly distant memory. Health systems are crumbling as malnutrition spreads. Informal barter networks and smuggling replace formal trade.

Governments deploy their militaries to ration medicine and care, reserving access for 'productive citizens'. Protests erupt occasionally, but militarised states quickly learn to suppress them – often by cutting food rations rather than resorting to violence. Conflicts erupt not only between states but also within them. Intergenerational tensions intensify as young people, deprived of prospects, rebel or attempt to flee.

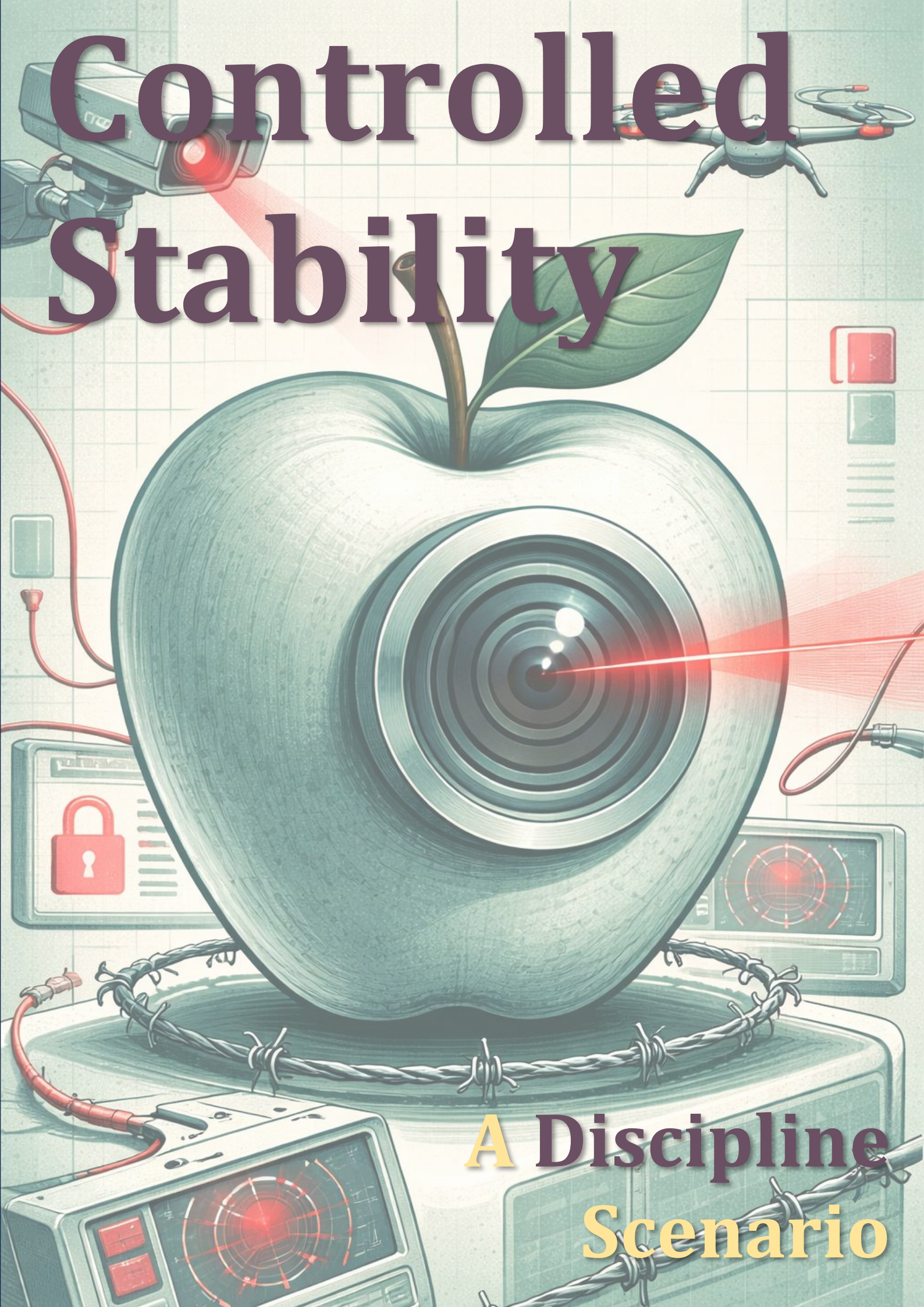
Meanwhile, nature offers little reprieve. **Ecosystems continue to collapse** and approach further tipping points, as everyone remains fixated on the breakdown of the Atlantic Meridional Overturning Circulation. Forests are cleared for survival farming, and soils lose fertility.

New pests and diseases spread, while pollinator losses make yields and harvest unpredictable. Even regions expected to benefit from shifting agroclimatic zones cannot rely on stable growing conditions as climate variability intensifies. Heatwaves, megadroughts, and flash floods occur with growing frequency and little warning.

Governments declare emergency zones across large parts of the planet, but relief mechanisms prove too slow, too politicised, or too corrupt to be effective.

Innovation continues but is fragmented, militarised, and focused on saving what remains. Agricultural technologies are tightly controlled by corporate-state alliances, serving closed regional blocs. Yet even amid systemic breakdown, small seeds of resistance emerge. A youth-led 'Food Alliance' rises across the globe. Former farmers, coders, and community organisers reclaim degraded land using open-source technologies and guerrilla gardening. Their efforts remain small and often face persecution, but are symbolically powerful: a reminder that food sovereignty still belongs to people rather than the most ruthless and powerful regimes.

By the mid-2030s, the planet still produces food – but not enough, and not for everyone. The agrifood system sustains only fragments of humanity, while food insecurity has become the main driver of conflict and war. For large parts of the world's population, survival depends on improvisation: gardens in refugee camps, rooftop farms in cities under stress, and barter markets guarded by militias. Freshwater becomes a bargaining chip; seeds are smuggled like contraband. Looking towards 2050, the trajectories seem even more daunting. **It is a world in profound peril.**



Controlled Stability

**A Discipline
Scenario**

Controlled Stability – Agrifood Systems in 2035

By 2035, individual production and food choices have been replaced by **government-managed nutrition systems**. Following years of recurring avian flu and zoonotic influenza outbreaks, people no longer trust traditional agriculture, open markets or long supply chains. The decade of contagion changed everything. Waves of infection, livestock culls, and export bans have turned food into a matter of national and global security. Governments have decided that common farmers, markets, and consumers could no longer be entrusted with something so essential – or so dangerous.

Across the world, **states have established a new, highly bureaucratic and sophisticated system of managed scarcity**. The old norms of ‘free trade’ and ‘consumer choice’ have given way to ‘controlled abundance’. Multilateral organisations plan and coordinate global supply and consumption under a joint commitment to a post-SDG agenda. This agenda envisions tight government control over both sustainability and health, without specifying how ‘control’ is interpreted or enforced. Annual carbon and calorie budgets define what nations and individuals can consume; hermetic scans, certifications, and tracking logistics ensure that every kernel of shipped grain is accounted for. Private certification companies and data analytics firms enforce national compliance, becoming new power brokers in global food governance.

Multilateral institutions such as the FAO now function primarily as inspection agencies that oversee and standardise agricultural production. Within countries, food discipline shapes daily life. Governments prescribe dietary norms down to the household level. Each citizen’s monthly food credit is calculated based on personal CO₂ emissions, health metrics, age, and level of political conformity. Rations arrive as digital tokens that can only be redeemed for

approved items. Supermarket scanners and mobile payments track every purchase.

Imported or ‘luxury’ products, such as chocolate or beef, are a privilege reserved for elites, who may purchase additional credits on secondary markets. Taxes on high-emission foods and sugary snacks reinforce moral hierarchies between “responsible” and “wasteful” citizens. Social pressure, as much as regulation, ensures compliance. Governments celebrate the resulting apparatus of tight surveillance and harsh enforcement as proof of progress, but citizens experience it differently. Synthetic or ultra-processed foods and nutrient pastes dominate diets, while cultural attachment to food and traditional cuisines vanish. Despite these control measures, chronic illnesses linked to microplastics, stress, and nutrient deficiencies quietly spread, pushing health insurance systems towards collapse. Public health is maintained through discipline, not vitality.

For many countries in the Global South, the new food order reshapes long-standing asymmetries rather than dissolving them. States with limited fiscal capacity, weak data infrastructures, or fragmented governance struggle to meet the compliance costs of the global nutrition regime. Mandatory traceability systems, real-time livestock surveillance, and carbon-calorie accounting require digital infrastructure and administrative depth that many low-income countries cannot rapidly deploy. As a result, entire regions are temporarily excluded from formal food trade - not because of shortages, but because their data are deemed insufficiently reliable.

Smallholders are the first to be pushed out. Unable to afford certification, sensors, or compliance audits, they are gradually absorbed into state-corporate farming zones as contract labour or displaced into urban

peripheries. Informal food markets - long the backbone of food access for the urban poor—are criminalised as biosecurity risks. What was once framed as “resilience through informality” becomes “non-compliance through opacity.”

At the same time, some Southern states manage to reposition themselves. Countries that align early with the new standards - often those with strong central governments and experience in export-oriented agri-food sectors - become preferred suppliers of low-risk, tightly monitored commodities. Certain East African, Southeast Asian, and Latin American countries successfully **market themselves as “certified climate-secure food zones”**, attracting concessional finance, technology transfers, and long-term offtake agreements. For these countries, compliance becomes a development strategy rather than a constraint.

Civil society, once a space of debate, has been folded into the machinery of complacent state control. NGOs and cooperatives can now only act as implementation units for national planning bodies. Youth groups that once advocated for agroecology now patrol neighbourhoods, ensuring compliance and reporting waste. Intergenerational tensions persist: the same students who once demanded change now enforce it. Dissent is permitted but only within “consultative councils”, where complaints are submitted directly to ministry dashboards.

Environmental governance follows a similar pattern of sophisticated planning and surveillance. Large tracts of land in the Global South are designated as climate-critical carbon sinks or biodiversity offsets for global consumption elsewhere. While this accelerates conservation finance inflows and improves satellite-verified carbon indicators, it often displaces rural populations and narrows livelihood options. In countries with strong land governance, some communities

secure long-term stewardship contracts, receiving predictable income streams in exchange for compliance - turning conservation into disciplined, though constrained, rural employment.

Innovation flourishes, but only where it is permitted and aligned with mission-based goals. Agricultural R&D is steered by state-tech consortia, heavily influenced by government and elite technology providers. Only certified institutions can use precision irrigation, CRISPR breeding, or advanced fermentation technologies, and intellectual property is tightly linked to national security laws. Given the high costs of this innovation system, smaller nations tend to purchase licenses rather than develop their own technologies, reinforcing dependency. Laboratories experimenting without permission risk closure or worse. States that fail to adhere to the global food, safety, and intellectual property standards are excluded from trade, innovation, and multilateral institutions.

Despite persistent inequality and extensive control, the world’s agrifood system appears stable. Hunger has largely been eliminated, and multilateral institutions operate under the imperative of food safety rather than food security. Yet the overt surveillance by the nation state and a handful of high-tech oligopolies means that the global agrifood system is hanging by a thin thread. The new age of monitoring and food safety comes at the cost of freedom, diversity, and taste. **The more efficient the system becomes at disciplining people, the less human it feels.**



Regenerative Transformation



A **Transformation**
Scenario

Regenerative Transformation - Agrifood Systems in 2035

By 2035, **agrifood systems have undergone a rapid transformation**, operating increasingly under fundamentally new conditions. Success is now measured not only by productivity and profitability, but also by health, stability, and restoration. Soil-replenishing and biodiversity-friendly agriculture, inspired by agroecological principles, has become the new norm across many regions. Global and regional food trade is closely aligned with sustainability and health goals, and community-led farming networks are fostering a new food and dining culture worldwide. Governments are held accountable for managing food, health, and climate together, to keep ecosystems – and societies – within the planetary boundaries. Food insecurity has become a thing of the past, while fewer advertisements for ultra-processed food, an abundance of healthy and diverse produce at local markets, and farmers prospering by applying novel techniques such as vertical farming and agrivoltaics at small and large scales have become the norm.

This **transformation began with a surprising series of major events**. First, public interest drove new demand for change. A widespread contamination of food and water supplies triggered a sharp decline in human fertility rates in industrialised regions. This crisis exposed decades of weak regulation and corporate negligence. Public outrage spread swiftly, driven by a generation already mobilised around climate and health issues, who joined forces with farmers and rural communities fearing for their livelihoods, as well as a new generation of female leaders. Secondly, this moment of reckoning profoundly impacted the **multilateral preparations for the post-SDG agenda in the late 2020s**. The renewed post-SDG framework positioned agrifood systems at the centre of

global development cooperation. Under mounting pressure from civil society and the business world, governments were compelled not only to adopt far more ambitious goals and commit to substantial investments to accelerate this transformation. An ambitious expansion of SDG 1 and 2 – aiming to leverage the transformative potential of agrifood systems to keep humanity within planetary boundaries – **created unprecedented momentum for public and private sector investments** alike.

By 2035, **agrifood systems are governed by highly coherent, mission-driven, and inclusive policies and platforms**. Public investments and subsidies are now aligned with healthier and more sustainable outcomes. Corporations have dramatically changed the way they operate as high standards and conducive incentives have been introduced to improve production practices, land use, additives, and advertising. Meanwhile, new financial mechanisms reward innovative businesses for advancing soil regeneration and ecosystem restoration. Data once monopolised by corporations or locked within bureaucracies now flows through open digital cooperatives, powering a new innovation system. Knowledge alliances between indigenous communities and scientists guide regenerative practices and innovations for sustainable production and consumption. The right to food – and to a stable climate – is enshrined in constitutions, and ocean-to-land biodiversity corridors form part of global adaptation strategies. What began as an unexpected policy response to crisis evolved into structural reform: Regenerative farming, sustainable business models, and healthy, affordable food environments have replaced the old paradigm of growth through extraction.

Restored landscapes across Africa and Latin America have become new centres of highly productive, regenerative farming. Following rapid productivity increases in Africa, formerly overproducing regions such as Europe, the US, and South Asia reduced their output in favour of significant improvements in environmental performance. Africa's Continental Free Trade Area, complemented by Strategic Food Corridors developed with an unexpected partnership between Europe and BRICS countries, amplified this shift, promoting local processing and intraregional exchange rather than raw commodity export. Large parts of the Global South have become the bread baskets of the world.

Grassroots farming movements spread quickly across cities and rural areas, leading to a new cultural appreciation of agriculture and food as an integral part of leading a 'good life'. Sparked by online mobilisation and climate anxiety, these movements held governments accountable at local and regional levels. Rather than suppressing informal initiatives, authorities recognised their value, legalising community stewardship and linking local production to national climate and biodiversity targets. Agricultural work became a climate-positive vocation, attracting youth and women back to the land. Youth migration slowed as rural entrepreneurship offered dignified and purpose-driven livelihoods.

Technology and innovation have been powerful enablers of this transformation. Digital platforms connect urban consumers with nearby and distant producers, while AI-managed logistics have reduced waste to near zero. Local markets and circular supply chains have revived regional economies and reduced dependency on long-distance trade. Where international food trade persists, it is carefully curated by corporations and states to leverage agroecological complementarities that promote healthy diets and sustainable production methods. Public-private

digital commons foster transparency, and agribusiness profits depend on verified sustainable practices.

Despite these significant changes, **water scarcity persists.** However, regional commons treaties and breakthroughs in low-energy desalination mitigate its impact. Deforestation caused by agriculture has effectively ended thanks to real-time satellite monitoring, which exposes illegal clearing and triggers automatic fines. Inspired by the EU Deforestation Regulation (EUDR), China and other BRICS members have introduced similar import restrictions on deforestation-linked products.

Food environments have transformed. Plant-based and low-carbon cuisines have become symbols of an aspirational lifestyle and are becoming increasingly affordable for everyone. Meanwhile, true-cost accounting in policy design is making unhealthy and environmentally destructive foods more expensive and less popular. Empowered by transparent data and ethical branding, consumers are driving demand for nutritious, equitable and low-impact diets. In response to these new conditions, corporations are adapting by diversifying their plant-based product range and adopting ethical branding strategies.

The once-fragmented global food system now operates through **nested public goods** – urban, regional, and global – each of which is designed to reinforce human and planetary health. Rather than competing for dominance, agrifood systems in different parts of the world now collaborate for resilience. However, the climate remains unpredictable: monsoons shift without warning, heat-waves scorch crops, and new adaptation measures are required each year.

By 2035, **agrifood systems not only feed the planet but help repair it** – continuously adapting through collective intelligence, human ingenuity, inclusive governance, and ambitious action.

OUTLOOK

This participatory strategic foresight exercise has demonstrated the value of structured futures thinking for navigating uncertainty in agri-food systems. By exploring a range of plausible futures, the process has supported GIZ and its partners in broadening strategic awareness, challenging underlying assumptions, and identifying robust options for action across different development pathways.

Regardless of which scenario, or rather which element of each scenario, may materialise, it remains evident that agri-food systems will continue to be shaped by complex and interlinked economic, environmental, technological, and geopolitical dynamics. Strengthening resilience, capacity to adapt, and cross-sectoral collaboration, therefore, remain essential priorities for GIZ's engagement in this field.

The scenarios developed through this participatory process serve as a shared reference

point for strategic dialogue and can inform programme design, policy engagement, and partnership development. Rather than offering predictions, the foresight process establishes the ongoing capacity to anticipate change, recognise emerging signals, and adjust strategies proactively.

Next steps will focus on integrating foresight insights into operational planning and strategies, as well as fostering continued exchange with partners and stakeholders. The scenarios provide a foundation for further country- or sector-specific applications, future workshops, and innovation processes aimed at strengthening sustainable, resilient and inclusive agri-food systems.

In this sense, this report should be understood not as an endpoint, but as a starting point for continuous strategic learning and collaboration.



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