

International Risk Management of Emerging Bioscience

The sudden spread of a novel form of a well-known plant pathogen through a newly bioengineered seed has triggered concerns about other biotechnologies. How should the world manage future biorisks?

1

Global Biosafety Certification Framework

Mandate an international, government-led framework requiring multi-stage testing and standardized biosafety certification for all new biotech and agtech innovations before their public use.

2

Regulated Risk Sandbox Pilot Programs

Establish controlled “regulatory sandbox” zones where new bioscience products can be deployed on a limited scale under strict oversight.

3

Industry Self-Regulation

Create a private-sector consortium that develops and enforces voluntary biosafety standards for emerging technologies.

Global Crisis Management

With wheat and barley prices skyrocketing and food inflation rising across the world, affordable food access has become a crisis, particularly in the developing world. How should the world respond to this emergency?

1

Centralized Global Response Authority

Establish a powerful civilian international crisis management body — operating under the U.N. or a similar entity — to centrally coordinate resource allocation, emergency response, and crisis communication for all transboundary threats.

2

Global Food Crisis Task Force

Establish a specialized international task force solely dedicated to management of the food crisis.

3

Minimal Intervention

Allow individual nations full control over their crisis response while international bodies serve in a supportive, advisory role and provide limited emergency resources.

Trade Policy and Food Crisis Alleviation

With acute food shortages throughout the world, attention has turned to agricultural tariffs, which consistently remain among the highest of any good as nations attempt to protect farmers from the vagaries of the global markets. Should the world change its trade policy in the context of this year's crisis?

1

Open Trade

Eliminate tariffs and trade barriers on agricultural products while streamlining global logistics to facilitate the rapid distribution of food supplies during the crisis.

2

Emergency Food Banking

Launch a large-scale, government-funded program to build strategic food reserves and provide subsidies to stabilize food prices, protecting vulnerable populations and farmers in the short term while maintaining historical trade policies in place in the long term.

3

Targeted Trade Adjustments

Implement additional temporary trade restrictions — such as bans on non-essential exports — to secure domestic food supplies.

Open Source / Intellectual Property

With the global food crisis in full swing, attention has turned to the private business behind the bioengineered seed, whose proprietary technology is not available for public inspection. Should the world require open innovation in biotechnologies?

1

Open-Source Innovation Mandate

Require that all biotech innovations relevant to the crisis — including the new seed technology — be released under open-source licenses to encourage global collaboration and rapid iteration.

2

Tiered IP Protection with Emergency Licensing

Create a two-tier intellectual property regime where core technologies are protected normally but are subject to mandatory emergency licensing during crises.

3

Voluntary Patent Pooling

Encourage the formation of a voluntary patent pool for crisis-related technologies to foster collaboration without forgoing IP rights.

Farm Modernization

Amidst the food crisis, there are growing questions about the use of biotechnology in agriculture. Should the world press ahead with new technologies, or pull back to more traditional agricultural methods?

1

Full-Scale Biotech Modernization Initiative

Launch a multi-year government-funded global initiative to aggressively expand national and international investment in biotech-driven agriculture.

2

Public-Private Ag Innovation Hubs

Foster regional public-private partnerships that create agtech hubs offering localized support, technical innovation centers and integrated services to help farmers transition to new technologies.

3

Protect Traditional Agricultural

Promote the preservation of traditional methods, organic or locally adapted farming methods while actively rejecting the use of biotech in food production through trade barriers and local market regulations.

Fiscal Recovery Strategy

With the immediate food crisis subsiding, most governments now face a serious fiscal crisis that demands an urgent response. How should governments approach their budgets?

1

Austerity for Stability

Governments adopt strict austerity measures such as cutting public spending, reducing subsidies, and tightening budgets in order to quickly restore fiscal balance.

2

Balanced Fiscal Approach

A moderate blend of austerity and stimulus measures: cutting non-essential spending while targeting investments in high-impact areas to preserve public services and promote growth.

3

Stimulus for Growth

Governments launch a large-scale stimulus package, injecting funds to jump-start the economy, boost research, and support manufacturing — even if it means higher deficits in the short term and greater debt in the long term.

Investments in Health Services and Innovation

Public health is one of the largest government expenditures for advanced nations across the world. During this fiscal crisis, should international funds be directed toward future investments in health technology or greater investment in health services today?

1

Tech-First Investment

Channel international funds toward high-tech research, digital innovation and futuristic manufacturing in order to prioritize advanced technology investments and build long-term economic strength, even at the expense of urgent public health needs.

2

Balanced Investment Strategy

Judiciously allocate resources between disruptive technology and immediate public health needs, seeking moderate gains in both areas.

3

Health-First Allocation

Focus global resources predominantly on bolstering public health such as improving healthcare systems, ensuring food security and supporting immediate community health needs, even at the expense of long-term tech innovation.

Challenges of Global Cooperation

A global fiscal crisis has placed strain on every nation's balance sheet, but not every country has the same challenges.

Should governments work together through multilateral institutions to try to solve the emergency, or should each go it alone and focus on their global competitiveness?

1

Isolationist Protectionism

Countries adopt aggressive protectionist measures by raising tariffs, imposing export controls and prioritizing domestic industries in order to secure their local economies and protect national interests.

2

Selective Engagement

A hybrid approach that combines strategic protectionism in critical sectors with targeted international partnerships, aiming to safeguard domestic priorities while reaping some benefits of global cooperation.

3

Global Development Initiative

Nations commit to a global development initiative that would see large transfers of funds to countries with the most severe fiscal crises. Those not joining would be penalized through trade restrictions.

Fundamental vs. Translational Funding

At a time of great fiscal stress, budget cuts are inevitable. Should governments advocate for more emphasis on fundamental scientific advances in global research funding, or should they encourage more translational opportunities that bring previous life-science advances to the clinic faster?

1

Fundamental Research Emphasis

Advocate for increased global funding for basic scientific research to build a long-term foundation for innovation, even if immediate clinical benefits are limited.

2

Diversified Research Portfolio

Encourage a diversified funding strategy that supports both fundamental and translational research, seeking to secure long-term innovation while achieving moderate near-term benefits.

3

Translational Research Emphasis

Push nations to reallocate research funding to projects that promise near-term clinical breakthroughs and tangible public health improvements, even if it means scaling back on fundamental science.

Trade Policy and Supply Chain Resilience

With a global fiscal crisis underway, there is tension between those who want to actively support and defend local industries and supply chains and those who believe that opening up trade may be the best solution. How should governments worldwide design their economic policies?

1

Protectionist Trade Policies

Implement aggressive tariffs, export controls and domestic subsidies to protect key industries and secure domestic supply chains at the expense of international trade openness.

2

Targeted Trade Adjustments

Use selective, temporary trade measures to protect critical sectors without fully closing off international trade.

3

Free Trade and Integration

Remove trade barriers and promote open markets to enhance global supply chain integration, boost efficiency and drive international cooperation — even if national sovereignty is diluted.

Global Patient Data Commons

The use of AI in biotech and health has surged, but that has led to a massive challenge: access to data. With patient records traditionally considered highly confidential, frontier AI models lack the massive amounts of high-quality clinical data needed to advance. What should the world do?

1

Global Data Mandate

Due to the growing need for massive datasets to train biotech AI models, a new international treaty requires every nation to contribute anonymized patient data to a single, centralized commons managed by a supranational body (e.g., under UN oversight).

2

National Health Exchanges

Data remains largely under private control by hospitals, tech companies and national health systems.

3

Decentralized Private Data Networks

Using advanced encryption and blockchain technology, personal health records are stored securely on a distributed ledger. Data sharing is governed by smart contracts, which allow individuals to grant access on a case-by-case basis.

Global AI Dividend

The rapid rise of AI technologies has suddenly imperiled millions of clinical workers throughout the world, who are now competing with automated programs owned by a handful of individuals and corporations. What should be done to ameliorate the labor displacement?

1

Mandatory Global AI Dividend Tax

A binding international framework mandates that all profits from AI-driven biotech breakthroughs are heavily taxed. The collected revenue is then redistributed as a “global dividend” to citizens worldwide.

2

Tiered Development Dividend

A global dividend scheme where taxation and redistribution are calibrated: developed countries pay higher tax rates on AI profits, while developing nations receive larger per capita dividends.

3

Voluntary Corporate Social Responsibility

No mandatory tax is imposed, but instead, governments may enact incentives for companies to help workers who are affected by AI obsolescence.

AI Equality

AI is producing prodigious wealth for the handful of nations and companies that are working at the frontiers of the industry. Yet, many nations are left behind without the necessary talent and compute resources to compete. Should governments help to equalize the imbalance?

1

Open-Source Mandate for Publicly Funded AI

Globally mandate that all AI algorithms and biotech innovations developed with public or international funds must be released under open-source licenses, ensuring that breakthroughs are freely available to all.

2

Tiered AI Licensing Model for Global Markets

Developed nations maintain exclusive rights to cutting-edge technology whereas lower-income countries are provided with legacy AI tools that, while less advanced, still offer significant benefits in healthcare and biotech.

3

Fully Proprietary Innovation

Encourage national sovereignty of key technologies by requiring all AI-driven biotech innovations to remain proprietary.

Critical Supply Chains

AI technologies now underpin critical sectors of the global economy such as pharmaceutical development and health services. To what degree should nations cooperate to share critical technologies or maintain their competitive edge?

1

Nationalization of Key Supply Chains

Countries should seize control of critical biotech, medical and agtech AI supply chains by nationalizing essential compute infrastructure and technologies, protecting distribution of vital products.

2

Public-Private Global Supply Chain Partnerships

Encourage governments to form strategic alliances with leading multinational corporations to jointly manage key supply chains.

3

Market-Driven Supply Chains

Allow market forces to manage supply chains with minimal government intervention. Companies compete to optimize efficiency and resilience, with any necessary support coming from targeted incentives rather than state control.

Responding to Labor Strife

Many workers are concerned about their livelihoods as AI technologies make enormous strides forward in quality and power. How should governments consider those who are left behind?

1

Universal Basic Income for the Transition

Encourage governments to institute a universal basic income (UBI) to provide every citizen with a guaranteed income regardless of employment status.

2

Comprehensive Retraining and Job Guarantees

Governments launch an expansive global retraining program paired with job guarantees or public-sector employment opportunities for displaced workers.

3

Minimal Government Intervention

Protect economic dynamism and flexibility by putting in place minimal support for worker retraining or income support.

Counterterrorism and Cyber Defense

With more and more aspects of daily life under the control of AI algorithms, computers have become ever more important targets for cybercriminals and international terrorists. How should governments respond to this vulnerability?

1

Global AI Security Pact

Forge an international alliance dedicated to tracking and neutralizing AI-based threats, including joint operations against terrorist groups leveraging AI for cyber or biological attacks.

2

Additional National Funding for Cybersecurity

Increase funding for offensive cyber teams to track down potential threats, potentially using proprietary information from industry.

3

De-Cyber Critical Systems

Remove networked computers from critical infrastructure systems, reducing connectivity but increasing resilience and security.

Synthetic Pathogen Regulation

Advancements in AI — particularly within biotech — have spooked security analysts, who are increasingly witnessing extremist groups using these tools to develop novel pathogens that could endanger human and plant life. How should governments respond to this threat?

1

International Biosecurity Protocol

Implement a global regulatory framework that strictly monitors research and development in AI-enabled bioengineering, with heavy penalties for breaches and misuse.

2

Temporary Moratorium on High-Risk AI Bio-Research

Enforce a temporary ban on AI research and usage in areas deemed high-risk for synthetic pathogen development, allowing time to develop safe regulatory frameworks.

3

Industry Incentives for Pathogen Defense

Aggressively fund national efforts to create prophylactics and other biodefenses against AI-designed synthetic pathogens.

Global Climate Controls

AI's rapid rise has triggered a global crisis in the energy markets with demand soaring in all regions of the world, even as this year's temperatures hit all-time highs. How should governments balance the benefits of AI against the costs to climate change?

1

Aggressive Geoengineering

Use the best AI modeling and manufacturing advances to rapidly geoengineer Earth's atmosphere to induce global cooling.

2

All-of-the-Above Energy Expansion

Encourage expansion of all available energy resources — from nuclear power to coal — in order to drive energy prices down in all regions.

3

Global Coordinated Energy Rationing

Implement temporary government-imposed price controls and targeted energy rationing of AI systems to protect vulnerable global populations from runaway energy costs and the effects of worsening climate change.

AI and Animal Experimentation

Advanced AI models can increasingly understand the complexities of human life, and that also means that they are capable of analyzing and evolving animal life as well. That's opened up new ethical frontiers on the conduct of animal experimentation. What safety policies should apply?

1

Aggressively Reduce Ethical Boundaries

Encourage scientists to aggressively expand the boundaries of animal research, including through such techniques as cloning, genetic engineering, experimental species hybrids and more.

2

License AI-Evolved Animals

Only allow scientists and industry to explore the frontiers of animal life through regulated experimental facilities that are globally licensed.

3

Protect Life

Forbid the use of AI technologies in the pursuit of speculative new animal species and hybrids.

Global Health System Overhaul

With AI radically changing the treatment options available for patients, there is a growing push to rethink how healthcare services are provisioned across the world. How should governments advocate for international medical care?

1

Right to Health Migration

Develop and sign a global treaty guaranteeing the right of health care to any person in the world to be paid by the host country.

2

Global Health System Investment Fund

Create a global financial institution to rapidly deploy biotech advances in all countries while also subsidizing companies with frontier technologies.

3

National Medical Sovereignty

Encourage all people to return to their home countries for all medical treatments.