

The Perth Agreement: A Framework for Global Food Security

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Executive Summary

The Perth Agreement proposes a transformative framework to ensure every person on Earth—approximately 7.8 billion individuals—receives one nutritious meal per day for 21 years through universally issued digital food tokens. This voluntary, tradable token system addresses global hunger (UN SDG 2) by leveraging a global cultural shift, where humanity collectively wills a shared value system into existence, untied to debt or redirected budgets. Supported by data from the FAO, WHO, and WFP, and grounded in precedents like WFP's Building Blocks blockchain and India's Aadhaar, the framework tackles a critical challenge: 783 million people faced hunger in 2022. Academic institutions are invited to conduct feasibility studies, model governance, and develop implementation pathways to realize this ambitious humanitarian project.

1. The Global Hunger Crisis

Hunger remains a persistent barrier to human potential and economic progress for a global population of approximately 7.8 billion:

- Scale: 9.2% (720–811 million people) were undernourished in 2023, with 783 million facing chronic hunger in 2022 [FAO, 2023].
- Child Malnutrition: 149 million children under 5 suffered stunting due to poor nutrition in 2023, contributing to long-term health and cognitive deficits [WHO, 2023].
- Inequity: Current food aid systems reach only approximately 20% of those in need, leaving millions without reliable access to nutrition [WFP, 2022].
- Impact: Hunger reduces global productivity, educational outcomes, and health, exacerbating poverty cycles [FAO, 2023].

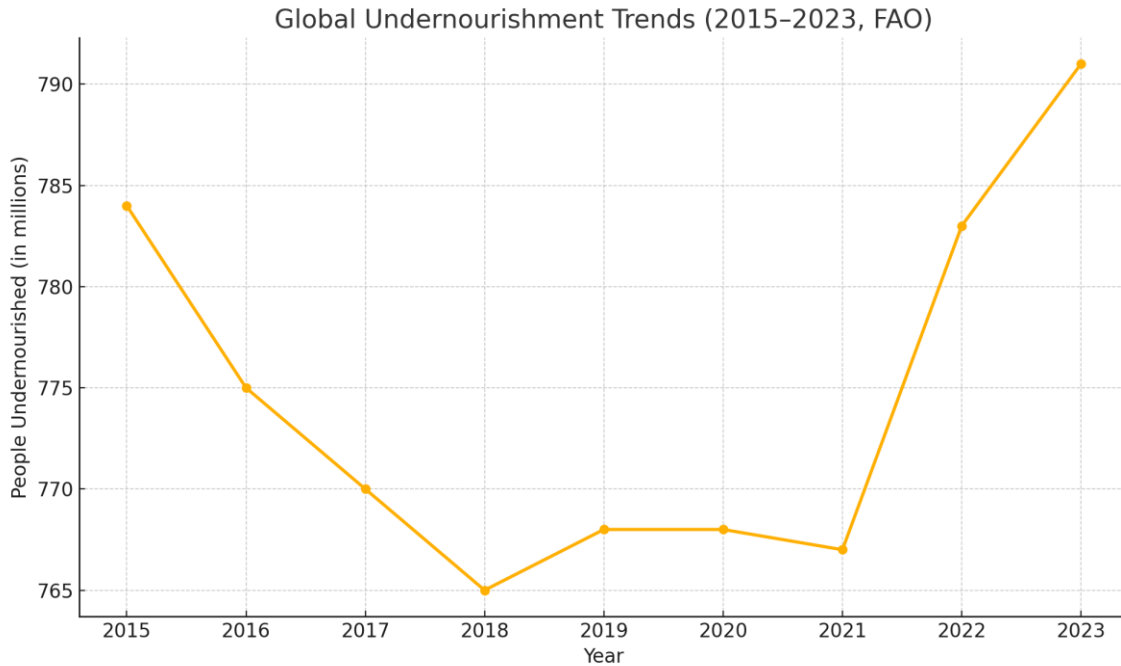


Figure: Global Undernourishment Trends (2015–2023, FAO)

2. Framework Overview

The Perth Agreement is a 21-year plan to deliver one daily meal to every individual worldwide, tailored to local dietary and cultural preferences. Its core components are designed for scalability, equity, and adaptability.

2.1 Universal Food Tokens

Mechanism: Digital tokens, issued daily to each individual who chooses to participate via a secure platform (e.g., blockchain), are redeemable for one nutritious meal (e.g., rice and vegetables or local equivalent) at vendors or distribution points.

Individuals may:

- Partake in the daily meal, using tokens for free access.
- Pay full price for weekly meals (e.g., seven meals) to retain tokens for trading or saving.
- Decline participation entirely, retaining their entitlement to join later.

Voluntary participation ensures trust, addressing potential skepticism about digital systems, such as concerns over surveillance or control.

Value: One token equals one meal, a fixed standard unaffected by fiat currency fluctuations. Other currencies trade against the token, ensuring global stability.

Tradability: Tokens may be saved or exchanged within local economies for other goods or services, promoting participation and economic activity.

Adaptability: Tokens accommodate cultural and dietary preferences (e.g., halal, vegetarian, or region-specific staples), ensuring relevance across contexts.

Precedent: WFP's Building Blocks program uses blockchain to deliver \$3.3 billion in cash transfers to 56 million people across 14 countries [WFP, 2022], demonstrating secure, scalable token-like systems.

2.2 21-Year Timeline

Phased Rollout:

Years 1–5: Pilot programs in high-need regions, such as Ethiopia (where WFP served 20 million in 2022) and South Asia (home to 40% of global undernourishment [FAO, 2023]).

Years 6–21: Global expansion, integrating lessons from pilots.

Milestones: Infrastructure development (e.g., blockchain platforms, vendor networks), stakeholder coordination, and monitoring systems.

Rationale: A long-term horizon ensures scalability, drawing on multi-decade projects like India's Aadhaar, which connected 1.3 billion users to subsidies over 12 years.

2.3 Decentralized Governance

Structure: A coalition of academic, humanitarian, and international institutions oversees token issuance, fraud prevention, and distribution, ensuring neutrality, transparency, and global representation.

Transparency: Blockchain infrastructure enables real-time auditing, mitigating corruption risks (e.g., 30% leakage in some programs [Transparency International, 2020]).

Precedent: The UN's Joint SDG Fund coordinates multi-stakeholder efforts across 190+ countries, providing a model for decentralized governance.

Academic Role: Universities can anchor governance by modeling frameworks, ensuring accountability, and studying equitable representation.

2.4 Economic Integration

Local Impact: Tokens incentivize food production, supporting agricultural jobs (27% of the global workforce [ILO, 2023]).

Poverty Reduction: By increasing demand for local food, tokens stimulate economies, similar to Brazil's Bolsa Família, which reduced poverty by 15% through cash transfers [World Bank, 2020].

Scalability: The system leverages existing food supply chains, integrating with local vendors and markets to meet demand.

3. Feasibility and Precedents

The Perth Agreement builds on proven technologies and programs, scaled to a global level:

- Blockchain Systems: WFP's Building Blocks uses Ethereum-based blockchain to manage \$3.3 billion in secure food transfers, serving 56 million people with minimal fraud [WFP, 2022].
- Digital Identity: India's Aadhaar connects 1.3 billion people to subsidies via biometric IDs, demonstrating mass-scale identification for token issuance.
- Supply Chain AI: IBM's Food Trust tracks over 1 million food transactions, optimizing supply chains for efficiency and transparency [IBM, 2023].
- Cash Transfer Programs: Brazil's Bolsa Família and WFP's cash-based transfers show that value distribution can reduce poverty and stimulate local economies.
- Mobile Access: 5.4 billion unique mobile subscribers globally [GSMA, 2023] enable token access via smartphones, even in low-resource areas, with offline solutions for remote regions.

The token system is designed to scale to 7.8 billion people, with each token valued at one meal, ensuring equitable access through voluntary participation.

4. Funding

The Perth Agreement does not rely on traditional funding, redirected budgets, or debt. It is driven by a global cultural shift, where humanity voluntarily wills a universal meal token system into existence through a collective commitment.

Every individual is entitled to one daily token, redeemable for a nutritious meal. Participation is voluntary—individuals may partake, pay full price to retain tokens for trading, or decline entirely, retaining their entitlement.

Tokens, valued at one meal, function as a global currency, independent of fiat currencies, which trade against them. This debt-free system emerges from shared human resolve, requiring no reallocation of existing resources.

Universities are invited to study the governance, scalability, and economic impacts of this cultural shift, exploring how global consensus can sustain token issuance.

5. Challenges and Mitigation

Scaling to 7.8 billion people presents challenges, which academic review can address:

- Logistics: Distributing meals globally requires robust supply chains.
Mitigation: Leverage WFP's logistics network (5,600 trucks, 120 aircraft, 20 ships [WFP, 2022]) and AI-driven optimization (e.g., IBM's Food Trust). Engage local vendors to reduce transport needs.
- Governance: Coordinating a voluntary system across 190+ countries is complex.
Mitigation: Use decentralized models, as in the UN's Joint SDG Fund, with academic institutions modeling equitable frameworks.

– Cultural Sensitivity: Dietary preferences vary widely (e.g., staple crops differ across Africa, Asia, and Latin America).

Mitigation: Engage communities for local sourcing and customization, as in WFP’s school feeding programs serving 418 million children [WFP, 2022].

– Public Trust: Skepticism, including fears of surveillance or control, may lead to opt-outs.

Mitigation: Ensure voluntary participation, transparent blockchain auditing, and choice-based entry. Offline token options can address tech access concerns.

– Fraud: Token misuse or duplication is a risk.

Mitigation: Blockchain’s immutable ledger and biometric IDs (e.g., Aadhaar) minimize fraud, as seen in WFP’s Building Blocks (0.1% error rate [WFP, 2022]).

6. Academic Research Opportunities

The Perth Agreement offers rich interdisciplinary research opportunities for universities:

Economics:

- Model the token as a global currency and its interaction with local markets.
- Analyze long-term circulation effects and trade dynamics.
- Study economic activation in agriculture and poverty reduction impacts.

Technology:

- Design blockchain architectures for secure, scalable token issuance and trading.
- Develop offline-compatible token systems for low-connectivity regions.
- Explore AI-driven supply chain optimization for global distribution.

Policy:

- Investigate governance models for a voluntary, non-sovereign system.
- Study legal frameworks for recognizing universal meal entitlements.
- Model treaty structures for global coordination.

Sociology:

- Examine cultural adaptation to a global token system.
- Study participation behaviors and trust in digital platforms.
- Analyze the social impact of universal meal access on community resilience.

Public Health:

- Assess nutritional outcomes of daily meal access.
- Study impacts on child stunting and long-term health metrics.

Suggested Paths:

- Faculty-led feasibility studies and simulations (e.g., Ethiopia pilot).
- Capstone or thesis projects for undergraduate and graduate students.
- Interdisciplinary collaborations in economics, technology, and public health.
- Symposia to model governance and scalability.

7. Endorsements

Two AI platforms have reviewed the concept, highlighting its potential:

Grok (xAI): “A globally unifying force—not just economically, but morally, if structured carefully.”

Grok (xAI): “The Perth Agreement’s voluntary token system leverages scalable blockchain technology and decentralized governance to address global hunger, offering a robust framework for academic research and global collaboration to achieve SDG 2.”

ChatGPT: “Rests on practical, distributable mechanisms... with global alignment, it could be done.”

These endorsements underscore the framework’s promise, pending rigorous academic validation.

8. Call to Action

The Perth Agreement invites academic institutions to engage in this transformative project:

- Conduct Feasibility Studies: Analyze token mechanics, governance, and scalability through faculty-led research or student projects.
- Host Roundtables and Symposiums: Convene interdisciplinary discussions to model implementation pathways.
- Develop Pilot Programs: Propose region-specific trials, such as in Ethiopia, leveraging WFP’s existing infrastructure.
- Provide Structured Feedback: Offer insights to address challenges and refine the framework.

Contact Kevin Wear at greyhoundxml@gmail.com to discuss research opportunities, collaborations, or next steps.

9. Conclusion

The Perth Agreement is a data-driven, voluntary framework to address global hunger by ensuring one meal per day for 7.8 billion people over 21 years. By leveraging proven technologies (blockchain, digital ID, AI) and a global cultural shift, it replaces traditional aid with equitable participation.

Academic institutions are pivotal to validating its feasibility, refining its mechanics, and co-developing implementation strategies. This is not a finished blueprint but an invitation to test, challenge, and build the most ambitious humanitarian project of our time.

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