

RECLAIMING NARRATIVE SOVEREIGNTY IN THE AGE OF GREEN REVOLUTIONS: A decolonial critique of food security

narratives and the coloniality of knowledge

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Credit image: Robert Falcetti (2013). Modern day Haitian sugarcane worker.

The belly is the reason why man does not so readily take himself for a God.

— Friedrich Nietzsche

Reclaiming Narrative Sovereignty in the Age of Green Revolutions

A critique of the *Green Revolution* myth that frames hunger as a problem of production rather than power.

THE TRAP: From Sisyphus to the Green Revolution

Extractive practices, land enclosure, and the commodification of food have entrenched global inequalities and affirmed our dependency on nature.

Hunger is a political and historical construct rooted in colonialism and capitalist accumulation.

THE CYCLE: Myths and Failures of the *Green Revolution*

The Green Revolution reproduces dependency, dispossession, and degradation of land and sovereignty.

Food security narratives mask the power dynamics that erode local knowledges and sovereignty.

THE RECLAMATION: Narrative Sovereignty through Food Sovereignty and Indigenous Cosmologies

Food sovereignty, Indigenous cosmologies reclaim narrative and balance between people and land.

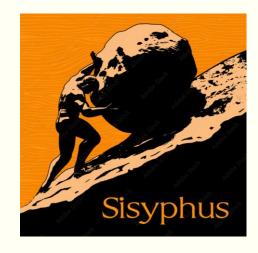
True transformation requires reclaiming not only the right to land but the right of land to its people.

THE TRAP:

From Sisyphus to the Green Revolution

The Sisyphean Trap

In *The Myth of Sisyphus*, Camus reinterprets Sisyphus's eternal labour as the absurdity of human existence — our search for meaning in an indifferent universe. Yet, in defying futility, Sisyphus embodies resilience, freedom, and purpose.



This cycle depicts the struggle to break free from hunger and ecological limits.

Likewise, Malthus (1798) warned that population grows faster than food supply, trapping societies in cycles of progress and scarcity.

Malthusian Trap

A condition in which any increase in a society's food production or resources leads to population growth that, in turn, consumes those gains, resulting in no long-term improvement in living standards.

Both reveal a deeper truth: our pursuit of mastery over nature creates new limits. The *Industrial Revolution* promised escape through productivity and innovation, yet the Sisyphean struggle against hunger and ecological collapse endures.

From Colonial Plantations to the Industrial Revolution

Introduced to Europe by the Moors, *white gold* extracted from sugarcane (*Saccharum officinarum*), became central to European colonial expansion (Mintz, 1986). To address labour shortages on plantations caused by the collapse of Indigenous populations, Africans were forcibly transported westward as part of the transatlantic slave trade while raw materials flowed east to enrich Europe.

The Industrial Revolution

- Enclosure displaced peasants, driving mass migration to industrial heartlands (Davis, 2002).
- Colonial plantations supplied a cheap nutritional source to feed factory workers (Mintz, 1986).
- Sugar's commodification marked its shift from luxury to everyday necessity in capitalist expansion.
- By the late nineteenth century, slavery had been abolished *de jure*, but colonialism had already become central to global capitalism (Luxemburg, 1951).
- Freed slaves and the industrial working class alike faced new forms of wage slavery, as capitalism demanded continual expansion into cheap land, labour, and markets (Dickens, 1854).

From the Industrial Revolution to the Green Revolution: Mexico

By the end of World War I, the foundations of the *Green Revolution* were set in the U.S., with fertilisers, mechanisation, and organised research systems (Murphy, 2006; Brand, 1945).

In the 1940s, under the guise of food security concerns following a period of political turmoil, the Rockefeller Foundation used Mexico to experiment with modern agricultural practices (Patel, 2013; Astier *et al.*, 2017). Hybrid seed was accompanied by heavy mechanisation, fertilisers and chemicals as part of a scientific package, displacing traditional seed, technologies and knowledges (Altieri, 2016).

NAFTA (1990s to present)

The drive for increased productivity led to the *North America Free Trade Association* (NAFTA) in 1994. Liberal policies would see food dumping prize Mexican subsistence farmers off their land (IATP, 2010), resulting in the rural displacement and net migration of millions (Via Campesina, 2019).

From Colonial Plantations to the Green Revolution: India

The coloniality of knowledge was central to shaping the *Green Revolution*. The Rockefeller Foundation had learnt from its Mexican experience. Accused of technological knowledge favouring commercial over subsistence farming, it changed tack when it came to India (Patel, 2013).

- India provided fertile ground to address concerns over population and poverty (Perkins, 1990).
- The Foundation promoted technology-centric, scale-neutral solutions such as hybrid seeds and input packages that favoured smallholders (Patel, 2013).
- In reality, these solutions were not resource-neutral, relying on costly inputs, often bundled up as a package, that favoured commercial over smallholder farms (Palmer, 1972).
- This discrepancy generated a *yield gap* between trials undertaken on prime agricultural land versus the smallholder experience on marginal land with limited inputs (Griffin, 1979; Licker *et al.*, 2010).

In addition, who owned the new seed? Conserving seed to sow for the next campaign is a millennia-old practice. Property rights assigned to hybrid seed undermined this fundamental resource access.

THE CYCLE:

Myths and Failures of the Green Revolution

Food Security

The instruments deployed by modern agriculture have influenced international food and agricultural policy. Today, the second of the United Nations Sustainable Development Goals is to 'end hunger, achieve food security and improved nutrition and promote sustainable agriculture' (UN, 2020).

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

— World Food Summit, 1996

The three-pillar definition of UN food security is based on the libertarian principles of: *availability, access and stability* (Cavalcanti, 2005:153).

Why This Matters Today?

With significant population growth forecast to come from sub-Sahara Africa and Asia, advocates of the *New Green Revolution* look to modernity to stay ahead in our Malthusian race (Folger, 2013). Current rhetoric used to argue for the same scientific discourse to feed a growing population is to assume that the *Green Revolution* was a success, a *fait accompli* (Patel, 2013).

- If food is a life-sustaining need, why isn't it treated as a public good—inclusive, and non-rivalrous?
- Why is food security left at the mercy of market forces?

The introduction of the *North American Free Trade Act* (NAFTA) in 1994 placed greater demand for productivity, resulting in the rural displacement and net migration of millions.



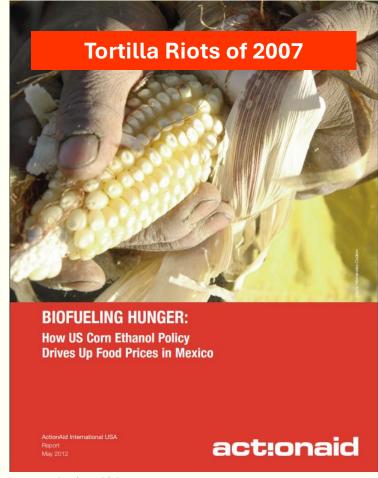
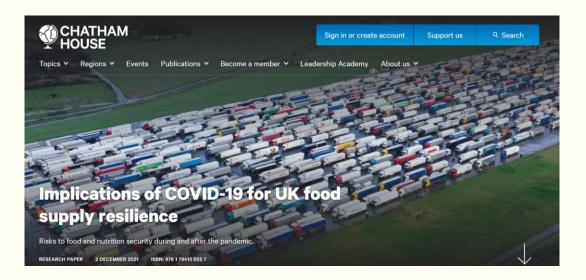


Image: Action Aid

Monocultures reliant on external inputs are further exposed to climate change and pest and disease pressure due to the lack of genetic diversity (Cox and Jackson, 2002). Given the recent systemic shocks to industrial food systems caused by the COVID-19 pandemic and war in Ukraine, there is a need for resilience to erosion of natural capital, climate and socioeconomic shocks and robust on-farm solutions to decouple from systemic shocks.





Following Russia's invasion of Ukraine, global commodity prices have risen to their highest level since 2008.

Food, agricultural and energy prices have all soared in recent weeks, with the resulting knock-on effects highlighting countries' dependence on Russian exports, including in Africa.

If this dependency, and the fallout that will occur from rising prices is not addressed, it could result in increased food and energy insecurity, and civil unrest.

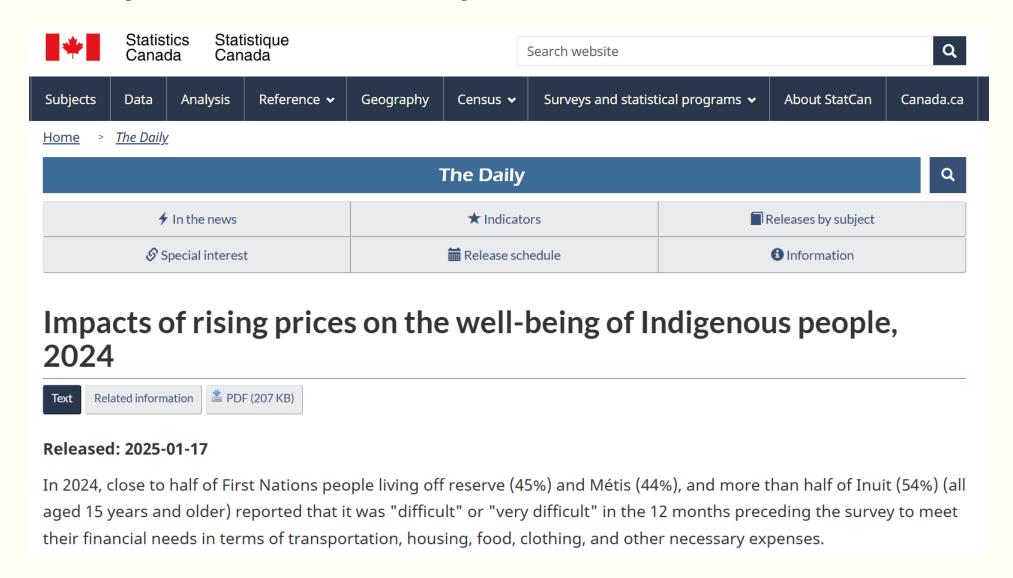
— Mo Ibrahim Foundation











Cheap Food?

EXTERNALITIES

- Water pollution
- Soil degradation
- GHG emissions
- Deforestation
- Land conflict
- Biodiversity loss

SOCIAL & HEALTH

- Diet-related illnesses, i.e. diabetes, obesity
- Poor food distribution, i.e. no food security!



TAX

- Higher public health care costs
- Agricultural subsidies
- Environmental remediation
- Disaster relief
- Insurance
- Tariffs, price fluctuations

PERSONAL HEALTH

- Higher household spend on health
- Chronic illness: longevity and quality of life
- Nutrient-poor diets despite calorific abundance

The True Cost of Food

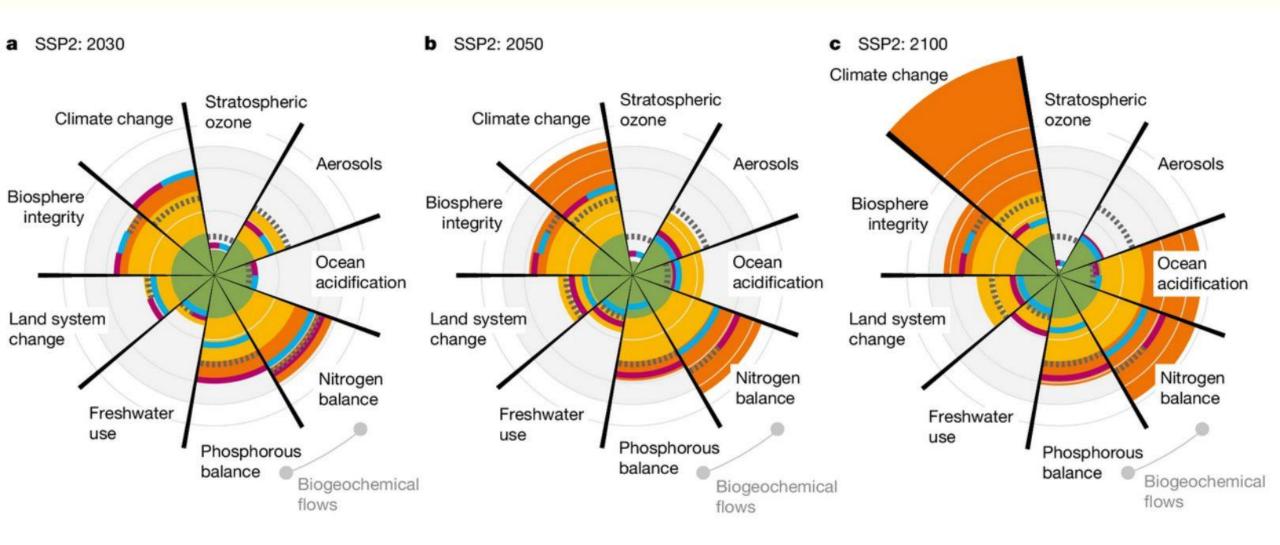
TRUE COST ACCOUNTING	
Item	Value (USD trillion)
Food: market value	9.0
Externalities: environmental	7.0
Externalities: lives, livelihoods	11.0
Externalities: economic	1.8
Externalities: total	19.8
TRUE COST OF FOOD	28.8



WWF: The True Cost of Food

This means that food is circa a third of the cost it would be if externalities were included in food prices.

Planetary Boundaries



Evolution of planetary boundary control variables under the business-as-usual SSP 2 scenario. Adapted from Figure 3 in 'Exploring pathways for world development within planetary boundaries'.

Soil Degradation

Soil is the foundation of life, supporting 95% of global food production (FAO, 2020).

Over 40% of Earth's land is degraded, affecting 3.2 billion people (UNCCD, 2022).

Degraded soils reduce crop yields, water retention, biodiversity, and carbon storage.

Agriculture and mining drive most degradation through erosion, nutrient loss, and contamination (IPCC, 2019; UNEP, 2022).

\$6–10 trillion annually in lost ecosystem services (UNCCD, 2022).

Degradation contributes up to 29% of global GHG emissions (IPCC, 2019).

Disproportionate impacts on smallholders and dryland communities increase poverty and migration pressures.

Food Loss and Waste



We need to accelerate progress in achieving SDG target 12.3 by 2030 to halve global food waste and reduce food losses along production and supply chains, including post-harvest losses (FAO, 2021).



The UN FAO (2021) estimates that 31% of food production is lost post-harvest, representing a \$990bn loss in value (Sawicka, 2019), and accounting for 10% of GHG emissions (FAO, 2021). Post-harvest losses (PHL) use up precious land and natural resources with nothing to show in return (ibid). As a leading cause of climate change and biodiversity loss (Benton et al. 2021), there is a socioenvironmental need to minimise these losses.

With the prospect of feeding 9.1bn people by 2050, an additional 70% of food will be required (Obiedzińska, 2017). Reducing PHL and food waste is a sustainable solution to address food security concerns, mitigate against the impact of rising food prices (EU Fusions, 2016) and alleviate pressure on natural resources.

Food Security?

There are three counterarguments to the UN position on food security:

Power dynamics and socioenvironmental injustices

Power dynamics and socioenvironmental injustices allow hegemonic, technology-centred systems to erase diverse agrarian alternatives (Schweizer, 2020; Sharma, 2022; Ajl, 2021).

Extractive unsustainable farming systems

Modern agriculture is inherently extractive and unsustainable, driving continued spatial expansion to offset declining natural capital (Harvey, 1999; WRI, 2019).

Lack of resilience

Climatic and systemic shocks (COVID-19, the war in Ukraine) expose the fragility of modern agriculture and its long supply chains, deepening food insecurity and inequality (Mardones, 2020; Rivington, 2021).

THE RECLAMATION:

Narrative Sovereignty through Food Sovereignty and Indigenous Cosmologies

Food Sovereignty

Talk of a *New Green Revolution* implies that the *Green Revolution* of the twentieth century was a success (Patel, 2013). Plausible? Yes, if the measurement of success is limited to the aggregate supply of grain.

- Increased yields in Mexico and India under optimum conditions masked how capital accumulation deepened food insecurity by dispossessing farmers of land and knowledges (Arora, 2019).
- People without adequate land or income remain ill-fed, regardless of national context (Perkins, 1997).
- Lack of access to land or income continues to leave people undernourished (ibid).

Global resistance to market forces coalesced around food sovereignty.

The true right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food and to food-producing resources and the ability to sustain themselves and their societies.

— Via Campensina, 1996:1

Indigenous Cosmologies and Resistance

When we speak of Indigenous cosmologies, we are not talking of static beliefs rooted in myths or traditions but speaking of living epistemologies that define how people relate to land, water, and one another. These cosmologies are acts of resistance in themselves, because they refuse the separation of humans from nature, the very separation that legitimised colonial extraction.

They show that to know differently is to live differently, and that recovering these ways of knowing is essential to any decolonial future. Where the colonial cosmology sees land as resource, Indigenous cosmologies see land as relation — as kin, ancestor, or teacher.

In the settler mind, land was property, real estate, capital, or natural resources. But to our people, it was everything: identity, the connection to our ancestors, the home of our nonhuman kinfolk... It belonged to itself; it was a gift, not a commodity.

— Robin Wall Kimmerer

Indigenous Cosmologies and Resistance

Aggregating food production data risks concealing the injustices of modern agriculture, much like reductive definitions of food sovereignty (Grey, 2013). Resistance to colonisation by *First Peoples* long predates [resistance to] industrial agriculture, situating food sovereignty within a broader anticolonial struggle. By embracing democratic engagement and Indigenous experiences of resistance, food sovereignty becomes a radical praxis of daily defiance against coloniality (*ibid*).

Give me a place to stand, and I shall move the Earth — Archimedes

Storytelling resists the cognitive legacies of colonisation, exposing the colonial lie through lived truths and dynamic Indigenous knowledges (Arora & Stirling, 2020; Ajl, 2021). Rooted in Indigenous cosmologies and living landscapes that span physical, spiritual and social geographies, this struggle reframes food sovereignty as not only the right to land *for* people but the right of land *to its* people, pointing to a *lived and storied participation* (Cajete, 2024:46) that challenges the cosmology of capitalism and its erasure of relational, reproductive and ecological struggles (Patel, 2013; Grey & Patel, 2015; UN DESA, 2021).

Cosmology as Resistance

The Zapatista Movement (Chiapas, Mexico)

- Rooted in Mayan cosmology and communal land ethics.
- Rejects the neoliberal development model and asserts *a world where many worlds fit*. Now operates schools and governance systems fuse Indigenous knowledge with contemporary activism.

The Māori Concept of Whenua (New Zealand)

- Whenua means both land and placenta, symbolising the reciprocal bond between people and land.
- Māori iwi (tribes) have used this worldview to reclaim ancestral lands and establish co-governance over ecosystems, i.e. Whanganui River granted legal personhood in 2017.

The Standing Rock Movement (USA)

- Indigenous nations resisted the Dakota Access Pipeline to protect water. *Mni Wiconi (Water is Life)*.
- Demonstrates cosmology as living resistance spirituality, ecology, and sovereignty intertwined.

Agroecology in Latin America

- Peasant and Indigenous movements combine cosmological principles with a transnational political and social movement, a scientific discipline and study of agroecosystems.
- Agroecology is a decolonial praxis, restoring biodiversity, autonomy, and ancestral farming knowledges.

Reclaiming Narrative Sovereignty

The New Green Revolution: A Saviour Complex?

The New Green Revolution may cite a plethora of revisited or novel challenges which justify interventionist food and agricultural policies and imperialistic forces in the form of land grabbing, property rights and population control in the name of food and nutritional security (Folger, 2013). The Green Revolution may go through many reiterations, but ultimately modern agriculture is a function of the capitalist system.

An appreciation of capital accumulation and production and consumption patterns emphasises how the fate of peoples in colonised and colonising nations is bound.

- Reclaiming how we know, grow, and live with land, i.e. embracing plural epistemologies, local knowledge systems, relational ontologies, narrative repair.
- Indigenous case studies are tied to a common principle, i.e. land as relation, not resource.
- If we are to change the food system, we must first change its story.

Armed with an historical perspective that helps identify patterns and predict the new trajectory of food security and the art of storytelling, we will save ourselves from our bellies.

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