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Fixing the food system through innovation, the World Economic Forum's recipe

On hungerexplained, we have already seen on several occasions how the dominant thinking about the way of managing (and solving?) the major intertwined crises the world currently faces, gives a prominent role to **technological innovation** [read <u>here</u> and <u>here</u>].

The World Economic Forum's solution: technical innovation in the hand of private companies

One of the main proponents of this techno-scientist approach – the **World Economic Forum** (WEF) – recently published its white paper and roadmap for stakeholders on how food innovation should be mainstreamed in order to reduce negative impacts of food systems, such as greenhouse gas (GHG) emissions and the level of water use by food systems [read]. This document will likely serve as one of the inputs into the yearly Forum of Davos scheduled for later this month, during which the idea that 'innovation in food systems has the power to mitigate [their negative] impacts and build a better food future for everyone', will probably be belaboured ad nauseam.



The WEF report takes as starting point the disastrous state in which food systems currently are, endorsing a long list of deleterious impacts that have frequently been highlighted in articles published in hungerexplained (e.g. deforestation, GHG emissions, obesity, soil erosion and degradation, waste, hunger and nutritional deficiency). It states that there will be a need for producing more as population grows, taking for granted – and that may be challenged – that consumption patterns will continue to follow past evolution trends.

The logical consequence of this way of considering the food issue is that agriculture will have to **produce more, but in a different way**, so as to address current impacts of our food systems, and that the brunt of the required effort will be on producers.

The different manner of producing is equated to adopting existing technosolutions¹ that should, therefore, be promoted and supported so as to be brought to scale. Many of these technosolutions were analysed by hungerexplained in a number of earlier articles [read here, for example]. Their strength and weaknesses have been highlighted, the least not being that most of these solutions are owned by private companies that, with the help of intellectual property rights protection laws, will tap a growing share of value added within food systems to the detriment of both farmers and consumers, thus accelerating the emergence of huge economic inequalities [read]. However, contrarily to what it had earlier done in the case of digital technologies [read], WEF does not venture this time in describing the extent to which the innovations discussed will actually reduce impacts listed at the beginning of the report.

Interestingly, too, the WEF document compares food innovation with 'other' climate innovations, suggesting that the main concern when WEF thinks 'food' is 'climate', which, we believe at hungerexplained, is only one of the multiple facets – although extremely important – of the food issue.

Obstacles to innovation

Obstacles to a broader adoption of recently developed innovations include, according to WEF, 'high production costs per unit, complex regulatory environments, lack of co-creation, poor infrastructure and inconsistent demand'. Many of these obstacles are well-known characteristics of the food and agriculture domain that authors seem to discover.

High production costs are a consequence of the fact that agriculture is a long-term and risky activity operated by a large number of mostly small actors who are often excluded from necessary services. Agriculture and food policies are complex, region-specific (depending on their natural, economic, social, political and cultural characteristics), and touch upon a great variety of domains. They

¹ e.g. biotech, 'smart' machinery, vertical agriculture and hydroponics, 'sustainable' inputs, digital-based technologies (fintech and insurance, precision farming, unmanned machinery, satellite imagery, etc.), aquaculture, 'smart' livestock monitoring, plant-based proteins, precision fermentation, 'sustainable' packaging.

entail the mobilisation of huge subsidies² and numerous regulations deemed required to protect consumer health and natural resources indispensable for producing food sustainably [read]. Because of that, policy-makers are under the influence of a host of lobbies [consult] often funded by the very members of WEF.

Authors also lament over the 'say-do gap' of consumers who, although in their large majority willing to consume healthy and sustainable food, do not do it on the ground that unhealthy and unsustainable food items produced by the food industries member of WEF are cheaper, as their negative health, social and environmental externalities are not factored into their price [read].

So far the diagnosis of the WEF report is largely endorsed by hungerexplained. It is not really the case of the discussion on infrastructure, particularly when it comes to the extremely costly irrigation infrastructure which is an increasingly risky investment as climate becomes more erratic [read].

Overcoming obstacles, according to WEF

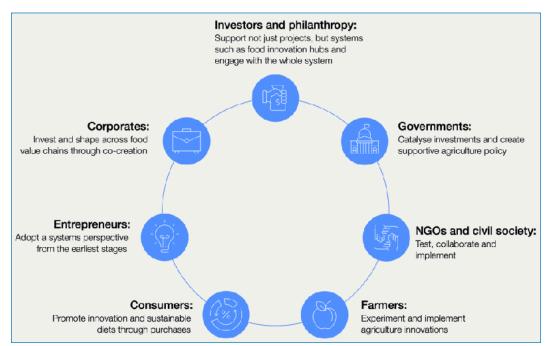
WEF **defines each stakeholder's role** in triumphing over the obstacles identified. Thus:

- The private sector should 'invest in research and development (R&D), make direct investments, derisk adoption and deploy market expertise' and 'shape across food chains through co-creation' - in other words steer the process and reap most of its benefits;
- Governments should 'foster collaborations, provide incentives and support public research' – in other words facilitate and subsidise (and not regulate to protect);
- Civil Society Organisations should 'test, collaborate and implement' in other words give up power and influence and hand over decision to the private sector -, while consumers should limit themselves to 'purchases' in other words forget that they are also responsible citizens;
- Farmers should 'experiment and implement agriculture innovations' in other words be free testers and apathetic clients of the industry;
- **Financial institutions, including philanthropies**, should 'play a crucial role by adopting a long-term perspective and sourcing innovations with high scalability and sustainability potential'.

Said differently, it is not just a matter of triumphing over obstacles, it is also organising the industry's triumph and its full control of innovation in food systems, all other stakeholders abandoning their capacity to influence corporate activities and, consequently, the evolution of food systems.

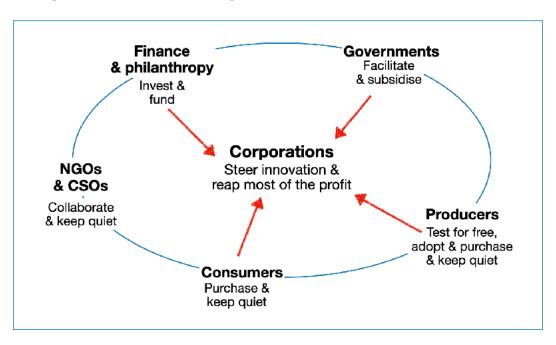
² as the price of food has to be kept low [read].

Stakeholder roles in the innovation ecosystem as presented by WEF



Source: Boston Consulting Group analysis, presented in WEF, 2024, p. 31.

Hungerexplained's reading of WEF's innovation ecosystem view



The WEF report proceeds by describing briefly several 'food innovation hubs' that could serve as models for organising in practice these activities and continues by presenting a framework for 'ecosystems' organisation and points to a 'playbook' that provides 'a comprehensive guide to setting up new, or managing and developing existing regional and country-specific hubs'.

The document ends with more detailed descriptions of hubs in the area of 'soil health' (understood mainly as anti-erosion measures and optimisation of fertiliser

application – virtually no mention of soil biodiversity that, however, plays a key role in plant-soil interaction [read]), and 'protein innovation' (plant-based, fermentation-derived and cultivated) that was discussed earlier articles on hungerexplained [read].

While dealing mostly with the organisation and distribution of responsibilities among stakeholders, the WEF report says very little on the means that will ensure that the innovation 'ecosystem' will produce and bring to scale innovations that will really address the issues presented in its initial pages. Based on experience, simplifying (dismantling?) regulations and relying on corporate responsibility and existing certification systems is unlikely to be sufficient to achieve the pursued objectives [read].

Conclusion

In 2009, WEF had launched their 'New Vision for Agriculture' that sought to make agriculture more market oriented and give a greater role to the private sector. It had promoted several initiatives in which major food and agriculture multinationals took part [read].

In 2021, on the occasion of the **Food Systems Summit** co-organised with the United Nations, WEF promoted the emergence of a new form of multilateralism in the shape of 26 coalitions dealing with a variety of issues. This set-up can be interpreted as made of 26 interest groups based on voluntary participation [read]. After two years of operation, it had led to a multitude of uncoordinated meetings with little concrete outcome, dominated by academics and representatives of the private sector and producer organisations. The process, as a whole, has been criticised by Producer and Civil Society Organisations as an attempt to legitimise and institutionalise the **capture of global food governance by private corporations** [read].

In this new piece by WEF, innovation is <u>the</u> solution to the problems met by our food systems. However, other views are that, while innovation is part of the solution, it cannot be effective alone and should be **governed appropriately** [read].

In this report, the approach that WEF puts forward amounts to **selling out** agriculture and food innovation to the private sector, lock, stock and barrel.

to know more:

- World Economic Forum, <u>Mainstreaming Food Innovation: A Roadmap for Stakeholders Whitepaper</u>, in collaboration with Boston Consulting Group, 2024.
- World Economic Forum, New Vision for Agriculture A global initiative of the World Economic Forum, 2015.

Selection of past articles on <u>hungerexplained</u> related to the topic:

- The World Bank presents its recipe to achieve zero net GHG emissions by food, 2024.
- <u>In the heart of the global economic system: the protection of intellectual</u> property rights, 2024.
- Opinion: 'Natural meat' and futurist fantasies? by Maria Grazia Quieti, 2023.
- The "food and agricultural transition" is ongoing Nine changes tell us to what kind of world it is leading us, 2023.
- Governance, consumer awareness, better income and wealth distribution, and technological, social and institutional innovations will be key in achieving a desirable future, says FAO, 2022.
- Opinion: <u>Food Systems Summit's Scientistic Threat</u>, by Jomo Kwame Sundaram, 2021.
- Responsible businesses or greenwashing? The certification industry in support of multinationals, 2021.
- The real cost of food Can the market alone guide our food systems towards more sustainability? 2020.
- The global food crunch: myth or reality? 2018.
- Food, Environment and Health, 2017.
- Water and Hunger -The "all-out irrigation" strategy has led to a fragile,
 wasteful and inegalitarian system, 2013.