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Innovation for whom?

The need to transform the global food system could not be clearer as multiple reports over the past decade have illuminated the toll of greenhouse gas emissions from the food system, soil erosion and degradation, loss of biodiversity, and unjust compensation and conditions of work for farmers and farmworkers. The response from most businesses has not been encouraging, however. Rather than fundamentally change their business models, they have doubled down on minor modifications of their products and major investment in lobbying and attempting to influence public opinion. The “Innovation Principle” in the EU is a thinly veiled attempt to circumvent existing environmental and public health safeguards. It calls for a new kind of impact assessment to ensure that whenever policy or regulatory decisions are under consideration the impact on innovation as a driver for jobs and growth should be assessed and addressed (ERF, n.d.). Its supporters, the industry lobby group European Risk Forum, come mainly from chemical, fossil fuel and tobacco sectors – not renowned for their scrupulous attention to the public interest.

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The World Economic Forum (WEF) and the IAASTD offer stark contrasts in the purpose of innovation. The IAASTD focused on impacts to smallholders who make up most of the world’s food insecure people, as well as most of the farming population. For WEF (2018), the ‘Transformative Twelve’ innovations that could deliver significant impacts to food systems by 2030 include alternative proteins, nutrigenetics for personalized nutrition, “big data and advanced analytics for insurance”, and “microbiome technologies to enhance crop resilience”. It points to 80% of the poor people in the world living in rural areas and dependent on agriculture, but does not explain how the “transformative twelve” will help them. In fact, the beneficiaries seem to be the companies that come to Davos each year, including companies pushing the “Innovation Principle”.

Innovation usually refers to new technology, even though social innovations (changes in policies, institutions, ownership regimes, knowledge) which encourage people to act in ways that promote conviviality and community show great promise to overcome barriers to cooperation and collaborative problem solving (e.g., Haxeltine et al., 2018). Why aren't we more wary of the glitter of modernity in food systems, given the many ways that “the modern” has backfired? The foods consumed in the typical “Western” diet lead to obesity, strokes, diabetes and even dementia. The excessive use of synthetic pesticides and fertilizers has

killed beneficial organisms and acidified soil so much that its productivity has plummeted. Reliance on fossil fuels in every food system activity is feeding the climate catastrophe. Yet each of these “innovations” was heralded as a breakthrough to greater yields and productivity when it first appeared.

If the rationale for an innovation is only increasing yields, productivity, profits or economic growth, it is likely to aggravate rather than ameliorate existing problems. The ten years since the publication of the IAASTD, during which neoliberalism as an economic system has metastasized, has shown that economic interests may cannibalize social and environmental goods and services. Articulating planetary boundaries, both environmental and social, has made clear that continuous economic growth is impossible. Societies must accommodate ecological constraints to keep the planet habitable for humans, and economic systems must accommodate the values set by a society in order to prevent rising inequity and discontent.

Those who have been hurt by the global food system should be included in decisions on new innovations.

How should an innovation be judged, to decide whether it is truly worthwhile in bringing society closer to justice, equitability and a healthy planet? The answer should be congruent with distributive, procedural and restorative justice; the EU’s Innovation Principle does not mention justice of any type. But who decides which innovations are embraced and promoted, and how that decision is made are as important as the attributes of the innovation compared with the need it purportedly serves. Those who decide should include ones who have not benefited from, or who have been exploited and hurt by the global food system (e.g., slaves, low-paid wage-workers, farmers whose land has been stolen). Innovations should help to remedy damage to people and the natural environment, not simply lead to greater convenience or other benefits to those who are currently reaping benefits from the food system in the form of wealth or disproportionate access to healthy food.

Of course, holding innovation to such a standard requires an international or national body capable of evaluating the costs and benefits of inventions and capable of regulating inventions before they are released. To some extent, that is what environmental and health agencies are doing or supposed to do, but they are as fallible as the governments that create and fund them. For example, the US Environmental Protection Agency has rolled back at least 95 regulations aimed at protecting public lands, water and health under the Trump Administration (Popovich et al., 2019) and many countries lack the resources for environmental and health testing. Most often regulation will limit or impede business interests, not vice versa; and regulation within a country may be undermined by lobbying. A principle that promotes any “innovation” as long as it promotes jobs and growth (Quist et al., 2013) is only likely to perpetuate or exacerbate injustice.

References

ERF – European Risk Forum. N.d. What is the innovation principle? <http://www.riskforum.eu/innovation-principle.html>

Haxeltine, A., Avelino, F., Wittmayer, J., Kunze, I., Longhurst, N., Dumitru, A. and O’Riordan, T., 2018. Conceptualizing the role of social innovation in sustainability transformations. Pp. 12-25 In: Backhaus, J., Genus, A., Loerk, S., Vardovics, E. and Wittmayer, J. (eds.) *Social Innovation and Sustainable Consumption: Research and Action for Societal Transformation*. London: Routledge.

Holland, N., 2019. The “innovation principle”: Industry’s attack on EU environmental and public health safeguards. Corporate Europe Observatory, Brussels. At: https://corporateeurope.org/sites/default/files/attachments/briefing_innovation_principle_final.pdf

Popovich, N., Albeck-Ripka, L. and Pierre-Louis, K., 2019. 95 Environmental rules being rolled back under Trump. *New York Times*, December 21, 2019.

Quist, D., Heinemann, J., Myhr, A., Aslaksen, J. and Funtowicz, S., 2013. Hungry for innovation: from GM crops to agroecology. Pp. 458-485 In: *Late Lessons from Early Warnings II: Science, Precaution, Innovations*. Copenhagen, Denmark: European Environment Agency.

World Economic Forum, in collaboration with McKinsey and Company, 2018. *Innovation with a Purpose: The role of technology innovation in accelerating food systems transformation*. At: http://www3.weforum.org/docs/WEF_Innovation_with_a_Purpose_VF-reduced.pdf



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