

Understanding Practices that Configure the Food Market to Transform it from the Sustainability of Plant-Based Food

MEAT AND DAIRY MEALS ARE UNSUSTAINABLE The current configuration of food market has prominent negative consequences for sustainability in all dimensions: environmental, social, economic and ethical. The problems related to this meat-and-dairy-centric meals involves its leading role in greenhouse gases (GHG) emissions, not just carbon dioxide, but methane and nitrous oxide too — the latter two being more aggressive, causing greater damage to the ozone layer and intensification of the greenhouse effect than carbon dioxide. Moreover, there are significant impacts on land use and loss of soil, deforestation pressure — there are indications that around 90% of deforestation in the Amazon, beyond the exploitation of wood, was promoted for animal production, between pasture areas and intensive monoculture of grains for animal feed. Our animal-based food market both impact significantly the use and pollution of water and the loss of biodiversity —, including recent mass extinctions in oceans. In addition, livestock production, in its current configuration to meet global market demand, causes threat to global food security, propitiate the emergence and proliferation of new communicable diseases, impacts consumer health, inflicts on high levels of human mortality and causes infringements upon animal rights and human ethics.

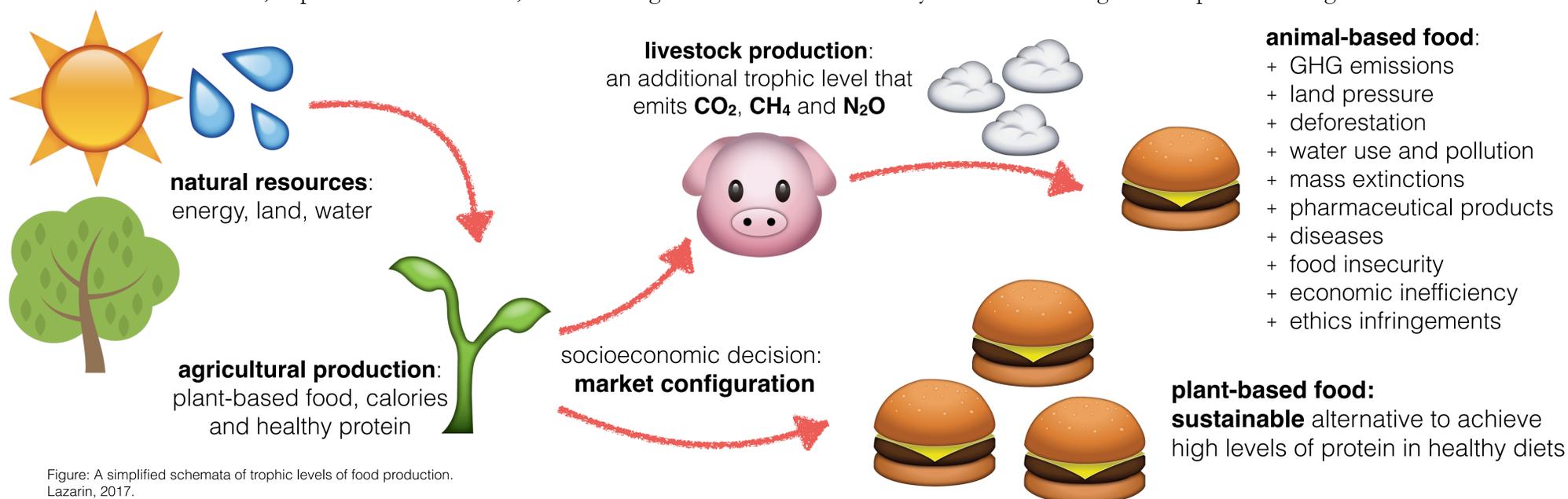


Figure: A simplified schemata of trophic levels of food production. Lazarin, 2017.

WHY VEGAN? Previous researches estimate that GHG emissions in kilograms of carbon dioxide equivalent per day are around 7kg for consumers of diets with more than 100 grams of meat per day, 6kg per day for consumers of diets between 50-99 grams of meat, 5kg for consumers of diets with less than 50 grams per day of meat, 3.9kg for consumers of fish diets, 3.8kg for vegetarians (containing milk and egg derivatives in diets) and 2.9 kg for vegans (strictly vegetable diets). By changing diets patterns from meat-centric to vegan, besides healthy benefits and other benefits, a consumer stop emitting more than **1,5 ton of CO_2** per year. This numbers do not yet include CH_4 nor N_2O , as not consider land and water uses, considering the difficulties of measuring these environmental issues. ONU warned about the unsustainability of global food production in light of demand forecasts for 2050, a year in which the food sector could become the main polluter, surpassing of the energy sector. For these compelling reasons, some researchers indicate that it is more effective, to stop climate change and to preserve our environment, changing human behaviors that to put faith in some disruptive technological innovation.

THERE ARE BARRIERS TO CONSUMERS “GO VEGAN”

Through qualitative multi-methods studies, it was be possible to access and understand motives underling daily practices related to food and beverage consumption, identifying not only attitudes, but actual practices and habitus of consumers. This motives act like devices of practices, operating as barriers and as facilitators to adopt plant-based options. In sum, is possible to allege that there are explicit and tacit motives.

The explicit devices are related to the marketing mix of products: available tasty substitutes, easy access to it, practicality of it, competitive and attractive prices, enticing advertising and packaging and persuasive information in multichannels.

Before moving forward, it is essencial to highlight that food habitus are deeply rooted in our culture and identity, so it's a consumption facet seldom questioned, facing resistance even in academic world. Thus, scientific research related to this theme must go beyond what is superficial and exposed initially, seeking to access in depth the operant logics.

Related to tacit (and sometimes unspoken) motives, there are social rules and cultural aspects. Eating meat is something central in our western culture, social meetings occur around animal-based meals, that is, meat (and sometimes eggs and milk derivatives) is a mythical element in our sociocultural rituals, our mediatic culture revels it; children learn in various ways that animals can be — and must be — eaten, and taste preferences are part of an aesthetic sociohistorical construction.

This sociocultural tacit motives are constantly being recreated in a feedback process that constitute and assigns meaning to our daily practices. So, social and cultural devices implicitly exert pressures on consumers to prefer animal based meals in a complex way being intrinsically interrelated to market offers.

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MARKET IS MORE THAN CONSUMERS DEMANDS ONLY

An economic and sociotechnical reconfiguration of the contemporary food market in favor of plant-based protein is a fundamental alternative to the advancement of the sustainability agenda. However, changes in market practices are complex, given the power relations, the cultural and historical bases, and the institutions and structural elements — both ideological and material — that sustain the beliefs and practices of the various actors involved in the market supply-chain. For the implementation of effective sustainable development policies it is necessary to fully understand and manage various elements and devices that influences on market constitution, not only in the consumption sphera, but in the mediatized cultural changes, governmental subsidies and regulations decisions, macro and microeconomics, international economic flows, scientific and technological advances, as industrial and commercial issues too.

CONSIDERATIONS

Can we transform this unsustainable reality? **Yes**. Only buy understanding consumers? **No**. Why? Because a market is a complex social system, is formed and opereted by humans, inserted in social and cultural contexts. So, it is necessary and urgent to understand and transform beliefs and practices among varius actors that constructs the current configuration of our food system: consumers, producers, marketers, retailers, shareholders, government, scientists, media, activists, teachers, parents, society at large.

So, we need to understand and act in the market and in the supply chain, accessing the distinct players that make it works in that way, through multimethods approaches and mobilizing diverse sciences, in favor of a vegan reconfiguration to stop climate change, achive global sustainability and improve human well-being.

LEADING REFERENCES

For any question or reference, please contact the author by email.
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