The true cost of food

Prices that better reflect the environmental costs of food can promote more sustainable production and consumption practices. The research community has a role to play in constructing the framework for the implementation of true cost.

Most environmental impacts of food production and consumption are not economically valued and are not, therefore, felt ‘in the pocket’. They are what economists call hidden costs — the difference between the market price of food and its comprehensive cost to society.

Not balancing the books with regard to the true cost of food propagates failures within the food system, the most pressing of which are poor production practices and the promotion of a convenience and throwaway culture that encourages waste, aggravates pollution and further dissociates consumption from production. This is even more problematic in a world of severe socioeconomic disparities, where the consequences of excessive production and consumption patterns are felt by everyone, both across and within countries.

It is impossible to put a price tag on the sociocultural complexity of food and the environment. However, an effort to price food based on the principle of true cost could help minimize the mismatch between who causes pollution and who pays for it. By reflecting, at least in part, the environmental impact of food, true pricing could promote more sustainable means of production, signalling to consumers the footprint of different food items and encouraging them

to make choices in line with Sustainable Development Goal 12 on responsible production and consumption. In fact, those at the end of the supply chain are arguably in the best position to drive positive change along its entirety — from retailers to distributors, processors and right back to the farm — although they should not bear the cost alone.

Calculating true prices involves technical challenges, such as what impacts to account for, how to appropriately value intangible goods, and how to attribute impacts to goods over time. A mechanism for ensuring that revenues stemming from true prices would reach the source of pollution and mitigate it would have to be created and monitored. The true cost of food discussed here faces the age-old arguments made against the taxation of certain foods due to their content of sugar or fat: prices may not be prohibitive if consumers are willing to pay more for polluting or unhealthy products, nor sufficiently dynamic to restrict the consumption of such products under market fluctuations. The poorer within society may face the greatest burden, even household food insecurity, if prices were to rise, and this is a likely scenario should food producers and retailers comply with stricter sustainability criteria — at least until cleaner

technologies and practices are up-scaled and become cheaper.

These are not insurmountable challenges. Technical instruments and policy measures can help overcome them, whereas regulations could play a crucial complementary role to market incentives by ensuring a hard cap to pollution. Research is key for proposing effective pricing mechanisms and assessing the impacts of true pricing on different regions and societal groups — including how the effects on sensitive groups could be alleviated and what policies would ensure that true pricing leads to less pollution, less waste and a positive restructuring of the food chain.

True cost offers researchers an opportunity to take a more protagonist role. Instead of ex post policy assessments, exploratory studies could point out ways to operationalize it successfully, and steer the debate in a constructive direction. Whether researchers will be proactive and do their part in bridging the gap with policymakers is yet to be seen; what is certain is that ‘fake pricing’ cannot be sustained for much longer. □

Published online: 17 April 2020
<https://doi.org/10.1038/s43016-020-0070-5>