## True cost accounting of food

Current market prices do not fully capture the impacts of food, leading to inefficiencies and propagating unsustainable behaviour. True cost accounting offers an opportunity to change that, but will only deliver on its promise if understood as part of a set of tools.

hat we pay for food in monetary terms does not reflect its value, its cost to the food system or a fair price to producers. Against this backdrop, the concept of true cost accounting (TCA) has been gaining traction in the food sector, having been adopted on a voluntary basis by many companies and organizations interested in promoting fairer prices, corporate social responsibility and environmentally sustainable practices. Recently, TCA has also become a focal point of the 2021 Food Systems Summit, to be held by the United Nations later this year. The Summit's Scientific Group has estimated that food is roughly a third cheaper than it would be if major environmental, economic and human externalities in the food system were embedded in market prices1.

By revealing the hidden costs involved in food production, processing, distribution and consumption, TCA constitutes a promising tool to have such costs accounted for in decision making — both for the purposes of effective policy design and responsible consumption. Cost is intrinsically linked to value, which cannot be fully monetized given its intangible, dynamic and actor-specific nature; yet, TCA impels us to reconsider the impact of food on society and to practice prices that better reflect such impact as a disincentive to unsustainable choices. Importantly, TCA should not only affect consumers at the end of the supply chain but all actors at each of its stages, and it should not only be about negative externalities but positive ones too (such as the provision of services through better farming practices).

Though holistic in its conception, TCA has limits. Shedding light on hidden

costs is a necessary but insufficient step for behavioural change. Ultimately, TCA's transformative power depends on our ability to apply it in combination with complementary measures (including incentives and regulations), have it grounded on a fundamentally different mindset (so that it does not become a box-ticking exercise for greenwashing purposes), and to adopt it widely (thereby ensuring a level playing field across countries and sectors). Moreover, constant iteration between research and practice is key to gain clarity over which accompanying measures are needed for TCA to deliver on its potential. On the one hand, institutes, private consultancies and think-tanks have been at the forefront of TCA's operationalization, capitalizing on their proximity to markets, governments, individuals and other stakeholders to generate insights into the implementation of TCA on the ground. On the other hand, scientific investigation can shed light on the likely impacts of different TCA models and policy packages on societal groups and geographic contexts through evidence synthesis and scenario exploration. Efforts to refine the concept of true cost of food must go hand-in-hand with those to operationalize it.

This month, *Nature Food* presents a focus issue on TCA. Five core pieces are presented: a Review Article by Reinier De Adelhart Toorop and colleagues comparing existing TCA methodologies in terms of scope, functional unit, impacts and monetization types — with an outlook to their harmonization; a Perspective by Steven Lord, proposing quantitative inequity indices for multi-capital accounts based on the true costs and benefits of activities

in the food sector; a World View in which Ruth Richardson, executive director of the Global Alliance for the Future of Food, shares her ideas on the need for TCA to be mainstreamed into the finance and policy arenas; a Comment by Raj Patel about the economic and political risks involved in the dollarization of food systems' externalities and how community-based processes can enable a more accurate evaluation of priorities when it comes to food; and finally a Correspondence by Julie Kurtz and colleagues, which discusses the incorporation of dignified labour in TCA methods and lessons extracted from two worker-driven models in operation in the United States.

This focus issue is a starting point for Nature Food to facilitate the processes above and further engage in efforts to move the TCA agenda forward. Scientifically sound, evidence-based research has a crucial role to play with respect to the estimation of food's true cost, the construction of frameworks for the successful implementation of TCA, the identification of complementary policies, as well as the understanding of the effects of TCA on different contexts and individuals. Now and beyond the United Nation's Food Systems Summit, we invite expert narratives, primary research articles and case studies in this and related fields.

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## References

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