

# Opinion: Scaling true cost accounting can transform our food systems

The release of the “State of Food And Agriculture 2023” report shows the U.N. system has recognized true cost accounting as vital to food systems policy-making — a key step in fixing the harm these systems cause people and the planet.

By *Alexander Müller, Jenn Yates* // 07 November 2023



Farmers transplant rice in Pathum Thani, Thailand. Photo by: [IRRI](#) / [CC BY-NC-SA](#)

A new [United Nations](#) report, released this week, shows that global food and agriculture systems have hidden environmental, social, and health costs worth at least \$10 trillion — nearly 10% of global gross domestic product. If we want to tackle climate change and biodiversity loss and transform our food systems for good, we must move beyond traditional success metrics and use true cost accounting to measure the hidden costs of the global food system.

Despite forming the bedrock of our society — providing jobs for [4 in every 10 people](#) around the world and generating 12% of global GDP — the State of Food And

Agriculture 2023 report shows that our food system has huge hidden costs. The rapid growth in modern industrialized food and farming systems has caused significant social, economic, and environmental harm.

Our food system is now [the primary driver of global biodiversity loss](#), responsible for around [one-third of global greenhouse gas emissions](#), and closely linked to poor public health outcomes such as [diet-related heart disease and increased risk of cancer](#). Instead of sustaining and nourishing us, our food system is making us, and the planet, sick.

## **The global food system's hidden costs**

Until now, policymakers have largely overlooked these hidden costs when approaching food system challenges, relying instead on narrow metrics like productivity or calorie intake to make decisions on everything from farm subsidies to anti-hunger programs. By failing to fully incorporate potential costs and benefits in their decision-making, policymakers miss out on the opportunity to design interventions that solve multiple big challenges at once, maximizing benefits for people and nature. This must change.

There is a growing consensus that food systems transformation is essential for tackling climate change, protecting biodiversity, and providing healthy, affordable food to everyone — but we can't do this without valuing the full impacts of agriculture and food systems, including those beyond the view of current market mechanisms.

This week's report, released by the [Food and Agriculture Organization](#), shows that the largest hidden costs — more than 70% — stem from unhealthy dietary patterns, driven by food insecurity and overproduction and consumption of ultra-processed foods. One-fifth are environment-related, from greenhouse gas and nitrogen emissions, land-use change, and water use.

## **True cost accounting**

These estimates are based on true cost accounting — a powerful tool that reveals hidden benefits, as well as costs. True cost accounting is an approach that aims to uncover the positive and negative impacts of food systems on our economy, environment, and society. It enables decision-makers to identify the best levers to transform agrifood systems, and it is already being used successfully to transform food systems around the world.

In India, where policymakers supported the transition of 630,000 farmers to agro-ecological farming, a true cost accounting analysis found that not only did crop diversity and yields on these farms increase, but [net incomes increased by almost 50%](#), safer farming methods resulted in better health outcomes, and fewer days were lost to illness. Villages with a higher takeup of natural farming also had higher female workforce participation.

In Thailand, policymakers used true cost accounting to uncover the hidden costs and benefits of public investments in transitioning to organic rice farming. Among other benefits, they uncovered over [\\$4 billion in potential health savings](#), due to less burning of fields and reduced use of pesticides, resulting in better air quality and fewer respiratory illnesses.

Researchers have also used true cost accounting to respond to climate-related emergencies. In 2018, a spike in temperatures in the Indian Ocean triggered a widespread invasion of locusts into Ethiopia, Kenya, and surrounding countries. Countries tried to tackle the locusts by treating their crops with huge amounts of insecticide, which in Ethiopia had the effect of killing bees and reducing honey production by as much as 75%. A true cost accounting analysis found that not only was this honey worth \$300 million, but the bees were strengthening food security by pollinating crops, estimated to be worth over [15 times the value of all hive products together](#).

The success of these initiatives shows how government leaders can use true cost accounting to solve the country-specific challenges outlined in this week's FAO report.

## **True cost accounting in the UN system and beyond**

At the U.N. Climate Change Conference, or COP 28, set to take place in Dubai later this month, policymakers have recognized the scale of the food systems transformation challenge. This year marks the conference's first "food day," and FAO will release a high-profile report setting out how food systems must change to meet the Paris Agreement goal of limiting global warming to 1.5 degrees Celsius. We must build on this momentum.

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The launch of this week’s FAO report shows that the U.N. has recognized true cost accounting as vital to food systems policymaking. We need to go beyond conventional success metrics like crop yields, and understand the value of the whole system such as the health outcomes, or a food system’s impact on water use and biodiversity.

Policymakers from around the world should now follow the example of leaders in India, Thailand, and other countries, and use true cost accounting to build a road map to solutions that transform our food systems — and lives — for the better.

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*The views in this opinion piece do not necessarily reflect Devex's editorial views.*

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