T20 INDONESIA 2022 THINK

Policy Brief

THE HARMONIZATION OF TRUE VALUE ACCOUNTING APPROACHES TO MAKE THE ECONOMIC CASE FOR NATURE-POSITIVE FOOD SYSTEMS

Task Force 4

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Abstract

Food systems' impacts and dependencies on nature are substantial. They threaten nature's capacity to supply the ecosystem services on which economies, food security, public health, and poverty alleviation depend. Policy makers lack evidence on the effectiveness and true costs of concrete policy intervention options.

This brief calls on the G20 to support International Organizations in efforts to harmonize and then to apply True Value Accounting (TVA) in policy making in the public and private sectors (i.e., valuing the impacts and dependencies of food systems on natural, social, human, and produced capital for both the public and private sectors). True Value Accounting approaches can, as per policy brief proposal, inform policies to repurpose agricultural subsidies to farmland restoration, which can be brought to scale through the transformative use of digital technologies.

Challenges

The true value of food is not reflected in production and consumption decisions. Depending on the valuation concept used, today's food systems are estimated to generate between US$6-19 trillion per year in hidden costs (UN Food Systems Summit, 2021; Van Nieuwkoop, 2019). The failure to account for and value the environmental, social, and human dimensions of food systems leads to unsustainable decisions by governments, market players, and consumers.

A lack of a harmonized approach for True Value Accounting for food systems. A holistic consideration of the interactions between natural, human, social, and produced capital—including spatial linkages, synergies, and tradeoffs—is a defining characteristic of a food systems approach (De Koninck et al., 2021; TEEB, 2018). To date there has been a tendency to focus on a single "yield per hectare" metric, whereas metrics around True Value reflecting our economies' dependency of well-functioning ecosystems are often absent or ignored. No common approach exists to describe and measure the range of diverse and complex food and agriculture systems coherently and comparably across spatial scales (i.e., national, regional, farm), accounting for the negative and positive externalities of these systems.

While references to True Value Accounting approaches have been included in negotiated documents at the international level (see Annex 1), there is confusion in key user groups owing to the co-existence of poorly defined and/or overlapping concepts (e.g., Life Cycle Assessment, True Value Accounting, True Cost Accounting, capitals assessments, impact valuation, TEEBAgriFood Evaluation Framework assessments).

Lack of evidence on the effectiveness and true cost of policy intervention options. Data to support True Value approaches is becoming more readily available, for instance through applications of the System of Environmental-Economic Accounting – Ecosystem Accounting (SEEA EA) on natural capital. However, policy applications are only beginning to emerge. In terms of scaling, national and corporate policy makers do not have the digital and knowledge infrastructure in place to routinely integrate environmental and social data and predictive analytics into decision-making for a food systems transformation. This hinders governments from identifying the best policy intervention options throughout the food value chain in terms of natural, social, human and produced capital outcomes, to achieve a given target or commitment (e.g., SDGs, CBD, UNFCC, UNCCD). This lack of evidence and scaling is a barrier for policy change in areas where tradeoffs for the economy, environment and society are politically sensitive, for

example in the development of specific subsidy reform options (The World Bank and IFPRI, 2022).

Lack of standardized natural capital accounting and valuation principles for businesses. Because today's negative impacts on the environment are tomorrow's business risks, agri-businesses are waking up to the importance of measuring and managing their impacts and dependencies on nature. However, the traditional concepts of Environmental, Social and Governance (ESG) do not include impact valuation. Given the complex interactions in food systems and challenges in comparing and interpreting the results, there is an unmet need for standardized natural capital accounting and valuation principles for businesses.

Proposals for G20

Recent global reports, such as the State of Finance for Nature in the G20 (UNEP, 2022), the Dasgupta Review on the Economics of Biodiversity (Dasgupta, 2021) and the Scientific and Economic Foundations report for TEEB for Agriculture and Food (UNEP, 2018) have made the economic case for food systems decision-makers in the G20 to recognize, measure, manage, and reward responsible stewardship of natural capital.

The 2021 UN Food Systems Summit has also shown a broad consensus for the need to account for the true value of food, by the development of a "True Value of Food" coalition and the "True Value of Food" being mentioned in 17% of national food systems pathway documents (UN FSS, 2022). Food systems evaluations that account for the impacts and dependencies of food systems on nature can therefore both guide and drive G20 countries to implement food systems transformation pathways.
The policy proposals herein aim to ensure that True Value is included in decision-making on food systems and provides suggestions on the means to implementation under G20 leadership.

Public Sector: *enabling true value economics of food systems*

Proposal 1: The G20 should support International Organizations to develop a harmonized approach to valuing the positive and negative externalities of food systems.

The G20 should support International Organizations to provide a harmonized approach to describe the range of diverse and complex food and agriculture systems coherently and comparably across spatial scales (i.e., national, regional, farm), accounting for the negative and positive externalities of these systems. The United Nations Environment Programme and the UN Food and Agriculture Organisation would lead this effort, in collaboration with the Members of the UN Food Systems Summit True Value Coalition.

Efforts have been made to create a harmonized framework for the evaluation of food systems (i.e., a common approach to measure and value the positive and negative environmental, social, health, and economic costs and benefits to enable better decisions). In this context, nature is framed as an asset ("capital") and biodiversity as a characteristic of those assets that enables food systems to be more productive and resilient (Dasgupta, 2021; Capitals Coalition, 2020b). These approaches and any alternatives should be discussed, agreed upon, and mainstreamed across the G20.

Any common approach and framework to valuing nature in food systems should seek alignment with the United Nations Statistical Commission's adoption of SEEA EA as a complementary measurement framework to metrics such as GDP in National Income Accounts that do not

capture nature's contributions to people (UN, 2021). A standardized rigorous way of collecting natural capital statistics can strengthen food systems evaluations, making them more robust, holistic, and credible. The upcoming 2022 IPBES Values Assessment can provide a common understanding of the role of values of nature and valuation in decision-making in the public and private sectors and within indigenous peoples and local community contexts.

Proposal 2: The G20 should call for the adoption of True Value Accounting approaches to inform the design and implementation of a strategy to repurpose agricultural subsidies to restore degraded farmland.

The G20 should call for the adoption of True Value Accounting approaches for the design and implementation of an agricultural subsidy repurposing strategy, with a focus on restoring degraded and marginal farmlands. This includes an analysis of the future impact and tradeoffs of specific repurposing options, which may include for instance price increases in commodities which were previously subsidized.

The international community has called for governments to repurpose agricultural subsidies that can help transform food systems and achieve the Sustainable Development Goals (FAO, UNDP and UNEP, 2021; The World Bank and IFPRI, 2022). While aligning with the T20 policy recommendations for a G20 Framework for Repurposing Agricultural Policy Support (IFPRI et al., 2022), this proposal has a specific focus on restoring degraded farmland. The G20 has reaffirmed shared ambitions under the United Nations Decade on Ecosystem Restoration (2021-2030), also building on the G20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats (G20, 2021). Governments can maximize efficiency, save costs, and increase the performance of current fiscal incentives—earmarked at ca US$470 billion per year—by redirecting these towards farm management practices that work for people and planet, including investments in farmland restoration (FAO, UNDP and UNEP, 2021; Ding, 2021). Many of such practices, including agroforestry, can be defined as Nature-based Solutions (NbS)—a category of actions defined by the 5th UN Environment Assembly to protect, conserve, restore, sustainably use and manage ecosystems (UNEP, 2022b). One third of G20 domestic Nature-based Solution spending (i.e., US$33 billion) is currently directed at sustainable agriculture, forestry, fishing, and hunting (UNEP, 2022a). To achieve all future biodiversity, land degradation, and climate targets, G20 countries would need to scale up their total annual Nature-based Solution spending by 140 percent by 2050 (UNEP, 2022a).

True Value Accounting approaches can complement conventional, narrow financial analyses that focus solely on marketed commodities. Data on wider societal returns are increasingly available; every US$1 invested in restoration can create up to $30 in economic benefits (Verdone, 2017). However, True Value Accounting approaches would go a step further and: i) assess the scale and nature of existing agricultural support policies, and its current impacts of the subsidy

on natural, social, human, and produced stocks and flows; and ii) assess the expected outcomes of subsidy reform scenarios, including transparency on the synergies and tradeoffs of concrete policy options in terms of natural, social, and human capital changes.
It is crucial to identify the barriers for change rooted in the political economy of subsidy reform, including social impacts of dismantling subsidies (The World Bank and IFPRI, 2022; TEEB, 2018). For example, subsidy reform can raise legitimate concerns regarding affordability and the availability of food, a subject that is being considered by the Global Crisis Response Group. True Value Accounting can provide the data needed to measure, value, and compare tradeoffs that may arise between conservation and food security goals. Mitigating social impacts, including affordability issues, will require a careful and cross-sectoral design of policy reforms (TEEB, 2018). Policy evidence is only a means to an end: the uptake of such evidence-base would depend on effective coordination across sectors (i.e., agriculture, finance, environment, health, and spatial management/planning) and between actors (i.e., government, civil society, private sector, and academia).

Private Sector: Enabling business impact valuation

Proposal 3: The G20 should provide a mandate to international partners to develop standardized natural capital accounting and valuation principles for businesses.

True Value Accounting approaches can change the rules of the game in which agribusinesses function and provide a secure level playing field for all, but this requires the development of standardized natural capital accounting and valuation principles for businesses.

The G20 should therefore provide a mandate to international partners for coordinated action, beyond the traditional concepts of Environmental, Social, and Governance (ESG). This would increase comparability and transparency, and allow for better decision making. Different methods and tools exist (Capitals Coalition, 2020) and efforts are underway for its standardization for the inclusion of natural capital valuation data in financial accounts or in external reporting (e.g., Align project). These efforts can be endorsed by the G20 for establishing a prescriptive industry standard that increases comparability and better decision-making.

Since 2018, the number of corporations committed to climate related financial disclosures has grown five-fold (TCFD, 2021). The G7 backed mandatory disclosure of climate-related risks which are now being included in domestic regulatory frameworks (G7, 2021). However, advances in norms for risk disclosure for nature and biodiversity are more recent and modest. The Taskforce on Nature-related Financial Disclosures (TNFD), endorsed by the G7 Finance Ministers, is a first step to fill this gap. The G20 Rome Declaration welcomed the development of a baseline global reporting standard to enable comparability and transparency in disclosures (G20, 2021).

This proposal goes beyond measurement of risks to also include valuation such as the value provided to businesses by natural, social, and human capital (i.e., society at large) in addition to financial capital (i.e., shareholders). Changes in the values provided to businesses by those four capitals (i.e., natural, human, social, financial) can be expressed in qualitative, quantitative, or monetary terms. A new emphasis on an integrated capitals approach holds the promise of moving from silos to systems; businesses would understand the integrated outcomes of their decisions as well as their dependence on non-financial capitals (Capitals Coalition, 2021).

Enabling programme: the transformative use of predictive analytics

Proposal 4: G20 should promote cooperation between partners for the transformative use of predictive analytics for a holistic approach to food systems decision-making.

Digital transformation is one of the three priority issues of the G20 Indonesia Presidency (G20, 2022). While the technological infrastructure for predictive analytics is increasingly available (e.g., ARIES, InVEST), the knowledge infrastructure needs to follow as well.

This requires G20 country support in prioritizing the deployment of capacities for predictive analytics to enable strategic foresight and anticipatory decision-making that values instead of discounts the future. Predictive analytics and scenario modelling allow decision makers to compare future policy intervention options in the food system, illustrating the full impacts of policy decisions on natural, social, human, and produced capital. It can hold-up the mirror to the effectiveness of plausible food systems policy pathways to achieve global targets or commitments (e.g., SDGs, CBD, UNFCC, and UNCCD), and would allow for real-time anticipatory decision-making given recent advances of models using machine learning algorithms and earth observation data.

Disclaimer

References

Capitals Coalition, *Improving nature's visibility in financial accounting*, London, Capitals Coalition, 2020, https://capitalscoalition.org/publication/improving-natures-visibility-in-financial-accounting/

Capitals Coalition, *Our Values Report 2020*, London, Capitals Coalition, 2021, https://capitalscoalition.org/wp-content/uploads/2021/08/Our-Value-Report_2020-21-.pdf

Dasgupta, *The Economics of Biodiversity: The Dasgupta Review*, London, HM Treasury, 2021

David Laborde, Marie Parent, Valeria Pineiro, *T20 Policy brief The True Cost of Food*, 2020, https://www.t20saudiarabia.org.sa/en/briefs/Pages/Policy-Brief.aspx?pb=TF10_PB17

Deconinck et al., "Making better policies for food systems will require reducing evidence gaps", in Global Food Security, Vol 33, (2022), https://doi.org/10.1016/j.gfs.2022.100621

Ding H., A. Markandya, R. Barbieri, M. Calmon, M. Cervera, M. Duraisami, R. Singh, J. Warman, and W. Anderson, *Repurposing Agricultural Subsidies to Restore Degraded Farmland and Grow Rural Prosperity*, Washington DC, World Resources Institute, 2021.

FAO, UNDP and UNEP, *A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems*, Rome, FAO, 2021, https://doi.org/10.4060/cb6562en

Food and Agriculture Organization of the United Nations, *FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors*, Rome, Food and Agriculture Organization of the United Nations, 2020, https://doi:10.4060/ca7722en

G7, *Communiqué Finance Minister's meeting*, London, HM Treasury, June 2021, https://www.gov.uk/government/publications/g7-finance-ministers-meeting-june-2021-communique/g7-finance-ministers-and-central-bank-governors-communique

G20, *Indonesia, G20 priorities*, retrieved 10 April 2022, https://g20.org/g20-presidency-of-indonesia/#priorities

G20, Rome Leaders' Declaration, 2021, https://www.consilium.europa.eu/media/52730/g20-leaders-declaration-final.pdf

Gemmill-Herren, B., Baker, L.E., Daniels, P.A., eds., *True Cost Accounting for Food Balancing the Scale*, Routledge, 2021

High Level Panel of Experts on Food Security and Nutrition, *Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition*, Rome, CFS Committee on World Food Security HLPE, 2019, www.fao.org/3/ca5602en/ca5602en.pdf

IFPRI et al., *A G20 Framework for Repurposing Agricultural Policy Support to meet Global Climate and Food Security Goals*, T20, 2022

Sukhdev, P., May, P. & Müller, A. Fix food metrics. *Nature* **540,** 33–34 (2016). https://doi.org/10.1038/540033a

TCFD, *Task Force on Climate-related Financial Disclosures 2021 Status Report*, TCFD, 2021 https://assets.bbhub.io/company/sites/60/2022/03/GPP_TCFD_Status_Report_2021_Book_v17.pdf

The Economics of Ecosystems and Biodiversity (TEEB), *TEEB for Agriculture & Food: Scientific and Economic Foundations*, Geneva, UNEP, 2018, http://teebweb.org/wp-content/uploads/2018/11/Foundations_Report_Final_October.pdf

The World Bank and IFPRI, *Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet, World Bank, Washington, DC., 2022, https://openknowledge.worldbank.org/handle/10986/36875*

TNFD, *Discussion paper: A Landscape Assessment of Nature-related Data and Analytics Availability*, Task Force on Nature-related Financial Disclosures, 2022, https://tnfd.global/publication/data-discussion-paper/

United Nations Environment Programme, Capitals Coalition, Global Alliance for the Future of Food, *Official Feedback Form Independent Dialogue 'True Cost Accounting for Food Systems: redefining value to transform decision making*, 2021, https://summitdialogues.org/dialogue/14776/official-feedback-14776-en.pdf?t=1624382207

United Nations Environment Programme, *State of Finance for Nature in the G20*, UNEP, Nairobi, 2022a

United Nations Environment Programme, *UNEA Resolution on Nature-based Solutions for Supporting Sustainable Development*, 2022b, https://www.unep.org/news-and-stories/press-release/un-environment-assembly-concludes-14-resolutions-curb-pollution

United Nations et al, *System of Environmental-Economic Accounting— Ecosystem Accounting (SEEA EA)*, New York, UN Department of Economic and Social Affairs, 2021, https://seea.un.org/ecosystem-accounting

United Nations Food Systems Summit, *Member State Dialogues Synthesis report 4*, 2022, https://summitdialogues.org/wp-content/uploads/2022/03/Member-State-Dialogue-Synthesis-Report-4-March-2022-EN.pdf

United Nations Food Systems Summit, *The True Cost and True Price of Food*, Scientific Group of the UN Food Systems Summit, 2021

Van Nieuwkoop, *Do the costs of the global food system outweigh its monetary value?* World Bank Blogs, 2019, https://blogs.worldbank.org/voices/docosts-global-food-system-outweigh-its-monetary-value

Verdone, M.A., and A. Seidl, "Time, Space, Place and the Bonn Challenge Global Forest Restoration Target", Restoration Ecology 25: 903–11, 2017; https://doi:10.1111/rec.12512

Appendix

1. **True Value Accounting as part of internationally negotiated documents**

True Value Accounting approaches have been included in a number of negotiated documents at the international level (Gemmill-Herren, 2021).

First, the 2021 UN Food Systems Summit has shown a broad consensus for the need to account for the true value of food, through the development of a "True Value of Food" coalition and the "True Value of Food" being mentioned in 17% of national food systems pathway documents including most of the G20 countries (UN FSS, 2021).

Second, the Committee on World Food Security, in its 2019 High Level Panel of Experts report, urged that "*States and IGOs, in collaboration with academic institutions, civil society and the private sector, should: (inter alia) recognize the importance of true cost accounting for negative as well as positive externalities in food systems and take steps to effectively implement it where appropriate*" (High Level Panel of Experts on Food Security and Nutrition, 2019).

Third, the member nations of the FAO adopted in 2019 a strategy on biodiversity mainstreaming across agricultural sectors in 2019 (FAO, 2020) calling to "*provide advice on options to internalize the positive and negative economic, environmental and social impacts (externalities) of different agriculture and food systems*".

In terms of global goals, the UN Sustainable Development Goal 15.9 set the following target: "by 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts." It is also expected that the Post 2020 Biodiversity Framework will include a milestone linked to the valuation of nature in national accounts and public and private sector financial disclosures.