



# **UNTAPPED OPPORTUNITIES FOR CLIMATE ACTION**

**A practical guide to assessing food systems  
in Nationally Determined Contributions (NDCs)**



#### DISCLAIMER

This document was commissioned from Climate Focus and Solidaridad by the Global Alliance for the Future of Food, for use by Global Alliance members and partners to stimulate discussion about critical issues related to food systems transformation and climate change, and to help guide collective action. The Global Alliance has chosen to make it available to the broader community to contribute to the discussion about sustainable food systems reform. It constitutes the work of independent authors; any views expressed in this document do not necessarily represent the views of the Global Alliance and any of its members.

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## PREFACE

Integrating food systems transformation into the Nationally Determined Contributions (NDCs) – the national climate actions at the heart of the Paris Agreement, is critical to delivering on interconnected ecological, biodiversity, health, economic, social, and cultural goals. Taking a food systems approach builds climate resilience and results in a diversity of context-specific solutions for food production, distribution, consumption, and waste. Yet, food systems are rarely prioritized in climate policy.

This guide is part of a suite of publications that are designed to center food systems transformation in future climate policy:

- 1. Untapped Opportunities for Climate Action: An Assessment of Food Systems in Nationally Determined Contributions:** A summary report providing a synthesis of the 14 country assessments with recommendations and priority actions for policymakers and climate policy advisors
- 2. A Practical Guide to Assessing Food Systems in Nationally Determined Contributions (NDCs):** A guide with a framework designed to enable users to take a food systems approach to developing future NDCs and implementing climate policies.
- 3. A set of 14 country assessments** examining the latest NDCs of 14 countries from around the world, outlining areas of improvement and opportunity.

Users are also encouraged to read **Confronting the Climate Crisis with Food Systems Transformation: Stories of Action from 14 Countries**, which provides a catalogue of global case studies that complement the suite of materials for policymakers, advisors, and advocates of climate action.

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## INTRODUCTION

Adopting a food systems approach can contribute to more streamlined and coherent policy-making. Food systems “encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded.”<sup>1</sup> A food systems approach allows for a more informed discussion and decision-making process that can address food systems comprehensively, minimize trade-offs, and maximize synergies toward climate, health, and other Sustainable Development Goals (SDGs). This requires multilevel, hybrid, and cross-sectoral governance, as well as policies developed and adopted in an integrated, iterative, coherent, and adaptive manner.

In addition, taking a food systems approach in policy-making can drive a systems-based transformation of the food sector. In turn, a food systems transformation that leads to more sustainable food production and distribution, as well as healthier diets and reduced food waste, has the potential to drastically reduce greenhouse gas (GHG) emissions, as well as contribute to several health, economic, and social co-benefits.

The Assessment Framework is based on the Global Alliance for the Future of Food’s [Seven Principles](#) and [Seven Calls to Action](#) for Food Systems Transformation. It provides a set of evaluation criteria to assess the extent to which a food systems perspective is adopted in developing and implementing Nationally Determined Contributions (NDCs). In particular, it serves as a guide for policymakers, organizations, experts working in the food–climate nexus, and other interested stakeholders to identify: 1) what elements of food systems are integrated in existing NDCs and 2) opportunities for more comprehensively reflecting food systems when updating or submitting subsequent NDCs. Furthermore, the Framework is designed as a living document to be continuously refined to reflect the most recent research on food systems thinking, as well as the technical input from a wide range of food systems actors.

For the purpose of this report, we are calling the resulting application of the [Assessment Framework](#) to specific NDCs “Country Assessments.” Each Country Assessment serves to illustrate how the Assessment Framework can be applied to NDCs, as well as highlight the key findings and areas for improvement identified via its application. For this exercise, the NDC of 14 countries were reviewed. Moreover, 105 interviews were conducted with a broad range of national and international stakeholders to confirm findings as well as to identify opportunities for better integration of food systems thinking into NDCs.

In applying the Assessment Framework, a positive example of food systems transformation was identified and summarized for each country. The Case Studies showcase examples of collaborative solutions developed by community groups, innovative policymakers, progressive private sector players, and social entrepreneurs. Shining a light on these positive examples serves as an entryway for identifying best practices and lessons learned grounded in the Global Alliance’s [Seven Principles](#). They also aim to provide inspiring evidence that a transformation of food systems can result in healthier and more sustainable, inclusive, and resilient food systems. A full analysis of all the Case Studies can be found [here](#).

## DEVELOPMENT OF THE ASSESSMENT FRAMEWORK

The Assessment Framework builds on various assessments, most notably the TEEBAgriFood Framework,<sup>2</sup> but differentiates itself by focusing on the NDCs, recognizing their role as influential political vehicles for climate action. Assessing NDCs also provides an opportunity to contrast the commitment and ambition of different countries at a national level as well as identify common opportunities for raising ambition on food-related targets and measures.

The Assessment Framework was developed through a participatory and consultative process. As part of the project, the Global Alliance convened a series of small closed-door dialogues throughout 2021 with a Project Advisory Committee (PAC) comprised of external experts representing a diversity of perspectives. The PAC provided inputs and feedback to refine the Assessment Framework during its development and application to selected countries. They also supported outreach and helped identify further opportunities for collaboration and engagement targeting the climate policy and food systems communities.

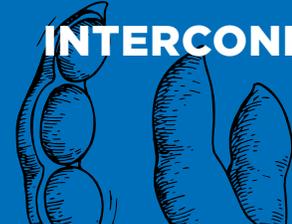
The [Seven Principles](#) and [Seven Calls to Action](#) for Food Systems Transformation underpin the scope and criteria of the Assessment Framework (see Tables 1 and 2). The [Seven Calls to Action](#) address the critical underlying challenges that hold back food systems transformation. In addition, the [Seven Principles](#) are intended to inform and guide decisions and actions to ensure systemic interventions and sustainable solutions for the benefit of people and the planet.

**TABLE 1: GLOBAL ALLIANCE'S SEVEN CALLS TO ACTION**

<b>ENSURE INCLUSIVE, PARTICIPATORY GOVERNANCE</b>	Ensure participatory, integrated, rights-based approaches to governance at all levels in order to address the structural inequities in food systems. Build processes and policy platforms on principles of transparency, inclusive participation, and shared power. This will ensure policies are driven not only by evidence but also ethics and public interest.
<b>INCREASE RESEARCH FOR THE PUBLIC GOOD</b>	Increase research in systems-based approaches, with an emphasis on indivisible ecological, health, social, and economic goals. Recognize and learn from diverse knowledge systems and ways of knowing, including Indigenous Peoples and farmers who have long recognized the interconnectedness between our food systems, health, and the planet. This holistic, transdisciplinary, and inclusive understanding of food systems impact is essential for the public good.

GLOBAL ALLIANCE'S SEVEN CALLS TO ACTION	
<p><b>ACCOUNT FOR EXTERNALITIES</b></p>	<p>Recognize the environmental, social, and health impacts of food systems policies and practices, and use this understanding to inform decision-making. Mainstream and strengthen True Cost Accounting and other impact assessment tools and methodologies to mitigate risk and increase accountability. These approaches will provide transparent, consistent guidance for governments, investors, farmers, corporations, and other stakeholders.</p>
<p><b>DIRECT PUBLIC FINANCE &amp; POLICY</b></p>	<p>Direct public sector finance and fiscal policy toward regenerative and ecologically beneficial forms of farming, healthy food, and resilient livelihoods and communities. Break from harmful subsidy and incentive programs, initiating well-designed and durable reforms through collaborations between governments, farmers, banks and corporations, researchers, and other stakeholders.</p>
<p><b>UNLOCK PRIVATE &amp; MULTILATERAL INVESTMENT</b></p>	<p>Unlock investment opportunities in sustainable food systems and align private, philanthropic, and multilateral funders with national actors for greater impact. Redirect financial flows of philanthropy, investors, banks, and donor agencies away from harmful practices and toward initiatives that are incentivizing, accelerating, and amplifying food systems transformations.</p>
<p><b>ENABLE AGROECOLOGY &amp; REGENERATIVE APPROACHES</b></p>	<p>Create enabling environments for agroecology and regenerative approaches to flourish. Ensure a systems approach centering on a strong role for local institutions, communities, smallholder farmers, Indigenous Peoples, and women; the protection and expansion of rights; policy coherence and coordinated governance; research mobilization; plus investment and funding for infrastructure (such as roads, schools, markets).</p>
<p><b>PROMOTE NUTRITIOUS, SUSTAINABLE, WHOLE-FOOD DIETS</b></p>	<p>Promote nutritious, whole-food diets underpinned by sustainable, diversified food production adapted to local ecosystems and sociocultural contexts. Create positive food environments that provide equitable access, dietary guidance, and controls on ultra-processed foods. These approaches will support dietary shifts toward whole foods and sustainable, minimally processed plant-based, animal, and aquatic proteins, particularly where meat and saturated-fat consumption is high or growing at levels that risk human and/or planetary health.</p>

**TABLE 2: GLOBAL ALLIANCE’S SEVEN PRINCIPLES FOR THE FUTURE OF FOOD**

<p><b>RENEWABLE</b></p> 	<p>Address the integrity of natural and social resources that are the foundation of a healthy planet and future generations in the face of changing global and local demands.</p>
<p><b>RESILIENT</b></p> 	<p>Support regenerative, durable, and economically adaptive systems in the face of a changing planet.</p>
<p><b>EQUITABLE</b></p> 	<p>Promote sustainable livelihoods and access to nutritious and just food systems for all.</p>
<p><b>DIVERSE</b></p> 	<p>Value our rich and diverse agricultural, ecological, and cultural heritage.</p>
<p><b>HEALTHY</b></p> 	<p>Advance the health and well-being of people, animals, the environment, and the societies that depend on all three.</p>
<p><b>INCLUSIVE</b></p> 	<p>Ensure meaningful and authentic engagement of diverse people and organizations in transparent deliberations, shared power, democratic decisions, and collective actions affecting food systems for the public good.</p>
<p><b>INTERCONNECTED</b></p> 	<p>Understand the implications of the interdependence of food, people, and the planet in a transition to more sustainable food systems.</p>

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## STRUCTURE OF THE ASSESSMENT FRAMEWORK

**The Assessment Framework considers three key elements of NDCs:** 1) the process of planning, developing, and formulating the NDC; 2) the content of the NDC, including its targets and measures; and 3) how the NDC is to be implemented and monitored.

### NDC DEVELOPMENT PROCESS

**The first section of the Assessment Framework contains criteria that relate to the development process of the NDC.** As with any national policy, the preparation process of an NDC involves agenda setting and policy coordination at different government levels to set goals and targets and formulate measures to achieve those goals. Assessing the potential outcomes of various policy options, as well as the financial and human resources they require, also calls for comprehensive data and research as well as institutional capacity and knowledge.

The development process is included in many of the updated NDCs. Policymakers are encouraged to include information on the planning process that the country undertook in preparing its NDC, including information on the domestic institutional arrangements and contextual issues that informed the formulation of the NDC.

### CONTENT OF THE NDC

**The second section of the Assessment Framework evaluates the targets and measures of the NDC.** In their NDCs, countries provide information on mitigation targets and measures that they commit to achieve in a given time frame. The mitigation targets range from economy-wide absolute emission reduction targets to strategies, plans, and actions for low-emission development. NDCs also outline domestic mitigation measures as instruments to achieve mitigation targets in specific priority areas, such as energy supply, transport, buildings, industry, agriculture, land use,\* and waste. In addition to mitigation, countries may also include information on adaptation needs and priorities, vulnerabilities, and adaptation measures, including sectoral actions and contingency measures.

### IMPLEMENTATION OF THE NDC

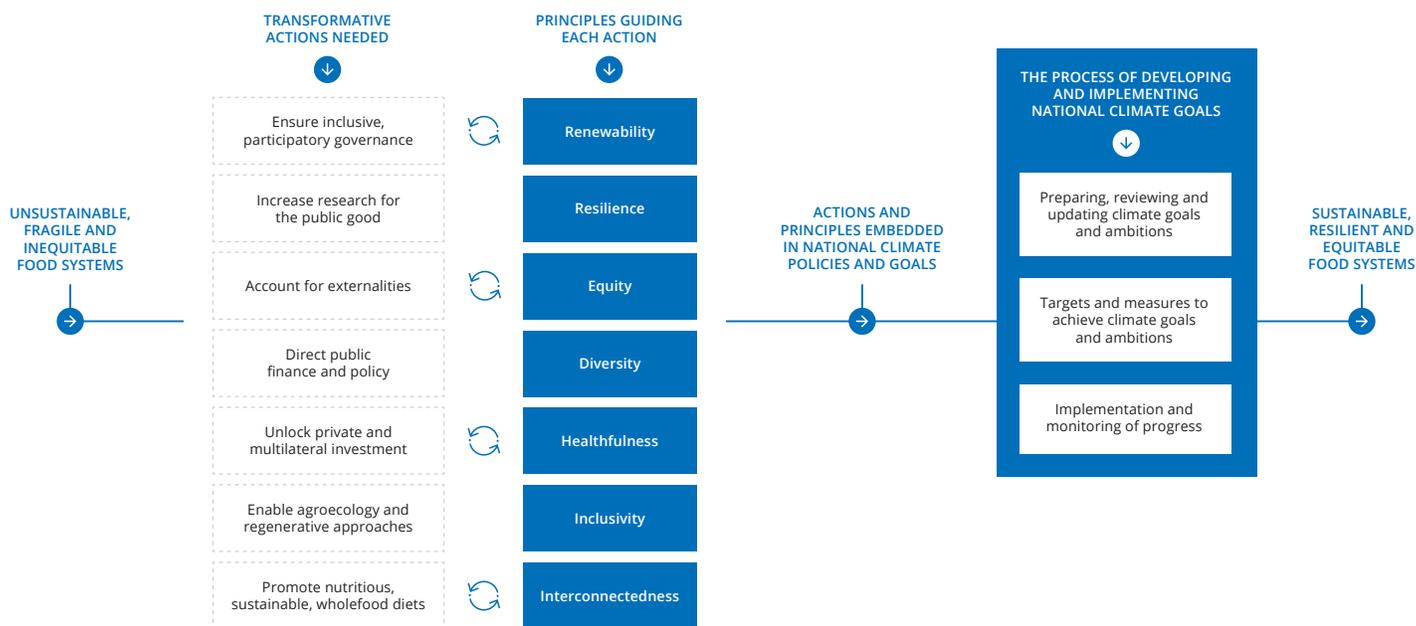
**The third section of the Assessment Framework addresses the implementation and monitoring plans of NDCs.** Countries also include information on how they plan to implement their NDC, including finance, technology, and capacity-building needs. Ideally, countries should also indicate their approach for monitoring and evaluating the implementation of their mitigation and adaptation targets and measures.

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\*This includes emissions from terrestrial sinks through Land Use, Land-Use Change, and Forestry (LULUCF).

The Assessment Framework provides criteria to assess each of these NDC elements. Moreover, each NDC element is evaluated based on a set of indicators that reflect one or more of the Global Alliance’s Seven Calls to Action. Together, these criteria assess whether food systems thinking is reflected in the NDC. They also assess how the NDC as a national policy and vision is guided by the Seven Calls to Action and Seven Principles to transform food systems and to achieve multiple climate, environmental, health, and socio-economic outcomes (see Figure 1).

**Figure 1**



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## SELECTION AND PREPARATION OF NDC COUNTRY ASSESSMENTS

When selecting countries to road test the Assessment Framework, the following criteria were considered:

- A combination of countries that ranked as good, fair, and weak performers under the Sustainable Food Index developed by The Economist Intelligence Unit;
- Countries with high or fair climate change mitigation potential and feasibility of mitigation action;
- Countries with considerable adaptation capacity needs and food security concerns;
- Geographical and economic balance, capturing different regions as well as income groups (but with a greater focus on emerging economies);
- Countries representing different climate negotiation blocks and their level of influence in these blocks and/or their geographical regions; and
- Status of NDC review and update.

This criteria resulted in a long-list of 20 countries. From this long-list, 14 countries were chosen, taking into consideration where the Global Alliance (GA) and consultants held stronger ties and connections to local stakeholders. These countries are Bangladesh, Canada, China, Colombia, Egypt, the European Union (with a focus on national climate policies from France, Germany, and Spain), Kenya, Senegal, South Africa, the United Kingdom, the United States, and Vanuatu.

### COUNTRY ASSESSMENT METHOD

The Country Assessments primarily focus on the NDC, but also consider broader key policies to develop a perspective for realizing sustainable food systems. The first step in assessing each country is a careful analysis of its NDC as well as any referred or supplementary document that provides additional information on development, content, and implementation. The initial focus is on the key elements of the NDC: its scope, targets, reference points, actions and measures, domestic planning procedures, and national context.

These NDC elements are then evaluated in light of their consideration of food systems and food systems approaches, and in particular the GA's Seven Calls to Action and Seven Principles. This allows for determining connections and entry points for addressing and enhancing the consideration of sustainable food systems in an integrated manner within the NDC. Where possible, our evaluation also considers how key topics and related policies associated with food systems — such as nature-based solutions, forests, agriculture, agroecology, fisheries, aquaculture, water, food availability and access, nutritional education, healthy diets, smallholder farming, gender equality, and supply chains — are addressed in key national (climate-related) policies.

Interviews were conducted to complement and contextualize the findings from the NDC assessment and aim to include different perspectives from both governmental and non-governmental stakeholders. Parallel to the NDC assessment, we reached out to key policymakers, advocates, and sectoral leaders in the selected countries to further add to and contextualize the findings for each country. The aim here is to interview both (academic) experts and policymakers involved in the NDC development process as well as other governmental officials in key ministries (for example, ministries of food and agriculture or health), civil society advocates, and sectoral leaders or experts to develop a comprehensive view of the challenges, ambitions, and needs in each selected country for realizing sustainable food systems.

In selecting and engaging with interview partners, we work closely with the Project Advisory Committee (PAC) to ensure adequate representation of different viewpoints. Interviewees also suggested other potential interview candidates for selected countries to enhance and diversify perspectives. Finally, the interview questions were also developed in close coordination with the PAC and formulated based on knowledge gaps or missing information identified during desk-review. For each interview, questions were adjusted according to the expertise and background of the interviewee or their involvement in the NDC development process.

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## ASSESSMENT FRAMEWORK

The [Assessment Framework](#) enables the determination of whether key food systems criteria have been included in the formulation, targets and measures, and implementation plans of an NDC. Each Call to Action is matched to an element of the NDC, based on when a specific Call to Action is likely to be most relevant. The columns of the Assessment Framework are structured as follows:

- **Food systems criteria** details the criteria to be considered under each Call to Action.
- **Inclusion in NDC** details whether the NDC assessed includes the specific criterion. It describes whether the food systems criterion is:
  - fully met in the NDC (“Yes”);
  - partially met (“Partially”);
  - not addressed at all (“No”); or
  - whether there is insufficient information to assess the criterion (“Insufficient information”).
- **Assessment guidance** provides a non-exhaustive reference for how each criterion may be met.
- **Positive aspects** provides an opportunity for detailing how a specific criterion has been met or partially met within an NDC. It should be left blank if the NDC did not meet the criterion or if insufficient information is available.
- **Areas for improvement** provides an opportunity for detailing on a country’s activities that would fit well within a specific criterion but that are not (yet) included in the NDC and could be included in the next round of NDC revision.

When assessing each category, assessors are expected to consider the information formally presented in the NDC. National policies and programs related to food systems that have not been formally included in the NDC document may be highlighted in the “Areas for improvement” column. A detailed assessment of such policies and programs is not included in this first assessment but may be considered for future iterations of the Framework.

Access and download the ready-to-use Detailed Assessment Framework [here](#).

## ENDNOTES

- 1 Food and Agriculture Organization of the United Nations, “Sustainable Food Systems: Concept and Framework” (2018). Accessed at <https://www.fao.org/3/ca2079en/CA2079EN.pdf>.
- 2 TEEB, “The Economics of Ecosystems & Biodiversity: The Evaluation Framework” (n.d.). Retrieved from: <http://teebweb.org/our-work/agrifood/understanding-teebagrifood/evaluation-framework/>.

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# ABOUT THE GLOBAL ALLIANCE FOR THE FUTURE OF FOOD



The Global Alliance is a strategic alliance of philanthropic foundations working together and with others to transform global food systems now and for future generations. We believe in the urgency of transforming global food systems and in the power of partnership to effect positive change. Food systems transformation requires new and better solutions at all scales through a systems-level approach and deep collaboration among philanthropy, researchers, grassroots movements, the private sector, farmers and food systems workers, Indigenous Peoples, government, and policymakers.

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