



Food System Summit - Mapping Pathways to Themes and Means of Implementation

Context

The Food System Summit fostered dialogues among stakeholders that led to the identification of strengths and vulnerabilities in the national food systems. Consequently, Initiatives, Alliances, and Coalitions emerged to promote and accelerate collective actions and support countries in response to their interests and priorities.

The route to achieving each nation's food systems vision was then described in the so-called National Pathway documents, to be considered as "living documents" where countries set their priorities and actions to pursue the sustainability of their food systems after the Summit.

Aim

This exercise intends to extract relevant information from the Pathway documents in an automatic manner. Specifically, it aims at providing insights based on the three following questions:

1. What themes do the Pathways focus on?
2. What are the means of implementation mentioned in the Pathways for each related theme?
3. What are the elements that characterize the Pathway documents?

Site Map and Methodology

Data and data management

The data used for this analysis consists of the set of available National Pathways that are subject to further updates (see Appendix A), 44 Themes including 13 Means of Implementation (see Appendix B) have been identified so far as common topics of interest found in the National Pathways.

Given that the National Pathways are unstructured documents that differ in terms of length, structure, format, and style, we first proceeded to harmonize the data. This implied translating all documents to English and extracting each country's action plan to an excel file, separating priorities from measures and with one measure per row. Priorities were extracted from the paragraph or sub-section headers, while Measures corresponded to the list of game-changing actions listed in the paragraphs. This process was manual and did not depend on any pre-set list of priorities or measures.



Identifying relevant Themes in National Pathways

This project's first objective was to identify the Themes the National Pathways focus on.

To answer this question, we identified a list of Themes that emerged as recurrent areas of interest in the National Pathways. We further defined a list of keywords for each Theme a priori and used them on both the priorities and measures to identify which areas of interest were mentioned in the action plans of the National Pathways. This is an ongoing iterative process, and keywords are being added as we fine-tune and validate our search.

The results were then ingested into a dashboard under the “General Overview” tab. This page shows the number of Themes relevant to each National Pathway, as well as the number of National Pathways that relate to each Theme. In addition, the page contains a world map with filters that allow the user to focus on any given continent, region, sub-region, country, Action Area¹, and Theme. The color shade on the map indicates the number of areas of interests mentioned in each National Pathway (the darker, the more areas of interest mentioned). Countries that do not have a National Pathway are colored in white.

Identifying relevant Measures in National Pathways

To better understand how the National Pathways would proceed in implementing their action plans, we grouped measures or interventions into 13 Means of Implementation (see Appendix B, under Action Area 5) derived from the data.

This step was implemented using the same keyword-based approach as the one implemented for the Themes. However, instead of searching for keywords on both the priorities and the measures, this exercise was performed solely on the measures.

The results were then included in the “Pathway Overview” page of the dashboard. This page is a focused view that allows the user to access a greater level of details of the results, one country at a time. The page shows the areas of interest (i.e., Themes) mentioned in a National Pathway, the frequency of the themes that appear in the document, and a table containing the corresponding priorities and measures that were extracted.

Deriving the degree of usefulness of National Pathways

The last objective consisted in gauging the degree of usefulness of the available National Pathways. We first defined a list of criteria (see Appendix C) based on a review of the documents. We then reviewed the National Pathways and manually assigned a score of 1 if the document met the criterion and 0 otherwise. The usefulness score according to each criterion was then calculated as the average score across all National Pathways.

The aggregated results per continent were then added to the dashboard under the “Key Elements” page.

¹ The Food Summit System Action Areas emerged as overarching areas of interest from the coalitions. An overview of the Action Areas can be found at <https://foodsystems.community/coalitions/>.



Limitations

This analysis does not reflect the commitments of the countries towards any given Theme. Instead, this exercise serves the purpose of merely indicating what topics were mentioned in the National Pathways.

Furthermore, this analysis does not quantify the degree to which a topic (i.e., Theme) is relevant in a National Pathway and therefore cross-country comparisons must be taken with caution.

During data management, the extraction of priorities and measures was a manual process and was performed on translated documents. This could have led to some loss of interpretation, especially in defining keywords.

The keywords were defined by our team and need to go through expert review and validation.

Finally, given the nature of the exercise, which uses automated methods of analysis, the results do not aim to replace or provide the same level of granularity as a manual review of each National Pathways.

Future Developments

National Pathways will be subject to change due to the pursuance of the Dialogues and to how Governments will include their findings. In accordance, the approach developed by the FAO Data Lab² will have to be constantly re-aligned with the flow of new documents, for a prompt inclusion of the modifications made.

Additional Notes

A paper based on the data displayed in this dashboard was presented at the 2022 Annual Meeting of Agricultural and Applied Economics Association and can be found at the following [link](#).

² <https://www.fao.org/datalab>

Last Updates

Version Number	Changes Applied
Version 1.0.0	10/06/2022: First publication of the dashboard
Version 1.0.1	28/06/2022: Updated School Meals keywords; Added pathway of Ecuador
Version 1.0.2	25/07/2022: Updated pathways of Chile and Colombia
Version 1.0.3	07/09/2022: Updated pathway of Algeria; Added link to conference paper presented by Mr. Torero
Version 1.0.4	07/10/2022: Updated pathway of Mexico and Yemen
Version 1.0.5	05/11/2022: Updated pathway of Yemen
Version 1.0.6	15/03/2023: Updated pathway of Ecuador
Version 1.0.7	08/05/2023: Updated pathways of Guyana and Mexico; Added new pathway of Belgium
Version 1.0.8	23/05/2023: Added new pathway of Madagascar
Version 1.0.9	22/06/2023: Added new pathways of Belize and of the European Union
Version 1.1.0	03/07/2023: Added new pathway of Jamaica; Updated pathway of Uruguay
Version 1.1.1	17/07/2023: Added new pathway of Viet Nam
Version 1.1.2	23/07/2023: Added new pathways of France, Togo, and Zambia; Updated pathway of Brazil
Version 1.1.3	04/09/2023: Added new pathway of Canada; Updated pathways of Belize and Uruguay



APPENDIX A: List of National Pathways

As of 04/09/2023, 127 National Pathways were submitted and available online on the [Member State Dialogue Convenors and Pathways](#) Website.

APPENDIX B: List of Themes

The list of Themes and Means of Implementation defined as of 04/09/2023 is given below. This list is currently undergoing expert validation and therefore might be subject to further changes.

Action Area 1: Nourish All People	Achieving Zero Hunger
	Healthy Diets from Sustainable Food Systems for Children & All
	School Meals: Nutrition and Health and Education for Every Child
	Different Forms of Malnutrition
	Food Loss and Waste
	Social Protection for Food Systems Transformation
	The True Value of Food
	Family Farming
	Sustainable Consumption
	Food quality and safety
Action Area 2: Boost Nature-Based Solutions of Production	Agroecology
	Aquatic / Blue Foods
	Sustainable Livestock
	Restoring grasslands and shrublands and savannahs
	Nature-Positive Innovation
	Soil Health
	Halting Deforestation and Conversion from Agricultural Commodities
	Land
	Water
	Agrobiodiversity
	Sustainable Productivity Growth
	Sustainable Consumption
Action Area 3: Advance Equitable Livelihoods, Decent Work, & Empowered Communities	Decent Work and Living Incomes and Wages for All Food Systems Workers
	Food Systems for Women and Girls
	Urban Food Systems
	Indigenous Peoples Food Systems
	Vulnerable Peoples Food Systems
	Youth Food Systems
	Equitable livelihoods
Action Area 4: Build Resilience to Vulnerabilities, Shocks, and Stresses	Resilient Food Supply Chains
	Climate and disasters Resilient Development Pathways (CRDP)
	Resilience to shocks and violent conflicts and food crisis
	Resilience to Health Crises
	Resilience to Stress and Vulnerabilities
Action Area 5: Means of Implementation	Finance and Investment
	Governance for sustainable food systems
	Digital
	Better Data



	Trade
	Infrastructure
	Human Rights
	Innovation and Knowledge
	Human Resource Capacities
	Public information
	Partnerships
	Policy and Regulation
	Other

APPENDIX C: List of Criteria for assessing the degree of Usefulness of National Pathways

Completeness Criterion	Description
Context	Does a National Pathway present a context (Available/Partial/Unavailable)?
Vision	Does a National Pathway include a vision (Available/Partial/Unavailable)?
Priorities	Does a National Pathway lay out priorities of action (Available/Partial/Unavailable)?
Measures	Does a National Pathway lay out measures or interventions (Available/Partial/Unavailable)?
Mapping priorities and measures	Can the measures or interventions presented in a National Pathway be clearly mapped to a priority (Available/Partial/Unavailable)?
Key Performance Indicators (KPIs)	Does a National Pathway provide KPIs to assess the future achievement of a measure (Available/Partial/Unavailable)?
Mapping measures and KPIs	Can the KPIs be clearly mapped to a measure (Available/Partial/Unavailable)?