

Tourism Food for Good

# Mid-Project Findings

Survey of National Tourism Agencies (NTAs) from 45 UN Tourism member states; additional evidence from Tourism Food for Good's Literature Review and Initial Stakeholder Mapping

*The Food for Good: Co-creating Sustainable Food Systems in the Tourism Sector action-research is a strategic collaboration between the Centre for Resilience and Sustainable Development (CRSD) at the University of Cambridge and UN Tourism, enabled by the TUI Care Foundation*

MID-PROJECT · JULY 2026

# Tourism Food for Good: a two-year action-research partnership

## What the project is.

Tourism Food for Good (F4G) is a two-year action-research collaboration between UN Tourism and the Centre for Resilience and Sustainable Development (CRSD) at the University of Cambridge, enabled by TUI Care Foundation. The project examines how tourism interacts with food production, procurement, consumption, and waste, and seeks evidence-based pathways toward circularity and local value capture.

## Why the project matters.

Tourism is a major node within global food systems. Over 80 billion meals are served annually by the sector, generating concentrated, measurable, and visible waste at the destination level. The project builds on UN Tourism's Global Roadmap for Food Waste Reduction in Tourism by building the system-level evidence required to act at the right scale.

# Why tourism, why food, and why the intersection is the lever

## Global food system impacts

- 25-30%** of global GHG emissions originate in the food system
- 70%** of freshwater withdrawals are food-related
- 50%** of habitable land is in food production
- 1 in 3** units of food produced is lost or wasted
- 8-10%** of global GHG emissions come from food waste alone

## Why tourism is the right entry point

### Concentration and visibility

Over 80 billion meals served annually in identifiable locations (hotels, resorts, restaurants, cruise lines). Waste is measurable; commitments are reputationally significant.

### Alignment with existing priorities

NTAs already rank local gastronomy, destination competitiveness, and support for micro, small, and medium enterprises (MSMEs) at the top. Circular interventions advance, rather than compete with, current policy.

### Clear value-chain connections

Direct links between tourism demand and local agriculture create visible feedback loops where waste becomes compost, supports local farms, supplies fresh produce, and differentiates destinations.

**The opportunity. Tourism's visibility, consolidation, and place-based nature make it a uniquely tractable lever for food-systems transformation.**

Source: *UNWTO (2023); Amicarelli et al. (2021); Berardo et al. (2020)*

# Three converging workstreams at Phase 1

01

## Scoping literature review and meta-synthesis

Over 125 academic papers, white papers, and reports were analysed across tourism food systems, hospitality waste, and circular economy approaches.

02

## Global National Tourism Administration (NTA) survey

A 70-item instrument deployed with UN Tourism, capturing how food is integrated into tourism policy, how waste and surplus are defined, and where circular opportunities and constraints sit. 45 responses received as of December 2025.

03

## Multi-scale stakeholder mapping

Global value chains, national policy frameworks, and destination-level actors. Mapping covers public, private, and civil society institutions across ten functional categories, with Cabo Verde used as a prototype destination.

**Each workstream cross-validates the others.** The NTA survey is the spine: it converts the literature's structural observations into measurable institutional facts, and it sharpens the stakeholder map by indicating where governance is present, absent, or asymmetric.

# Tourism food systems as complex adaptive systems

**Headline finding.** Tourism food systems function as complex adaptive systems in which stakeholders at different echelons understand the system through divergent frameworks. Coordination failures occur even where actors share sustainability goals.

## Common themes

- Scale mismatch between global value chains and destination-level policy and operational outcomes
- Definitional pluralism in how food waste and surplus food are conceptualised
- Institutional fragmentation across tourism, agriculture, environment, and health portfolios
- Limited measurement infrastructure beyond the national level
- Persistent exclusion of smallholders and MSMEs from procurement chains

## Stakeholder divergence across scales

### Global

International hotel brands operate on ISO, HACCP, and GlobalGAP standards that prioritise traceability and inadvertently exclude uncertified smallholders.

### National

NTAs hold policy instruments (legislation, fiscal incentives) that target destination-level outcomes (local gastronomy, MSME support), generating implementation gaps. In short, the instruments exist at the national (NTA level), but the desired outcomes are at the destination-level.

### Destination

Local farmers, MSMEs, and community organisations face resource constraints. Circular solutions remain aspirational without coordinated demand aggregation and technical support.

Source: *F4G Literature Review; Holland (1995); Levin et al. (2013)*

# Cambridge Impact Roadmapping: action-research for systemic change

Tourism Food for Good will apply the Cambridge Impact Roadmapping methodology, developed at CRSD, together with the Cambridge Policy Boot Camp. The approach combines systems thinking, collective intelligence and participatory research so that scientific evidence and local experience jointly inform the transformation of tourism food systems.

## Why action-research

*Evidence is generated in the first year through literature review, the global NTA survey, an upcoming non-government stakeholder survey, and a global stakeholder mapping. Selected outputs are then prototyped with UN Tourism and partners in Cabo Verde during the second year, allowing the theory of change to be validated through practice.*

### Systems boundaries

Define the tourism food system, its scales, and where governance is present, absent or asymmetric.

### Value chain mapping

Map flows from production to consumption to surplus and by-products across destinations and operators.

### Stakeholder engagement

Convene public, private, civil society and community actors through structured workshops and interviews.

### Leverage and pathways

Identify intervention points and sequence them into pathways for the 2040 Impact Roadmap.

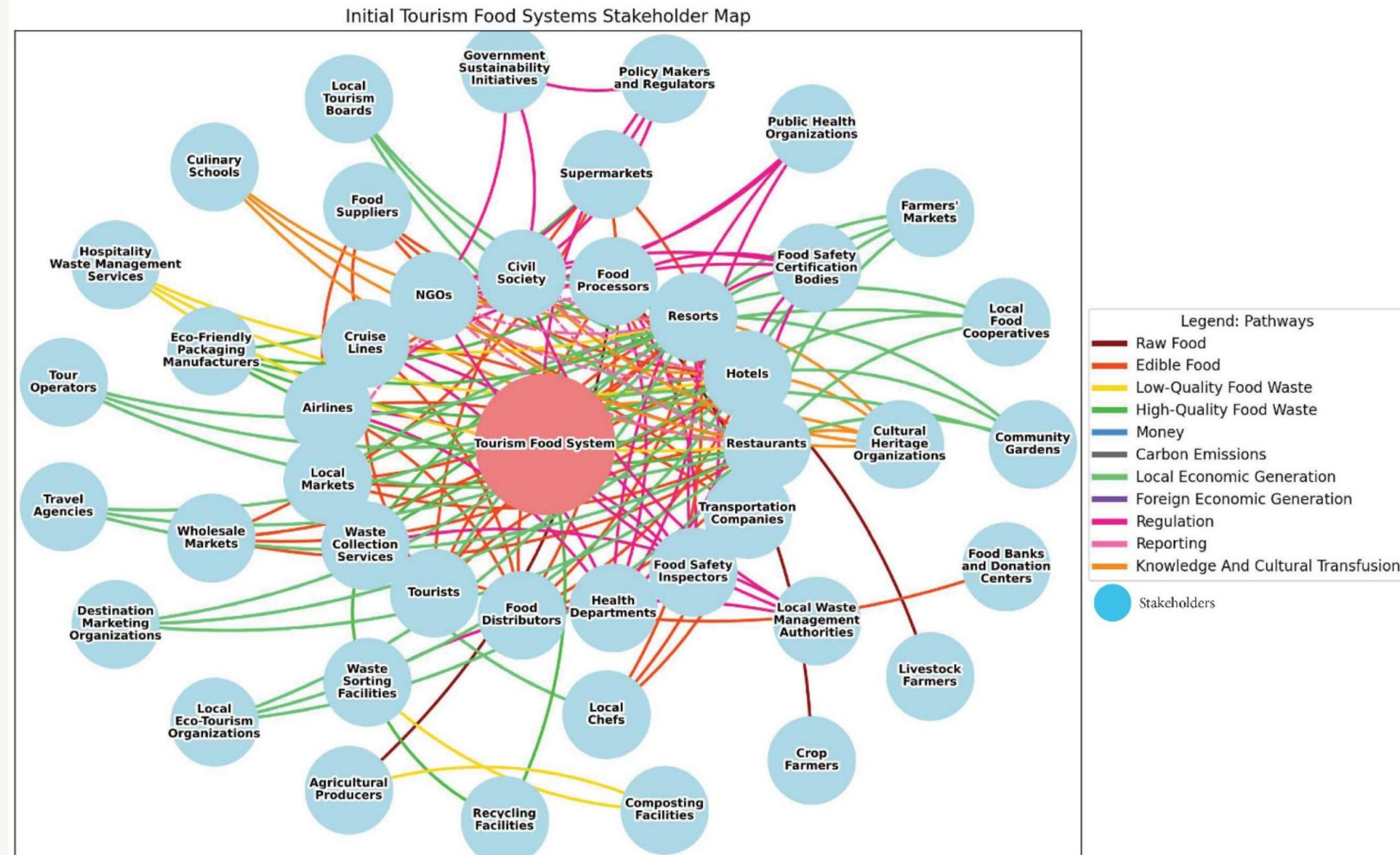
# An initial systems map of the tourism food system

## What the map shows

**Actors.** Around 40 stakeholder categories that together constitute the tourism food system, from upstream producers (agricultural producers, crop and livestock farmers, fisheries) to operators (airlines, cruise lines, hotels, restaurants, resorts, tour operators) and downstream waste, redistribution, regulatory and civil society.

**Pathways.** Edges encode nine pathway types: raw food, edible food, low- and high-quality food waste, money, carbon emissions, local and foreign economic generation, regulation, reporting, and knowledge and cultural transmission/exchange.

**Leverage points.** Nodes carrying many converging pathways (for example hotels, restaurants, food distributors, waste collection services, NTAs, regulators) are candidate intervention points for the 2040 Impact Roadmap.



# A ten-category map of the global tourism food system

A structured stakeholder register has been compiled across ten functional categories, drawing on Phase 1 desk research, the NTA responses, and supporting industry documentation.

## Airlines

Catering, in-flight waste, regulatory advocacy

## Cruise lines

Supply chains across multiple ports and countries, on-board valorisation, port-level interfaces

## Hotels and resorts

Procurement, F&B operations, on-site waste

## Tour operators and OTAs

Procurement, traveller information, certification

## Importers and catering

Wholesale supply, distribution, food safety standards

## Public Sector and Intergovernmental organizations

norms, guidance, policies, regulations

## Foundations and NGOs

Produce and fund research; implement, and manage programs

## Industry Lobbies and associations

Industry bodies shaping standards, advocacy, and procurement norms

## Universities

Research and methodology partners across hospitality and food systems

## Waste and circular solutions

Biodigestion, AI-tracking, redistribution platforms, and waste-to-energy

# 45 NTAs

Data provided by National Tourism Authorities (NTAs) from 45 UN member states.



Source: *F4G NTA Survey (n = 45, Dec 2025)*

## Small Island Developing States (SIDS)

*SIDS · n = 6*

Antigua and Barbuda  
Cabo Verde  
Jamaica  
Maldives  
Mauritius  
Sao Tome and Principe

## Least Developed Countries (LDCs)

*LDCs · n = 5*

Burkina Faso  
The Gambia  
Liberia  
Mali  
Senegal

## ODA-Receiving Countries

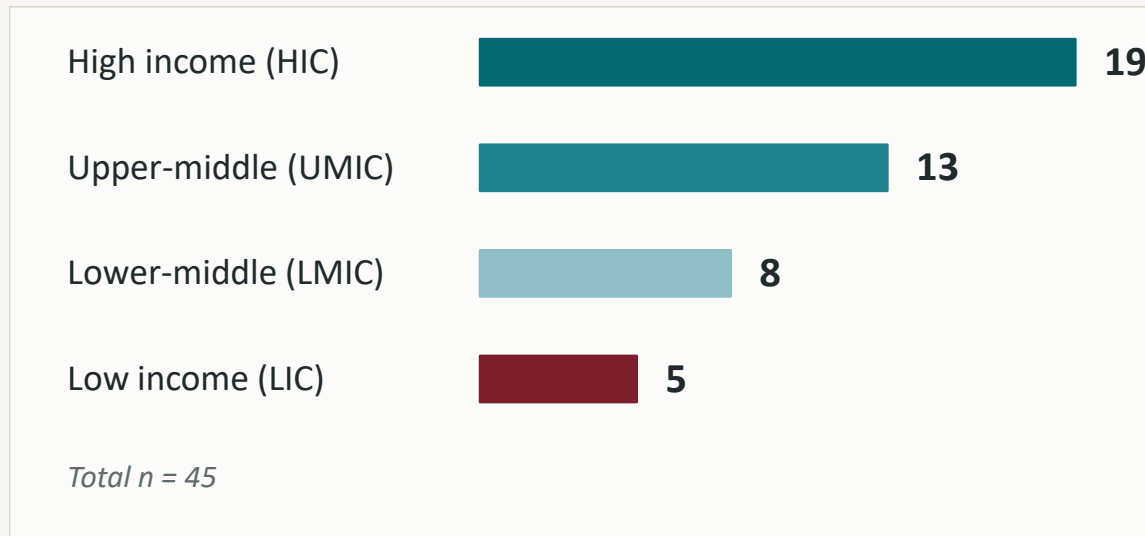
*ODA recipients (OECD-DAC) · n = 26*

More than half of the sample (26 of 45 NTAs) represents an ODA-recipient country on the OECD-DAC list. SIDS and LDC respondents sit within this group, alongside lower-middle and lower-income economies in Africa, the Americas and Asia.

# Sample composition: who responded to the survey

The 45 NTAs span the full World Bank FY26 income classification and all six UN Tourism regional groupings, giving substantial coverage of high, middle and low-income contexts and of the country categories where tourism food system stress is concentrated.

## By World Bank income group (FY26)



## By country category



Note: SIDS and LDC respondents also count within the ODA-recipient group.

Source: F4G NTA Survey (n = 45, Dec 2025); World Bank FY26 income classification; UN-OHRLLS SIDS list; OECD-DAC ODA recipients

## Food is on the agenda, but the agenda may sit at the wrong scale

# 78%

**have policy that mentions food**

*35 of 45 NTAs report national tourism policy that references **food***

# 62%

**reference food systems explicitly**

*28 of 45 NTAs report that their national tourism policy **explicitly references food systems**.*

# 73%

**have a relevant strategy in place**

*33 of 45 NTAs report having a relevant national tourism **food or gastronomy strategy***

## Where the policies operate

**64% National**

**17% Destination**

**19% Other**

### The mismatch

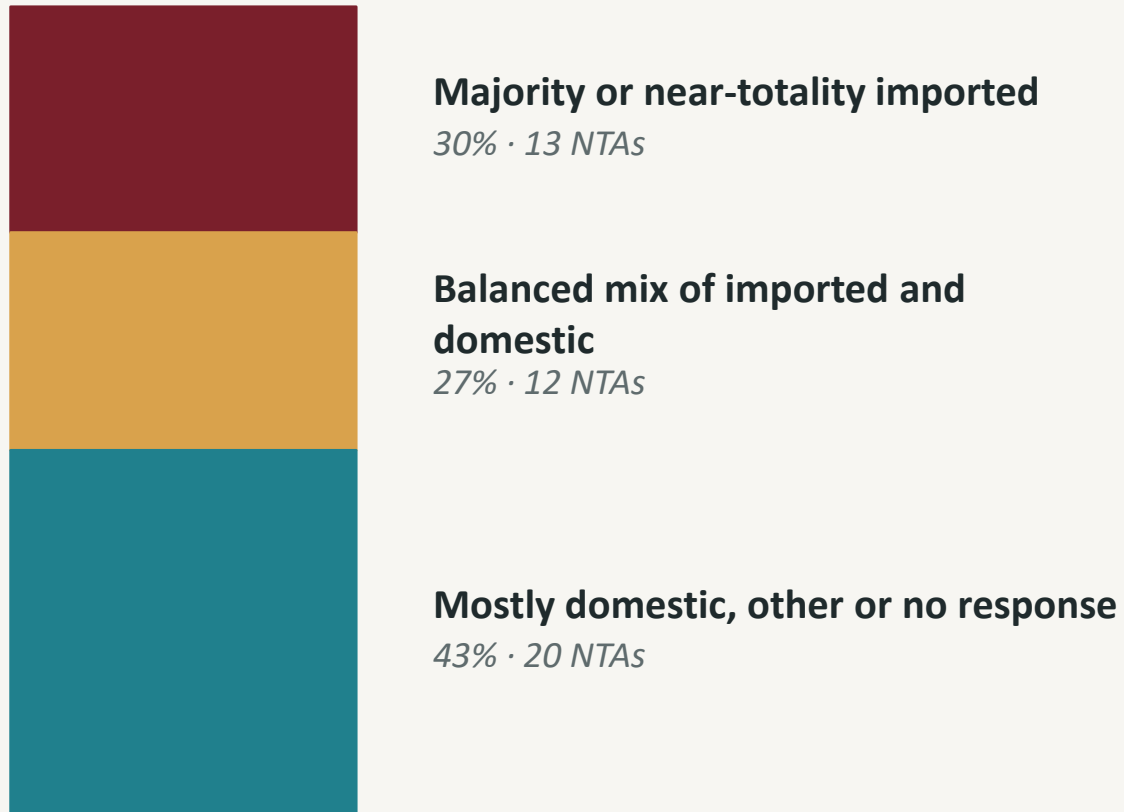
*Food now appears in most national tourism policies and strategies, but **only a small minority of those policies operate at the destination level, where most decisions on procurement, waste and supplier logistics are actually made.***

*National policy presence is high; policy reach is low.*

Source: *F4G NTA Survey Q14, Q18, Q22*

# Import-Dependence at Tourism Destinations

## Reported share of imported food in the tourism sector



*n = 45 · F4G NTA Survey Q35*

Source: *F4G NTA Survey Q35 (n = 44)*

### What this means

**Majority-imported NTAs (30%).** More than one in four NTAs report that the majority or near-totality of food used in their tourism sector is imported. Tourism procurement in these locations, tourism procurement flows almost entirely through international supply chains.

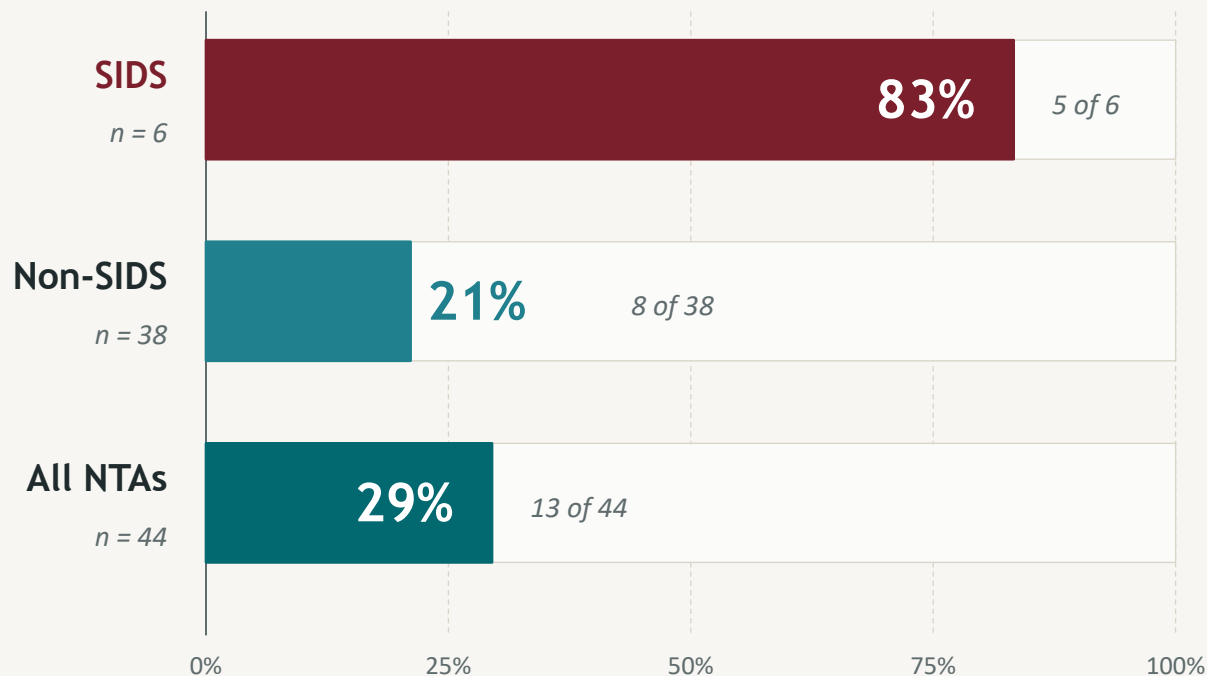
**Balanced-mix NTAs (27%).** A further quarter describe a balanced mix between imported and domestic. Combined, 55% of NTAs operate in a context where imported food is a structurally significant feature of the tourism food system.

**Why it matters.** High import reliance can limit local supplier development, expose destinations to price and supply shocks, and weaken the link between tourism revenue and local food economies.

# Import-Dependence at Tourism Destinations

## Elevated levels of import dependence in SIDS

Q28 · share of NTAs reporting that the tourism sector is supplied mostly or near-totally by imports



**≈ 4× higher than non-SIDS**

“Majority imported” combines “Mostly imported” and “Nearly all imported”. Three NTAs did not answer Q28.

## Tourism-dependent have highest levels of import-dependence

**Sector-wide.** Across responding NTAs, 30% (13 of 44) report that food used in the tourism sector is mostly or near-totally imported. Including the further 27% reporting a balanced mix, more than half of destinations sit in a structurally import-exposed segment.

**SIDS contrast.** 83% of SIDS respondents report majority-imported tourism food supply, against 21% of non-SIDS. Two of six SIDS, report tourism food as “nearly all imported”, a category no non-SIDS chose.

**Why it matters.** For tourism-dependent destinations, especially SIDS, **high import reliance compounds existing vulnerabilities**: thin domestic supplier bases, exposure to shipping and price shocks, weak linkages between tourism spend and local food economies, and limited room for circular procurement.

## Policy without measurement: the missing evidence layer

# 18%

**of NTAs report collection of tourism food-waste data**

*8 of 45 NTAs report any systematic collection of food-waste data within the tourism sector.*

# 62%

**have policy but no measurement**

*28 of 45 NTAs report a relevant policy or strategy referencing food, yet collect no tourism food-waste data.*

### What is missing

#### Baseline volumes

Without food-waste data, NTAs cannot establish a baseline for the sector, set targets, or support their national reporting to SDG 12.3.

#### Targeting interventions

Investment decisions and policy levers cannot be aimed at the highest-impact sub-sectors (hotels, food service, events) without disaggregated measurement.

#### Accountability

Public and private commitments to food-waste reduction in tourism cannot be independently verified without a measurement infrastructure.

Source: *F4G NTA Survey Q58 (food-waste data collection); cross-tabulation with Q14, Q18, Q22*

# Priority inversion: cultural and economic goals dominate, environmental and health lag

Current priorities, Q26 (n = 44; lower mean = higher priority)

|     |                                                  |              |
|-----|--------------------------------------------------|--------------|
| 1.  | Promote local gastronomy and culinary heritage   | 2.34         |
| 2.  | Enhance destination competitiveness and branding | 4.66         |
| 3.  | Support smallholder farmers and local MSMEs      | 4.75         |
| 4.  | Diversify tourism offerings                      | 5.34         |
| 5.  | Rural and community development                  | 5.77         |
| 6.  | Reduce food imports and improve supply chain     | 5.93         |
| 7.  | Strengthen food safety and quality               | 6.43         |
| 8.  | Attract higher-value visitors                    | 6.48         |
| 9.  | <b>Reduce food waste</b>                         | <b>7.05</b>  |
| 10. | <b>Increase employment</b>                       | <b>7.09</b>  |
| 11. | <b>Improve nutrition and public health</b>       | <b>10.16</b> |

## Key insight

**Top three priorities are cultural and economic.**

Local gastronomy, destination branding, and MSME support sit at the top of the ranking.

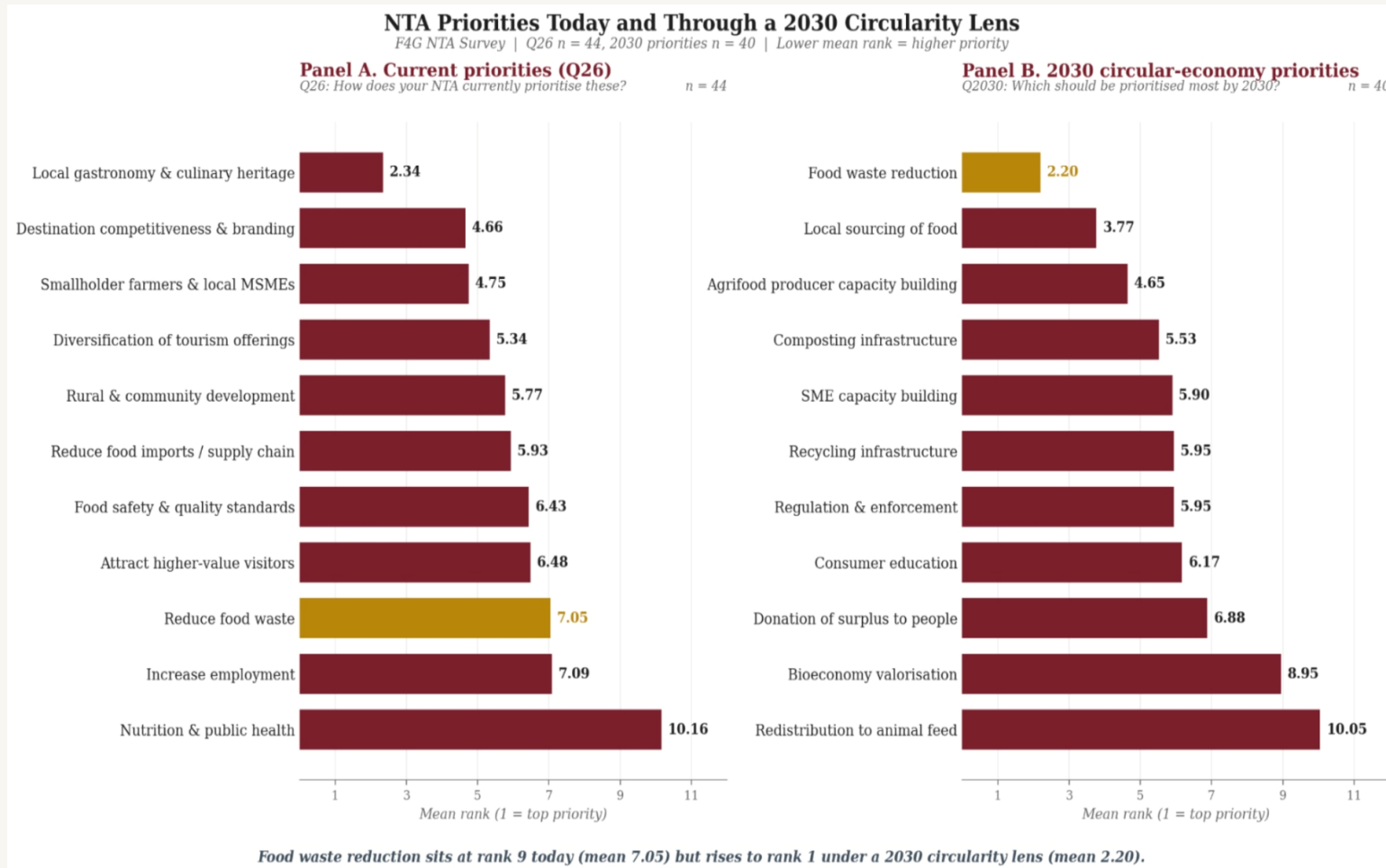
**Bottom three are environmental, social, and health.**

Food waste reduction (#9), employment (#10), and nutrition and public health (#11) are treated as separate from, and lower than, the cultural and economic goals.

Yet items 1–3 and items 9–11 are the same system: *a localised food system would deliver both simultaneously.*

Source: F4G NTA Survey Q26, n = 44 (one non-response on Q26 within the n = 45 sample)

# Priorities today and through a 2030 circularity lens



## What changes between today and 2030

Food waste reduction moves from rank 9 (mean 7.05) to rank 1 (2.20).

Local sourcing rises to second; agrifood producer capacity-building to third.

Bioeconomy valorisation and redistribution to animal feed (related to food waste reduction) are ranked in the bottom two.

*Sample note. Today panel n = 44, 2030 panel n = 40, reflecting four NTAs that did not complete the forward-looking ranking.*

**Implication.** NTAs recognise that the nexus between sustainability, food and tourism must be prioritised, but have not yet embedded it in national or local policies.

Source: F4G NTA Survey, Q26 (today, n = 44) and 2030 projection (n = 40)

# Scale mismatch between policy architecture and impact concentration

## Where policies sit

**National level:** 64% of food-related policies

**Destination or city level:** only 17%

**Tourism food-waste data collection:** 18% (8 of 45)

*35 NTAs (78%) report tourism policy that addresses food (Q14 or Q18); only 7 also collect tourism food-waste data. 28*

**NTAs, 62% of the full sample, hold policy without measurement.**

## What goals look like

**Local gastronomy and cuisine**

*destination-specific*

**Local MSMEs and smallholder farmers**

*local actors*

**Destination competitiveness**

*place-based branding*

**Community development**

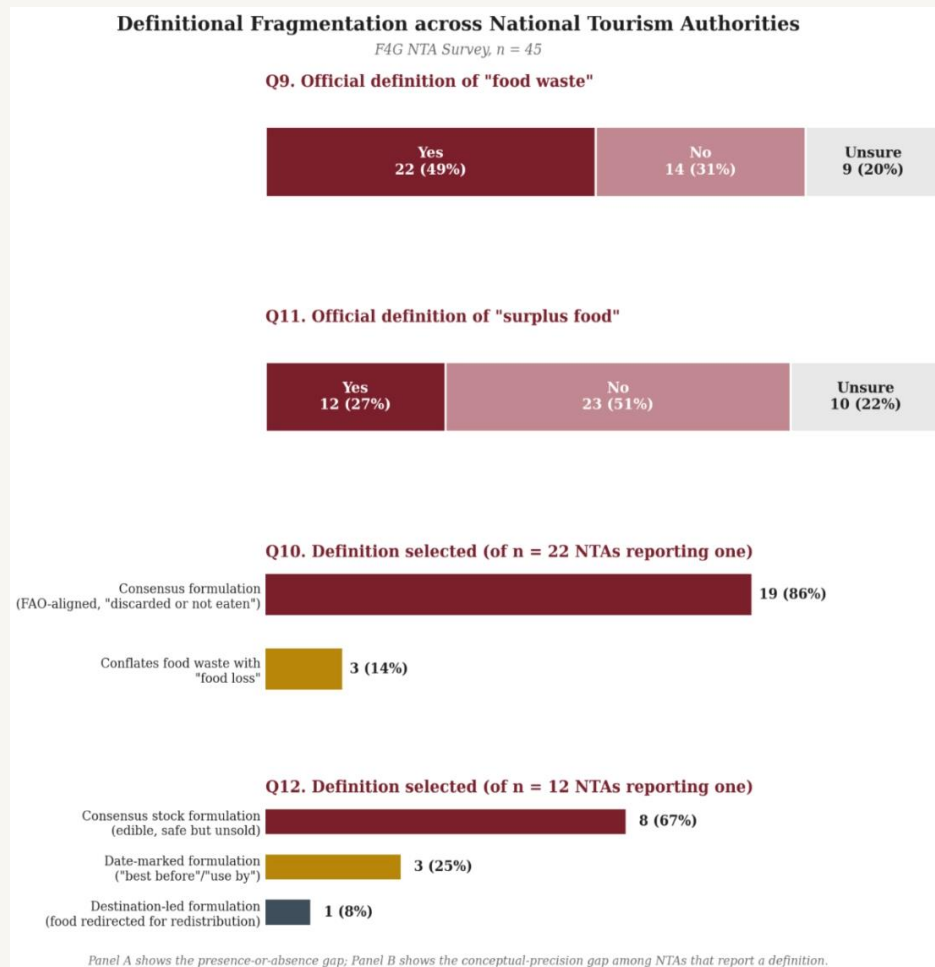
*local outcomes*

*Read together: the goals on the right are destination-specific outcomes; the policy instruments on the left sit predominantly at national or supranational level. The vertical gap is the scale mismatch.*

**Goals are destination-level; instruments are national.**

Source: *F4G NTA Survey Q14, Q16, Q18, Q26, Q58*

# Definitional fragmentation: presence and precision both vary



## Two layers of fragmentation

**Presence gap.** 49% of NTAs report an official definition of food waste; only 27% report one for surplus food.

**Precision gap.** Of those reporting a definition, 14% conflate food waste with food loss; among surplus-food definers, 33% use non-consensus formulations.

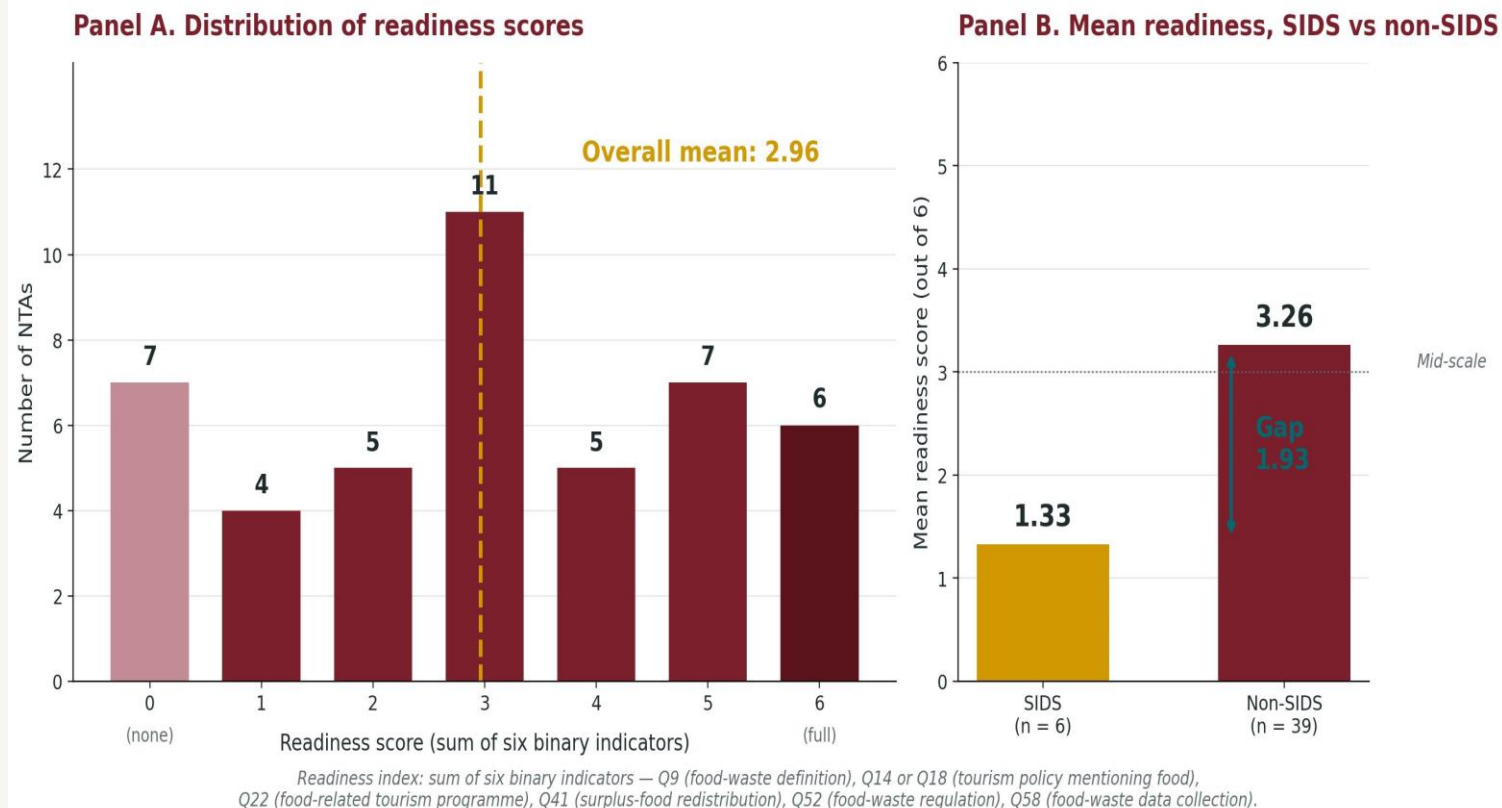
**Distributional pattern.** 62% of high-income countries (HIC) and upper-middle-income countries (UMIC) NTAs report a working definition versus 15% of lower-middle income countries (LMIC) and low-income countries (LIC) NTAs. None of the five LDCs report one.

*Without a shared, operationalised vocabulary, cross-national comparison and policy coordination are structurally impeded.*

Source: F4G NTA Survey Q9–Q12

# Institutional readiness for circular tourism food systems is uneven

## Institutional Readiness for Circular Tourism Food Systems



## SIDS are less ready for tourism food system circularity

A six-indicator composite covering food-waste definition, tourism policy or strategy mentioning food, food-related tourism programme, circular policy including food, food-waste regulation, and tourism food-waste data collection.

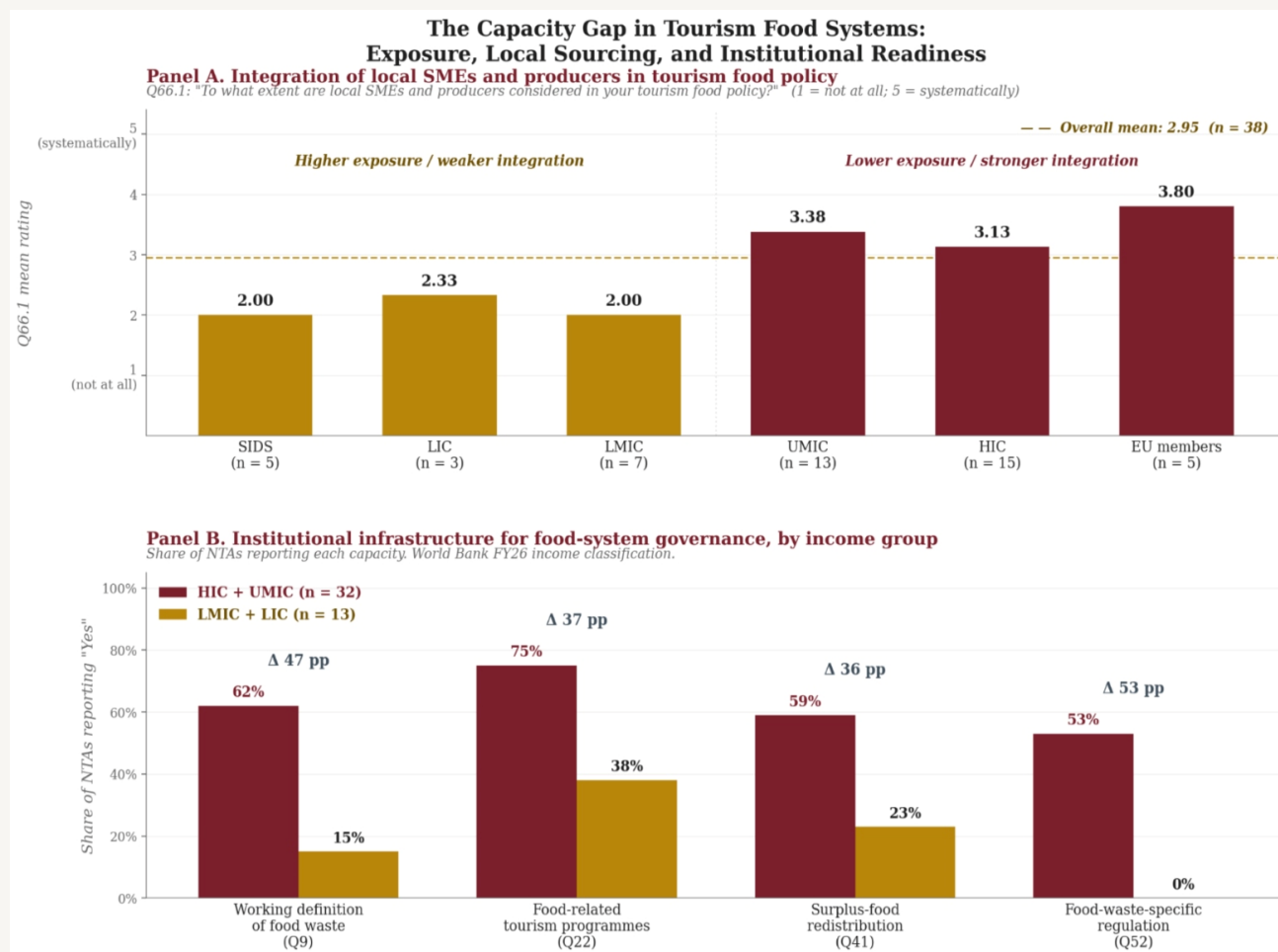
**Overall mean:** 2.96 out of 6.

**Distribution:** 7 NTAs at 0; 11 at the median score of 3; 6 at the full score of 6.

**SIDS gap:** SIDS average 1.33 against 3.26 for non-SIDS, a gap of 1.93 points on a six-point scale; this means that **SIDS are 84% less ready than non-SIDS according to this criteria set.**

Source: F4G NTA Survey readiness index (Q9, Q14/Q18, Q22, Q64, Q52, Q58); n = 45

# Capacity gap: lower-income destinations often face the highest exposure



Source: F4G NTA Survey Q9, Q22, Q41, Q52, Q66.1

## The institutional inversion

NTAs in countries with the greatest food-import exposure and most fragile local supply chains report the weakest formal integration of local MSMEs and producers in tourism food policy.

### Largest gaps (HIC + UMIC vs LMIC + LIC):

Food-waste regulation: 53 pp

Food-waste definition: 47 pp

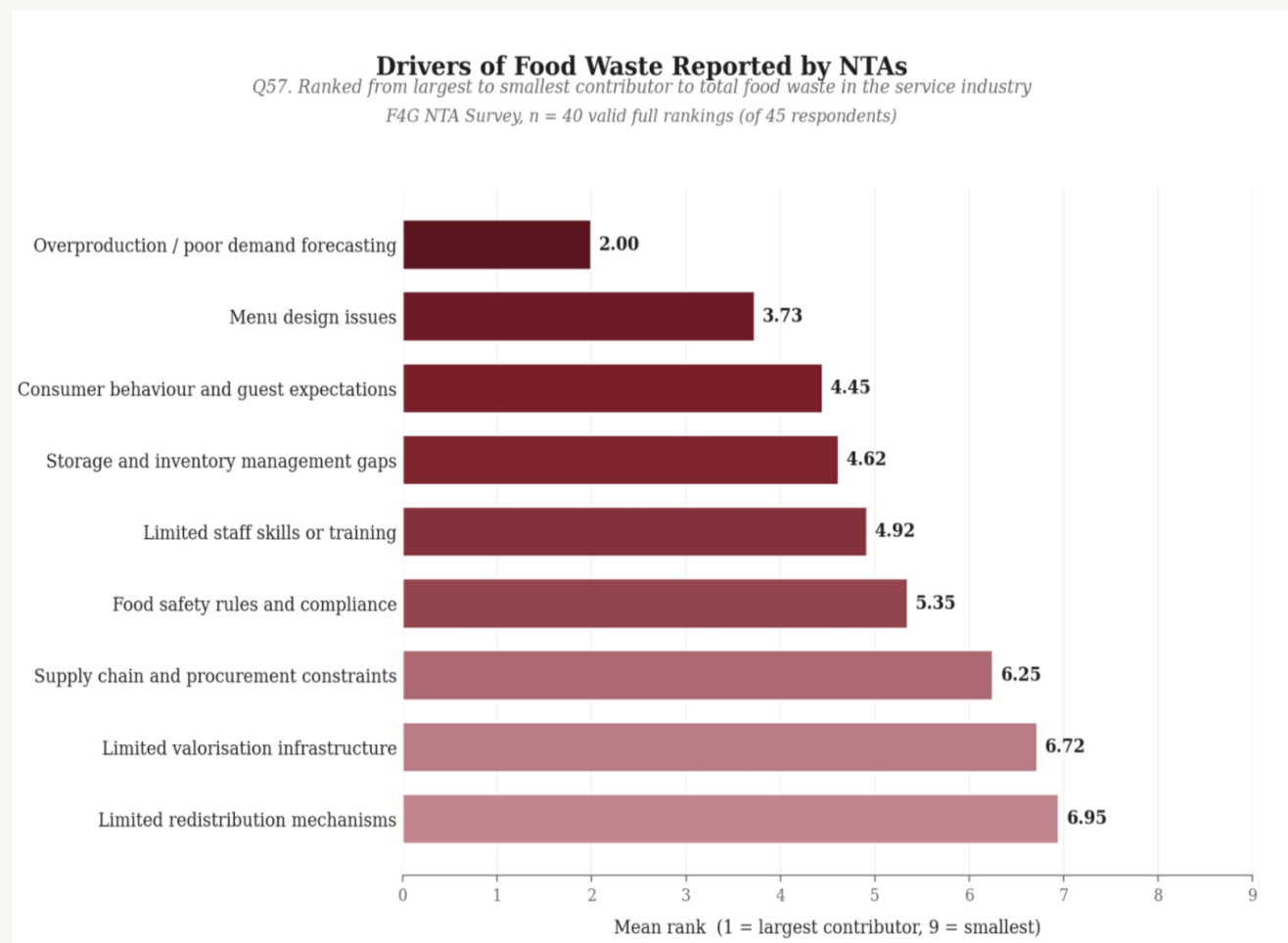
Food-related programmes: 37 pp

Surplus-food redistribution: 36 pp

**A development-assistance reading.** Capacity-building, technical assistance, and data infrastructure should be sequenced before, not alongside, demand-side circular interventions.

**Note:** pp = percentage points; Δ = difference between (delta)

# Drivers of food waste: overproduction and demand forecasting dominate



Source: F4G NTA Survey Q57, n = 40 valid full rankings

## Reading the ranking

### Top-ranked drivers (operational, demand-side):

Overproduction, menu design, consumer expectations, and storage gaps.

### Lower-ranked drivers (structural, supply-side):

Procurement constraints, valorisation infrastructure, redistribution mechanisms.

**Significance.** NTAs identify the drivers most amenable to destination-level intervention (staff training, menu redesign, supplier coordination) as the most consequential.

## Written responses support the structural/capacity gap

Open-text items captured how NTAs describe their own constraints. Three excerpts illustrate the pattern.

### Near Eastern Respondent

*“Policy, data, infrastructure and capacity gaps remain key challenges.”*

Confirms the policy-without-measurement pattern in 62% of the sample.

### Sub-Saharan African Respondent

*“The subject matter is not being explored at the national level [despite an existing national tourism policy].”*

Illustrates how presence of policy can coexist with absence of operational engagement.

### West African Respondent

*“Waste is not sorted; all types end up in a dump site which is not engineered for the purpose.”*

Reflects the valorisation and redistribution capacity gap in LIC contexts.

Source: *F4G NTA Survey written responses (Phase 1)*

# The primary mid-project finding

**Tourism food systems present a configuration of conditions, complexity, locally held knowledge, governance fragmentation, and uncounted costs, under which the case for destination-scale, participatory design becomes the rule rather than the exception. *The NTA evidence is consistent with this proposition.***

## Three converging claims

### 1. Outcomes concentrate at the destination

Environmental, economic, and nutritional outcomes are produced at the destination, even where their drivers are structured globally.

The literature review and stakeholder map converge on this point; the NTA priority ranking reinforces it through what NTAs themselves rank most important.

### 2. Policy architecture is misaligned

64% of respondents have food-related tourism policies that operate at the national level, only 17% of respondents reported one at the destination or city level.

62% of NTAs have policies without an appropriate measurement mechanism.

### 3. NTAs are already signaling the requisite interventions

NTAs themselves rank local gastronomy among their top priority today.

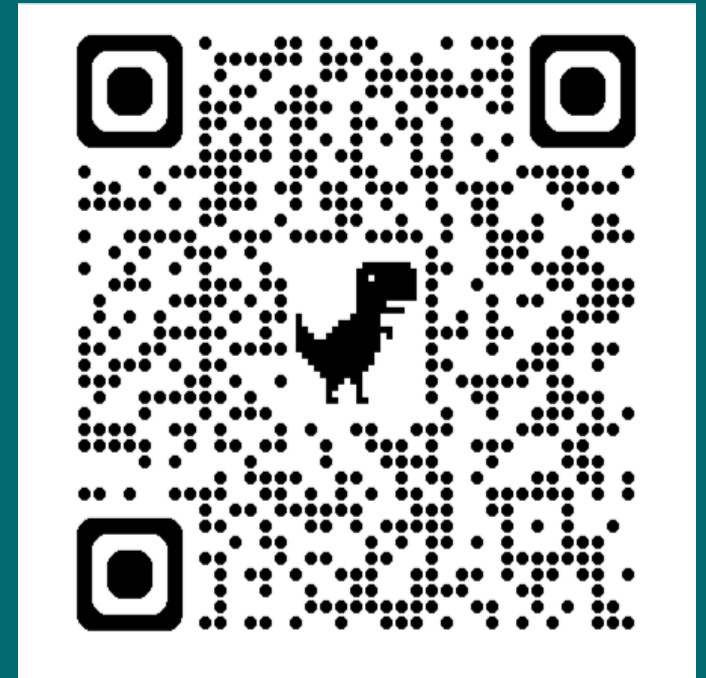
When asked to project to 2030 through a circularity lens, local sourcing rises from 6th to 2<sup>nd</sup>; food waste from 9<sup>th</sup> to 1<sup>st</sup>; agrifood producer capacity to 3<sup>rd</sup>; and SME capacity to 5th.

*Phase 2 will test these 3 claims directly through destination-scale co-design in Cabo Verde, supported by wider stakeholder workshops at supranational and national levels.*

Source: *NEST Conference Paper (Staats, 2026)*; F4G NTA Survey (n = 45)

# Thank you

QR Code to Project Page



## PROJECT CONTACTS

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**TUI Care Foundation** Manuel Ferreira

# Sources and references

## EMPIRICAL AND PROJECT DATA

4G NTA Survey (n = 26 ODA-eligible National Tourism Administrations), Cambridge–UN Tourism, 2025.

F4G NTA Written Responses (qualitative dataset, 2025).

UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. List of SIDS. [unohrrls.org/about-sids](https://unohrrls.org/about-sids)

## TOURISM, FOOD SYSTEMS AND POLICY FRAMEWORKS

UNWTO. *Global Roadmap for Food Waste Reduction in the Tourism Sector* (2023). [doi.org/10.18111/9789284424085](https://doi.org/10.18111/9789284424085)  
UNEP.

*Food Waste Index Report 2024*. [unep.org/resources/publication/food-waste-index-report-2024](https://unep.org/resources/publication/food-waste-index-report-2024)

One Planet Network. Sustainable Tourism Programme.

[oneplanetnetwork.org/programmes/sustainable-tourism](https://oneplanetnetwork.org/programmes/sustainable-tourism)

Ellen MacArthur Foundation.

*Cities and a Circular Economy for Food*. [ellenmacarthurfoundation.org/cities-and-a-circular-economy-for-food](https://ellenmacarthurfoundation.org/cities-and-a-circular-economy-for-food)  
IPES-Food.

*From Uniformity to Diversity* (2016, 2024 reprint). [ipes-food.org](https://ipes-food.org)

## CABO VERDE CONTEXT

IFC. *Cabo Verde Country Private Sector Diagnostic* (2024). [ifc.org/cabo-verde-cpsd](https://ifc.org/cabo-verde-cpsd)

FAO. GIEWS Country Brief: Cabo Verde. [fao.org/giews/countrybrief/country.jsp?code=CPV](https://fao.org/giews/countrybrief/country.jsp?code=CPV)

## KEY ACADEMIC LITERATURE

Berardo, I. et al. *Fighting Food Waste in the Tourism Sector*. IDB (2020). [oneplanetnetwork.org](https://oneplanetnetwork.org)

Chambers, R. (1994). “The Origins and Practice of Participatory Rural Appraisal.”  
*World Development* 22 (7). [doi.org/10.1016/0305-750X\(94\)90141-4](https://doi.org/10.1016/0305-750X(94)90141-4)

Crippa, M. et al. (2021). “Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions.”  
*Nature Food*. [doi.org/10.1038/s43016-021-00225-9](https://doi.org/10.1038/s43016-021-00225-9)

Filimonau, V. and De Coteau, D. (2019). “Food Waste Management in Hospitality Operations.”  
*Tourism Management*. [doi.org/10.1016/j.tourman.2018.10.009](https://doi.org/10.1016/j.tourman.2018.10.009)

Guell, C. et al. (2022). “Food Systems and Health in SIDS.”  
*Food Security*. [doi.org/10.1007/s12571-022-01281-0](https://doi.org/10.1007/s12571-022-01281-0)

Ostrom, E. (2009). “A General Framework for Analyzing Sustainability of Social-Ecological Systems.”  
*Science*. [doi.org/10.1126/science.1172133](https://doi.org/10.1126/science.1172133)

Meadows, D. (2008).  
*Thinking in Systems: A Primer*. Chelsea Green Publishing.

# Acronyms and abbreviations

## F4G

Tourism Food for Good, the two-year action-research programme between UN Tourism, Cambridge CRSD, and TUI Care Foundation.

## CRSD

Centre for Resilience and Sustainable Development, University of Cambridge, the research lead.

## LDC

Least Developed Countries, the UN-designated low-income group (n = 5 in sample).

## HIC / UMIC

High-Income and Upper-Middle-Income Countries under the World Bank FY26 income classification.

## MSME

Micro, Small and Medium Enterprises, local businesses central to destination-level food supply.

## GHG

Greenhouse Gas emissions, of which 25-30% originate in the global food system.

## NTA

National Tourism Authority (also National Tourism Administration), the government body surveyed in this study (n = 45).

## SIDS

Small Island Developing States, a UN grouping of small island economies with high import exposure (n = 6 in sample).

## ODA

Official Development Assistance, aid flows tracked by the OECD-DAC; 26 of 45 respondents are ODA recipients.

## LMIC / LIC

Lower-Middle-Income and Low-Income Countries under the same World Bank classification.

## OTA

Online Travel Agency, a digital intermediary within the tour operator stakeholder category.

## pp

Percentage points, the unit used to express gaps between income groups (e.g. a 53 pp food-waste regulation gap).

# Institutions, standards and data sources

## UN Tourism (UNWTO)

The United Nations specialised agency for tourism; project partner and survey deployment channel.

## OECD-DAC

OECD Development Assistance Committee, which maintains the list of ODA-recipient countries.

## UN-OHRLLS

UN office maintaining the official designations for SIDS and LDCs.

## ICAO / IMO

Aviation and maritime regulators relevant to airline catering and cruise-line waste (e.g. MARPOL Annex V).

## MARPOL Annex V

International maritime rule governing disposal of garbage, including food waste, from ships.

## TUI Care Foundation

Funding partner; runs the Field to Fork programme active in Cabo Verde.

## World Bank FY26

Income classification used to group respondents into HIC, UMIC, LMIC, and LIC.

## FAO / UNEP

UN Food and Agriculture Organization and Environment Programme; sources for food-loss and waste definitions and data.

## ISO / HACCP / GlobalGAP

International food-safety and traceability standards that can inadvertently exclude uncertified smallholders.

## SDG 12.3

Sustainable Development Goal target to halve per-capita global food waste by 2030.

# Key concepts and framing

## Complex Adaptive System (CAS)

A system of many interacting actors whose collective behaviour is emergent and cannot be reduced to any single part; the headline framing for tourism food systems.

## Cambridge Impact Roadmapping

The CRSD action-research methodology combining systems thinking, collective intelligence, and participatory research to co-create the 2040 Impact Roadmap.

## Scale mismatch

The gap between food-related policy sitting at the national level (64%) and impacts and decisions concentrating at the destination level (17%).

## Policy without measurement

The pattern where NTAs hold a food-related policy or strategy (62%) yet collect no tourism food-waste data.

## Definitional fragmentation

Variation in whether NTAs hold official definitions of food waste and surplus food, and in how precisely those definitions align with consensus formulations.

## Institutional readiness index

A six-indicator composite (definitions, policy, programme, circular policy, regulation, data) scoring readiness for circular tourism food systems out of 6.

## Capacity / institutional inversion

The finding that destinations with the highest import exposure and most fragile supply chains report the weakest formal integration of local producers.

## Value leakage

Revenue that exits a destination through imported procurement, e.g. an estimated EUR 48m of Cabo Verde's EUR 60m hotel food market leaving the country.