

Inclusive Clustered Agri-Networks: Mapping Food Sharing Initiatives in Galway City & County

Abstract

Food systems are critical to achieving the SDGs, with inclusion central to the 2030 Agenda's goal to "leave no one behind." Food Sharing Initiatives, from community gardens to surplus redistribution, address food security, equity, and resilience. While 50% of the global population lives in small and medium-sized cities, research has largely focused on large urban centres, overlooking rural–urban dynamics. This study mapped 58 FSIs in Galway City and County, applying a 15-indicator Inclusion Framework across five domains. Cluster analysis revealed three inclusion typologies, showing geographic disparities and highlighting how governance, location, and mode of sharing shape inclusion. Two practical frameworks: Inclusive Clustered Agri-Networks and the Food Share System are proposed to guide equity-focused, urban-rural food system transitions in Ireland and beyond.

1. Objective

Map FSIs in Galway, assess inclusion using a 15-indicator framework, and identify patterns to inform policy.

Inclusion was measured via 15 indicators across 5 domains:

1. Access & Resources
2. Participation & Representation
3. Equity & Rights
4. Empowerment & Capacity Building
5. Resilience & Sustainability

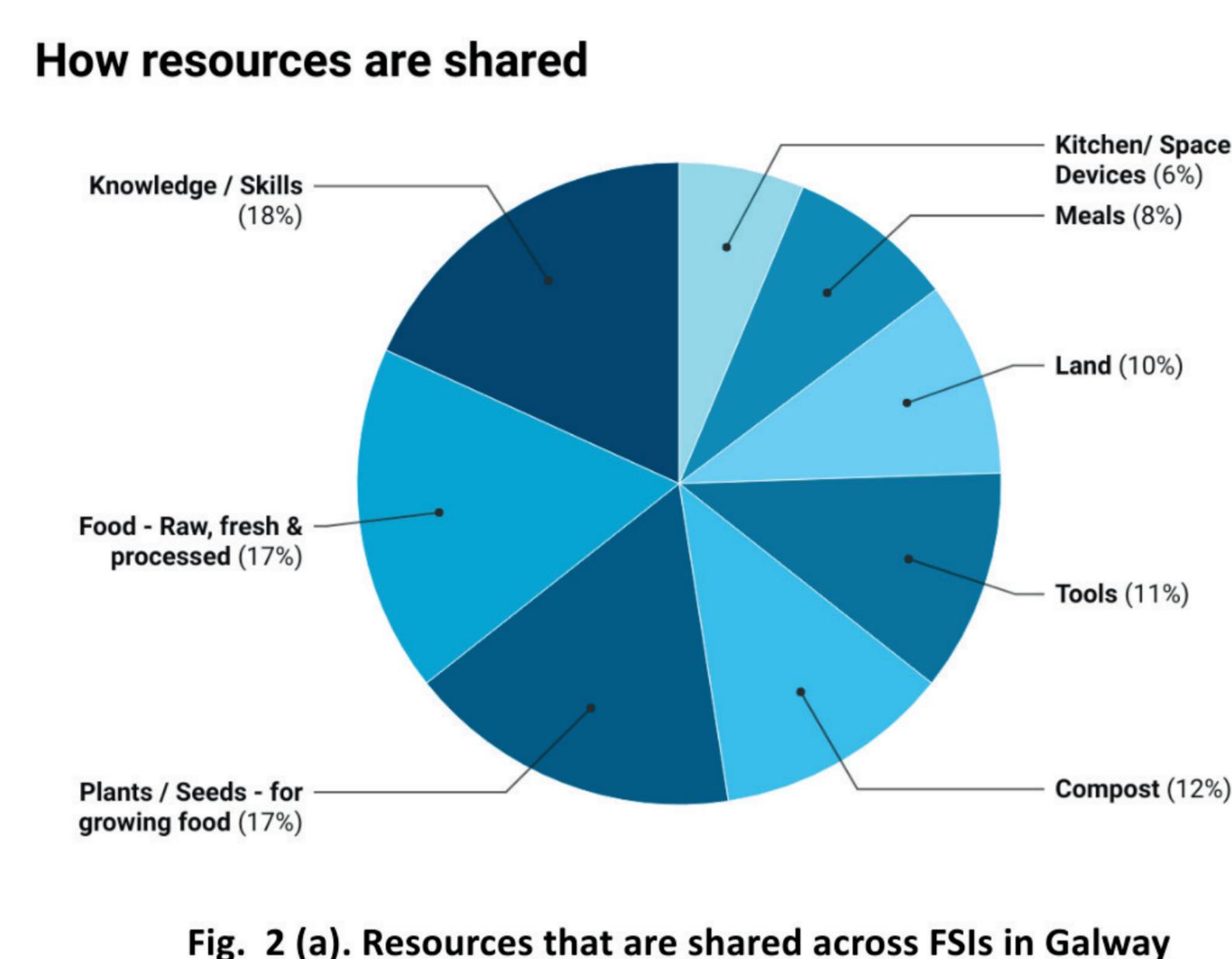


Fig. 2 (a). Resources that are shared across FSIs in Galway

3. Results

Resilience & Sustainability and Access & Resources are key strengths in Galway FSIs

Clusters:

1. **High inclusion (17.5%)** - Urban, community-led, strong across all domains.
2. **Mid inclusion (34.9%)** - Rural care-focused, hybrid governance, moderate inclusion.
3. **Low inclusion (39.7%)** - Rural, market-oriented, low on governance & participation.

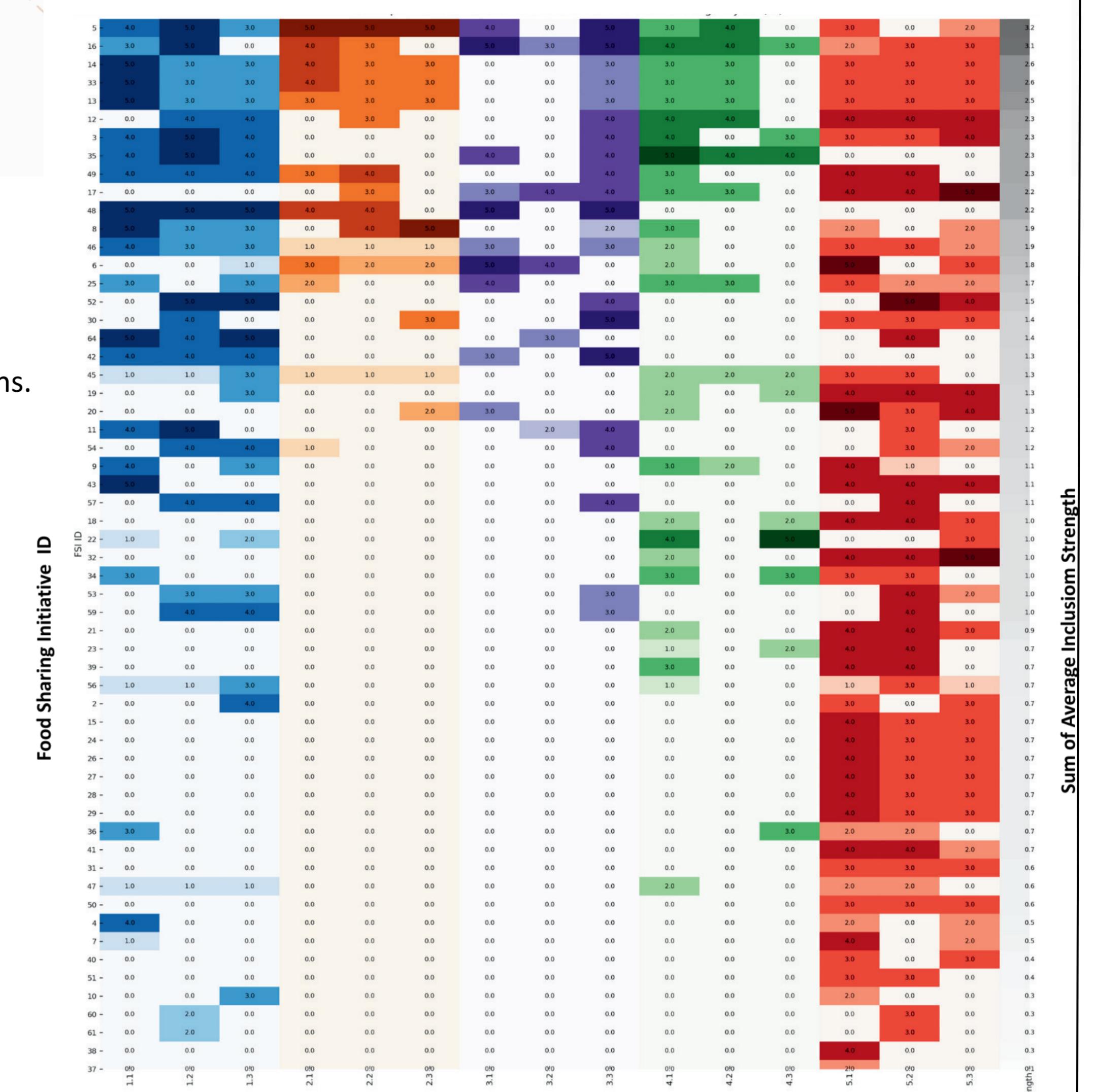


Figure 4. Heatmap of FSIs by inclusion indicators and average strength The Five Domains of Inclusion and scores

2. Methodology

Mapping FSIs

Identified 63 FSIs (58 with sufficient documentation for analysis). Geographic classification: **Urban (29%)**, **Rural (55%)**, **Urban/Rural (9%)**, **Global (7%)**.

Data Analysis

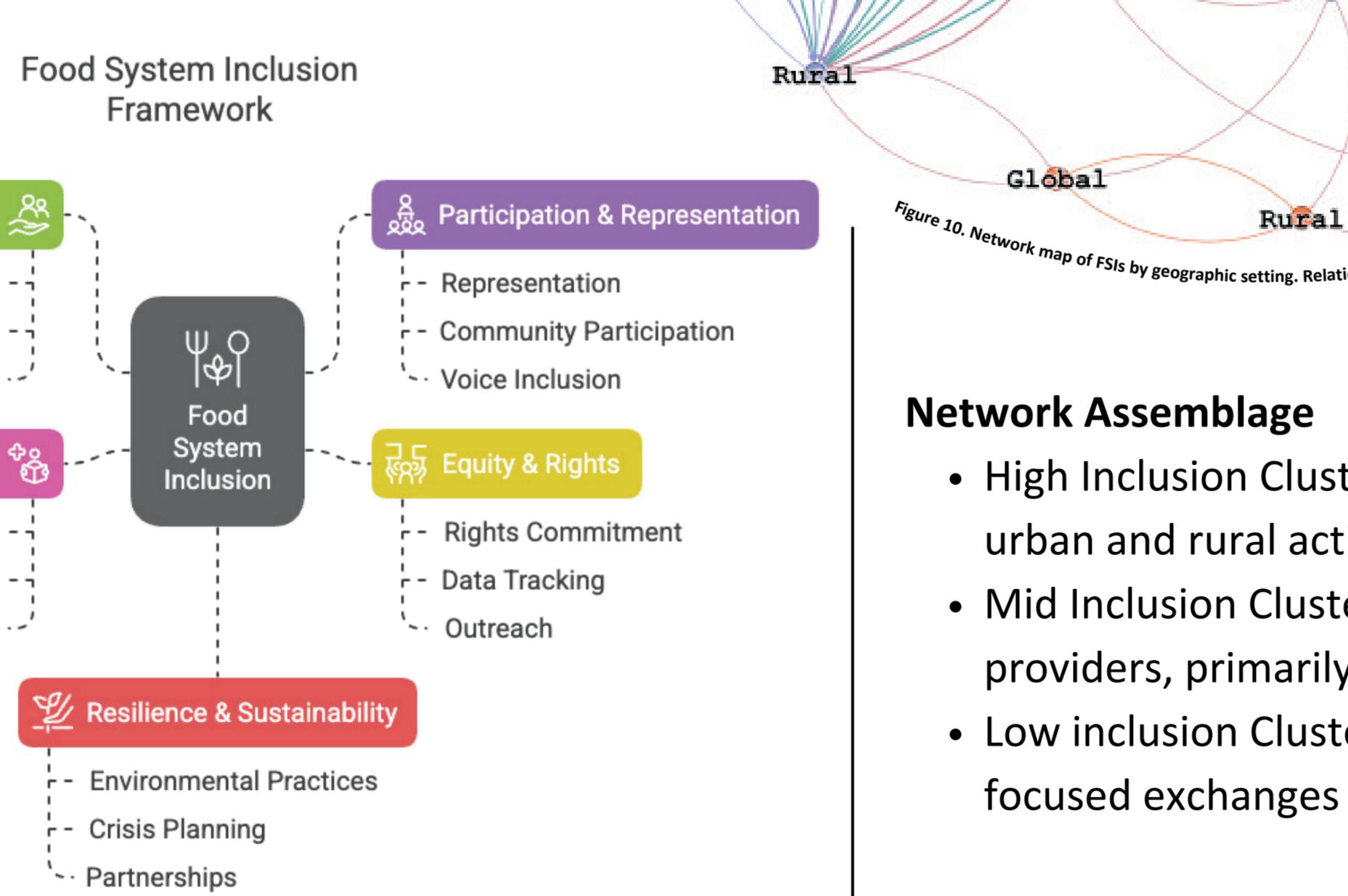
Hierarchical cluster analysis → 3 inclusion typologies.

Chi-square tests for associations between inclusion clusters.

Assemblage network mapping to examine relational connectivity.

Inclusion Indicator Framework

Developed from FAO (2023, 2025), Hawkes et al. (2024), SHARE IT (Mackenzie & Davies, 2019) MUFPP (2021) Five domains / 15 indicators scored 0–5 based on digital trace evidence.



Network Assemblage

- High Inclusion Cluster FSIs act as connectors between urban and rural activities.
- Mid Inclusion Clusters have bilateral links with service providers, primarily place-based.
- Low Inclusion Cluster is peripheral, with market-focused exchanges and fewer relational ties.

4. Findings

Food Sharing in rural Galway scores low on inclusion relative to urban initiatives. FSIs are embedded in Galway's food culture, reflecting a deep cultural legacy of cooperation and care, offering a powerful foundation for inclusive, sustainable food systems.

CLUSTER ONE: HIGHER INCLUSION



- Key Actors:** Community groups, social enterprises
Activities: Gifting, capacity building, and participatory education
Outcomes: Civic engagement, social cohesion, cultural appreciation
Policy Support: Long-term funding, social infrastructure, formal recognition

CLUSTER TWO: MID INCLUSION



- Key Actors:** Hybrid initiatives, food services, socially-conscious farms
Activities: Targeted meal provision, CSA, skills training
Outcomes: Upskilled labour, reduced food insecurity, outreach to excluded
Policy Support: Capacity-building programmes, inclusive procurement, supportive regulation

CLUSTER THREE: LOWER INCLUSION



- Key Actors:** Commercial farms, agri-food enterprises
Activities: Market-oriented production, resource efficiency
Outcomes: Urban–rural links, climate adaptation, resource efficiency, food resilience
Policy Support: Incentives for sustainability innovation, inclusive supply chains



5. Conclusion

"**FSIs are the hidden scaffolding of Ireland's food system**

FSIs are central to the food system and are shaping local outcomes and impacts. They're inclusive, people-powered, urban–rural food linkages. The Inclusive Clustered Agri-food Networks Framework is a tool for integrating FSIs into regional food policy. FSIs are relational, resilient, and sustainable.