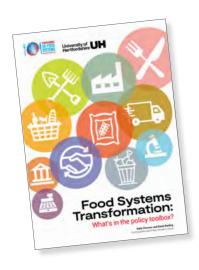


University of Hertfordshire **UH**



This briefing paper provides a summary of the report: Parsons, K & Barling, D (2021) Food Systems Transformation: What is in the policy toolbox. The full report is available at www.foodsecurity.ac.uk/research/foodsystems-spf/ outputs/

Food Systems Transformation:

What's in the policy toolbox?

Policies have been described as the 'control knobs' that can be adjusted to achieve system change. Understanding which policies do, or could, influence food systems is therefore an important part of catalysing transformation.

But information about food systems policy levers tends to be fragmented across different policy sectors or disciplines, with no overarching picture of the available options and their relationships to one another. This briefing summarises the findings from a research project by the University of Hertfordshire's Food Systems & Policy Research Group, commissioned by the UKRI Transforming UK Food Systems Programme, to map 'policy levers' for food systems transformation.

The outputs of the project were: a map of policy levers organised by food supply chain segment (p4) and taxonomy of broad types of policy lever (p5). Because of the importance of considering the overall coherence of the policy approach to food systems, the project also explored the relationship between different policy levers. The findings begin to document in one place what we know about how these different food systems policy levers impact on one another, or 'interact' (p5), and where particular mixes, or 'policy packages' of levers are being used in combination (p6).



Rationale: Why is an overarching map of policy levers needed?

The project identified three key ways a map of policy levers can support food systems transformation, by facilitating a shift towards a broader, bolder and better-evidenced approach to food systems policy.

1. Understanding and applying interventions in the BROADER SYSTEM CONTEXT

Transforming food systems requires a more holistic approach to applying policy levers. Many policies targeting the food system are aimed at:

- a single activity, such as eating/consumption, or agricultural production;
- and/or a single outcome, such as health, or farmer livelihoods.

These policies are made by many different government and non-government departments and organisations.

Because of the connected nature of the food system, the application of a policy lever has potential to create intended and unintended cascading effects across the system to other activities and outcomes. Though the evidence base on these cross-system impacts is patchy, pockets of evidence highlight how intervening in the system has broader consequences beyond the specific activity or outcome targeted. Unintended consequences of the application of particular policy levers may create incoherence between activities and objectives. Implementing one solution may create problems in other ways.

Several major reports have concluded that to ensure policies are aligned to strengthen each other, or at least do not counteract each other, effective food systems policy requires a wide range of policy levers which are:

- designed through the lens of an integrated food system;
- implemented in joined-up rather than piecemeal ways;
- with increased coordination between different policy making communities (e.g. agriculture, fisheries, environment, public health);

This requires identifying what the range of relevant levers are

2. Enabling a BOLDER, MORE INNOVATIVE APPROACH, utilising the full range of policy levers available

Transforming food systems will require a bolder approach to applying levers than has historically been taken: innovative solutions to complex policy problems will need to be developed.

At the same time, we know that policymakers and practitioners, faced with an overwhelming amount of possibly-relevant information, take shortcuts including their own familiarity with issues, to identify policy solutions.

Understanding the policy landscape is also important for researchers looking to have impact from their work. But knowing which policies are relevant to their area of research, and which policymakers are responsible for them, can be challenging.

Having a clearer picture of the policy levers available for transformation can help to navigate the complex range of activities, actors, and objectives linked to food systems, by providing a bird's eye view. A common organising framework could facilitate systemic collaboration on food across policy sector and disciplinary boundaries and reduce the tendency towards tweaking the current system and proposing the same familiar policy levers ('path dependency').

3. Providing an organising framework for producing a BETTER EVIDENCE BASE on food-related policy levers

Evidence on food systems policies and how they work in practice is not always available; some levers have been more robustly evaluated than others, and there is relatively little policy lesson-sharing between countries. This means the evidence base on the most effective food systems policies is poor, or the only available evidence is on the problems, and their causes, rather than effective ways to address them.

Mapping examples of the application of different policy levers across the world can support improvements to this patchy evidence and offer an organising framework for that evidence.

A range of ways the toolbox could be utilised are outlined on p7.



From individual tools to toolboxes

By mapping out the range of policy levers which are available, in the form of a food systems transformation policy toolbox, the report aims to support would-be transformers (policymakers, researchers, other practitioners) to understand:

- The complex range of activities, actors, and objectives linked to food systems, and their relationship with policy
- The wide selection of levers which could be used to tackle a food system activity or outcome they are interested in
- The levers that different governments apply to target particular problems (given that a particular lever may be used for a many different purposes)
- That each lever is part of a toolbox, along with many others
- That the policy toolbox is in the hands of multiple policy sectors and disciplines, such as nutrition, agriculture, environment, safety
- That individual levers should not be considered in isolation, because policies can enable
 and constrain one another, meaning additional 'complimentary' policies or 'policy
 packages' may be required to maximise or mitigate those effects.



Method used to produce the map of policy levers

The project drew on the authors' previous work mapping food systems and policies; different disciplinary thinking, including political science on policy tools and policy mixes, and systems transformation scholarship; and combined these with a specially created data-set of food systems policies.

Policies are the focus of many major food systems reports to have been published in recent years, and an increasing number of projects are analysing and recommending the application of policy levers to support food systems transformation. No obvious list or source which lays out the potential toolbox as a whole could be identified, so a new inventory of policy levers was created, through an empirically-led 'bottomup' process, of identifying major reports on food systems and coding them for any levers mentioned. A snowballing approach was taken to incorporating additional levers identified during the research and review process. The data was coded according to type of lever, for example 'tax', 'community projects', 'labelling'. The categorisations used in other databases and lists were used to refine this coding.

Categorising in terms of food system activities (ie segment of the food chain) was considered of the most practical value when thinking about transforming the system (for example for use in workshops, policy labs, or policy development processes). More details on the method are provided in the main report.

The Food Systems Transformation Policy Toolbox: A map of policy levers

Figure 1 presents the headline findings of the mapping of levers at each point in the chain. There is also a category of cross-cutting levers which are applied across multiple segments, such as governance arrangements, and crosscutting framework policies (for example on food security). As discussed in the main report, while the majority of levers are what might traditionally be considered 'policies' made primarily by governments, the lists also include levers applied by the private and third sectors. These may or may not be supported by governments (for example community projects, certification schemes, or cooperatives).

One important lever, which is included under the segment Multiple/ Cross-cutting, is that of waivers and exemptions, which can be applied to particular activities in the food system (for example to small businesses, in the form of a tax waiver, or exemption from particular safety requirements).

A more granular mapping of the levers applied at each segment of the chain, alongside implemented examples drawn from the inventory created for the analysis, is presented as an Appendix to the main report.

Figure 1: Food Systems Transformation Policy Toolbox: A map of policy levers.

RESEARCH AND TECHNOLOGY

Collaboration Funding

FOOD WASTE

Collaboration
Consumer Behaviour Change Measures
Data (Collection and Application)
Fiscal Incentives
Food Waste Infrastructure Solutions
Food Waste Valorisation Initiatives
Framework Policy: Food Waste
Improving Skills/Training/Knowledge
Labelling

Rules on Food Waste Reduction Supply Chain Efficiency Initiatives Surplus Food Redistribution Programmes

EATING

Breastfeeding (Programme/Rules/Campaign) Community Projects Data (Collection and Application)

Direct Food Provision

Education

Education

Food-Based Dietary Guidelines Improving Skills/Training/Knowledge

Labelling

Rules on Promotion/Advertising
Public Information/Campaigns

Subsidies

Taxes

Technology/Innovation

FOOD SERVICE

Certification of Production Methods/Products Collaboration

Composition/Reformulation (Food)

Data (Collection and Application)

Framework Policy: Food Service Sector

Framework Policy: Food Culture

Improving Skills/Training/Knowledge Incentivising Improved Provision

Labelling

Planning

Procurement Rules/Standards

Rules on Promotion/Advertising

Rules on Composition/Reformulation

Rules/Standards on Provision (Health/Sustainability)

Standards: Safety/Quality/Traceability

Subsidies

Technology/Innovation

MULTIPLE

Finance/Investment (targeting food business impacts)

Framework Policies: Cross-Cutting:

- · Circular Economy
- Food Culture
- · National/Urban Food Strategy
- Food Security
- · Job Creation
- Obesity

Food Governance Arrangements:

- . Dodio
- · Direct Spending/Funding
- Leadership/Political Will
- · Monitoring, Mapping, Measurement
- Participation
- Transparency

General Laws impacting across the food chain:

- · Animal Welfare
- · Consumer Protection

Environment

- Food Integrity
- Labour
- Trading Practices

National Security Policies

Welfare Payments

Waivers and Exemptions (from policies)

INPUT

Certification of Production Inputs

Framework Policy: Input Use

Market Intervention: Local Input Production/Provision

Rules on Inputs

Subsidies for Inputs

Taxes on Inputs

FARMING

Agricultural Market Intervention

Certification of Production Methods/Products

Collaboration

Community Projects: Agriculture

Cooperatives (Support for)

Data (Collection and Application)

Finance/Investment/Insurance (Support for)

Framework Policy: Agricultural Production

Impact Assessment: Agriculture

Improving Skills/Training/Knowledge

Labelling

Land Ownership/Reform/Management

Rules on Natural Resource Management

Standards: Safety/Quality/Traceability

Subsidies (for production)

Short Supply Chains (Support for)

Taxes applied to (or removed from) Agricultural Production

Technology/Innovation

DISTRIBUTION AND TRANSPORT

Agricultural Market Intervention Food Purchase/Storage)
Agricultural Market Intervention (Storage/Infrastructure/

Distribution Support)

Rules on Food Packaging

Standards: Safety/Quality/Traceability

Technology/Innovation

TRADE

Export Subsidies/Taxes

Framework Policy: Export Promotion

Import Tariffs/Duties

Rules on Import/Export of Foods

Trade Agreements

Trade Facilitation Arrangements

Certification of Production Methods/Products Collaboration

Data (Collection and Application)

Direct Food Assistance (Retail Support)

Finance/Investment/Insurance (Support for)

Framework Policy: Retail Sector

Improving Skills/Training/Knowledge
Incentives for Improving Provision

Labelling Planning

RETAIL

Rules on Promotion/Advertising

Rules/Standards on Provision (Health/Sustainability)
Standards: Safety/Quality/Traceability

Technology and Innovation

PROCESSING AND MANUFACTURING

Agricultural Market Intervention (Processing Facilities, including Abattoirs)

Certification of Production Methods/Products

Collaboration
Data (Collection and Application)

Framework Policy: Processing/Manufacturing Sector

Improving Skills/Training/Knowledge

Labelling

Rules on Composition/Reformulation

Rules on Promotion/Advertising

Standards: Safety/Quality/Traceability

Technology/Innovation

Types of food policy lever

In addition to the more detailed mapping, a simplified categorisation/aggregation of the mapped levers was produced, drawing on the 'toolbox' tradition of the policy sciences. Nine broad categories of policy lever are presented in the taxonomy. A full description of each type of policy lever is provided in the main report.



FRAMEWORK POLICIES

Levers aimed at coalescing action in the food system around a particular goal



DIRECT FOOD PROVISION

Levers which provide food, or the means to purchase food, directly to consumers



CERTIFICATION AND STANDARDS

Levers to document and promote the processes of food production



INFORMATION/ COMMUNICATION

Levers to share information with or between different actors in the food system



GOVERNANCE/ ORGANISATION

Levers around processes and structures



REGULATORY

Levers aimed at controlling a foodsupply chain activity or process



ECONOMIC/ FINANCIAL

Fiscal levers aimed at sending signals to the markets



MARKET INTERVENTION

Levers aimed at supporting agri-food markets – including during emergencies impacting on the food supply chain – and how they are organised



TECHNOLOGY/INNOVATION

Levers aimed at the application technology or other innovative measures to food production or consumption, or both

Interactions between policy levers

A natural extension of considering food systems policy levers as part of a broader 'toolbox' is understanding how the different tools work in combination. Though often not explicitly framed as such, food systems reports offer numerous examples of where particular levers are linked to other system activities, or levers. The project collated these into a register of policy 'interactions'.

Examples of 'interactions' include when a policy has negative unintended consequences, or the efficacy of a lever is undermined or 'dampened' by other levers or factors; or several levers are interdependent. These interactions may necessitate additional levers, 'complimentary policies' or a different governance approach to improve effectiveness or negate unintended consequences in other parts of the system. Examples of potential 'dampening effects' and therefore potential barriers to transformative impact identified included:

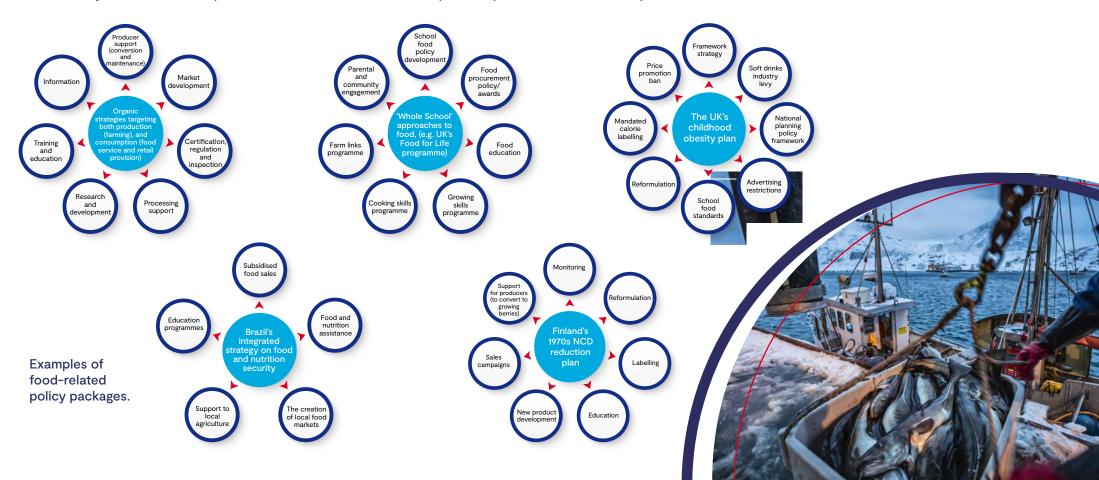
- the need for agricultural programmes to be accompanied by levers targeting skills/training/ knowledge in farmers, to ensure there is buy-in and effective implementation by those farmers;
- supporting Food-Based Dietary Guidelines with additional levers to improve food environments and reduce the potential dampening effects of commercial promotion of unhealthy foods;
- supporting consumption-based food taxes with levers to reduce the perceived and actual impacts on low-income communities, including the use of public information, labelling or subsidies.

From individual tools to toolboxes

Along with understanding and addressing interactions between particular levers, another fruitful avenue for exploration is how levers might be grouped together. The importance of considering policy tools as part of a mix, and the idea of designing 'clusters', 'bundles' or – the term used in this report – 'policy packages', has been a focus in the policy sciences for some time, and been tentatively applied in the context of food systems.

The application of these insights around policy packages has the potential to advance a 'food systems approach' to policies, by targeting a supportive combination which maximises coherence of the mix. Doing this would require an evidence base on policy interactions, and on where such packages have been implemented in relation to food, both previously and as part of the ongoing process of evaluating policies now.

The project findings highlight several examples of policy packages targeting food systems change – though they may not necessarily have been conceptualised as such. Additional examples are provided in the main report.



How to use the toolbox

The policy lever map, and broader taxonomy, offer a common organising framework, which others can use to support cross-system conversations, research and action. The table shows the ways in which an organising framework might be helpful.



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Application	Details
Understanding the Range of Levers which can be applied to Food Systems	Provides overview of policy levers relevant to food systems Provides examples of application of those levers from a range of countries
Showcasing Policy Possibilities, Extending and Developing Policy Design	Highlights how levers are used to tackle different food system activities or outcomes. Could encourage: • re-deployment or extension of existing levers towards new activities or outcomes • design of completely new policy levers, using a 'pick and mix' approach to best bits of what has been tried
Benchmarking a Country/City's Food- Related Policy Levers	Used in conjunction with other mapping – for example an inventory of a particular country or city's food-related policies – can identify how much of toolbox is utilised in the current policy approach (which levers are already being wielded, and what is missing)
Comparing Policy Approach Between Countries/Cities	Supports comparison of policy approaches to food systems between countries and cities
Identifying and Addressing Interactions	Offers a reference list when selecting policy levers (to introduce or recommend), from which to identify potential links to existing levers, and address coherence
Identifying Coherent 'Policy Packages'	Could be used to identify a package of policy levers which could be applied in combination to improve coherence and transformative potential
Researching Policy Levers	Supports further investigation into particular levers – their relevance to system activities and outcomes, policy interactions, packaging potential, and transformative potential
Facilitating Policy Lesson Drawing	Provides inspiration and organising framework for policy learning between cities and countries

The £47.5 million Transforming the UK Food System for Healthy People and a Healthy Environment SPF Programme is delivered by UKRI, in partnership with the Global Food Security Programme, BBSRC, ESRC, MRC, NERC, Defra, DHSC, PHE, Innovate UK and FSA. It aims to fundamentally transform the UK food system by placing healthy people and a healthy natural environment at its centre, addressing questions around what we should eat, produce and manufacture and what we should import, taking into account the complex interactions between health, environment and socioeconomic factors. By co-designing research and training across disciplines and stakeholders, and joining up healthy and accessible consumption with sustainable food production and supply, this Programme will deliver coherent evidence to enable concerted action from policy, business and civil society.

