



# Localising value chains and food system resilience

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## Background, objectives and methods

The recent outbreak of the COVID-19 pandemic highlighted critical vulnerabilities of global food systems. Can localised and shorter food chains where food is produced and consumed near where it is produced increase food system resilience?

This study aims to unpack the real goals and effects from localisation policies. We developed a simple analysis framework, consisting five of steps:

- Step-1: Understanding the context
- Step-2: Understanding the scope
- Step-3: Understanding the vulnerabilities
- Step-4: Understanding potential impact on food system outcomes
- Step-5: *Understanding the trade-offs*

We applied this framework on the case of localising **rice value chain in West-Africa** – where localisation of rice chains is seen as a way to reduce dependency on rice imports from Asia.

## Results

The localisation of West-African rice value chain affects various food system activities:

- Expansion of smallholder producers' production, Potential reduction in rice consumption due to import tariffs,
- Less vulnerability to global shocks (in the wake of a global financial crisis, there would still be stable local availability of rice), but more vulnerability to local shocks such as drought, pests, or domestic political unrest,
- Mixed impact of localisation on food system outcomes: Consumers might pay higher prices for local rice compared to imported rice, but smallholder producers' and midstream businesses' income levels will improve due to increased economic activity.



An overview of the three types of food system outcomes with arrows indicating the positive (green), neutral (yellow) or negative (orange) impacts of localisation. For example, it could be the case that economic livelihoods of different actor groups are negatively impacted by localisation, but in contrast, localisation might contribute to more sustainable outcomes with less pollution due to reduced international transportation.

Food system activities	Step 2: Impact on food system activities		Step 3a: Assessment of change in vulnerability to global shocks				Step 3b: Assessment of change in vulnerability to local shocks				
	Please specify and define the actors for this case	Definition of the relevant actors in the context of the case	Q2.1	Q3.1	Q3.2	Q3.3	Q3.4	Q3.5	Q3.6	Q3.7	Q3.8
Agricultural production Ranging from smallholder farmers to larger corporations											
Mid-stream actors Processors, storage providers, traders, transporters, input suppliers, etc.											
Food provision Retailers, restaurants, supermarkets, kiosks, food vendors, etc.											
Consumption											

Food system activities	Step 4: Impact assessment on food system outcomes																
	1. Economic livelihoods				2. Food and nutrition security				3. Environment								
Please specify and define the actors for this case	Will localization affect the employment rates in the different actor categories, and if so, how?	Why? Briefly explain	Will the localization affect income or profit rates in the different actor categories, and if so, how?	Why? Briefly explain	Will the localization affect the supply of food products and services from following actors?	Why? Briefly explain	Will the localization affect the price of food products and services supplied by the following actors?	Why? Briefly explain	Will the localization increase the food access of consumers and other actor groups?	Why? Briefly explain	Will the localization affect the food affordability for consumers?	Why? Briefly explain	Will the localization affect the overall sustainability of the value chain (e.g. in terms of carbon emissions)?	Why? Briefly explain	Will the localization affect the biodiversity at the local level?	Why? Briefly explain	
Definition of the relevant actors in the context of the case	Yes, it will increase; Ambiguous; No, it will decrease; No change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	Yes, it will increase; Ambiguous; no it will decrease; no change	Describe and link with the actors in Q2.1	
Agricultural production Ranging from smallholder farmers to larger corporations	Q2.1	Q4.1	Q4.2	Q4.3	Q4.4	Q4.5	Q4.6	Q4.7	Q4.8	Q4.9	Q4.10	Q4.11	Q4.12	Q4.13	Q4.14	Q4.15	Q4.16
Mid-stream actors Processors, storage providers, traders, transporters, input suppliers, etc.																	
Food provision Retailers, restaurants, supermarkets, kiosks, food vendors, etc.																	
Consumption																	

Assessment tool for understanding scope and vulnerabilities, and impact of localisation on food system outcomes. It provides a simple assessment tool to describe how localisation might affect the vulnerability of different actors/activities in relation to different types of shocks and how localisation might affect the different food system outcomes based on a few indicators.

## What's next?

- Applying the tool to different cases and implementing the tool in an iterative way through debating facilitating a debate among different interest groups.
- Future research on the net effects of the localisation on the food system outcomes and vulnerabilities at an aggregate level.
- Future research should be conducted to understand how one can combine the effects of localisation on different actors and food system outcomes.

## Questions for audience

- How can you use this localisation framework designed in this study in your researcher?
- Do you have any cases of localisation of food value chains in your work and research? Does this tool help you to identify the trade-offs resulted from localisation?



## Key publications

- Bakker, J. D., Gonne Beekman, C. B. de Steenhuijsen Piters, Haki Pamuk, and S. A. Wigboldus. Localising value chains and food system resilience: A systematic exploration. Wageningen University & Research, 2021.