

Sustainable food and security

-A framework for analysis

STEP 1: Conceptualising and defining food security [1]

What is to be secured? Competing definitions provide different focus points

Negative definition

Freedom from...

Emphasis (absence of) threats

Example: Low price volatility Positive definition

Freedom to...

Emphasis capabilities

Example: Self sufficiency

Security for whom? - Scales

Global

National

Local

Is the food system a security subject, object or both?

Security Object: Something that should be secured, e.g. "affordable notorious food at all times"

Security Subject: Something that enhances insecurity, e.g. "control of food supplies as a foreign policy tool"

STEP 2: Review sustainability practices impacts on food systems [2]

Sustainable intensification
Agro ecological farming
Reduce waste
Dietary change

> Impacts on

Inputs (e.g. land, raw materials, labour)
Production (e.g. yields)
Distribution networks
Consumption
Dependencies within the supply chain

STEP 3: Analyse how impacts can affect different aspects of security [3]

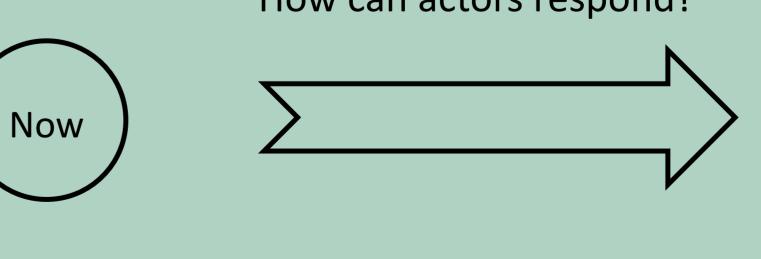
The choice of definition and conceptualisation will affect if a 'sustainability practice' is perceived as preferable or not for food security. How do preferences differ within and among societies? How can they evolve?

Intensification -> low production cost but reinforce existing dependencies (e.g. geographical bottlenecks and market concentration)

Agro ecological farming -> higher food production cost

Waste reduction and dietary change -> reduce food expenses

How is security valued in the future?
What can happen along the way?
How can actors respond?



Current situation

Multiple futures

Notes and references

[1] This step draws from five sets of literature, general security studies, human security, food security, energy security and risk research; see e.g. Boholm, Å., Corvellec, H., 2011. A relational theory of risk. Journal of Risk Research 14, 175-190; Hoogensen Gjørv, G., 2012. Security by any other name: negative security, positive security, and a multi-actor security approach. Review of International Studies 38, 835-859.; Pasqualetti, M.J., Sovacool, B.K., 2012. The importance of scale to energy security. Journal of Integrative Environmental Sciences 9, 167-180; UNDP, 1994. Human Development Report. Oxford/New York.

[3] This step draws on literature on policy coherence, see e.g. Nilsson, M., Chisholm, E., Griggs, D., Howden-Chapman, P., McCollum, D., Messerli, P., Neumann, B., Stevance, A.-S., Visbeck, M., Stafford-Smith, M., 2018. Mapping interactions between the sustainable development goals: lessons learned and ways forward. Sustainability Science 13, 1489-1503. 10.1007/s11625-018-0604-z.

[2] This step was conducted as a literature survey.