# To what extent are the Italian regional food systems vulnerable to climate shocks?

*An assessment framework to detect critical products*

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# Motivations

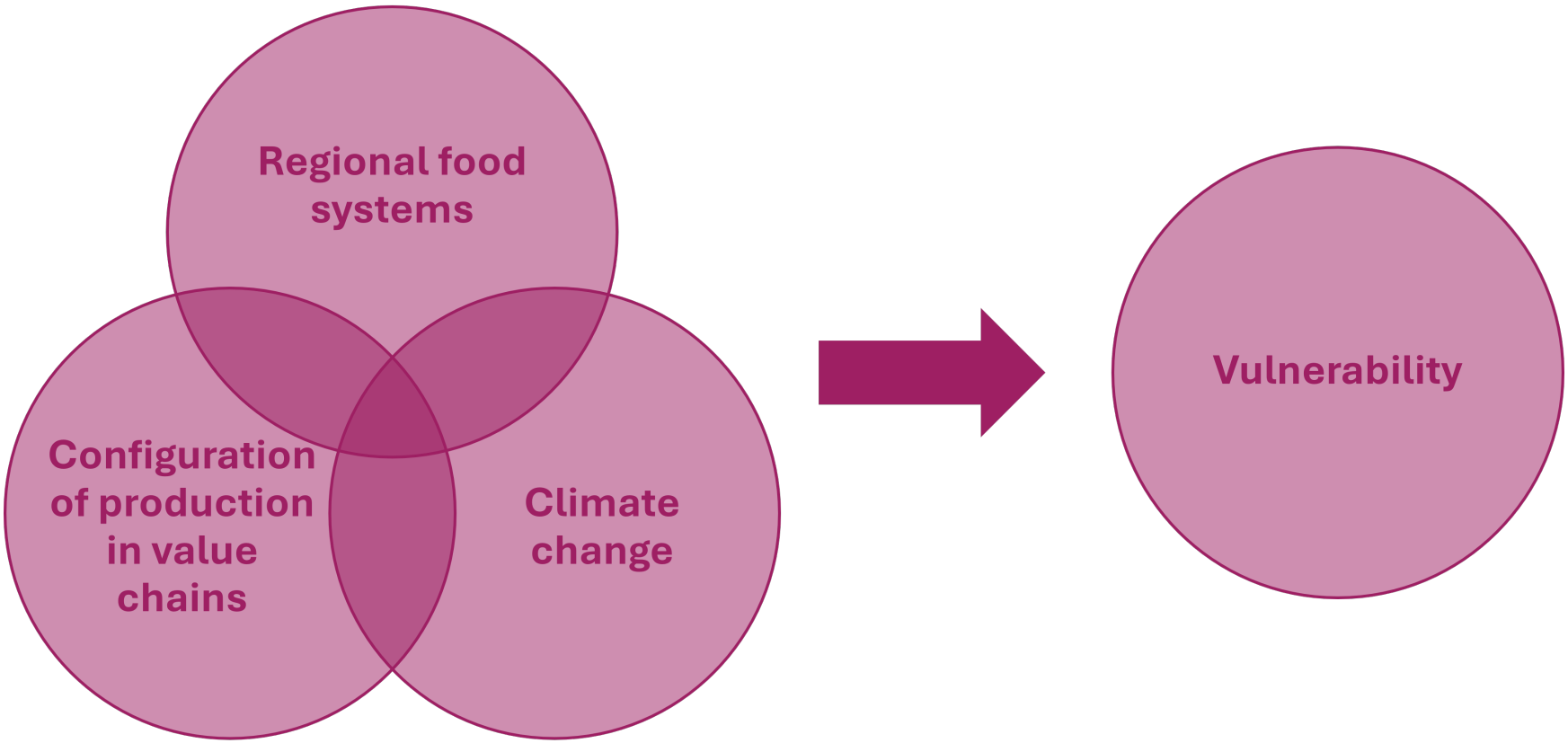
Climate shocks are expected to dramatically affect agriculture and food production in the very next years (e.g., FAO, 2021)

Input-output based models are a natural framework to study such effects due to the network based structure of nowadays economies

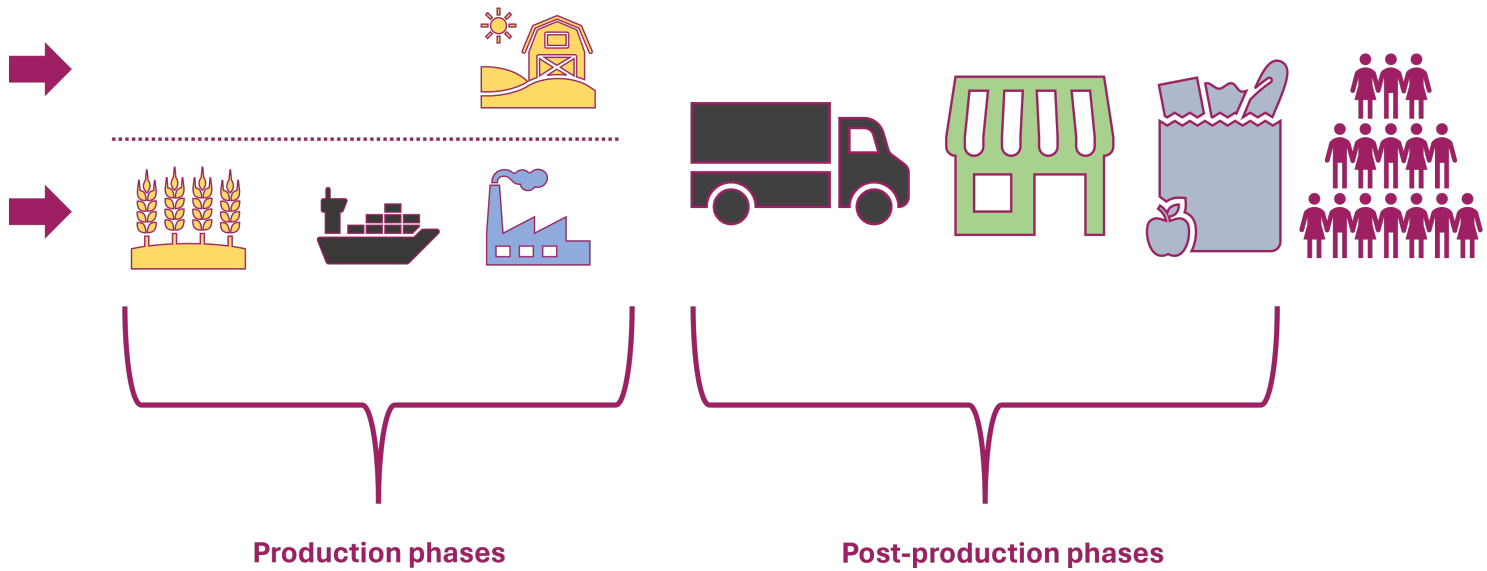
However, classic, mainstream and sequential approaches to modelling suffer from different (sometimes overlapped) issues

*!* level of aggregation of inter-sector/inter-territories relations, hypotheses about input substitutability, geographical lenses used to examine phenomena, lack of attention to firm heterogeneity and market structures, the timing of economic production, etc..

# The research project



# The configuration of food value chain(s)

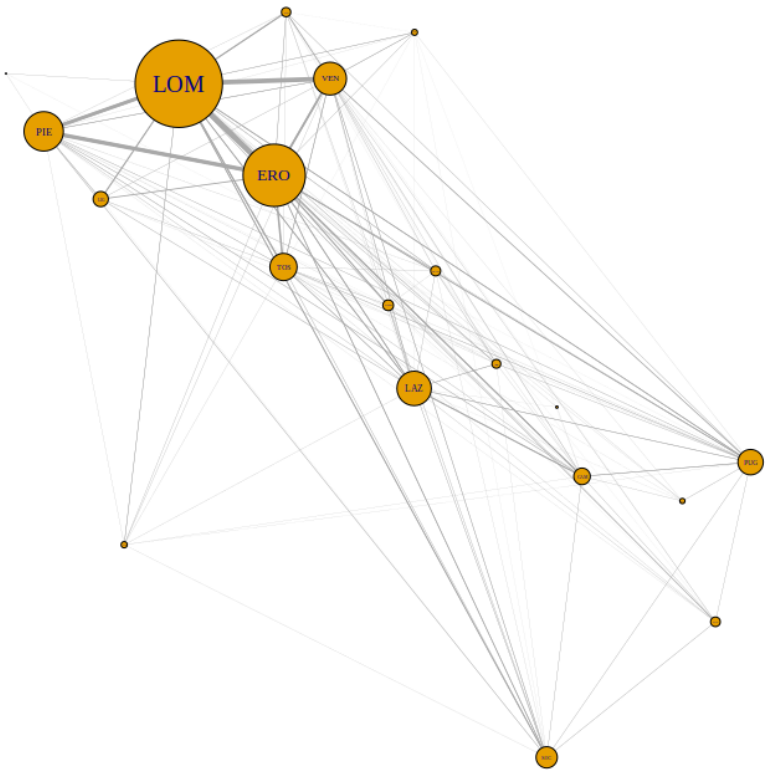



Production is spatially dispersed

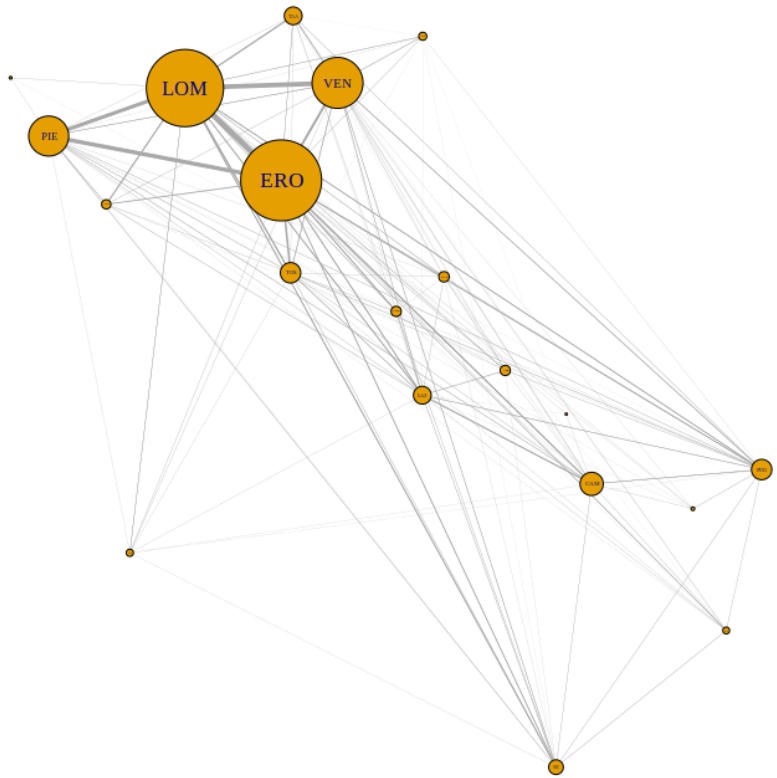
Industries (more precisely, firms) are in charge of production within the network

Products are the items which are traded and some of them are critical

# The interregional network serving national food demand




Out-degree




In-degree