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Role of small farms in regional food availability: insights from 25 regions in Europe

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Summary

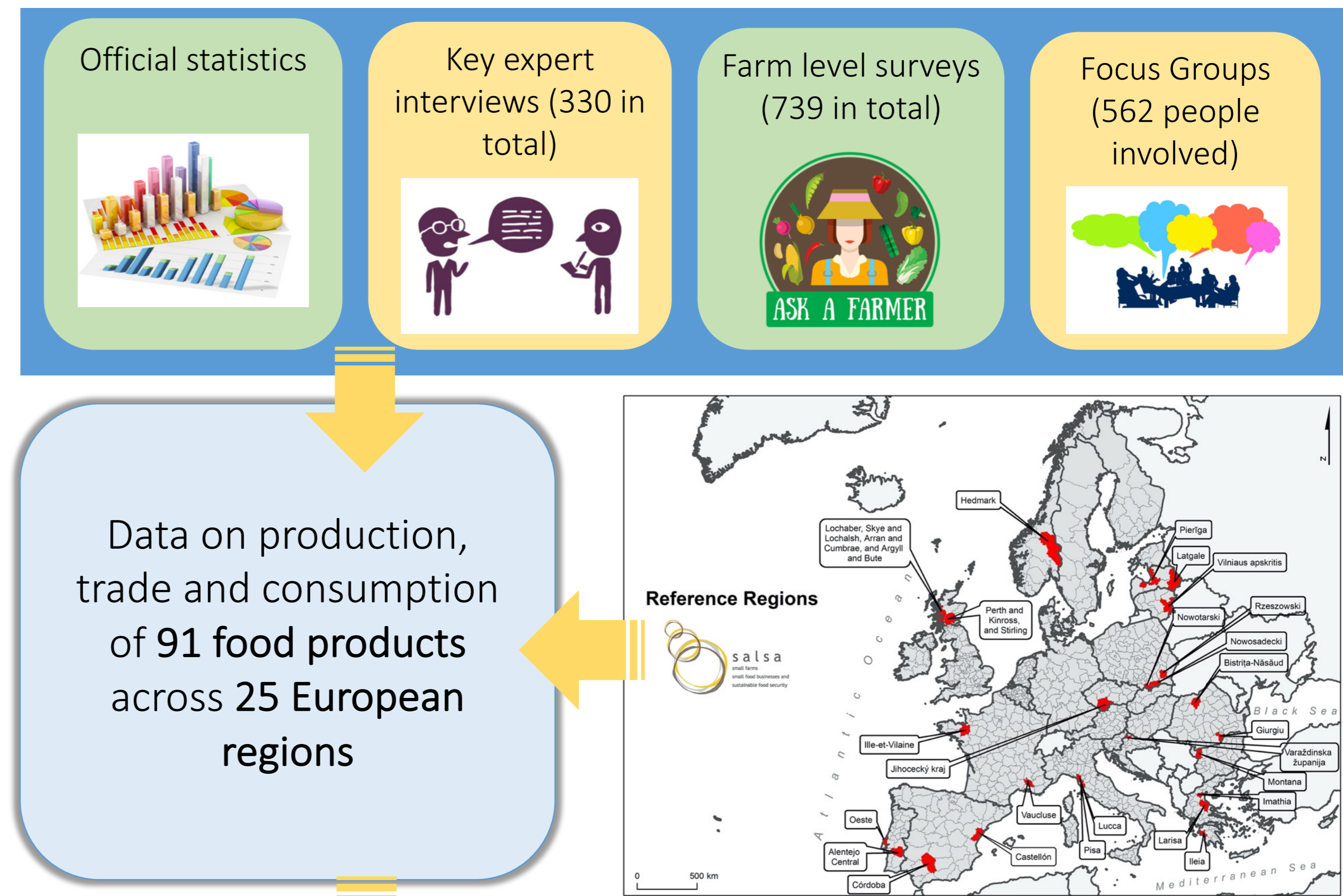
The importance of small farms is well established and recognized in developing countries, but far less is known about their role in Europe, where agriculture is largely industrialized.

We present evidence from a comparative analysis of 15 European countries to assess the contribution of small farms to regional food production and availability, across geographies and products.

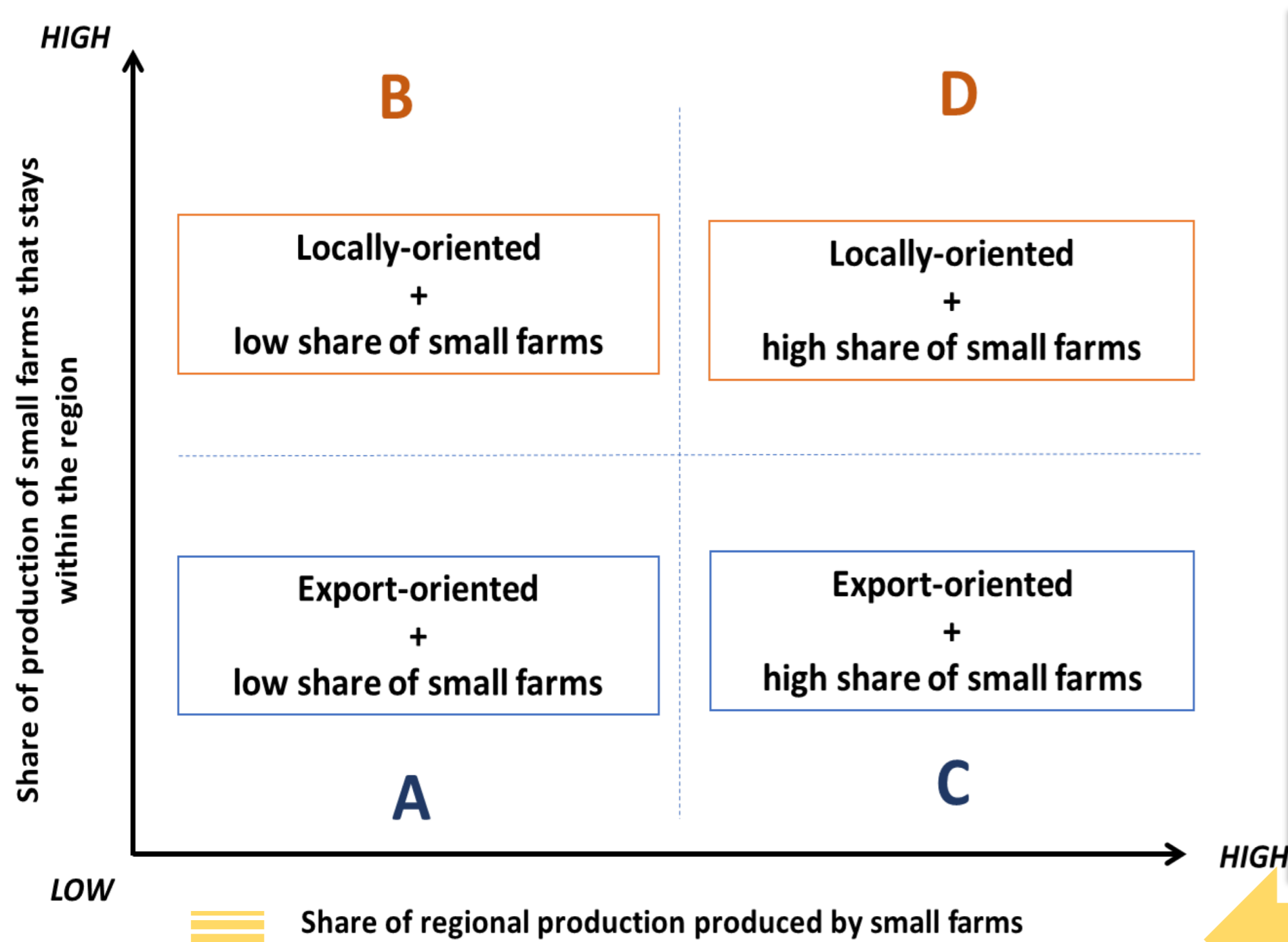
Our results suggest that the contribution of small farms to regional production is closely related to the relative abundance of small farms in the agricultural landscape, while their contribution to regional food availability is driven by structure of specific supply chains and the market linkages available to small farms, and in particular the degree of self-provisioning and direct sales to consumers.



Methodology

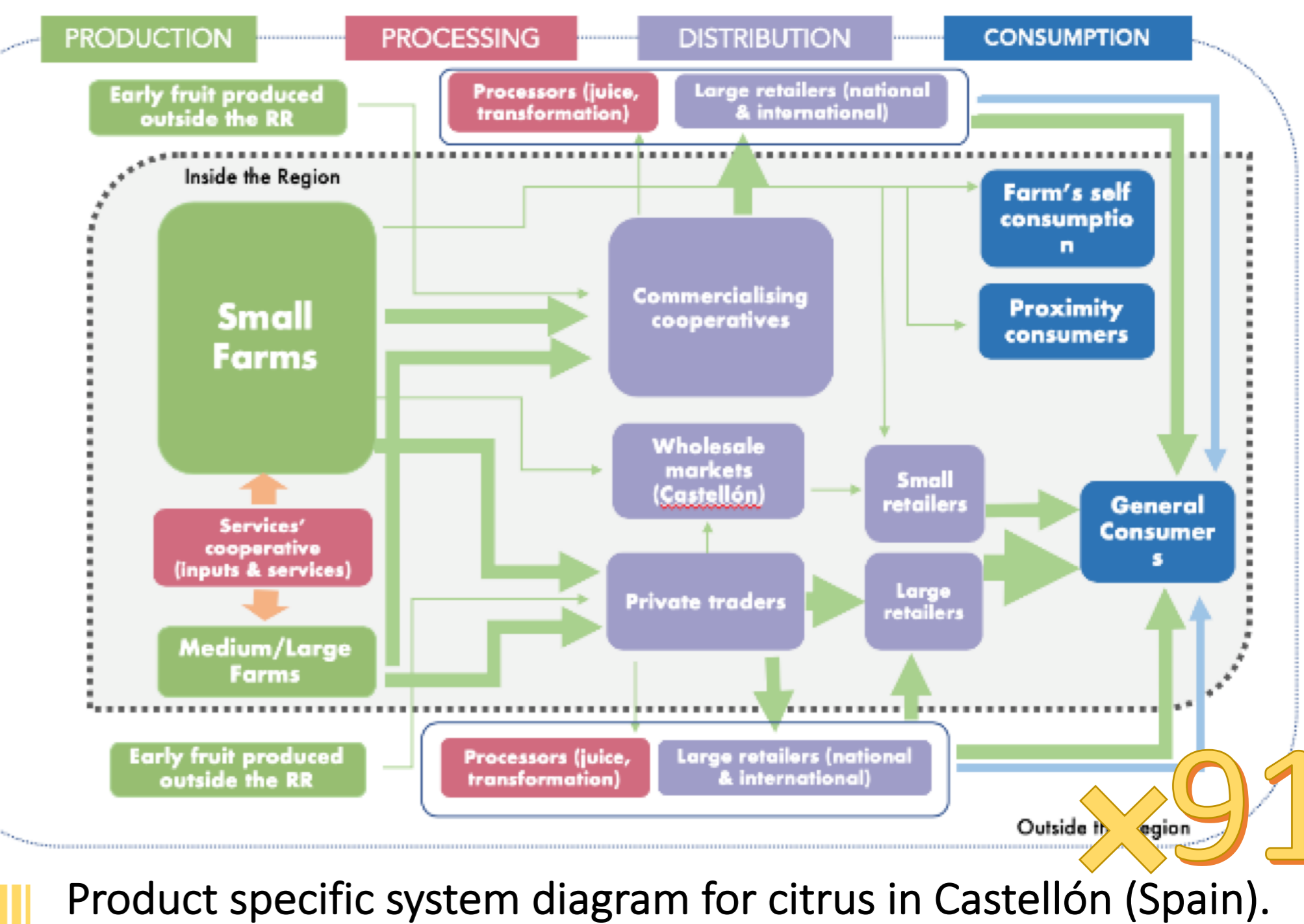


Results

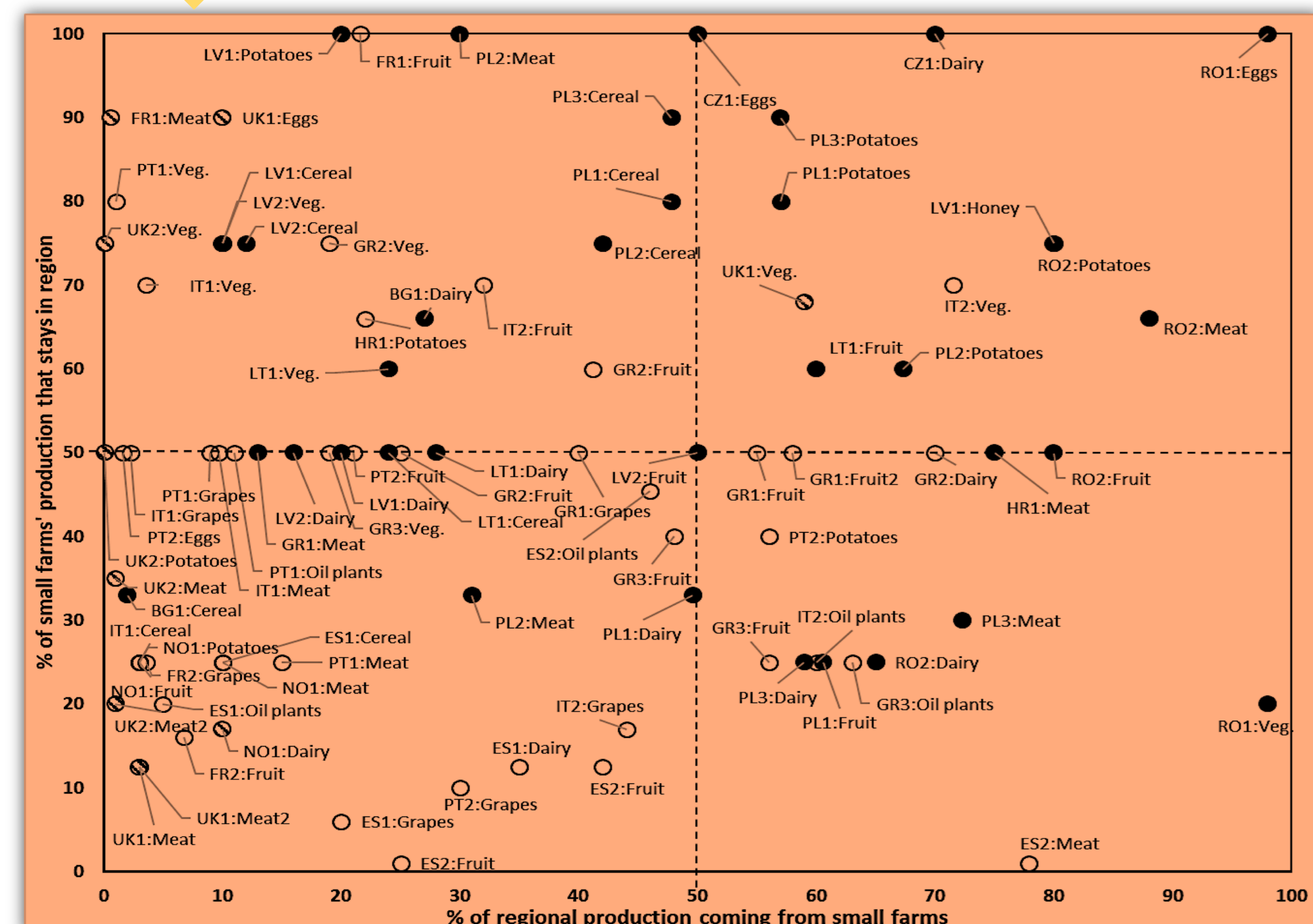


This information was used to develop product-specific systems maps which were coded and systematised.

We then used a Random Forest algorithm to establish which system variables were more likely to explain variation along two dimensions: the contribution of small farms to regional production (i.e. proportion of regional production coming from small farms) and their contribution to regional food availability (i.e. proportion of their production that is consumed within the region).



Product specific system diagram for citrus in Castellón (Spain).



Product food system distribution across the four food system types. Dots are colour-coded to represent region: white dots = Southern Europe; black dots = Eastern Europe; dots with diagonal stripes = Northern Europe. See table 1 for region codes. (Source: Data codified from the 91 product specific system maps).

Key messages

Contributions to production:

- Highest in regions where small farms are a more dominant part of the agricultural landscape;
- In Southern Europe, product systems are mostly export-oriented
- In Northern Europe, we found both export oriented and locally oriented SF.
- In Eastern Europe SF seem to follow different marketing paths and strategies compared with larger farms. Small farms within these systems play more important roles in terms of regional food production.

Contributions to availability:

The importance of small farms is closely related with non-market channels. In food systems dominated by supermarkets, such as those in Europe, some small farms seek alternative commercialization channels and/or rely on their own production to satisfy their consumption needs. This, in turn, means that the degree to which the small farms are able to contribute to regional food availability hinges on how much of their production is consumed in the household or sold (or given as gifts) directly to consumers.

For full results please see: Rivera, et al., (2020) Assessing the role of small farms in regional food systems in Europe: evidence from a comparative study. *Global Food Security*, 26, 100417.