LCA on virtual water and embodied energy in food consumption

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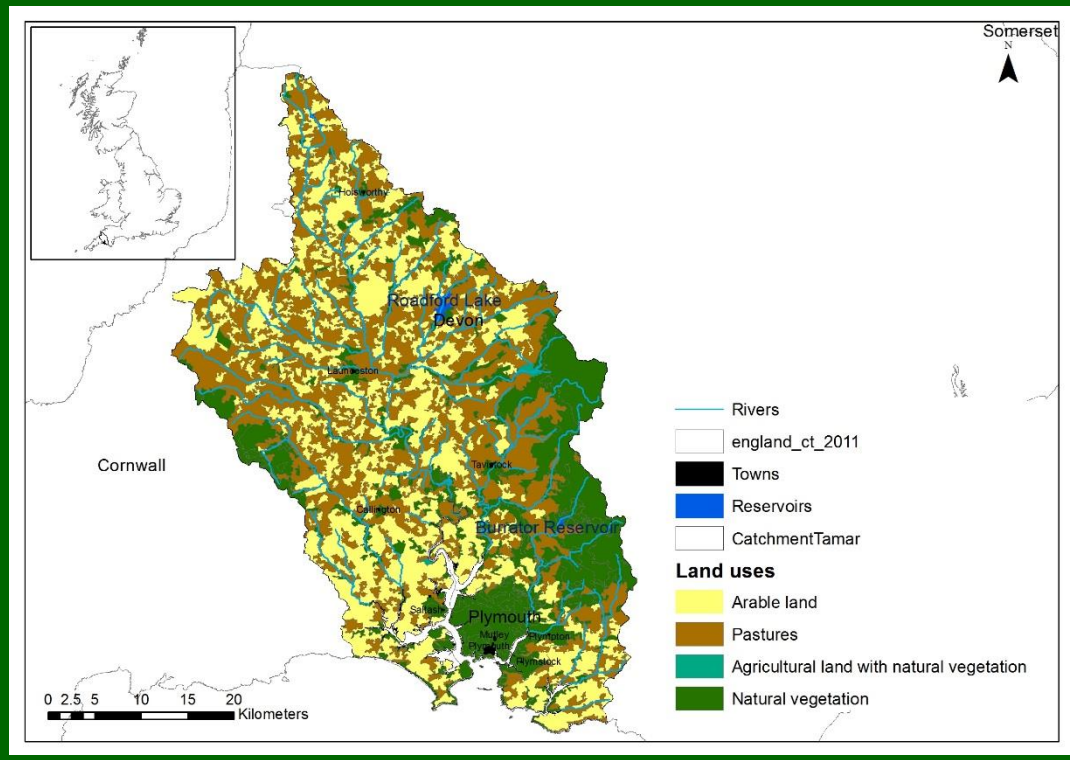
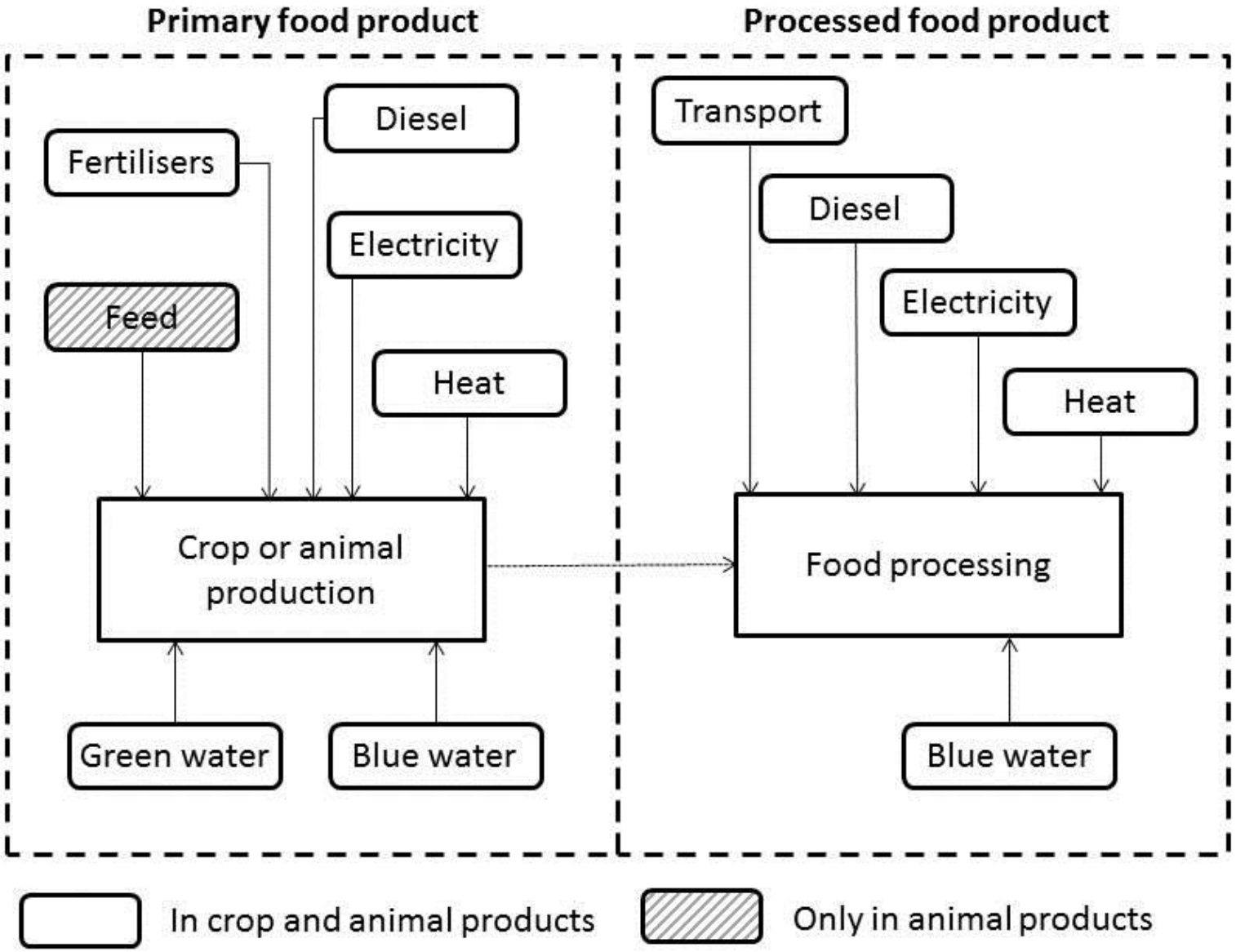
Our aim in the Tamar catchment

- To evaluate the upstream virtual water and embodied energy in food consumption in the Tamar catchment, distinguishing between domestic production and imports origin.
- To evaluate key inputs, including virtual nutrients and animal feed, when tracking supply chain of food products.



Our system boundaries for the selected food products

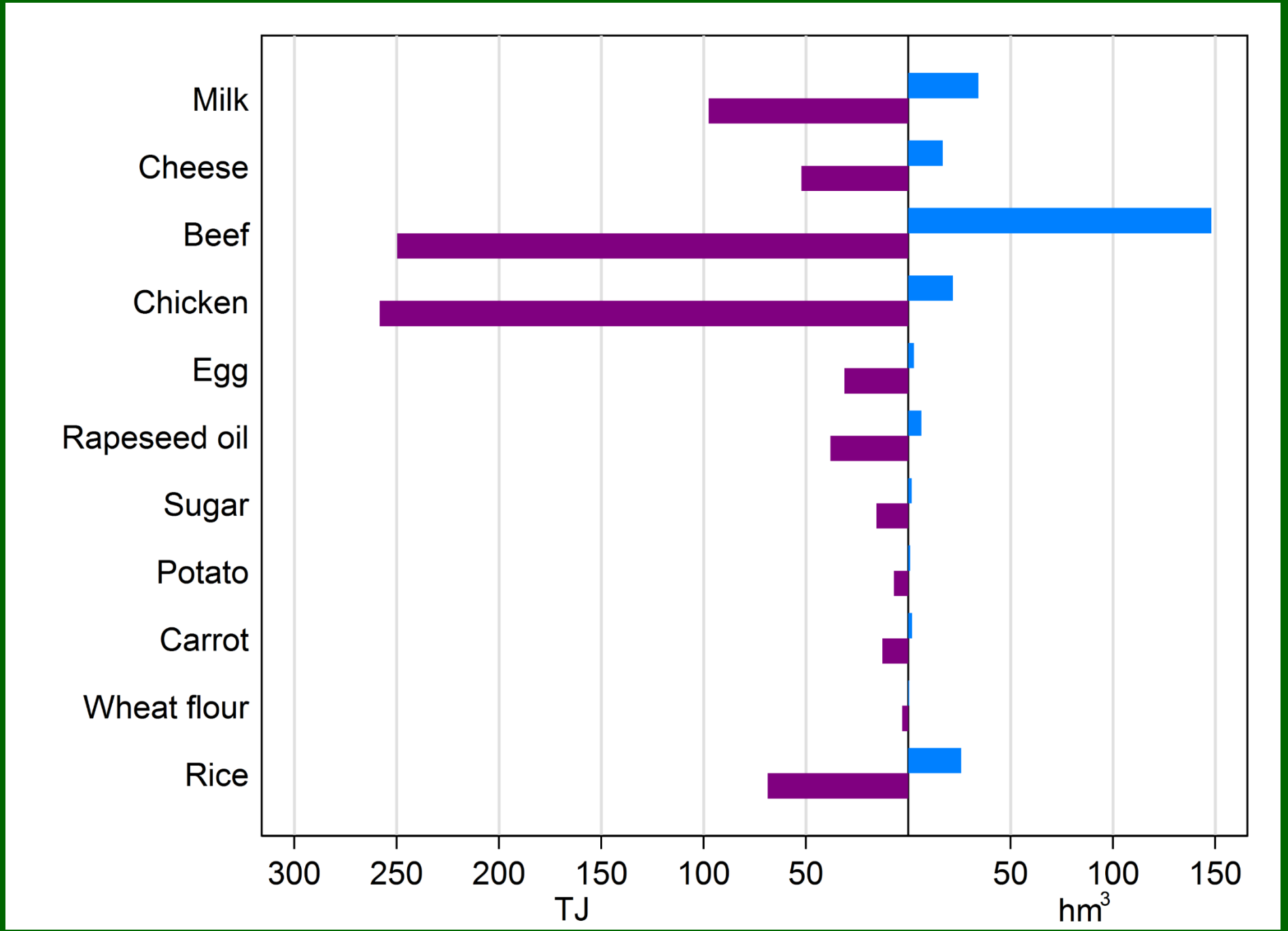


Embodied energy

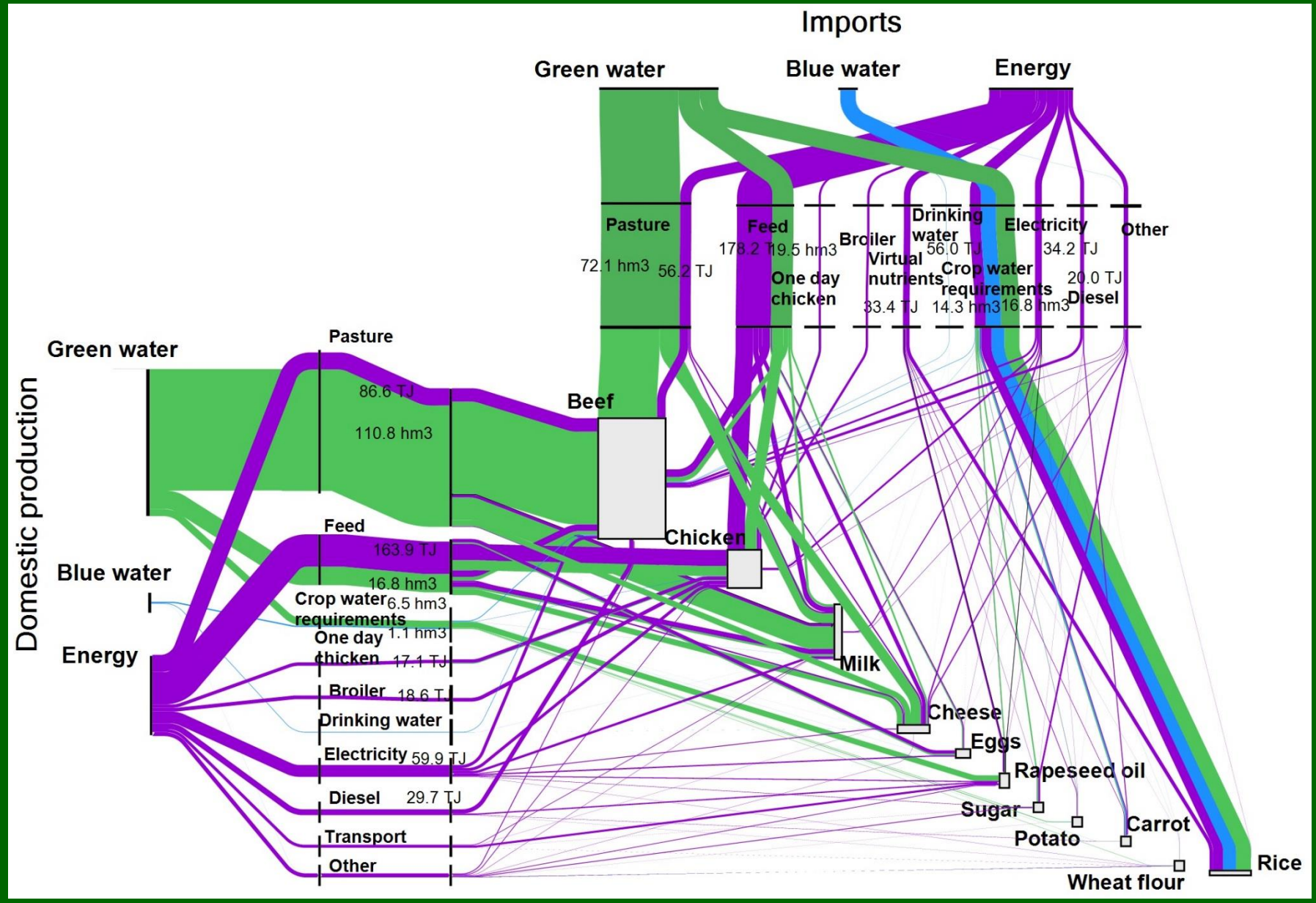
and

virtual water

(blue water + green water)



Resources embedded by food product and source of production



Key messages

- Catchment-scale LCA of food based on diets and available LCA inventory databases
- Significant shares of embodied energy and virtual water in food found to be imported
- Water and energy hotspots highlight potential risks and trade-offs in food life cycle
- Currently available LCA databases offer potential for FEW nexus assessments