

## SuMSO Competency Questions

We did not formulate competency questions (CQs) while creating the SuMSO Ontological Module (SuMSO OM). Nevertheless, we consider it essential to undertake this action to extend this core module. Here, we provide a tentative and non-exhaustive list of possible CQs that SuMSO may answer. These CQs require revision and to be further detailed. This list aims to simply provide a starting basis for discussion.

- What are the meat system components according to a certain perspective?
- What are the meat systems stakeholders according to a certain perspective?
- What are the activities of a meat system?
- What (sub-)activities are part of a meat system activity?
- Who is involved in a certain meat system activity?
- Who are the actors of a certain meat supply chain?
- What are the activities part of a meat supply chain?
- What are the inputs or the outputs of a certain meat system activity?
- What is the spatial region of a meat system?
- What are the interactions among meat system components?
- What are the scales and levels used to address the meat system of interest according to a certain perspective?
- What are the interactions part of a certain activity?
- What is considered worthy of value according to a certain perspective?
- What is the information associated with a certain perspective or indicator?
- What are the indicators of a certain meat system?
- What are the properties of a meat system?
- What is the history of a meat system?
- What is involved in the development of a meat system?
- What does a meat system component interact with?
- What are the meat system agents?
- What are the meat system agents in a certain activity or interaction?
- What activity(ies) precede/follow/happen simultaneously with a certain meat system activity?
- How does a meat supply chain activity or meat system activity contribute to meat system wellbeing (and components), vulnerability, resilience, and/or stability?
- How is a meat supply chain activity or meat system activity in relation to a certain process (like bio-geophysical, social, etc.)?
- What are the available perspectives?

- What are the impact areas considered for a certain meat system?
- What components and agents pertain to a certain meat system environment (per se and with regard to a certain activity)?
- Where/which are the boundaries of the meat system of interest?
- What certification regards a certain meat system aspect? In relation to a certain perspective?
- How does a certain certification measure a certain value?
- What subsidy and/or economic premium correspond to meeting the criteria of a certain certification?
- What are the standards, certifications, and claims available? What do they refer to/certify?
- What are the communities that are part of a certain meat system?
- What material has a role of product, byproduct, or waste according to a certain perspective?
- (Some CQs about types of relations existing among entities are required.)