

Memo of meeting between ‘MAGIC’ staff and staff from DG Agri on 31st October 2018

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Purpose of meeting: To debate the nature of the linkages between competitiveness and delivery of public good by EU farming and how this can be influenced by the CAP, informed by a fresh perspective on existing data; for the MAGIC team to receive feedback on their work, and shape the next steps of their research.

Information presented by researchers¹. The researchers presented a brief precis of the MAGIC project (<https://magic-nexus.eu/>), which responds to a call to work on the ‘Water-Energy-Food-(Environment) Nexus’. The nexus concept emphasises the interconnections between all environmental resources and societal goals. Part of MAGIC focuses on how EU policies are linked together and to climate and sustainability goals. Two phases are being undertaken – the first looking at how individual policies link to climate and sustainability goals and the second from 2019 focusing on interlinkages. In both phases an iterative process of ‘Quantitative Story-Telling (QST)’ is used to identify and discuss ‘narratives’ in use (i.e. the questions, assumptions and ideas underpinning policy positions and alternatives) followed by a ‘social metabolism’ analysis to test the robustness of these narratives, the results of which are then used to stimulate further reflection. In 2017 a process of extracting and selecting narratives related to the CAP was undertaken (see box right)²; in 2018 the social metabolism-based analysis has been carried out; this meeting was convened to share and discuss its early results.

The results of social metabolism-based analysis try to be diagnostic in characterising the state of the system in terms of extents (where significance is size) or intensities (where significance is the degree of concentration e.g. per ha). Productivity³ was expressed per ha or per hour, comparing farmtypes between counties or the mix of farmtypes within individual countries. The graphs also highlighted how CAP spending was distributed among the entities. Other graphs focused on inputs from the technosphere to the environment (e.g. fertilisers) or impacts on the environment (e.g. GHG emissions or soil erosion).

“CAP aims to ensure European agricultural competitiveness in the world market and also aims to deliver public goods such as biodiversity conservation, water quality and climate change mitigation. These aims are in opposition. ‘Narrative’ shaping MAGIC CAP analyses

Topics discussed:

- Questions about social metabolism analysis (and MuSIASEM) gave useful pointers for communication about the method, e.g. enquiring about how it deals with causation and the pros and cons versus other approaches.
- Advice on using and interpreting the datasets (e.g. FADN) was especially helpful in highlighting areas where the analysis could be made more robust and where the choices of metrics could have limitations, particularly in making inter country comparisons.
- The desirability of looking at distributions rather than mean values we highlighted, and the team were encouraged to engage with FADN staff to access more disaggregated datasets and to seek their advice on the level of reliability that can be assumed for the newest variables such as N, P and K rates. The turnaround for such requests was noted as being potentially much faster than anticipated by the research team.
- Participants noted the potential to move beyond the standard farmtypes (e.g. potentially grouping by intensity of use). They also noted that the social metabolism analysis had the potential to be interesting in comparing the pros and cons of organic versus inorganic production systems.
- There was a fruitful discussion of the degree to which the ‘extent’ aspects of the analysis had utility. There was agreement that this wasn’t self-evident, and thus needs to be better communicated, but also that extents can highlight qualitatively different kinds of issues. For example, when pressures are caused by the outcome of moderate emissions rates across wide areas (e.g. emissions to air) rather than localised impacts (e.g. on water quality) of intensive emissions. These may be challenging issues to address.

¹ See also a pdf of the slides used with annotations, attached to this memo

² Other instruments considered by other teams in MAGIC were Natura 2000, Water Framework Directive, the Energy Efficiency Directive and the Circular Economy strategy.

³ With a series of useful caveats and advice for interpretations provided by attendees.

- CAP post 2020 proposals are explicitly designed to support achieving some of the SDGs (as set out in an annex to the Impact Assessment). There are new links, to be considered, for example with Health that are potentially as important as the longstanding concern of linking with the environment.

Outputs and next steps: This memo is the first output of the meeting. At the end of November 2018 we will be writing a project deliverable based on our analysis, and this will be strongly shaped by the advice and insights provided by the participants. The MAGIC team will also make use of inputs in the next phase of MAGIC looking at policy interactions in the WEF nexus conducted with other members of the MAGIC consortium. We hope that it will be possible to continue to interact with the DG Agri participants in this meeting and other interested colleagues as the project moves forward.

If anyone would like to discuss any aspect of this work further, please contact Keith.Matthews@hutton.ac.uk