Report of

Product Environmental Footprint (PEF) of agricultural products –workshop

on 19th September 2018 in Helsinki

Short summary of the discussion in the workshop:

1. The development of guidelines for Life Cycle Assessment (LCA) is always about finding the right balance between being enough accurate to make differences visible and in the same time to make guidelines applicable and not too heavy to hinder implementation.
2. The PEF initiative should create incentives for actors of the agri-food chain to make data available. Data ownership issues need to be tackled. It is a great challenge to get the necessary change in the mindset of actors to share of data openly.
3. There is a need for regional data on agricultural practices, farm data, feed production data and regional parameters for modelling.
4. Consumer communication needs to be simple. PEF results as such should support communication B2B, which in turn can be used to tailor fact-based but simplified consumer communication.

About the workshop

The aim of the workshop was to discuss challenges in the data availability in Nordic countries for agricultural and animal production, data provisioning and management, and also modelling of the agricultural stage. The outcome of the workshop will be used to give common Nordic feedback to the European Commission on methodologies to be used to assess the environmental footprint of agricultural products.

The workshop was organized by a group of Nordic LCA researchers. The aims of the group is to comment and develop EC's PEF initiative from a Nordic perspective and to promote the initiative in the Nordic countries for agri-food sector. Members of the group are:

- Hannele Pulkkinen, Merja Saarinen, LUKE
- John E. Hermansen, Troels Kristensen, Arhus University, Denmark
- Ulf Sonesson and Anna Woodhouse, RISE, Sweden
- Hanne Møller and Erik Svanes, Ostfold Research, Norway

There were over 40 participants at the workshop, from both industry, retail and authorities, although some left after the keynotes before the group discussions.

Statement from the discussion

LCA modelling

Regional differences inside Europe and even among Nordic countries, regarding for example different management systems, water use, and temperature, should be taken into account, and thus, regional adaptations are needed.

Modelling is a big challenge of the PEF-initiative. The challenge is to find the right balance between preciseness of models possibly causing overwhelming data collection and too simple models not reflecting the reality nor taking into account important factors.

Lack of sufficient impact indicators were identified as one of the most challenging part of the modelling. Particularly biodiversity and modelling of soil carbon related to climate impact assessment were emphasized as important impact indicators that vary between different farming practices.

The participants acknowledged that including soil carbon changes in PEF is important and will give incentive to reduce the impact by choosing the right management practise. It was pointed out that soil carbon release/sequestration is affected by several factors which should be taken into account in the assessment. An example of this are the benefits of grass production in Nordic Countries, that should be accounted in the assessment align with PEF.

Data

The need for regional data was highlighted by several participants. It was stated that the Nordic countries have a lot of agricultural statistics and reliable data, but they are limited, does not capture the specifics of Nordic agriculture or they are not in the right form to conduct PEF. Will a high price for data be a barrier for collecting more specific data? Is there a conflict of interest, if data is purchased from consultancy/private companies, thus becoming the property of the company and not openly available? Moreover, how to ensure that primary data is used and still safeguard company confidentiality?

Regarding data ownership, who will own the data and who will pay for producing it? Is it the best strategy to share data in order to create trust? To be transparent is a matter of shift in mindset of data owners.

Large opportunities to gather specific data by digitalization of food production is anticipated. A lot of things are already now measured locally throughout the chain, but data might not be aggregated. Close collaboration between all actors in the supply chain is needed. It was seen that this could be a far greater challenge than the technical ones.

Using primary data is important; use of secondary will not give any possibilities to benchmarking. It is important that PEF is aligned with ISO as LCAs are done globally.

Market and economy

LCA require resources from the agricultural sector. Will the food sector get economic benefits from communication of sustainability? Is the consumer willing to pay or who shall pay for implementation of measures in the supply chain? Could PEF be a selling point to gain premium prices and to drive for transparency of the supply chain? Possible economic benefits using PEF could be used as motivation to use PEF and for communication of sustainability measures. The aim for the producers is to get higher prices on the market and, by being fully transparent of the environmental impacts, people might trust more in companies' claims.

To get data from farmers there is a need to create (monetary) incentives for them to provide data. The vague promise that they will get higher prices in the future is not enough.

Communication

Direct communication to consumers of PEF results as such was considered challenging and the companies need help on how to communicate sustainability in the food sector in a simple way. Consumers will not use such complex information. PEF can be used in other ways: Branding, (existing) labelling systems, B2B etc. Common rules are good. How this should be designed depends on the region/country but simplifications are needed for consumer communication.

PEF results can be used for a more general communication on the complexity and how it is managed by the agri-food industry. By combining that with transparency, consumers, media and other influencers will get a better understanding of the system. This can reduce the confusion about food and sustainability.

More information/openness is needed from food companies, but the consumers are not yet very concerned about environmental impacts. It is important to be sure that the PEF is correct before it is used. On the other hand, if data is not communicated, it cannot be used for B2C nor public procurement. Communication needs to be simple, but still include biodiversity and social aspects. Communication B2C is a balance between comparability, reliability, costs to farms/companies and simplicity.

Regarding digitalization (Big data), in the future it might be possible to use PEF results for individual consumers, by adding your purchasing patterns and receive feedback on individual level.

Vision for future

PEF could be mandatory in future. PEF data is available for everything and it should be used by everyone, by chain actors, policy makers and consumers to assess impacts of different practices, to do improvements and to verify them. Better transparency. No other labels needed. Digitalization can help, maybe no need for labels in the future?

Lower environmental impacts should decrease the cost. The question should not be who is paying for conducting PEF, but who gets the benefits for doing so, e.g. economic incentives, such as lower taxes, for those who provide PEF. But if there are costs for companies and farms from providing PEF data, it should be avoided that costs are increased only for actors in the EU as we compete also with ex-EU production too.

PEF needs to be continuously developed, needs to be adapted to the environmental situation in 30 years. Proofs are needed to show that right choices have helped the environment.

If we are successful, the PEF system can be a model for a global system.