

The project's response to input from BREAD critical friends meeting on December 3rd, 2020

The two workshops

There were some questions related to the scenarios [developed differently in both workshops - JS]. Since this work has been completed, it will not be reproduced or commented on here. What is mentioned here is what the project team can relate to in the further work. None of the representatives from the companies attended the scenario-development meeting. [We used externally developed scenarios during the Matvett companies workshop - JS]

Matvett companies workshop:

- This made a lot of sense, but requires a lot of commitment from the industry players. How to ensure that it is followed up?
- Who are the 'we' of the 10 Recommendations? Not an unambiguous player, but is complex and this may need to be addressed much more clearly.

Our response: We agree that it is important to be precise. "We" are companies in the food and hospitality industry. Cooperation in the value chain between the players and with the authorities is crucial to halving food waste and therefore "an actor" is not defined as responsible. The points are followed up by Matvett, but should also be included in some concrete recommendations from the project and addressed to the various responsible parties.

Future Literacy Lab workshop:

- The scenarios with NIFU are important because there is a hub that will link the projects in AFINO, and here we want to use the scenarios for the projects. They are supposed to stimulate reflexivity in the current situation in order to promote 'double loop' learning. To meet sustainability challenges, all actors in the research system must think differently (3rd generation research and innovation policy).

Our response: We take this for orientation, and are open for further learning processes that may be arranged in AFINO.

Postdoc project

Nhat presented her project and received the following feedback:

- a) Think about how to manage to get down to the intentions and motivations of the players. What do the companies want? Don't just look at the apps and get too tech-fixated. Is it profitability, idealism, or other motivations that underlie it? To what extent do companies cooperate on this? What are they communicating about?
- b) It is interesting with a post-doc that can look at what we have previously discussed. Can the project place itself in between the two proposed research questions? We know that 50% of food waste occurs at the consumers' level; there's a lot to get here. Can you do more on that in the project?
- c) What about the refrigerator for planning purchases, information for the consumer, etc.?
- d) Keep in mind that TooGoodToGo is not only for the consumers, but also for the industry to get rid of its waste. It's a problem that the app predicts food waste and doesn't always

encounter real wastage. You often don't get half a loaf of bread in Too good to go; you get bigger quantities than you can use.

- e) What types of consumers are triggered by apps? Perhaps it is suitable for meeting those who are not so concerned with food waste?
- f) The education system: Hypothesis: Why are those between 25-40 worst when it comes to wasting food, sorting waste, etc.? Why don't they take responsibility for their own actions? How does university staff make students good people? Is it addressed at student accommodation facilities, etc.? How to educate and build competence in students who will get their own homes?
- g) In other areas a lot has been done, so the post-doc project requires a good state of the art survey so as not to repeat research that has been done.
- h) What other goals do companies have beyond food waste reduction? For example, other sustainability considerations? Seeing food waste as part of a larger whole can be fruitful because it will give us a richer picture of the sustainability challenges. There are both trade-offs and synergies.
- i) Will the digital technologies become techno fixes that steal the attention from other considerations and measures? It's nice to take in the digital side, but how can you point out the digital solutions that you can actually reduce food waste in certain groups?
- j) In the health sector, we are talking about lightweight and heavy weight solutions. Lightweight: How to make new services available to consumers without changing so much? Then entrepreneurs can take a role and it doesn't affect the systems that much. It can be positive. Heavyweight: Where the heavy business transactions take place and where there are large, well-coordinated data platforms. Here there is power and interesting possibilities. Can you change these so that you can measure and improve practice step by step? These are much heavier processes to influence, but here you can have a big impact.
- k) Environment/CSR/sustainability: It's partly about business models. There is a big difference between companies that see it as a business idea and change to a business model that is based on sustainability. Or is it a hygiene factor, something you have to do in line with other things you expect. This also applies to food waste. To what extent is the trend towards 2030 driving more companies to change their business model? Take the example Q-dairyene: They've gone to great lengths to think about innovative business models around it, in communication and innovation. What distinguishes them from other companies?

Response from Nhat/the project:

We agree with many of the inputs and will take them with us further, both as part of the post-doc project and in the project in general. Through the interview questionnaire and the industry survey, we answer parts of point a), h) and k). This will also inform the post-doc project.

The input from the critical friends on how we should look at the apps has been the basis for good discussions in the consortium. Nhat wants to do a pilot first where she interviews a few actors about the usefulness of digital solutions/apps and other short-term measures, versus larger systemic perspectives. Relevant apps and other measures may be included, but also systemic barriers to innovation around food waste.

The project wants a systemic analysis to form the basis for more targeted recommendations on ambitious responsible innovations in the industry. We see the benefits of the post-doc project studying the entire innovation system/value chain (in line with Matvett's 10 Recommendations), but it requires a lot of resources, especially during corona times.

It is exciting to look at transformative steps and innovations across the entire value chain, also with the primary production. In terms of primary production, it will take a lot of resources to include this link on a large scale, so this will probably not be covered in a complete way through a post-doc project, but we will draw in the primary link whenever possible. It can be difficult in one post-doc project to gain a better understanding of what such a system might look like and at the same time study apps more short-term.

When it comes to apps and other digital solutions, we want to add that most apps focus on saving food. More digital solutions for food waste prevention may be worth looking into. The apps can become concrete tools for corporate initiatives more than measures in themselves.

Other

There were more questions on the scenarios. These were initially questions about the group's thoughts, but their character allows us to take the following issues for our further work:

- a) What is the relationship between the products where there is high wastage and between profits in various points of the value chain?
- b) How to obtain other benefits at the same time, for example, increased animal welfare or less consumption of animal proteins? Are there any win-win scenarios? Take this to the company work.
- c) Food boxes and Covid19: Take a closer look?
- d) The corona situation sets some new premises. How can you turn this into an opportunity in the project? There's a lot going on now in people's heads and actions.
- e) Education and edible schoolyards etc. can contribute to a cultural shift in the population habits from the moment they go to school.
- f) Business side: Industry dynamics and power in the business sector, related to competition practices, are relevant to consider. In order to achieve food waste reduction, there are important opportunities in the sector: the chains have data control and the ability to coordinate and set requirements in the chain (bargaining power). The chains have a key role that offers great potential.
- g) We are not able to do anything about food waste as long as we have an agricultural policy that pumps food into the system; production and overproduction. How can we limit the flow in the chain? Do we only operate repairing measures or can we change production here? Biological systems we can not only turn on and off; these are vulnerable systems, require a long planning horizon, etc.
- h) Can you examine new dynamics that arise, with dilemmas between values: I eat more meat now because we seek out the disks with products at half price due to expiry dates, and there is a lot of meat there. This has health, animal welfare and environmental consequences, even if less wastage is achieved by taking this measure.

Our response: We take these good inputs with us in the further work on the project. To date, we cannot elaborate on how we proceed with the various points, but will return to several of them during 2021.