

Hello and welcome to Section 4 of the Food Systems Learning Guide. My name is Saher Hasnain and this section is about Analysing Interventions in Food Systems, using a tool called BATWOVE. The purpose of this section is to explore how winners and losers and unintended consequences for a potential intervention can be identified. This section builds on the guide thus far by using the insights from complex problem identification, developing transformation statements and rich pictures. By the end of this section, you will be able to identify the key winners and losers and the potential sources of unintended consequences from a food system intervention.

As we have learnt earlier in the guide, food systems are incredibly complex and the different feedbacks and dynamics in the system make intervening effectively quite difficult. Given the complex array of drivers and feedback, any intervention in the system will create a set of winners and losers. These winners and losers are not just people or human institutions. These winners and losers will require us to make trade-offs in different areas. This section provides a structured and systematic approach for analysing the interventions and identifying where some of these trade-offs will need to be made. BATWOVE is a mnemonic from Soft Systems Methodology. These are the key elements within BATWOVE. The first is beneficiaries which refers to people or entities benefiting from the transformation, actors, who are the people doing the transformation, the transformation itself, which is the planned intervention to transform the intended outcome, worldviews, which underpin the transformation, owners are the people who own the process, actors are the ones who can change the transformation, victims, who are adversely affected by the intervention, and environmental constraints are any limitation that can be applied to the transformation, for example, budgets, time, laws or regulations.

Before we proceed, it is necessary to discuss worldviews. Worldviews are built from our answers to fundamental questions. Like, who am I? Why am I here and what I should do with my life? These views provide key principles or values that give us a sense of meaning and purpose while helping us sort out and evaluate the continual flood of information and misinformation that bombards. People with widely differing environmental world views can take the same data, be logically consistent in their analysis of that data and arrive at quite different conclusions from someone with another worldview because they start with different assumptions and values. It is the belief that makes sense of the rules definition that we discussed earlier. Here are a number of examples of different worldviews, for example, solutions from technology, socially just food production, profit maximisation, gender issues, maximising consumer choice, environmentalism and animal welfare and I'm sure that you can think of many more that are not currently represented on this list.

The tool that we will discuss now in order to analyse these interventions can be a very good test of seeing the viability of the transformation statement that we have developed before. This is why people use these conceptual models to test the viability of their transformation statements. We will take the transformation that we have done earlier in the guide and then explore the worldview, because of the major role that the worldview and the perspective will have on how the transformation statement is operationalised. It is important that the transformation statement is as clear and succinct as possible before the activity is begun. In the example on the screen, the transformation statement is emerging from the veterinary and animal welfare space. The idea is to develop and promote a best practice hygiene protocol over lambing by working with farmers and industry to reduce indoor lambing mortality rates by 25% by 2035. The objective of the transformation is quite clear. Animal welfare enhancement is one

possible worldview that could be applied in how this transformation statement is operationalised.

Once these two are identified we can then fill in the rest of the rows. Beneficiaries are the sheep, by avoiding death and suffering, farmers, from the avoidance of loss and the mental anguish from losing lambs, and consumers, with the satisfaction of knowing that their lands are coming from a high best practice hygiene protocol application, the key actors, so the people who will be doing and applying the transformation are the farmers industry, organisations, public bodies and vets all who have a vested interest in the development and creation of an effective protocol. The owners are the farmers and industry organisations. In this context, owners means that these are the people and entities who can interrupt or change the process at any time. The victims might be pharmaceutical companies from loss of revenue, vets, from the potential loss of livelihood, knackermen, with a reduction of animal bodies to handle, and dog food companies. Environmental constraints might include cost, time and the individual efforts of workers and their opinions about the effectiveness and the practicalities of the lambing protocol.

There is a grid for BATWOVE available in the activity sheet. Please apply the transformation statement from earlier in the guide and discuss the worldview. You can use sticky notes to fill in the rest of the rows with your stakeholder group. It is essential to agree on a worldview before you begin. We recommend that a very expansive world view, such as 'one health and one welfare' are not used for the purpose of this exercise and to consider those that may be more practically represented in the stakeholder groups for the problem situation of concern and again it is helpful to follow the order recommended. Start with the transformation statement. Decide the world view that will be the baseline of proceeding and then fill in the rest of the rows.

The key benefits of BATWOVE is the systematic and structured approach to identify the winners and losers. You will have seen that it is essential to know what are the key time periods and spatial boundaries of concern. What are the practical limits that your intervention will take? It allows us to think about the constraints, boundaries and possibilities, not just of the intervention, but of the capabilities and abilities of all of the individuals and stakeholders of concern. The exercise, when done with the diverse stakeholders that are part of the intervention can help build mutual understanding. It can also help people explore more radical ideas and challenge some of the key assumptions that are relevant in the space by moving towards accommodations. Between stated worldviews, implementations can become much easier, especially now that a lot of assumptions and values are made explicit for the people around the table.

However, the key weaknesses of BATWOVE are that the workshops themselves can be quite time consuming and the soft systems methodology toolbox has no view on objective evidence. All evidence is an aspect of world use and best participants can agree. As you can imagine, this can not only make facilitation difficult, but requires the provision of more structured time to have good discussions. Everything is also relative to the perspective of the participants. It is important here than to discuss the ethical, the social justice issues and all concerns around knowledge valuation whose knowledge and perspective counts. Finally, the exercise can also really be effective if people are able to communicate openly and this requires a very key recognition of the power relations active in our system of concern