



ASSET SC 22. Nested Theory of Change in the ASSET project Guidance document

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for internal use of the ASSET project partners

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Glossary

Agroecology: Agricultural production and food systems respectful of people and the environment. It values biological diversity and natural processes (i.e. the cycles of nitrogen, carbon, and water). Agroecology is also defined as an alternative to intensive agriculture relying on synthetic inputs (fertilizers, pesticides, etc.) and fossil fuels. Agroecology is brought into the public sphere by social movements which defend food sovereignty, short commercial circuits and small-scale agriculture.

Agroecological transition: A change in agrifood system that leads to the implementation of agroecology principles. A complex process by which the principles governing a system are radically altered, resulting in a series of changes in the habits and values of actors, the techniques they use, the governance mechanisms and regulatory framework, etc. It involves a co-evolution of technical and social norms in the agriculture, food and energy sectors.

Food system: A food system gathers all the elements (e.g. physical environment, people, inputs, processes, infrastructures and institutions) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socioeconomic and environmental outcomes (HLPE, 2014). Three core constituent elements of food systems are: (i) food supply chains; (ii) food environments; and (iii) consumer behavior (HLPE, 2017).

Impact pathway: A graphical representation of the theory of change that shows the causal process leading from inputs/actions to the production of outputs, to their appropriation which generates changes for multiple actors (outcomes) and to the medium and long-term impacts resulting from these changes in actor's practices, behavior, interaction, motivations, capacity, knowledge or opportunities.

Impact: the consequences, positive or negative, intended or unintended, expected or unexpected, of the outcomes or the changes in practices, behavior, interactions, and opportunities of the actors.

Intervention: In the ASSET project, the intervention refers to the ensemble of actions planned and implemented as a result of building the theories of change at each level (flagship, national, regional). These interventions aim to support the implementation of agroecological and sustainable food systems transitions.

Actors: The characterization of an actor as belonging to one "type" or another is always artificial and only useful for the purpose of mapping actors and their interactions in a specific time and space. The categories here proposed are not mutually exclusive, as one actor can belong to more than one category at once. Moreover, the same actor can play different roles at the same time depending on the level at which the ToC is developed or on the type of action considered within the intervention. Ultimately, their role can evolve over time. Therefore the definitions herewith outlined are to be used according to the context and specific purpose, not as fixed categories.

- **Intervention system actors:** actors who are "permanently" or "temporarily" in the system in which the intervention takes place and make the change or influence the change. They can be classified into three types: core actors, supporting functions actors, regulating functions actors.
 - **Core actors** – depending on the type of intervention system, they can design, develop, disseminate, or use a new service, a new practice, a new product, a new technology, a new organization, a new network, a new policy, a new strategy, or new capacities (to implement the agroecological and sustainable food systems transition). Sometimes, especially in co-design processes, an actor can play multiple roles: for instance, they can be engaged in the design of the service or product that they are going to use or in the development of the organization they are going to participate in. Depending on each intervention for the agroecological and sustainable food systems transition, it can be useful to distinguish these actors following Swisscontact's approach in terms of service providers and service receivers. Service providers would be those who could introduce a new service and/or a new product, creating a new organization, developing a new policy and so on. Service receivers are mainly those actors for which the services or products are being designed. These can be farmers or farm groups applying new practices, products, and new capacities; these can also be local market sellers, etc. depending on the type of intervention.
 - **Supporting actors** – those who influence the actions and agency of the core actors by providing support functions, such as information, training, financing, human capital, social capital, communication infrastructure, specific inputs and so on, supporting the agroecological and sustainable food systems transition. "Temporary" actors in the system such as NGOs or researchers are often found at this level.



- **Regulatory actors** – those who influence the actions and agency of the core actors by providing formal or informal regulations on the actions and interactions of the actors that influence the agroecological and sustainable food systems transition.

Intervention System: within the ASSET project, the intervention system refers to the boundaries of the system made up by the intervention system actors as defined above. However, the notion of system itself needs to be defined in each context and can include non human actors and actants.

Outcome/change: a change in the practices, behavior, interactions, motivations, capacity, or opportunities of an actor or a group of actors that happens because of their appropriation of outputs.

Scenario: a representation of the future connected to a representation of the present, describing the successive steps that bring from one point to another with or without a temporal dimension.

Sustainable food system: a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised (HLPE, 2014).

Theory of change: an explicit theory or model of how the intervention, e.g. a project, programme, strategy, initiative, policy, contributes to a chain of results or events, making explicit both the expected change process, the actions to generate it, and the assumptions that explain why these actions would generate that desired changes.

Trajectory: A development path associated with progress made in a chosen direction toward a certain end-goal. Slight changes in a trajectory can lead to huge differences in outcomes.

Transformation: Many transitions occurring in specific production practices and across food value chains are required to achieve a transformation of food systems involving profound change in what is produced and how it is produced, processed, transported and consumed (HLPE, 2019)

Vision: The Theory of Change building process should make explicit the different visions of change and their underlying hypotheses. The actors co-building the ToC discuss the values underlying their vision of change and build a shared understanding of the business as usual (BAU) and the agroecology and safe food system transitions (ASSET) scenarios. This vision is a shared one, meaning that it does not necessarily reflect each actor's desirable scenario. It is a critical moment in which power imbalances can emerge or constrain the pathway towards change that the group is building.

Frequently Asked Questions about Theory of Change (ToC) in the ASSET project

1. What is the purpose of this document?

This is an internal document of the ASSET project, serving two main purposes.

First, it outlines the building blocks for the implementation of national and flagship level Theories of Change, which will in turn support the implementation of the regional level Theory of Change for ALiSEA. It presents the theory of change framework applied, the concepts used, and examples of tools that can be used to build the ToCs. However, the specific methods to be applied and the data that need to be collected at each level and country and at each step of the process, will depend on each context, available knowledge, and type of stakeholders involved. Therefore, the level of detail and the type of sources used to collect data will differ, although the overall framework and logic will be the same. Training materials will be developed to train the facilitators supporting the ToC building process.

Second, it develops a common language and shared principles for building ToC among the ASSET project partners and in particular those engaged in the “Methodological framework for assessing performances and impacts of innovations and transitions” sub component of the project (SC 22). Its development allowed to make multiple perspectives explicit and negotiated among project partners.

2. How do you integrate the three challenges of the ASSET project in the ToC building process?



The ASSET project proposes to focus on three main challenges: #1: Agricultural systems connected to markets: Feeding booming cities through short, safe and fair food circuits; #2: Rice-based systems in lowlands: Sustaining rice production as the cornerstone of food and farming systems; #3: Crop-livestock-forest in rainfed uplands: Preserving uplands from social and environmental degradations.

At the flagship level, these challenges guide the selection of flagship sites and therefore contribute to delimit the intervention system (see glossary). The three challenges will allow to identify the entry points relevant to each flagship site and ultimately to select the participants of the ToC workshop.

At the national level, these three challenges, once validated with ALiSEA members in each country and with the ASSET sub component in charge of the policy dialogue, will guide the identification of the intervention systems boundaries, the participants for the national ToC workshops and the development of challenge-focused Theories of Change. At the regional level, the intervention system boundaries will be defined with ALiSEA members at a second stage, based on the outputs of the flagship and national level ToCs.

- 3. We already have a fair understanding of issues and potential levers related to agriculture and food systems sustainability: why don't we pre-build a ToC that could be modified, adapted or even torn up by local stakeholders?***

Validating pre-defined ToCs with stakeholders could be a perfectly appropriate approach but we make the strong assumption that accompanying them in building their own ToC generates a different level of empowerment for the actors engaged. Certainly, pre-defined ToCs can be developed by the project team to provide knowledge and reflection elements to the facilitators of ToC workshops. However, allowing stakeholders to discuss their own vision of change, of sustainability, and of the actions needed to achieve them empowers them as actors of change and questions them about roles, legitimacy and agency. In such a process, the project team and the facilitators become critical companions accompanying the actors towards desired changes rather than experts guiding the actors.

- 4. What are the boundaries of the flagship ToC we intend to implement? Province? District? Communes? Watershed?***

The Flagship Toc will be conducted at provincial level, except in Vietnam where two neighbouring provinces have been selected as Flagship site. This option is coherent with the objective to engage with local authorities at provincial level and build on this engagement to feed and foster the policy dialogue from local to regional level, and to draw lessons on potential and options for supporting transitions at larger scales. However, this will have to be further examined depending on each specific flagship and on the type of challenge being addressed, as this will determine the actors that should engage in supporting the agroecological and safe food systems transition.

- 5. What would be the interventions/concrete activities targeted by this ToC process? A specific crop/livestock/forest system? A specific value chain?***

At the flagship level, the answer depends on each specific context: based on the information gathered through the scoping studies, the knowledge review and the participatory ToC workshops, the project team will identify the key actions that the ASSET project can support. Expectations are that a diversity of activities will form part of the intervention in each flagship, with different levels of investment of ASSET project resources and maximizing the potential for synergies with existing interventions and innovations.

At the national level, the ASSET project will support key actions of the ToC developed by national stakeholders through capacity building for national actors, targeted Small Grants, and through support to activities of the ALiSEA network.

At the regional level, ALiSEA network national actions plans will be developed during ALiSEA consultations meetings and General Assemblies benefiting from the ToC. This will serve as a road map for ALiSEA in each country.

- 6. Who should be invited to the participatory workshops? Only the actors of the intervention system? What about actors that are not intervening?***



Participatory building of shared visions is an approach that works better as a process rather than a stand alone workshop. Implementing it as a process allows to generate a dynamic interaction with actors engaged, while allowing for the identification and engagement of new actors as new understanding on the intervention system is built in each workshop.

Particularly at the flagship level, we suggest a pragmatic approach where the dynamic is initiated based on existing knowledge from the scoping studies, partners' knowledge of each site and existing interactions with local actors. Pre-identified intervention system actors (core, supporting or regulatory) (*see glossary*) will be invited. Whether these should only include pre-identified intervention system actors or more specifically those who will directly intervene (*see glossary*) or others, will depend on each context and the choice of the ASSET team at the flagship level. In the ToC building process, the need to engage new actors will likely emerge, and therefore subsequent workshops would be carried out to involve them and take forward the building of a shared vision of change. Specific actions to integrate new actors in the intervention would likely emerge from each workshop.

At the national level, the participants are the ALiSEA board of members from each country who participate in the ToC workshop. At the regional level, the purpose of the theory of change work is to support ALiSEA network members from all countries build a shared vision of the agroecological and safe food system transition in the region and how the network contributes to it. This needs to be further discussed and validated with ALiSEA members.

It is important to take into account power asymmetries when inviting actors with specific decision-making power, such as local authorities. Separate working groups within the workshop or multiple separate workshops by groups of actors can be envisaged to allow openness of discussion, followed by workshops at a second stage when all actors come together.

7. *How many people should be invited to this (these) participatory workshop(s)?*

This depends on who are the actors that will intervene as identified in the system analysis before the workshop and whether multiple workshops are implemented by groups of actors. As a general rule, at least one representative from each type of actor identified should be invited to participate, but this also depends on the type of actor (one representative from an institutional actor or a private sector company might be enough, but more might be needed if they come to represent groups of people that are not formally part of an organisation/institution, such as farmers, or market sellers. As part of gathering prior knowledge, the ASSET team will pre-identify some typologies for the categories of small-scale actors (such as farmers or market sellers) to better represent them in the workshop(s).

Moreover, in order to achieve good facilitation, an overall rule of thumb for the number of participants would be to invite 8-10 (max) people per facilitator, so each facilitator can work with groups that can have meaningful discussions.

8. *Do we need to have a balanced representation between the different actor categories?*

Particularly at the flagship level, the idea is to ensure the presence of the pre-defined actors of change (or the pre-defined actors that would intervene if the workshop focuses only on these). However, by implementing ToC workshops as a process, it might be possible that not all actors are represented at the beginning. See Q6 for complementary information.

9. *How do we ensure that all participants /stakeholders can express his/their views during this (these) workshop(s)?*

There is an art and science to participation: multiple solutions can be identified to allow each participant to actively engage in a participatory process. These can include for instance group sessions, individual reflection sessions, and individual follow up. This can also be achieved by carrying out separate workshops (see Q4). The solution is context and actor specific, and facilitation is key to achieve this.

10. *How do we use the knowledge from the scoping studies in the flagship sites to document the ToC process?*

This guidance document aims to give an overview of the methods and processes to develop Theories of Change that are grounded in existing knowledge, plausible and also contextually meaningful. The results from the scoping studies are part of the knowledge review. They inform each step of the ToC building process presented in this



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document. Only information that is needed to build the ToC and that has not been collected already through the scoping studies will be collected through ad hoc interviews and secondary data gathering.

11. What kind of data and informants do we mobilize at the national level to generate a ToC that is relevant at the country scale?

The stakeholders engaged in the national level ToC include ALiSEA national members and other actors relevant at the country level to develop ToCs around the three challenges of the ASSET project (once validated): #1: Agricultural systems connected to markets: Feeding booming cities through short, safe and fair food circuits; #2: Rice-based systems in lowlands: Sustaining rice production as the cornerstone of food and farming systems; #3: Crop-livestock-forest in rainfed uplands: Preserving uplands from social and environmental degradations.



Introduction

This document provides guidance on the approach and process chosen to develop the **national, flagship, and regional level Theories of Change** that will guide action planning of the ASSET project towards sustainable food systems based on agroecological transitions. The overall objective of the ASSET project is to make food and agricultural systems in Southeast Asia more sustainable, safer and inclusive, through harnessing the potential of Agroecology to transform them. The aim is to achieve this through synergizing initiatives contributing to Agroecological and Safe food System Transitions (ASSET) from local to regional levels. At the national and regional level the project also aims to strengthen the Agroecology Learning Alliance in South-East Asia (ALiSEA) through networking and sharing a common vision of the Agroecological and Safe food System Transitions (Sub Component 1.1 of the ASSET project). Additionally, the ToC building process is intertwined with Sub-component 2.1. “Knowledge production and support to innovations” through which the ASSET project engages in action-research in selected flagship sites to co-design and support technical, organizational and institutional innovations at farm, value chain and territory levels. The Theory of Change (ToC) building process contributes to these objectives by building shared visions of change and action plans. Such ToCs are a key component of the wider assessment framework that supports intervention planning, monitoring, evaluation and learning of the ASSET project.

The document is structured as follows: 1) The nested theory of change; 2) The theory of change framework; 3) The theory of change building process (Brick I: *current system*; Brick II: *future system*; Brick III: *obstacles, risks and opportunities*; Brick IV: *planning the transition*; Brick VI: *measuring success*).

1. The nested theory of change

The ASSET project ToC approach has its roots in the ImpresS *ex ante* framework developed at Cirad (Blundo Canto and De Romemont, 2020), complemented by elements of the EFICAS Community-based Agricultural Development Planning framework (Castella et al., 2020), and Swisscontact’s Inclusive Markets Practitioner Handbook (Swisscontact, 2016). It aims at developing a **Nested Theory of Change** that provides an understanding of: the agricultural and food system and the changes needed to transition towards safe food systems supported by agroecological transitions. The Nested ToC integrates existing knowledge and partners experience with the point of view of the actors that would implement and be affected by these changes. This Theory of Change is Nested as it combines the **national** (developed by ALiSEA members in each country), **flagship** (developed by multiple stakeholders at the territory level) and **regional** (developed by members of the ALiSEA regional network) level theories of change developed by actors operating at each of these levels. The different levels of the ToC interact through macro and micro drivers and feedback loops. The flagship and national ToCs contribute to a higher-level theory at the regional level. Figure 1 illustrates the logic of the Nested ToC.

By combining participatory approaches and existing knowledge from multiple sources, **contextually meaningful and scientifically relevant Theories of Change and action plans are developed at each level**, and feed into an **assessment framework that allows for learning through contextualisation, but also comparability**.

The nested ToC and action plans building process combines **knowledge review (including partner’s experience)**, **key informant interviews**, and **participatory meetings and workshops**. This guidance document is not a facilitation or data collection guide. Detailed data collection and interview protocols, as well as pedagogic scenarios for the participatory workshops are not presented here, and will be developed for each country and flagship site following a similar structure, but contextualised to the specificities of each intervention area.



The **building of the Theories of Change at each level is a process** and not a one-shot activity, and it is composed of the following steps:

- **Knowledge review** (flagship and national level): during the first year of the project, existing knowledge at the flagship and national level is gathered through scoping studies, key informant interviews and other knowledge sources,
- **Training of national facilitators:** in each country, facilitators from national partners of the ASSET project will be trained in facilitating the building of the theories of change, including shared visions and action plans,

Flagship ToC

- **Preliminary flagship ToC (project partners):** through a series of meetings, the ASSET project partners, by country, develop a first version of the ToC for the flagship site selected, drawing on their own experience, existing knowledge and scoping studies results.
The preliminary flagship ToCs aim to:
 - develop a flagship level ToC from the point of view of the project partners so they can identify their potential role and actions at the flagship level, including the grass-roots activities before the implementation of onsite flagship ToCs,
 - identify knowledge gaps and needs,
 - prepare the ground for the onsite flagship ToCs, including material for the facilitators to better question participants during the onsite flagship ToC workshops.
- **Further data collection according to knowledge needs** (flagship level)
- **Onsite flagship ToCs (multiple stakeholders):** in each country, through a multiple days' workshop or multiple workshops, stakeholders from the flagship site selected for intervention, come together to develop the ToC of agroecological and safe food system transitions for their territory and draft potential actions that would support these transitions.
 - At the end of the workshops, the ASSET project partners, based on the preliminary flagship ToC developed and knowledge review, discuss with the onsite flagship ToC participants, the actions that the ASSET project can support within the duration and resources of the project.
- **Final flagship ToC** based on a combination of the different sources of knowledge: knowledge review, preliminary flagship ToC, onsite flagship ToC. This is presented at the flagship level to those who participated in the onsite flagship ToC workshops.

National ToC

- **Preliminary national ToC (project partners):** ALiSEA national members and ASSET ToC team validate the intervention system boundaries at the country level and the proposed challenges.
 - The preliminary national ToC meetings aim to identify the intervention system boundaries for the country level, knowledge needs, and the actors to be invited to the national ToC workshops
- **Further data collection according to knowledge needs** (national level)
- **National level ToCs:** ALiSEA members in each country develop a shared vision of the issues at stake in the agroecology and safe food systems transitions, including the global trends that drive social, economic and environmental changes, and of the pathways to drive changes and achieve impact.

Regional ToC

- **Regional level ToCs:** ALiSEA members will come together in a regional workshop to build a shared vision of how the network supports these transitions at the regional level, supporting network coherence and sense of ownership of its members, activity prioritization, and strengthening synergies with other initiatives
 - The regional level ToCs are carried out at a later stage and therefore the process will be informed by the national and flagship level experiences. The national and regional level ToC will support ALiSEA network and policy institutions to develop a master plan towards regionally supported agroecology and safe food system transitions that take into account the specificities of the national political contexts. Depending on the convergence with the ASSET policy dialogue activities, this process can also inform further planning of policy dialogue activities.

The final ToC for each level (flagship, national, regional) and the related action plans will guide the interventions of the ASSET project and the development of the Monitoring, Evaluation and Learning (MEL) system that will be implemented to assess progress and support adaptation during the interventions. The ToCs and action plans will be periodically revised with relevant stakeholders through successive learning loops.



Figure 1. The Nested Theory of Change concept in the ASSET project

Figure 2 provides an overview of **the nested ToC building process**.

For the flagship ToCs, we can consider that the steps that lead to the ToC and action plan, as a “**pre-intervention**” process. The interventions that will be carried out at the flagship sites will integrate the outputs from each step.

The regional level ToC will follow a similar process but its details will be defined at a later stage. Whilst the ToC building process is common to the flagship, national and regional levels, the flagship ToC takes a territorial perspective that makes it finer-grained. The national and regional level ToCs provides a common perspective on key trends and a road map for national partners linked to the ALiSEA network to support agroecological transition towards sustainable food systems.

Specificities of the Flagship and National level ToC building processes

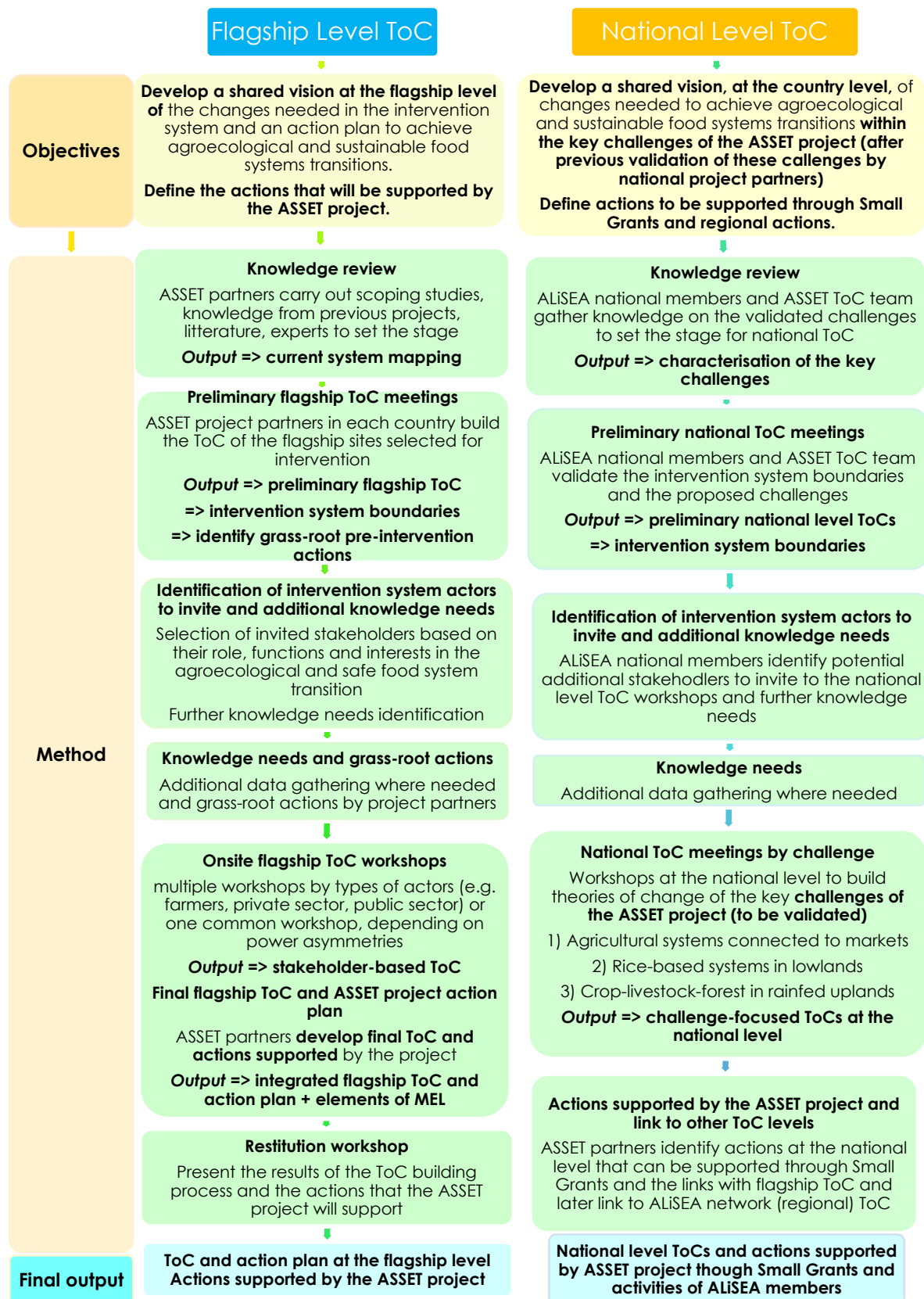


Figure 2. Flagship and National level ToC building processes

2. The theory of change framework

The Theory of Change (ToC) is an approach used in intervention planning to develop **an explicit theory or model of how the intervention**, e.g. a project, programme, strategy, initiative, policy, **contributes to a chain of results** or events, **making explicit both the expected change process, the actions to generate it** (action plan), **and the underlying assumptions** (Funnell and Rogers, 2011). It can be used at different moments: upstream of an intervention design (*ex ante*) by imagining the future impact pathway that will define the logic of the intervention; during its implementation to monitor progress and guide adaptive management and reflexive learning (*in itinere*); or once the intervention has been completed, to evaluate the changes that it eventually produced (*ex post*).

Here we refer specifically to building *ex ante* theories of change that will then guide action planning, monitoring, learning and evaluation. The typical core questions to build a theory of change *ex ante* include: What impacts do we aim to contribute to? Who is going to be impacted? What are the changes needed to generate these impacts (and who defines that they are needed)? Who needs to change and why (and why would/should/could they)? When will these changes (outcomes) and their consequences (impacts) likely happen? How are we going to make these changes happen? Why and in which context are these strategies/actions supposed to work (assumptions)?

The process for building the Theory of Change in the ASSET project is inspired by the **ImpresS framework** (Faure et al., 2020), and more specifically the **ImpresS *ex ante*** approach (Blundo Canto and De Romemont, 2020). ImpresS *ex ante* is a structured approach to build a narrative of the intervention based on a shared vision of change, mapping desirable changes (outcomes) and building the intervention strategy by making explicit the underlying assumptions about how change happens, and the obstacles and opportunities to these changes, taking into account **multiple perspectives** and the role of each actor in the system intervened. It shares its backbone with other approaches that rely on the **impact pathway** (Douthwaite et al., 2008), which is the process leading from activities to outcomes, presented in Figure 3. The approach to ToC building with ImpresS is participatory and aims to “enable participants develop their own understanding of and control over processes and events being investigated” (Ashby, 2003, p. 10).

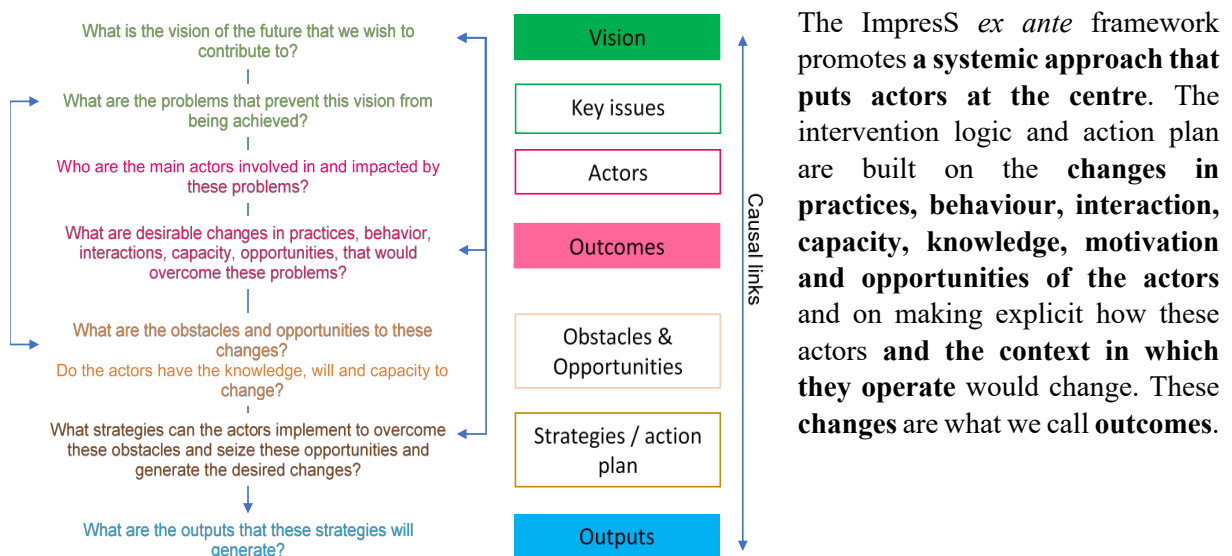


Figure 3. The ImpresS *ex ante* back-casting process



The theory of change built through this approach defines the **ambition of the intervention**, by clarifying over what elements the core, supporting and/or regulating actors that will participate in the intervention will have (1) a significant level of **control** (notably on the production of outputs), (2) a significant level of **influence** but not control (notably on the desired changes), and (3) a significant level of **interest** (notably the impacts that they aim to contribute to as a consequence of the desired changes that the actors of the intervention have influenced).

In order to build the ToC, a backcasting process is applied. We start from defining a **vision of the desired future situation**, then we question **why that vision is not realised today**, and **who are the actors** involved in the issues holding the vision from happening. Then, we identify what would **actor's behaviour, practices and interactions** look like if these issues were overcome, and question whether the actors have the **motivation, capacities (individually or collectively)** and **opportunities (enabling context)** to change their behaviour, practices and interactions.

By answering these questions, we identify the **existing obstacles and opportunities to change** and the **strategies that the actors can implement to overcome them or seize them**. This allows to make explicit our **assumptions about how and why these strategies would generate the desired changes**. Finally, these strategies or actions will generate the outputs of the intervention. The whole process of building the ToC relies on making explicit the causal links between its different elements, from the action to the vision. Figure 4 shows a graphical example of a Theory of Change built with the ImpresS *ex ante* approach for a large research intervention.

The ASSET Theory of Change approach integrates the building blocks of the ImpresS *ex ante* framework with elements of other frameworks developed to build systemic theories of change. We include elements of the **EFICAS Community-based Agricultural Development Planning** (Castella et al., 2020). From this framework we use the **agrarian history tool that characterizes changes in settlement location, in population, in infrastructure, and in agricultural and livestock practices, and the reasons behind these changes**. This approach explicitly considers the interdependencies between social and ecological systems under scrutiny as dynamic (Barrios et al., 2020; Levard et al., 2019; Mottet et al., 2020). The ToC is deemed as an intervention at a specific stage in a transformative pathway. It creates a bifurcation intended to create conditions for a more sustainable trajectory as compared to a business as usual scenario. This contextual knowledge informs the backcasting process described above and provide quantitative data necessary to feed the discussions among stakeholders to reconcile multiple, often diverging interests.

From Swisscontact's **Inclusive Markets Practitioner Handbook** (Swisscontact, 2016) we adapt the **system maps** that identify core actors in value chains, those providing supporting functions, and those providing regulatory functions. We also adapt elements of the **intervention logic analysis framework (ILAF)** that characterizing problems, underlying causes, enabling environment and service weaknesses.

Throughout the text, we provide references to tools that can be useful in implementing the ToC workshops (e.g. from foresight studies - the Futures Triangle (Inayatullah, 2008) and the Futures Wheel (Bengston, 2016) - and recommendations from Hivos' ToC guidelines for including a gender lens and power analysis in theory of change building (van Es et al., 2015)).

Nonetheless, the tools chosen for each application of the ToC process (flagship, national, regional), whilst responding to the same overarching framework, will be adapted to each specific context.

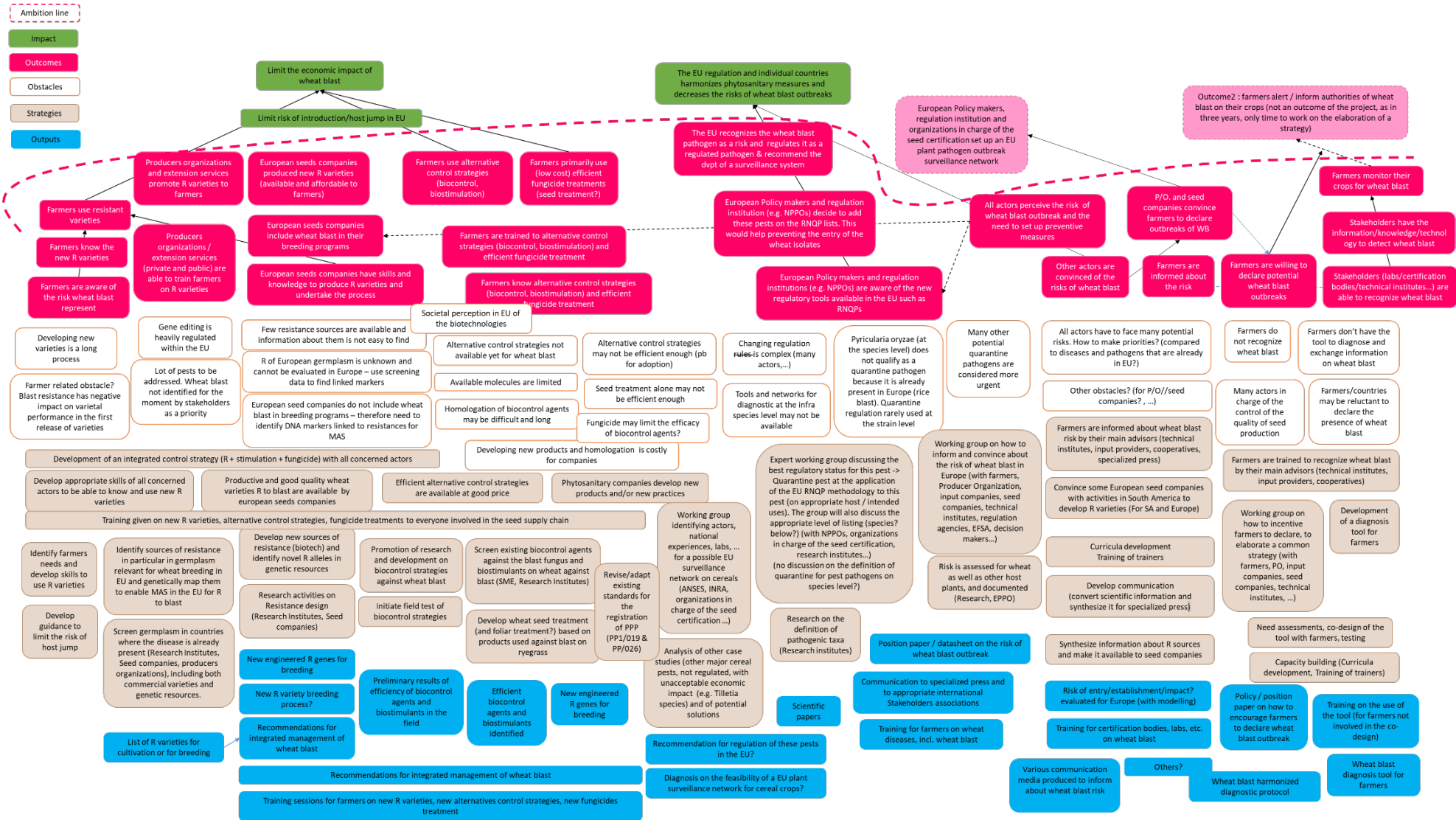


Figure 4. An example of Theory of Change built with the ImpresS ex ante approach for the project CerealSecure



ASSET

Applying a systems perspective that makes actor's influence, functions and roles explicit

The ToCs built through the process outlined in this document, aim to **make explicit the role of the different actors** in the **intervention system** studied and of the actors who are at the frontline of the transitions towards safe food systems that rely on agroecological practices. We refer to the **intervention system** as the system of actors directly or indirectly engaged in, influencing, or affected by, an agroecological transition. The boundaries of this system are defined based on the flagship, national or regional level dimension. The **role, responsibilities, legitimacy** in defining and generating changes is questioned and made explicit throughout the process. The potential risks involved in making these changes and if some actors are not engaged, are discussed.

The intervention system is characterised by identifying actors by their functions (core, supporting, and regulatory) or because they are impacted. Please refer to the Glossary for detailed definitions of each function. These categories are not exclusive. This distinction aims to **identify the roles and functions** of the different actors.

Box 1 presents a fictitious example to identify these actors, their roles and functions.

Box 1: A fictitious example of the functions and roles of actors in the intervention system

Local extension services, farmers engaging in agroecological practices, and market sellers develop an intervention to increase their reach and a network for capacity building on agroecological and safe food production. As part of a research for development project, two international NGOs, one international and one national research center support these actors through agricultural, marketing and organizational capacity building, and knowledge co-creation within the action plan that they contributed to develop.

*The **core actors** in this example would be farmers and market sellers. The **supporting actors** are the extension services that support the core actors making the transition, as well as the NGO and researchers (who temporarily support the core actors through training and knowledge co-creation).*

Some changes in practices, behavior and interactions of the supporting actors might also be needed in order for them to adequately support the core actors.

*The **regulatory actors** might be local and national agencies of the ministry of agriculture defining new standards for agroecological production, or the health agencies providing new regulations on food safety and new guidelines on safe and nutritious diets, but also actors involved in defining local consumption and production habits through informal norms. These actors might also need to make changes in order for the core actors to change. Other actors, including the local tourism office, and the local agricultural school are part of this intervention system but do not participate in the implementation of the intervention. However, they might be the target of some of the products of the intervention.*

Some actors will be impacted by the intervention. These can be the core actors who make the change, but also other actors present in the intervention system, such as local consumers and farmers applying conventional practices, who would be positively or negatively impacted by the changes made by the core actors.

Understanding Theory of Change as a negotiation process between multiple perspectives

The ultimate purpose of the nested ToCs is to **make explicit the different visions of change and build a shared vision on this basis, to develop a common action plan and to guide the monitoring, evaluation and learning process**. In other words, it invites a group of actors to discuss the values underlying their vision of the future and of desirable changes. This vision is shared, although not necessarily reflecting each actor's desirable scenario: it is therefore a critical reflexive moment in which power imbalances can emerge or constrain the pathway towards change that the group is building.

Indeed, the actors participating in a ToC building process bear different **knowledge, interests, perspectives, roles, influence, and decision-making power**. Therefore, building and periodically revising a theory of change requires **negotiation between different stakeholder's visions, objectives and interests**. The negotiation process aims to find common ground when diverging visions emerge, or conflicting contextual factors would inhibit the change. In these cases, the participants are invited to



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find the terms of change on which they can agree upon or select elements that they can collaborate on, towards smaller or more intermediary changes. At the same time, it is important to keep track of whose visions are expressed in the workshops and to take into account whose visions prevail when a common ground is not found at the end of the negotiation.

The role of facilitation in tackling and making explicit power imbalances in the negotiation process is key. Issues of confirmation bias can arise, when voices of power and hierarchy (under different forms, from formal to informal) are dominant. Facilitation therefore needs to provide voice to the different actors, while engaging them in negotiating towards a vision of change that they can share and work towards. Where power asymmetries are significant, workshops by groups of actors would make explicit different visions, which would then be discussed in a collective workshop at a later stage. Similarly, facilitation is key in managing expectations of participants to what is the plausible reach of the action plan.

Therefore, **balanced and transparent selection of participants and facilitation that allows different views to be expressed and discussed**, noting and tracking whose values and visions are reflected in the ToC, are key in this process. In the ASSET project, participants at the flagship level will be selected based on their role or potential role in terms of the agroecological and safe food systems transition in the intervention system identified. At the national level and regional level, they are the actors linked to the ALiSEA network.

Ultimately, the **theory of change** is not a fixed map, but rather a compass, which **provides an indicative direction** to plan actions but **which evolves as the actors engage in action and as their understanding of how change happens is confronted with the dynamic of reality**. The actors implementing the intervention periodically revisit the ToC and reassess the direction of the intervention, allowing a critical reflection on necessary adjustments to the initial version of the ToC.

The operational version of the theory of change that is going to guide the interventions that the ASSET project will support and its monitoring and evaluation plan is not uniquely the result of a collective building process. It results from triangulating different sources of knowledge to build a narrative of the change process and of how the intervention contributes to it. Literature, expert and key informant knowledge, secondary and primary data from diverse sources, and participatory building of the theory of change are part of an overall process to develop a common action plan and adapt its implementation in due course.



3. The ToC building process

The key challenges of ASSET guiding the Theory of Change building process

Three key challenges have been proposed in the ASSET project to capture the diversity of development contexts and represent the three main agroecosystems that account for the most significant transformations observed:

- 1) Agricultural systems connected to markets: Feeding booming cities through short, safe and fair food circuits
- 2) Rice-based systems in lowlands: Sustaining rice production as the cornerstone of food and farming systems
- 3) Crop-livestock-forest in rainfed uplands: Preserving uplands from social and environmental degradations

These three challenges allow to identify entry points relevant to each flagship site and ultimately will help select the participants of the ToC workshop by their current or potential roles, functions and interests in agroecological and safe food system transitions. At the national level, they are also proposed to guide the development of challenge specific ToCs. Therefore, national level participants could be selected based on their current or potential roles, functions and interests in each of the three challenge. The challenges will be validated with the national ALiSEA board of members and national partners at the beginning of the national ToC process.

Organizing participatory Theory of Change workshops

The objectives of the workshops and why these participants are specifically invited should be clear for all participants before participating. The facilitators will have a key role in presenting the objectives and managing expectations of participants before, during and after the workshop.

The workshops would be ideally carried out over 2 to three non-full days, in the most appropriate time and format for local customs and activities.

The proposed ToC workshop logic is built on an iterative back and forth process: we start by analysing the recent history of the territory that shaped to the state of agricultural and food systems; then, we map the main activities that characterise them in the present. At this point, we start the ToC backwards building process: from the future vision to the changes needed to achieve it, the obstacles and opportunities to change, and the risks related to such changes; and the actions that the actors should put in place to achieve these changes and overcome obstacles or take advantage of opportunities. Specific training material will guide facilitators in implementing the workshops.

Engaging national facilitators

National facilitators are trained to support the implementation of the Nested ToC and of the Monitoring, Evaluation and Learning system in the ASSET project. This will strengthen national capacities in accompanying the agroecological and food system based transitions, including through the co-design of theories of change in specific intervention systems. Facilitators are selected among ALiSEA network board of members and project partners (Box 2). They are trained in order to carry out key informant interviews where needed, support the implementation of participatory workshops and systematization of results, contribute to the finalization of ToCs and action plan, and facilitate learning loops. The facilitators are selected among individuals with an interest for multi-stakeholder processes to build shared visions and action plans, taking into account multiple perspectives and potential power imbalances between participants.



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The steps to build the ToC

Figure 5 depicts the bricks and steps of Theory of Change building in the ASSET project:

- Brick I: Current system
- Brick II: Future system
- Brick III: Obstacles, risks & opportunities
- Brick IV: Planning the transition
- Brick V: Achievement indicators

The **outer circle** in Figure 4 depicts the **knowledge review and preliminary ToC** carried out by **project partners**, including the national facilitators, who gather, systematize and combine different sources of knowledge to guide the Theory of Change building process and the definition of the action plans. This includes literature review, scoping studies, data from different databases and expert knowledge. At the flagship level, a preliminary flagship ToC is developed by the project partners in dedicated meetings that focus on the intervention system of the flagship sites and the potential actions the partners could support there.

The **intermediary circle** depicts the **Key Informant Interviews (KII)** carried out with few **knowledgeable informants** when there is a need to **deepen the knowledge review** on some aspects for which information is scarce or contradictory or too general. They also aim to identify and characterise diverging visions and potential conflicting interests.

The **inner circle** depicts the **onsite ToC** process which is carried out **with the intervention system actors** identified in the knowledge review and KII. Onsite refers to the flagship intervention system or to the intervention system of the three challenges at the national level, depending on which level the ToC is being built.

Together, the knowledge review, preliminary ToC, the KII respond to multiple **objectives**:

- contextualise the intervention system analysis
- develop a flagship level ToC from the point of view of the project partners so they can identify their potential role and actions
- strengthen capacity of national facilitators through a better understanding of context dynamics and facilitation skills
- address knowledge needs
- prepare the ground for the onsite ToCs
- outline the boundaries of the intervention system
- identify intervention system actors to be invited to the onsite workshops

The onsite ToCs aim to:

- co-design the representation of the current intervention system from the point of view of the intervention system actors
- build a shared vision of the future system, contrasting a business as usual and alternative preferred future
- critically reflect on the obstacles, risks and opportunities to change
- collectively identify strategies to transition towards desired changes and the roles of the different actors in these strategies
- characterize from stakeholders' perspectives what indicates success in these strategies and their outcomes in term of transition
- potentially identify additional intervention system actors as well as new actors who should take part in the interventions supported by the ASSET project, as well as further knowledge needs that should be addressed through the ASSET project action plan



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Once the onsite flagship ToCs are carried out, the information from all the sources of knowledge is put together by the project partners to **finalize the Theory of Change and action plan of the ASSET project** for each level of action (national, flagship, regional) and develop the assessment framework and MEL system.

The proposed format for the preliminary and onsite ToCs is to carry out multiple **4 or 5 hour sessions**, but will depend on the number of stakeholder groups identified and on what is most appropriate in each context.

Finally, the **action plan is shared and validated with the actors** who participated in the onsite ToCs.

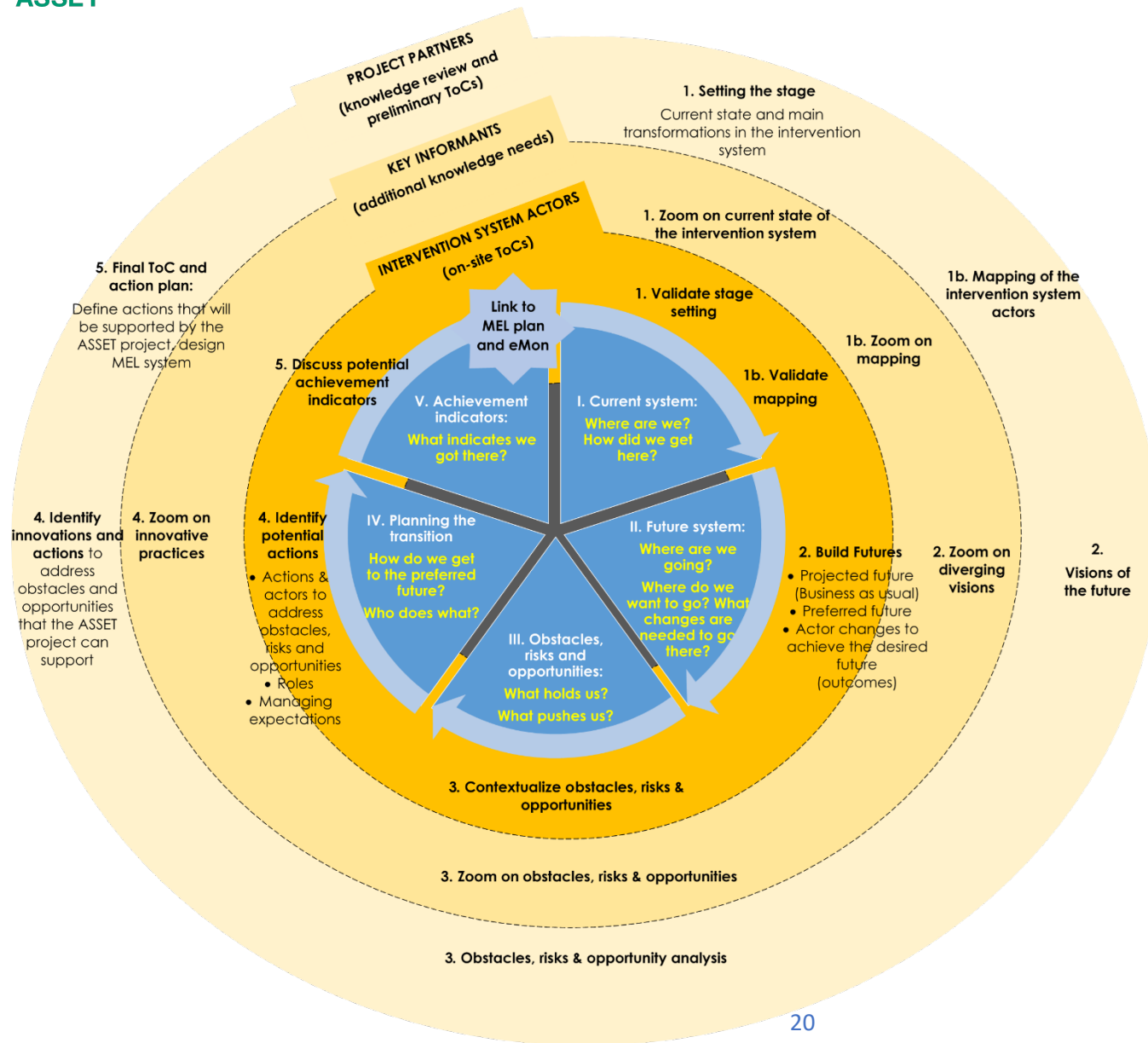


Figure 5: The successive steps (bricks) to build Theories of Change in the ASSET project



Brick I: Current system: where are we? How did we get here?

To characterize the current system, structural factors and a system mapping are carried out using multiple sources of data from the partners' knowledge review and then discussed during the preliminary ToC meetings. If additional knowledge needs emerge, key informant interviews (KII) or other methods of data collection can be used to address them. Finally, the representation of the current system is validated and complemented through the onsite ToC workshops.

The knowledge gathered can be summarized through **different tools** chosen by the team working on the ToC in each country and at each level. See tables representing the key elements of the intervention system (**Box 2** and **Box 3**), a timeline (**Box 4**), and a system map (**Box 5**).

Setting the stage

Objective:

Assessing current state of knowledge on key agricultural and food system dimensions at the national, flagship and regional level and the main transformations that led to this state in the past ten years, including the actors who contributed to and were affected by these transformations.

At the flagship level:

The ASSET SC22 team and national facilitators prepare a first characterization of the current intervention system based on the results of the scoping studies and other sources where needed (literature, data from previous interventions, Alisea's and other databases, expert knowledge). The intervention system studied for the flagship ToC is the flagship site selected; for the national ToC it is the intervention systems of the challenges chosen; and for the regional level it will be defined at a later stage and linked to ALiSEA areas of intervention.

The information from the scoping studies used to characterize the intervention system can include the following items:

On-going innovations and dynamics related to AE and SFS:

- Technical innovations: AE practices, on-farm and on-station experiments, post-harvest processing, waste management, bio-products, appropriate-scale mechanization etc.
- Organizational innovations: Participatory land use planning, farmers' access to market and services, farmers interactions with consumers, private and public actors, quality management, etc.
- Institutional innovations: access to inputs (seeds, bio products, machinery), labelling/signalling of AE products (branding, certification, marketing), sensitization campaigns, local entrepreneurship, policy dialogue mechanism, Incentives etc.

Existing data and knowledge

- Current land cover and land use (LULC), LULC changes and land use trajectories
- Local livelihoods and livelihood development strategies
- Situation of youth, women, and ethnic minorities
- Local policies and rural development strategies
- Agricultural extension facilities and strategy
- Actors and investment in the agribusiness sector
- Performance and impact of conventional agricultural systems
- Performance and impact of innovative AE and SF systems
- Past initiatives that aimed to generate change in the local agricultural systems and their reasons for success or failure

Local expertise and champions



- Local technician, farmer, decision-maker, service provider etc. who can be mobilized to support the transition process

Opportunities, constraints, and potential levers for change

- At the level of local authorities; producers; other market system actors

Box 2 and **Box 3** present additional dimensions that can be adapted to map the current system at the flagship level when appropriate.

Box 2: An example of characterisation of the system in the EFICAS project

At the **Flagship level**, a more detailed characterisation of the intervention system, or of some parts of it, can be envisaged to guide KII, for the Flagship level ToCs. One can refer to the EFICAS protocol (Castella et al., 2020) and the resources available at the EFICAS website (<https://www.eficas-laos.net/resources/baseline-material>) for more details. The protocol presented in the figure below shows different types of data that can be collected and how.

Group interviews	Description
Village history	About 10 persons, including members of the elder committee who are knowledgeable about the history of the village
General Information	Village head, and any other villager likely to provide the needed information: deputy head, teachers, members of elder-committee, etc.
Problem census Women	10 to 12 women, of all categories (young, old, rich, poor, etc.)
Problem census Men	10 to 12 men, of all categories (young, old, rich, poor, etc.)
Cropping systems	About 15 farmers (men & women) as diverse as possible: rich, poor, people growing cash crops, big & small households, people hiring labor-force, etc.
Livestock systems	About 15 farmers (men and women) all raising at least one animal species: buffaloes, cows, pigs or goats.
Sales & Contracts	10 to 15 villagers, who sell (or used to sell) some production: cash crop, animals, NTFPs, etc.
Individual survey	Description
Rapid survey	All village households are surveyed.
Detailed Survey	30 households. The list of these 30 households has to be random: random selection from village head's list of all the HH in the village.

Box 3. An example of guiding questions to characterize Market dynamics

Swisscontact's *Inclusive Market Handbook* (Swisscontact, 2016) can also be used in particular for guiding questions on markets and market dynamics:

Who are the market actors? What are the goods and services which are being provided in the market? Which actors (service providers) are providing these services?

Can you draw a generic value-chain (VC) for this market?

Why do market players act as they do and what are the incentives they have to change?

Has the performance of market players improved or worsened over time, or stagnated?

What is the level of competitiveness in the market? What are the factors which affect the competitiveness?

What are the opportunities in this market?

What are the key generic constraints in the market?

What are the key constraints to a given market actor, or market actor group, in the market?

At the national level:

The ASSET national project partners, supported by the SC22 team and the national facilitators can characterize the intervention systems of the key challenges chosen according to the following items:



Food Systems

- Food System country profiles
- Analyses of drivers, supply actors and activities, food environment and consumer choice through an agroecological lens
- Main transformations in national / regional trends in the food system in the past 10 years

Agricultural systems within the challenges chosen

- Spatial distribution of agricultural activities
- Identification of agroecological practices/initiatives: actors, location, scale, interaction with other initiatives
- Role and positions vis a vis agroecology in national and regional agricultural policy : policy dialogue activities of the ASSET project
- Main transformations in the past 10 years and their reasons

Environmental dynamics

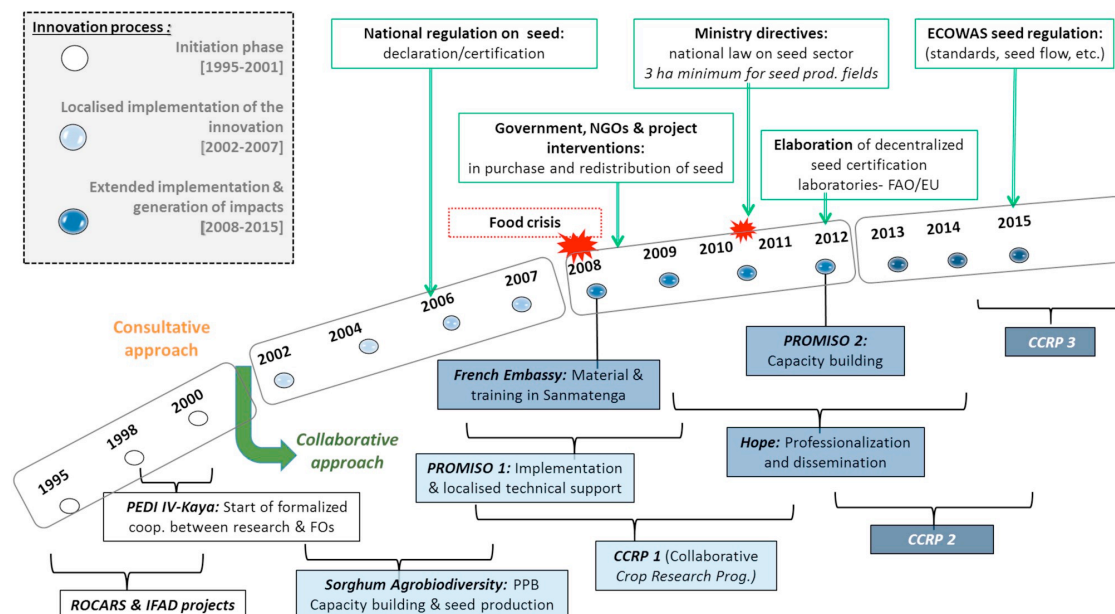
- Major environmental events in the past ten years that affected agricultural and food systems: where and actions taken. What were the responses to these events from different actor groups?

Population dynamics

- Demographic trends related to agriculture: in and out-migration (sources, destinations, type) within and outside the country/region and their reasons

Box 4: Timeline of the participatory sorghum breeding process in Burkina Faso (source vom Brocke et al 2020)

The ImpresS approach not only has a framework to guide ex ante theory of change building, but also a method to evaluate retrospectively the impacts generated in innovation processes and how research contributed to these impacts. Within the several tools used, the timeline is an effective tool to visualize the main events, crises, actions and transformations that characterized the history of an innovation process. Such a tool can easily be adapted to visualize the recent history of the intervention areas (whether at the flagship or national or regional level) in which the ASSET project will support transitions towards agroecological and safe food systems.



Box 4 presents one way to visualize the main events and transformations on a timeline.



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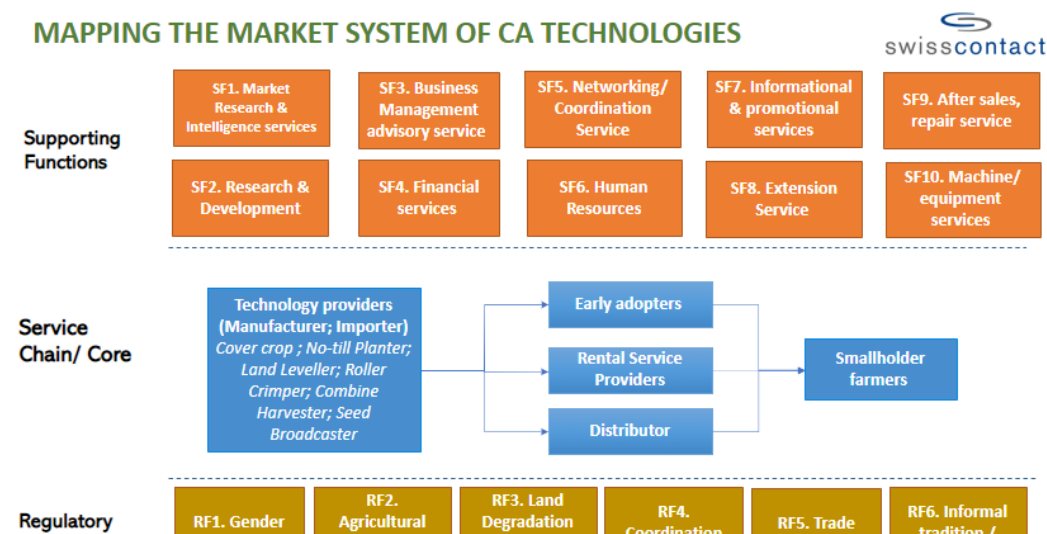
Mapping of the intervention system actors

During the knowledge review and the preliminary ToC building, project partners map out the actors in the intervention system analysed (i.e. flagship, national by challenge), identifying: core actors who would design, develop, disseminate, or use/participate in a new service, a new technology, a new organization and so on, and the actors providing supporting and regulatory functions for these core actors.

One tool that can be used to draw the map of intervention system actors is Swisscontact’s Market System Map. This is a visual representation of the sub-system in which the project’s target groups are currently supplying and demanding core services, and how the supporting functions and regulatory environment influence these core services. The map provides a snapshot of the existing system and enables the project team to understand existing flows of services/product and information between various actors in the selected market system. It also serves as the first step towards analysing the problems and underlying causes of system failure by identifying weak or missing links in support functions and regulatory environment of the system. Box 5 presents the steps to develop these Market System Maps.

Box 5: Market System Maps

The intervention system can be mapped out with different tools, one tool is the Market System Maps. First, the core products or services actors and services/product are identified to develop the core value service chain. One should be specific about the services/product that the project could support, identify the core actors on the demand side and the supply side for the service/product or service. In this process, please identify the role of the target population in the transaction. You can depict all the supply-demand relationship and linkages through which a primary service/product is produced/offered and reaches the final beneficiaries. The next step is to identify the support functions which are required to enable the core product or service. The core actors require support service(s) to produce, sell or buy their product or service, deliver or reach the target groups. A support function can be performed by multiple actors. The third step is to identify the rules (formal and informal) and regulatory environment that affect the transaction of the core product or service. Rules and regulatory functions generally comprise of structures, formal and informal norms, cultural customs and institutions that are beyond the control of the actors involved in the core system. When identifying the regulatory environment factors, it is useful to consider how these rules and regulations affect the core services.





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Specificities for the onsite Theory of Change workshops

Objective:

The objective is to allow key stakeholders reflecting on the current state of the territory and what were the major transformations that led the territory to its current state in terms of agricultural and food systems, and the roles of different actors. The common lexicon is also built here: agricultural and food systems, sustainability.

In the onsite ToC workshops, participants validate and complement the current system analysis carried out through the knowledge review, preliminary ToC meetings and additional data collected to address knowledge needs.

In the workshop, participants are presented with the timeline depicting major events and transformations that characterised their territory in the previous 10 years, as well as the characterization of the system, according the data collected for “setting the stage”. The facilitators from the project team prepare the timeline beforehand and facilitate the discussion in order to validate or amend or complement the timeline.

The system maps developed can be used to present the actors and interactions and to discuss whether the mapping reflects participant’s view of the system. The interactions between the different actors are specifically discussed in order to identify particular relationships that can influence the agroecological and safe food system transition. Moreover, influential actors beyond the intervention system and those potentially impacted by changes in the intervention system are also discussed here. Throughout the following Bricks, participants will revisit the actor maps and their interactions: future visions (Brick II) might include new actors or new relationships or resolved conflictual interactions; obstacles (Brick III) might include lacking interactions or missing actors that would be needed to support the transition; and the strategies identified (Brick IV), might include creating new links between actors or favouring the inclusion of a new actor (for instance an organization) and so on.

Proposed facilitation approach:

The discussion around the timeline can be carried out in a plenary session or in groups (e.g. by gender, by actor type) followed by a plenary restitution of main points amended in the groups.

Time: 45 minutes to 1 hour

The discussions on mapping can be carried out in groups by type of map, followed by a plenary restitution of main points amended in the groups.

Time: 45 minutes to 1 hour



Brick II: the future system: Where are we going? Where do we want to go? What changes must happen to go there?

Visions of the future

The second brick of the ToC building process focuses on understanding different visions and interests and building future visions according to multiple perspectives: project partners, flagship site stakeholders, other national level stakeholders.

Objective:

- To understand potentially diverging visions on the near future evolution of the agricultural and food system and to identify power dynamics that would affect the agroecology and sustainable food system transition
- To build a shared vision of the future towards which the system seems bound to go (“business as usual”, projected future) and the alternative/preferred/intended future that the actors of change would like to happen
- To identify the outcomes or changes in actors’ practices, interactions, behaviour, capacity, opportunities needed to achieve the preferred future

The discussion of future visions consists of two parts: first, discuss the **business as usual or projected scenario** of the agricultural and food systems evolution in the next 10-15 years, then discuss the **future vision** that participants would deem **preferred or desirable** (if the business as usual scenario or parts of it are deemed non desirable).

Diverging visions over the agricultural and food systems evolution can coexist. The knowledge review can provide first elements to identify different interests of actors of the agricultural and food systems. These different visions will be characterised through the preliminary Theory of Change meetings and additional data collection based on knowledge needs.

The interplay of potential power dynamics that affect how the intervention system evolves in relation to the central issue of the agroecological transition to support safe food systems, should be explicitly addressed in this step.

Understanding potential **power dynamics** in the agricultural and food system is important to calibrate facilitation of the onsite workshops, so that methods can be adapted to make different voices heard. Moreover, influential actors who should be taken into account when developing an action plan to support these transitions will likely emerge through these discussions.

If the preliminary ToC meetings make **particularly diverging visions emerge, a power analysis tool** can be applied within the preliminary ToC meetings or through key informant interviews to better understand issues of power related to the action planning. The power analysis should address:

- how power is distributed in the agricultural and food system
- what type of power is exerted by different actors and on what actors, in particular on the actors of change, in decisions affecting the agricultural and food system

Gender and intergenerational related issues in agricultural and food systems can also be discussed at this stage with the key informants.



Other issues should be addressed: access and control over resources; laws, policies and resource allocation; norms, beliefs and practices; emerging initiatives and changes, both in general and in gender or intergenerational relations.

Specificities for the Theory of Change meetings and workshops (preliminary and onsite)

After having discussed the current system, the participants of the preliminary ToC meetings or onsite ToC workshops are asked to consider how the agricultural and food system are likely to evolve in the following 10 years. The agricultural and food system needs to be adequately defined so that the boundaries of the system for the vision of the future are clear to all participants.

Projected future

This first exercise allows participants to discuss the **projected or “business as usual” future:**

- What is the future **of the agricultural and food system** towards which we are currently going (Business as usual)
- What characterizes this future in terms of social, technical, economic, environmental, political (STEEP) dimensions?
- Impacts: who are the actors taking advantage or losing in this future and how?

Proposed facilitation approach:

Each participant writes 2 to 3 post-its characterizing one dimension of the future (social, economic, environmental, political and technical) of the agricultural and food systems. Then, a large board with five columns (one for each dimension) is filled by each participant by sticking the post-its corresponding to the column.

Then the facilitator creates clusters of post-its presenting the same or similar idea, asking participants to validate his/her interpretation. This defines the future state of each dimension identified. A sentence summarizing this future state can be developed for each dimension.

At this point, the futures wheel is used to identify the direct and indirect impacts of the future state of each dimension on different actors affected by them. Each dimension will have its own futures wheel: the participants can split in five groups and then report their synthesis to the plenary or work in plenary on the five dimensions.

This work allows to identify the actors “gaining or losing” in the business as usual scenario.

Minimal timing: 1.5 hours

Preferred or desirable future:

After having discussed the projected BAU future and its impacts, participants are asked to brainstorm **whether this future is desirable, and whether it is more desirable for certain actors rather than others**. Then, they are asked to identify what are the elements that they wish to be different in a preferred future and those they wish to maintain. They formulate the vision narrating this preferred future.

If diverging visions emerge, the facilitators allow participants to **discuss to find common ground** and identify an intended future that all participants can agree with, even though it is not preferred by all.

The following guiding questions can be applied:

- What is the future of the **agricultural and food systems** that we would like to see (10 years vision)? Why and how would it differ from the projected future? What would be the role of agroecology in this preferred future?
- Would this future involve sustainable agricultural and food systems and how? Who would be impacted positively and negatively in this preferred future and how?
- For whom is this future desirable?



The map of the future intervention system is drawn, identifying the core, supporting, regulating actors and the impacted actors (which can be any of the previous ones as well).

Box 6 shows how the Futures wheel (Bengston, 2016) can be used to map out the potential impacts of a key specific change that the future vision implies.

Characterising the changes for actors and context

Characterising the outcomes (changes in actors and context) that lead to this preferred future implies:

- What are the changes in actor's practices, interactions, behaviour, capacity, opportunities for the actors of change (participants)? What are the changes of the other actors in the system that need to happen to support these changes?

Proposed facilitation approach:

After brainstorming on what is desirable or not in the business as usual future, the participants work on each STEEP dimension to discuss its preferred future state. This discussion can be done in plenary or through a group exercise (such as World Café).

For each element, the actors involved and their perspectives are made explicit.

Based on this, the facilitators ask participants to form five groups and to come up with one or two sentences to describe each dimension of the future. Then, each sentence is discussed and a paragraph that narrates the vision of the projected future is assembled by the facilitators, who asks the participants to validate and amend the narrative proposals. If the participants are active and comfortable enough, they can voice or write the sentences directly.

The Futures wheel is then carried out on few key dimensions that would undergo major changes to identify the direct and indirect impacts of this desired future and the actors impacted and question the sustainability (term defined with participants) of the preferred future.

A new **intervention system map** depicting the preferred future is developed, identifying core, supporting and regulatory actors. Impact actors are identified (from the Futures Wheel exercise).

At this point, the participants can work in groups (by actor) to identify the **changes (outcomes) for each actor** (they start with the core actors and then look at supporting actors and regulating function actors):

- what are the core actors doing differently, what are the changes in their practices, behaviour, interactions, capacities and opportunities in this preferred future?
- desired systemic changes: do other actors (supporting, regulating) need to change to allow the core actors implement the changes identified and achieve the preferred future and how?
- are there new actors in this future system?
- are there new interactions between actors?

A final plenary session is then carried out to validate the changes identified in the groups, for instance through a World Café method followed by restitution of final version of changes identified and to check that everyone is comfortable with the result.

Minimal timing:

1 - 1.5 hours for future states and Futures wheel

30 – 45 minutes for intervention system map

1.5 hours for the outcomes

Box 6: The futures wheel method to map out potential impacts of a specific change

The futures wheel method is used in future studies to discuss the potential direct and indirect consequences of the change identified. First-order consequences generated directly from the event/change are first identified (for instance one key element of the preferred future vision that is different from today), both positive and negative, whether they are probable or less probable. Then, possible second-order consequences are identified as a result of the first-order consequences. The group can proceed to third-order consequences if desired. The figure below provides a graphical visualisation. The figure below shows a graphical representation (Bengston, 2015).





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Brick III: Obstacles, risks and opportunities: What holds us? What pushes us?

Objective

- To build realistic and plausible action plans towards the desired changes in actor's practices, behaviour, interactions, capacities and opportunities
- To identify, from the perspective of multiple actors, the obstacles, risks and opportunities to the changes identified

What holds us? What pushes us?

During the knowledge review and preliminary ToC meetings, project partners develop a common understanding of the existing obstacles and opportunities at the actor and at the context level that would hinder or support the achievement of the changes identified in the previous step. Subsequently, the obstacles and opportunities and the risks inherent to these changes for the actors making the change or for other actors that would be affected by it, are discussed in the onsite workshops (flagship, national).

Going through these elements in the different steps, knowledge review, preliminary ToCs, onsite ToCs, allows to build a comprehensive understanding of what holds the change and what pushes towards it, which allows to identify the plausible strategies (the intervention) that can be implemented to move towards the desired changes.

Different elements can be analysed at this level: key problems and opportunities of the agricultural and food systems characterizing the intervention systems (flagship, or national by challenges). Existing interventions supporting agroecology and those that are deemed as most relevant by key informants, and why, are identified as opportunities. Previous interventions in agriculture that have not succeeded and the reasons for their lack of success can be questioned. The current land management and related regulations can be characterised, and the key actors concerned by these regulations identified. Emerging debates about land management and regulations can be discussed to identify whether these would potentially hinder or favour the desired changes.

A **gender and youth lens** should be applied to each dimension to characterize potential differences in the problems faced and the opportunities open to women and youth.

The objective is to understand actor-related and context-related obstacles, risks and opportunities.

Why the actors who would make the change possible are not currently implementing these practices, behaviors, or interactions? Do they have the knowledge, skills, capacity and motivation to implement them? Are these changes aligned to their values?

Is there an enabling or hindering context for them to make these changes?

These questions should be addressed for each outcome identified in Brick II.

The ImpresS *ex ante* guidelines provide examples of specific questions:

- Do the identified actors wish to change and for what reasons?
- How is this outcome in line with their values?
- To what extent do they have the ability, knowledge, resources, and power to do things differently?
- Do the changes that the actors would make engender potential risks and for whom?



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- Are there actors with specific interests that make the realization of the outcomes difficult or impossible?
- Are there actors with specific interests that would accelerate/favor the outcomes?
- Are there power relations positively or negatively influence the final outcomes at the level of specific actors?

In some cases, contextual factors may represent an obstacle or an opportunity:

- Do the physical environmental conditions prevent actors from changing their practices?
- Does the economic environment support changes in actors' behavior and interactions (incentives, markets, infrastructure, etc.)?
- Is there a regulatory or legislative model that frames, limits, or encourages changes in practices?
- Do the local culture and values hinder or support the possible changes?
- What past experience or existing arrangements can facilitate or hinder generation of the targeted outcomes?

At this point, a plausibility check is carried out to define the roles and responsibilities of the actors who are building the theory of change:

For which obstacles can the intervention's partners (including core, supporting and/or regulating) legitimately intervene?

What obstacles and opportunities can they address?

The actors that will implement the intervention could also seek links with other actors, projects or interventions that would be able and legitimate to overcome the obstacles identified.

The obstacles that these actors cannot address, could also become potential risks to the success of the intervention: they should be highlighted and strategies to minimize these risks discussed.

In order to understand contextual issues (obstacles, risks and opportunities) and potential interventions (strategies) one can adapt Swisscontact's Intervention Logic Analysis Framework (ILAF). The ILAF outlines the problems faced by the target group (i.e. the core actors, but could include supporting and regulating ones depending on the type of intervention), the underlying causes, the related services/functions and actors, the service weaknesses and the potential intervention areas.

We can adapt the ILAF framework to systematise knowledge before and after the preliminary and onsite workshops, presenting all the information from problems (obstacles) to intervention areas (strategies) in the same tool. **Box 7** presents the ILAF and how to build it.

The next Brick of the ToC building process focuses on answering these questions and checking the boundaries of the intervention by identifying the obstacles and opportunities.

When answers are not clear and/or need for additional knowledge emerges, a specific phase may be devoted to this assessment at the start of the intervention. This will help define the best strategy to engage the various actors and encourage output appropriation or modification of the intervention.

Box 7: Intervention Logic Analysis Framework (ILAF)

The Intervention Logic Analysis Framework (ILAF) acts as the connection between the problems experienced by the target group (for instance, farmers) and the systemic interventions that can be deployed to make the market system work better for them. The ILAF provides a logical sequence to guide the project team. To build the ILAF, follow the steps:

Step 1: Identify the main problems in the core market or value chain faced by the actors (focus on target group or beneficiaries, for instance farmers)

Step 2: Identify the underlying causes of the underperformance of the core market (or core value chain) problems identified in step 1

Step 3&4: Identify the support function and (or) regulatory environment from system map that are related to underlying causes of the underperformance causes and who are core market actors or value chain to whom these supporting and regulatory functions are directed

Step 5: Identify the key weaknesses or the binding constraints of those actors in the support and (or) regulatory functions that lead to the under- or weak provision of the support/regulatory function

Step 6: Identify the key intervention areas to overcome market system failure in the support or regulatory functions and improve performance of core market /value chain to benefit target group.

Intervention Logic Analysis Framework (ILAF)



Problems of the target group	Underlying Causes	Services/ Functions	Actors	Service Weaknesses	Intervention Areas
1. Low and declining productivity 2. Low profits	Limited coordination across the diverse range of innovation stakeholders to joint effort in promotion and advocacy of sustainable agriculture to farmers	Coordination service	Gov, research institute, private sector	<ul style="list-style-type: none"> • Coordination lack of management expertise. • Lack of vision setting for the • Lack of trust and credibility 	Coordination (promotion, extension, research)
	Inadequate or no conducive policies that inform and promote sustainable agriculture practices	Advocacy service	CASIC, AMAC	<ul style="list-style-type: none"> • Not credible enough • No consolidated experience to advocate properly 	Coordination
	Sustainable agriculture technologies designed/ developed are not suitable for farmers (use, cost, etc.)	Market testing/ commercial research& development service	Tech parks, universities	<ul style="list-style-type: none"> • Limited commercial orientation in the development of new technologies by technology providers • Limited engagement with end-users by technology providers in idea generation, technology design, and testing, thus leading to technologies that are not context specific or demand-driven • Lack of transfer between research-based innovations and their commercial application in the marketplace 	Extension

Specificities for the Theory of Change meetings and workshops (preliminary and onsite)

What is presented in the previous section is valid for the whole ToC building process, as the analysis of obstacles, risks and opportunities is based on answering a series of guiding questions. The specific facilitation of this session in the ToC workshops (preliminary or onsite) will be defined by the ASSET ToC team for each application.

However, overall the exercise should cover the following items:

- Weight of the past: why are the actor changes identified as desirable not happening? What holds them?
- Push of the present: are there emerging opportunities to generate the actor changes identified?
- Pull of the future (optional): are there trends that push the intervention system towards a specific direction (not necessarily the business as usual nor the preferred future)?
- Are there specific risks for the actors who would make the change or for other actors affected by these changes?



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- Actor's perspectives: who defines obstacles and opportunities as such and for whom?

Proposed facilitation approach:

Two proposed facilitation approaches can be used.

Version A.

Once all changes are collectively agreed, they are listed as lines in a matrix with 7 columns: optimistic arguments of the change/point of view of the actors that have a positive view of the change, pessimistic view of the change/actors that would have a negative view of the change), other arguments, obstacles, risks, opportunities, strategies (including activities and actors involved) to achieve the actor changes.

The selected changes are addressed one after the other by a team of 3 participants. Two participants defend two opposite positions in an adversarial debate and bring in arguments pro or cons the proposed change. The arguments are gradually listed in post-its and arranged in the first two columns then another column may present other arguments that are different from the ones proposed in the two first columns. Other participants are invited to propose different arguments, to write them on post-its and then to place them in one of the three columns.

Once the three first columns are filled in, the facilitator invites participants to translate the positions of the two discussants as obstacles, risks, opportunities and strategies that are gradually listed in the corresponding columns of the matrix.

Participants identify the actions and resources needed to overcome the obstacles and to take advantage of the opportunities. They also discuss resources and actions needed to limit the risks identified. They identify plausible strategies and identify actors' roles and responsibilities. If other actors need to be engaged to achieve the desired changes, this either becomes a risk or a specific strategy. At this stage, the boundaries of the action are defined: expectations in terms of what can be achieved given the resources and the actors who are in charge of each action become explicit.

Then, the debate moves to the next proposed change to fill in the next line of the matrix, until there is no proposed change left.

VERSION B.

One group works on the current **obstacles** (weights) to the achievement of the desired changes. The obstacles can link back to the projected (business as usual) scenario: the maintenance of the status quo. These obstacles can be related to the actors or to contextual factors.

Guiding questions are (see also main text above): Do the actors want to change (motivation and interest)? Can they change (knowledge, capacity, networks/interactions, access to and availability of resources)? Do they have the opportunity to change, are the external conditions favourable to change (technology, policy, laws, infrastructure and so on)? Do the changes align with their values and interests? Are there other actors whose interests would conflict or converge with the desired changes? Are there gender or youth specific obstacles to these changes?

Another group works on the existing **opportunities** (pushes) that would support the desired changes for each actor: the actions, actors and trends that are pushing the system towards the preferred future identified. They can also discuss whether there are images of the future (pulls) that appear to dominate the current discourse of actors towards directions that are different than the preferred future identified.

Once the two groups have finished, they discuss and amend in plenary their results and identify the **potential risks** linked to the changes in actors' practices, interactions, behaviour, capacity, and opportunities identified.

At all times, the actors involved and their perspectives are made explicit.

If an ILAF framework has been built during the knowledge review, the facilitators can use it to question participants (preliminary ToC, or onsite ToC). The analysis of obstacles, risks and opportunities (or ILAF if this tool is privileged) resulting from the preliminary ToC meetings can be used to support participants' thinking in the onsite ToC workshops too.

Minimal Timing: 1 to 1.5 hours (group session) ½ to 1 hour plenary



Brick IV: Planning the transition: How do we get to the preferred future? Who does what?

Objective:

- To discuss potential innovative practices and dynamics that can address the obstacles and opportunities identified supporting the agroecological and safe food systems transitions
- To identify the strategies (broad action plan) that would can address the obstacles and opportunities identified
- To define roles of the actors (core, supporting and/or regulating) and of the ASSET project

Identify innovations and actions

Innovations:

Through the knowledge review (scoping studies in particular), traditional agricultural practices and emerging new practices are analysed and how they are related to agroecology (converging or diverging with the notion of an agroecological transition). Beyond agricultural practices and services, emerging innovations (organizational and institutional innovations) in the local food system and in policies are also analysed. The actors engaged in these innovations are identified.

These innovative practices are then discussed during the preliminary ToC workshop in relation to the obstacles and opportunities identified by project partners. This discussion can raise new knowledge needs and therefore further data might need to be collected before the onsite workshops.

At the onsite workshops, participants can identify innovative practices that would support the transition towards the preferred future.

The ILAF refined with the results of the preliminary and onsite ToC workshops, can also serve as a foundation to identify appropriate innovations. There may be numerous innovative practices in the sector studied, however, the intervention areas (= innovation areas) in ILAF help the team to stay focused on the areas of innovations which will eventually address the obstacles of the system actors and problems of the target group in the agroecology and food system transition.

Strategies/actions:

In the previous Brick, the obstacles, risks and opportunities have been identified: the next step is to design the strategies to overcome obstacles on the one hand, and seize opportunities on the other. Discussing the plausibility of the strategies is key at this point: underlying assumptions on why these strategies would generate the changes (outcomes) should be made explicit, as well as the links between the different strategies identified, to draw well coordinated and systemic action plans.

Guiding questions for the identification of strategies and actions can include:

- For each obstacle/opportunity, what would be the actions to overcome, seize them? Who would carry them out?
- What actions would motivate actors that would oppose the changes to support them? Who is legitimate to do so and how?
- What actions would facilitate actor's access to resources (cognitive, financial, material, human, economic, legal, social, etc.) so as to enable them to implement the change?
- Should new innovations be devised or existing innovations be promoted? be improved?
- What actions would address the organization, governance, relationships changes identified?



- What type of training or capacity strengthening is needed, for whom, and in what formats? Who should conduct these actions?
- Can the implementation of new mechanisms of consultation between actors help solve conflicts between them? Under what conditions?
- What strategies are needed to mitigate the risks and potential negative impacts identified?

The actors building the intervention cannot probably implement all the strategies identified.

The ToC building process needs to go through a **plausibility check**. During the preliminary ToC building, the project partners identify the strategies that they can carry out or support. Further knowledge needs might need to be addressed as part of the strategies to implement. Then, during the onsite workshops, the participating stakeholders discuss the actions they think should be carried out to overcome obstacles and seize opportunities: they identify who are the actors that should or could implement these strategies (including themselves) based on their role and functions (core, supporting, regulating). Ultimately, if actors building the preliminary or onsite ToCs do not have the ability, means, or mandate to implement certain strategies. In this case, the strategies should explicitly target those actors who are legitimate to do so.

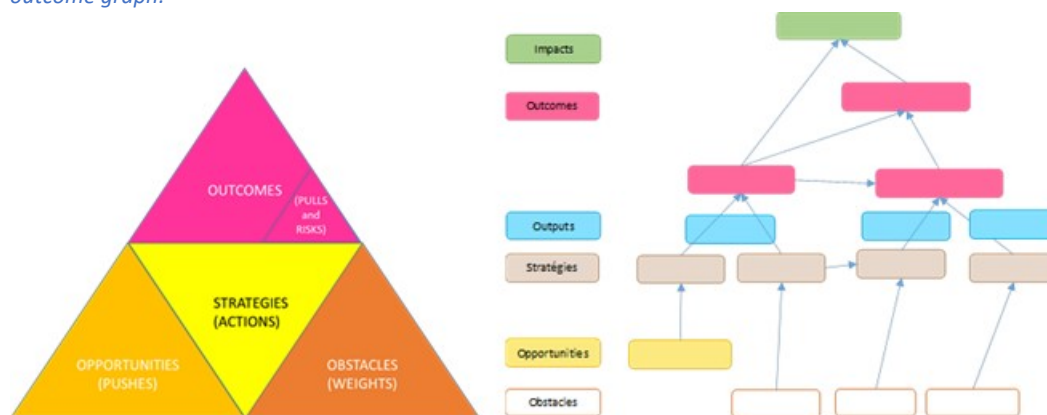
Mapping together all the linkages from the Future vision, to the desired changes, to the obstacles, risks, opportunities and to the strategies and between these elements provides the whole intervention logic, or impact pathway of the intervention. See **Box 8** for three visualizations of the intervention logic/impact pathway. The construction of these graphs is carried out by the workshop facilitator, who puts participant responses in the corresponding field.

Box 8: Visualizing the links between strategies, obstacles, opportunities and outcomes

There are different ways to facilitate and visualise the results of building the impact pathway or theory of change, for instance by asking participants to compile the following matrix:

Outcomes	Obstacles	Opportunities	Risks	Strategies to overcome obstacles	Strategies to overcome opportunities	Strategies to mitigate risks

We can also use visual tools. The figures below show the plausible actions or strategies built by the interaction of outcomes (desired changes), obstacles, opportunities and the strategies to overcome or seize them. Pulls towards certain future directions (not necessarily the preferred future vision identified) can be taken into account in building the strategies, as they can determine bifurcations during the implementation of the intervention (one scenario is happening even though we had planned for the desired future scenario to happen). It is also important to take into account the potential risks linked to the outcomes identified and the strategies to mitigate them. The graph merges ImpresS' graph on outcomes (Blundo Canto and De Romemont, 2020, pp. 41, 53) with a foresight tool, the Futures Triangle (Inayatullah, 2008, p. 8). We can represent these elements through a pyramid representation (left) or through what we call an outcome graph:



When all outcomes the group has decided to work on, and the strategies to generate them by overcoming obstacles and seizing opportunities have been treated, **we have the backbone structure of an action plan**. The strategies are the different lines of action that the intervention will implement. The next task is for the group of actors who will lead the intervention to build a detailed action plan that lays out the what, how, who, where of the intervention.

Managing expectations:

The expectations of stakeholders participating in the ToC building process need to be addressed. It is important to make explicit what the actors who are designing the ToC can or cannot do. During the onsite workshops in particular, it is important to discuss the innovations and the actions defined by the actors, that the ASSET project can support. The knowledge review and results of the preliminary oC building can be used to identify the areas of the ToC built by stakeholders at the onsite, that the ASSET project can address.



Specificities for the Theory of Change meetings and workshops (preliminary and onsite)

As in Brick III, the preliminary ToC meetings and onsite ToC workshops can follow the same overall guiding questions:

- What are the plausible actions that will help overcome obstacles and seize opportunities?
- Who are the legitimate actors to carry them out?
- Are there external (context) and preliminary (related to the strategies themselves) factors that might affect the strategies' success (look back at obstacles and risks)?
- Defining roles and responsibilities of actors
- Managing expectations and check plausibility: do the stakeholders defining the strategies have the power/legitimacy to define the changes that the actors would make or to implement the strategies identified?
If not, identify for which changes and strategies these stakeholders are able/legitimate to intervene or identify strategies to engage the actors that are able/legitimate to intervene.

Once the strategies have been defined by stakeholders during the onsite ToC workshops, the ASSET project partners can discuss which of these strategies they can support based on the preliminary ToC developed beforehand and the capacities that these partners bring to the table.

It is unlikely that the project will be able to support all the strategies identified by stakeholders, which will likely go beyond the reach and capacities of the project partners. Therefore, it will be a key moment during the onsite ToC workshops to adequately discuss what can and cannot be supported by the ASSET project. For the actions that the project cannot support, alternative strategies can be devised: linking with existing initiatives, other actors and so on. In any case, it is important to discuss the expectations of stakeholders participating in the workshop and what they can expect from the ASSET project.

Proposed facilitation Approach:

Participants work in groups to identify the actions and resources needed to overcome the obstacles and to take advantage of the opportunities. They also discuss resources and actions needed to limit the risks identified. The time horizon is probably shorter than that of the changes identified, about 5 years, or in any case a duration that allows to monitor and evaluate the achievement (at least partial) of these changes.

They identify plausible strategies that they have the **influence and legitimacy to carry out**. They identify their **roles and responsibilities**. If other actors need to be engaged to achieve the desired changes, this either becomes a **risk** or a specific **strategy** in the action plan.

At this stage, the **boundaries of the action** are defined: **expectations** in terms of what can be achieved given the potential resources and the actors who are in charge of each action need to be managed and made explicit.

Next step in action plan building are defined.

Minimal timing (more if detailed action plan is to be built in this session): 2 hours



Brick V: Achievement indicators: What indicates we got there?

In the final Brick, the process differs in terms of what is done at the level of ASSET project partners and at the level of onsite (flagship, national) ToC workshops.

Final ToC and action plan and identification of MEL indicators:

Preliminary ToC workshops

At the level of project partners, elements to discuss the action plan for the intervention that the project partners will implement have been gathered through the previous steps: knowledge review (scoping studies and expert based knowledge), preliminary ToC, actions to address knowledge needs. If the ILAF tool has been applied previous to the onsite workshop, innovation areas have been identified and refined with the results of the workshops, and it is now necessary to identify the interventions that fall under each innovation areas to define in detail the actions, strategies, risks etc.

Onsite ToC workshops

At the end of the onsite workshops, once the overall strategies/actions have been discussed, it can be useful to identify the key outcomes (changes) that they think should be monitored to indicate that the actions undertaken are being successful. The idea is to identify with participants some key indicators (descriptions) of what they would call success in achieving the desired changes, as well in some key impacts.

Ultimately, it will be the work of the project team to integrate all the sources of knowledge used to finalize the TOC and define a detailed action plan and MEL system, but the input of participants in defining indicators (descriptors) of change supports the identification of contextually meaningful dimensions to be monitored and evaluated, additional to those identified through scientific literature.

Proposed facilitation approach:

Participants are invited to discuss what would be the key changes that need to be achieved and whether they are complex or simple to achieve based on the strategies and actions identified. A prioritization exercise can be carried through ranking and discussion: they rank the changes from the most important to less important to monitor. They may also rank the changes depending on how easy they are to achieve (low hanging fruits to highly challenging).

Then they are asked to identify what would indicate progress and success for the changes they identified as priorities. They can also go back to the impacts identified in the visioning exercise to link them to these changes and identify how these impacts could be described as achieved (or mitigated if they are negative).

Participants write down indicators (or descriptors) on post-its and they are discussed collectively until an agreement on a list of relevant indicators for each specific change and impact is achieved.

Minimal timing: 1.5 hours

Final validation meetings

Finally, the project partners systematize all this information to guide the specific actions that the project will support and how, making explicit the values and visions underlying the changes identified (by whom and for whom) and the underlying hypotheses on why the changes identified would happen as a consequence of the actions planned.



The detailed action plan will be ultimately used to inform the Monitoring, Evaluation and Learning System, also identifying links to the knowledge hub. The project team will therefore define the intervention indicators related to:

- Achievement (for evaluation)
- Progress (for monitoring)
- Learning loops

Restitution meetings after the onsite workshops will present the final action plan that the ASSET project will implement. This step allows to validate the action plan with those stakeholders who will participate in, influence or be impacted by, the actions undertaken. The format and methods that these validation meetings will take, will depend on each specific context of intervention and the actors who were involved in the onsite ToC workshops.

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