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Deliverable 5.1
Monitoring and Evaluation Approach for NEFERTITI Hubs and Networks

Document Summary

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Deliverable Lead: Boelie Elzen (Wageningen Research)

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Author(s): Boelie Elzen, Anne-Charlotte Dockes, Cynthia Giagnocavo, Fleur Marchand, Herman Schoorlemmer and Laure Triste.

Contributor(s): Adrien Guichaoua and Mathieu Merlhe

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Abstract

The NEFERTITI project facilitates the creation of interactive thematic networks related to the agriculture sector to promote knowledge, peer-to-peer learning and the adoption of innovative techniques through the exchange of information between different actors and live demonstrations.

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INTRODUCTION

M&E in NEFERTITI

This deliverable describes the monitoring and evaluation (M&E) approach for NEFERTITI project. It addresses the three NEFERTITI 'levels', i.e. M&E of the 45 hubs, M&E of the 10 thematic networks (each comprising 4-5 hubs) and the M&E of the wider learning on demonstration beyond the networks.

This M&E will serve two general functions:

1. To increase the capacity for 'self-assessment' (*i.e.* reflexivity) in the hubs and networks to help them realise their objectives in an optimal way.
2. To gather and report information on what happens and what is learned in the hubs, networks and the wider AKIS environment for later analysis in WP5.

Each of these functions will set some general requirements for the M&E plan, including:

- Local practitioners, many of whom will not have any experience in doing this, will carry out the M&E in the networks and hubs. These monitors will be quite experienced in the content of what is at stake in the hub or network but may have less sensitivity for the social processes at play. To allow them to carry out M&E effectively, the M&E approach should be presented to them as a very practical set of tools that are easy to apply and have a logic that is easy to grasp.
- The annual M&E reports (from each of the hubs and networks) that will be analysed in WP5 should be based on a very structured form of data collection that is guided by an explicit methodology on how the data will be analysed that is rooted in recent scientific insights and practical experiences.

These two general requirements imply that, on the one hand, the M&E should be scientifically rooted, while, on the other hand, it should include an easy to comprehend and use set of tools. To realise this we have taken a two-step approach.

- In the first step we have developed a 'general M&E approach' that is rooted in scientific insights and a detailed assessment of the requirements of the NEFERTITI project. The current document is intended as the first version of this M&E approach. The final version of this document has been produced in a process that only involved the task leaders of WP5.
- In the second step we have produced a very practical set of 'M&E guidelines and tools' that will be used by the monitors in the hubs and network, and in which they will be trained. These guidelines, of course, are based on the general M&E approach. To facilitate this, sections on the 'general approach' below include various remarks on consequences of the general approach for the more practically oriented M&E guidelines.

This deliverable will assess the requirements of the NEFERTITI project, present some general features of M&E and discuss how such insights can be applied in the project. Below, the report first presents some relevant parts from the NEFERTITI project description (DoW – Description of Work), including the WP objectives, tasks, and activities. Next, it discusses a number of general concepts and objectives of M&E. Thereafter, it addresses some general aspects of using M&E in NEFERTITI, followed by a number of challenges, requirements and suggestions concerning its application. Finally, the enacting of M&E in NEFERTITI is discussed by presenting a set of guidelines and tools that various NEFERTITI practitioners can use.

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Requirements for the NEFERTITI M&E approach

Objectives of WP5

WP5 will create and facilitate M&E of both regional learning processes in the NEFERTITI hubs and interregional knowledge exchange within the NEFERTITI thematic networks. A number of objectives for WP5 and the WP5 M&E approach are set out. The first three objectives below are taken from the NEFERTITI DoW (Discription of work). They are followed by some additional objectives that are inferred from the WP and task descriptions in the DoW. The main objectives of WP5 are:

- Capturing and sharing practices and methods to improve collective peer-to-peer learning on demo-farms.
- Organising self-monitoring, evaluation of these practices and methods and collective learning to enhance the learning process of farmers within the NEFERTITI demonstration networks.
- Developing recommendations on how to utilise these approaches for Demo-farms in various countries of the EU, supporting the implementation of EIP-AGRI, related to the dynamics of the advisory and education systems in the EU.
- Add reflexivity to the learning process within the demo-farm networks which results in a dynamic mode of learning that is crucial in innovation (innovation loop). Bring in reflexivity within the dynamic action plans (WP1) and to articulate the lessons learned from - and to be used by - demo-farms. This includes the development of a reflection process at the level of the hubs and networks (T5.3).
- ‘Harvest’ from learners, teachers and observers what has been learned on ‘science-practice’ interaction and facilitation of operational groups (EIP-AGRI).
- Assess which learning processes could support the implementation of the EIP-AGRI and be relevant for the advisory and education systems in the EU.

Tasks and key task objectives in WP5

The following tasks are distinguished in WP5

- T5.1 – M&E approach and methods. (M10-M16; WR lead).
  T5.1 will develop a monitoring approach and select tools to bring in reflexivity within the dynamic action plans (WP1) and to articulate the lessons learned from - and to be used by - demo-farms
- T5.2 Implementation and facilitation of a self-reflection process on demo-farm level. (M15-M40; ACTA lead).
  T5.2 focuses on the preparation and provision of training in the use of the monitoring tools and on the coordination of the monitoring process by demo-farmers.
- T5.3 - Implementation and facilitation of a cross-reflection process for the hubs and networks (M15-M40; ILVO lead).
  The actual self-monitoring is done in WP3 (T3.3) by coaches and demofarmers, but this will be coordinated, steered, inspired and facilitated by task 5.2 which will serve as a helpdesk with individual reflection and advice by webinars and mail.
- T5.4 – Analysing lessons learned about used practices, methods and collective learning. (M25-M40; WR lead).
  T5.4 will analyse the results of T5.2 and T5.3.
  Note: this implies that T5.4 will also analyse the monitoring process itself to answer the question: how to organise a good (self-) monitoring of demonstration activities.
- T5.5 – Providing recommendations for a better use of demo-activities in the AKIS. (M40-M48; UAL lead).
  T5.5 focuses on how to utilise the lessons learned in various EU countries, supporting the implementation of EIP-AGRI, related to the dynamics of the advisory and education systems in the EU

Key activities within the tasks

- T5.1 will develop the M&E approach in accordance with the network DAPs (dynamic action plans), seeking to increase the effectiveness of network and hub activities and to harvest experiences from all hubs and networks.
- The T5.2 training will be interactive, involving hub coaches, network leaders and monitors, to adjust the monitoring approach to the individual Hub Campaign plans (WP1). The task will subsequently function as a helpdesk.

- T5.3 will design interventions to stimulate collective learning, focusing on good practice approaches for demonstration by commercial Demo-farmers in Networks at EU or national levels, like transnational events (T2.3) or cross visits (T2.4).
- The T5.4 analysis will be fuelled by the organisation of 2-3 reflection meetings with the partners in this WP, NEFERTITI network leaders and hub coaches.
- T5.5 translates lessons learned from T5.4 into a set of recommendations to improve collective learning and practice change in demoactivities. This takes into account lessons from PLAID (WR and ACTA are involved) and AgriDemo-F2F (ILVO is involved). Furthermore, lessons will be generated on the role of farm advisors in peer-to-peer learning processes on demo-farms by interaction with AgriLink project (WR is involved).

T5.5 will also organise a dedicated workshop with representatives from the RUR 13 team ('Building a future science and education system fit to deliver to practice') and from the EIP-AGRI team to share findings and recommendations

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M&E CONCEPTS AND OBJECTIVES

The concepts of monitoring and evaluation

Note: The following chapters feature a number of general remarks on the role of M&E and observations that are specifically tailored to the NEFERTITI project. The general sections, to a considerable extent, build on a comparable M&E plan that was developed to monitor so-called ‘Living Labs’ in the currently ongoing H2020 AgriLink project (https://www6.inra.fr/agrilink). We gratefully acknowledge consent from the authors of the AgriLink M&E plan to build on these sections for the NEFERTITI project.

M&E are concepts that are often used together, with monitoring usually thought of as a part of evaluation. Meanings of both concepts vary depending on what is being monitored and evaluated and why. Monitoring usually involves observing, measuring, documenting and verifying what is going on in relation to planned activities, objectives or some expectations. Evaluation involves making a qualitative or quantitative interpretation of activities, behaviors or outcomes against criteria or standards, in reference to pre-established objective. Evaluation is usually about determining effectiveness (doing the right task, completing activities and achieving goals) and efficiency (optimal use of resources). Both monitoring and evaluation can be formal and/or informal, active and interactive. Criteria can be explicit or implicit and M&E can be carried out continuously and/or at specifically agreed time intervals. Both processes can focus on different levels of activity, using a range of supporting tools and techniques.

Objectives of M&E in NEFERTITI

Note: the various sections below will provide specific guidance for the NEFERTITI M&E approach that is developed here. This guidance is made specific in several of these sections in a paragraph that starts with the phrase: ‘Consequence for M&E Guidelines’. The first of these ‘consequences’ follows at the end of the present section.

M&E can have two general objectives, both of which are relevant for NEFERTITI:

1. To add reflexivity to a project by a process of continuous or periodic assessment. Feedback is given by the monitor to the project, to be discussed among the partners and to adjust, if necessary, the project’s activities to ensure that the project’s objectives are achieved in an effective and efficient manner. In NEFERTITI this is largely the responsibility for WP3 (T3.3) but the approach and tools are created in T5.1, taught in T5.2, and supported by the provision of a helpdesk in T5.3.
2. To collect data and report on the functioning of ongoing activities or a project, and/or for later analysis. In NEFERTITI this is relevant for data collection in T5.3 that will later be analysed in T5.4. and processed into recommendations in T5.5.

   Consequence for M&E guidelines: the objective of reflexivity implies that M&E should be embedded in the project in an active manner. Hence, the M&E manual should indicate how M&E can be put on the agenda of hub and network meetings.
   Consequence for M&E guidelines: the objective of using M&E reports from 45 hubs and 10 thematic networks for analysis implies that these reports should follow a specific and rather simple template to make this feasible.

General dimensions of an M&E approach

Several factors should be considered in the process of monitoring a project or activity (e.g. a hub):

- The **objectives**: what does the project seek to achieve?
- The **activities** and **resources** (or tools): how will the project seek to realise these objectives?
- The **actors**: who is involved in the project?
- The **context**: What external factors outside of the project have an important influence on the extent to which the project can achieve its objectives?

M&E should consider all these factors. In addition, the M&E process can assist and stimulate hub coaches and network leaders to ‘re-set’ or adjust their objectives and strategy. While M&E is about ‘doing things right’ in order to meet objectives, M&E can also encourage those who are setting objectives and strategy to re-think whether they are ‘doing the right things’. In particular, the question of whether objectives reflect ‘the right thing’ needs to address how the project is related to its external environment. For example, a hub or network may have formulated a specific objective to be reach a specific goal (i.e. reducing water use). But a discussion on the external environment may shed light on the fact that reducing water use is not enough: in fact, that additional capture of water resources may be necessary; or that certain types of water (drinking water) should not be used at all. M&E may invoke such a broader discussion that may lead to a reformulation or further specification of the objective.

Core concepts for M&E

Two core concepts are important for M&E: 1) 'reflexive monitoring' in keeping with the reflexive approach of NEFERTITI; and 2) 'systemic evaluation', which acknowledges that NEFERTITI hubs operate within a wider (AKIS) context that co-determines what the hubs may achieve. These two core concepts are briefly discussed below.

Reflexive monitoring

According to the DoW, the NEFERTITI M&E plan should stimulate reflexivity within the hubs. To achieve this, reflexive monitoring is one of the key principles of NEFERTITI which combines the concepts of reflexivity and monitoring. Reflexivity is a 'second order' process in which the observer sees her/himself as a part of the situation rather than apart from it (Ison, 2010; Fook, 2002). A reflexive process is one of critical self-awareness and 'thinking about the processes of thinking'. Figure 2 below illustrates the idea of reflexivity. When applied to the NEFERTITI hubs, 'practitioners' might be researchers and other participants engaged in a critically reflective process about what they are doing and their underlying assumptions. NEFERTITI hub monitors have a key role in reflexive monitoring.

> Consequence for M&E guidelines: the fact that in various cases M&E will be carried out by people without M&E experience while they have a key role to play implies that this role should be well described in the M&E guidelines.

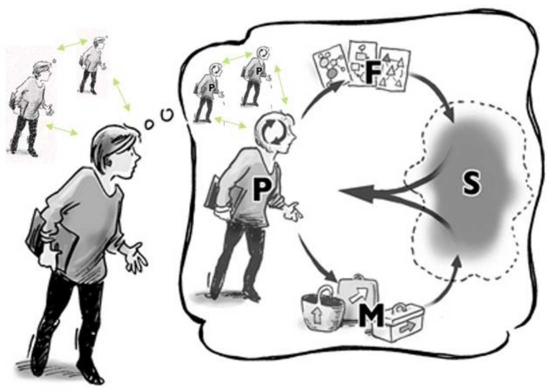

Figure 1: Thinking about an inquiry process in which practitioners (P) use a framework of ideas (F) and methods (M) to inquire into a situation (S) (Source: adapted from Ison, 2010 in the AgriLink M&E plan)

The aim of the NEFERTITI hubs is to improve the peer-to-peer learning by visiting farmers, taking into account the AKIS (Agricultural Knowledge and Innovation System) environment in which these farmers operate. Achieving this requires a reflexive stance on the side of both researchers and practitioners to critically look at their own practices, their views and their ways of doing things. Reflexive monitoring is supported by tools to stimulate reflexivity in co-creation processes whilst also collecting relevant data on the process of each NEFERTITI hub that will later be analysed in WP5 in relation to the results from the other NEFERTITI hubs at the network level (across five related hubs) and the project level (across 10 networks).

The NEFERTITI M&E approach will draw on action research traditions that include reflexive monitoring as an integral part of their process. For example: the approaches of Reflexive Monitoring in Action (RMA) developed at Wageningen University (Van Mierlo et al. 2010) and Systemic Inquiry developed at the UK Open University (Ison 2010). Both these approaches, which are briefly described in the box below, draw on a range of other traditions of theory and practice and both are framed as learning approaches to change.

Reflexive monitoring traditions that the NEFERTITI hubs will draw on:

Reflective Monitoriong in Action (RMA) is an interactive methodology to encourage reflection and learning within groups of diverse actors that seek to contribute to system change in order to deal with complex problems. This approach builds on the assumption that recurrent collective reflection on a current system of interest (barriers as well as opportunities) helps to stimulate collective learning and to design and adapt targeted systemic interventions (Van Mierlo et al., 2010).

Systemic inquiry (SI) is a key form of practice for situations that are best understood as interdependent, complex, uncertain and possibly conflictual. Reflexive monitoring is an integral part of SI, as is facilitation. Participating in systemic inquiry with others is a particular means of facilitating movement towards social learning, which is the sort of 'concerted' action associated with everyone working well together to address an issue of concern, making their contributions in a harmonious way. The overall inquiry (system) is monitored, measures of performance articulated against accepted criteria and control action taken. Measures of performance are not imposed from the outside. Iteration and concurrent action in different stages are common (Ison, 2010).

<u>Consequence for M&E guidelines</u>: These two monitoring traditions will be used as a starting point to develop indicators and practical tools for the M&E guidelines.

Systemic Evaluation
Like monitoring, evaluating can be both formal at particular stages of a process (punctual) and/or informal 'as you go' (continuous). Evaluation can be qualitative and/or quantitative and is driven by a need to develop knowledge, e.g. about learning or the effectiveness of an intervention and/or by a need for accountability, e.g. regarding how resources have been used and whether a project has achieved what it set out to do. Evaluation can apply to outputs, outcomes and processes.

This systematic approach tends to be a 'first order' process focusing on the subject in hand rather than a second order process that also takes a wider systemic view. In NEFERTITI we will purposefully combine reflexive monitoring with 'systemic evaluation' indicating that evaluation will be informed by systems thinking, *i.e.* a process that involves engaging with multiple perspectives, recognizing and understanding inter-relationships and reflecting on boundary judgements. Systemic evaluation is about determining whether an activity or outcome is consistent with stated goals or objectives, taking into account its context or external environment.

The following provides an example of systemic evaluation: In 'first order' evaluation the success of a demonstration might be measured by the number of visitors, their active participation, etc. However, the general idea behind holding demonstrations is to encourage visiting farmers to consider innovations for use on their own farms. To what extent farmers will do so not only depends on the demonstration but also on the agricultural system (also called AKIS: The Agricultural Knowledge and Innovation System) that the farmers operate in. To assess the 'wider success' of the demo we therefore also need to look at this wider AKIS system and to include this within the NEFERTITI M&E approach.

<u>Consequence for M&E guidelines</u>: The tools should also address a mapping of the AKIS environment in which the hubs and networks operate.

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CHALLENGES, REQUIREMENTS and SUGGESTIONS FOR M&E in NEFERTITI

Levels of monitoring

In NEFERTITI, the monitoring will need to address the following levels

- A NEFERTITI hub: a group of demos on the same topic in the same country or region
- The thematic network level: The level of an individual NEFERTITI network (a set of four or five hubs on the same topic in 4-5 different countries) and the process of exchange between these 10 thematic networks.
- The 'wider learning' level across Europe: the relevance of NEFERTITI experiences for the innovation dynamic in agriculture (beyond the 10 themes of the networks) in the EU (beyond the regions of the hubs), to support the implementation of EIP-AGRI, related to the dynamic of the advisory and education systems in the EU.

Challenges

Networks and hubs

NEFERTITI is organised into 10 networks, each consisting of 4-5 hubs resulting in 45 hubs, each of which may cover around five demonstration activities per year, i.e. app 15-18 during the three campaign years. Each hub and network will have its own M&E activities to fuel the self-reflection. At the project level, monitoring such results presents the challenge of processing a large number of reports in order to give feedback on the monitoring to T5.3 and for the analysis in T5.4. How will this be managed effectively?

> Consequence for M&E guidelines: To be able to process the volume of reports, M&E reports will need to follow a brief and fixed template. To facilitate evaluation, a process will be developed (possibly including the individual monitors) which filters out 'highlights' from individual reports that are likely to be of general relevance.

Dynamic Action Plans and Hub Campaign Plans

Each NEFERTITI thematic network will develop a 'Dynamic Action Plan' (DAP) that describes its planned activity for the year to come. Each hub will also produce a document with its plans by the name 'Hub Campaign Plan' (HCP). The M&E approach for these two levels will have to be embedded in the DAPs and HCPs. The main objective of this M&E for hubs and network is to provide guidance in achieving the objectives of the DAP and HCP during the year and to improve the hub and network approaches from one year to another.

Network leaders have submitted the first version of their DAP in the fall of 2018. The focus in the first draft should be on goals and challenges. Especially these challenges should be reflected in the M&E approach. The key factors in the DAPs, that should be reflected in the M&E approach, are the following:

1. Network goals, identity and values
2. Governance: network formation and hierarchies
3. Knowledge exchange and learning activities for value creation
4. Infrastructure and resources
5. Monitoring and evaluation
6. Maintaining the networks

Concerning the Hub Campaign Plans, the guidelines for these plans distinguish a cycle of four activities that are indicated in Figure 2 below.

Figure 2: Structure of the Hub Campaign Plan

The HCP guidelines give specific guidance for each of these steps that should be reflected in the M&E approach.

Note: as is evident from this cycle, M&E is not something that stands apart from the HCP but it is an integral part of a hub's activities.

> Consequence for M&E guidelines: The DAPs should form the basis for the network level M&E plans which should at least address the 6 key factors mentioned. The Hub level M&E plans should reflect the guidelines from the HCP.

Requirements for M&E PLANS

On the basis of the objectives and task descriptions for WP5 (cf. Ch.2) we can formulate a set of specific requirements that the NEFERTITI M&E plan should fulfil. They are presented in a rather random order below and will later be structured when actually developing the plan. During the process of development of concrete M&E guidelines and tools they will serve as a checklist. These requirements are:

The M&E Plan should address multiple levels

- The local hub level
- The network level (4-5 hubs), but also across all networks
- Impact beyond hubs/networks; national and EU levels. Policy and education.

Some requirements are relevant for all of these levels (the first section below) while others may be specific for one of them.

General requirements for all levels

- The approach should be application oriented and easy to explain to various actors who may have little or no experience in M&E. It should present very practical tools.
  M&E will focus on the learning process and on the context and conditions of the demo
- The 'harvesting of experiences' in T5.3 should use a standard reporting format from the very beginning to ensure that the results can later be analysed in T5.4.
- The set of indicators will include the suggestions for indicators that resulted from the Toulouse consortium meeting.
- It should have a hierarchical structure of general tools (which may be a bit abstract) and specific tools of which it is relatively easy to see how they should be used.

NEFERTITI hub level requirements

- Self and cross monitoring tools should be developed, tested, checked and provided
- The central M&E question is whether the demo-activities of WP3 are specifically stimulating learning by farmers and result in change of their own practices.
- Focus should be: how to assess the effectiveness of peer-to-peer learning?
- Possible indicators
    - the outcome and the impact (for example, no of attendees … and adoption/further dissemination, respectively)
    - the methodology (or innovation in methodology) as it relates to the former point
- Hubs and concrete demos can be varied in objectives and approaches. There should be flexibility and a specific set of objective does not automatically lead to an associated set of M&E tools. Tools should also be presented as a sort of ‘menu’ from which hub monitors can pick when it seems relevant to them.

NEFERTITI network level requirements

- Network leaders have submitted a first draft of DAP by 7 Sept 2018. The focus in these drafts is on goals and challenges. Especially these challenges should be reflected in the M&E approach.
- An objective is that the networks continue development after the projects ends. An approach to monitor the activities intended to achieve this will be developed.

‘Wider lessons’ level requirements

- One of the goals of WP5 is to develop recommendations on how to utilise these approaches for Demo-farms in various countries of the EU, supporting the implementation of EIP-AGRI, related to the dynamics of the advisory and education systems in the EU. We will start to address this in the second campaign year as in the first campaign year hubs will need to learn to apply the basics of M&E. When they are more experienced in the second year, we will ask hubs to co-develop (with the WP5 team) such recommendations. We need input from the hubs for this since these recommendations will, at least in part, be dependent on the local context. This makes it possible to address the issue of local vs global (i.e. EU level; OGs) in WP5. This will be addressed in Task 5.5.

  Consequence for M&E guidelines: The requirements derived from the WP5 description in the DoW (section 4.2.1 – 4.2.4) should be taken into consideration when developing the M&E guidelines for the various levels.

5

ENACTING M&E in NEFERTITI

Levels of enactment of M&E

As indicated above, M&E will be working at three levels:

Within NEFERTITI hubs: 45 hubs across the EU will implement a hub approach based on the DAPs that are formulated at the thematic network level (each network covering 4-5 hubs). Each hub will be supported by a local hub coach and monitor. They will be instructed (T5.2) and supported and guided (T5.3) by the WP5 team through the M&E process.

The thematic network level: The most important network level activity are the 'Cross Visits' in which the 4-5 hubs will come together for a workshop and demo, hosted by one of the hubs. Furthermore, hub teams will meet at annual consortium meetings (with WP5 representatives) to exchange experiences, to draw general lessons, and to gather inspiration for their work in each of the hubs. This will involve training in facilitation and monitoring, and exchange across hubs. The network leadership should also include a network-level monitor to facilitate the working at the network level and to collect data from the hubs to be analysed in WP5, T5.4.

The 'wider relevance' level (agriculture as a whole and EU-wide): This should support an assessment of which learning processes could support the implementation of the EIP-AGRI and be relevant for the wider advisory and education systems in the EU. This analysis will be done in T5.4 but it will be based on monitoring results from the previous two levels. Hence, this ambition should give guidance to these two levels for some specific data collection.

> Consequence for M&E guidelines: To facilitate a 'wider relevance' analysis (T5.4) and development of recommendations in T5.5, specific monitoring guidance is required for the hubs and networks.

Who will do the M&E?

Every NEFERTITI hub will appoint a monitor who will have a central role in monitoring ***within the hub*** and in ensuring that the insights and lessons learnt in each hub are recorded so that they can be shared and evaluated across the NEFERTITI hubs, i.e. the thematic network level. Depending on the resources of the hub and the capacities of the people involved, in some cases the hub coach can also play this monitoring role.

This ***thematic network level*** has the same general objective as the hubs (i.e. to foster the effectiveness of demonstrations) but with the additional ambition of doing this via exchange of experiences between hubs. A specific monitor at the network level will perform the M&E to monitor how and to what extent that specific ambition is realised.

Monitoring and evaluation ***at the EU level*** will be more of a shared responsibility among several of the NEFERTITI work package teams, including WP5.

> Consequence for M&E guidelines: The guidelines should describe the process of appointing a monitor and the role(s) this monitor has to play.

M&E at the hub level

To ensure that M&E is integrated into the NEFERTITI hub process it is important for hub teams to do or to continue to do the following:

1. Negotiate (and if necessary re-negotiate) roles and responsibilities within the hub teams to include M&E;
2. The hub coach and monitor to work together on a hub process design that includes monitoring and evaluation;
3. Use this general NEFERTITI M&E plan to develop an M&E plan specifically for each hub.

To support the first of these activities, a description of the role and responsibilities of the monitor is discussed in more detail below.

Specific responsibilities of the NEFERTITI hub monitors are to:
(i**) Strengthen the reflection, reflexivity and learning in the hub and contribute to learning within hub and at the network level.**

This will involve

- The monitor should propose moments for reflection and reflexivity (reflection-in-action (as you go), as well as reflection-on-action (after the event), e.g. take time to check understandings and assumptions as part of meetings and workshops, allow time for reflections before moving on, draw diagrams or fill in tables together.
- The monitor should document what he is doing and thinking by keeping a NEFERTITI 'hub journal' so that he can keep track of his learning, share insights and recognise what he needs to learn (see also (iii) below)

(ii) **Develop a monitoring and evaluation (M&E) plan for the hub by translating this general M&E plan to the local context of the monitor's own hub.**
Each hub M&E plan should address the following topics:

- Brief description of NEFERTITI hub and who is involved
- Roles and responsibilities (say who is doing what)
- Brief description of overall M&E approach
- A completed table detailing M&E questions and initial ideas about how they will be monitored and evaluated.
- Brief description of the type of data to be collected, how and by who
- Challenges and issues for M&E (and how you will address them)
- Timeline

The NEFERTITI hub M&E plans will initially be produced as drafts and updated as needed. The plans will be discussed within the hub teams and feedback will be given from WP5 (T5.3; ILVO).

(iii) Take the lead in ensuring that outcomes of meetings and reflections, new insights and lessons learned are documented.

This will involve making notes and checking them with others, using flip charts to record conversations, asking to record interviews and discussions whether online or face-to-face, taking photographs and make podcasts. Note that it is the role of monitor to ensure this activity takes place but all hub members can help in recording activities.

(iv) In cooperation with the hub coach develop new activities or approaches for the hub based on monitoring results.

This should be done following each demonstration activity within the hub and as part of overall planning and preparation for specific meetings and events.

Within the context of the M&E plan the monitor will take the lead in the following four tasks:

1. Keep a hub Journal (format is provided) to document the planning meetings from the hub Team and the demonstration activities that are actually carried out.
2. Create frequent reflection moments with the hub team on the M&E questions in the plan to summarise the progress and assess the current state of the NEFERTITI hub, analyse the underlying causes, draw lessons learned and decide what next actions are needed.
3. Write annual monitoring reports for the hub also assessing the effectiveness and efficiency of the hub. (Guidance and a template is provided)

Consequence for M&E guidelines: The various relevant process factors (role of monitor; steps to make M&E plan, tasks to perform, etc. Cf. section 5.5) should be included in the hub-level M&E guidelines.

M&E at the network level

Findings and insights will be shared across NEFERTITI hubs at annual Cross Visits, consortium meetings and

occasional on-line meetings. At these meetings hubs can exchange experiences concerning:
- Questions being used for monitoring and ideas about how M&E will take place;
- Occasional reflection memos (frequency derived from the network level planning) from monitors that report on progress and current state of the NEFERTITI hub, comment on underlying causes, draw out lessons learnt and detail the next actions needed;
- Annual M&E reports assessing the efficacy, effectiveness and efficiency of the NEFERTITI hubs.

The T5.3 M&E team will facilitate this process of sharing and will also offer feedback and support to the NEFERTITI hubs in this process.

A specific M&E activity is needed to document the proceedings of these sharing meetings which take place at the network level. Each network will need its own monitor (under responsibility of the network leader) to document these proceedings. This monitor has to develop her/his own M&E plan, based on the DAP (and made part of the DAP) and the network's objectives. This plan follows some of the main aspects from the hub-level M&E plan but some extra things are needed related to the ambition of stimulating learning via exchange between hubs. Different networks may do this differently (but following general guidance from T5.1) and by comparing these in T5.4 we should assess how network level M&E can best be approached.

> Consequence for M&E guidelines: The various relevant process factors (role of monitor; steps to make M&E plan, tasks to perform, etc. Cf. section 5.6) should be included in the network-level M&E guidelines.

M&E at the 'wider relevance' level

This task will rest with the WP5 team via assessment of all monitoring reports from hubs and networks. Specific guidance may be given to these levels to facilitate this analysis. This implies that T5.5 (UAL) should already reflect early on to what extent this task would have specific data collection requirements for hubs and networks that should be included in the M&E plan. The same is true for the overall assessment in T5.4 (WR responsibility). UAL and WR will do this jointly, using other WP5 partners as a sounding board.

> Consequence for M&E guidelines: WR and UAL will develop monitoring topics based on assessment of T5.4 and T5.5 needs.

The Nefertiti M&E Guidelines

Introduction

As indicated above, there is a tension between doing M&E in the 'ideal case' (with a dedicated, professional monitor and a significant budget) and doing M&E in the NEFERTITI case, taking into account the practical limitations of demo resources and circumstances. The most important of these limitations are:
- NEFERTITI monitors are largely practitioners, not having any experience in M&E. They need a limited set of simple tools that are easy to apply.
- Budgets for hubs are limited, providing very little room to appoint a dedicated monitor. As a consequence, some of the monitoring tasks in practice will be carried out by hub coaches. This will create an extra burden for them as they have also other things to attend.
- The same limitation applies for the thematic network level, implying that network leaders may have to carry out some network level monitoring.
- The 10 thematic network leaders are at the same time a coach for the hub in their own country. If they also do part of the M&E tasks (for both hub and network), these 10 people may have four roles to play in a single meeting.

To address these limitations, we have taken the following starting points in the design of the NEFERTITI M&E approach:
- We see M&E as a learning process in itself. For the first campaign year we will provide a rather simple form of M&E. The experiences in working with this will be evaluated at the end of the first campaign year and, depending on the results, it will be decided whether to make the overall approach and/or some of the tools more advanced.

- In the first campaign year, the main focus will be on the hub level M&E. This is where the 'most advanced' M&E approach will be used.
- In the first campaign year, network level M&E will be limited to the cross visits since they are an essential ingredient of the overall NEFERTITI approach. Other M&E aspects may be added in later years.

M&E for hubs
The hub level M&E approach consists of a document with guidelines for hub coaches and hub monitors and a set of M&E tools. The guidelines are an integral part of the Hub Campaign Plan. A copy of these guidelines is presented in Annex 1.

These guidelines have the following three parts:
- M&E objectives, role of the monitor and main monitoring tasks
- Step 1: Preparing M&E
- Step 2: Carrying out M&E

The first part explains the importance of M&E and how to do it in general terms. It especially stresses that M&E is set-up as a tool to help hubs to do their work more effectively. M&E is not something 'extra' that they have to do but that this is something to serve their needs. At the end of the first campaign year, the WP5 team will assess to what extent this has actually been realised and adjust the M&E approach where needed.

The second part (Step 1) provides guidance how the hub can plan its M&E activities, also specifying who will take which responsibilities in M&E. One of the tools is a simple table that hub coaches fill in which lists all the hubs activities, as well as the objectives and expected outcomes for these activities. By later comparing the actual outcome with the expected outcomes, this becomes a tool to stimulate reflexivity in the hub as a basis for learning and improving.

The last part (Step 2) describes how to actually perform M&E. This also presents and describes how to use a set of concrete tools, notably:
- The **Hub M&E Journal**: an Excel file containing separate tabs for monitoring and evaluation of the hub meetings, demo events, cross visits and the annual hub report.
- A **Checklist** describing important aspects and guiding questions for M&E of demo-events.
- An **Exit Poll** for demo events, which is a short questionnaire for participants of a demo event.
- A tool/method for **Team Reflection**, to guide the hub in the organisation of a session to reflect on hub activities, and to draw lessons from this to improve its way of working.

These latter three tools are reproduced in Annex 2 below. The first, the Hub M&E Journal (Excel file), is too complicated to be reproducable in an MS Word text format.

The key objective of the NEFERTITI project is to foster the process of on-farm demonstration across Europe. Most hubs will be engaged in 5- 6 demonstrations each year and to learn the best from these activities, it would be recommendable to monitor each of these in considerable depth. That, however, is hardly feasible in view of the limitations described above. As a 'compromise', the M&E guidelines now ask hubs to identify one so-called 'showcase demo' each year, i.e. the demo that they see as the most important one in that year. For this demo, they are asked to do a more in-depth monitoring while for the other demos they would do this in a less refined way. What we aim for, is that the hubs will gain the experience that it this in-depth monitoring has surplus value to them in terms of learning to do it better that it would motivate them to do this in-depth monitoring for other demos as well. The WP5 will assess by the end of the first campaign year how well this worked.

M&E for Cross Visits
Cross Visits will be organized once every year within each Network (10 CV per year at project level). During this visit, one hub region will be visited by the hub coach and at least one demonstration farmer from each of the other hubs from that network. The visit consists of 2 major parts: the field demonstrations and knowledge exchange based on observations made during the field demonstrations. Although the main organisation of the cross visits are the responsibility of WP2, WP5 developed some tools and an approach to aid the monitoring

reflection, knowledge exchange and learning between the different hub members during the cross visits. Each CV will be monitored by one representative from WP5 who is experienced in M&E. This WP5 monitor will take a role in stimulating reflexivity at the CV itself and 'harvesting' important lessons for the overall assessment across all CVs in WP5.

1. Field demonstrations
On the first day of each cross visit, two field demonstrations will be visited. To support the observations during the demonstrations we developed some monitoring tools. These are:

- Short pre- and post-demo questionnaires to capture both the participants' expectations and feedback before and after the demonstrations. (See Annex 3)
- Observation cards: This is a compilation of 12 cards with 3 questions on a specific topic participants can focus on during the demonstrations. The questions on the observations cards aim to stimulate and inspire the participants to observe specific aspects of the demonstration more consciously and to enable deeper reflection on these aspects. We made a distinction between 'innovation observation cards', that focus on the innovation that is being demonstrated (or *what* is being demonstrated), and 'demonstration observation cards', that focus on the demonstration activity itself (or *how* it is being demonstrated). In this way the observations cards will aid both discussion on technical aspects as requested by network members and learning on how to organize effective demonstrations. These two aspects are not completely separable from each other, because what is demonstrated (the innovation) will also affect how it is best demonstrated (the set-up of the demo). (See Annex 3)
  The participants of the cross visit have to pick two cards (one demonstration and one innovation observation cards) before the demonstration, take a look at this card before the demo starts, and try to pay a bit more conscious attention on this aspect. Afterwards, during the knowledge exchange and reflection part of the cross visits, the observations on these different aspects can be used as a start to discuss what they have seen and to reflect on how this would be useful in their hub or network.
- Observations templates to be used by the WP5 monitors present during the cross visit. This is a tool to monitor the specific aspects of the demonstrations. (See Annex 3)

2. Reflection and knowledge exchange
Different steps will be taken to facilitate the knowledge exchange and learning on the demonstrations, for which WP5 has developed specific tools.

First, all hub coaches (together with the demonstration farmer from their hub) should reflect on the demonstrations by completing the associated tab on cross visits in the Hub Journal. This is a first exercise for participants to structure their observations with regard to the following discussions. This should be done on the first day of the cross visit. It will also be useful to take back home the main ideas to be used in the hub activities.

Second, on the second day of the cross visit, the focus shifts towards knowledge exchange and reflection between network members.

- First, the group will reflect on the innovation that was demonstrated. All participants will share their observations (based on the innovation observation cards and their hub journal). WP5 developed an innovation canvas (See Annex 3), that can help to cluster and visualize the observations made by the group. Main questions are:
  - What are the pros and cons of the innovation?
  - What is the impact of the innovation on the hub region?
  - How can the innovation be applied/introduced in other hub regions?
  - What are other solutions used in the other hub regions?

  Based on this discussion, suggestions for knowledge exchange in demonstrations within the network can be made.
- Second, the group will reflect on how the innovation was demonstrated. All participants bring together their observations (based on the demonstration observation cards, the hub journal and the observation template of the WP5 monitor). WP5 developed a demonstration canvas to facilitate the discussion (See Annex 3). After this discussion the facilitator summarizes the lessons learnt in a table by using the pearls, puzzlings and proposals template (See Annex 3)

- Third, the group will try to link the innovation to the demonstration by selecting 5 key aspects of the innovation that require attention during the demonstration to stimulate adoption. After this selection, the group will reflect on how these aspects are addressed during the demo and how it could be improved, using the pearls, puzzlings and proposals template (See Annex 3)
- Fourth, during the wrap up of the cross visits hub members should reflect on what they learned during the cross visit, what they will take home to their hub region and how they will put it into action. This final concluding step makes the transition to implement lessons learned into the Hub Campaign Plans and the Dynamic Action Plans.

These tools will be used as a start during the cross visits of the first year, and will be evaluated and improved based on the experiences with the use of these tools and approaches.

Support and guidance on M&E from the WP5 team

Besides providing the guidelines and formats needed to implement the monitoring and evaluation in the NEFERTITI hubs, the WP5 team, specifically under T5.3 led by ILVO, is available on skype and email for support and will dedicate time in all NEFERTITI project meetings to share experiences and address difficulties in M&E

Furthermore, the WP5 team keeps track of developments in the NEFERTITI hubs by reading and analysing the reflection memos of all hubs. The purpose is to keep track of the development of the hubs and the harvesting of lessons learned and to highlight crosscutting themes and opportunities for learning between the hubs and networks. Regularly, the WP5 team will contact the NEFERTITI hub teams (individually or in a group skype) to inquire how progress is what challenges are ahead and what support and exchange would be helpful.

The relationship between hub and network monitors and the wider WP5 team is two-way. It is very important that monitors take responsibility for their own learning and don't just struggle alone and wait for the WP5 team to be in touch. There will be formal training and sharing sessions at the annual meetings (especially the one in February 2019) but between meetings monitors should ask for support if it would be helpful to them.

The WP5 team can also offer:

- Suggestions for tools and techniques for M&E and guidance on how to use them;
- Help with filling in the detail of the M&E plans ;

Online discussions will be organised as needed (email and/or skype), including for a specific hub or among a group of monitors from different hubs.

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Annex 1

NEFERTITI Hub M&E Guidelines

Introduction

Note for hub coaches and monitors: These guidelines contain a lot of detail on doing M&E that you will not be able to grasp all at once. You are advised to first read it through once in half an hour or so to get a feel for what it is about. Subsequently you read it more closely to help you carry out the first steps that have to be taken in connection with M&E. After having gained your first experience with doing M&E you are advised to read it through once more to see whether there are things that you may have overlooked initially.

This manual describes how monitoring and evaluation (M&E) should be carried out by the NEFERTITI hubs. The first chapter describes the **objectives** of M&E, the **role of the monitor** and distinguishes **two main steps** in connection with M&E. These two steps**, 'preparing M&E' and 'carrying out M&E'**, are further elaborated in the third and fourth chapter of this document.

Together with this manual, four **tools and templates** are provided to assist you with the performance of the M&E process within your hub. These tools are:

- The **Hub M&E Journal**: an excel file containing separate tabs for monitoring and evaluation of the hub meetings, demo events, cross visits and the annual hub report.
- A **Checklist** describing important aspects and guiding questions for M&E of demo-events.
- An **Exit poll for demo events**, which is a short questionnaire for participants of a demo event.
- A tool/method for **Team reflection,** to guide you in the organisation of a session to reflect on hub activities.

The text in this manual below refers **in bold** to these tools and indicates how they can be used.

M&E objectives, role of the monitor and main monitoring tasks

Objectives of monitoring and evaluation
Monitoring and evaluation of the NEFERTITI hubs has two general objectives:

1. To help the hub achieve its objectives. M&E provides input for a process of 'self-reflection' in the hub. This implies that the hub critically assesses its own activities and outcomes and, consequently, takes corrective action when needed.
2. To report the most important experiences in the hub. Hub monitoring reports are used as a source of input for learning at the NEFERTITI thematic network level and for the overall project assessment in WP1 ('Dynamic Action Plans'), WP4 ('knowledge reservoir') and WP5 ('Analysing lessons').

Source of M&E: The 'Hub Campaign Plan'
To fuel a process of self-reflection, M&E should be based on the hub's objectives and the activities. These will be specified in the 'Hub Campaign Plan' that each hub will develop and update every year as part of the WP3 activities.

Starting in the second year of the NEFERTITI project (2019), each hub will compose an annual Hub Campaign Plan. The lessons learnt from the previous demo campaign year will be taken into account in the following demo campaign years. The Hub Campaign Plan will help to do this in a systematic way. its objectives?

M&E steps and responsibilities

M&E steps
The M&E process supports the self-evaluation of the hub's functioning and activities and reports the main achievements and learning by the hub. This is realised by taking the following two steps.:

1) Preparing M&E, including:

- **Developing** a draft M&E scheme by using this manual as a guide.
- **Discussing** the M&E scheme with hub partners to produce the final version. This version will be included in the Hub Campaign Plan.
- **Adapting** the M&E scheme if needed.

2) Carrying out M&E, including:

- **Observing and recording** what happens at hub team meetings and demonstration events.
- **Reflecting** in the hub team on lessons learned and opportunities for future improvements.
- **Reporting** on what is learned, to be used in different WPs in the NEFERTITI project.

These two steps are further elaborated below.

M&E responsibilities: role of the hub monitor
It is recommended that hubs assign a person other than the hub coach as the '**hub monitor'**. Within the project, the hub coach is responsible for the overall functioning of the hub. However, it will be difficult to combine the role of hub coach as overall facilitator of the hub, with the role of doing M&E. A hub monitor can take over the hub coach's responsibilities for self-evaluation and reporting on the main achievements and learning by the hub.

The two following examples show the advantages of assigning a hub monitor:
- During hub meetings, the hub coach is primarily occupied with the question 'are we doing things right according to the Hub Campaign Plan?'. But for M&E there is also a more fundamental question: 'are we doing the right things according to our objectives?' It is difficult to have both roles combined in one person, and the hub monitor can add considerable value here.
- During meetings or demo events a hub coach needs to be on top of everything that goes on and to facilitate the discussions and agenda. But the M&E process requires a focus on those things that may need improvement to achieve the hub's objectives. This requires taking a more reflexive stance. And the hub coach most likely not have the time and necessary distance to combine these responsibilities.

There may be practical barriers for appointing a dedicated monitor for all meetings and events because of limited hub resources and time. However, by using the tools provided with this document, M&E should not require a lot of time. It is up to the different hubs to decide for themselves how they will implement the role of hub monitor, taking into consideration that in the ideal case the coach and monitor would be different people. In this document, we will further refer to the 'hub monitor' as the person who is responsible for the M&E process. However, this role could also be played by the hub coach for specific occasions, if a separate person would not be available as hub monitor.

Step 1: Preparing M&E

Develop draft M&E scheme for the hub
The hub monitor needs to develop an M&E scheme as part of the Hub Campaign Plan, which is adapted to the needs of the hub. The M&E scheme describes how M&E will be carried out in the hub, i.e. which events will be monitored, which tools will be used and how the evaluation of the monitoring will be carried out.
A template for this M&E scheme is provided as part of the Hub Campaign Plan template (filename: Nefertiti - Hub Campaign Plan - Template.docx). Completing this template for your own hub will render a 1-2 page description of how you plan to do M&E.

To develop an M&E scheme, the following steps need to be taken by the hub team:
- Appoint a hub monitor from the hub team;
- Discuss roles and responsibilities of the monitor and the hub coach regarding M&E (e.g., if the hub coach would also carry out some monitoring tasks) ;
- Identify the key elements that should be included in the M&E scheme using the template in the Hub Campaign Plan

The Hub monitor develops (possibly in interaction with the Hub coach) a draft M&E scheme based on the previous discussion.

Discuss the draft M&E scheme with hub partners
The draft M&E scheme should be discussed with partners to ensure everybody's participation in the reflection process on the functioning and impact of the hub's activities. The monitor takes the lead in this process and produces the final version of the M&E scheme so that it is supported by the whole team.

Adapt the M&E scheme if needed
Each year, the hub must adapt its Hub Campaign Plan based on the experiences from the previous year. Accordingly, the M&E scheme also should be updated to match the objectives of the adapted Hub Campaign Plan. In addition, small changes may be useful during the demo campaign, resulting from direct experiences of applying M&E.

Step 2: Carrying out M&E

Observing

Activities to monitor
There are various hub activities that can be monitored to increase the Hub's effectiveness:
- Hub meetings in preparation of a demonstration event
- The demonstration event itself
- Hub meetings to evaluate a demonstration event
- Cross visits (where all hubs in one thematic network exchange experiences)
- Other thematic network meetings (at NEFERTITI annual meeting or skype meetings)

Observation and taking notes
During all these activities, the key task of the monitor is to observe and take notes of what occurs. This is the **monitoring** part of M&E. These notes can be entered in the **Hub M&E Journal,** which is provided as a separate template. This is an Excel-file with separate tabs for the various types of activities mentioned in section 4.1.1 above. On each tab, specific aspects of the activities are suggested on which you can enter notes.

To help you with completing the specific aspects of the activities in the **Hub M&E Journal**, **a Checklist** has been developed as a separate tool with guiding questions for the monitoring. This tool distinguishes the following aspects of a demo event:
- Objectives of the demo event
- Demo preparation
- Demo event (the demo itself)
- Demo impact

Instruction for use: At a meeting or event, have the related specific page (objectives, preparation, event or impact) from the **checklist** lying in front of you. The checklist indicates the issues to observe and questions you can ask yourself. On the basis of your observations in relation to each aspect, you can take notes in your **Hub M&E Journal**.

In addition to taking notes on observations, monitoring data can also be collected by other means. For example:
- Sound recordings;
- Photographs or videos;
- Questionnaires to gain feedback from participants of a demo event. For this purpose, a tool is provided, named 'Exit Poll for Demo events'.

Showcase demo and visitor questionnaire
During the year, the Hub team will organise various demo events. For most of these, a basic M&E should be carried out by using the **Hub M&E Journal** tab ('**Demo events'**). However, for one specific demo event, the **'showcase demo'**, a more in-depth M&E should be carried out, by using the tab **Showcase Demo** in the **Hub M&E Journal**. Such an in-depth observation can provide better insights in what could be improved in the organisation of demo events and it can provide relevant input for the overall project analysis in WP5.

For this showcase demo, feedback should be collected from the visitors of the demo by using the provided questionnaire **Exit poll for demo events**. To be able to use this for your own demo, you need to translate the questions into your local language. Possibly, some questions should be adapted to the characteristics of your own demo.

At this showcase demo, it is recommended that some members of the hub team briefly interview a number of visitors (a few minutes for each interview) at the end of the demo and note down their answers on the questionnaire sheet (**'Exit poll for demo events'**) on a clipboard. With the combined efforts of several people from the hub team and half an hour or 45 minutes at the end of the demo, several dozen feedback questionnaires can be collected that will give a more extensive impression of the visitors' views.
Alternatively, visitors can be asked to fill in the exit poll themselves, but this may result in less control over the quality of the responses. Questionnaires may also be distributed and people asked to send them back later, but the risk is that there will be a low response rate.

For the showcase demo, some key factors in the 'context' of a demo event should be indicated. (See **Hub M&E Journal**, tab **Showcase Demo**, one column under '**Before the demo day'**). A demo event always takes place on a topic in a specific agrarian subsector. But other developments in that (sub-) sector (e.g. economic developments in the sector, public pressure for change, policy regulations, etc.), can also influence the impact of the demo event. When identifying and taking into account these contextual factors, the possible impact of a demo event can be increased.

Note for the monitor: Other hub members attending the demo event can assist in recording, e.g. by taking notes, asking visitors to fill in questionnaires, taking photos, etc. Afterwards, the monitor is responsible to process the information recorded by the others. Prior to the demo event you should discuss in the hub team how the monitoring at the demo event will be organised.

If more members of the team attend the demo, it is also useful that each of them fills in the associated page in the **Hub M&E Journal**. This provides a more diverse basis to evaluate the demonstrations afterwards.
We ask you to use the **Exit poll for demo events** in connection with the showcase demo. However, since this can be a very rich source for you to gain feedback on a demo from participants, you are advised to use these with other demos as well.

Organising team reflection
Everything noted in the **Hub M&E journal** can later be used to fuel the self-reflection in the hub team. This is the **evaluation** part of M&E. To do this, the team (on the initiative of the monitor and the hub coach) should put reflection explicitly on the hub's meeting agenda. Two very useful occasions for this are:

- A preparation meeting for a demo event. During this meeting the monitor should take care that the objectives and the activities for the demo event are well formulated. The demo objectives specify what the demo event seeks to achieve. The demo activities should guarantee that the objectives can indeed be achieved. If the objectives are not very clear and/or the activities are not in line with the objectives, it will be very difficult to assess later whether the demo has reached its desired impact. You can use the guiding questions on 'demo objectives' in the Checklist to make this reflection.
- An evaluation meeting after the demo. This is intended to assess to what extent the demo has achieved the hub's objectives, to learn as much as possible on how things went and to draw lesson on how things may be improved for the next demo event. To assist this reflection, you can use the guiding questions on 'demo impact' in the Checklist .

During hub meetings where you plan to reflect on the demo events, you can use various methods to stimulate active participation of hub members (post-its, flip charts, mind maps, making timelines, etc.). The document '**Team reflection**' provides some guidance on how this may be done. There may also be other familiar tools to facilitate reflection which may be used. .

To identify topics for reflection, your **Hub M&E Journal** is the key source. After each hub meeting, you are advised to reflect briefly on what you noted and identify the most important items that could be reflected on during a next hub meeting. Alternatively, some issues may be introduced immediately at the ongoing meeting, in interaction with the hub coach or the chairperson for the meeting.

For any demo, for which you have used the **Exit poll for Demo Events**, the answers from the demo participants will be a very rich source for reflection. Even if you did not use the exit poll at the demo, the questions from the exit poll may still help you to structure your own evaluation of the demo.

General note on reflection: To evaluate the hub activities it is important always to do this against the background of the hub's objectives. The central M&E question is whether the demo-activities within the hub are actually stimulating learning by farmers and result in change of these farmers' practices. Simply stating that a demo event was a success because of a large number of participants will not be enough, as that can only be a partial objective. The objectives should also specify that farmers take home something from the demo that is useful for their own farm and farming practices. This does not mean that they start changing things immediately. It may also have stimulated them to first search for further information and advice.

To assess whether this has been achieved, it is key to reflect on whether a large number of demo participants actually helped to realise this objective. 'Digging deeper' may then reveal that some parts of the demonstration did not meet the needs of most participants so that little learning took place. These are important lessons for following demo events.

Producing monitoring reports
Hub monitors have to provide monitoring reports that will be used for exchange of experiences at thematic networks meetings and for further processing within the NEFERTITI project (WP5).

Templates for reporting are provided in the **Hub M&E journal,** in 5 tabs (see below). We advise you to take notes in the related sections of your M&E Journal immediately after each major event, such as a demonstration event, a cross visit or a thematic network meeting. Before each network meeting (including the Cross Visit), you can then send a preliminary version of your M&E journal to the partners to inform them of your progress thus far.

At the end of the campaign year you also need to fill in the tab **'Annual M&E Report'.** However, you are advised to assess immediately after each meeting or event whether you have already learned things that can be put into the Annual M&E Report. Thus, you run less risk of forgetting important things when you fill in the final version of Annual M&E Report.

After completing your annual report at the end of the campaign year, you submit your complete **Hub M&E journal** for further analysis in WP5 and then start a new journal for the next year, using the same template.
The following tabs are especially relevant for reporting to the WP5 team for purpose of exchange of experiences between Nefertiti partners and cross-fertilisation:

- 'Annual M&E Report'
- 'Cross Visit'
- 'Showcase Demo'
- 'Demo Events'
- 'Hub Meetings'

Annex 2

Three M&E Tools for NEFERTITI Hubs

Tool 1: Checklist for organizing a Demo

This document contains some guiding questions to monitor the organisation of a demonstration event, from the very start of identifying its objective to the reflection on its impact. The checklist should be seen as an aid during the organization of a demo event. The scheme below shows the four main parts involved in the organisation of a demo. On the following pages of this document, more specific guiding questions are given for each of these different steps.

Demo Objective
- Main objective
- Specific objectives
- Topic of demonstration
- Target group of participants
- Targeted impact

Demo Preparation
- Your role in the organisation
- Organizing partners
- Hosting farm
- Hosting farmer/demonstrator
- Funding
- Participation costs
- Agenda and planned activities
- Promotion

Demo Event
- Activities
- Level of participation
- Number of participants
- Typology of the participants
- Satisfaction of participants
- Satisfaction of the demonstrator

Demo Impact
- Learning by participants
- Learning by the demonstrator
- Follow-up activities
- Follow-up activities of farmers
- Implementation in practice
- Feedback obtained

Demo Objective

Aspects of the demo objective	Monitoring questions and guidance
Main objective	- What are the main objectives for organising this demo event (e.g. to stimulate use of sustainable farming practices, to stimulate improved animal welfare, to raise awareness on improved machinery, new crop varieties, etc.)?
Specific objectives	- What are the specific objectives that will make the demo event a success (e.g. expected number of participants, attendance of a specific target group, knowledge co-creation on a specific topic, …)?
Topic of demonstration	- What is the topic of the demonstration (which can either be very specific or a range of topics)? - Does the topic meet the interest of the targeted audience?
Target group of participants	- Who is the target group to participate in the demo event (e.g. all farmers, specific group of farmers, advisors, others)?
Targeted impact of demo	- Which impact is aimed for with the demo event (e.g. participants learn something new, adoption of specific farming practices, obtaining feedback on specific techniques)?

Demo preparation

Aspects of demo preparation	Monitoring questions and guidance
Your role in organisation	- As a Nefertiti Hub member you can either have a rather passive or a more active role in the organisation of the demo. - Indicate what you try to achieve in your role.
Organizing partners	- Which type of partners (e.g. farmers, farmers organisations, advisors, agro-businesses) will be involved in the demo organization to make it successful in meeting the objectives?
Hosting farm	- Is the hosting farm suitable for the demo event, taking into account the topic, expected number of participants, and the planned activities during the event? Possibly, the farm is chosen for very pragmatic reason but not optimally suited given the demo objective.
Hosting farmer/demonstrator	- Does the demonstrator have the necessary skills and attitude to lead a demonstration activity and/or does he/she need support?
Funding	- Who will finance the demonstration?
Participation costs	- Will participants have to pay an attendance fee? - Do you think this will influence the type and number of participants?
Agenda and planned activities	- Which type of activities (lectures, workshops, field walks, showcases, trials, group discussions …) will be used to reach the objective and the target group of participants?
Promotion	- Which promotion activities (e.g., targeted mailing, website, press announcements, social media, …) will be used to reach the target group of participants?

Demo Event

Aspects of a demo event	Monitoring questions and guidance
Activities	- How do visitors value the various activities (lectures, workshops, field walks, showcases, trials, group discussions…)? What do they appreciate most and what the least?
Level of participation	- What is the level of interaction between participants and between demonstrators and participants? For example asking questions, actively trying, feeling, tasting, smelling, … , knowledge sharing, … ?
Number of participants	- How does the actual number of participants correspond to the organisers' expectations?
Typology of the participants	- How does the type of participants correspond to the targeted group? Is this different from what you had expected, e.g. concerning regarding age, gender, education, occupation, farming experience, travel distance, reasons/motivation for attending the demonstration, familiarity with the topic?
Satisfaction of participants	- How do participants value the demo event (e.g. regarding the demo topic, the newly gained knowledge, the novelty of the showed practices, their (active) involvement in the activities of the event, their ability to relate to other participants, their trust in the demonstrators' competences, the overall atmosphere, their expectations)?
Satisfaction of the demonstrator	- What is the demonstrator's overall impression of the demo event (e.g., regarding the interaction with the participants, the organisation of the demo, his/her presentations)?

Demo Impact

Aspects of impact	Monitoring questions and guidance
Learning by participants	- What do visitors take home from the demo?
Learning by the demonstrator	- What did the demonstrator learn on the topic of the demo and on how to set-up and perform a demo?
Follow-up activities	- What is the impact of the demo in the media (written press, web info, social media, activities of advisors, national press, …) - Will there be follow-up activities related to the demo?
Follow-up actions of farmers	- Do you have indications that the demo event has had an impact on what the participants did afterwards (e.g, seeking additional information, attending other related events, changing farming practices, buying new equipment, discussing with others)? - For demos where you have used the **Exit Poll for Demo Events**, the answers from the participants are a very rich source to assess impact.
Implementation in practice	- What stimulates or hinders participants to apply what they learned during the demo-event?
Feedback obtained	- Do the organisers obtain spontaneous or solicited feedback after the demo -event?

Tool 2: Team reflection procedure

The aim of this tool is to support the Hub team's reflection process in two ways:

- With hub members: reflect on the development/progress of the hub.
- With hub members: reflect on the development/progress of the hub.

Setting and material for the reflection process:

- Sit in a comfortable position such that everybody can see each other (e.g. at a table, in a circle).
- Flip-overs
- Post-its
- Pens / markers
- Tape

Process

Below there are two variants, one to evaluate the overall hub progress and one to evaluate a specific demo. Only step 2 is different for these two variants.

Variant 1: Process to evaluate the overall hub progress

Step 1	**The moderator (e.g., Hub coach or hub monitor) explains the goal and method of the evaluation and stimulates participants to ask open questions**
Step 2	**The moderator writes down the following key-questions on a flip over** **1. What did we want to achieve (our objectives)?** **2. Did we have success (reach our objectives)? How do we know that?** **3. Do we have an explanation for success or failure?** **4. What went well? What's still useful for the next time?** **5. What should we change next time?**
Step 3	**Ask the key questions to the group one by one, or let another participant ask a key question. Explore the answers by open questions (Why? What? How?). Write answers in keywords on flip-over.** **(If your group > 5 persons, than you could make use of post-its. Give every person 3 minutes individual time to write down his/her answer on a post-it. One answer per post-it. Collect and cluster the post it's on a flip-over. Reflect on the answers)**
Step 4	**Summarize main insights with the group**
Step 5	**Make (afterwards) a short summary with the results of the evaluation in the Hub M&E Journal**

Variant 2: Process to evaluate a specific demo

Step 1	**The moderator (e.g., Hub coach or hub monitor) explains the goal and method of the evaluation and stimulates participants to ask open questions**
Step 2	**The moderator writes down the following key-questions on a flip over. Make use of the exit polls.** **1. Was the recruitment successful? Why or why not? What was appealing for the participants?** **2. How was the demo event organised? What was most interesting?** **3. Are there indications that the participants will apply what they witnessed? Or**

	where there certain barriers? **4. What went well? What's still useful for the next time?** **5. What should we change next time?**
Step 3	**Ask the key questions to the group one by one, or let another participant ask a key question. Explore the answers by open questions (Why? What? How?). Write answers in keywords on flip-over.** **(If your group > 5 persons, than you could make use of post-its. Give every person 3 minutes individual time to write down his/her answer on a post-it. One answer per post-it. Collect and cluster the post it's on a flip-over. Reflect on the answers)**
Step 4	**Summarize main insights with the group**
Step 5	**Make (afterwards) a short summary with the results of the evaluation in the Hub M&E Journal**

Tool 3: Exit poll for demonstrations

Put these 2 pages in paper on a clip board and fill it in while interviewing farmers at the end of a demo
Note for monitor: It may be helpful to translate these questions into your local language.
Some questions may have to be adapted in accordance with your own demo, notably Q1 and Q3

Questionnaire for exit poll

3. How did you learn about this demonstration event (tick box)?

   - ☐ Personal invitation
   - ☐ Farming press
   - ☐ Website
   - ☐ Social media
   - ☐ Other (indicate which): ………..

4. Why were you interested to visit this demo event?

Open text

5. How do you appreciate the various aspects of the demo event (tick boxes)
   (Items to be filled in by the monitor depending on the activities during the event)

	Very useful	Useful	neutral	Not useful
Lecture				
Field walk				
Workshop				
…				

6. How was the demo event organised?

Which aspects were well organised	**Which aspects were not well organised**
Open text	Open text
Why?	**Why?**

7. What was most interesting to you about this demo event?

Open text

8. Which aspects of the demonstration(s) would be useful for your own farm and why?

Open text

9. Do you have plans to apply what you witnessed today? Yes / No / Maybe
If you answered "Yes" or "Maybe", what might you apply?

Open text

10. What are barriers to apply what you learned or saw today?

Open text

11. Do you have any other suggestions?

Open text

Thank you very much, this survey will help us to improve the next demo events!

Annex 3

M&E-tools for cross visits

Pre- questionnaires for the participants of the demo

Cross visits: Pre survey participants

Network:

Hosting Hub/region:

Member of Hub:

Name (use initials for anonymity):

Age:

Gender (circle): male / female / other

What are your occupations?

Are you involved in farm demonstrations? How?

Why did you want to attend this cross visit?

What would you ideally like to learn?

Post- questionnaires for the participants of the demo

Network: Hosting Hub/region:

Member of Hub:

Name (use initials for anonymity):

12. Which aspects did you value the most during the demo?

13. How was the demo organised?

Which aspects were well organised	**Which aspects were not well organised**
Why?	**Why?**

14. What was most interesting to you about this demo?

15. Which aspects of the demonstration(s) would be useful for your own occupations and why?

16. Do you consider to apply what you witnessed today? Yes / No / Maybe
If Yes or Maybe, what do you plan or consider to apply?

17. What are (potential) barriers to apply what you learned or saw today?

18. How could this demonstration be improved?

Observation cards

Innovation observation cards

IOC1: Description of the innovation

What is new about this innovation?

To which problems is this innovation an answer?

Are there any side effects (positive / negative)?

IOC4: Innovation development in the host region

What is the potential of the innovation for the host partner/ hosting hub in the future?

What is needed to make this innovation a success in the hosting hub region?

Is dissemination of the innovation actively promoted?

IOC2: The innovation process

How far is the development of the innovation from widespread adoption?

What are the current obstacles for widespread dissemination and adoption of the innovation?

Who are key actors in this process?

IOC5: External factors influencing the innovation

Which external factors initiated the development of the innovation?

Which external factors are helpful in the development and adoption process of the innovation?

Which external factors are obstacles in the development and adoption process of the innovation?

IOC3: Potential impact of the innovation

Who benefits from this innovation?

Who is/will be negatively impacted by this innovation?

Do others change their practices because of what they see here (on this farm)?

IOC6: Applicability of the innovation in my hub

What is useful about this innovation for my hub region?

What would be the main challenges to introduce this innovation in my hub regions?

Which actions can we take to overcome these challenges?

Demonstration observation cards

DOC1: Demo set-up

Is the demo set up effective to fully grasp the innovation?

Does the demo set up stimulate peer learning?

How can the demo set up be improved?

DOC2: Host farm(er) characteristics

Is the farm suitable for the purpose of the demonstration?

What is the contribution of this specific farm to the demonstration of the innovation?

How does the host farmer contribute to the demo?

DOC3: Actors and their roles in the demo

Who are the key actors during the demo and what are their contributions?

What is the role of the participants in the demo?

Is someone missing that might have increased the quality/effectiveness of the demo?

DOC4: Demonstrator skills

Is the demonstrator doing a good job? Why?

How does the demonstrator involve participants in the demonstration?

How does the demonstrator respond to critique?

DOC5: Facilitation of knowledge exchange

Which techniques and activities are used to stimulate knowledge exchange?

Is knowledge exchange between the demonstrator and the participants effective?

How are participants stimulated to share their experiences and knowledge with the group?

DOC6: Learning outcomes

Which facts, skills, methods did you exactly learn during this demo?

Are you able to understand the full impact of the innovation on a farm and within a region after the demo?

In which way did the demo contribute to a deeper understanding of the presented innovation?

WP5 monitor observation template

Manual
This document should be used by the monitor from WP5 (or another dedicated monitor for the cross visit) to observe the demos during the cross visit. Although this template should be completed during and right after the demo, we ask to please read it carefully before, so you are prepared on what to look for. If preferred, free notes can be taken during the demo and can be integrated in this template right after the demo. We also ask to take pictures during the demo to enrich the observations.

Please note: The aim of the questions in the template is to investigate what happens during demonstrations and how it contributes to the understanding of the demonstrated innovation. So there are no right or wrong answers on these questions. E.g.: it is not ‘wrong' to not have a long group discussion or an interactive hands-on activity during a demonstration, we just want to know if this happened or not.

General questions
These questions can be filled in before the demo starts.

Name of the Monitor:

Network involved in the cross visit:

Specific topic of the demo:

Group size:

Host farm/ company:

Demonstrator:

List of participants to the demo:

Please fill in the table with the participants of the demo, and their role in the network. This gives us an overview of the type of actors who attended the demo and the representation of the different hubs.

Name	Role in the network (e.g. demo farmer of hub X, advisor of Hub X, Hub coach of hub X, researcher of Hub X, …)

Demo set up

1) What is the goal of the demo?

2) Describe the innovation that is showcased (PLEASE PROVIDE PICTURES).

3) Is equipment showcased (e.g. new machinery)?

YES NO

Description of the equipment (PLEASE PROVIDE PICTURES):

4) If yes on (1), does the equipment belong to the farm?

YES NO

If no, to who does it belong?

5) What is the size and design of the demonstration area (e.g., stable, test strip, test plot, whole field, other)? Explain.

6) Is the impact of the innovation on the whole farm system taken into account during the demo or is the innovation presented as an isolated practice?

a. The innovation is presented as an isolated practice
b. The impact of the innovation is limitedly linked to the whole farm system
c. The innovation was clearly framed in the whole farm system
d. The general topic of the demonstration referred to the whole farm system
e. N/A

Please, explain.

7) Are multiple experiments/practices/techniques compared (e.g. comparison between fields, between machines, etc.)?

YES NO

If yes, please describe (PLEASE TAKE PICTURES):

8) Who is the facilitator of the demo and what are his/her tasks?

9) What is the host farmers' role during the demo?

10) What are the tasks of the demonstrator?

11) Is dissemination material available for the participants (e.g. folders, leaflets, ...)?

Knowledge exchange
Circle the answer that fits best and clarify. If not applicable, circle N/A and clarify your decision underneath!

12) Does the demonstrator show hands-on activities or does he/she use the material in an interactive way (e.g. try out a machine)?
   a. No hands-on activity was demonstrated.
   b. A hands-on activity was demonstrated, but only very shortly.
   c. A hands-on activity was demonstrated for a long time, so participants could fully understand how it works.
   d. More than one hands-on activity was demonstrated very clearly.
   e. N/A

   Please, describe the hands on activities:

13) Are participants encouraged to participate in hands-on activities or to actively interact with material related to the topic (e.g.: try out a machine, tool taste)?
   a. No hands-on activity was carried out by participants.
   b. Participants could take part in a hands-on activity, but didn't get any feedback on what they did.
   c. Participants could participate in a hands-on activity, and got some sort of feedback on what they did.
   d. Participants could participate in multiple hands-on activities, and got some sort of feedback on what they did.
   e. N/A

   Please, describe the activities and the type of feedback.

14) Hands on activities and the development of the skills on the demonstrated innovation by the participants were …
   a. …not addressed at all
   b. …not sufficiently addressed

c. …sufficiently addressed
d. …carefully and effectively addressed (E.g.: put into practice in different ways.)
e. …N/A

Please, explain.

15) Is the use of multi-sensorial experiences stimulated during the demo (e.g. are participants encouraged to use taste, smell, touch, ...)? Explain.

16) How does the demonstrator use the knowledge of the participants during the demo?

a. The demonstrator doesn't ask participants to share what they already know about the topic.
b. The demonstrator refers to what participants might be familiar with or know already, but doesn't allow them to talk about it.
c. The demonstrator asks a few questions in the beginning to let participants share what they already know related to the topic.
d. The demonstrator asks about, and frequently refers back to what participants might already be familiar with.
e. N/A

Please, explain.

17) How is the innovation explained to the participants?

a. Not clear, as a big unstructured chunk of new knowledge.
b. In different parts, but it remains unclear how they link together.
c. In different linked parts, but some parts were still too complicated.
d. Step-by-step linking to the previous step, thus gradually increasing the complexity in a comprehensive way.
e. N/A

Please, explain.

18) The explained knowledge was…

a. … (almost) not understandable
b. … not sufficiently understandable
c. … sufficiently understandable
d. … very clearly explained
e. … N/A

Please, explain.

19) Is time made available for questions from the audience to the demonstrator?

a. No time is specifically foreseen for questions.
b. There is some time for questions, but it is too little.
c. There is some time for questions, but it is enough to answer individual questions.
d. There is a lot of time for questions, and it contributed to the overall understanding of the innovation.
e. N/A

Please, explain.

20) How many people ask questions to the demonstrator?

a. Nobody asks questions.
b. A few persons (10%) ask questions.
c. Some persons (10-50%) ask questions.
d. A lot of persons (>50%) ask questions.
e. N/A

Comments

21) Is innovative, surprising or controversial content exchanged with the participants?

a. Participants are not confronted with innovative, surprising or controversial content.
b. Participants are confronted with innovative, surprising or controversial content, but this led to confusion (clearly indicated by participants) that wasn't solved during the demo.
c. Participants are confronted with innovative, surprising or controversial content, which was clearly explained afterwards.
d. Participants clearly confronted with innovative, surprising or controversial content, that was later thoroughly discussed in the group.
e. N/A

Please, explain.

22) In light of the common farming best practices, the demonstrated innovation is…

a. … not questioned.
b. … questioned, but no discussion on alternatives.
c. … questioned and alternatives were shortly elaborated on in group.
d. … questioned and alternatives were extensively elaborated on in group.
e. … N/A

Please, explain.

23) Is time made available for discussion (i.e., sharing (conflicting) ideas and viewpoints on the topic, in more than one question and answer within the group)?

YES / NO

Comments

24) How does the group discussion contribute to the understanding of the innovation?

a. There is very little enthusiasm to participate in the group discussion.
b. The contribution to the group discussion is too limited to add to the understanding of the innovation (e.g. no critical opinions shared).
c. During the group discussion interesting viewpoints on the innovation are touched, but not thoroughly discussed.
d. The group discussion resulted in a rich view on the innovation and contributed to the a deeper understanding of the innovation.
e. N/A

How many people participated in the discussion?

Comments.

Interaction between participants of the demo

25) How would you describe the atmosphere between the participants?

a. They act distant.
b. They act more distant then open.
c. There is a feeling of trust and openness amongst them.
d. They act like friends who are familiar to talk to each other.
e. N/A

Comments.

26) How many participants shared knowledge or experiences related to the topic **with the whole group**?

a. Participants were rather closed and didn't share knowledge/experiences willingly.
b. Not more than 10% of the participants shared knowledge/experiences willingly
c. Between 10% and 50% of the participants shared knowledge/experiences willingly
d. More than 50% of the participants shared knowledge/experiences willingly
e. N/A

Please, describe.

27) How many participants shared knowledge or experiences related to the topic **within small groups**?

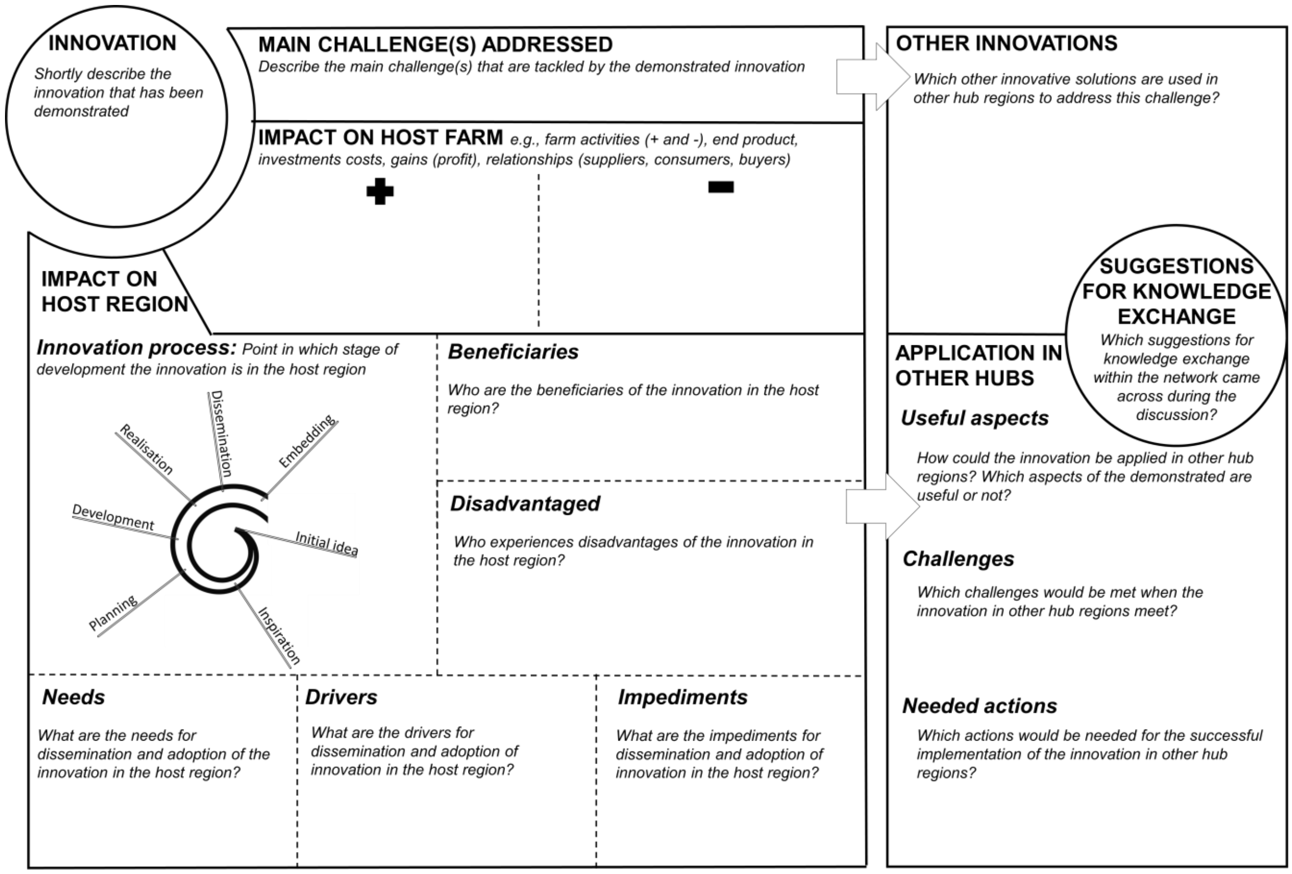
a. Participants were rather closed and didn't share knowledge/experiences willingly.
b. Not more than 10% of the participants shared knowledge/experiences willingly
c. Between 10% and 50% of the participants shared knowledge/experiences willingly
d. More than 50% of the participants shared knowledge/experiences willingly
e. N/A

Please, describe.

General comments on the demonstration event

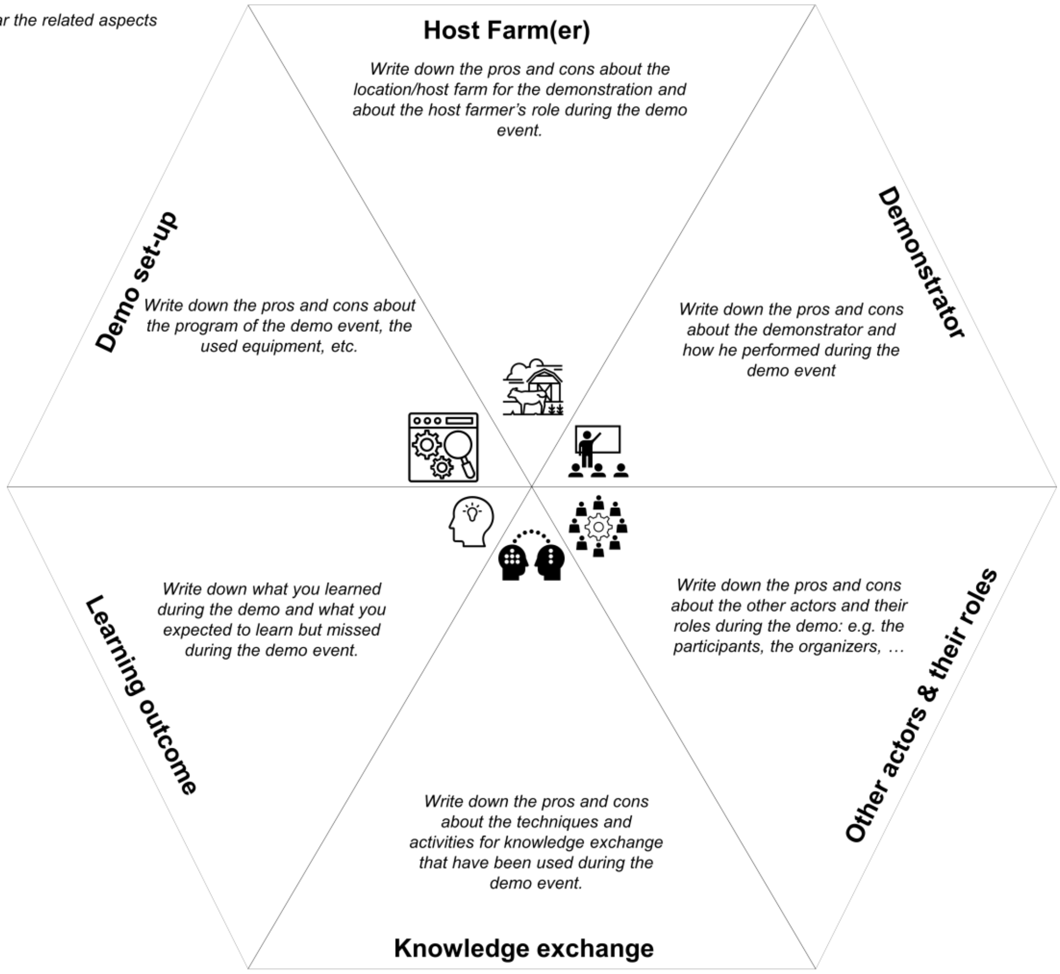
Please describe here anything else you believe that is worth mentioning about the demonstration: general impressions, main strong aspects, main aspects for improvement…

Innovation canvas

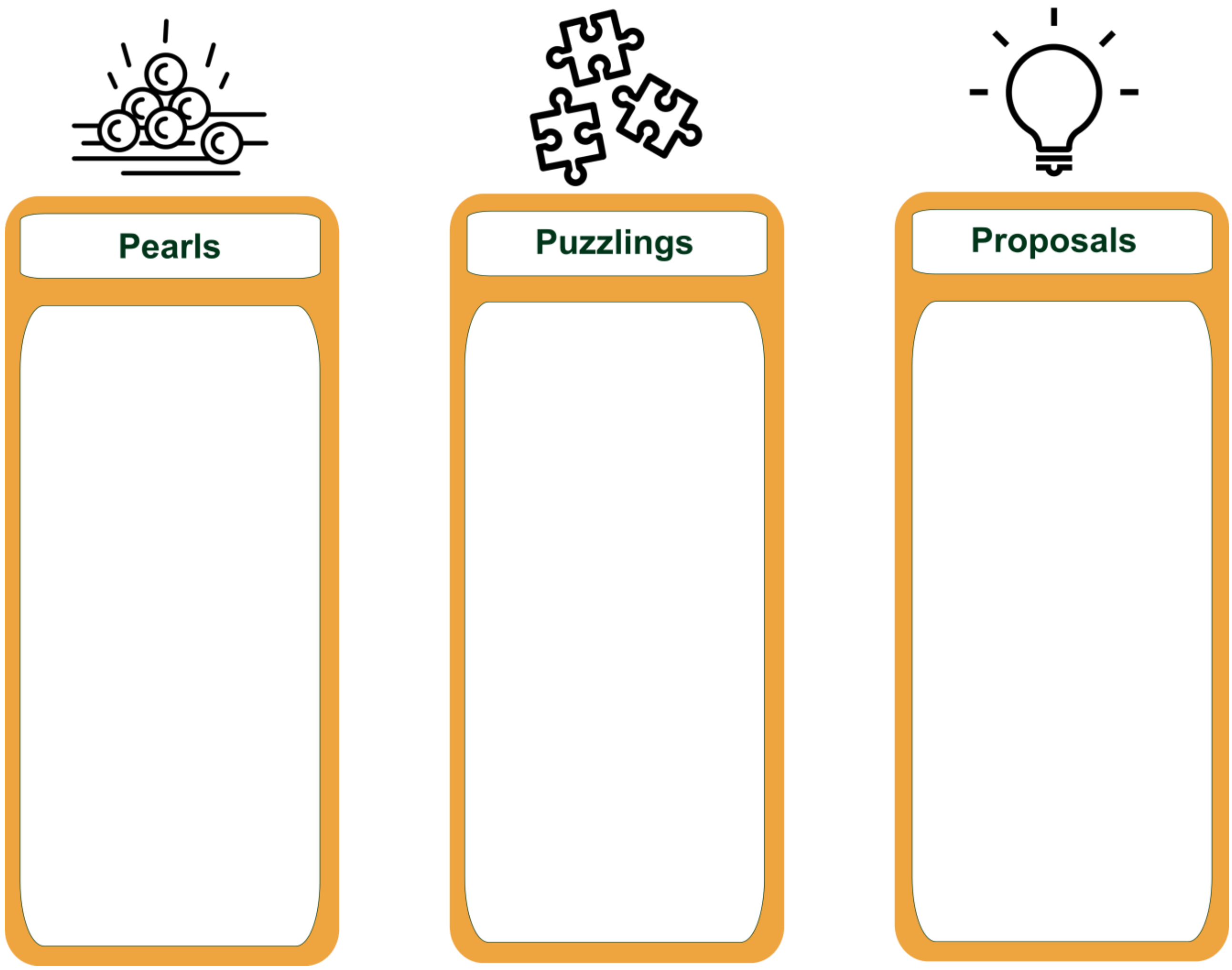


Demonstration canvas

Please stick your post-its near the related aspects



Pearls, puzzlings and proposals template to link the innovation to the demonstration



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