

AfricaMilk Project - Outcome assessment framework

Work package "Monitoring, evaluation and learning" - focus on the innovative platforms and farm management practices

Marie Ferré (UMR Innovation, Cirad) and Eric Vall (UMR Selmet, Cirad)

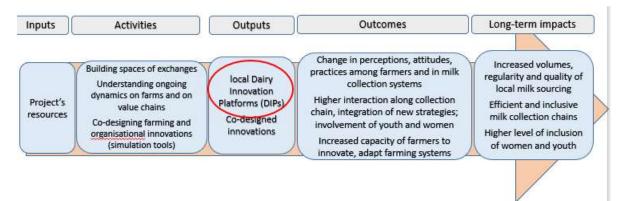
1. Introduction

The 3-years project 'AfricaMilk' focuses on the co-const0ruction and testing of innovations aimed to increase and secure local milk sourcing in Burkina Faso, Madagascar, Senegal, and Kenya. Two types of innovations were targeted: i) technical innovations: at farm level to increase productivity of dairy farms, and ii) organisational innovations: to enhance and increase efficiency of collection systems. The innovations are developed through the following steps:

- 1. Diagnostic of situation (baseline studies): information on household, livestock inventory, dairy cows 'management, milk marketing
- 2. Simulations of the effect of innovation on farm's or region's milk productivity using different tools and models
- 3. Choice of innovation + Testing
- 4. Implementation and evaluation

Steps 2 and 3 are conducted as part of **Dairy Innovation Platforms (DIPs)**, which are conceived by the project to provide dialogue-spaces for discussing innovation, and increasing participation of some parts of the population (women and youth in particular) in key activities. DIPs include dairy farmers, collectors, dairy processors, extension services, and researchers, and are in charge of steering the co-design, choice, testing, and implementation process of innovations.

Project's INITIAL Theory of change:

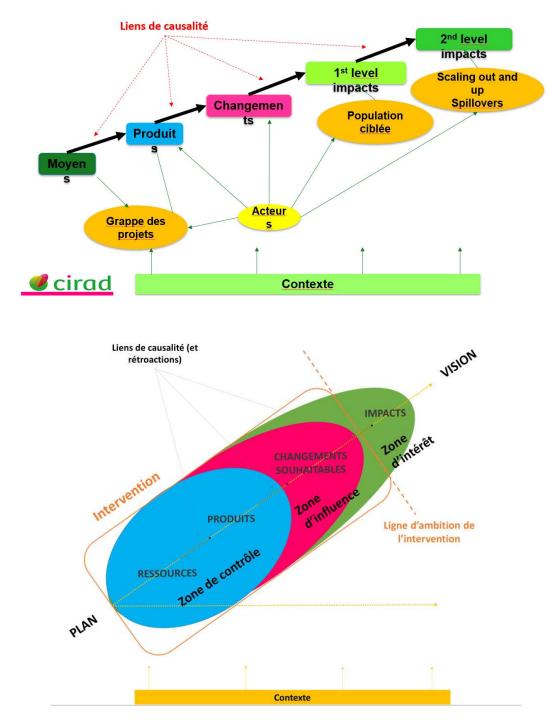


Project's achievements: in green are the DIPs that were either launched or influenced by the project and implemented activities that could generate outcomes. They are the focus of the evaluation.

	Baseline surveys		Co Conception of form improvedien	Co-Conception of organisational	Establishment of DIPs	
	Farm	Milk collection system	Co-Conception of farm innnovation	innnovation	Establishment of DIFS	
Kenya	1144 farms surveyed along multiple variables	Survey and cartography of three milk collection systems/ milksheds (NkCC, Happy Cow, & Mukurweini) + study about microbiological quality of collected milk - Planned (but suspended because of Covid)	No	No	Plan to set up 3 DIPs, and conduct innovation co- conception works in either improvement of milk quality, improvement of ration cow feeding, organizational innovation like quality-based milk payment - still in progress	
Sénégal	140 farms	Study on 2 milk collectors: - Laiterie du Berger - Kirène	Internship M2 Birane Siack on "Co- conception de rations alimentaires équilibrées des femelles laitières en production ». Work in Diagana sector with 20 farmers volunteers .	Role playing games with Co'ssam to discuss it in two dairy collectors (2 areas) Anna Sow internship M2 on "Co- conception d'un système de collecte de lait efficient dans la région de Fatick »	 1 DIP Dagana – Laiterie du Berger (existed prior to projet) – work on co-conception of cow rationing with the use of the Jabnde tool 1 DIP Fatik: meetings and training took place, for programming activities, running simulations, training farmers on feeding (no much changes to be expected here) 	
Burkina Faso	140 farms considered Work conducted by PhD Etienne Sodré «Co- conception of technical innovations in food rationing of dairy cow for sustainable increase of milk production in West Burkina Faso"	Mapping of 2 collection systems: - Banfora and - Bobo-Dioulasso	Simulation and testing of farm innovations (20 farmers) 2019: Test of 12 fodders at 300 farmers volunteers in the two milksheds. 2020: test production of fodder on parcels 0.25ha/farm of 60/70 farmers volunteers. 25 farmers pursue feeding trials on farm.		 <u>1 DIP Banfora existing prior to project</u>, including 4 small milk collectors <u>1 DIP Bobo Dioulasso</u> in Sept 2020: an office in charge of animation 	
Madagascar	105 farms Internship M2 about typology and cartography of 300 farms of Socolait network	Two milk collection systems: - Socolait - Sodimilk	M2 internship about co-devpt of feeding rations cow. Simulations using Jabnde. 8 farmers involved PhD Lovariana: trial of feeding ratios on- going, 6 farmers involved (2 cows each)	 Socolait: cow feed rationing and test of protocol about monitoring and improving milk quality from farm to milk processor. 3 innovations: "zeer port" to keep the milk cool, hygiene kits (tested over 100 producers), milk tanks with big openings. Milk sampling before/after but lab analyses did not really work out. Sodimilk: 70 producers – out of project 	 DIP Socolait: work on scenarios of production (feeding of cows), protocol for improving milk quality monitoring from farm to dairy processor. DIP Sodimilk: study about providers network (database producers and collectors); drafting managing operation booknote. Not major activities implement no significant changes expected. 	
			\rightarrow Progress on both innovation at farm and ϕ			

2. Rational of the evaluation, and focus

Reminder of key element and how defined. The 'impact pathway' (chemin d'impact) = une manière d'expliciter la logique d'une intervention/projet, et de représenter le passage des produits de l'intervention, à des changements chez des acteurs (pratiques, interactions, comportements), puis à des impacts (conséquences long-termes économiques, sociales, environnementales ... de ces changements), et d'expliciter les liens de causalité entre ces différents éléments. Influence of the context and external factors on the realization of these changes.



In our case, products of the intervention = the DIPs and associated activities.

Focus of the outcome assessment:

Outcome/change = a change implemented by an actor (individual, group, or organisation) – something that an actor is doing differently as a result of the intervention. We distinguish two levels of changes:

- **Changes in practices, behaviour, interactions,** which are tangible, observable, and demonstrable. The way DIPs have been designed, we expect changes in interactions to be an important element.
- Intermediary changes including **changes in actors' perceptions, opinions, knowledge, and capacities**, which are more intangible, and correspond to intermediary levels of changes

The project is mainly interested in the first level of outcome/change. Yet, because of the uncertainty in the nature and number of outcomes that can be captured, we will also aim at capturing, to the extent it is possible, intermediary levels of changes (which may be more easily comparable across the cases/DIPs). Thus the idea is to focus on concrete/tangible changes, and to reflect on intermediary changes that have contributed to the concrete changes. Some broader intermediary changes, who did not (yet) induce a concrete change, might also be identified.

Notes:

- Impact refers to the long-term consequences of these changes (e.g. increase in milk production, increased efficiency of collection system, following the adoption of innovations), which we will not be able to evaluate in the frame of this project (too early such long-term effects).
- The project has not delivered significantly on the activities relating to organizational innovations, that were aimed to foster more efficient and more inclusive milk collection systems (dairy processors, milk collectors, dairy farmers) through more rapid and energy-efficient means of storing and transporting milk, higher involvement of vulnerable populations (small farmers, women, youth), and contractual arrangements to secure local milk sourcing in terms of quantity, seasonality, quality.

Based on the various activities conducted in the project in the last 2 years, we orient the outcome assessment activity on **the DIP organisations** specifically, which are considered as "engine" of the project for choosing and testing innovations. They have been designed in the idea of creating collective intelligence (understanding); sharing a vision (predictability), and choosing and implementing actions towards improving a specific situation (feasibility). The essence of the DIPs is to foster links, interactions, and exchanges among various actors' categories of the milk collecting and dairy system, thus facilitating mutual learning.

We focus on 4 DIPs:

- 1 DIPs in Sénégal (1existing prior project)
- 2 DIPs in Burkina Faso (lexisting prior project, the other implemented through the project)
- 1 DIP in Madagascar (different phases, activities, people involved)

Research questions to guide the evaluation:

Do the DIPs contribute to build capacity among its members and to the take up of new farming techniques and practices? If yes, how? (e.g. by facilitating the sharing of experiences and skills?)

More specifically, we want to the study whether DIPs play a role in facilitating i) new understanding among DIPs members of current milk production and milk collection systems, ii) sharing of experiences and knowledge that concern farming / milk production techniques, iii) use/application by members (farmers specifically) of new farming techniques, related to feeding rations and procedures mainly, and iv) conception and trying out new techniques aimed to improve milk production.

Our sample consists of 4 DIPs located in different contexts and having different backgrounds/trajectories (e.g. two of them existed prior to the project, and two were initiated by the project).

This study will help capture any association between DIPs' characteristics, contextual factors, and the outcomes to which the DIP contributed to generate.

Value of the findings of the evaluation - Use of the findings:

- 1. To gain an overview of the effect of DIPs in fostering learning and uptake among members and in generating changes as stated above.
- 2. To improve DIPs' organization, e.g. in terms of effectiveness in delivering spaces of exchanges between actors of the milk collection chain, enhancing interactions, and sharing issues, experiences, and practices.
- 3. To identify factors (based on the analysis of the various DIPs) that could either facilitate or hinder the functioning of DIPs (DIP- and context-related features?)

3. Method – Adapted Outcome Harvesting (OH)

3.1. Design of the harvest

General introduction

Outcome harvesting is an evaluation method commonly designed to capture tangible (demonstratable) outcomes. It is a qualitative evaluation tool which identifies, describes, checks, analyses, and interprets **observed outcomes** (changes in **behavior**, like actions, practices, interactions), and aims to understand the contribution of an intervention to these outcomes. It aims to capture **all positive**, **negative**, **expected and unforeseen changes** which concern all actors influenced directly or indirectly by an intervention (Wilson-Grau 2018). Outcome Harvesting is generally used in complex project contexts, where there is a lack of predefined outcomes, an inherent focus on social actors, and when the project is short.

The method includes **6 main steps**: i) design of the harvest, ii) documentation review and draft of outcomes, iii) engagement with human sources, iv) substantiation of the outcomes with knowledgeable and independent informants (to validate outcomes), v) analysis and interpretation, and vi) supporting the use of the evaluation's findings.

The effectiveness of the methods relies on the fact that outcome statements are very precise, and include information on when, where, which change, for whom, how much (significance), and which contribution from the intervention evaluated. The change needs to be verifiable (need evidence).

In this study, beside changes in practices, we will tempt capturing intermediary levels of changes such as changes in perceptions, opinion, knowledge, and capacity. Some of them could be identified as contributors to the first level of changes.

Note: i) DIPs are composed of farmers, milk processors, and milk collectors. Yet, changes are mainly expected among the farmers' population, due to the kind of activities conducted by the DIPs (focus on cow feeding procedures and rations, and farm trials of associated techniques). The method will however enquire (to the key informants) about possible changes in each DIPs' actors' category. ii) In case we capture effective changes in practices among the farmers, we will be able to presume the effect this may have on the milk production system (e.g. in terms of milk volume produced) in the case whereby these practices would be maintained over time.

- Actors' definitions

A change agent (sphere of control) = an individual or organization that influences an outcome. Here, change agents will consist of project members and DIPs representatives/facilitators, who are very

knowledgeable of its activities, governances, strategies etc. and therefore who are able to provide information on project's outcomes.¹

A social actor (sphere of influence) = an individual, group/community/organization that changes because of a change agent's intervention. This represents the members of the DIPs (who implement changes because of the DIP and the project's activities) as well as non-members of the DIPs that have been impacted (more indirectly) by the DIPS. (an outcome is a change in a social actor)

Change agent and social actors, depending on the setup of the DIP, may include people from the different sectors involved in the project: **dairy farmers, milk collectors, dairy processor, researchers**.²

The harvest user = the stakeholder who needs the findings of the outcome harvest to make decision or take action. This may include people from the change agent organization. Here, it deals with DIPs' and project's boards.

The harvester = person responsible for managing the outcome harvest. Internal or external evaluator (preferably potentially)

Who will describe the outcomes?	Researchers and a mix of change agents (including potentially a few social actors)			
	i) Review of available project literature to draft a first set of outcome based on the readings.			
How to harvest outcomes?	ii) A workshop with a set of change agents (key informants): people involved and knowledgeable of the project and of the respective DIPs, and who are able to describe outcomes/changes generated by the project or by the DIPs. This includes DIPs representatives, researchers, facilitators closely involved in the setting up or functioning/animation of DIPs. They will review the outcomes drafted from the literature, complete them, and think of other outcomes. The idea will be to think first of concrete and verifiable outcomes, and then to think of intermediary outcomes, some of them contributing to the realization of the concrete ones.			
	iii) A few interviews with other change agents (not involved in the workshop) and/or with a circle of social actors (impacted by the DIP or who interacted with DIP's representative without taking part to DIP activities as such).			
Who conducts the activities?	Workshop: researcher or DIP representative. Interviews: potentially master students in the 3 fields/case studies, supervised by key project contacts			
Where to store the outcome data?	Excel			
Substantiation	To confirm accuracy, gain additional insight on outcomes, and better understand the project's contribution (and others) to the outcome. Though call and email with independent informants: those need to be knowledgeable of the changes but independent from the intervention .			

Logistics

¹ Change agents also include project's actors ("sphere of control"), which includes partnership and research team, i.e. Institut Sénégalais de la Recherche Agricole (ISRA), Senegal ; Institut de l'Environnement et de Recherches Agricoles (INERA), Burkina Faso ; University of Nairobi (UoN), Kenya; Kenya - MOEST (Ministry of Education Science and Technology); Fiompiana Fambolena Malagasy Norvéziana, FIFAMANOR, Madagascar; Wageningen University & Research, The Netherlands - MinEZ (Ministry of economic affairs / Agriculture and Nature knowledge Department); SNV Netherlands Development Organisation, SNV Kenya.

 $^{^{2}}$ Beyond the sphere of influence/social actors, we identify the sphere of concern (ultimate beneficiaries, for impact), that includes a larger circle to the DIP's impacted actors like the households. We will not focus on this level as part of this evaluation.

Criteria for selecting	Not all outcomes have to be substantiated. Selection of outcomes may be done			
outcomes to be	based on the most important ones in relation to the intervention/DIP			
substantiated	implementation			
Analyzia and intermetation	Choice of clusters/categories of outcomes depending on the types of DIP selected.			
Analysis and interpretation of outcomes	Analysis of common trends in the outcomes (e.g. on the type of intermediary			
or outcomes	level changes that leads to first level outcomes)			

Note: we focus on understanding how the project contributed to generate change. This means that, for the DIPs that were existing prior to the project existence, it will be important to ensure the harvested changes are effectively the result of the project's influence.

Who changed? (social actor)	Type of outcome/change	Hypotheses on contribution		
	Change of perceptions, opinions, knowledge Increased capacity: with regard to learning, formulation of proposition of adaptive solutions based on needs, communication, leadership	DIPs, through meetings, exchanges, discussions and reflections on farm innovations/new techniques, sharing of issues, skills, and experiences DIPs stimulate member's initiatives to develop new ideas		
Farmers (DIP members) and farming	Increased level of trust for others, new communication New or modified interactions with other farmers and	DIPs support exchanges, sharing of		
organizations	other actors of the milk chain, including in particular collectors, and milk processors (laiteries) (consumers, advisory services, financial institutions not concerned)	learning, discussions.(cf. action plans, new collaborations being set up)		
	Change in farm management practices/techniques (e.g. on rationing), testing of the techniques Integration of the new practices in farming systems	DIPs organizing simulation tools and exercises, providing advises, follow-up		
Women and youth	Higher involvement in DIPs, broader scope; changes in consideration with regard to that population	DIPs decide to address it as a key matter. Topics that are of interest to women and youth are selected		
Collector	Changes in posture, opinion in managing the network, knowledge	Interaction with other actors of the chain		
Concetor	Changes in interactions with the various actors of the milk collection/processing chain.			
	Changes in opinion, posture, knowledge	Interaction with other actors of the chain		
Milk processors	Changes in interactions with the various actors of the milk collection/processing chain.			
Х	Unintended and unexpected changes?			

- Potential outcomes to be harvested (outcomes generated by project)

Note: all types of change matter (positive and negative)

3.2. Methodological Steps

The OH evaluation method builds upon the principle of triangulation: triangulating data from documentation review, workshop/interviews with change agents, and substantiation with independent sources.

Step 1: Documentation review

Documents to be reviewed include, for instance, progress reports, minutes of board meetings, characterization of the network of stakeholders and their farm practices, DIP guidelines, DIP activities, press releases, evaluations, etc.

The documentation review is to be done by people internal to the project / DIP.

<u>First objective of the documentation review</u>: Laying down **the trajectories of development of each of the 4 DIPs** (e.g. using timelines), in order to trace how they evolved, list the various activities organized (exchange/discussion/decisional sessions, and implementation/more technical activities), and be able (later on) to link outcomes' findings to some of these activities, and to the characteristics and contextual features of the DIPs. Table 1 for an example of the kind of that could be gathered. This step is important in order to understand each DIP's situation, and of the activities that might have generated changes.

Table 1: Examples of information that could contribute to build the trajectory of each DIP

DIP name	Launch date, location	Composition and evolvement (evolution of the number and type of members, number and turn-over of leaders)	Main exchanges organized: number, frequency, objectives, participants	Supporting material to these exchanges: minutes, action plans	Main activities implemented and objectives	Supporting material

<u>Second objective of the documentation review</u>: **drafting outcome descriptions** of who changed their behavior and how the project contributed to this change (e. thorough which activities?). It deals with identifying and describing a first set of outcomes/changes and supporting evidence. **The team reviewing these internal documents will primarily focus on tangible, concrete changes, verifiable (in practice, interactions, behavior)**.

Outcome description: An actor that underwent a change that was influenced by the project. Name this person, group or institution and description of what this actor did that was new or different. To be as specific as possible about when this happened and where.

Tips: Check if the outcome description i) describes an outcome and not an output? (An output is under the control of the project while an outcome is influenced by the project). ii) describes an observable change in behavior of a social actor, and a significant change in the behavior of the social actor (not just doing something more or better). iii) contains **who**, **what**, **when**, **where** information & project's contribution to the change (what it did). iv) uses active verbs (not enhanced knowledge, increased awareness...).

Step 2: Engagement with human sources: changes agents primarily and a few social actors

A workshop /group discussion with a set of change agents to:

- i) Validate the trajectory of the DIP
- ii) Review/complete the first set of outcomes (changes in practices, interactions, behavior) gathered from the review of documentation
- iii) Harvest more outcomes, i.e. formulate additional outcome descriptions (who changed what, when and where, and how the change agent contributed to the outcome)

- a. Focus first on concrete outcomes/changes (changes in practices, interactions, behavior) that are verifiable
- b. Reflect of intermediary level outcomes/changes that enabled, contributed to the changes. + drawing of links between intermediary and concrete changes.
- c. Reflection on intermediary outcomes that are observed as a result of the project, but have not (yet) transformed into concrete changes

Note: It is important that the structure of the workshops organized in the various DIPs follows the **same protocol** (though we do expect harvested changes to be different across DIPs) so that participants follow the same logic/mechanism of reflection along the workshop, and this will reduce potential bias in the analysis and comparison of the findings.

Change agents are "parties prenantes de la plateforme": they have participated and contributed to the running of the platform, and to the generation of the outcomes. **They are those who are most knowledgeable about the changes.** The idea is to target a mix of change agents that have a diversity of knowledge. Based on those, the workshop can be completed by additional interviews with other change agents (that did not participate to the workshop) and potentially with a few social actors to get some deeper level understanding on the changes.

DIP name	Type of key informant: change agent (primarily), social actor	Level of involvement in the DIP (time, participation to DIP activities)	Role and responsibility	Profession (farming, milk collector, milk processor)	Institution

Table 2: Set of key informants involved

Examples of evaluation questions to harvest (more) outcomes (can be declined by specifying the elements) during workshop or interviews, with change agents:

- In which social actors has the project influenced change and what are the main characteristics of these changes?
- What was the project's contribution to the changes/outcomes? Are you aware of any other contributing factor(s)?
- To what extent do the outcomes represent progress towards the project's objective XX? (idea on the significance of the change)
- How do you explain this change could you think of intermediary levels of changes (posture, capacities, knowledge, motivation vision ...) that have made these changes possible. (to be as precise as possible on the description of these intermediary levels of change too. (*see more information on the proposed question further down in this document*)

Elements of an outcome: outcome description (what, what, when, where) + **significance** + **contribution** (including also examples and evidence/proof)

Significance = explaining why the outcome is important. The challenge is to contextualize the outcome so that an external reader will be able to appreciate why this outcome is significant, e.g. compared to previous situation. Significance criteria possible: outcome's contribution towards intended impact ("relevance"), Importance of the outcome for a stakeholder group, if the change is the first of its type, if it represents a systemic change,

Contribution: describe what the project did contributing to the generation of the outcome. It involves to identify the projects' activities or outputs of the change agent that plausibly contributed to the change in the social actor (partially (other contributions to consider? If yes, which ones?), directly or indirectly, intentionally or unintentionally?

Tips: to check that outcomes are specific and coherent. To check that there is a plausible relation between the outcome and contribution, and that the rational supporting the significance is acceptable.

Step 3: Substantiation of the outcomes with knowledgeable and independent informants (to validate outcomes)

It deals with verifying the accuracy of information describing the outcomes. This is to be done with independent informants, who will be able to confirm the outcome and the contribution of the project to this change. This can consist of social actor that have not been involved in the running/organization of the DIP.

Sample Format for Requesting Substantiation of Outcome Formulation:

Provide the outcome description (XX), and then ask the substantiator to complete the following record of opinion: 1. To what degree you are in agreement with the description of the [social actor XX]' decision/action/ to WW ?

[] Fully agree; [] Partially agree; [] Disagree

Comments, if you like:

2. How much do you agree with the description of how AfricaMillk project influenced the XX decision?

[] Fully agree ; [] Partially agree ; [] Disagree

Comments, if you like:

- What do you know about the DIP XX? Which experience do you have with it?

- To what extent do you agree that you used/implemented/XX Y? When and how did you use/implement/XX it?

– What are the reasons to use the information that way?

- What have been the changes in knowledge, capacities, practice, .. in you or your organization and others you interact with?

How would you state the validity/robustness of outcome XX?

- In what ways did you or your organization relate with [DIP name] to obtain the information?

-Is there any other change you would like to relate here, and results from your participation in this process?

Activities	Trim 4 2021	Trim 1 2022	Trim 2 2022	Trim 3 2022
Choice of focus of the evaluation, design of the method for assessing outcomes of the project, plus template for data collection				
Conduct the outcome harvest – documentation review + interviews				
Substantiation and validation of results by actors				
Analysis of outcomes, to spot outcomes' clusters, common trends in generation mechanisms				
Support use of findings and work/findings valorization				

4. Proposition of guideline questions to harvest outcomes

Below, we list generic questions and topics to capture <u>changes</u>, and <u>contributions</u> to these changes. The questions and formulations suggested below are to be adapted to the type of DIP considered and the level of involvement of the participant in the DIP. These questions are to be affined with the elements described in the earlier parts. <u>Objectives</u>: i) get a better understanding of the matter, DIP development, activities, objectives, and overall context, ii) capture observed changes in DIP organizations and among members; and project's contribution to these changes, iii) identify other potential contacts (change agents), who could bring another type of knowledge.

Gather general individual characteristics (to be gathered before the workshop/interview, without asking participant):

- 1. Role of the persons in the project?
- 2. Role in the DIP? Since how long?
- 3. In which activities of the **DIP** have you participated / have you been involved?
- 4. What motivated you to get involved in the DIP (reasons for engagement, participation)?
- DIP trajectory
 - 5. Historical background
 - 6. Context
 - 7. Key activities implemented and objectives/topics
 - 8. Modus Operandi: actions plans, strategy development?
 - 9. Membership (composition, type of actors), and information on their interests, motivations etc.
 - 10. How would you **define** the concept of the DIP ?
- Observed changes in the DIP organisation (mainly valid for DIP that existed prior to project):
 - 11. Is there any change that you have observed in the last 2 years in the organisation of the DIP? *Precisions, illustrations on what change, where, when* (this might include change in the DIP composition: women, youth %, interactions between the different professions of the milk collection chain).
 - 12. Are these changes the result of the project? How? Or other factors? Contextual factors?
 - 13. Supporting evidence?
- Observed changes in social actors (*Tip*: to go back to the explanation of the outcome description to make sure to gather the relevant information)
 - 14. Is there any change that you have observed among the DIP members (individuals or groups; organisations)? *Precisions, illustrations on who, what change, where, when*.
 - a. Change in practice which ones? Trying out of farming techniques? How? Significance? *Evidence*?
 - b. Change in interactions between DIP members (same actor type or a different profession of the milk collection chain) how materialized: communication, new collaboration outside DIP activities, increased level of trust, etc.? Significance?
 - c. Any other concrete change?
 - 15. Are these changes the result of the DIP/project? How? Through which ways?
 - 16. Can you illustrate this change?
 - 17. Other factors contributing to these changes? Contextual factors?
 - 18. Supporting evidence?
 - 19. How do you explain those changes? Ca you think of changes that enables those to happen? Or that were conducive at least to their realisation?
 - d. Change in knowledge? (e.g. level of understanding of the milk collection chain and the actors that compose it; increased level of knowledge about specific milk production techniques (need to mention specifically here, depending on the DIP))

- e. Change in opinion, vision, posture? (*about some farming techniques?*) How? (through *interacting with other members? Through participating in specific sessions?*)
- f. Change in capacities which ones (organisational, technical, leadership, management)? How? Mobilized and how? Significance?
- g. Any other learning that you might like to report? *Contribution of the DIP? How? Significance?*
- 20. Are these changes the result of the DIP/project? How? Through which ways?
- 21. Can you illustrate this change?
- 22. Other factors contributing to these changes? Contextual factors?
- 23. Supporting evidence?
- *Experienced change(s)*
 - 24. At your own level, which change(s) did you experience through being involved in the DIP? ... same declination process as question above
 - 25. How are these changes the result of the DIP/project? How? Through which ways?
 - 26. Can you illustrate this change?
 - 27. Other factors contributing to these changes? Contextual factors?
 - 28. Supporting evidence?

• Perception of the DIP

- 29. What is according to you most successful for the DIP ? (highest added value of the DIP)
 - a. Network creation
 - b. Exchanges participation
 - c. Mutual learning stimulation
 - d. Creation shared vision?
 - e. Getting updated on current issues
 - f. Getting to think and develop new solutions with others (innovative capacity development)
 - g. Other please specify
- 30. Contribution of the project? Other types of contributions?
- 31. What could be considered as a fail of DIPs? Constraints/difficulties?
- 32. What do you think could be improved in the way the DIP and its activities are organized/implemented?

Additional questions for the few interviews with social actors:

- 33. Did you share any of these changes with others? *With how many people? Precision on the content, purpose.*
- 34. Did you apply any of what you learnt in your farming system? *Precision, illustration, contribution of the DIP/project to this, and of other contributions?*
 - h. Was the result expected? Yes/no
 - i. Did you feedback the results of this trial into the DIP network? Yes/No + precisions.
 - j. Do you intend to continue adopting these new practices?
- 35. What are you aiming at by applying these new farm practices? (how do you believe this will impact you later on?)

- Increased volume of milk produced by cows
- Higher productivity
- Cows more healthy
- Higher level of income?
- Higher quality of the milk, and better recognition of tits value
- Alignment with ecological principles?
- Other reason/motivation?
- 36. More generally, did you bring your own experiences, or knowledge to the DIP (*or shared with other members?*)? *If yes, which ones.*

5. Organization of the data collected in interviews

Formulation and systematization of outcomes

Type of change: change in action, practice, behavior, interaction, relations	Type of intermediary changes: perceptions, opinion, knowledge, capacity	Description of the change: Who, What, When, Where	Source (who reported the change, or in which document?)	Contribution of the project to the change, in the frame of DIPs	Other contributions: factors/actors that contributed to the changes - Focus on contextual factors of the DIP	Significance of the change	Evidence

6. Synthesis of information

Based on the various types and levels of outcomes captured and the understanding of the contributions (project related and non-project related) to the generation of these outcomes, the idea is to synthetize the collected information **into an impact pathway**.

The distinction of these two products for DIP that have been existing prior the project versus DIPS that were launched as part of the project could be interesting.

Potential final step (potentially only): A workshop bringing together the key informants and other impacted actors to discuss, validate, affine **the impact pathway** that was built using the harvested outcomes, discussing the causality links. Such a workshop to be seen also as participating of the learning dynamic of the DIP.

Global analysis of the outcomes: identifying common trends, clusters of outcomes, common types of contributions etc.

7. References

Blundo-Canto, G., Andrieu, N., Soule Adam, N., Ndiaye, O., Chiputwa, B. 2021. Scaling weather and climate services for agriculture in Senegal: Evaluating systemic but overlooked effects. *Climate Services* 22, 100216, ISSN 2405-8807, <u>https://doi.org/10.1016/j.cliser.2021.100216</u>.

Carlin, R.E, Love, G., Smith, C. 2017. Measures of interpersonal trust: Evidence on their cross-national validity and reliability based on surveys and experimental data, OECD Statistics Working Papers, 2017/10, OECD Publishing, Paris. <u>http://dx.doi.org/10.1787/333c8ed0-en</u>; <u>https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=STD/DOC(2017)10&docLanguage=En</u>

- Evans, A.M. & Revelle, W. 2008. Survey and behavioral measurements of interpersonal trust. *Journal of Research in Personality* 42: 1585-1593
- Garred, M. & Refai, M. 2020. CHANGE INSIDE AND OUT An Outcome Harvesting plus Attitude Change toolkit for peacebuilders and other changemakers. <u>https://michellegarred.files.wordpress.com/2021/03/ohac_toolkit.pdf</u>
- Giraldo D.C, Camacho K, Navarro-Racines C, Martinez-Baron D, Prager, S.D, Ramírez-Villegas J. 2020. Outcome Harvesting: Assessment of the transformations generated by Local Technical Agroclimatic Committees In Latin America. CCAFS Working paper No.299. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). https://cgspace.cgiar.org/bitstream/handle/10568/108492/WP%20MTA%20Outcome%20Harvesting Final.pdf
- Pali, P. & Swaans, K. 2013. Guidelines for innovation platforms: Facilitation, monitoring and evaluation. ILRI Manual 8. Nairobi Kenya ILRI https://cgspace.cgiar.org/bitstream/handle/10568/27871/ILRImanual8.pdf?sequence=4&isAllowed=y.
- Pillai, R.V., Awantang, G., Gurman, T.A., Leslie, L.T. 2017. Outcome Harvesting Evaluation of Social and Behavior Change Communication Capacity Strengthening Activities in Liberia. Baltimore, MD: Health Communication Capacity Collaborative Project, Johns Hopkins Center for Communication Programs. <u>https://healthcommcapacity.org/wpcontent/uploads/2018/05/Liberia_OH-Report_Final.pdf</u>
- Toillier A., Guillonnet, R., Bucciarelli, M., Hawkin, R. 2020. Developing capacities for agricultural innovation systems: Lessons from implementing a common framework in eight countries. Rome : FAO-Agrinatura, 116 p. ISBN 978-92-5-133375-4 ; 978-2-35709-020-0. <u>https://doi.org/10.4060/cb1251en</u>
- Jagodzinski, W. & Manabe, K. 2004. How to measure interpersonal trust? A comparison of two different measures. ZA-Information / Zentralarchiv für Empirische Sozialforschung, 55, 85-98. <u>https://nbn-resolving.org/urn:nbn:de:0168-ssoar-198749</u>
- World Bank. 2014. Outcome-Based Learning Field Guide Tools to harvest and monitor outcomes and systematically learn from complex projects
- Zhang, M. 2021. Assessing Two Dimensions of Interpersonal Trust: Other-Focused Trust and Propensity to Trust. Frontiers in Psychology. 12:654735. doi:10.3389/fpsyg.2021.654735
- Roest-Boers, N. 2018: Measuring Self Confidence. http://blog.sinzer.org/measuring-self-confidence-examples-available-inthe-sinzer-library: In order to measure the extent of self-confidence, researchers typically make a distinction between two aspects of the concept: self-esteem (the regard or respect a person has for oneself) and self-efficacy, which refers to a person's belief in their ability to accomplish a specific goal or task. For each of these aspects, there is a validated scale. Sinzer advices to work with validated scales. The Rosenberg Self Esteem Scale:10 items, with which you either strongly disagree, disagree, agree or strongly agree. The strength of this scale is that positive items, such as: 'I feel that I have a number of good qualities' are alternated with negative items, such as: 'All in all, I am inclined to feel that I am a failure.' In this way, respondents are not steered toward a certain direction when answering. The level of self-esteem is calculated by adding the values of the answers. A higher score indicates a higher level of self-esteem. The General Self-Efficacy Scale:10 items, based on a 4-point scale ranging from 4 Exactly true – 1 Not at all true. Examples of items: 'I can always manage to solve difficult problems if I try hard enough' and 'I can remain calm when facing difficulties because I can rely on my coping abilities'. <u>https://positivepsychology.com/self-efficacy-scales/</u>

Annexe:

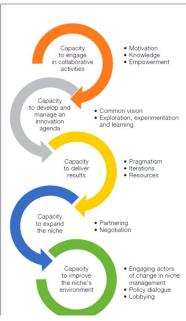
Literature to support the evaluation (in view of scientific valorization of the study)

Strands of literature to be considered to formulate the contributions of this evaluation

- Innovative capacity, capacity strengthening (focus on learning, technical, communication, leadership capacities, as well as knowledge management?) – the idea is to discuss which type of capacity makes sense to be studied in each respective DIP/context (depending on the different types of activities that have been implemented by the DIP)

Common functional capacities (Toillier et al. 2020, CDAIS project)





- https://www.betterevaluation.org/en/themes/capacitydevelopment
- Role of community of practices, platforms in fostering learning and trial/adoption of new practices
- Innovation platforms. Indicators to evaluate their success, in terms of engagement, planning, coordination.
 Pali & Swaan (2013): « innovation platforms (IP) 'innovation networks' or 'stakeholder networks' or 'multistakeholder platforms': generally, an IP is a mechanism to enhance communication and innovation capacity among mutually dependent actors, by improving interactions, coordination, and coherence among all actors to facilitate learning and contribute to production and use of knowledge."
 - Along the principles set by S. Mathé; trust, meaning, co-construction, and reflexivity?
 - Indicators/index to capture intangible changes, e.g. in capacity, motivations index of gain in self-confidence, trust in others (interpersonal trust) to be investigated if it makes sense only for the DIP, empowerment of people (more conscious of their strengths), and capacity. For measuring interpersonal trust: index set of key questions and incentivized experiments (ex: Zhang 2021; Evans & Revelle 2008)
 - Measurement tools from behavioral economics COM-B (motivation, capacity behavior)
 - Relevant literature from Outcome Harvesting for ideas on formulation of their outcomes:
 - Pillai et al. (2017): considered increase in coordination of activities, higher capacity of monitoring, management etc.
 - Giraldo et al. (2020): look at how communities and organization have enhanced their knowledge; understanding, relationships.