

## Working Document

### WP1:

# Report on the 2023 Review and 2024 Activity Planning Workshop of the CGIAR Initiative on Agroecology project

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The CGIAR Initiative Transformational Agroecology across Food, Land, and Water Systems develops and scales agroecological innovations with small-scale farmers and other food system actors in seven low- and middle-income countries. It is one of 32 initiatives of CGIAR, a global research partnership for a food-secure future, dedicated to transforming food, land, and water systems in a climate crisis.

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### 1 Introduction

The Initiative on Agroecology (Transformational Agroecology across Food, Land, and Water Systems) is a CGIAR research initiative committed to meeting the challenge of sustainable development by 2030. The aim of this initiative is to demonstrate the practicality of agroecology and to promote its adoption by stakeholders in the food system, particularly farmers with small holdings in low-income countries. The initiative works with farmers and other food system stakeholders to ensure that agriculture harnesses nature's goods and services while minimising negative environmental impacts and improving knowledge co-creation and inclusive relationships among those stakeholders. It supports the application of agroecological principles in food, land and water management systems, working towards the co-development and implementation of agroecological innovations throughout the food system.

To facilitate co-learning and co-development, the Initiative on Agroecology is establishing an international network of Agroecological Living Landscapes (ALL). This initiative is structured around five Work Packages (WPs) whose activities are implemented by a coordinator and a team of researchers in each ALL. The CGIAR Initiative on Agroecology implementation steering team includes members of several CGIAR centres and alliances (Alliance of Biodiversity International and CIAT, IWMI, IFPRI, CIMMYT, CIP, WorldFish and IITA), as well as international partners (CIRAD and CIFOR-ICRAF) and national partners in each country (Burkina Faso, India, Kenya, Laos, Peru, Senegal, Tunisia, Zimbabwe).

In Burkina Faso, the Initiative on Agroecology is led by the CIRAD and its partners, the CIRDES and the INERA. In March 2023, the Burkina Faso Agroecological Living Landscape (ALL-BF) was set up in the Hauts Bassins region of Western Burkina Faso, which is the ALL implementation area. The ALL-BF currently includes dairy farmers, collectors affiliated to milk collection centres, private collectors, dairy processing units, government support services (local departments of the Ministry in charge of livestock, farming research, technological research) and private providers (livestock feed suppliers, artificial insemination service providers, microfinance institutions).

A number of activities were carried out over the course of 2023 in connection with all the WPs of the Initiative on Agroecology project around the ALL-BF.

So as to take stock of the activities carried out in 2023 and validate the 2024 programme with stakeholders, the coordination team decided to organise a workshop with all ALL-BF stakeholders. This took place on 17 and 18 April 2024 in the training room of the CIRDES (Centre International de Recherche-Développement sur l'Élevage en zone Subhumide). The workshop was attended by 78 participants, including all the researchers involved in the implementation of the project as well as ALL-BF stakeholders (see attached attendance list).

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## 2 Workshop context and objectives

### 2.1 Opening ceremony

The workshop was officially opened by the CIRDES project Focal Point, Dr SANOGO Souleymane, the representative of the INERA Focal Point, Dr KIENDREBEOGO Timbilfou, and the Secretary General of IPROLAIT (Interprofession de la Filière Lait au Burkina Faso), Mr BOKOUM Assane. After the customary greetings and a few points on the roles of the various institutions represented, the trio welcomed all the participants and declared the workshop open, wishing them fruitful exchanges with a view to achieving the project's objectives.

### 2.2 Objectives, expected results and workshop agenda

The initiative's Co-Coordinator, Dr SIB Ollo, began the presentations by outlining the objectives, expected results and agenda (see appendices) for the 2023 Review and 2024 Planning Workshop.

The objectives were as follows:

- To outline the objectives, activities and expected results of the CGIAR Initiative on Agroecology project;
- To present the preliminary results obtained in the implementation of the CGIAR Initiative on Agroecology project;
- To present and approve the work programme for 2024.

The workshop was expected to achieve the following results:

- The objectives, activities and outcomes of the CGIAR Initiative on Agroecology project are shared and understood by the participants;
- The preliminary results achieved in the implementation of the CGIAR Initiative on Agroecology project are presented and have been discussed in order to assess their relevance;
- The 2024 work programme is presented and adopted by all ALL-BF stakeholders.

The agenda was spread over two days of presentations and discussions between all the ALL-BF stakeholders.

## 3 Presentation of the Initiative on Agroecology

This presentation was given by the project's Co-Coordinator, Dr SIB Ollo. It was structured around three main themes: (i) Presentation of the stakes involved in the Initiative on Agroecology (IAE) and the Agroecological Living Landscape (ALL) concept; (ii) Presentation of the work packages (WPs) and (iii) Presentation of the objectives and expected changes.

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### 3.1 Stakes involved in the Initiative and presentation of the Agroecological Living Landscape concept

Agroecology has gained visibility in scientific and political debates on agriculture, but the environments conducive to widespread implementation of agroecological practices remain limited, despite the benefits shown in a number of specific contexts. Research into agroecology has tended to focus more on technical aspects than on the socio-political dimensions involved in improving the socio-technical system beyond individual farms.

ALLs are multi-partner schemes in which experimentation is carried out in specific territorial and community contexts with farmers and other stakeholders. They form a framework that enables various stakeholders (farmers, retailers, processors, consumers and institutions) involved in a territory's food systems to share insights and knowledge, and to jointly develop and adapt various types of agroecological innovations. Lastly, they integrate interdisciplinary research as part of a continuous and interactive innovation process at territorial level.

In Burkina Faso, stakeholders in the Bobo-Dioulasso Dairy Value Chain (DVC) face many challenges at all levels (milk production, milk collection, dairy processing). The initiative therefore aims to guide it towards becoming a more agroecological dairy value chain driven by Bobo-Dioulasso's Dairy Innovation Platform ('Plateforme d'Innovation Lait', PIL) through all its WPs.

### 3.2 WP presentations

#### **WP1: Transdisciplinary co-design of innovations in the Agroecological Living Landscape (ALL)**

WP1 is divided into two main parts:

- The first part focuses on making life easier for the ALL, with objectives linked to the principles of agroecology.
- The second part is centred on the co-creation of change through the setting up of agroecological experimental schemes at farm level.

#### **WP2: Evidence-based performance assessments of agroecological farming systems**

WP2 involves assessing agroecological practices in dairy production systems using the HOLPA tool. The objectives are:

- To get to grips with the HOLPA tool;
- To add a small set of robust and location-based metrics that are meaningful to dairy value chain stakeholders in order to assess the level of agroecology in the dairy value chain (farm, collector, processor, retailer, consumer level);
- To test the HOLPA tool on a significant sample of dairy farms.

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### **WP3: Inclusive business models and financing strategies**

WP3's ultimate goal is to set up a 'tripartite' Agroecological (Ae) Business Model (BM) between the "dairy farmers' organisation", the "network of milk collection centres", and the "dairy processors' cooperative" in the city of Bobo-Dioulasso. The aim of this Ae BM will be to increase local milk production and secure milk supplies for dairy processors throughout the year. This Ae BM will include Ae technical innovations tested in WP1, local financial schemes looking to develop Ae in Burkina Faso (Ae schemes identified and adapted in WP4 for a local Ae dairy value chain), as well as key measures to positively change the behaviour of key stakeholders (WP5 outcomes).

### **WP4: Strengthening policies and institutional environments conducive to agroecological transitions**

WP4 aims to :

- Support and develop milk collection centre operations promoted by the Burkina Faso government in order to promote a dynamic and secure dairy value chain, and
- Leverage local institutional and political initiatives to support Ae and the dairy value chain.

### **WP5: Understanding and influencing changes in partnerships and behaviours**

WP5 aims to :

- Drive behavioural change among dairy farmers: towards more dairy-led production systems that retain the benefits of traditional agro-pastoral production systems;
- Drive behavioural change among milk collection centres: from milk collection points to service centres (support for Ae milk production) and milk collection centres, and
- Drive behavioural change among dairy processors: smart contract with milk collection centres, focusing on milk quality.

## **3.3 Key objectives and expected changes**

The ultimate goal is to support stakeholders in improving and securing milk supplies (18,000 l/d in 2024) in local value chains using Ae principles.

Expected changes for DVC stakeholders are as follows:

- Dairy farmers: Adopting the agroecological package
- Milk collectors: Providing a range of services to farmers (consultation, advice, access to agroecological inputs) and processors (guaranteed deliveries in terms of quantity and quality, quality control, etc.)
- Dairy processors: diversification of dairy products (dairy products with natural flavours based on local produce: néré, kinkéliba, etc.)
- Consumers: (i) demand for more dairy products made from local milk at affordable prices; (ii) replacing milk powder with local milk in dairy products; (iii) diversification: Dèguè, Gapal, Wagashi, Soap, Oil, and various innovative products



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### 4 Introducing the PIL and the ALL-BF

Bobo-Dioulasso's Dairy Innovation Platform (PIL) was presented by its Chairman, Mr KONATE Hati.

The Bobo-Dioulasso PIL was set up through the Africa Milk project in 2020. It arose from the desire of local dairy value chain stakeholders in Bobo-Dioulasso and surrounding areas to come together and take action to develop their respective activities. It is made up of dairy farmers, collectors affiliated to milk collection centres, private collectors, dairy processing units, as well as public and private support services. Its overall objective is to increase the daily production, collection, processing and marketing of milk in Bobo-Dioulasso's dairy production area to 18,000 litres by 2024. As part of the Initiative on Agroecology's activities, this PIL was extended to include other stakeholders (support services and external members) during a co-design workshop held in March 2023 at the CIRDES, thus forming the ALL-BF.

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### 5 2023 Results

#### 5.1 Overview

This presentation by Dr SIB Olo included all the reports on activities carried out in 2023 (Table 1).

**Table 1: Results achieved in 2023**

N°	WPs	Authors	Title	Links
1	WP1	Sib Olo, Tionyéfé Fayama, Kouakou Patrice Koffi, Sanogo Souleymane, Sodré Étienne.	Stakeholder mapping of Burkina Faso agroecological living landscape. s.l. : CGIAR Initiative on Agroecology-CIRAD, 32 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607631/">https://agritrop.cirad.fr/607631/</a>
2	WP1	Sib Olo, Orounladji Boko Michel, Ouattara Songdah Désiré.	Formalisation of the Burkina Faso agroecological living landscape (based on the actors of the local dairy value chain). Bobo-Dioulasso, 28-30 March 2023. s.l. : CGIAR Initiative on Agroecology-CIRAD, 14 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607632/">https://agritrop.cirad.fr/607632/</a>
3	WP1	Sib Olo, Orounladji Boko Michel, Ouattara Songdah Désiré	Co-designing an agroecological package with the actors of the Burkina Faso Agroecological Living Landscape. Bobo-Dioulasso, CIRDES, May 11, 2023. s.l. : CGIAR Initiative on Agroecology-CIRAD, 8 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607635/">https://agritrop.cirad.fr/607635/</a>
4	WP1	Sib Olo, Orounladji Boko Michel, Ouattara Songdah Désiré	Co-design workshops in Milk Collection Centres (CCLs): Training on technical itineraries, seed distribution and commitment of volunteer dairy farmers. Bobo-Dioulasso, June 19-25, 2023. s.l. : CGIAR Initiative on Agroecology-CIRAD, 14 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607634/">https://agritrop.cirad.fr/607634/</a>
5	WP1	Vall Eric, Orounladji Boko Michel, Berre David, Assouma Mohamed Habibou, Dabire Der, Sanogo Souleymane, Sib Olo	Crop-livestock synergies and by-products recycling: Major factors for agroecology in West African agro-sylvo-pastoral systems. Agronomy for Sustainable Development, 4:70, 16 p.	<a href="https://agritrop.cirad.fr/607471/">https://agritrop.cirad.fr/607471/</a> <a href="https://doi.org/10.1007/s13593-023-00908-6">https://doi.org/10.1007/s13593-023-00908-6</a>
6	WP2	Kouakou Patrice Koffi, Sib Olo, Orounladji Boko Michel, Assouma Mohamed Habibou, Ouedraogo Adama, Vall Eric	Context document Burkina Faso. Agriculture and agroecology in the Hauts-Bassins region, an ALL intervention area in Burkina Faso. Montpellier : CGIAR Initiative on Agroecology, 50 p.	<a href="https://agritrop.cirad.fr/607595/">https://agritrop.cirad.fr/607595/</a>
7	WP2	Orounladji Boko Michel, Kouakou Patrice Koffi	Report on the WP2 Burkina and Senegal workshop on the HOLPA tool. Bobo-Dioulasso, April 26, 2023. s.l. : CGIAR Initiative on Agroecology-CIRAD, 9 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607638/">https://agritrop.cirad.fr/607638/</a>
8	WP2	Orounladji Boko Michel, Sanogo Souleymane, Kouakou Patrice Koffi, Ouedraogo Adama, Sib Olo, Assouma Mohamed Habibou, Vall Eric	Localised indicators for multi-criteria assessment of agroecological performance. Bobo-Dioulasso, August 23, 2023. s.l. : CGIAR Initiative on Agroecology-CIRAD, 13 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607639/">https://agritrop.cirad.fr/607639/</a>
9	WP3	Sib Olo, Vall Eric, Corniaux Christian, Sodre Etienne, Sanogo Souleymane	Characterising the dairy value chain from an agroecological perspective in the peri-urban area of Bobo-Dioulasso, Burkina Faso's 'Agroecological Living Landscape' focus area. s.l. CGIAR Initiative on Agroecology, 33 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607630/">https://agritrop.cirad.fr/607630/</a>
10	WP4	Dedieu Claire	Mapping of stakeholders involved in agroecology in Burkina Faso. Montpellier : CGIAR Initiative on Agroecology, 7 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607641/">https://agritrop.cirad.fr/607641/</a>
11	WP5	Vall Eric, Orounladji Boko Michel, Ouattara Songdah Désiré, Sanogo Souleymane, Dabire Der, Traore Issouf, Sib Olo	Bobo-Dioulasso's dairy value chain: assessing stakeholders' space for initiatives with a view to identifying behaviours conducive to agroecological transition. Montpellier: CGIAR, 55 p. (Working Document CGIAR)	<a href="https://agritrop.cirad.fr/607522/">https://agritrop.cirad.fr/607522/</a>



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### 5.2 Summary of WP1 results

This presentation was delivered by OUATTARA Songdah Désiré, WP1 co-facilitator. It focused on transdisciplinary co-design of innovations in the ALL-BF.

The overall aim of the study was to support dairy farmers in setting up agroecological production systems in their farms' dairy production units. An Experimental Agroecological Farming Scheme ('Dispositif Expérimental Agroécologique en Milieu Paysan' - DEAMP) was introduced to 54 dairy farmers and 12 agricultural farmers. The DEAMP is based on four (4) complementary components: 1) Implementation of a fodder and seed production system, called Fodder Demo-Plot (FDP); 2) Sound management of farm crop and livestock co-products using the *CoProdScope* tool (Zoungrana et al., 2023); 3) Implementation of Dairy Production Units (DPUs) based on FDP fodder and co-design of balanced rations using the *Jabnde* rationing tool and, 4) Introduction of Efficient Covered Manure Pits (ECMPs) involving the monitoring of livestock and crop co-product recycling from production and use of organic manure.

The introduction of Fodder Demo-Plots resulted in the production of fodder and seed in each FDP. The resulting fodder was used to ration 48 lactating cows during the dry season using the *Jabnde* tool.

The *CoProdScope* (CPS) tool was used to optimise the management of crop and livestock co-products on 10 farms involved in the implementation of the Experimental Agroecological Farming Scheme. The review of CCP and LCP co-product recovery covered the period from June 2022 to May 2023 (year N), and the advisory process ran from June 2023 to May 2024 (year N+1).

In a bid to optimise the recycling of livestock and crop co-products from farms and limit the production of greenhouse gases (GHGs), in particular nitrous oxide (NO<sub>2</sub>), covered manure pits are currently being installed in 54 volunteer dairy farms involved in setting up the DEAMP. As of 17 April 2024, 38% of the planned pits have been built, filled and covered; 46% have been built and are being filled; 2% are under construction; 2% have been lost and 12% have not yet been installed.

### 5.3 Summary of WP2 results

This presentation was delivered by Dr OROUNLADJI Boko Michel, WP2 co-facilitator. It focused on the preliminary results of the agroecological performance assessment of Bobo Dioulasso's milk-producing farms using the HOLPA tool.

The HOLPA tool was applied to dairy farms through a survey of 52 farmers involved in local milk production systems. Soil samples were also collected from the farms of the 52 farmers surveyed. This survey helped to analyse the diversity of dairy farmers in relation to their agroecological characteristics.

Most of the respondents to the HOLPA 2023 survey conducted on 52 farms in the Burkina Faso CGIAR Initiative on Agroecology (IAE) focus area (which covers the Bobo-Dioulasso dairy production area and the Agroecological Living Landscape focus area) are male (90.38%), illiterate (65.38%), of Fulani origin (71.15%) and cohabiting (90.38%). On the whole, they expressed satisfaction with their living conditions, barring concerns about safety. Men, unlike women, expressed a feeling of freedom in their decision-making.

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A majority of respondents (61%) said they had very basic theoretical knowledge of agroecology. For them, agroecology is a concept that mainly means: (i) eating local food, (ii) eating food without chemicals, (iii) looking after nature on the farm, (iv) enjoying nature, (v) caring about nature, and (vi) paying workers fair wages.

Livestock farms are mainly focused on cattle breeding, with the renewal of animals mainly provided by the farm's own herd. All respondents said they wanted to ensure that their animals were fed, watered, sheltered and well cared for. Watering is mainly provided by surface water. Although there was a strong interest in forage crops for feed, few respondents seemed to be concerned about grazing load management. There was also a strong interest in organic manure management.

On these livestock farms, which also grow crops, there does not appear to be any major problem with soil fertility or erosion. Pests are mainly managed through the use of pesticides. Of the 16 so-called agroecological practices in the HOLPA tool, only crop rotation is widely used by respondents. Given that most farmers are livestock breeders, field sizes are not very large, unlike herd sizes which are substantial.

### 5.4 Summary of WP3 results

This presentation, which was delivered by Dr Souleymane SANOGO, WP3 co-facilitator, focused on the preliminary results of the process of co-designing an Agroecological Business Model for Bobo-Dioulasso's dairy value chain.

A map of Bobo Dioulasso's dairy value chain stakeholders was drawn up, providing an insight into the structure of the dairy industry and highlighting the diversity of direct and indirect stakeholder interactions.

The characterisation of the dairy value chain from an agroecological perspective in the peri-urban area of Bobo-Dioulasso led to the identification of two major systems: (i) an agro-pastoral dairy farming system and (ii) a dairy farming system moving towards more agroecological intensive practices. Based on the 13 elements of agroecology identified by Wezel et al (2020), none of the described dairy systems fully satisfied all of the principles. According to these criteria, intensive and agroecological dairy systems were those that implemented the greatest number of agroecological elements in their operation. The study also highlighted the advantages and disadvantages of local milk marketing channels.

Based on the Business Model Canvas, 6 current Business Models for Bobo Dioulasso's dairy value chain stakeholders were pre-designed by researchers. These Business Models focused on: (i) agro-pastoralists; (ii) mini-dairy farms; (iii) independent milk collectors; (iv) milk collection centres; (v) mini-dairies using milk powder and (vi) mini-dairies using local milk. They were validated during workshops with the various DVC stakeholders. The agroecological characteristics of the current Business Models were then identified in relation to the principles of agroecology:

- Among dairy farmers: Ae characteristics specific to both types of farmers can be observed (more recycling and interaction between agriculture and livestock farming on mini-farms, more use of local resources (spontaneous pastures, local breeds, livestock farmer social networks) among agro-pastoralists).

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- Among milk collectors: Both occupational groups (independent collectors and collection centres) promote a local resource: milk. MCCs offer greater potential for Ae characteristics, but this potential is not expressed to any great extent (limited range of services => limited connectivity), while independent collectors do not display significant Ae characteristics.
- Among dairy processors: More Ae characteristics are found among processors using local milk (willingness to diversify products, emphasis on local food traditions, strong links with all stakeholders in the industry) compared with processors using mainly milk powder.

### 5.5 Summary of WP4 results

This presentation was delivered by Dr SIB Ollo, WP4 co-facilitator. It focused on the results of the inventory of institutional initiatives promoting agroecological transition in Bobo-Dioulasso's dairy value chain. The aim was to review local and national institutional initiatives in the field of agroecology and to assess their applicability to Bobo-Dioulasso's dairy value chain.

Interviews were conducted in the cities of Bobo-Dioulasso and Ouagadougou over 2 phases. During the first phase, which took place in November 2023, interviews were carried out with 18 agents from the various institutions and organisations located in Bobo-Dioulasso. Following this first phase, a second round of interviews was conducted with 16 agents from national institutions and organisations based in Ouagadougou.

This study revealed that in Burkina Faso, various initiatives supporting agroecology are being carried out by government bodies, local authorities, trade associations, research institutes and universities, vocational training structures, NGOs, engineering consultancies, private agro-supply companies, financial service providers and agroecology initiatives. These initiatives aim to support agricultural stakeholders in increasing production and improving food security. They take into account aspects such as capacity building, technical and financial support, equipment support, etc.

However, they are not all specific, or even tailored, to the needs of dairy industry players, as they are often aimed at one or more stakeholder categories at a time, with varying levels of involvement. Despite their diversity, local agroecology initiatives are rarely able to meet all the needs and expectations of those involved in the dairy value chain. To address the needs and expectations of stakeholders, the agroecological Living Landscape approach could provide a gateway that would enable a diverse set of stakeholders (farmers, collectors, processors, consumers and support and research institutions) who are part of food systems and territorial landscapes to share insights and knowledge, and to jointly develop and adapt various types of agroecological innovations.

### 5.6 Summary of WP5 results

In this WP, two presentations were delivered during the workshop. The first one dealt with the assessment of Bobo-Dioulasso's dairy value chain stakeholders' space for initiatives aimed at identifying behaviours conducive to agroecological transition. The second one focused on the results of the study into milk and dairy product consumption preferences in Bobo-Dioulasso.

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### 5.6.1 Assessment of Bobo-Dioulasso's dairy value chain stakeholders' space for initiatives

The first presentation, delivered by OUATTARA Songdah Désiré, highlighted the fact that the scope for initiative and room for manoeuvre enjoyed by stakeholders in Bobo-Dioulasso's dairy value chain (dairy farmers, milk collectors, dairy processors, distributors, consumers of dairy products, etc.) lie within a space bounded by a set of opportunities and constraints that affect their behaviour. The study offered a methodology for determining, in a participatory way, the space for initiatives of Bobo-Dioulasso's DVC stakeholders. By characterising this space for initiatives, the aim was to identify the main areas where action is needed to step up the pace of agroecological transition by influencing stakeholder behaviour.

The method was based on Focus Group Discussions (FGDs) tasked with gathering, in a participatory way, the opportunities and constraints identified by the DVC stakeholders, enabling them to then design their space for agroecological initiatives. The study provided an inventory of opportunities and constraints as perceived by dairy industry stakeholders, who ranked them in order of intensity. Opportunity, constraint and initiative scores (with the latter integrating opportunities and constraints) were established for each socio-economic group. These scores helped to define the characteristics of constraint spaces, opportunity spaces and spaces for initiatives for each socio-economic group in two different spaces:

- 1) One comprising the following five dimensions (Access to Natural Resources, Access to Knowledge, Access to Market, Social Levers, and Political & Institutional Levers);
- 2) The other the 13 elements of agroecology.

This work helped to identify priorities for action by socio-economic group with a view to reducing constraints. Looking at the five-dimensional space, priorities for action mainly centre on economic constraints (access to market and production factors) as well as institutional and value chain governance constraints. Among farmers, priorities for action are also needed to reduce the constraints they face in accessing knowledge and know-how (particularly among women farmers). Lastly, constraints faced by women farmers in terms of access to natural resources need to be addressed. Looking at the 13-dimensional Ae space, we note that for all players, priorities for action mainly revolve around overcoming the constraints of 'Co-creation of Knowledge', 'Connectivity', 'Participation', 'Fairness', and 'Social Values & Diets'. Integrating the project's actions into Bobo-Dioulasso's Dairy Innovation Platform, which brings together most of the industry stakeholders, creates an ideal framework for addressing all of these constraints. Among farmers, priorities for action are also needed to reduce the constraints they face with regard to all the components of agroecology, which tend to be more related to the production system (i.e. elements 1 to 6 of the Wezel et al. (2020) grid). Lastly, milk collection centres are largely unaffected by these Ae constraints, which puts them in a strong position to provide support (services) to other socio-economic groups, as envisioned in the Ae Business Model that the project plans to co-construct with industry stakeholders.

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### 5.6.2 Study on consumer preferences for milk and dairy products

This presentation was delivered by Dr FAYAMA Tionyéélé, WP5 co-facilitator. The aim of the study was to determine how people choose which type of milk to consume. In other words, what was the rationale behind individual and/or collective choices to consume milk and its by-products?

In order to characterise milk consumption preferences, a mixed quantitative and qualitative approach was used. A questionnaire was sent to milk consumers and a category-based interview guide was issued to retail outlet managers and milk and dairy product distributors. Retail outlets were identified from a directory provided by Bobo-Dioulasso's Dairy Innovation Platform. The distributors interviewed were those working with these outlets. Consumers were approached directly at the point of sale. A total of 103 milk consumers were interviewed, with 19 interviews conducted at points of sale and 14 with dairy distributors. The study showed that consumers prefer the following dairy products in descending order: yoghurt, raw/pasteurised milk, gapal, dêguê, etc. This preference varies according to gender. While men prefer raw/pasteurised milk, women tend to favour yoghurt, gapal and dêguê. Preference for dairy products also depends on age. Young people prefer yoghurt, gapal and dêguê, while adults tend to favour raw/pasteurised milk.

In terms of consumption drivers for dairy products, the results showed that consumers believe that dairy products are good for their health (46%), boost physical performance (20%) and are highly nutritious (19%), among other things. Most consumers interviewed (91%) prefer dairy products made from local milk to those made from milk powder for a number of reasons: complete food, healthy, pleasant taste, better quality, natural product, recommended product.

As for consumption frequency of local dairy products, 62% of respondents said they consumed these products several times a week.

## 6 Presentation and validation of the 2024 Activity Programme

In his presentation, Dr SIB Ollo began by outlining the objectives of the CGIAR Initiative on Agroecology project in 2024, before presenting each of the key activities planned per component and concluding with the 2024 work schedule.

The initiative's objectives for 2024 are as follows:

- To increase the share of local milk in dairy products manufactured by Bobo-Dioulasso dairy processors, through innovations at farm level, in milk collection, in dairy product processing, and in the governance of the dairy value chain, and
- To support the co-design of an agroecological Business Model for the dairy value chain which could integrate all of these innovations based on the key principles of agroecology in order to guarantee the value chain's sustainability and resilience.

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### 6.1 WP1: Co-design of agroecological dairy farming systems

The following activities will be carried out:

- Report on the Ae package experiment implemented in 2023;
- ALL annual 'Pause & Reflect' Workshop: 2023 review / 2024 planning;
- Experimentation on the use of the Ae package with around 60 volunteer dairy farmers (Fodder Demo-Plots, manure pits, advice to farmers on co-product management, advice to farmers on dairy cow feed management);
- Assessment of the changes induced by the co-design of multi-scale innovations (production, collection, processing) with ALL stakeholders;
- Final workshop: presentation of results and discussion on future prospects with ALL stakeholders.

### 6.2 WP2: Holistic assessment of agroecological performance (HOLPA)

The following activities will be carried out:

- HOLPA 2023 pre-survey report on 52 farms;
- HOLPA 2024 campaign (200 farms): data collection and analysis;
- Presentation workshop on the results of the HOLPA survey to all stakeholders.

### 6.3 WP3: Co-creation of an Agroecological Business Model for the dairy value chain

The following activities will be carried out under WP3:

- Characterisation of the dairy value chain Business Model and its Ae characteristics (strengths and weaknesses from an Ae perspective);
- Cost/Benefit Analysis workshop for Ae packages:
  - Workshop 1: Cost/Benefit Analysis of the Ae Package in dairy production units (agro-pastoral dairy farmers, mini dairy farms);
  - Workshop 2: Cost/Benefit Analysis of milk collection activities (milk collection centres, independent collectors);
  - Workshop 3: Cost/Benefit Analysis of dairy product diversification (processors using local milk, processors using milk powder);
- Development of an Ae BM (research team proposal);
- Ae BM validation workshop with all stakeholders (discussion on the Ae BM and validation by all stakeholders);
- Georeferenced database of stakeholders in Bobo-Dioulasso's DVC (dairy farmers, collectors, processors).



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### 6.4 WP4: Mobilising institutional initiatives to support the AET in the DVC

WP4 will involve completing and finalising the inventory of initiatives aimed at supporting the agroecological transition and the local dairy value chain.

### 6.5 WP5: Understanding and influencing behavioural change among DVC stakeholders

The following activities will be carried out:

- Study report on consumer criteria for dairy products in Bobo-Dioulasso;
- Gender, Youth and Social Inclusion (GEYSI) study: women's place and role in the dairy value chain;
- Brainstorming workshop: women's place and role in the governance of the ALL and the dairy value chain ;
- Co-building of an impact track from the current BM to the Ae BM (V2A and ToC workshop).

## 7 Discussions, testimonials and suggestions

The workshop was also an opportunity for participants to discuss the various results presented and to give accounts of the activities carried out as part of the project. However, a number of suggestions were also made with a view to finding ways and means of curbing the marketing of counterfeit dairy products (i.e. made from milk powder, often vegetable-based and fattened with palm oil) and improving the extension system for results/innovations.

### 7.1 Discussions

During the workshop, a number of discussions took place between the various presentations, covering a range of subjects:

- 1) Marketing of counterfeit dairy products;
- 2) Changes in the quantity of local milk produced;
- 3) Continued implementation of Experimental Agroecological Farming Schemes;
- 4) Interconnection of initiatives to support the agroecological transition;
- 5) The future of ALL-BF after the CGIAR Initiative on Agroecology.

With regard to the marketing of counterfeit dairy products, all DVC stakeholders were urged to report any such cases. On this subject, the Bobo-Dioulasso Consumers League ('Ligue des Consommateurs de Bobo-Dioulasso', LCB) has already been conducting awareness-raising campaigns, sometimes involving repression, in collusion with law enforcement and security forces, in order to curb this practice, which does not promote local milk. This issue raised a number of questions, particularly about the LCB's remit for milk quality control and the technical departments mandated to monitor milk quality.

Discussions revealed that the quantity of local milk produced in the Bobo-Dioulasso dairy production area rose from 1,127 L/d in 2020 to 6,830 L/d in 2023 thanks to (i) the involvement of research projects, (ii)

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government support, particularly in the form of inputs for dairy farmers, and (iii) the end of Covid. It should also be noted that preliminary data available for 2024 show a further increase in the quantity of milk produced per day, thanks in particular to the agroecological package co-developed with researchers from the Initiative on Agroecology and implemented on dairy farms.

With regard to the ongoing implementation of Experimental Agroecological Farming Schemes, farmers feel that the skills they acquired through this project will provide them with the tools they need to maintain these innovations and further boost milk production in Bobo-Dioulasso's dairy production area. They also express their willingness to pass on the knowledge they acquired to their peers, so that they too can increase milk production on their respective farms.

Discussions helped workshop participants to understand that once initiatives aimed at supporting the agroecological transition in Burkina Faso have been identified, the support of each of them will be sought for interconnection. It should be understood that the Agroecological Business Model that will ultimately be developed works towards this convergence of existing agroecological initiatives.

As for the future of ALL-BF at the end of the project, it appeared that it would be up to the PIL to maintain it. However, the planned study on governance under WP4 will help the PIL's Executive Management to develop tangible actions to secure the long-term future of the ALL-BF.

## 7.2 Testimonials

During the workshop, a number of comments were made by the heads of the various MCCs to the project implementation team on the activities carried out in 2023:

- SIDIBE Adou (FARAKOBA MCC): "The project has helped us a lot this year, especially in terms of cow rationing. We used to distribute too much or often too little feed to the cows. Thanks to rationing, we've been able to make a profit".
- YRA Kassoum (KOUAKOUALE SCOOP): "We received the seeds and set up the Fodder Demo-Plot. With the exception of sorghum, all the other crops were successful. Sorghum failed because of pockets of drought and birds".
- OUEDRAOGO Ibrahim (YEGURESSO MCC): "[...] I used to distribute feed without measuring. Thanks to rationing, I've been able to increase my milk production".
- SIDIBE Hamidou (FARAKOBA MCC): "My heartfelt thanks go to the researchers, especially for their support in setting up the manure pits".
- BARRY Drissa (DAFINSO MCC): "Thanks to the farmers involved, I was able to buy fodder from them to ration my cows in the dry season. My fodder stock was insufficient".
- SIDIBE Assane (BAMA MCC): "The [Experimental Agroecological Farming Scheme (DEAMP)] was a very good thing. Our neighbours are now keen to introduce it on their farm this year".
- SANGARE Hamidou (SATIRI MCC): "In our case, the [DEAMP] was set up successfully. However, sorghum seems to have failed for 3 farmers".
- SIDIBE Siaka (BANA MCC): "We would like to thank everyone involved for their support in setting up the [DEAMP]. In our case, sowing was late and this had an impact on crop yields".

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- ZOUNGRANA Ibrahim (BENKADI SCOOP): "Thank you for your support in setting up the [DEAMP], especially for the seeds. I didn't know where to get good quality cowpea seed, but thanks to the project, I got some".

Overall, the farmers thanked the project team for providing forage seed, advisory support on rationing and assistance in setting up covered manure pits. They admit that thanks to this fine initiative, they were able to stockpile fodder for their livestock, thereby offsetting the fodder shortages often witnessed in the dry season.

### 7.3 Suggestions

A number of suggestions were made during the workshop:

- Results of the implementation of agroecological packages should be presented by individual and by MCC in order to determine the changes induced per individual and per MCC.
- Meetings should be organised between ALL-BF-affiliated services and the relevant anti-counterfeiting authorities to discuss awareness-raising strategies and ways of supporting defendants and perpetrators to limit or stamp out this practice.
- The various reports produced as part of the Initiative on Agroecology should be published and made available to all ALL-BF stakeholders.

## 8 Conclusion

During the workshop, participants gained a better understanding of the objectives, activities and expected results of the CGIAR Initiative on Agroecology project. The preliminary results of the project were presented and discussed in order to assess their relevance. Lastly, the work programme for 2024 was presented to all ALL-BF stakeholders. Interesting discussions took place during the presentations, leading to relevant testimonials and suggestions. At the end of the two-day workshop, all the participants were satisfied with the results achieved up to this stage of the project's implementation, while looking forward to the presentation of the final results at the end of the year, which are already promising in view of the preliminary results presented.

## 9 References

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### 10 Appendix

#### Agenda

Date	Time (UTC)	Activities	Details	Responsibilities
Day 1 17/04	08:30 - 09:00	Welcome	Participant registration	Organising Committee
	09:00 - 10:00	Introduction to the workshop	Opening, presentation of the workshop's objectives and proceedings, general rules	Souleymane Sanogo, Souleymane Ouédraogo, Hati Konaté, Olo Sib
	10:00 - 10:30		Presentation of the CGIAR Initiative on Agroecology project, its objectives, activities and expected results	Souleymane Sanogo, Souleymane Ouédraogo, Olo Sib
	10:30 - 10:45		Group photo	Organising Committee
	10:45 - 11:00		Coffee break	Organising Committee
	11:00 - 11:30	Introduction to the workshop	Presentation of the ALL	Hati Konaté, Souleymane Sanogo, Souleymane Ouédraogo, Olo Sib
	11:30 - 12:00	2023 Review	Overall summary of preliminary results	Olo Sib
	12:00 - 12:30		ALL discussions & overall summary of results	Participants
	12:30 - 13:30		Lunch	Organising Committee
	13:30 - 14:00	2023 Review	Presentation of WP1 results	Etienne Sodr�, Souleymane Sanogo, D�sir� Ouattara
	14:00 - 14:30		Presentation of WP2 results	Adama Ou�draogo, Michel Orounadj, Patrice Kouakou
	14:30 - 15:00		WP1 & WP2 discussions	Participants
	Day 2 18/04	08:30 - 09:00	Welcome	Welcome, set-up and reminder of the day's agenda
09:00 - 09:45		2023 Review	Presentation of WP3 results	Arahama Traor�, Sanogo Souleymane, D�sir� Ouattara, Etienne Sodr�
09:45 - 10:15			Presentation of WP4 results	Issouf Traor�, Der Dabir�, Olo Sib
10:15 - 10:45			WP3 & WP4 discussions	Participants
10:45 - 11:00			Coffee break	Organising Committee
11:00 - 11:30		2023 Review	Presentation of WP5 results - Space for initiatives for Dairy VC stakeholders	Der Dabir�, Souleymane Sanogo, D�sir� Ouattara, Michel Orounadj
11:30 - 12:00			Presentation of WP5 results - Consumer criteria for dairy products	Etienne Sodr�, Tiony�l� Fayama, Olo Sib
12:00 - 12:30			WP5 discussions	Participants
12:30 - 13:30			Lunch break	Organising Committee
13:30 - 14:30		2024 Programme	Presentation and validation of the 2024 Activity Programme	Olo Sib
14 :30			<b>End of the workshop</b>	

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Workshop participants

