

CANALLS

AGROECOLOGICAL PRACTICES
FOR SUSTAINABLE TRANSITION



D3.1. Agroecology Living Labs: Plans and Achievements- initial version



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Authors and contributors

First Name	Last Name	Beneficiary
Mehreteab	Tesfai	NIBIO
Balagizi Karhagomba	Innocent	APDIK
Batumike	Ruphine Nshobole	IITA-DRC
Byamungu Burume	Alain	GASD
Charles	Sivirihauma	RIKOLTO
Gilbert	Nsabimana	NATUR
Kokou	Kintche	IITA-DRC
Niyuhire	Marie-chantal	ISABU
Tata Ngome	Precillia Ijang	IRAD
Tchouga	Alvine Ornella	IITA-Cameroon
Vicky	Ruganzu	RAB
Willy	Irakoze	ISABU

In case you want any additional information, or you want to consult with the authors of this document, please send your inquiries to: Mehreteab.tesfai@nibio.no (person in charge of Deliverable)

Quality Reviewers

First Name	Last Name	Beneficiary
Kokou	Kintche	IITA
Isaac	Balume Kayani	ETHz

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Executive Summary

This deliverable report (D3.1) is the initial version of agroecology living labs in the CANALLS project which is a living document that will be updated during the project lifetime. One of the overall objectives of CANALLS project is to drive agroecological transitions in the humid tropics of Central and Eastern Africa through multi-actor transdisciplinary Agroecology Living Labs (ALLs). ALLs are being implemented under the thematic work package 3 (WP). The work package (WP3) is led by NIBIO, co-led by IITA, and supported by several project partners and stakeholders. All partners are involved in the establishment and operationalization of the ALLs in the case study countries of Burundi, Cameroon, Democratic Republic of Congo (DRC) and Rwanda.

In this report, the activities implemented during the first 12 months period of the project, and some preliminary achievements gained related to the *planning phase of ALLs* (Task 3.1) and *establishment of ALLs* (Task 3.2) are presented and described. The overall objective was to set up 8 ALLs in the case study countries of Burundi, Cameroon, DRC and Rwanda by working together with multi-actor stakeholder communities and project partners. D3.1 report will be updated by two more versions that will be submitted at Month 30 (mid-term version) and at Month 42 (final version) of the project period. In this preparation phase, the two key activities implemented are:

a) Establishing multi-actor community in each ALL

A questionnaire survey was carried out using a checklist in the case study countries of Burundi, Cameroon, DRC and Rwanda. There were 10 main questions subdivided into several sub questions (in total 53 questions) that addressed some of the key elements/principles of agroecology transitions that include *diversification, recycling, and efficiency of agroecosystems*. The interview was conducted on different types of stakeholders (n = 40-55 per ALL site) that composed of farmer organizations (8-10), government institutions (4-5), research institutions (4-5), academic institutions (4-5), non-government organizations (4-5), value chain actors (12-15) and civil society (4-5). Out of these, 20 stakeholders' groups per ALL were duly selected (including a few short listed) candidates to join membership of the multi-actor community group using a set of selection criteria. The criteria took into consideration: *scores achieved in the interview, diversity of the actors, competence of the actors related to agroecology, expected influence and interest of the actors* in the ALLs. At this initial stage, 7 ALLs were established that included 4 ALLs in DRC namely Biega, Bunia, Kabare, and Uvira, 1 ALL in Burundi i.e., Bujumbura, 1 in Cameroon which is Ntui, and 1 ALL in Rwanda which is Kamonyi. The ALL establishment in Giheta (Burundi) is in progress.

b) Stakeholder roles and responsibilities in each ALL

A stakeholder meeting is being held in the ALLs where orientation about the CANALLS project is given and key roles and responsibilities of the stakeholders were determined. The specific roles and responsibilities of the stakeholders vary among the members within the ALL and from one ALL to another. However, they have common roles and responsibilities, at a project level. They will:

- engage in co-creation of combined agroecological practices/tools tailored made to specific context of the ALL;
- support in co-testing and monitoring/measuring and evaluation of agroecology strategies suitable for the ALL;
- engage in co-design of services, marketing tools, and business models relevant to ALL;
- support in capacity building, training activities and adoption of agroecological practices through knowledge exchange, and
- facilitate dissemination and exploitation of project results using their own networks/forums in their respective countries and/or regions.

In addition, protocols, procedures/guidelines that could be used for setting up and operation of ALLs, stakeholder engagement plan, performance indicators to assess the multi stakeholders in the ALLs, and annual work plan, are drafted.

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List of Terms and Definitions

Abbreviation	Definition
AATF	African Agricultural Technology Foundation
AE	AgroEcology
AFAAS	African Forum for Agricultural Advisory Services
ALLs	Agroecological Living Labs
APDIK	Association Paysanne Pour Le Développement Intégré Au Sud-Kivu
CAMF	Cameroon Forum for Agricultural Advisory Services
CANALLS	<i>Central and east Africa through traNsdisciplinary Agroecology Living LabS</i>
CANoLL	Central and Eastern African Network of Agroecology Living Labs
CAPAD	Capad Shirukubute
CIRAD	Centre De Cooperation Internationale Enrecherche Agronomique Pour Ledevloppement
COPEL	Coped Ltd
ETHz	Eidgenoessische Technische Hochschule Zuerich
GASD	Global Action for Sustainable Development
GIS	Geographical Information System
ICT	Information and Communication Technology
IITA	International Institute of Tropical Agriculture
INERA	Institut National Agronomiques Pour L'etude Et La Recherche
IRAD	Institute of Agricultural Research for Development
ISABU	Institut Des Sciences Agronomiques Du Burundi
KPI	Key Performance Indicator
LL	Living Lab
MFARM	Maggot Farm Production Ltd
NATUR	Verband Für Ökologischen Landbau E.V
NIBIO	Norwegian Institute of Bioeconomy Research
Q-PLAN	Q-Plan International Advisors Pc
RAB	Rwanda Agriculture and Animal Resources Development Board
RIK	Rikolto International Son
SCOOP	Societe Cooperative Avec Conseil Dadministration Pour Le Manioc
ToR	Terms of Reference
UCB	Université Catholique De Bukavu
UHOH	Universitaet Hohenheim
VC	Value Chain
WP	Work Package

1. Introduction

The terminology of ‘living lab’ originally emerged in the nineties from the need to think about how technological innovations could be adapted to people and society. In Europe, it appeared to be used in the early 2000s and since then, it was applied in various economic sectors which applied information and communication technology (ICT). Nowadays, there exists various definitions and conceptualizations of living labs. In this report, we adopted the definition of a living lab suggested by *ENoLL (2022)*: *Living Lab (LL)* is a physical and/or virtual space for all actors/stakeholders (e.g., farmers, scientists, and other interested actors) to exchange their views, co-design/co-create innovations, and test solutions in transdisciplinary research under users’ real-life context. According to *ENoLL (2022)*, five key elements must exist in a LL, regardless of their application domain: *i) co-creation with multi-stakeholders, ii) multi-methods approach, iii) real-life settings & communities, iv) multi-stakeholder participation, and v) active-user involvement* (Figure 1.1). These key elements are reinterpreted in each socio-economic sector to fit the aim, activities, the context, and the participants involved in each LL. Maintaining active engagement and participation of the stakeholders (for e.g., busy farmers and policy makers) is however, one of the main challenges for LL sustainability.

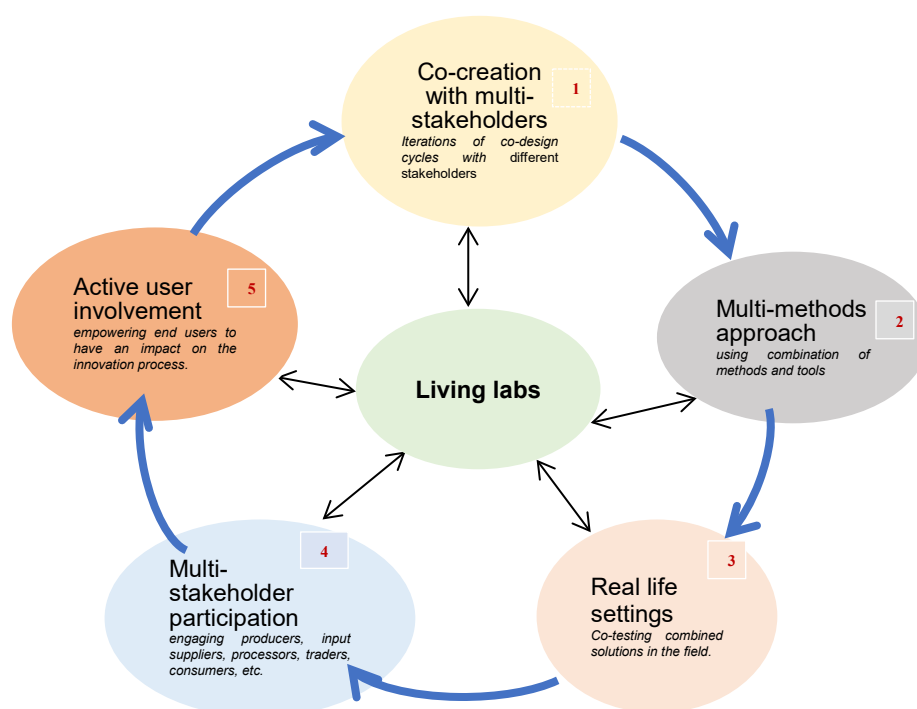


Figure 1.1: Key elements of Living labs approach

Today in the agricultural domain, the concept of Living Labs is gaining increased attention and support as it becomes very hard for a single stakeholder to find the right solution for a complex challenge. But by collaborating and by co-creating the solutions with end-users and other actors involved, the complexity and uncertainty is reduced and the chance of finding a sustainable solution is increased. In Africa, albeit several agroecology (AE) initiatives emerged, a holistic Agroecology Living Labs (here after ALLs) approach has not been applied so far.

1.1 Definition and concepts of agroecology

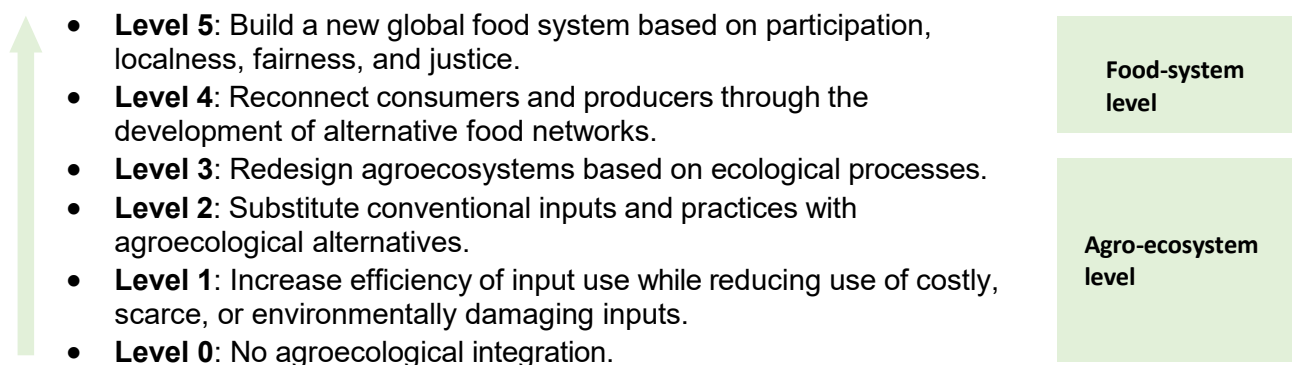
There has been continuous debate about the definition of agroecology, as evident from the literature (e.g., FAO, 2018; Wezel and Silva, 2017), without widely accepted, common definition of agroecology yet. There are no clear, consensual boundaries between what is agroecological and what is not (HLPE, 2019). However, there is a consensus that agroecology embraces three dimensions that are interlinked and complementary (CIDSE, 2018; Tesfai et al., 2022). The three dimensions are:

- i) *Agroecology as scientific research approach* involves a holistic study of agro-ecosystems and food systems at different scales;
- ii) *Agroecology as set of principles and practices*, enhances the resilience and sustainability of food and farming systems while preserving social integrity; and
- iii) *Agroecology as a socio-political movement*, focuses on the practical application of agroecology and seeks new ways of agricultural production, food processing, distribution and consumption, and its relationships with society and nature.

Agroecology aims at supporting the transition of agri-food systems towards more sustainable practices by connecting science, practice, and society and by triggering the adoption of a set of policies (IPES-Food, 2020). Agroecology is a powerful strategy that reduces the trade-offs between productivity and sustainability of agriculture and food systems while ensuring ‘no one is left behind’ (Niggli et al., 2021). It promotes the diversity of crops and livestock, fields, farms, and landscapes, which altogether are key to improving the sustainability of food and agricultural systems, food actors’ empowerment, and environmental health (von Braun et al., 2021).

The deep engagement of the local communities and the transdisciplinarity nature of agroecology offers greater potential to better address complex environmental, social, and economic challenges that Africa faces. This is related to agroecosystems and food systems through integrated efforts of science, practice and society, and policy at all levels. In response to this, the CANALLS project (<https://www.canalls-project.eu/>) is aimed to drive agroecological transitions in the humid tropics of Central and Eastern Africa via multi-actor transdisciplinary ALLs. Within the AE paradigm, ALLs are based on co-creation and knowledge sharing, and are seen to accelerate and scale up the AE transitions. They can operate at different scales and are characterised by very strong local embeddedness, multi-stakeholder involvement having large diversity of origins, and knowledge intensiveness.

Against this background, we applied the ALLs approach to make the agricultural sector more sustainable, resilient, and responsive to societal and policy demands. For this to happen, the agriculture sector, however, needs to be transformed through various AE transitions. Five levels of agroecology transition have been widely adopted based on the suggestion by Gliessman (2016). These levels, modified from the FAO/ HLPE Report (2019) and the FAO TAPE Tool (2019), are:



In the CANALLS project, we will steer eight respective ALL sites: i.e., two in Burundi (BR), one in Cameroon (CR), four in Democratic Republic of Congo (DRC), and one in Rwanda (RW) that are context-specific transition pathways for agroecology (Figure 1.2). The basis for selecting these sites include diversity of the farming systems, AE zones, forest degradation levels (Reed, et al., 2017) and existing projects in the area.

We envisaged the ALLs to transform from level 1 to levels 2, 3 or 4 (Table 1.1) by implementing tailor-made combinations of AE strategies/practices which will be determined through co-creation together with the multi-actors in each ALL. The benefits of establishing ALLs at local level include most stakeholders are physically present nearby for meetings and activities, the LL demand can be very specific to the needs of the community, local networks already exist where new LL can tap into these relationships, and if the LL is successful, its co-creation process can be upscaled in other small communities.

Table 1.1: CANALLS agroecology living labs, AE transition phase, and relevant ongoing projects

Case Country	ALL	AEZs*	Farming systems	Transition phase	Ongoing projects relevant to CANALLS (website links)
DRC	Biega	Highland	Coffee	Level 1 → Level 4	Kivu Specialty Coffee Project ¹ :
	Bunia	Lowland	Cacao	Level 1 → Level 4	Shade-Grown Cacao Project
	Kabare	Highland	Coffee	Level 1 → Level 3	Kivu Specialty Coffee Project, RUNRES
	Uvira	Lowland	Rice	Level 1 → Level 2	Great Lakes Integrated Agriculture Development Project (PICAGL)
Cameroon	Ntui	Lowland	Cacao	Level 1 → Level 2	CacaoSoils ²
	Giheta	Highland	Coffee	Level 1 → Level 4	COCOCA ³
Burundi	Bujumbura	Lowland	Maize	Level 1 → Level 2	PRDAIGL
Rwanda	Kamonyi	Highland	Cassava	Level 1 → Level 3	RUNRES ⁴

*AEZs: Agroecological zones

The CANALLS project will capitalise and build on existing ongoing projects related to AE (Table 1.1) and/or innovation platforms where our project partners and stakeholders are involved in the project areas. This will facilitate setting up of multi-actor ALLs, their implementation, knowledge sharing and capacity building activities.

¹ <https://borgenproject.org/kivu-specialty-coffee-project/>

² <https://cocoasoils.org/>

³ <https://www.cococaburundi.com/>

⁴ <https://runres.ethz.ch/project-sites/rwanda/>

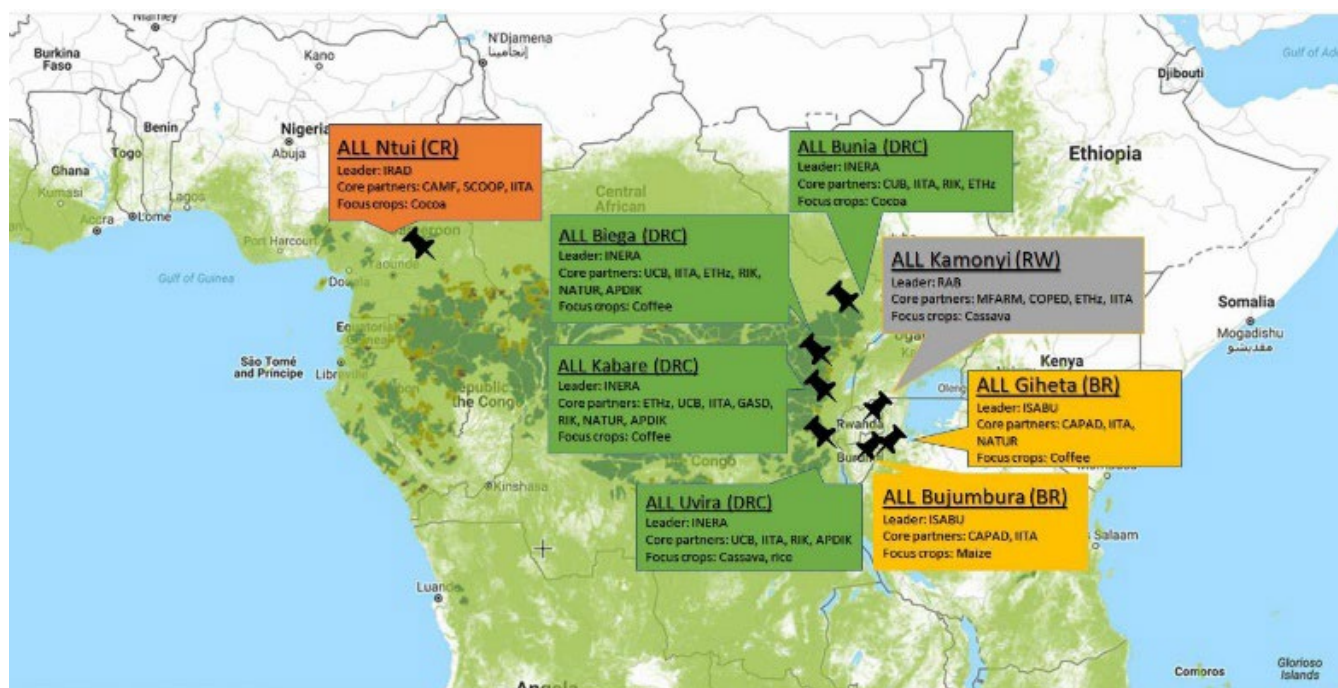


Figure 1.1: Location map of ALLs site in case study counties of Burundi, Cameroon, DRC and Rwanda. Source: CANALLS project website

This report (D3.1) is structured into five main chapters which are subdivided into several sections. Chapter 1 gives an introduction on living labs (its definition and concepts) with respect to agroecology, and briefly describes the AE transition levels in ALLs. Chapter 2 elaborates the planning phase of the ALL establishment, the key activities implemented and some of the preliminary achievements. Following this, work plans designed in the different phases of ALLs are presented in chapter 3. In chapter 4, general description of each ALL site is presented and key activities to be undertaken in the next 12 months are presented for each ALL. Finally, chapter 5 summarises the main conclusions and the way forward. In this report, actors and stakeholders are interchangeably used and the same also for AE strategies/solutions with AE practices.

2. Planning for establishing the ALLs

In this section, the activities carried out under the initial planning phase (i.e., establishing the multi-actor community in ALL) and some preliminary achievements, are described.

2.1 Planning phase

The planning phase for establishing ALLs is implemented under Task 3.1 and Task 3.2 of Work Package 3. The main objective of these tasks is to set up and operate eight ALLs by working together with multi-actor stakeholder communities and project partners in the four case study countries (i.e., DRC, Burundi, Cameroon, Rwanda). The activities under Task 3.1 started in January 2023 and will continue until June 2026. While activities under Task 3.2 started in June 2023 and ended in December 2023. Both tasks are led by NIBIO in collaboration with all project partners (n = 22) and in particular with ALL team coordinators and partners in the four case countries. During the initial planning phase of establishing ALLs, the two main activities undertaken were establishing team of multi-actor communities and define their roles and responsibilities per stakeholder group.

2.2 Establishing team of local partners in ALLs

NIBIO in consultation with the WP3 task leaders, defined a minimum of seven steps in establishing a multi-actor community group in ALL. These include from conducting interview (step 1) to set up of multi actors (step 7).

Step 1: Develop a checklist of questionnaire and conduct an interview

A questionnaire survey was carried out using a check list in the case study countries (in Burundi: 2 cases, Cameroon: 1 case, DRC: 4 cases and Rwanda:1 case) to get an overview on the respondents' knowledge and experiences related to agroecology. The checklist consisted of 10 main questions subdivided into several sub-questions (total 53 questions) which addressed the key elements of agroecology (FAO, 2019) and/or principles of agroecology (HLPE, 2019), shown in bold text in Table 2.1. Against these questions, four possible choices/answers were provided to the respondents.

Table 2.1: Main questions asked to selected respondents representing multi stakeholders where they can tick is appropriate answer

Main Questions	No. of sub-questions	Yes, we do	No, but we plan to do	No, but we would like to be involved	No/Not relevant
Q1. Does your organization promote Resilience and Sustainability of agroecosystems?	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q2. Does your organization support Diversity of agroecosystems?	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q3. Does your organization support Adaptation and Mitigation practices to climate change?	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q4. Does your organization promote Synergies between different functions of agroecosystems?	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q5. Does your organization promote Efficiency in the use of natural resources?	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q6. Is your organization involved in Land and Natural resources governance ?	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q7. Is your organization involved in creating Circular and Solidarity Economy ?	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q8. Does your organization promote Values of social and ecological justice ?	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q9. Do you work with others (beyond your organization) to create New knowledge or Innovation ?	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total	53	-	-	-	-

The last question, i.e., Q10: ‘would you qualify your organization as being a: living lab, research infrastructure, open innovation or other (specify?)’ was meant to get feedback on the status of the organization.

Step 2: The interview should be inclusive of diverse stakeholders-driven process

A sampling procedure for identifying the ALLs multi-actor’s community was designed. The procedures include, among others, making a list of stakeholders that will be involved in the interview/checklist questionnaire for ALLs (for e.g., from the ongoing projects and/or programs related to agroecology in the study area). The interview was participatory and inclusive of diverse stakeholders with a sample size of 40-50 respondents per ALL (Table 2.2). The samples included representatives from different organizations who are working directly or indirectly in agroecology-related activities. These include:

- *Farmer organizations, cooperatives, associations*: men and women farmers (including youth), lead farmers, chairpersons, farmer promoters
- *Government ministries (e.g., Ministry of Agriculture, water, or other agencies)*: experts (e.g., agriculture, water, food sectors), extension workers, policy makers/planners
- *Research institutions and/or innovation platforms*: researchers, scientists, innovators, consultants
- *Academic institutions (universities, colleges, schools)*: teachers, rectors, students,
- *Non-government organizations (local, international)*: development agencies (UN, regional organizations, forums)
- *Value chain actors*: input suppliers (e.g., seeds, fertilizers, farm machinery), processors, traders, consumers
- *Civil society*: media (journalists, activists) or others (religious, village leaders)

Table 2.2: Number of interviews conducted per stakeholder groups in each ALL

ALL	Farmers' organizations	Government ministries	Research institutions	Academic institutions	VC chain actors	Civil society, NGOs	Total (n)
Biega	13	6	4	4	10	9	46
Bunia	10	7	n.a.	5	8	8	38
Kabare	6	6	5	4	21	13	55
Uvira	10	5	4	2	25	6	52
Ntui	9	5	5	4	11	8	42
Giheta	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bujumbura	14	3	5	6	17	10	55
Kamonyi	12	6	3	2	9	9	41
Target	8-10	4-5	4-5	4-5	12-15	8-10	40-50

n.a. not available

The target number indicated in each stakeholders' groups gives only an indication how to distribute the sampling population (Table 2.2). However, this does not mean to strictly follow the sampling size because it all depends on the specific country context and the ALL-site conditions.

Step 3: Analyse the data/information collected from the interview

After conducting the interview and collecting the data using KoboCollect App, the answer to each question was analysed by converting into a four-point Likert scale as follows:

- Yes, we do = 3,
- No, but we plan to do = 2,
- No, but we would like to be involved = 1
- No/Not relevant = 0.

Each point was summed, and the total score was converted into percentage in the excel sheet. The scores were used as one of the criteria in the selection of actors/stakeholders⁵ that will be engaged in each ALLs.

Step 4: Develop a set of criteria and select the most appropriate actors

A set of selection criteria was developed to identify the most appropriate actors (n = 15-20 per ALL). The criteria took into consideration: *scores achieved in the interview, diversity of the actors, competence of the actors related to agroecology, actors' involvement related to agroecology activities, expected influence and interest of the actors* to participate in the ALLs. Systematic stakeholder analysis was conducted by constructing stakeholder matrix (*Influence versus Interest*) to identify those groups falling under the boxes of High interest - High influence (H-H), High interest – Low influence (H-L) and Low interest - High influence (L-H) (Figure 2.1). More specifically, stakeholders who stand to lose/gain significantly from the CANALLS project and whose actions affect the project's ability to meet its objectives are grouped under H-H but those whose actions do not affect the project's ability to meet its objectives are grouped under H-L. Stakeholders whose actions can affect the project's ability to meet its objectives but who do not lose or gain much from the project are grouped under L-H. Stakeholders who do not stand to lose or gain much from the project and whose actions cannot affect the project's ability to meet its objectives are grouped under L-L.

⁵ In this report, a stakeholder (in ALL) is defined as an institution/organization/group/person that is assumed to have an interest and/or have influence or is influenced by the CANALLS project activities.

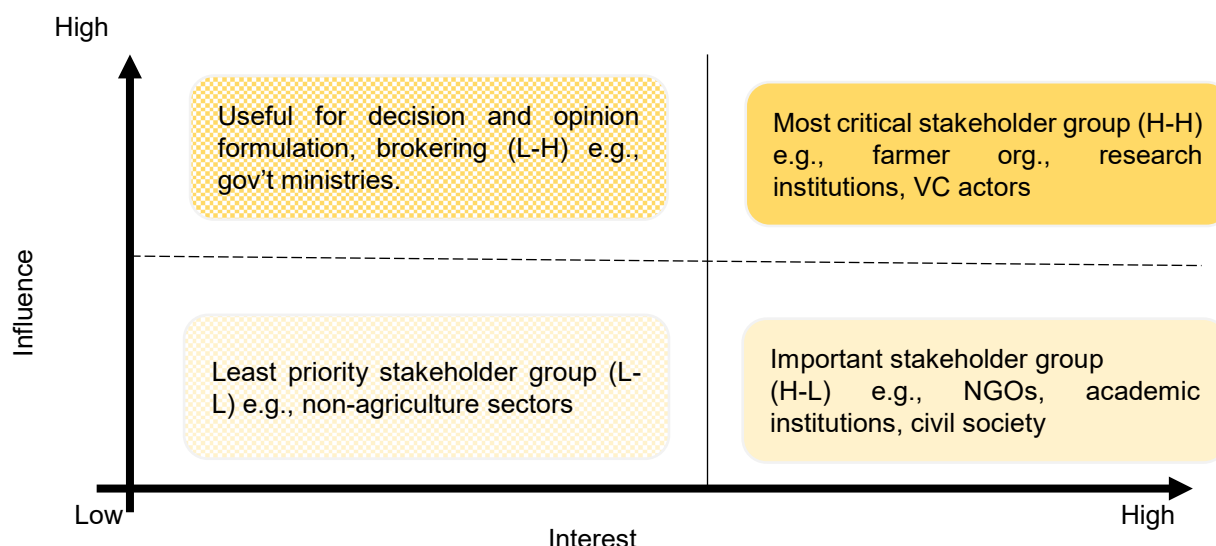


Figure 2.1: Stakeholder analysis using Interest/Influence matrix

Finally, the most appropriate actors comprising of 20 members (plus up to 4-6 short-listed candidates) per ALL were selected and their list are presented in Annex A of this report.

Step 5: Organize stakeholder meeting

In this first stakeholder meeting, all stakeholders who participated in the interview and those who were not, were invited to attend the meeting. The objectives the meeting was to:

- familiarize the stakeholders with the basic concepts and approaches of CANALLs project, agro ecology, living labs and co-creation process.
- discuss & agree on the key roles & responsibilities of stakeholder groups in the ALL; and
- plan key activities and planned outputs related to ALL for the next 3 months.

The Kamonyi ALL in Rwanda and Ntui ALL in Cameroon, have carried out the first stakeholder meeting but the others are in the process.

Step 6: Send a formal invitation letter to duly selected organizations in each ALL

An official invitation letter was sent to the candidate organizations they are affiliated with. In the letter, nominated organization was invited to join the multi-actor team community in the ALL. Once the organization confirm its willingness, it appoints representative/s, who shall be engaged in the implementation of ALL.

Step 7: Congratulations! you have now set up a team of multi actor community of ALL

After receiving names of representatives from each organization, a multi-actor stakeholder team (n = 20) plus short-listed candidates were set up in each ALL except in Giheta ALL which is in progress.

2.3 ALL roles and responsibilities

At the project level, the eight ALLs shall inter-alia perform the following roles and responsibilities, in common:

- Enable active involvement of multi-actor stakeholder communities in the case countries in experimenting transdisciplinary AE research with the aim to identify and co-create the conditions and tools to support AE transitions (*most relevant to WP1, WP3*);
- Engage in the co-development of practical tools to identify combinations of AE practices tailored to the humid tropics of Africa as well as monitoring and measuring their socio-economic and environmental performance (*most relevant to WPs 2, 4*);
- Engage in the co-design of services and marketing tools to enhance demand for agroecology food products as well as fair value propositions and business models to ensure financial viability and facilitate access to markets (*most relevant to WPs 2, 5*);
- Support in co-creation, testing and evaluation of AE strategies suitable for the humid tropics of Africa by tackling complex socio-economic and environmental challenges of food systems in line with policy priorities (*most relevant to WPs 3, 4, 5*); and
- Support capacity building and adoption of AE practices by leveraging knowledge exchange, policy dialogues and coordination with key networks for dissemination, exploitation, and replication of project results (*most relevant to WPs 3, 5, 6, 7*); and
- Any other related duties as required.

However, at institutional level, each stakeholder group in ALL will have the following key roles and responsibilities (Table 2.3). The details of Terms of Reference (ToR) will be co-defined during the first stakeholder meeting that will be held in each ALL site.

Table 2.3: Some key roles and responsibilities of stakeholders in ALL

Type of stakeholders (specifications)	Key roles and responsibilities (some examples)
Farmers organization (Men and women farmers, including youth, lead farmers, chairpersons, farmer promoters)	<ul style="list-style-type: none"> • Co-testing of selected combined agroecology farming practices/solutions at ALL site/s through farmer-led experiments/demo trials
Government institutions (Experts in agriculture, water, food sectors, extension workers, policy makers/planners)	<ul style="list-style-type: none"> • Co-creation of enabling environments (institutions and policy) for optimal functioning of ALLs
Non-Government organizations: (Development agencies: UN, regional organizations, forums)	<ul style="list-style-type: none"> • Co-dissemination of good agroecology farming practices/solutions to end users • Provide better access to available data, potential contribution of resources and expertise to CANALLS project
Research institutions (Researchers/scientists, Directors, innovators, consultants)	<ul style="list-style-type: none"> • Co-design of combined agroecology farming practices/strategies with field protocols and • Co implementation of capacity building, training and outreach activities
Academic institutions (Deans, rectors, teachers, students)	<ul style="list-style-type: none"> • Co-creation and integrating curriculum on agroecology courses in their education and teaching students
Value chain actors (Input supplies, Producers, Processors, Traders, Consumers)	<ul style="list-style-type: none"> • Co-creation of value-added markets for AE products and support to increase demand for agroecology products
Civil society (Media: journalists, activists or others: religious, village leaders)	<ul style="list-style-type: none"> • Awareness creation and/or raising of the society and the general public on the importance of agroecology

The specific ToR for each ALL will be co-defined and agreed in consultation with each ALLs team coordinators and multi actors team members. The ToR shall enter into effect from the date of the signature by the coordinator of the ALLs and the multi-actors. It shall remain in force throughout the project period for four years and may be revised and/or extended, if necessary. Any inquiry, complain or concern from ALL team members about any aspect of the ToR shall be addressed to the ALL coordinator in each case study country who oversees the set up and full operation of the ALL. The contact address of the coordinators, deputy coordinator and members for each ALL are provided in Annex B of this report.

2.4 ALL membership and management

One of the key aspects in the operationalization of ALL will be, its governance that requires tailored modes of functioning to work in a smooth way. The governance of ALL needs to consider the working modalities for its members. All activities in each ALL, will be managed by a coordinator in collaboration with the case country team (Table 2.4).

Table 2.4: ALLs management team composed of a coordinator and country team members

Case country	ALLs	Partner in charge	Names of ALL-coordinators	No. of country team	No. of multi-actors (+ short listed)
DRC	Biega	APDIK	Balagizi Karhagomba, Innocent	4	20 (+ 10)
	Bunia	RIKOLTO	Charles Sivirihauma	2	20 (+ 2)
	Kabare-	IITA-DRC	Byamungu Burume Alain	3	20 (+ 6)
	Uvira	IITA-DRC	Kokou, Kintche	3	20 (+ 7)
Burundi	Bujumbura	ISABU	Marie-chantal Niyuhire	7	20 (+ 6)
	Giheta	NATUR*	Gilbert Nsabimana	6	n.a.
Rwanda	Kamonyi	RAB	Vicky Ruganzu	5	20 (+ 5)
Cameroon	Ntui	IRAD	Tata Ngome Precillia Ijang	7	20 (+ 6)

*COCOCA project in Giheta is commissioned by partner NATUR to implement the ALL in Giheta.

The list of multi actor members in each ALL are presented in Annex B of this report which indicates the name of the organization, type of stakeholders, and contact address. The multi actor members composed of different stakeholders including farmer organizations, Government ministries, Research institutions, Academic institutions, non-government organizations, Value chain actors and Civil society.

The key duties and responsibilities of the ALL coordinators include:

i) Coordinate and support the ALL team in implementing the respective project activities related to ALL in the study site. Each ALL team consists of a coordinator, technical team, and the multi-actor members. Each coordinator of the ALL will create its own technical team/working group. The coordinator will plan and follow up the implementation of the different project activities in the ALL sites. The technical team will determine who is doing what activities, monitor, evaluate the work progress and report to the coordinator of ALL. The coordinator will then inform the respective task/WP leaders and the CANALLS project coordinator about the work progress. The respective task leaders/WP leaders will provide a technical backstopping and guidance (as needed) to the team.

ii) Reporting about the work progress in ALL

Coordinators of each ALL site shall report regularly on the work performed and results achieved to WP3 leader and the project coordinator. The report will be compiled and incorporated in the updates of Deliverable 3.1 (mid-term version) that will be due on M30 (i.e., 30 June 2025), and the final version on

M42 (i.e., 30 June 2026). Moreover, the ALL-team coordinator will ensure that the local partners have prepared an annual work plan and all necessary materials required for effective implementation of the ALLs activities.

iii) Organizing and chairing ALL meetings

The ALL coordinator (supported by the team), is responsible for organising the ALL meeting, chairing the meetings and reporting minutes of the meeting. The ALL-team meetings will be held regularly (biannual), ad-hoc meetings in between whenever needed. The coordinators shall have the role of steering ALL internal communication, ensuring the integration of opinions of its members, and building trust among them. Whenever possible, back-to-back meetings will be organised (with project consortium meeting and/or relevant events) to discuss work progress with the ALL-multi-actors.

The key duties and responsibilities of the ALLs technical team members include:

- Provide technical support to the end users (for e.g., to lead farmers) in implementing the different planned activities in the ALL site.
- Organize customized trainings and capacity building workshops in collaboration with the multi-actors, relevant WPs leaders and project partners.

The coordinators and members of the ALLs are appointed for the duration of the project (i.e., 48 months) starting from 31st December 2023 until 31st December 2026. If one of the main representatives of a stakeholder in ALL resigns due to job changes, or other reasons, a deputy member of that stakeholder organization will take over the tasks and responsibilities.

The AE transitions levels to reach and the combined AE practices to be tested differs among the ALLs. For example, targeted combination of AE practices that will be tested for coffee-based systems in Kabare ALL is different from maize-based system in Bujumbura ALL. Thus, the specific roles and responsibilities for each ALLs team (coordinators, technical team, multi-actors) will be co-defined in the first stakeholder meeting that is being held in each ALL.

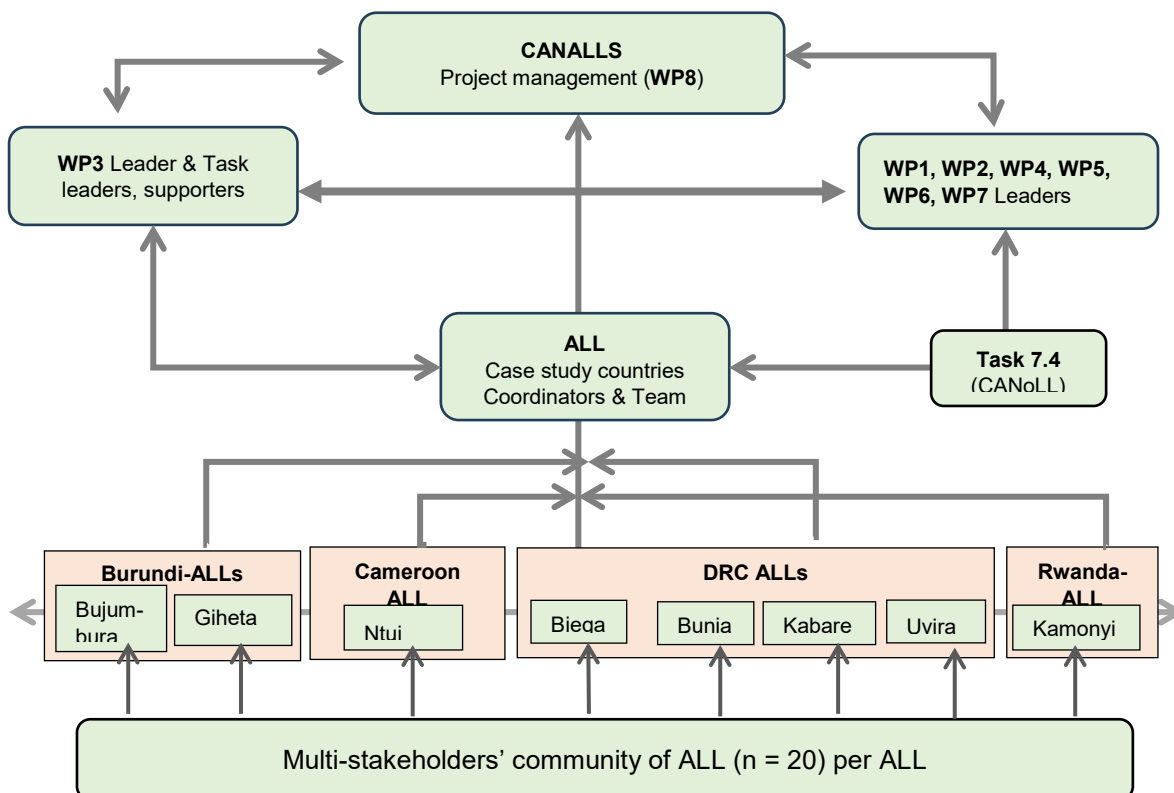


Figure 2.2: Organizational structure of the ALLs

The ALL organizational/governance structure is presented in Figure 2.2. Our ALLs constituted a quadruple helix model of stakeholders from different organization and sectors. They are governed by bottom-up cocreation activities from ALLs that are networked together and top down from the CANALLS project management. ALL coordinators and their team will have a two-way communication with all WP leaders in general and with WP3 leader, Project coordinator and leader of Task 7.4 (CEA Network of Agroecology Living Labs, CANoLL) in particular. One of the key objectives of Task 7.4 is to connect our ALLs and facilitate their operation and cooperation in the longer term. Those ALLs with the same farming systems and commodity crops will co-share knowledge and experiences during the implementation of ALL. With a series of wider communication and multi-actor engagement actions, we envisioned at crafting an evidence-based knowledge for exploitation, including a viable model for creating and growing network of multi-actor ALLs in Central and Eastern Africa Network of Living Labs (CANoLL).

ALL membership: benefits and opportunities

It is expected that members of ALLs will gain several benefits and opportunities which include among others:

- Improved exchange of knowledge and experiences through co-learning and teaching in the process of co-creation, co-design, co-implementation of combined AE practices/ strategies and co-evaluation.
- Cross fertilization of new ideas for scientific research projects, dissemination, and impact of project results
- Increase networking and visibility in a larger multi-stakeholder community from individual and institutional perspectives.
- Creates opportunities for partnering in future projects of scientific research and innovation; and
- Provision of support services and tools offered by CANALLS project, for e.g., capacity building and training activities.

2.5 Risks and challenges related to ALLs

Key challenges and/or risks that could deter the implementation of ALLs in the case study sites, their ratings and possible risk mitigation measures are suggested below (Table 2.5).

Table 2.5: Critical risks and challenges for ALLs implementation and possible mitigation measures

Description of risks/challenges	Rating*	Risk-mitigation measures
<ul style="list-style-type: none"> Operational difficulties in the implementation of ALLs 	Low probability, Low impact	<ul style="list-style-type: none"> Capacity building and training of ALLs team (co-ordinators, team members, multi actors). Clearly define roles and responsibilities between the work package leader and the country coordination team
<ul style="list-style-type: none"> Lack of full commitment of stakeholders and/or stakeholder fatigue 	Low probability, Medium impact	<ul style="list-style-type: none"> Motivate and engage actively the actors from the start of the project by preparing detailed action plan Make the benefits for all actors' visible in the project
<ul style="list-style-type: none"> Political instability/ Conflicts 	Medium probability High impact	<ul style="list-style-type: none"> Alternative sites with similar conditions identified for ALL implementation
<ul style="list-style-type: none"> Unrealistically high expectations among stakeholders of ALL 	High probability Medium impact	<ul style="list-style-type: none"> Inform stakeholders to show which of their ideas have been integrated and why it was not possible to integrate all ideas.
<ul style="list-style-type: none"> Insecure sustainability of ALLs 	High probability Medium impact	<ul style="list-style-type: none"> Give regular updates on the progress of ALL sites to actors and Develop exit strategy plan that includes seeking for alternative funding opportunities

* Rating indicates the level of likelihood of a risk to occur and severity.

2.6 Stakeholder engagement plan

There are several reasons for undertaking stakeholder engagement plan within research project. These include promoting links between science and society; gaining access to additional information or resources and improving the relevance or utility of the research to users and beneficiaries (Durham, et al., 2014). In chapter 4 (Site descriptions of ALLs), we prepared a stakeholder engagement annual plan for each ALL. For each planned activity, we described who needs to be involved, as well as how (level of engagement) and when they will be involved along the process. The relevant stakeholders in ALLs need to be engaged as early as possible in the project activities. Stakeholder engagement plans will be revised and updated during the project life i.e., during project planning; implementation; monitoring and evaluation.

Levels of stakeholder engagement: There are four main levels of stakeholder engagement from (lowest level) inform → consult → involve → to co-create (highest level) to targeted stakeholders.

i) Informing the stakeholders: This will be done by presenting project activities and results through folders, brochures, reports, newsletters, exhibitions, advertisements, project website to targeted stakeholders.

ii) Consulting the stakeholders: Consultation will be done by asking stakeholders for their views, ideas etc. to give advice and suggestions on specific issues and by listening to their feedback. This is implemented through surveys, interviews, organising workshops, focus group meetings, field days, advisory panels and/or interactive sessions.

iii) Involving the stakeholders: Engaging stakeholders by actively taking part in the ALLs implementation, for e.g., field measurements, imparting trainings, discussion in the field, data provisions, dissemination of project results in their own working groups and/or platforms.

iv) Cocreation with the stakeholders: This could be done by organizing a series of co-creative workshops where new ideas or innovations will be considered for decision making. This is a higher level of stakeholder engagement that will build up a community of trust between the actors and increase networking with other national, and regional networks.

In this regard, the task 7.4 under WP7 will draft an initial network design to link our ALLs to Central and East Africa Living lab (CANoLL) networks. At the end of the CANALLS project, the coordinators of our ALLs will sign a Memorandum of Understanding to formalise the network and increase commitment for its sustainability. Whenever possible and meaningful, we will also network and cooperate with other international living lab networks such as the European Network of Living Lab (ENoLL) or the future AgroEcoLLNet to facilitate scaling, dissemination, and exchange of good practices on agroecology.

3. Workplans for the ALLs

The work plan for ALLs is designed in three phases that span over the CANALLS project period. These include initial phase (M01-M12), midterm phase (M13-M30) and final phase (M31-M42). The planned activities for the initial phase include planned outputs, emerging opportunities, and barriers to address during the project period. While for the midterm and final phases of ALL, the planned activities are shown in general which will be revised and updated as needed and in alignment with the project progress. A detailed work plan for each ALL site will be developed in collaboration with the case study country partners and multi-actor stakeholders.

3.1 Initial phase of the ALLs

In the initial phase of the ALL, the key planned activities and achievements made during the first year of the CANALLS project (M01-M12) with respect to ALL multi-actor community establishment, are described in detail below. The work plan is described along four dimensions: specific action (what); how (methodology/approach), who (potential actors in charge) and when (time horizon) to implement the specific activity. During M01-M12, part of the activities under task 3.1 and the whole task 3.2 were implemented (Table 3.1 and Figure 3.1).

Table 3.1: Work plan for initial phase of ALLs (M01-M12)

What activity to undertake?	How to implement the activity?	Who will implement the activity?
<ul style="list-style-type: none"> Reviewing existing agroecosystems of ALL and synthesizing information 	Literature review (e.g., reports of ongoing projects)	NIBIO, case study partners*
<ul style="list-style-type: none"> Developing checklist of questionnaire 	Questions addressing key AE elements/principles that are relevant to the ALL	NIBIO with inputs from partners
<ul style="list-style-type: none"> Conducting interview and data analysis 	Digital tools/software Excel sheets	Case study partners with support of NIBIO
<ul style="list-style-type: none"> Selecting most appropriate actors 	Selection criteria, systematic stakeholder analysis	Case study partners with support of NIBIO
<ul style="list-style-type: none"> Inviting nominated organizations for ALL inception meeting 	Official invitation letter sent to organizations	Project coordinator/ ALL coordinator
<ul style="list-style-type: none"> Organizing introduction meeting with co-creation workshop 	Interactive workshops and group discussion	ALLs team, CIRAD and NIBIO
<ul style="list-style-type: none"> Set up multi-actor community of ALL 	Terms of Reference signed by each nominated organization	Case study partners with support of NIBIO
<ul style="list-style-type: none"> Defining ALLs roles and responsibilities 		Case study partners with support of NIBIO

* Note that case study partners are APDIK for Biega-ALL, IITA-DRC for Uvira-ALL, GASD for Kabare-ALL, Rikolto for Bunia-ALL, RAB for Kamonyi-ALL, IITA-Burundi for Bujumbura-ALL, NATUR/COCOA for Giheta-ALL and IRAD for Ntui-ALL, are the main contact partners (see Table 2.4, page 8 of this report).

Activities implemented	Year 1: January 2023 (M1) to December 2023 (M12)											
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
• Reviewing existing agroecosystems in ALL sites and synthesizing information	X	X										
• Develop checklist of questionnaire		X	X	X	X							
• Conduct interview and analyse the data collected						X	X	X	X	X		
• Select most appropriate multi-actors										X	X	
• Inform the stakeholders/actors chosen										X	X	
• Organize first stakeholder meeting											X	X
• Send a formal invitation letter to the nominated organizations												X
• Set up a team of multi actor community of ALL												X
• Define ALLs roles, responsibilities												X
• Develop guidelines/procedures, key performance indicators for ALLs												X

Figure 3.1: Time plan of activities for establishment and implementation of ALLs (Tasks 3.1 and 3.2)

Developing guidelines and key performance indicators for ALLs

This sub task will include activities related to developing procedures/ guidelines (to set up and operate the ALLs), templates for data collection and reporting, and key performance indicators (KPIs). A few KPIs (which are simple to monitor and evaluate the ALLs), are being co-developed by taking inputs from ALL coordinators, team members and multi actors in each ALLs. The KPIs include *i) number of stakeholder meetings organised, ii) ALLs sites that are operational, iii) diversity of stakeholders engaged in each ALL, iv) contribution of the stakeholders in the ALLs* in terms of facilitating dissemination of project results to wider audiences. These indicators can be expressed in quantitative and/or qualitative terms against the base line values.

Baseline data of the indicators will be collected by taking inputs from WP1 (e.g., T1.3) and WP4 (e.g., T4.1). Developing KPIs with baseline values in the beginning of the project could serves as a benchmark for the ALLs performance assessment. Methods of monitoring and assessing the KPIs (including ratings) will be developed and discussed with the multi-actors and project partners in workshops. The KPIs for ALLs will be evaluated twice during the project (i.e., M30 and M42) against the baseline. The results will be incorporated in the updates of the respective deliverable reports of D3.1 that will be due in M30 (midterm version) and in M42 (final version).

3.2 Midterm phase of the ALLs

During the midterm phase (i.e., M13 - M30), stakeholder engagement plan and activities will be designed for each stakeholder group in ALL (Table 3.2).

Table 3.2: Work plan for midterm phase (01 January 2024 to 30 June 2025) of ALLs

What activity to undertake?	How to implement the activity?	Who will implement the activity?
<ul style="list-style-type: none"> Organizing regular ALLs meeting 	Physical/online meetings	ALL coordinator and Team
<ul style="list-style-type: none"> Multi-actor engagement planned activities 	Engagement plan for each stakeholder group	Case study partners with support of NIBIO
<ul style="list-style-type: none"> Resource mapping of ALLs sites (soils, vegetation, forests, water, etc) 	Reconnaissance survey, Participatory GIS mapping, Ground truthing (if needed)	NIBIO, IITA and ALL team
<ul style="list-style-type: none"> Building capacity of multi-actor community in ALLs 	Organize training workshops and exposure field visits	Case study partners with support of NIBIO

i) Mapping of agroecology resources in ALL site: One of the key activities is undertaking agroecology resource surveys/mapping and ground truthing of existing maps of soils, vegetation/forest, land use/land cover, etc. using participatory Geographic Information system (GIS) supported with satellite imagery. Local partners will use existing base maps (if available) or extensively map the farming systems in each ALL with technical support provided by NIBIO. Using this baseline information, the ALL site/s will be classified and established in the respective AE zones and/or existing agroecosystems. The information from this activity will be an input to the AE design phase (Task 3.3) and AE implementation phase (Task 3.4) of ALLs. Activities implemented and results achieved, will be reported in the updates of D3.1.

ii) Capacity building and trainings of stakeholders in ALL: Introducing ALLs to structure stakeholder involvement in AE transition requires capacity building at many levels. Tailor made trainings and capacity building activities for different stakeholders (i.e., for scientists, farmers, etc.) will be co-developed and implemented to boost the understandings and increased uptake of ALLs. Capacity building of multi-actor community in the ALLs will commence right from the preparation phase of the project to build trust and credibility.

3.3 Final phase of the ALLs

During the final phase of ALLs (M31-M42), the main activity will be developing an exit strategy plan in consultation with multi-actor community and case country team to sustain the key outcomes/outputs of achieved from ALL sites after the project is over (Table 3.3).

Table 3.3: Work plan for final phase (01 July 2025 to 30 June 2026) of ALLs

What activity to undertake?	How to implement the activity?	Who will implement the activity?
<ul style="list-style-type: none"> Organizing regular ALLs meeting 	Physical/online meetings	ALL coordinator and team
<ul style="list-style-type: none"> Building capacity of multi-actor community of ALLs 	Engaging the multi-actors in the ALLs	NIBIO and ALL team c
<ul style="list-style-type: none"> Linking ALLs with other national, regional LLs 	Networking with other LLs in the region or outside	NIBIO and ALL team
<ul style="list-style-type: none"> Preparing exit strategy plan for ALL 	Organizing planning workshop	ALL coordinator team with support of NIBIO

4. Site descriptions of the ALLs

In the CANALLS project, 8 ALLs having one or two demonstration trial sites are being established. They will be managed by local project partners in collaboration with multi-actor community group. The ALLs sites have different levels of forest degradation that varies from low degradation in Biega and Bunia ALLs, severe degradation in Ntui ALL, to agro-reforestation in Giheta ALL. There are two main agroecological farming systems in ALLs sites:

- i) the highland AE farming systems which grow coffee or cassava; and
- ii) the lowland AE farming systems which grow cacao, maize, or rice.

The ALLs sites have different levels of forest AE transitions ranging from Level 1 (i.e., *increase efficiency of input use while reducing environmentally damaging inputs*) under agroecosystems to level 4 (*reconnect consumers and producers, develop alternative food networks*) under food systems. To reach the different AE transition levels, targeted combinations of AE solutions will be co-created/co-designed and co-tested under real life settings together with multi-stakeholders using multi-methods approaches.

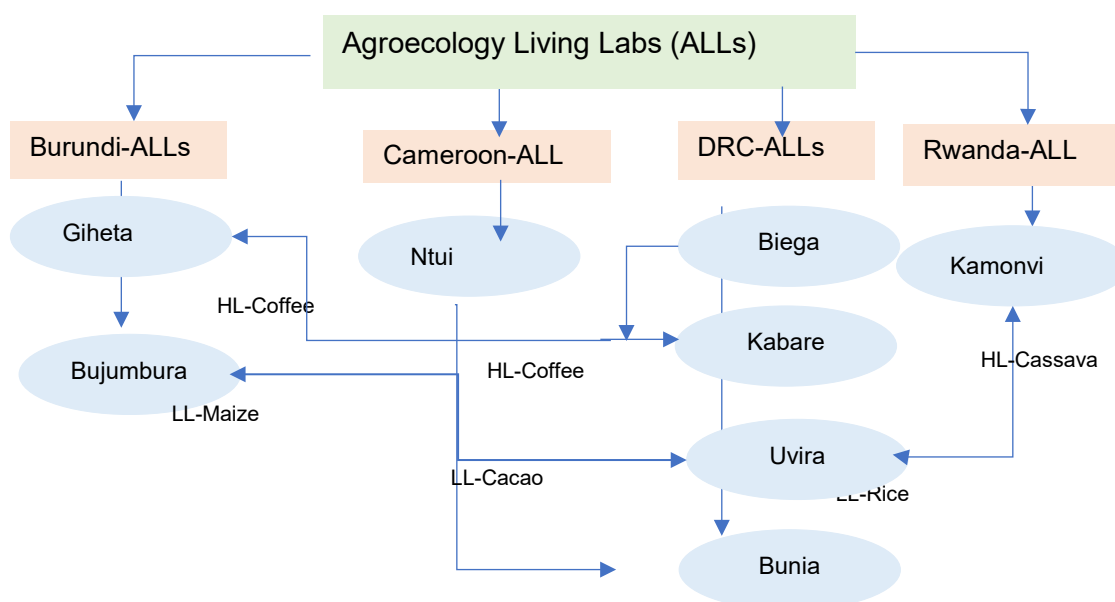


Figure 4a: Interconnectivity of ALLs with dominant AE farming systems and

To facilitate the interconnectivity among ALLs for knowledge exchange and co-learning, the ALLs will be grouped as Coffee-network, Cassava-network, Cacao-network, and Cereals-network that includes maize in Bujumbura ALL and rice in Uvira-ALL (Figures 4a and b).

In each ALL, the implementation of WP3 will be carried-out and monitored under real-life settings using multi-methods approach through multi stakeholder participation, active user involvement, and cocreation with multi stakeholders.

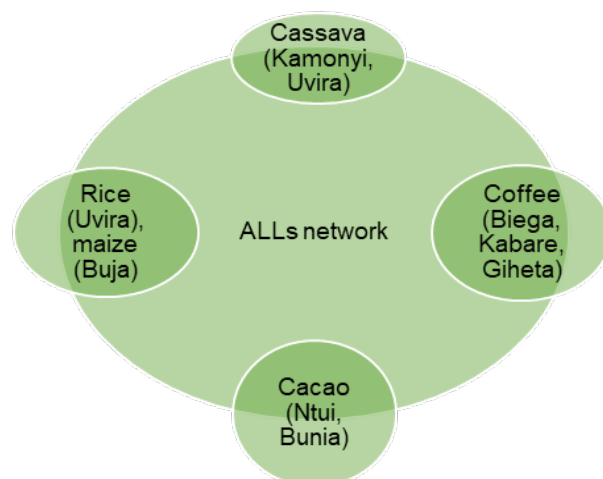


Figure 4b: ALLs networking in CANALLS

General descriptions of each ALLs with respect to their geographic locations, mapping of resources including population, overall objectives of the ALL, activities implemented so far, and planned activities with expected outputs in the next 12 months (M13-M24), are briefly described in the following sub section.

4.1 Biega ALL: Coffee-based agroecological farming systems with associated trees

i) Introduction

Biega is one of the ALLs in DRC which is located along the tropical montane forest of Kahuzi Biega national Park (Figure 4.1a). The altitude of the ALL site lies between 1700 - 2000 m above sea level. The main crops grown in the area include coffee, bananas, beans, cassava, sweet potato, vegetables. There are two indigenous communities living in the area: *i) the Pygmy group*: are marginalized native people who are landless, jobless with high risks of social conflicts and *ii) the Bantu group*: are agro-pastoralists that grow cash crops such as coffee, beans, bananas, sweet potatoes, vegetables and yams (taro) and raise livestock.

The Biega area is endowed with volcanic soils, rich in agrobiodiversity, that are favourable for agricultural production. There are international agencies and NGOs (e.g., FAO, PEX, GIZ) Kivu Specialty Coffee Project (IITA/RIK/UCB) website/link⁶: working together with the local communities to increase food security. They are also involved in reforestation activities by planting indigenous tree species, promote valuable botanical gardens including wild foods and medicinal plants.



Figure 4.1a: Location map of Biega

The key challenges in the area are extreme weather events (heavy rains and drought), lack of improved farming practices, forest degradation, food insecurity and animal

⁶ <https://borgenproject.org/kivu-specialty-coffee-project/>

diseases. Moreover, farmers lack knowledge and awareness on agroecology and other improved farming practices.



Photo credit: Balagizi Karhaqomba

The main objective of Biega ALL is to transform the coffee-based AE farming systems from level 1 (i.e., increase efficiency of input use while reducing environmentally damaging inputs) to level 4 (i.e., reconnect consumers and producers through the development of alternative food networks). To achieve this, possible combination of AE practices will be on-farm tested and this include agroforestry systems, intercropping (banana), nutrient recycling through composting, integrated pest management, value added coffee products. It is assumed that these practices could address some of the elements/principles of agroecology such as circular and solidarity economy, culture and food traditions, co-creation and sharing of knowledge.

ii) Activities implemented

i) Questionnaire interview and data analysis: Several online meetings were held with the NIBIO team who prepared the draft questionnaire on agroecology to interview appropriate stakeholders and identify for membership in the ALL in Biega. In these meetings, the country case study partners and WP3 task leaders participated. In addition, back-to-back meeting was also conducted with the consortium meeting to discuss in detail each question in the questionnaire survey. The questionnaire was translated into French for easy communication between the interview and respondent. The Biega team conducted the questionnaire on 50 different stakeholder groups and collected the data digitally (using kobo collect app). Data collected was analysed using Excel sheet.

ii) Stakeholder meeting organised: Local meetings were organised with the most appropriate stakeholders to give orientation about the CANALLS project and basic concepts of agroecology and living labs.

iii) Multi-actor stakeholder community established: Figure 4.1b shows members of the stakeholder distribution in Biega ALL where civil society and farmer organizations take a large part. In total 30 different stakeholders including short listed candidates were chosen for membership in the Biega ALL.

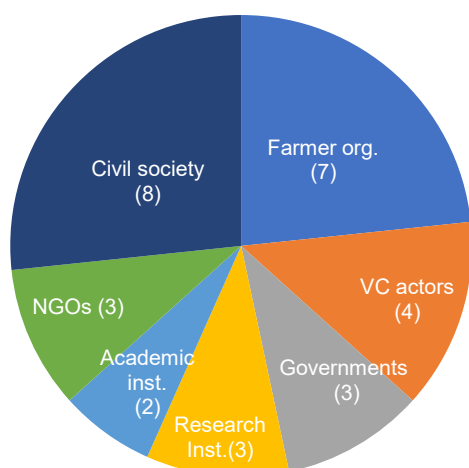


Figure 4.1b: Number and type of stakeholders nominated for Biega ALL

iii) Next steps planned

In Biega ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.1a: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	• Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	• The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	No of people trained on different topics:	• The training could include e.g., agroecology, living labs, etc.

The stakeholder engagement annual plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.1b).

Table 4.1b: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

4.2 Kabare ALL: Coffee-based agroecological farming systems with intercropping of annual crops

i) Introduction

Kabare living lab is found in the highlands of South Kivu province of Eastern DR Congo where population pressure is very high. (Figure 4.2a). South Kivu is characterised by its diverse landscape of highlands and lowlands between the Congo Basin and the Great Lakes Kivu and Tanganyika. The name Kabare refers to *territoire* unit, *territoire* being the higher administrative region at province level. Below the *territoire* level is *groupement* where small collections of villages surrounding a central community where Chef de groupement resides.

The Kabare living lab comprises the *groups* of *Luhihi*, *Irhambi Katana*, *Mudaka* and *Kabamba*. These *groupements* lie on an extended stretch of the shore of Lake Kivu north of Bukavu at around 1,500 m above sea level., cut off from the main Bukavu-Goma Road by a volcanic ridge. Fertile Humic Nitisols and Ferralsols are found in these areas because of recent rejuvenation by volcanic ashes or mudflow deposits. The soils have high organic matter content, optimum pH values and larger nutrient reserves. Agriculture is the most important economic activity for 90% of the populations. The primary focus should be to improve agriculture productivity and tackle malnutrition.

In Kabare, *RUNRES* (SDC-funded project) will set up consortium of practitioners who are piloting waste sorting at the source, composting, and utilization to fertilize the soils. The project is also piloting human waste (urine) utilization. It will provide farmers networks and knowledge transfer infrastructure for ALL Biega and ALL Kabare (DRC). The eco-friendly approaches will be evaluated and optimized using CANALLS' methodologies. Through newly developed market services, we will also further facilitate access to international coffee markets.

The key challenges include deforestation coupled with sharp rise in temperatures, crop pests, landslides, and irregular rainfall. Moreover, farmers lack of knowledge and awareness on agroecology and other improved farming practices. The main objective of Kabare ALL is to transform the coffee-based agroecosystems from level 1 (*increase efficiency of input use and reduce use of costly, scarce or environmentally damaging inputs*) to level 3 (*redesign agroecosystems based on ecological processes*). Possible combination of AE practices that will be tested in the Kabare ALL site includes Integrated Soil Fertility Management (ISFM), recycling of nutrients combining coffee pulp, and organic waste compost. These AE practises will address key elements of agroecology such as synergies, diversity, resilience, and recycling.

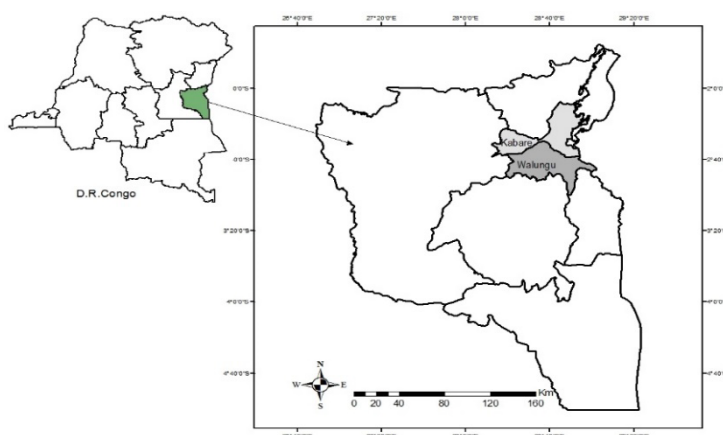
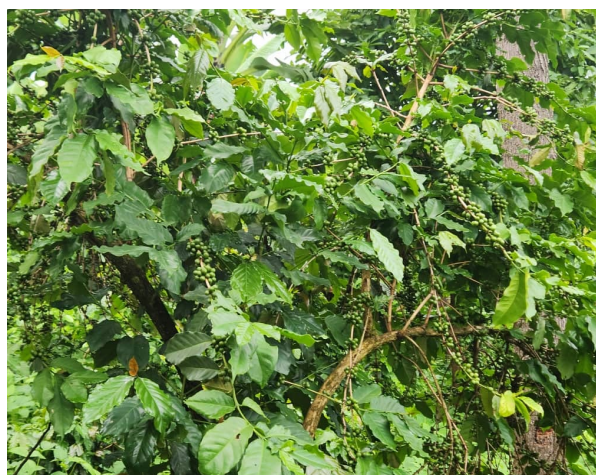


Figure 4.2a: Map showing the “territoire” of Kabare, South Kivu



ii) Activities implemented

i) *Questionnaire interview and data analysis*: we started by defining the purpose of the interview, determine the target population and minimum sample to take. The questionnaire was pretested, revised and then we interviewed 54 respondents representing different stakeholders. The data was collected digitally using Kobo collect app and data analysed using excel sheet.

ii) *Stakeholder meeting organised*: Objectives of the meeting was to familiarize the stakeholders with the basic concepts and approaches of CANALLs project, agroecology, living labs and co-creation process.

iii) *Multi-actor stakeholder community established*: To establish the multi-stakeholder community team, we first identify the relevant stakeholders (Who are the main stakeholders we need to engage with); then we created a common Vision; then we established the Roles and Responsibilities (Who should do what); after we made a Governance Structure (How do we manage ourselves); then followed a Common Strategy (How to work together and How do we know we are progressing towards the desired change. In total, 20 stakeholders were chosen to join the memberships of ALL and 4 stakeholders were short listed.

Table 4.2a: Typology and number of stakeholders interviewed and nominated to join membership of Kabare-ALL

Type of stakeholders	No. of interviews	No. of stakeholders nominated for ALL
Farmer org.	5	4
Governments	6	3
Academic inst.	4	2
Research Inst.	5	3
Civil society & NGOs	12	3
VC actors	22	5
Total	54	20

iii) Next steps planned

In Kabare ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.2b: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	• Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	• The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	People trained on different topics:	• The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.2c).

Table 4.2c: Multi-actor engagement planning for M13-M24 (January 2024 – December 2024)

S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

4.3 Giheta ALL: Coffee-based agroecological farming systems

i) Introduction

Giheta Commune is one of the eleven communes in Gitega province in central Burundi. Giheta is one of the most densely populated communes of the Gitega province. It has a total population about 94000, with an annual growth rate of 2.4% (Ministry of Finance, 2012). Giheta is characterized by dry and rainy seasons with average annual rainfall more than 1100 mm. The average annual temperature is 20°C varying between 18°C and 21°C. It has extensive hydrographic network, with the major rivers and their tributaries. The eastern part of Giheta is mostly rugged mountains with heights of 1922 - 1975 m above sea level. The land bordering these mountains is colluvial, with agricultural potential for irrigation.



In Giheta living lab, farmers are mainly involved in coffee production, with bananas as a secondary crop. Agro-reforestation or agroforestry is the main farming activity in the coffee farm. COCOCA (*German province of Baden-Württemberg*) (NATUR), website/link⁷ is a union of the cooperatives of coffee growers in Burundi. It assists coffee cooperatives to transform them into sustainable organic coffee production and strengthen value chains actors. CANALLS project will help the cooperative get access to markets (regional/international) through increased certification schemes. According to coffee farmers, their key challenges include lack of animal manure, low price of coffee, lack of mulching materials, climate change and lack of biopesticides.

⁷ <https://www.cococaburundi.com/>



The main objective of Giheta ALL is to transform the coffee-based agroecosystems from level 1 (*increase efficiency of input use while reducing environmentally damaging inputs*) to level 4 (*reconnect consumers and producers through the development of alternative food networks*). Possible combination of AE practices that will be tested in the Giheta ALL site includes agroforestry systems, intercropping (e.g., banana or timber trees), nutrients recycling from organic sources, organic pest control, value added coffee market.

These AE strategies will address circular and solidarity economy, culture and food traditions, training and capacity building, co-creation and sharing of knowledge related to agroecology.

ii) Activities implemented

i) Questionnaire interview and data analysis: We first identified the stakeholders that could be part of the interviews. Then, we explained to the respondents the overall objective of the interview, i.e., to collect baseline data, understand their impressions on agroecology, their activities related to agroecology and their expectations from the project. The interview was conducted face to face and data was collected using KoboCollect App.

ii) Stakeholder meeting organised: We conducted a meeting first with COCOCA project staff to introduce the CANALLS project at the Headquarter of COCOCA. Then, we visited the farm cooperatives in Giheta. COCOCA has 2 main coffee farm cooperatives which are well organized. They grow organic coffee using organic fertilizers such as compost manure. Farmers are aware about agroforestry, coffee shading, composting using organic materials.

iii) Multi-actor stakeholder community established: We are in the process of nominating the candidates representing different stakeholders to join the membership in the ALL.

iii) Next steps planned

In Giheta ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.3a: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Establishing Multi-actor stakeholder community	List of Multi-actor stakeholder community	<ul style="list-style-type: none"> • Work in progress
2	Organizing regular ALL meetings	Meeting minutes	<ul style="list-style-type: none"> • Work progress on ALL
3	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	<ul style="list-style-type: none"> • The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
4	Building capacity of multi-actor community in ALLs	No of people trained on different topics:	<ul style="list-style-type: none"> • The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.3b).

Table 4.3b: Multi-actor/stakeholder engagement plan for M13-M24 (January 2024 – December 2024)

S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

4.4 Bunia ALL: Cacao-based agroecological farming systems

i) Introduction

Bunia city is the capital of Ituri province in DRC. Bunia ALL site is found in the Mambasa Territory which is an administrative area in the Ituri Province. The dominant soils in Mambasa area are the ferrallisols. The vegetation is covered with dense forest, secondary forest, wooded savannah and grassland. The main land use type in Bunia is agriculture, particularly food crops, cacao, and cacao-based agroforestry. The key challenges include extreme weather events of irregular rainfall, prolonged dry seasons, and sometimes heavy rains that destroy beans and cassava, disease and pests, and forest degradation. Moreover, farmers lack knowledge and awareness on agroecology and other improved farming practices.

Shade-grown Cacao project (funded by USAID) aims to enhance natural resource conservation and improve rural livelihoods. The project develops a cacao value chain platform consisting over 700 cacao producers. Access to international markets will be facilitated through newly developed services and tools in CANALLS project.



Photo credit: Charles Sivirihauma

Table 4.4a: Cacao farmers cooperatives in Bunia ALL, Mambasa site

	UPCCO Cooperative	Cacao Okapi Cooperative
• No of farmers in the cooperative	3333	1520
• No. of farmer producers certified by Ecocert	527	412
• Cacao area cultivation (ha)	756	2500
• Cacao production (average) kg/ha/yr	540	600
• Age of the plantation (average in years)	4-7	3 -10
• Agroforestry practice, No of trees /ha	40 - 50	40 - 50

The main objective of Bunia ALL is to transform the cacao agroecosystems from level 1 (*increase efficiency of input use while reducing environmentally damaging inputs*) to level 4 (*reconnect consumers and producers through the development of alternative food networks*). To achieve this, possible combination of AE practices will be co-tested that include agroforestry systems, intercropping with diverse shade trees,

integrated soil fertility management (ISFM), integrated pest management (IPM), organic value chain. These AE solutions will address key elements of agroecology including circular and solidarity economy, culture and food traditions, co-creation and sharing of knowledge.

ii) Activities implemented

i) Questionnaire interview and data analysis Several online meetings were held with the NIBIO team who prepared the draft questionnaire on agroecology to interview appropriate stakeholders and identify for membership in the ALL in Bunia. In these meetings, the country case study partners and WP3 task leaders participated. In addition, back-to-back meeting was also conducted with the consortium meeting to discuss in detail each question in the questionnaire survey. The questionnaire was translated into French for easy communication between the interview and respondent. The Bunia team conducted the questionnaire on 38 different stakeholder groups. Data collected was analysed using Excel sheet.

ii) Stakeholder meeting organised: Local meeting is being organised to give orientation about the CANALLS project and basic concepts on agroecology and living labs where stakeholders that participated in the interview and others, are invited to the meeting.

iii) Multi-actor stakeholder community established: In total 20 stakeholder were nominated as candidates to join the membership of ALL (Table 4.4b).

Table 4.4b: Number of stakeholders nominated to join the membership of Bunia -ALL

Type of stakeholders	No. of stakeholders nominated for ALL
Farmer org./cooperatives	4
Governments institution	5
Non-government organization	2
Academic institution	2
Research institution	1
Civil society	2
Value chain actors	4
Total	20

iii) Next steps planned

In Bunia ALL, we envisioned the following key activities to be undertaken and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.4c: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	• Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	• The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	xx no of people trained on different topics:	• The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.4d).

Table 4.4d: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

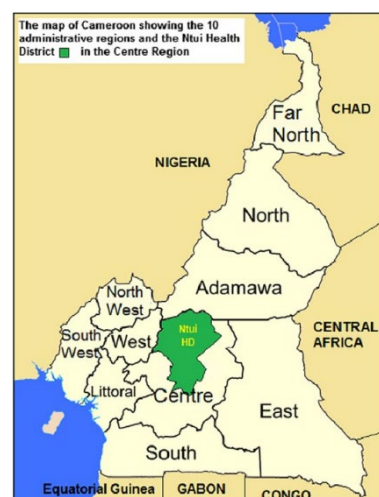
S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

4.5 Ntui ALL: Cacao-based agroecological farming systems

i) Introduction

Ntui ALL is found in the Central region of Cameroon in Ntui subdivision which stretches between 4°20' and 5°00' North and between 11°29' and 11°47' East. It is situated between three agroecological zones – the humid forest area with bimodal rainfall pattern, the high Guinean savannah and the western highlands agroecological zones. Generally, this municipality is classified under the humid forest area with bimodal rainfall patterns wherein it enjoys a subequatorial climate with four seasons. The annual rainfall is around 1465 mm, with nearly 110 rainy days per year. This makes Ntui a strategic agricultural hub with possibility of a large range of annual, perennial and tree crop together forestry and animal husbandry activities. The main occupation of the population is farming with cacao being major cash crop wherein about 77% of the population grows cacao. Food crops cultivated include cassava, corn, coco-yams plantains yams etc.

The key challenges include forest degradation, land conflict due to lack of agricultural land, bush fires and lack of labour for agricultural activities. Human population growth is increasing which has affected negatively the natural resources, especially forest resources. The main drivers of deforestation are slash-and-burn agriculture and the cutting of wood for fuel and export.



The Ntui ALL will build on existing ongoing projects in the area, such as the *CacaoSoils*⁸. This project employs an integrated soil fertility management (ISFM) approach for sustainable intensification of cacao production. ISFM is defined as “a set of practices, involving the use of fertilizers, organic inputs and improved germplasm, aimed at maximizing the agronomic use efficiency of applied nutrients and crop productivity (Vanlauwe et al., 2010). ISFM promoted practices will be further complemented and optimised through CANALLS’ project. Farmers in Ntui had never heard of agroecology before the project was introduced in the area. However, a small proportion of the households were already practicing recycling, using compost, manure or cow dung and vegetable-based green manures in their farming systems.



The overall objective of Ntui ALL is to transform the cacao agroecosystems from level 1 (*increase efficiency of input use and reduce use of costly, scarce or environmentally damaging inputs*) to level 2 (*substitute conventional inputs and practices with agroecological alternatives*). Possible combination of agroecological practices that will be co-tested include traditional agroforestry systems, ISFM, IPM to addressing efficiency, recycling of AE elements.

ii) Activities implemented

i) Questionnaire interview and data analysis: Several online meetings were held with the NIBIO team who prepared the draft questionnaire on agroecology to interview appropriate stakeholders and identify for membership in the ALL in Ntui. In these meetings, the country case study partners and WP3 task leaders participated. In addition, back-to-back meeting was also conducted with the consortium meeting to discuss in detail each question in the questionnaire survey. The questionnaire was translated into French for easy communication between the interview and respondent. The Ntui team conducted the questionnaire on 42 different stakeholder groups and collected the data digitally. Data collected was analysed using Excel sheet.

A preliminary selection of stakeholders was made in consultation with the project partners. Once the list had been drawn up, the surveys were carried out at the headquarters of the stakeholders identified (Yaounde and Ntui). A total of 42 stakeholders were surveyed as part of the creation of a team of local partners. This team was distributed as follows: Farmer organizations (10), Decisions markers (6), NGOs (5), academic institutes (7), research institutes (5), civil societies (4) and value chains actors (12). A 10-question questionnaire was completed by the respondent. Using Microsoft Excel, we calculated the cumulative points for each question.

ii) Stakeholder meeting organised: Local meetings were organised with the most appropriate stakeholders to give orientation about the CANALLS project and basic concepts on agroecology and living labs.

iii) Multi-actor stakeholder community established: Figure 4.5a shows members of the stakeholder distribution in ALL Ntui where value chain actors take a large part followed by farmer organization and government ministries. In total 26 different stakeholders including short listed candidates were chosen for membership in the Ntui ALL.

⁸ <https://cocoasoils.org/>

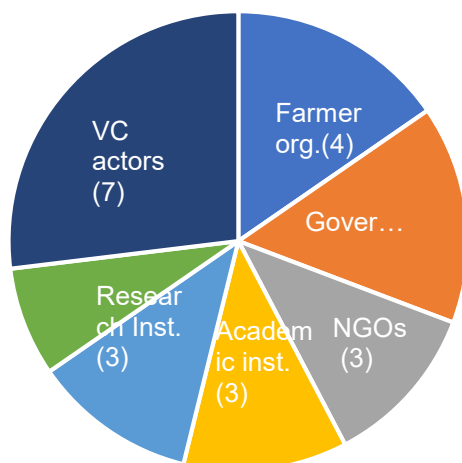


Figure 4.5a: No. of stakeholders nominated in Ntui ALL

iii) Next steps planned

In Ntui ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.5a: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	• Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	• The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	No. of people trained on different topics	• The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.5b).

Table 4.5b: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

4.6 Kamonyi ALL: Cassava-based agroecological farming systems

i) Introduction

Kamonyi ALL site is found in the Kamonyi district which is one of the eight Districts that make up the Southern Province of Rwanda. It is composed of 12 Sectors. The average annual rainfall is 1200-1400 mm. The soils of Kamonyi District are naturally fertile and rich in humus. However, the District is facing soil erosion due to high population pressure and overcultivation. The fauna and flora in the District have been progressively depleted following clearing and destruction of natural forests. In Kamonyi district, the diversity of agricultural production includes cereals (maize), pulses (beans and soybeans), coffee, avocado, tubers (cassava), vegetables and banana. In Kamonyi area, extreme weather events (frequent dry spells, extreme floods, droughts) are key challenges. Majority of Kamonyi's farmers showed interest to increase knowledge on agroecological practices, build their capacity in agroforestry practices, integrated use of fertilizers (organic and inorganic inputs) and animal husbandry to optimize the benefits of agroecology.

In Kamonyi area, the project RUNRES (funded by Swiss Development Cooperation) website/link⁹: aims to improve recycling of nutrients in 4 different rural-urban regions across Africa using potential urban waste streams as a source. It will provide innovation platforms for ALLs in Kamonyi. The know-how (technology, practices) for nutrient recycling through co-composting organic waste and the potential for farm diversification through the production of Black Soldier Fly larvae and cassava peel transformation to feed animals, will be exploited in CANALLS. Other agroecological options suitable for Kamonyi ALL will be identified during the co-creation phase participatory approach involving stakeholders.

The main objective of Kamonyi ALL is to transform the cassava-based agroecosystems from level 1 (*increase efficiency of input use while reducing environmentally damaging inputs*) to level 3 (*redesign agroecosystems based on ecological processes*). Possible combination of AE practices that will be tested include, intercropping (legume), agroforestry, conservation agriculture (cover crops), ISFM, nutrient recycling (organic waste compost), farm diversification addressing synergies, diversity, resilience, and recycling of AE elements.



ii) Activities implemented

i) Questionnaire interview and data analysis: Several online meetings were held with the NIBIO team who prepared the draft questionnaire on agroecology to interview appropriate stakeholders and identify for membership in the ALL in Kamonyi. In these meetings, the project team/partners and WP3 task leaders participated. In addition, back-to-back meeting was also conducted with the consortium meeting to discuss in detail each question in the questionnaire survey. The Kamonyi team conducted the questionnaire on 41 different stakeholder groups and collected the data digitally. Data collected was analysed using Excel sheet.

ii) Stakeholder meeting organised: A meeting with selected stakeholders (19 out of 20 identified) from different group category was organized with the following objectives:

⁹ <https://runres.ethz.ch/project-sites/rwanda/>

- Introduce the basic concept of CANALLs project to potential key stakeholders in order to have a clear and common understanding;
- Discuss with stakeholders on project concepts and get their consent for involvement in setting up the operational and multi-actor agroecology of Kamonyi Living Lab;
- Create a structural analysis of the causes and effects of the key challenges faced by stakeholders on the focus crop and value chain; and
- Explore the alternative objectives for the co-creation activities within the ALL

iii) Multi-actor stakeholder community established: Figure 4.6a shows members of the stakeholder distribution in Kamonyi ALL where farmer organizations take a large part followed by civil society. In total 20 different stakeholders including short listed candidates were nominated for membership in the Kamonyi ALL.

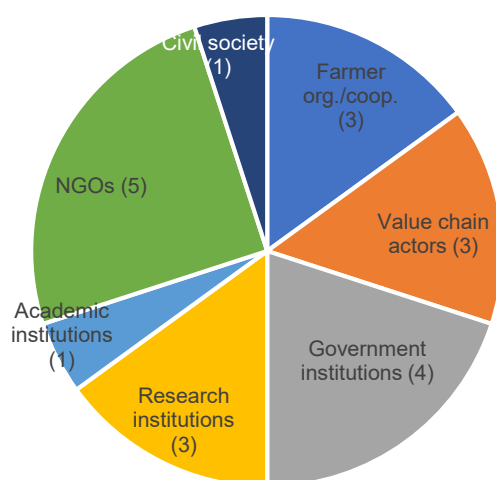


Figure 4.6a: Number of candidates in each stakeholder types nominated in Kamonyi ALL.

iii) Next steps planned

In Kamonyi ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.6a: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Formal establishment of the ALL	Nomination letters	<ul style="list-style-type: none"> • Stakeholders are officially involved in the ALL
2	Organizing regular ALL meetings	Meeting minutes	<ul style="list-style-type: none"> • Work progress on ALL
3	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	<ul style="list-style-type: none"> • The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
4	Initiate establishment of on-ground activities (AE practices)	Prototyping of activities conducted. Field establishment of activities	<ul style="list-style-type: none"> • Monitoring and evaluation the performance of established activities
5	Building capacity of multi-actor community in ALLs	35 people trained on different topics:	<ul style="list-style-type: none"> • The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.6b).

Table 4.6b: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

S.No.	What? (type of activity to implement)	Who? (name of stakeholder)	How? (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creation

4.7 Uvira ALL: Rice/Cassava-based agroecological farming systems

i) Introduction

Uvira ALL site is located between 3°20' and 4°20' latitude S, 29° 0' and 29°30' longitude E. It is bordered to the north by the *Walungu* territory, to the West by the Mwenga territory, to the South by the Fizi territory and to the East by Lake Tanganyika and the Ruzizi River plains which separates it from Burundi (Figure 4.7a). The territory of Uvira has a semi-arid climate with mean altitude of about 1000 m above sea level and annual rainfall of 1600 mm. The main rainy season falls between November to May and dry period is between May to October. Monthly average air temperature ranges between 22 °C and 25°C. Agriculture is the main activity of the population which is dominated by arable farming and livestock raising such as cattle, pigs, goats and poultry (<https://fr.wikipedia.org/wiki/Uvira>) to some extent.

In Uvira, around 55% of farm households grow paddy rice, and cultivate cassava. In Uvira, the project PIGAGL (funded by World Bank) aims to increase sustainable rice production and also other crops like cassava and maize in South Kivu through knowledge transfer, better physical infrastructure and access to digital credit. It provides stakeholder networks and farmer field school platforms.

Key challenges in the area include deforestation coupled with irregular rainfall, extreme drought, landslides, annual bush fires, conflicts between farmers and livestock keepers. Moreover, farmers lack knowledge and awareness on agroecology and other improved farming practices. The main objective of ALL in Uvira is to transform the rice-based agroecosystems from level 1 (*increase efficiency of input use while reducing environmentally*

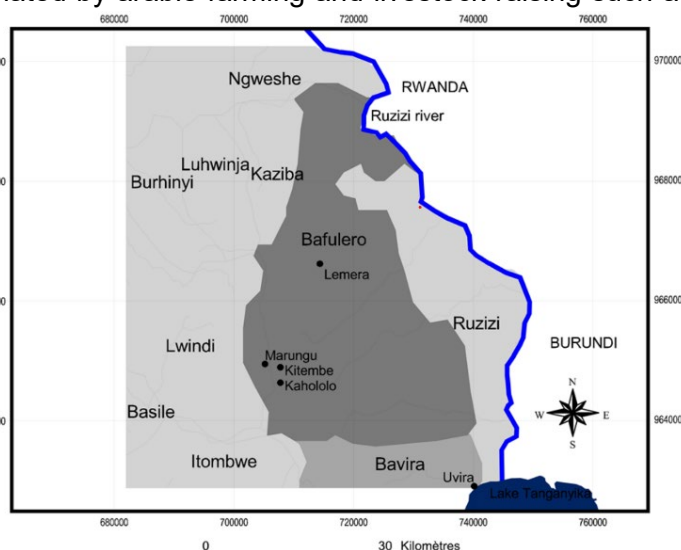


Figure 4.7a: Local map of Uvira site

damaging inputs) to level 2 (substitute conventional inputs and practices with agroecological alternatives). Possible combination of AE practices that will be tested include, integration of crop and livestock systems, forage production, ISFM with recycling of nutrients via manure, intercropping (legumes), cover crops. These practices will address efficiency, and recycling of AE elements.

ii) Activities implemented

i) *Questionnaire interview and data analysis:* making list of stakeholders involved in the agroecological field in the area, initial visit to targeted stakeholders, brief explanation of the project objectives, conducting interview in selected respondents that represent different stakeholders. The Uvira ALL team conducted the questionnaire on 55 different stakeholder groups. After collecting the data, it was analysed by selecting the stakeholders based on certain criteria such as highest scores during the interview, interest versus influence of stakeholders on the CANALLS project, experiences of working with actor.



Photo credit: to Balume Kayani Isaac

ii) *Stakeholder meeting organised:* The overall objectives of the meeting were to familiarize the stakeholders with the basic concepts and approaches of CANALLS project, agroecology, living labs and co-creation process; discuss and agree on the key roles and responsibilities of stakeholder groups in the ALL; and plan key activities and planned outputs related to ALL for the next 3 months. The key findings of the meeting include roles and responsibilities of each actor defined and key activities for the next 3 months in ALL Uvira discussed and planned.

iii) *Multi-actor stakeholder community established:* In total 20 stakeholders with 7 short listed candidates were nominated to join the membership of ALL in Uvira (see Annex A).

iii) Next steps planned

In Uvira ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3.

Table 4.7a: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	<ul style="list-style-type: none"> • Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	<ul style="list-style-type: none"> • The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	xx no of people trained on different topics:	<ul style="list-style-type: none"> • The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.7b).

Table 4.7b: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

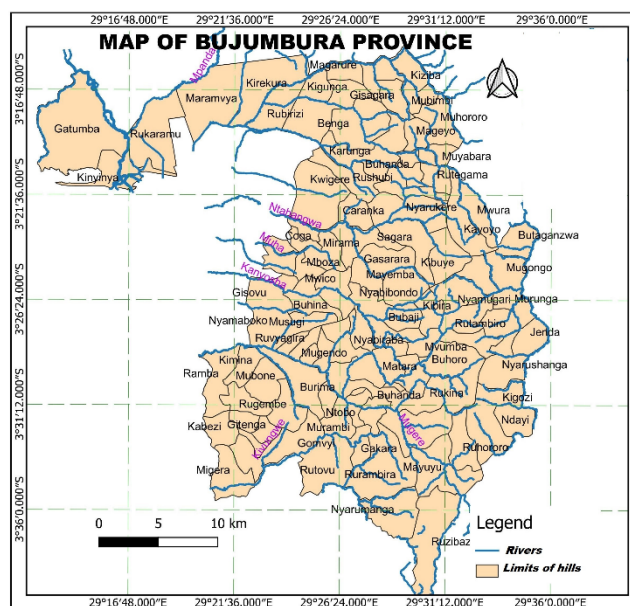
S.No.	What (type of activity to implement)	Who (name of stakeholder)	How (methods/approaches to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Mapping of agroecology resource	All Stakeholders	Participatory GIS	Involve
3	Training and capacity building	Researchers	Practical training, hands on	Involve, co-creative
4	Developing field protocols	Researcher with others ALL technicians	Participatory methods	Collaboration, involve
5	Set up of demo trial plots	INERA / IITA with others ALL members	Farmers school fields	Involve

4.8 Bujumbura ALL: Maize-based agroecological farming systems

i) Introduction

Bujumbura ALL site is divided into two provinces i.e., the urban province and rural province of Bujumbura. According to FAO (2020), about 36% of households in Burundi are food insecure, where 7% are severely food insecure and the remaining 29% are moderately food insecure. Bujumbura ALL has 308000 households, where 55000 are directly involved with the PRDAIGL project (about 35% are being women). About 95% of the population's energy source comes from biomass such as firewood, charcoal, and agricultural residues as well as peat soils.

Agriculture and livestock breeding are the main activities in Bujumbura, with 45% small-scale farming and 55% medium-scale farming. About 75% of households are directly involved in growing maize which is the main staple crop. In Bujumbura area, the PRDAIGL project (funded by World Bank) goal is to reduce poverty and enhances economic growth by including largely poor smallholders, especially young farmers, into a more modern, efficient maize VC. It will provide stakeholder networks in ALL Bujumbura. In Bujumbura, farmers recycle farmyard manure and crop residues and make compost. They reduce external inputs using more organic fertilizer. Farmers face challenges related to soil health in particular low soil fertility and deforestation.



The main objective is to transform the maize-based agroecosystems from level 1 (*increase efficiency of input use and reduce use of costly, scarce, or environmentally damaging inputs*) to level 2 (*substitute conventional inputs and practices with agroecological alternatives*). Possible combination of AE practices

that will be co-tested include, ISFM, IPM, intercropping of *Brachiaria* forage with maize, forage production, integration crop- livestock systems addressing agroecological elements/principles such as efficiency and recycling.

ii) Activities implemented

i) Questionnaire interview and data analysis: We first identified the stakeholders that could be part of the interviews. Then, we explained to the respondents the overall objective of the interview, i.e., to collect baseline data, understand their impressions on agroecology, their activities related to agroecology and their expectations from the project. The interview was conducted face to face on 55 different stakeholder groups. Data was collected using Kobo Collect App and was analysed using Excel sheet.

ii) Stakeholder meeting organised: We conducted a local meeting at Bujumbura ALL where we gave orientation about the CANALLS project that includes overall goal of the project. We discussed what we expect from the stakeholders and vice versa; and then selected the farmers cooperatives that will work in the project. We realised that the topic of agroecology is new to most of the stakeholders and their understanding is different. Despite several of the farming practices implemented by the stakeholders, are agroecology by itself, they have lack of knowledge on improved agroecological farming practices. Awareness raising, building capacity of extension services and other stakeholders through customized trainings, are needed.

iii) Multi-actor stakeholder community established: In total 20 stakeholder were nominated as candidates to join the membership of ALL (Table 4.8a).

Table 4.8a: No. of stakeholders nominated to join the membership of Bujumbura-ALL

Type of stakeholders	No. of stakeholders nominated for ALL
Farmer org.	4
Governments	n.a.
NGOs	6
Academic inst.	2
Research Inst.	3
Civil society	1
VC actors	4
Total	20

iii) Next steps planned

In Bujumbura ALL, we envisioned the following key activities to be implemented and planned outputs to be achieved during the period of M13-M24. This annual plan is in relation to the ALL implementation of WP3 (Table 4.8b).

Table 4.8b: Key activities planned for M13-M24 (January 2024 – December 2024)

S.No.	Activities to be implemented	Planned outputs	Remarks
1	Organizing regular ALL meetings	Meeting minutes	• Work progress on ALL
2	Resource mapping of ALLs sites	Digital resource maps of ALL sites at a scale	• The map shows soil resources, vegetation, forests, water bodies, land use types, etc.
3	Building capacity of multi-actor community in ALLs	No. of people trained on different topics	• The training could include e.g., agroecology, living labs, etc.

The annual engagement plan for the multi-actors in the ALL will be updated as the project progresses (Table 4.8c).

Table 4.8c: Multi-actor engagement plan for M13-M24 (January 2024 – December 2024)

S.No.	What (activity to implement)	Who (name of stakeholder)	How (methods, approach to use)	Levels of stakeholder engagement
1	Organizing regular ALL meetings	All stakeholders	Interactive meetings	Consult, involve
2	Resource mapping of ALLs sites	Case study partners with support of NIBIO	Participatory GIS	Involve
3	Training and capacity building	All project partners	Practical training, hands on	Involve, co-creative

5. Conclusions and way forward

This deliverable 3.1 report is an initial version of *setting the baseline for the establishment, operation, and monitoring of Agroecology Living Labs in the CANALLS project*. The overall objective is to establish 8 ALLs in East and Central Africa region in four case study countries, namely Burundi (n = 2), Cameroon (n = 1), DRC (n = 4), and Rwanda (n = 1) by working together with case country project partners and stakeholders. In this initial stage, we have managed to establish a multi actor community group in 7 ALLs comprising of different stakeholders. The stakeholders include farmer organizations/ cooperatives, government ministries, research institutions, academic institutions, non-government organizations, value chain actors and civil society. In total, 20 candidates were nominated to join the membership of ALL including 4-7 short listed. In most of the ALLs, the farmers organizations dominate and the numbers of candidates per stakeholder groups differs among the ALLs.

The activities implemented during the last 12 months period of the CANALLS project, and some preliminary achievements gained, have been presented and described. This is in relation to the *planning phase of ALLs* (Task 3.1) and *establishment of ALLs* (Task 3.2). The different steps and/procedures undertaken in the ALL establishment which includes from conducting interviews to convening the first stakeholder meetings, have been described. In this initial phase, the two key activities implemented are establishing multi-actor community in each ALL and defining their roles and responsibilities.

The present report will serve as a living document that will be regularly updated, revised, and re-endorsed during the course of the project. There will be two more versions of the report that will be submitted at Month 30 (mid-term version) and at Month 42 (final version) of the project period. These reports will provide up to date information and analysis on the implementation performance of the ALLs in the CANALLS project.

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Annexes

A: List of members of the stakeholders' candidates for memberships in ALL

Biega ALL: Coffee-based agroecological farming systems with associated trees

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	MUZUSANGABO	Farmer organization	(+243)977621353
2	ASDR	Farmer organization	(+243) 827595963
3	RUGWASIKANYE	Farmer organization	(+243)974360988
4	ADEA	Farmer organization	(+243)994261316
5	Union Communautaire	Farmer organization	ucpuedkivu@gmail.com
6	RUZUSANYE	Farmer organization	(+243)971345729
7	RAEK	Farmer Cooperative	(+243)973475067
8	MINAGRI (Minister of Agriculture	Government institution	(+243)976525314
9	Service National d'appui au developpement de l'horticulture urbaine et peri-urbaine (SENAHUP) Sud Kivu	Government institution	(+243)990840011
10	RURAL DEVELOPEMENT (Minister of Rural Developemnt	Government institution	(+243) 853529760, salvamubama@gmail.com
11	INERA	Research institution	(+243) 973793785
12	CRSN LWIRO	Research institution	(+243) 977447344 pkaleme@gmail.com
13	FDA	Research institution	(+243) 999349727
14	(CAB) ANTIBWAKI	Non-government org.	(+243) 999119950
15	CENTRE KITUMAINI	Non-government org	Centrekitumaini@yahoo.fr
16	PRIMATE EXPERTISE	Non-government org	(+243) 825833821 ak_basabose@primateexpertise.com
17	Virunga coffee	Value-Chain Actors	(+243)990462480
18	TUMAINI CC MITI	Value-Chain Actors	(+243) 993096932 coocatkabare@gmail.com
19	KIVU AGROBUSINESS	Value-Chain Actors	(+243) 853055041 kivuagrobusinessrdc@gmail.com
20	THOMAS BALEZI	Value-Chain Actors	(+243) 981541651
21	ITAV MITI	Academic institution	kulimushiaugustin@gmail.com
22	Université du cinquantenaire (UNI-50)	Academic institution	(+243) 999119950
23	Paroisse St Immaculé of Kavumu	Civil society (catholic church)	(+243)992035314
24	BETEL CHOMBO	Civil society (Protestant church)	(+243)972568215
25	Socitete civile Miti	Civil society	(+243) 993860022
26	Socitete civile Bugorhe	Civil society	(+243)976785376
27	Chef de localité Cibinda	Civil society (Chief)	(+243) 994204910
28	Groupement Miti	Civil society (chief of social groups)	(+243)999479139
29	Radio Maendeleo	Civil society (media)	(+243)853164186

30	GORILLA FM	Civil society (media)	(+243)998965559. mushagalusaventura41@gmail.com
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** Personal data pertaining to telephone number was given as per permission of the individual/organization.*

Kabare ALL: Coffee-based agroecological farming systems with intercropping of annual crops

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	Inspection Provinciale d'Agriculture du Sud Kivu	Government institution	
2	Division Provinciale de Pêche et Élevage	Government institution	
3	Service National de Vulgarisation	Government institution	
4	Comité des négociants et Producteurs de Café Bushi et Buhavu	Farmer org./coop.	+243 974 809 391
5	Genre et Action Sociale	Farmer org./coop.	+243 977 802 114
6	Coopérative des Planteurs de Café de Kabare	Farmer org./coop.	+243 976 307 864
7	Tumaini Coffee Cooperative	Farmer org./coop.	omatumaini@louvaincooperation.org
8	Université Catholique de Bukavu (Teacher)	Academic institution	www.ucb.ac.cd
9	Université Catholique de Bukavu (student)	Academic institution	www.ucb.ac.cd
10	International Institute of Tropical Agriculture	Research Institution	
11	CRSN LWIRO	Research Institution	
12	Institut National Agronomiques Pour L'etude Et La Recherche	Research Institution	
13	Emmanuel Birato	Value chain actors	+243 979 777 382
14	Azukilwango Jeff	Value chain actors	
15	Nediva Bed And Breakfast	Value chain actors	
16	Jacque Muhamiriza	Value chain actors	
17	Aganze Jean Paul	Value chain actors	+243 995 216 909, +243 850 808 776
18	FAO-DRC	Non-Government Org.	
19	MERCY CORPS	Non-Government Org.	
20	Christian Murhula	Civil Society	groupementluhihi@gmail.com
Reserve list			
1	Kivu Coffee		+243 974506721
2	M'bushenyula Magdaleine		
3	Makombe Kabare Janvier		
4	Enfuka Eciza		+243 996 656 561
5	AGDD Services		agddservices@gmail.com
6	Munyemale JEAN		+243 859 684 019

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Giheta ALL: Coffee-based agroecological farming systems

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	Mboneramiryango coop	Farmer cooperative	
2	Nyarunazi coop	Farmer cooperative	
3	NSABIYUMVA	Farmer-cooperative Nyarunazi	
4	Manager coop Nyarunazi	Farmer cooperative staff	
5	Nyinawintore	Tresure-Farmer coop Nyarunazi	
6	Coffee certification officer	COCOCA project staff	
7	Tresure	COCOCA project staff	
8	NKUNDUMUKIZA	Certification officer-COCOCA	
9	Nsabimana	Agronomist -COCOCA	
10	INADES-Formation	Non-Government org.	
11	KAHAWATU	Coffee Processor	
12	HORAMAMA Dry Mill	Coffee Processor	
13	NKURUNZIZA-Village leader	Civil society	
14	ISABU-Natural Resources Research Program	Research Institute	
15	NDUWAYO G.	ISABU-Coffee research station	
16	FABI/University of Burundi	Academic Institution	
17	Ndorimana-AM	Government Institution*	
18	Mpayingeza-Advisor	Government Institution*	
19	Nininahazwe	Government Institution*	
20	BEPEAE Gitega extension service	Government Institution	
Reserve list			
1	Kagisye	ISABU-Agronomist	
2	Ngendakumana P.	IITA-Agronomist	
3			
4			
5			
6			

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Bunia ALL: Cacao-based agroecological farming systems

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	Universite Okapi de Mambasa	Academic Inst.	
2	Université Chrétienne Bilingue au Congo	Academic Inst.	
3	Environment of Mambasa territory	Government inst.	
4	Inspection Peche et Elevage (ITEL)	Government inst.	
5	Inspection Territorial de l'Agriculture	Government inst.	
6	Chefferie de Mambasa	Government inst.	
7	Chefferie de BABILA BABOMBI	Government inst.	
8	Mercy Corps	Non-Government inst.	
9	CARITAS Wamba/Mambasa	Non-Government inst.	
10	Université Catholique du Graben	Research organization	
11	UPCCO	Cooperative	
12	Coopérative Cacao Okapi	Cooperative	
13	AVAVEO	Farmer organization	
14	Coopérative Cacao Okapi	Cooperative	
15	REPALF	Civil society, leader of PYGMIES	
16	Radio Télévision Communautaire Canal de la Paix	Civil Society	
17	UPCCO	Value chain actor	
18	UPCCO	Value chain actor	
19	Producer private	Value chain actor	
20	Producer private	Value chain actor	
Reserve list			
1	Chefferie de Babila Bambombi	Government inst.	
2	UPCCO	Cooperative	
3			
4			
5			
6			

* Personal data pertaining to telephone number was given as per permission of the individual/organization.

Ntui ALL: Cacao based agroecological farming systems

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email, phone)
1	GIC PAMAC	Farmer organization	+ 237 698123823
2	GIC PLAN NTUI	Farmer organization	+ 237 695521708
3	NGANGONA DONGODÖH	Farmer organization	+ 237 677925652/675334012
4	SOCOOCU VIMV MACOPKA	Farmer organization	+ 237 677293444
5	MINADER	Government inst.	+ 237 670 212513
6	Mairie-Ntui	Government inst.	
7	ACEFA	Government inst.	+ 237 679 60 78 67
8	MINFOF	Government inst.	
9	SODECAO	Research institute	+ 237 693139425
10	CIFOR-ICRAF	Research institute	a.degrande@cifor-icraf.org
11	IDH	Research institute	ngwa@idhtrade.org/+ 237 650 74 88 88
12	CDDR-SAILD	Civil society	tetayiamappo@yahoo.fr
13	FODER	Civil society	forest4dev@gmail.com / + 237 677583186
14	FAO-Cameroon	NGO	+ 237 675 306 269
15	AFRICA-IPM	NGO	+ 237 697 033 130
16	GIZ	NGO	+ 237 673 30 10 35
17	Ofi CAM-OLAM	Value chain actor	erasmus.n@ofi.com + 237 697 005 594
18	MUFID	Value chain actor	+ 237 694 060 493
19	SIC CACAO	Value chain actor	
20	Ets PHYTO L'HONORABLE NGUENTCH	Value chain actor	+ 237 675 07 34 50
Reserve list			
1	TELCAR	Value chain actor	
2	Groupe de transformation du cacao	Value chain actor	
3	Centre de l'excellence	Academic institute	+ 237 673 14 05 95
4	Higher Institute of Environmental Sciences	Academic institute	+ 237 677 70 55 82
5	ISAGO	Academic institute	+ 237 696 93 99 59
6	Centre de formation des jeunes agriculteurs de Nachtigal	Academic institute	

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Kamonyi ALL: Cassava-based agroecological farming systems

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	Institut Catholique de Kabwayi	Academic institution	Email: pbicamumpaka@uck.ace.rw
2	Radio Huguka	Civil Society	Tel: 0788617698/0722980055
3	IMPUYABO	Farmer Org/coop.	Tel: 0788710210; email: impuyabo2000@gmail.com
4	KOMINYA	Farmer Org/coop.	Tel: 0788658923
5	KOUBITE	Farmer Org/coop.	0785596985 e mail: koubite@gmail.com
6	KAMONYI DISTRICT	Government institution	Tel: 0788416259 info@kamonyi.gov.rw
7	NYAMIYAGA SECTOR	Government institution	788720804/0782878048; Email: info@kamonyi.gov.rw
8	MUGINA SECTOR	Government institution	Tel: 0788461435, email: info@kamonyi.gov.rw
9	RAB station manager	Government institution	0788527054: parfait.gasana@rab.gov.rw
10	RAB Cassava	Research Institution	0788772201 athanase.nduwumuremyi@rab.gov.rw
11	ICRAF	Research Institution	0788210530, a.mukuralinda@cifor-icraf.org
12	CEFAPEK	Non-Government Org.	Tel: 0783461006; Email: cefapek@yahoo.fr
13	COCOF	Non-Government Org.	Tel: 0788480161; Email: semugazath@gmail.com
14	Global Civil Sharing	Non-Government Org.	Tel: 0782425460; Email: taimable2@gmail.com
15	UGAMA USC	Non-Government Org.	Tel: 0788814519; Email: t.callixte@yahoo.com or ugama@ugama.org
16	Rwanda Organic Agriculture Mov't	Non-Government Org.	Tel: 0788848454, Email: lisechantal@roam.org.rw
17	Cassava Processor-Eulade	Value chain actors	Tel: 0788225874/0722225874/ no e mail
18	Cassava Processor-Alice	Value chain actors	Tel: 0788514645; Email: fidnsenga01@gmail.com
19	Agrodealer-Thierry	Value chain actors	Tel: 0788712702, Email: ittier@yahoo.com
20	Agrodealer-Sophie	Value chain actors	Tel: 0788409811, Email: nyirasangwasophie40@gmail.com
Reserve list			
1	University of Rwanda	Academic Institution	Tel: +2507832140327, Email: umunolla@yahoo.com
2	INGABO farmers 'syndicate	Civil Society	Tel: 0785764482, vmanariyo11@gmail.com
3	IMPABARUTA	Farmer Org/coop.	+250785458084, Email: cooperativeimpabaruta22@gmail.com
4	KABIYAKI	Farmer Org/coop.	Tel: +25 0783102647
5	Cassava Processor-Macumi	Value chain actor	+250788899778

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Uvira ALL: Rice/Casava-based agroecological farming systems

S.No.	Name of Organization (Acronym)	Type of stakeholder	Contact address* (website, email, phone)
1	RIZMA	Farmer org./coop.	n.a.
2	AVPD	Farmer org./coop.	pascalmitambo@gmail.com ; (+243)995162322
3	BAGULA (OP Espoir)	Farmer org./coop.	(+243) 977736888
4	GA3RA	Farmer org./coop.	n.a.
5	SOCOAKI	Farmer org./coop.	(+243)990093536
6	Sagru	Farmer org./coop.	n.a.
7	Mushamalirwa	Value chain actors	(+243)993293759
8	Kibonge	Value chain actors	n.a.
9	IPA	Government institution	estheriziki@gmail.com
10	IPEL	Government institution	dppelsudkivu@gmail.com / sangwamuhigirwa@gmail.com
11	SNV	Government institution	rosewandjo@gmail.com
12	INERA	Research Institution	stylonya@gmail.com
13	CRSN-Lwiro	Research Institution	xavierngo20@gmail.com
14	OXFAM	Non-Government Org.	(+243)971848602
15	World Vision	Non-Government Org.	(+243)975591969
16	UCB	Academic institution	edgardmunganza66@gmail.com
17	UCB	Academic institution	kumbuka.shweka@ucbukavu.ac.cd
18	Inst.Kashenyi	Academic institution	n.a.
19	Hasani Shabani	Civil Society	n.a.
20	Radio Mutula	Civil Society	radiocommunautaireluvungi@gmail.com , (+243)973498236 chadkangele@gmail.com
Reserve list			
1	ATVEDER	Farmer org./coop.	atvederuvira@gmail.com
2	COOCAPA	Farmer org./coop.	n.a.
3	Wenda	Value chain actors	(+243)997807613
4	Mushemuka	Value chain actors	n.a.
5	Inst.Itara	Academic institution	kashindshimbe@gmail.com
6	CICR	Non-Government Org.	n.a.
7	Mulangaliza	Civil Society	(+243)993702566

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Bujumbura ALL: Maize-based agroecological farming systems

S.No.	Name of Organization	Type of stakeholder	Contact address* (website, email)
1	University of Burundi/FABI	Academic institution	
2	High Agriculture Training Institute	Academic institution	
3	ISABU-Natural resources Research Program	Research Institution	
4	ISABU-Maize unit	Research Institution	
5	IITA (Ngendakumana P)	Research Institution	
6	PRDAIGL Coordinator	Non-Government Org	
7	BD	Non-Government Org	
8	ADISCO	Non-Government Org	
9	CAPAD	Non-Government Org	
10	RBU2000+	Non-Government Org	
11	Burundi Organic Agri. Mov't	Non-Government Org	
12	SANGWE Cooperative	Farmer org.	
13	Dukingirisi Coop	Farmer org.	
14	CAFMU	Women farmer org.	
15	CJAPAE	Youth farmer org.	
16	Duhuzumutima	Value chain actor	
17	Maize Processor-Nicayenzi	Value chain actor	
18	Agrodealer-Gilbert	Value chain actor	
19	Agrodealer-Kanyamuneza	Value chain actor	
20	Migera Mosque	Civil society	
Reserve list			
1	University of Ngozi	Academic institution	
2	Light University of Bujumbura	Academic institution	
3	Retailor-Kwizera	Value chain actor	
4	Maize Processor-Niyongabo	Value chain actor	
5	Nsabiyumva	Value chain actor	
6	Village leader-Ntakirutimana	Civil society	

* Personal data pertaining to telephone number was given as per permission of the individual/organization.

B. List of contact persons for each ALL: their roles and email address

Case Country	ALL name	Demo site name	Contact persons	Partner	Role	Email	
DRC	Biega	Birimano, Bushushu, Nyamukubi	Balagizi Karhagomba, Innocent	APDIK	Coordinator	balkarh2015@gmail.com	
			Ntamwira Bagula Jules	INERA	member	ingjules@yahoo.fr	
			NTAKOBAJIRA NTUGULO Louange	GASD	member	louangennl@gmail.com	
	Bunia	Mambassa	Charles Sivirihauma	RIKOLTO	Coordinator	charles.sivirihauma@rikolto.org	
			Germaine Furaha Mirindi	RIKOLTO	member	germaine.furaha@rikolto.org	
			Wivine Munyahali	UCB	member	wivine.munyahali@ucbukavu.ac.cd	
	Kabare	Kabamba	BYAMUNGU BURUME Alain	GASD	Coordinator	albur2002@gmail.com	
			Ruphine Batumike	IITA - DRC	member	R.Batumike@cgiar.org	
			Janvier Mulumuna	UCB	member	mulumuna.walola@ucbukavu.ac.cd	
	Uvira	Kamayola, Bwegera, Luvungi	Kokou, Kintche	IITA - DRC	Coordinator	k.kintche@cgiar.org	
			Katunga Musale Dieudonne	INERA	member	stylonya@gmail.com	
			Augustin Rushunda	RIKOLTO	member	augustin.rushunda@rikolto.org	
Burundi	Bujumbura		Willy IRAKOZE	ISABU	Coordinator	willy.irakoze@isabu.bi	
			Marie-chantal NIYUHIRE	ISABU	member	marie-chantal.niyuhire@isabu.bi	
			KAGISYE Alain	ISABU	member	alain.kagisye@isabu.bi	
			Willy EMERA Desire	ISABU	member		
			Deo HAVYARIMANA	ISABU	member		
			Jean Marie Vianney	ISABU	member		
			Patrick Mutuo	IITA - Burundi	member	pk.mutuo@cgiar.org	
			NGENDAKUMANA Pierre Claver	IITA - Burundi	member	PC.Ngendakumana@cgiar.org	
	Giheta			Gilbert Nsabimana	COCOCA	Coordinator	gilbert@cococaburundi.com
				Jonas Nzohabonayo	COCOCA	deputy coordinator	
				Francine Niyonizigiye	COCOCA	member	
				Josias Niyoyitungira	COCOCA	member	
				Audace Irakoze	Giheta co-op	member	
				NIYUHIRE Marie-Chantal	ISABU	member	marie-chantal.niyuhire@isabu.bi
Sam Fan	NATURLAND	???	s.fan@naturland.de				
Rwanda	Kamonyi	COPEP, MFARM	Speciose Kantengwa	IITA - Rwanda	deputy coordinator	s.kantengwa@cgiar.org	
			Emmanuel Rukundo	IITA - Rwanda	member	E.Rukundo@cgiar.org	
			Vicky Ruganzu	RAB	Coordinator	Vicky.ruganzu@rab.gov.rw	
			Jonas Iradukunda	COPEP	member	ejonas61@yahoo.com	
			Francis Kavutse	MFARM	member	kavusefrank@gmail.com	
			Barthazar Masengesho	MFARM	member	maggotfarm ltd@gmail.com	
Cameroon	Ntui		Tata Ngome Precillia Ijang	IRAD	Coordinator	ijang2001@yahoo.fr	
			Tchouga Alvine Ornella	IITA - Cameroon	deputy coordinator	a.tchouga@cgiar.org	
			Harmand Jean-Michel	CIRAD	member	jean-michel.harmand@cirad.fr	
			Fiaboe Komi K. Mokpokpo	IITA	member	k.fiaboe@cgiar.org	
			Onana Adibime Adalbert	IITA - Cameroon	member	a.onana@cgiar.org	

			KAKDEU Louis-Marie	CAMFAAS	member	kakdeu@yahoo.fr
			Nestor Ngouambe	AFAAS	member	nngouambe@afaas-africa.org
			Nnomendoue Alvine	SCOOPMAN	member	odefcom_org@yahoo.fr