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BASELINE EVALUATION REPORT FOR THE FOURTH PHASE OF THE PROMOTING ELUM AND NETWORKING FOR LIVELIHOOD IMPROVEMENT (PENELI IV) PROGRAMME

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Final Evaluation Report

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ABBREVIATIONS AND ACRONYMS

AFREDEC	African Research and Economic Development Consultants Limited
ASALs	Arid and Semi-Arid Lands
CBOs	Community based organizations
CEO	Chief executive officer
CIDPs	County integrated development plans
EOA-I	Ecological Organic Agriculture Initiative
FGDs	Focus group discussions
GOK	Government of Kenya
KALRO	Kenya Agriculture and Livestock Research Organization
KEPHIS	Kenya Plant Health Inspectorate Service
KIIs	Key informant interviews
MOs	Member organizations
NGOs	Non-governmental organizations
NRM	Natural resources management
PELUM	Participatory Ecological Land Use Management
PENELI	Promoting ELUM and networking for livelihoods improvement
SHF&P	Small holder farmers and pastoralists
TOR	Terms of reference
ZNC	Zonal network coordinators

EXECUTIVE SUMMARY

Promoting ELUM (ecological land use management) and networking for livelihoods improvement (PENELI IV) is a four-and-a-half-year project implemented by Participatory Ecological Land Use Management (PELUM) Kenya. The project aims to enhance resilient livelihoods through sustainable agricultural and environmental practices among smallholder farmers and pastoralists. The programme focuses on four strategic areas: advocacy and policy influence; agro enterprise and market development; climate change and sustainable development; and institutional development. The programme also seeks to enhance gender inclusion and participation across the four thematic areas with special attention given to women, youth, and special interest groups.

PELUM Kenya commissioned a baseline evaluation which sought to provide basis for subsequent programme performance monitoring and results measurement of the intervention hence be able to assess the programme impact throughout the project period. The baseline evaluation focused on four project objectives mainly to strengthen PELUM Kenya network to advocate for integration of agro-ecology in policy as an effective strategy for food security and resilience building; to enhance agro-enterprise initiatives among smallholder farmers and pastoralists (SHF&P) for increased household incomes and adoption of agro-ecological practices; to enhance resilience of smallholder farmers and pastoralists on effects of climate change and environmental degradation; the governance, management and operations of PELUM Kenya network institutions are functioning and delivering services effectively and lastly involvement of women, youth and other special interest groups.

The baseline study used a mixed methodology approach that incorporated the use of both qualitative and quantitative research techniques. Primary data was obtained from the PELUM Kenya secretariat level (headquarters and zonal level); member organizations (MOs); national and county level government and non-governmental stakeholders', and direct beneficiaries' (smallholder farmers and pastoralists) level. The primary data was triangulated with relevant secondary data.

The baseline study noted that on advocacy and awareness creation on integration of agro-ecology, the buy-in into agro-ecology at the national and county level was still low albeit there being increased public interest and dialogue on agro-ecological practices. A draft national organic agriculture strategy has been developed through strong support from PELUM MOs but is yet to be adopted. A key milestone in government integration of agroecology is the formation of the Intersectoral Forum for Agrobiodiversity and Agroecology (ISFAA) which provides a platform through which stakeholders at the intersection of biodiversity conservation and agricultural production can interact to discuss, share knowledge and information, influence policy, fundraise, implement joint programmes, and monitor and review progress towards mainstreaming biodiversity and ecosystem services in the agricultural sector and landscapes.

At the county level, there has been some gravitas towards integration of agro-ecology into the county policies and strategies. The PELUM MOs have been playing a major role in influencing the integration of agro-ecology in the county integrated development plans (CIDPs). However, understanding of agro-ecology coupled with limited financial and technical capacities within the network are major gaps in advocacy and lobbying. Further, there is no organized tracking

of the implementation of the policies and strategies that have been adopted or ensuring that the interventions proposed are included in the CIDPs, annual plans and budgets.

On enhancing incomes of SHF&P and marketing for agro-ecological products, the average annual income for the interviewed smallholder farmers and pastoralists was Kshs 118,613. Crops, livestock, and forest products accounted for about 55% (Kshs 64, 754) of the household incomes. However, the level of value addition was very low with only value-added livestock and crops products accounting for 2.3% of the household income. Reliance of farm gate and middlemen were the most prominent marketing channels in all the four (4) zones as indicated by 46.6% and 36.6% of the small holder farmers and pastoralists respectively. Marketing through well-defined or organized markets such as groups/co-operatives/associations/contract marketing was utilized by only 6.8% of the smallholder farmers and pastoralists.

On adoption of climate resilient agro-ecological practices, awareness of the term climate change among the SHF&P was very high at 94.4%. Some of the climate resilient agro-ecological practices adopted were agroforestry, bio-intensive/organic farming, crop diversification, kitchen gardening, conservation agriculture, use of manure, small livestock enterprises, soil and water conservation, permaculture, integrated pest management (IPM), bio-controls (especially push and pull technology), vermiculture, voluntary savings and loans, irrigation, bee keeping, diversified, climate resilient livelihood options, in situ water harvesting technologies, seed banks for pulses and cereals, value addition, and pasture conservation and management.

On governance, management and operations of PELUM Kenya network institutions, horizontal and vertical networking was on a positive trajectory. However, there were gaps in having a strong monitoring and evaluation (M&E) system and M&E technical capacity. Resource mobilization strategies and financial management strategies are also important areas for both the network and MOs that could be tweaked to expand from the traditional donors. Member driven joint initiatives and collaborations have been growing steadily and should be encouraged and enhanced.

Lastly on gender mainstreaming, concerted efforts were made to involve women, youth and other special interest groups in agro-ecological activities. It was noted that involvement of women was successful. However, the involvement of youth was not very successful.

Some of the key recommendations from the evaluation given for consideration include:

i. The project should leverage on engagement forum for stakeholders outside the network including national and county governments and partners with common interest.
ii. There is need to sensitize the project beneficiaries and clarify their roles and expectation before the project is rolled out for implementation.
iii. According to the findings, there are some initiatives within the targeted project areas that are congruent with PENELI IV objectives. There is need for the project to leverage and prioritize these initiatives in the initial years as the project seeks to introduce new innovations. Focusing on this low hanging fruits will ensure smooth transition and build trust and confidence. For example, the project should leverage on the achievement of PENELI III. In addition, leveraging on other projects, programs and

initiatives such as global advocacy project (GAP), EOA-I, knowledge centre for organic agriculture (KCOA) project, and intersectoral forum for agrobiodiversity and agroecology (ISFAA) should be emphasized to enhance complementarity and the impacts of the interventions.

iv. There is need to invest in capacity building for the community and project executants to fully internalize the intended project outcomes. This will aid a paradigm shift from business-as- usual towards focusing on outcomes and impacts. The programme needs to adopt more practical training and demonstration of technologies. There is a need for more exchange visits and educational tours to areas where some of the technologies have been very successful so that the farmers can exchange ideas and learn some of the success factors.

v. There is need for continuous capacity building of secretariat and network members based on the capacity needs identified in the baseline study.

vi. Joint fundraising and enhanced lobbying to other donors in sustaining the PELUM Network activities.

vii. There is need for a tracking mechanism of the implementation of the policies and strategies that have been adopted and ensuring that the interventions proposed are included in the CIDPs, annual plans and budgets.

viii. There is a need to establish robust monitoring and evaluation system that articulates project monitoring and evaluation processes and procedures for ease of project performance tracking.

ix. Sensitization on men, youth and special interest groups involvement in agro-ecology needs to be enhanced.

x. *Upscaling of climate resilient practices/technologies:* Agroforestry through drought resistant fruit trees growing; In-situ water harvesting, and roof catchments; solar driven irrigation technology; soil and water harvesting technologies such as use of Zai pits and conservation agriculture would have a lot of value for the communities especially those in the ASAL areas; Diversification of livelihoods by integrating crops production, livestock production, agroforestry and beekeeping. This integrated with use of manure and integrated pest management as well as seed banking will enhance sustainable agriculture. Pasture management and conservation and water harvesting technologies such as terracing, small pans, are important interventions in the ASALs for livestock keepers.

xi. Leverage on county development planning. The project beginning towards the end of the current CIDPs (2017-2022) gives an opportunity to agroecology to be adequately anchored on the CIDPs of (2023-2027).

xii. Mid-term and end line evaluations should be conducted using the same methodology to allow comparison of findings and measuring of attribution/contribution of the project to the results.

1 INTRODUCTION

1.1 About the Report

This report presents the results of a baseline evaluation of the fourth phase of the Promoting ELUM (Ecological Land Use Management) and Networking for Livelihoods Improvement (PENELI IV) – a four-and-a-half-year project implemented by PELUM Kenya. It also incorporates comments and revisions emanating from the validation workshop held on 3rd February, 2022 at RODI Kenya, Kiambu County, Kenya (attendance list attached as Appendix 8). The project aims to enhance resilient livelihoods through sustainable agricultural and environmental practices among smallholder farmers and pastoralists in Kenya. The study sought to collect relevant baseline data and information to set a basis upon which the project performance, results, and impacts will be measured. The report presents the baseline values of these indicators against which future project progress and impacts will be assessed, especially at the mid-line and the end-line evaluations

1.2 Outline and Arrangement of the Report

The report is organized into five (5) Chapters including an Introduction; Methodology; Findings and Discussions; Conclusions and Recommendations; and Appendixes. Chapter 1, introduces the contents of the report, including the background to the project, the objectives of the baseline, and the roles of the client and project implementing partners. Chapter 2 comprises the approach and the methodology used in preparing, conducting the study, and presenting the findings. It includes the study design, sampling strategy, data collection approaches, and the risks and limitations of the approaches applied.

Chapter 3 is the findings and discussions. For ease of follow up, and to address the data needs of the baseline study, the results are organized according to the key result areas of the project. These include the socio-demographic and socio-economic background of the target groups and beneficiaries; findings on advocacy and awareness creation on integration of Agroecology in policy; levels of incomes and marketing of agroecological products; adoption of climate resilient agroecological practices; finding on governance, management, and operations of PELUM Kenya Network institutions and gender mainstreaming within the network. Finally, the report presents updated project log-frame showing baseline values of the established indicators.

Major conclusions and recommendations from the study is presented in Chapter 4. These are aligned to the key indicators and result areas of the projects. All the other information is presented as appendices to the report in the last Chapter (Chapter 5 -Appendices).

1.3 About the Client (PELUM Kenya)

Participatory Ecological Land Use Management (PELUM) association is a network of civil society organizations (CSOs) and NGOs working with small-scale farmers in east, central and southern Africa. It is an association of indigenous African network with over 250 Civil Society Organizations drawn from 12 African Countries of which Kenya is a member. PELUM Kenya is the Kenyan Chapter of the larger PELUM association and comprises of 57 Member Organization in 42 counties across the Country. The mission of PELUM Kenya is to promote agroecological principles and practices among member organizations, small holder farmers and pastoralists communities in Kenya. This is achieved through networking, capacity building, information sharing and advocacy.

The network operates through a zonal structure made up of four (4) operational zones namely: Nairobi and Central Zone with 16 Member Organizations (MOs); Upper Eastern and Northern Kenya Zone with 11 MOs; Lower Eastern and Coastal Zone with 12 MOs; and Rift and Western Kenya Zone with 18 MOs.

1.4 About PENELI IV Programme

PENELI IV (Promoting Ecological Land Use Management (ELUM) and Networking for Livelihoods Improvement Phase IV) is a four-and-a-half-year programme. The programme addresses the issues that have come about because of PELUM Kenya's past project engagements and programmes. It also addresses itself to the organizations strategic plan for the years 2021-2025.

The overall goal of the Programme is to enhance resilient livelihoods through sustainable agricultural and environmental practices among small holder farmers and pastoralist. The programme focuses on four strategic areas: advocacy and policy influence; agro enterprise and market development; climate change and sustainable development; and institutional development. The programme also seeks to enhance gender inclusion and participation across the four thematic areas with special attention given to women, youth, and special interest groups. The programme intends to adopt different approaches to the four strategic areas.

The advocacy and policy influence focuses on evidence-based advocacy, especially on issues impacting women and youth as well as climate change. The agro-enterprise and market development aims to expose the member organizations to Agribusiness opportunities, knowledge and skills thereby empowering the smallholder farmers and pastoralists (SHP) they work with to engage in agro entrepreneurship to improve incomes and thereby livelihoods. The climate change and sustainable development has a focus on enhancing the capacity of Member Organizations and farmers on adaptation strategies, aims to conduct exposure and learning visits and exchange programmes. PELUM Kenyan tends to influence policies geared towards adaptation plans for climate change and environmental management; integration of agro ecology at the local and national level. The institutional development will adopt a comprehensive capacity strengthening approach that will include capacity building for knowledge development, skill and attitude adjustment among the target groups.

1.5 Objectives of the Baseline Evaluation

The baseline evaluation gathered relevant baseline data and information to provide a basis for subsequent programme performance monitoring and results measurement of the intervention. This will enable the organization and its network partners to be able to assess the programme impact throughout the project period.

The assignment specifically targeted to gather data on:

a) Indicators for all outcomes and outputs detailed in the programme document, and test how realistic the targets are based on the baseline data.
b) The organizational/institutional capacity of the member organizations (MOs) in terms of operational and staffing capacities, mandates, and training needs.
c) Inclusion of women, youth, and special interest groups, establish their level of participation and roles in the programme.
d) Advocacy and awareness creation on key issues within the programme and the network, to identify areas that need advocacy and public awareness.

e) Information relating to markets for agro-ecological products (crops and livestock), the market systems and the related opportunities and challenges
f) Existing technologies currently employed to tackle climate change and establish cost of adopting and scaling up those technologies and their effectiveness in improving resilience.

1.6 Scope and Focus of the Evaluation

The Baseline assessment of the PENELI IV covered the four zones where the programme is to be implemented. The data for the survey was obtained at four (4) tiers: the PELUM Kenya secretariat level (headquarters and zonal level); Member Organization Level; National and County Level Government and Non-Government stakeholders' level; and direct beneficiaries' (small holder farmers and pastoralists) level.

2 BASELINE METHODOLOGY

2.1 General Approach and Methodology

Overall, the evaluation used a mixed methodology approach that incorporated the use of both qualitative and quantitative research techniques. The approach was designed to ensure that all key stakeholders are properly mobilized and involved at all stages of the assignment. This would enhance ownership of the final output of the evaluation process and may lead to effective utilization of the study results by PELUM Kenya, the participating Member Organizations and the donors (Bread for the World and the Swedish Society for Nature Conservation).

2.2 Research Questions and Sources of Data

The study was guided by the PENELI IV objectives, key result areas and the indicators. The data was sourced from review of relevant literature, key informant interviews (KIIs) with PELUM Kenya Network (Secretariat and Member Organizations-MOs); KIIs with National and County Government Departments and other relevant non-State actors on policy issues in agroecology and climate change and interviews with a sample smallholder farmers and pastoralists in the programme zones.

The research questions and methodology for each of the indicators is described in the baseline assessment research matrix below (Table 2.1).

Table 2-1: The Baseline Assessment Research Matrix

Project Objective	Expected Results	Indicators	Research Questions	Methodology
Objective 1	**Result 1**	**Indicator 1.1**		
To strengthen PELUM Kenya network to advocate for integration of Agroecology in policy as an effective strategy for food security and resilience building	PELUM Kenya MOs actively advocate for the integration of agroecology as a strategy for food security and resilience building in National and County agricultural sector and other related sectors policies.	Agroecology integrated[1] in at least five agriculture related policies at national and county levels.	• What are the current strengths & weaknesses of PELUM Kenya in Advocacy? • What are the current policies influenced or in the process of being developed through the PELUM Kenya network? • What lessons can be learned from other state and non-state policy influencers and makers that would enhance the capacity	• Review agricultural related policies to verify integration of agro ecology in the policies. • Key informant interviews (KIIs) to establish current policies influenced or in the process of being developed through the PELUM Kenya network • Key informant interviews (KIIs) to state and non-state policy influencers and makers at National and County levels
		Indicator 1.2		
		At least two agroecological projects are supported[2] by national or county governments.	• What is the level of project support the government at both levels (national and County) provide to agro ecological projects (Number of Project Supported)	• Review of MOAL & F reports at national and County level • Key informant interviews (KIIs) MOAL&F • KIIs with MOs and ZNCs
Objective 2	**Results 2**	**Indicator 2.1**		
To enhance agro-enterprise initiatives among SHF &Pastoralist for increased household incomes and adoption of agro-ecological practices	Agro-enterprise initiatives among SHF & Pastoralists adopting agro-ecological practices are successfully linked to markets.	5% increase in household incomes among the target smallholder farmers and pastoralists by December 2023	• Level of household incomes	• Digital household survey to be done to a sample of SHF & Pastoralist
		Indicator 2.2		
		At least 300 SHF confirm that they are linked to accessible and reliable markets for agroecological products by December 2023.	• Proportion of SHF &Pastoralist linked to accessible and reliable markets for agroecological products • Marketing challenges	
Objective 3	**Results 3**	**Indicator 3.1**		

[1] Integration involve mainstreaming agroecological practices in different agriculture related

[2] Support from the government can be informed of technical and/or financial support

Project Objective	Expected Results	Indicators	Research Questions	Methodology
To enhance resilience of smallholder farmers and pastoralists on effects of climate change and environmental degradation	SHF and pastoralists have adopted practices that are climate resilient and/or counter environmental degradation.	At least five climate resilient agroecological practices disseminated by 30 MOs and adopted by at least 150 SHF and pastoralists by December 2023.	• No of climate resilient agroecological practices disseminated by MOs • Level of awareness of climate resilient agroecological practices by SHF and pastoralists • Level of adoption of climate resilient agroecological practices by SHF and pastoralists • How could the practices be replicated?	• KIIs with MOs on climate resilient agroecological practices they disseminate • Household survey with a sample of SHF & Pastoralist
		Indicator 3.2		
		At least five degraded natural sites restored and rehabilitated by December 2023.	• What is the number of degraded natural sites identified in the project areas? • What is the level of degradation in identified sites (soils (erosion, crop yields); water (quantity, quality); vegetation cover)? • How are the degraded sites being restored and rehabilitated?	• KIIs with PELUM Kenya Team and MOs to determine the degraded natural sites identified in the project area. • Participatory degradation assessment through observation (expert opinions through photos, picking GIS coordinates) and users' opinion • FGDs with SHF and pastoralists • KIIs with the environment departments at the County level for the identified sites
Objective 4	**Results 4**	**Indicator 4.1**		
The governance, management and operations of PELUM Kenya Network institutions are functioning and delivering services effectively	The governance, management and operations of PELUM Kenya network institutions are functioning and delivering services effectively.	50% rate of successfully implemented projects.	• How many projects have you completed successfully in the last 5 years? • What are your challenges in project implementation? • What are MOs capacity gaps?	• Face to face & virtual interviews with PELUM Kenya team and all MOs-online survey tool to be developed).
		Indicator 4.2		
		At least eight new member-driven joint initiatives and collaborations in the network by December 2023.	• No of new member-driven joint initiatives and collaborations in the network?	• Face to face & virtual interviews with PELUM Kenya team and all MOs

Project Objective	Expected Results	Indicators	Research Questions	Methodology
			• What are the challenges in member-driven joint initiatives and collaborations in the network? • What could be done to enhance joint initiatives and collaborations in the network?	
		Cross cutting indicators		
	Gender mainstreaming in Network	Gender mainstreamed in network activities	• How is gender mainstreamed in your organization? • What is the gender composition of leadership positions in your organization? • How do you ensure that gender is mainstreamed the communities you work with? • How could gender mainstreaming be enhanced	• Face to face & virtual interviews with PELUM Kenya team and all MO).

2.3 Sampling Strategy for Smallholder Farmers and Pastoralists

Sampling for the SHF and pastoralists was done by selecting groups that partner with the MOs in each zone and are expected to benefit directly from PENELI IV interventions. Four (4) FGDs per zone (16No.) were conducted comprising of 8-12 members each. The list of groups interviewed is presented under Appendix 4.

Quantitative data were collected from individual households that are members of the groups that work with the MOs that will be involved in implementing PENELI IV interventions directly. Sample size was determined by Yamane (1967:886) formula as below i.e., n =N/1+N (e)^2 Where: n is the sample size; N is the population size (number of targeted beneficiaries' households=3750 households) and e is the desired level of precision. Assuming, a confidence level of 95% and level of precision of 5%, the sample size for the household survey was expected to be 192 SHF & Pastoralist. The achievement of the sample is illustrated in Table 2-2 below.

Table 2-2: Household Sample Sizes and Distribution

Zone	County	HH Sample Size (N)		%
		Proposed	Achieved	
Nairobi and central zone	Kiambu	12	11	91.67
	Murang'a/Nyeri	36	37	102.78
	Zonal Total	**48**	**48**	**100.00**
Rift and western zone	Nakuru	24	24	100.00
	Siaya	12	16	133.33
	West Pokot	12	8	66.67
	Zonal Total	**48**	**48**	**100.00**
Lower eastern and coast zone	Kitui	12	18	150.00
	Machakos	12	15	125.00
	Makueni	12	12	100.00
	Kajiado	12	5	41.67
	Zonal Total	**48**	**50**	**104.17**
Upper eastern and northern zone	Laikipia	12	10	83.33
	Samburu	12	14	116.67
	Marsabit	12	15	125.00
	Meru	12	10	83.33
	Zonal Total	**48**	**49**	**102.08**
Overall		**192**	**195**	**101.56**

2.4 Sampling Strategy for Key Informants

The KII respondents were selected based on their role in the project and level of importance in achieving the project objectives. A total of 54 KIIs were conducted as summarized in Table 2-2 below, and the list of informants interviewed is presented in Appendix 5.

Table 2-3: List of Key Stakeholders Sampled

Category	Number of Respondents
Project Secretariat	6
Zonal Coordinators	4
National and Country Government Officials	12
Non- state Actors Policy Actors	1
Member Organizations	31
Total	**54**

2.5 Data Collection Approaches

Quantitative data was collected using a semi-structured household survey questionnaire covering a range of indicators as outlined in the project logical framework. The tool was administered to a sample of smallholder farmers and pastoralists that belong to groups that work with MOs and will directly benefit from the PENELI IV interventions. These were administered by trained enumerators supervised by the key experts. Data was collected digitally using the CSPro platform with face-to-face interviews been preferred. Raw data was uploaded into a database daily and checked for quality. Feedback was shared every evening and a debriefing done early morning before the next day's data collection exercise. A back-end team supported data quality checks, data cleaning in readiness for analysis.

2.6 Data Collection Tools

The following tools were used to collect data from targeted respondents. The data collection tools are attached as Appendix 2.

Qualitative data was majorly collected through KIIs, FGDs and observations. Key Informant Interviews (KIIs) were conducted with people familiar with the PENELI IV project and its components as well as with identified partners; likely to have major influence on the project. These included PELUM Kenya secretariat; the Leadership/management of the participating Member Organizations (Chief Officers and/or Managing Directors or their assigned representatives; Government and non-state policy influencers and makers. KIIs were conducted by the key experts using a discussion guide administered face to face, virtually or self-filled online.

Focused Group Discussions (FGDs) aimed to clarify and elicit deep-seated information on issues not captured by the household questionnaire. To ensure an integrative perspective of the issues to be discussed, FGD groups were selected in consultation with the PELUM Kenya secretariat team and Member Organizations (MOs). These included groups of smallholder farmers and pastoralists that work that with MOs and will directly benefit from the PENELI IV interventions. Each FGD lasted up to 2 hours and were moderated by the key team members with the assistance of a note taker. Prior consent was obtained from the participants for audio recording (Dictaphones) and photos during the FGDs sessions.

2.7 Ethical Considerations during Data Collection

Prior to beginning the household surveys, KIIs or FGDs, the respondents were informed of the interviews' purpose. Informed and voluntary consent was sought from each of the respondents before undertaking any interviews. Each tool included an informed consent form that also assured respondents of confidentiality and anonymity of the information supplied by them.

2.8 Quality Control during Data Collection

The following mechanisms were used to ensure data quality:

- Recruitment of qualified research assistants (enumerators).
- Extensive training of survey team.
- Use of digital data collection devices- These minimized errors and ensured quick corrections in case errors occur
- Backup data team. A backup team was stationed in the consultant's offices to ensure that data collected is consistent and of expected quality.

2.9 Data Analysis Approach

At the end of each data collection day, quantitative household data was uploaded into the consultant's servers where initial quality checks were undertaken. At the end of data collection, all quantitative data was merged and exported into SPSS software in readiness for cleaning and analysis. Initial cleaning checked for completeness and quality before the analysis. Detailed analysis was conducted to generate the desired statistics for the baseline study. In most cases, the analysis includes descriptive statistics including means and percentages. The analysis was also guided by the reporting needs based on the key result areas and the indicators identified in the logical framework. To the extent possible, data was disaggregated by Gender, Zone etc.

The ***qualitative*** data was transcribed and content analysis undertaken. This also combined information from the desk review and qualitative research. Triangulation was used to draw the findings together and to establish the degree which the different data sources complement or refute each other.

2.1 Study Limitations

Overall, the baseline study was conducted with little or no significant challenges apart from the following:

- Inability to complete some of the intended key informant interviews owing to unavailability of some of the targeted respondents. Overall, the assessment was conducted in a time when the country is experiencing Covid-19 and some respondents were unavailable from their workstations. Virtual interviews were incorporated.
- Different understanding of the term agroecology among Government officials at the local levels and among the SHF and pastoralists required a lot of explanation to gather required data.

3 FINDINGS AND DISCUSSION

3.1 Introduction

This Chapter presents the key findings of the baseline evaluation study. The first section describes the respondents' demographic and socioeconomic characteristics. This is then followed by the key findings on the prevailing situation of the intended PENELI IV project expected impacts, outcomes and outputs.

3.2 Socio-Demographic and Socio-economic Background of Study Population

The main socio-economic and demographic characteristics that are important in influencing the adoption or uptake of project interventions at individual, household and community level analyzed were sex, age, education, income and occupation. These characteristics were disaggregated by zone and are useful in analyzing the developmental effects of program interventions.

3.2.1 Sex Distribution

The distribution of respondents by sex indicates that 67.2% of the respondents were women, while 32.8% were men (***see*** *Error! Reference source not found.*). The results are indicative of the possibility of the project having more women participating. This aligns well with the program's objective to have enhanced gender inclusion, explicitly targeting the participation of women and marginalized groups. Discussions with the MOs indicates that there was preference in working with women groups because over time it has been found that interventions through women groups are relatively more successful.

Table 3-1: Distribution of Respondents by Sex

Zone	County	Male %	Female %	No. of HH
Nairobi and central zone	Kiambu	36.4	63.6	11
	Murang'a/Nyeri	59.5	40.5	37
	Zonal average	**54.2**	**45.8**	**48**
Rift and western zone	Nakuru	37.5	62.5	24
	Siaya	56.3	43.8	16
	West Pokot	0.0	100.0	8
	Zonal average	**37.5**	**62.5**	**48**
Lower eastern and coast zone	Kitui	38.9	61.1	18
	Machakos	33.3	66.7	15
	Makueni	8.3	91.7	12
	Kajiado	0.0	100.0	5
	Zonal average	**26.0**	**74.0**	**50**
Upper eastern and northern zone	Laikipia	40.0	60.0	10
	Samburu	0.0	100.0	14
	Marsabit	0.0	100.0	15
	Meru	30.0	70.0	10
	Zonal average	**14.3**	**85.7**	**49**
Overall	**Project area average**	**32.8**	**67.2**	**195**

Source: PENELI IV Baseline Survey, 2021

3.2.2 Age Distribution

Most of the study participants (65.6 %,) were between 36-60 years (***see*** *Error! Reference source not found.***Error! Reference source not found.**). This is an important age group because apart from being an active age group, they are usually engaged in productive livelihood activities for their families. They are therefore expected to be the most engaged in agroecological and climate change mitigation and adaptation practices. This is also an important age group because they are usually the owners of the assets such as land and livestock and are key decision makers in community issues. Youths aged between 18 and 35 years were approximately 16.9% of the sampled respondents. This is an important target age group for PENELI IV interventions and the PELUM Kenya Strategic Plan (2021-2026).

Table 3-2: Distribution of Respondents by Age

Zone	County	Age of respondent (years)			Total (N)
		18-35 (%)	36-60 (%)	>60 (%)	
Nairobi and central zone	Kiambu	0.0	81.8	18.2	11
	Murang'a/Nyeri	2.7	64.9	32.4	37
	Zonal average	**2.1**	**68.8**	**29.2**	**48**
Rift and western zone	Nakuru	4.2	70.8	25.0	24
	Siaya	37.5	50.0	12.5	16
	West Pokot	12.5	62.5	25.0	8
	Zonal average	**16.7**	**62.5**	**20.8**	**48**
Lower eastern and coast zone	Kitui	5.6	83.3	11.1	18
	Machakos	6.7	80.0	13.3	15
	Makueni	16.7	75.0	8.3	12
	Kajiado	20.0	80.0	0.0	5
	Zonal average	**10.0**	**80.0**	**10.0**	**50**
Upper eastern and northern zone	Laikipia	30.0	60.0	10.0	10
	Samburu	64.3	28.6	7.1	14
	Marsabit	26.7	66.7	6.7	15
	Meru	30.0	50.0	20.0	10
	Zonal average	**38.8**	**51.0**	**10.2**	**49**
Overall	**Project area average**	**16.9**	**65.6**	**17.4**	**195**

Source: PENELI IV Baseline Survey, 2021

3.2.3 Education Level

The level of literacy is crucial to the adoption of new practices and innovations as it enables target beneficiaries to discern the importance of such practices. Most of the population sampled for the study had at least a primary level of education (62.1%) ***(See*** *Error! Reference source not found.**)***. This may be explained by the fact that those interviewed belonged to community groups and therefore had some level of education to understand the importance of being in the groups. However, triangulation with FGDs, indicated that there were some members of the groups targeted in the baseline in West Pokot and Marsabit with no formal education. This may be a hindrance to adaptation of new technologies and ideas. It will be therefore important for the project to develop interventions that could be easily understood and adopted by the communities in these project areas.

Table 3-3: Distribution of Respondents by Level of Education

Zone	County	Highest level of education			No. of HH(N)
		Primary %	Secondary %	Tertiary %	
Nairobi and central zone	Kiambu	63.6	36.4	0.0	11
	Murang'a	48.6	37.8	13.5	37
	Zonal average	**52.1**	**37.5**	**10.4**	**48**
Rift and western zone	Nakuru	41.7	41.7	16.7	24
	Siaya	62.5	18.8	18.8	16
	West Pokot	100.0	0.0	0.0	8
	Zonal average	**58.3**	**27.1**	**14.6**	**48**
Lower eastern and coast zone	Kitui	72.2	27.8	0.0	18
	Machakos	26.7	66.7	6.7	15
	Makueni	83.3	16.7	0.0	12
	Kajiado	40.0	40.0	20.0	5
	Zonal average	**58.0**	**36.0**	**6.0**	**50**
Upper eastern and northern zone	Laikipia	70.0	20.0	10.0	10
	Samburu	78.6	21.4	0.0	14
	Marsabit	100.0	0.0	0.0	15
	Meru	60.0	40.0	0.0	10
	Zonal average	**79.6**	**18.4**	**2.0**	**49**
Overall	**Project area average**	**62.1**	**29.7**	**8.2**	**195**

Source: PENELI IV Baseline Survey, 2021

3.2.4 Main Occupation

The project targets to create resilient livelihoods through sustainable and environmentally sound agricultural practices. The project area spreads across the four PELUM Kenya zones with very diverse landscapes and sources of livelihood. Overall, most of the respondents were crop farmers at 69% (highest in Rift and Western Zone and Nairobi and Central, and at 89.2% and 87.5% respectively) (***see Table 3-4***). Livestock keeping was the second most practiced livelihood activity; this was evident in the ASAL areas of Upper Eastern and Northern Kenya Zone, with Laikipia and Marsabit having more than 50% of the respondents engaged in it the primary source of livelihood.

Table 3-4: Distribution of Respondents by Main Occupation

Zone	County	Main occupation of respondent (%)					
		Crops farmer	Business	Formal employment	Livestock keeper	Casual labour	No. of HH (N)
Nairobi and central zone	Kiambu	81.8	9.1	0.0	9.1	0.0	11
	Murang'a/ Nyeri	89.2	2.7	0.0	2.7	5.4	37
	Zonal average	**87.5**	**4.2**	**0.0**	**4.2**	**4.2**	**48**
Rift and western zone	Nakuru	100.0	0.0	0.0	0.0	0.0	24
	Siaya	87.5	12.5	0.0	0.0	0.0	16
	West Pokot	80.0	0.0	0.0	20.0	0.0	8
	Zonal average	**89.2**	**4.2**	**0.0**	**6.6**	**0.0**	**48**

Zone	County	Main occupation of respondent (%)					
		Crops farmer	Business	Formal employment	Livestock keeper	Casual labour	No. of HH (N)
Lower eastern and coast zone	Kitui	88.9	11.1	0.0	0.0	0.0	18
	Machakos	60.0	13.3	6.7	13.3	6.7	15
	Makueni	58.3	25.0	0.0	16.6	0.0	12
	Kajiado	20.0	40.0	20.0	20.0	0.0	5
	Zonal average	**56.8**	**22.4**	**6.7**	**12.5**	**1.6**	**50**
Upper eastern and northern zone	Laikipia	30.0	10.0	10.0	50.0	0.0	10
	Samburu	42.9	21.4	0.0	35.7	0.0	14
	Marsabit	6.7	6.7	0.0	86.6	0.0	15
	Meru	90.0	0.0	0.0	10.0	0.0	10
	Zonal average	**42.4**	**9.5**	**2.5**	**45.6**	**0.0**	**49**
Overall	**Project area average**	**69.0**	**10.1**	**2.3**	**17.2**	**1.5**	**195**

Source: PENELI IV Baseline Survey, 2021

3.3 Findings on Advocacy and Awareness Creation on Integration of Agroecology

The focus of this strategic objective is to advocate for better policy outcomes that would enhance agroecological practices and improve food and nutrition security while at the same time conserving the environment. In PENELI IV, PELUM Kenya MOs are expected to actively advocate for the integration of agroecology as a strategy for food security and resilience building in national and County agricultural sector and other related sectors policies. It is expected that by the end of the project period, agroecology should be integrated in at least five agriculture-related policies at national and county levels through the influence of the PELUM Kenya MOs. Incorporating agroecological friendly policies at the national and devolved level will provide a policy backing that would aid in promoting its technologies at the community level through increased budgets and increased awareness. Some of the key advocacy and awareness creation strategies applied include direct consultations; media engagement; capacity building; partner engagements; advocacy thematic committees; political leaders and other stakeholders' engagement; field days; donor engagements and demonstrations.

3.3.1 Agricultural Related Policies Integrating Agro-ecology Influenced or in the Process of being Developed through the PELUM Kenya Network

The baseline study revealed that the buy-in into agroecology at the National and County level was still low albeit there being increased public interest and dialogue on agroecological practices. There was talk of climate-smart technologies/agriculture, but much remains to be done in terms of implementation and dissemination of these technologies; conventional production methods and approaches are still given more prominence. At the national level, there is no explicit integration of agroecology in the agricultural policies but is implicit using the term climate smart agriculture. It is important to note that engagement with Government agencies has been enhanced. This has culminated with the national government establishing a desk at the Ministry of Agriculture, Livestock and Fisheries (MOALF) to coordinate issues of organic agriculture. A draft national organic agriculture strategy has been developed through strong support from PELUM MOs but is yet to be adopted. A key milestone in government

integration of agroecology is the formation of the Intersectoral Forum for Agrobiodiversity and Agroecology (ISFAA) which provides a platform through which stakeholders at the intersection of biodiversity conservation and agricultural production can interact to discuss, share knowledge and information, influence policy, fundraise, implement joint programmes, and monitor and review progress towards mainstreaming biodiversity and ecosystem services in the agricultural sector and landscapes.

At the County level, there has been some gravitas towards integration of agroecology into the County policies and strategies. PELUM Kenya network has supported development of agroecological policies in Kiambu and Murang'a Counties. Meru, West Pokot, Busia and Makueni Counties are in the process of developing agroecological policies. There should be emphasis on ensuring that these policies are adopted. In addition, the Network has played a role in influencing development of climate change policies in 14 Counties including Kisumu, Migori, Taita Taveta, Kiambu, Meru, Makueni and Tharaka Nithi. Vihiga County is developing a conservation agriculture policy. These policies have captured the salient issues to do with agroecology. Nakuru County has been supported in developing the Agri-nutrition Platform Strategy. The PELUM MOs have been playing a part in influencing the integration of agroecology in the County Integrated Development Plans (CIDPs). However, it is notable that some have included issues of sustainable agriculture and climate smart agriculture.

The Network has in the past contributed inputs in various national bills, regulations, and guidelines. These include Forest policy 2020; 5 agricultural commodity bills; KEPHIS regulations; review of Seed and Plant varieties (amendment) Act 2016; review of Seed and Plant Varieties (conservation, access, and benefits sharing for plant genetic resources' for food and Agriculture, 2015; The draft Agriculture policy; the seed Act 2010; the forest Policy 2020; The Food Crop 2013; annual Biosafety Conference on Guidelines for National Performance Trials (NPTs); Environmental Impact Assessment on BT Cotton NPTs; HIVOs analysis of gaps and opportunities in current seed legislation and policy framework and developed policy recommendations on a possible direction for recognition and implementation of the Open Source Seed System (OSSS). In addition, the network played a huge role in lobbying Parliament in banning of synthetic fertilizers.

3.3.2 Strengths & Weaknesses of PELUM Kenya in Advocacy

There is a general sentiment among the PELUM Kenya stakeholders that advocacy and lobbying are on an upper trajectory with the building of synergies among more stakeholders, such as government, member organizations and other civil society organizations that are not within the PELUM Network. The PELUM Kenya Network comprises 56 Member organizations with operations across 42 counties in the Country. This significant number and the sphere of influence that the MOs wield in their respective areas of operation give the organization a national outlook and a voice to pass across its message. The network has an advocacy committee that comprises members from the secretariat, the MOs representatives, the advocacy and implementing partners who can establish a structured dialogue and advocate and lobby for ecological balance to be considered in the production processes. The network has access to donor partners who can support the network's initiatives in so far as promoting Agroecology and Climate change adaptation. Increased visibility using broadcast media and international and national topical days is also a strength of the network. Having complementary programs such as Global Advocacy Programme and EOA-I that have advocacy

and lobbing components in the subject of ecological agriculture is a strength that should be leveraged on.

There are however some weaknesses or gaps that inhibit advocacy and influencing agroecological related policies. There is diverse and broad understanding of agroecology among stakeholders especially among policy makers and influencers in county and national government and at the community levels. For instance, some define it as sustainable agriculture, others as climate smart agriculture, others organic agriculture etc. There is therefore still a need to gather critical mass to push through the concept of agroecology. Inadequate staff with the prerequisite technical capacity within the MOs is still a challenge especially at the zonal levels. This issue is exacerbated by high turnover of staff in the MOs. High turnover of key contact staff at the National and County Government levels through retirement and transfers is a key challenge in the policy influencing process. Policy influencing is an expensive process and lack of adequate financing is a challenge within the network. A key gap is on the tracking of the implementation of the policies and strategies that have been adopted and ensuring that the interventions proposed are included in the CIDPs, annual plans and budgets.

3.3.3 Level of Government Project Support to Agroecological Projects

The support to agroecological projects at the national level are not explicit but there are initiatives on adoption of climate-smart technologies. Climate-Smart agriculture provides an opportunity for transformation within the agriculture sector by uniting agriculture, development, and climate change under a joint plan by integrating the three dimensions of sustainable development by jointly addressing the food security and climate challenges. The Kenya Climate-Smart Agriculture Strategy 2017-2026 aims to adapt to climate change build the resilience of agricultural systems while reducing emissions for enhanced food and nutritional security and improved livelihood. This aligns with the vision of the PENELI Program. Climate smart agriculture, afforestation, rangeland management and restoration, water harvesting and conservation, soil conservation, pasture conservation, irrigation, kitchen gardening and diversified livelihoods are some of the climate smart technologies being promoted by the National and County Government in collaboration with other stakeholders. There has also been support of the Government in providing technical knowledge and oversight in interventions being implemented by PELUM Kenya MOs. National and international events such as World food day, world environmental day are some of the events where there is strong collaboration between PELUM network and the National and County Governments. In addition, at the national level, the Ministry of Agriculture, Livestock and Fisheries (MOALF) intiated the Intersectoral Forum for Agrobiodiversity and Agroecology (ISFAA) which provides a platform through which stakeholders at the intersection of biodiversity conservation and agricultural production can interact to discuss, share knowledge and information, influence policy, fundraise, implement joint programmes, and monitor and review progress towards mainstreaming biodiversity and ecosystem services in the agricultural sector and landscapes.

3.4 Findings on Levels of Income and Marketing for Agroecological Products

PELUM Kenya aims at improved incomes among the smallholder farmers and pastoralist communities through adoption of agro-enterprises and enhanced access to markets for agro-

ecological markets. Agro-enterprise development is an avenue through which the network can assist the farmers to monetize their surplus produce or produce for a particular target market and thereby increase their incomes. The program targets women and youth engaged in start-up and incubation projects to enhance their incomes and improve the agricultural shelf life of their produce through processing and value addition.

3.4.1 Household Incomes among the Smallholder Farmers and Pastoralists

The average annual income for the interviewed smallholder farmers and pastoralists was Kshs 118,613 (***see Table 3-5***). Crops, livestock, and forest products accounted for about 55% (Kshs 64, 754) of the household incomes. However, the level of value addition was very low with only value-added livestock and crops products accounting for 2.3% of the household income. PENELI IV intervention in enhancing value addition and incomes will come in handy in increasing household incomes. A notable finding is that remittances account for 5.3% of household incomes, this should be reduced through the programme interventions.

Table 3-5: Average Annual Household Income

Source of Income	N	Mean (Kshs)	Weight (proportion reporting)	Weighted Mean (Kshs)	Contribution to Total Income
Sale of raw horticultural crops (fruits and Vegetables)	119	39,415	61.0%	24,053	20.3%
Sale of value-added horticultural products (juices, dried, packaged etc.)	8	19,881	4.1%	816	0.7%
Sale of raw cereals and pulses	92	26,555	47.2%	12,529	10.6%
Sale of value-added cereals and pulses	13	22,269	6.7%	1,485	1.3%
Sale of livestock	76	20,457	39.0%	7,973	6.7%
Sale of raw livestock products (milk, eggs, meat, honey)	77	40,663	39.5%	16,057	13.5%
Sale of value-added livestock products (milk, eggs, meat, honey)	9	7,672	4.6%	354	0.3%
Wage earning	103	69,245	52.8%	36,576	30.8%
Remittance	46	26,599	23.6%	6,275	5.3%
Sale of forest products (gums, resins, firewood, charcoal)	18	16,125	9.2%	1,488	1.3%
Other businesses	48	44,720	24.6%	11,008	9.3%
Total				**118,613**	

Source 1: PENELI IV Baseline Survey, 2021

3.4.2 Linkages to Accessible and Reliable Markets for Agroecological Products

Reliance of farm gates and middlemen were the most prominent marketing channels in all the four (4) zones as indicated by 46.6% and 36.6% of the smallholder farmers and pastoralists (SHF&P) respectively (***see Table 3-6***). Marketing through well-defined or organized markets such as groups/co-operatives/associations/contract marketing was utilized by only 6.8% of the smallholder farmers and pastoralists. This affects incomes the smallholder farmers and pastoralists accrue from their agriculture enterprises. The highest proportion of SHF&P that had adopted group marketing models to establish cooperatives or societies that the farmers use to aggregate and market their organic produce as a group was observed in Nairobi and Central Zone (18.8%).

"Kianjugi Organic Farmers group – Kangari in Murang'a, a group working with OACK a member organization working with PELUM Kenya, have most of their members selling at farm-gate. However, there is an organic market at the Kangari Market that is open to members every Tuesday of the week."

Table 3-6: Distribution of Respondents by Marketing Channel

Zone	County	Marketing Channels (%)				
		Farm-gate	Group/ cooperative/ association	Middlemen	Local markets	No. of HH (N)
Nairobi and central zone	Kiambu	63.6	9.1	45.5	0.0	11
	Murang'a	67.6	21.6	59.5	10.8	37
	Zonal Total	**66.7**	**18.8**	**56.3**	**8.3**	**48**
Rift and western zone	Nakuru	37.5	4.2	70.8	0.0	24
	Siaya	75.0	12.5	25.0	31.3	16
	West Pokot	87.5	0.0	0.0	12.5	8
	Zonal Total	**58.3**	**6.3**	**43.8**	**12.5**	**48**
Lower eastern and coast zone	Kitui	55.6	5.6	50.0	27.8	18
	Machakos	33.3	6.7	60.0	33.3	15
	Makueni	41.7	16.7	25.0	41.7	12
	Kajiado	60.0	0.0	0.0	40.0	5
	Zonal Total	**46.0**	**8.0**	**42.0**	**34.0**	**50**
Upper eastern and northern zone	Laikipia	60.0	0.0	50.0	0.0	10
	Samburu	42.9	0.0	57.1	0.0	14
	Marsabit	14.3	0.0	14.3	71.4	7
	Meru	50.0	0.0	37.5	12.5	8
	Zonal Total	**43.6**	**0.0**	**43.6**	**15.4**	**39**
Overall		**42.6**	**6.8**	**36.6**	**14.0**	**185**

Source: PENELI IV Baseline Survey, 2021

Discussions with key informants revealed that the Network has made previous efforts to enhance marketing of agro-ecological products. These interventions include: creating awareness of organic produce though branding and providing of banners, fliers and signage for the Organic farmers' markets and broadcast media engagements; organize forums where producers, traders and consumers interact to increase awareness, share experiences and elaborate on the process and values of organically produced fresh produce and the health benefits and environmental considerations of the ecological organic agriculture; assisting farmers to get organic certificates for their agricultural produce through links to the certification bodies or through the participatory guarantee system (PGS); connect farmers to marketing outlets and processors; linkage to input providers, advisory and extension services.

"Totum Women Self Help Group in West Pokot have received a certificate of recognition from FAO through PELUM Kenya for their efforts at value addition and their honey products, but this has not translated into a sustainable market for its members."

3.4.3 Challenges in Marketing Agroecological Products

Most of the respondents reported that unstable prices (42.2%) were the biggest challenge to the marketing of their produce. Price instability was due to inconsistent local demand, a glut in the market during peak seasons, and information asymmetry occasioned by selling through intermediaries; this and lack of market information (17.4%) was the third primary concern for marketing. Lack of a dedicated organic market (poor market Infrastructure 18.2%) in most areas across the zones also contributed to the poor market performance (***see Table 3-7***). Transporting produce to the main markets was also a challenge to the respondents, while unfair and unregulated competition posed a threat to market reliability and sustainability.

During the focus group discussions, the farmers indicated that lack of value addition to their products was one of the reasons for poor market performance. Shorter shelf life meant they could not access specific markets, mainstream retail stores, and large shops. The MOs felt that the primary reason for the agroecological production system was to ensure that the quality of the food produced was devoid of harmful chemicals, clean and healthy for home consumption, and safe to the environment. Therefore, the drive was to increase awareness and adoption of these practices. The focus now is to explore ways to monetize this enterprise through agro-enterprise development and focusing on the commercial production of organic produce for the market. Under the PENELI III program, the network had set up a marketing committee with membership drawn from MOs at the zonal level; to establish market linkages for some of the value chains developed due to the activities under the agro-enterprise development. A lot of effort is being made to assist farmers in the certification of agroecological products, however the certification process is expensive and cumbersome for the farmers.

Table 3-7: Challenges to Marketing of Agroecological Products

Zone	County	Marketing Challenges (%)						
		Unstable prices	Lack of market information	Poor market infrastructure	Transport challenges	Unfair competition	Other (specify)	No of HH (N)
Nairobi and central zone	Kiambu	100.0	18.2	36.4	18.2	9.1	0.0	11
	Murang'a	86.5	48.6	59.5	2.7	13.5	5.4	27
	Zonal Total	**89.6**	**41.7**	**54.2**	**6.3**	**12.5**	**4.2**	**48**
Rift and western zone	Nakuru	100.0	50.0	33.3	41.7	0.0	4.2	24
	Siaya	87.5	31.3	68.8	50.0	6.3	6.3	16
	West Pokot	100.0	12.5	25.0	100.0	0.0	0.0	8
	Zonal Total	**95.8**	**37.5**	**43.8**	**54.2**	**2.1**	**4.2**	**48**
Lower eastern and coast zone	Kitui	77.8	33.3	33.3	44.4	0.0	11.1	18
	Machakos	86.7	26.7	33.3	46.7	0.0	13.3	15
	Makueni	90.0	10.0	20.0	40.0	0.0	10.0	10
	Kajiado	60.0	0.0	20.0	0.0	0.0	40.0	5
	Zonal Total	**81.3**	**22.9**	**29.2**	**39.6**	**0.0**	**14.6**	**48**
Upper eastern and northern zone	Laikipia	100.0	60.0	0.0	20.0	30.0	0.0	10
	Samburu	100.0	64.3	50.0	42.9	7.1	0.0	14
	Marsabit	44.4	0.0	11.1	11.1	0.0	55.6	9

Zone	County	Marketing Challenges (%)						
		Unstable prices	Lack of market information	Poor market infrastructure	Transport challenges	Unfair competition	Other (specify)	No of HH (N)
	Meru	100.0	44.4	22.2	33.3	0.0	0.0	9
	Zonal Total	**88.1**	**45.2**	**23.8**	**28.6**	**9.5**	**11.9**	**42**
Overall		**42.2**	**17.4**	**18.2**	**15.3**	**2.8**	**4.1**	**186**

Source 2: PENELI IV Baseline Survey, 2021

3.5 Findings on Adoption of Climate Resilient Agroecological Practices

The goal of PELUM Kenya's interventions on climate change resilience and natural resource management thematic area is to enhance resilience of smallholder farmers and pastoralists on effects of climate change and natural disasters. Agroecology is promoted as a means of climate change adaptation and promotes indigenous knowledge. Creating awareness of the subject climate change and its effects and building resilience of the communities is a key intervention of the PENELI IV. PELUM Kenya also seeks to influence policy makers at county, national, and regional levels, and official development partners to systematically integrate climate change adaptation (CCA) issues into policies and to provide more support to the communities to respond, cope and bounce back from the negatives effects of Climate Change and natural disasters. Climate governance and increased participation in decision making is also a key interest of PELUM Kenya. The key interventions proposed in this component are: Natural Resource Management; Disaster preparedness; Climate governance; Soil and water conservation; sustainable water management including water governance, watershed management and rehabilitation; diversification of Agro enterprises and issues.

3.5.1 Level of Awareness of Climate Change

The level of awareness of the term climate change was very high at 94.4% (Table 3.8). Changes in the patterns of weather were reported including changes in the rainfall pattern who most described as being unpredictable, prolonged drier period and rising temperature.

Table 3-8: Proportion Aware of Climate Change

Zone	County	Have you ever heard of the term climate change?		No of HH
		Yes (%)	No (%)	
Nairobi and central zone	Kiambu	100.0	0.0	11
	Murang'a	100.0	0.0	37
	Zonal Total	**100.0**	**0.0**	**48**
Rift and western zone	Nakuru	100.0	0.0	24
	Siaya	100.0	0.0	16
	West Pokot	100.0	0.0	8
	Zonal Total	**100.0**	**0.0**	**48**
Lower eastern and coast zone	Kitui	100.0	0.0	18
	Machakos	100.0	0.0	15
	Makueni	75.0	25.0	12
	Kajiado	80.0	20.0	5

Zone	County	Have you ever heard of the term climate change?		No of HH
		Yes (%)	No (%)	
	Zonal Total	**92.0**	**8.0**	**50**
Upper eastern and northern zone	Laikipia	100.0	0.0	10
	Samburu	71.4	28.6	15
	Marsabit	80.0	20.0	14
	Meru	100.0	0.0	10
	Zonal Total	**85.7**	**14.3**	**49**
Overall	**Project Areas**	**94.4**	**5.6**	**195**

Source: PENELI IV Baseline Survey, 2021

3.5.2 Sources of Climate Change Information

Broadcast Media (Radio and TV) was the most widely accessed source of climate change information reported by 42% of respondents. Earth observations on the changes in the rainfall and other weather parameters such as temperatures and sunshine intervals, and the dry season was the second most widely used mean of determining climate change (23%). This is illustrated in Table 3.9. Civil society Organizations such as NGO and Advocacy networks, i.e., PELUM and its affiliate network members, accounted for 10% of the total information accessed by those interviewed during the baseline. Mobile phones accounted for only 1.9% of the information accessed, and this means that the level of adoption of technology was still a bit low among the respondents interviewed.

Table 3-9: Distribution by Source of Climate Change Information

Source of climate change information (Expressed in %)										No. of HH (N)
Zone	**Radio/TV**	**Newspaper**	**Mobile phones**	**County government**	**National government**	**Chief**	**Civil society organizations**	**Schools**	**Observation**	
Nairobi and Central	62.5	0.0	0.0	4.2	4.2	0.0	6.3	0.0	91.7	48
Rift and Western	95.8	10.4	4.2	4.2	0.0	2.1	25.0	0.0	45.8	48
Lower Eastern and Coast	47.8	2.2	6.5	26.1	6.5	0.0	21.7	8.7	15.2	46
Upper Eastern and Northern	85.4	2.4	2.4	2.4	0.0	0.0	14.6	2.4	0.0	41
Project area	**41.8**	**2.2**	**1.9**	**5.3**	**1.6**	**0.3**	**9.7**	**1.6**	**23.0**	**183**

Source: PENELI IV Baseline Survey, 2021

3.5.3 Impacts of Climate Change

The key impacts of climate change mentioned by respondent were loss of crops, loss of incomes, loss of livestock, decreased water and decreased pasture. Decreased water and pasture is more prevalent in upper eastern and northern zone and lower eastern and coast zone. This is illustrated in Table 3-10 below.

Table 3-10: Perception of Impacts on Climate Change

Impacts of Climate Change	Zone				Project area
	Nairobi and central zone	Rift and western zone	Lower eastern and coast zone	Upper eastern and northern zone	
Loss of crops	93.3%	100.0%	79.6%	93.9%	91.7%
Loss of income	28.9%	91.7%	36.7%	71.4%	57.2%
Loss of livestock	42.2%	8.3%	61.2%	98.0%	52.4%
Decreased water	20.0%	12.5%	65.3%	87.8%	46.4%
Decreased pasture	37.8%	12.5%	28.6%	83.7%	40.6%
Increased prevalence of disease	33.3%	35.4%	6.1%	57.1%	33.0%
Loss of productive assets	13.3%	4.2%	2.0%	61.2%	20.2%
Injury/death	2.2%	4.2%	2.0%	57.1%	16.4%
N	45	48	49	49	191

Source: PENELI IV Baseline Survey, 2021

3.5.4 Climate Resilient Agroecological Practices Disseminated

Some of the notable technologies that they were trained on included: agroforestry, Bio-intensive/organic farming, crop diversification, kitchen gardening, conservation agriculture, use of manure, small livestock enterprises, soil and water conservation, permaculture, Integrated pest management, bio-controls (push and pull), vermiculture, voluntary savings and loans, irrigation, bee keeping, diversified, climate resilient livelihood options, in situ water harvesting technologies, seedbank cereals, value addition, pasture conservation and management, and seedbanks grass seeds (see Table 3-11).

Table 3-11: Trainings on Climate Resilient Agroecological Practices

Agroecological practices	Zone (%)				Project area
	Nairobi & Central	Rift & Western	Lower Eastern & Coast	Upper Eastern & Northern Kenya	
Agroforestry practices	41.7	72.9	22.0	50.0	46.6
Bio-intensive/organic farming	62.5	43.8	0.0	26.7	33.2
Crop diversification including indigenous crops, drought resistant crops	20.8	14.6	50.0	26.7	28.0
Kitchen garden	14.6	56.3	20.0	16.7	26.9
Conservation agriculture- (minimum tillage and soil disturbance, permanent soil cover with crop residues and live mulch	8.3	43.8	32.0	13.3	24.4
Use of manure (compost, animal)	41.7	31.3	8.0	3.3	21.1
Small livestock enterprises (poultry, goats, sheep)	35.4	12.5	18.0	13.3	19.8
Soil and water conservation	6.3	18.8	50.0	3.3	19.6
Permaculture	37.5	0.0	0.0	26.7	16.0
Integrated pest management, bio-controls (push and pull), vermiculture	4.2	43.8	2.0	3.3	13.3
Voluntary savings and loans	0.0	18.8	34.0	0.0	13.2

Agroecological practices	Zone (%)				
	Nairobi & Central	Rift & Western	Lower Eastern & Coast	Upper Eastern & Northern Kenya	Project area
Irrigation	43.8	2.1	0.0	3.3	12.3
Bee keeping	0.0	2.1	0.0	43.3	11.4
Diversified, climate resilient livelihood options	6.3	10.4	8.0	10.0	8.7
In situ water harvesting technologies	18.8	10.4	4.0	0.0	8.3
Seedbank cereals	0.0	14.6	10.0	3.3	7.0
Value addition	4.2	2.1	4.0	16.7	6.7
Pasture conservation and management	4.2	0.0	6.0	0.0	2.5
Seedbanks grass seeds	0.0	2.1	0.0	3.3	1.4
No of HH (N)	**48**	**48**	**50**	**49**	**195**

Source: PENELI IV Baseline Survey, 2021

The main sources of training of the SHF and pastoralists was NGOs (66.7%). Most of the training was delivered by the Member Organizations in various approaches that included Classroom-based instructions, Practical infield demonstrations, and educational tours. An important finding is that farmer led trainings (25.7%) accounts for higher level of training providers than Government agencies. Ministry/department of agriculture (17,5%), CBOs (6.4%) and other Ministries/departments (4.6%) were the other training providers mentioned by the smallholder farmers and pastoralists (See Figure 3-1: Source of Training).

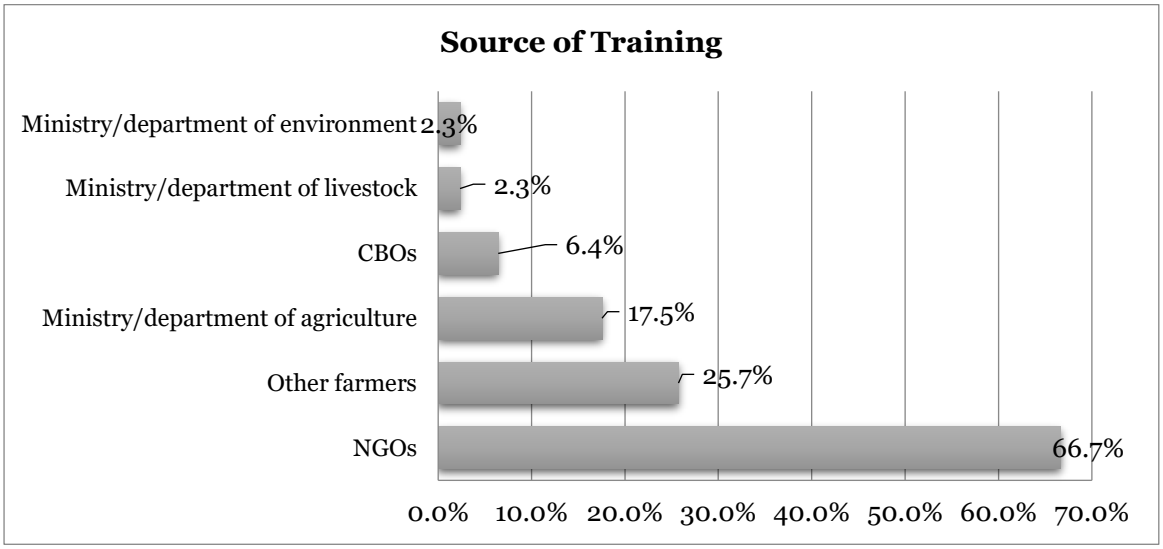

Figure 3-1: Source of Training

3.5.5 Level of Adoption of Climate Resilient Agroecological Practices

The communities residing within the project area bare the effects of climate change that threatens to diminish their livelihood and their survival. Communities responded to climate variability by adopting various tools, instruments, strategies, and activities targeted to defray adverse effects of climate variability. Households resorted to diversified, climate resilient livelihood options such as climate smart agriculture, kitchen gardening, small livestock enterprises (poultry, goats, sheep), beekeeping, irrigation, value addition of the crops and livestock products, voluntary savings and loans. To combat degradation, households within

the area adopted activities that either aid landscape restoration through direct contribution such as tree planting, grass re-seeding and soil and water conservation efforts or those that did not contribute to further degradation such as pasture conservation and management, beekeeping, use of manure, and integrated pest management. Agroforestry was a widely adopted climate change adaptation strategy by 50% of the sampled SHF and pastoralists. This is more prominent Rift and Western zone and Upper Eastern and Northern zone ***(see Table 3-12).*** Kitchen gardening and organic farming was embraced by 32.9% and 30% of farmers of the respondents respectively. This is more prominent in Rift and Western zone and central and Nairobi zone. Seedbank cereals, value addition and pasture conservation and management had the lowest adoption rate of less than 10% and should be an emphasis for the programme.

Table 3-12: Level of Climate Resilient Agroecological Practices

Agroecological practices	Zones (%)				
	Nairobi and Central	Rift and Western	Lower Eastern & Coast	Upper Eastern & Northern	Project area
Agroforestry practices	33.3	75.0	16.0	75.9	50.0
Kitchen garden	10.4	72.9	24.0	24.1	32.9
Bio-intensive/ organic farming	54.2	41.7	0.0	24.1	30.0
Crop diversification including indigenous crops, drought resistant crops	14.6	8.3	44.0	37.9	26.2
Conservation agriculture- (minimum tillage and soil disturbance, permanent soil cover with crop residues and live mulch	2.1	43.8	24.0	3.4	18.3
Use of manure (compost, animal, Bokashi)	29.2	33.3	6.0	3.4	18.0
Soil and water conservation	4.2	16.7	42.0	3.4	16.6
Small livestock enterprises (poultry, goats, sheeps)	35.4	8.3	16.0	3.4	15.8
Permaculture	20.8	0.0	0.0	41.4	15.6
Integrated pest management, bio-controls (push and pull), vermiculture	0.0	50.0	2.0	0.0	13.0
Voluntary savings and loans	0.0	16.7	28.0	0.0	11.2
Irrigation	33.3	6.3	0.0	3.4	10.8
Bee keeping	0.0	2.1	0.0	37.9	10.0

Agroecological practices	Zones (%)				
	Nairobi and Central	Rift and Western	Lower Eastern & Coast	Upper Eastern & Northern	Project area
In situ water harvesting technologies	22.9	6.3	4.0	3.4	9.2
Seedbank cereals	0.0	10.4	8.0	17.2	8.9
Diversified, climate resilient livelihood options	2.1	8.3	0.0	6.9	4.3
Value addition	0.0	0.0	0.0	17.2	4.3
Pasture conservation and management	4.2	0.0	2.0	3.4	2.4

Source: PENELI IV Baseline Survey, 2021

Further analysis of the baseline survey data indicated that at least 85% of the respondents had adopted at least 1 agroecological practice ***(See Table 3-13).*** The average number of practices adopted were three (3).

Table 3-13: Number of Agroecological Practices Adopted

No of agroecological practices adopted	No of SHF&P that adopted	Proportion that adopted
0	29	15%
1	29	15%
2	34	17%
3	33	17%
4	28	14%
5	42	22%
Total	**195**	**100%**

Source: PENELI IV Baseline Survey, 2021

3.5.6 Rehabilitation of Degraded Sites

One of the key interventions of the PENELI IV programme is to ensure that at least five degraded natural sites restored and rehabilitated by December 2023. In PENELI III, fifteen (15) out of targeted ten degraded sites were rehabilitated in four (4) Zones. These included rehabilitation of water catchments, afforestation/ tree planting, soil, and water conservation, improving soil health among other interventions.

Discussions with the MOs and observations noted that there were many degraded sites within the project zones. The degradation included deforestation, gullies, rangeland /grazing land degradation, degradation of water catchments, invasive plant species, soil erosion' loss of soil fertility. The MOs are currently implementing interventions on rehabilitation of degraded areas. These include rehabilitation of forest land; terraces; building of gabions; rehabilitation of water structures; promotion of planned grazing; reseeding and protection to allow regeneration; fencing forest land; community dialogues on environmental conservation

3.5.7 Technologies Currently Employed to Tackle Climate Change Proposed for Scale Up

Agroforestry is a technology that can easily be scaled up because it is supported by a myriad of stake holders both Government and non-governmental. It is also fully acceptable by the SHF &P. Fruit trees growing should be adopted because they serve the purpose of increasing tree cover thus absorbing carbon emissions and reducing desertification and they improve food and nutritional security through providing fruits. Drought resistant tree seedlings are easily available in all the zones at affordable prices.

A major challenge of tackling climate change is lack of water to provide for crops, livestock, agroforestry and for domestic use. The zones source water from various sources including rivers, water pans, dams, springs, rivers among others. In-situ water harvesting, and roof catchments are technologies that could assist in water conservation for production services. Solar driven irrigation technology is a very viable climate change adaptation mechanisms that could be adopted by the SHF &P. This is a technology when integrated with soil and water harvesting technologies such as use of Zai pits and conservation agriculture would have a lot of value for the communities especially those in the ASAL areas.

"For instance, a visit to a farm that had adopted Sunculture solar technology revealed that adoption of the technology by an individual farmer in Katangi, Machakos County yields high profits for small scale irrigation.

- The purchase and installation of the solar equipment (with 3-year warranty) cost to irrigate 2 acres of land – Kshs, 146,000 when purchased using higher purchase or KES 110, 000 if paid cash
- Building 4 tanks using old bricks cost Kshs 10,000
- Boosting with generators-Kshs 15,000
- Inputs and crop husbandry costs for 3 months - 25,000
- Total cost approximately -Kshs 200,0000
- Income after 3 months of watermelon- Kshs 300,000
- Quarterly profits per acre- (Kshs 100,000/2)- Kshs 50,000

The above technology should be disseminated to farmer groups but is viable to be disseminated to implemented in individual farms

Diversification of livelihoods by integrating crops production, livestock production, agroforestry and beekeeping has been adopted by less than 10% of the respondents and this a climate change adaptation mechanism that could be scaled up. This integrated with use of manure and integrated pest management as well as seed banking will enhance sustainable agriculture.

One of the key challenges observed in the project area is rangeland degradation especially in the ASAL areas. This has severely affected access to water and pasture for livestock. Pasture management and conservation and water harvesting technologies such as terracing, small pans, roof water harvesting and storage are important interventions in the ASALs.

3.6 Findings on Governance, Management and Operations of PELUM Kenya Network Institutions

PELUM Kenya being a member-driven network and the vibrancy of the network is essential and vital for relevance and sustainability. Strengthening and improving the capacity of network members for learning and information sharing of Agroecological practices is therefore very important for the network. Identifying the capacity needs of the PELUM Board, secretariat and the member organizations and capacity building to fill in the identified needs is important to ensure effectiveness and sustainability of the network.

3.6.1 Capacity Gaps within the Network

At the PELUM Kenya secretariat level, the main challenge identified was the monitoring and evaluation mechanisms and capacity. It was notable that there is an M&E policy, however it has not been fully implemented. Tracking and measurement of higher-level results like outcomes and impacts has been a challenge. Monitoring and evaluation has also been primarily the function of the monitoring and evaluation department that was manned by one staff with limited support from the other programme officers and ZNCs. Implementation of the PELUM Kenya activities is mostly at the zonal level but the staffing at zonal level is thin with most of the staff at the headquarters level. Procurement and financial management were also identified as key capacity gaps for programme officers and zonal coordinators. PELUM Kenya has the privilege of having consistent and reliable traditional donors, this a positive fact but there is a risk of sustainability and hence the need for strengthening the capacity for resource mobilization both in terms of training and personnel. PELUM Kenya current strategic plan has laid an emphasis of youth and women involvement in agroecology and therefore gender mainstreaming is an important intervention.

At the Member Organizations level, the main capacity needs/gaps are identified in the ***Table 3-14*** below.

Table 3-14: Member Organizations' Capacity Needs

Capacity Gap	No of MOs Reporting				
	NCZ	LECZ	UENZ	RVWZ	Total
Advocacy and lobbying • developing IEC materials • Rolling out advocacy and lobbing at local level • Strategies	4	3	3	8	18
Monitoring, Evaluation and Knowledge Management • Weak M&E and knowledge management system • Setting clear and realizable indicators • Process of developing M and E plan/framework/systems • Knowledge management • Report writing • M&E Tools	5	4	1	6	16
Marketing and participatory guarantee system • Setting up a marketing strategy • Guide on steps for developing a participatory guarantee systems	5	5	3	3	16

Capacity Gap	No of MOs Reporting				
	NCZ	LECZ	UENZ	RVWZ	Total
• Market linkages for organic products • Technology and social media in marketing • Lack of clear marketing and PGS					
Resource mobilization/ proposal development/donor linkages	3	5	3	5	16
Policy development • Developing position paper • low funds to develop/support policies especially for partners like county government	5	4	1	4	14
Agroecological practices • documentation of best agro-ecological practices demo sites	3	4	3	4	14
Financial management and accountability • Donor requirements • Digital finance management • Financial management system • Lack of financial software • Procurement process • Auditing	3	4	1	4	12
Climate change mainstreaming/ adaptation/resilience	4	5	1	2	12
Joint initiatives and collaborations • lack of information, openness, • developing joint concepts/proposals, • managing joint projects • involving all MOs/weak synergies	4	3	1	4	12
Gender mainstreaming • Gender policy	3	4	1	1	9
Governance- • How to manage transitions • Governance policies • Capacity building Board • Skills on strategi planning • Organizational development	3	3		2	8
Project management	3	3	1	1	8
Human resources • Policies • Adequacy of technical staff • Management functions • Staff turnover	1	2	1	3	7
Use of social media/online platforms for communication				2	2

Source: PENELI IV Baseline Survey, 2021

3.6.2 Member Driven Joint Initiatives and Collaborations in the Network

Member-driven joint initiatives and collaboration were encouraged during the Third Phase of the PENELI program. Members were encouraged to network and establish joint projects within their zones to enhance the cohesion and visibility of the network. Most of the Member organizations, who took part in the baseline study, had participated in some joint initiatives that were initiated and implemented jointly with other members of the network. Members

collaborated in at least three to four projects zonally. Some of the areas of collaboration included

- **Ecological Organic Agriculture Initiative-** an African led initiative aimed at promoting organic farming in Africa
- **Re-afforestation efforts** - Concept on Restoration on Eastern MAU, a joint initiative of MOs within Rift and Western region.
- **Integrated Watershed Management for Diverse Farming Enterprises (IWAMA-DIFE) Project-** implemented in Aberdare's Forest catchment which falls within PELUM Kenya's Nairobi and Central Networking zones and particularly in Kiambu and Murang'a Counties
- **Food Security and Livelihoods Programme (FOSELI)-** implemented in Nairobi and Central Networking zone
- **PELCA Project** implemented by Rodi Kenya, Youth Action for Rural Development , COSDEP Kenya and Organic Agriculture Center of Kenya. The project is aimed at improving livelihoods of small holder farmers and youth in coffee producing areas of Kiambu and Muranga Counties within PELUM Kenya's Nairobi and Central Networking zone.
- **McKnight foundation programme** – Western region MOs on issues of soil health
- **Seed Platform network**- Western MOs funded by Tudor Trust
- **Inter-sectoral Forum on Agrobiodiversity and Agro-ecology (ISFAA)-** to promote mainstreaming of Biodiversity and ecosystem service within the agriculture sector and its landscapes. PELUM Kenya is part of the forum and lead in the TWG 4 on Biosafety, GMOs and Seed Sovereignty.
- In other areas of collaboration were joint training and capacity building efforts, restoration efforts such as water conservation and catchment conservation. Seed learning and seed saving were some of the areas of collaboration.

The main challenges of member-driven joint initiatives and collaborations in the Network is that Member Organizations fundraise for their own organization individually rather than for the Network. In addition, the MOs have varying capacities among the MOs in terms of capacity to develop proposals, financial muscle, and technical capacity. Some members embrace joint initiatives /collaborations while others do not. Synergies within the zones have been improving over the years but it has not reached the optimal level. Managing joint projects in terms of accountability and governance mechanism is a gap identified by the stakeholders.

3.7 Findings on Gender Mainstreaming

PELUM Kenya aims to increase women and youth involvement in agroecology in Kenya through its gender and youth thematic area. The justification / rationale for strengthening women and youth leadership in agroecology is brought about because of: Most farmers are women and hence resonate / connect and learn well from women trainers; There is a need to mobilize, organize and empower women leaders to push for their space in leadership in agroecology; Women are best in practicing and scaling up what they learn; Women are best placed to feed the family and the world hence placing them as leaders in agroecology is putting

agroecology in sustainable and safer hands; The youth are ambitious, enthusiastic and energetic and hence can push the agroecology to the next level.

3.7.1 Gender Mainstreaming within PELUM Kenya Network

Member Organizations have made strides to ensure gender is mainstreamed into the organizations. About 60% of the MOs that took part in the baseline study, had put in place a gender policy or had a gender clause within their human resource policy to ensure there was no discrimination on the basis of gender. The MOs have also been very purposeful during the selection of the groups they work with to ensure that women and youth and other vulnerable persons such as persons with disabilities are involved in interventions. Some donors have explicit gender requirements that the composition of beneficiaries should be based on a certain ratio of women to men.

In terms, of gender composition among the Boards and top management, there was a fair distribution of men and women within the Boards and top management. However, it is important to note that the male dominate the CEOs positions.

To ensure that gender is mainstreamed within the communities the MOs work with, there is deliberate efforts to ensure that men, women, youth, and persons with disabilities are integrated in the project. This is illustrated in the analysis of a mapping conducted of the Network MOs in terms of the gender differentiation of the farmers they work with ***(See Table 3-16).*** Overall, 61.5% of the farmers MOs are working with are female while 38.5% are male. Youth account for 14.5% and persons living with disabilities are 1.5%.

Table 3-15: Gender Distribution of Farmers' Working with PELUM Kenya MOs

Zone		Male	Female	Youth	PWD	Total No of farmers	No of MOs that reported
Central and Nairobi	No of farmers	24493	29634	5519	149	54127	12
	%	45.3%	54.7%	10.2%	0.3%		
Rift and Western	No of farmers	35805	72711	27621	660	108516	15
	%	33.0%	67.0%	25.5%	0.6%		
Upper Eastern and Northern	No of farmers	11598	13824	1607	1050	25422	9
	%	45.6%	54.4%	6.3%	4.1%		
Lower Eastern and Coast	No of farmers	37205	57759	6321	2303	94964	10
	%	39.2%	60.8%	6.7%	2.4%		
All zones	No of farmers	109101	173928	41068	4162	283029	46
	%	38.5%	61.5%	14.5%	1.5%		

Source: Analysis of PELUM Kenya MOs Mapping List, 2020[3]

3.7.2 Decision Making on Agricultural Activities

Gender inclusion for agricultural activities ensures that women's, men's and youth's knowledge, experiences, and skills are recognized and respected in the community. However, involving everyone in the management of natural resources and related decision-making is usually a challenge. Survey results, as shown in ***Table 3-16*** below, show the extent to which

[3] More detailed analysis in Appendix 7

men, women and the youth are involved in the decision making on various aspects. It is notable that women are mostly involved in decision making on crop production and marketing while livestock production and marketing is predominantly a men affair. Decisions on use of farm proceeds is done equally by men and women. Attending seminars and trainings is predominantly undertaken by women. Hence, they are key in adoption of climate resilient agroecological practices. Involvement of youth is quite low.

Table 3-16: Gender Roles in the Community

Activity	Extent of Decision Making (%)		
	Men	Women	Youth (18-35 years)
Crop production	40.55	54.07	5.37
Crop marketing	37.91	56.85	5.24
Livestock production	51.29	43.30	5.41
livestock marketing	54.07	41.15	4.78
Utilization of farm proceeds	47.74	47.78	4.48
Attending seminars/trainings	31.11	63.69	5.21
Average	43.78	51.14	5.08

Source: PENELI IV Baseline Survey, 2021

3.8 Updated Logical Framework

A key output of the baseline survey was to provide the values of the impact, outcome and output indicators at the baseline. These values have been used to set the targets for the various indicators as well as to establish a basis for which future project monitoring and evaluation will be conducted. This is illustrated in ***Table 3-17*** below.

Table 3-17: Updated Logical Framework

Project Objective	Expected Results	Indicators	Baseline Values	Remarks/Recommendations
Objective 1	**Result 1**	**Indicator 1.1**		
To strengthen PELUM Kenya network to advocate for integration of Agroecology in policy as an effective strategy for food security and resilience building	PELUM Kenya MOs actively advocate for the integration of agroecology as a strategy for food security and resilience building in National and County agricultural sector and other related sectors policies.	Agroecology integrated[4] in at least five agriculture related policies at national and county levels.	5 policies under development	This could include National Organic Strategy and Meru, West Pokot, Busia and Makueni Counties Agro-ecological Policy that are in the processing the process
		Indicator 1.2		
		At least two agroecological projects are supported[5] by national or county governments.	1- ISFAA	There is collaboration between Government and PELUM Kenya. There is need for a joint agroecological project
Objective 2	**Results 2**	**Indicator 2.1**		
To enhance agro-enterprise initiatives among SHF &Pastoralist for increased household incomes and adoption of agro-ecological practices	Agro-enterprise initiatives among SHF/Pastoralists adopting agro-ecological practices are successfully linked to markets.	5% increase in annual household incomes among the target smallholder farmers and pastoralists by December 2023	Kshs 75,762	This is income from crops, livestock, forest products and off farm businesses as the indicator.
		Indicator 2.2		
		At least 300 SHF confirm that they are linked to accessible and reliable markets for agroecological products by December 2023.	6.8% are linked to accessible and reliable markets for agroecological products	Propose the indicator be a percentage. ***"30% increase in SHF that are linked to accessible and reliable markets for agroecological products by December 2023"***
Objective 3	**Results 3**	**Indicator 3.1**		

[4] Integration involving mainstreaming agroecological practices in different agriculture related policies

[5] Support from the government can be inform of technical and/or financial support. These are projects implemented by the National and County level through influence of PELUM Kenya network

<table>
<tr><th>Project Objective</th><th>Expected Results</th><th>Indicators</th><th>Baseline Values</th><th>Remarks/Recommendations</th></tr>
<tr><td rowspan="3">To enhance resilience of smallholder farmers and pastoralists on effects of climate change and environmental degradation</td><td rowspan="3">SHF and pastoralists have adopted practices that are climate resilient and/or counter environmental degradation.</td><td>At least five climate resilient agroecological practices disseminated by 30 MOs and adopted by at least 150 SHF and pastoralists by December 2023.[6]</td><td>• Average number of agroecological practices adopted by farmers is 3.
• 85% of SHF and pastoralists have adopted at least 1 agro-ecological practice</td><td>Proposed indicators
• “50% increase in the number of agro-ecological practices adopted by SHF and pastoralists”
• 100% of SHF and pastoralists will have adopted at least 1 agro-ecological practice</td></tr>
<tr><td>Indicator 3.2</td><td></td><td></td></tr>
<tr><td>At least five degraded natural sites restored and rehabilitated by December 2023.[7]</td><td>0-Identification ongoing</td><td>“Level of degradation could be measured for the identified degraded sites. Propose an indicator on acreage restored and rehabilitated”</td></tr>
<tr><td>Objective 4</td><td>Results 4</td><td>Indicator 4.1</td><td></td><td></td></tr>
<tr><td>The governance, management, and operations of PELUM Kenya Network institutions are functioning and delivering services effectively</td><td>The governance, management, and operations of PELUM Kenya network institutions are functioning and delivering services effectively.</td><td>50% rate of successfully implemented projects[8]</td><td><table><tr><th>Capacity Gap</th><th>No of MOs reporting capacity gap</th></tr><tr><td>Advocacy and lobbying</td><td>18</td></tr><tr><td>Monitoring, Evaluation and Knowledge Management</td><td>16</td></tr><tr><td>Marketing and participatory guarantee system</td><td>16</td></tr><tr><td>Resource mobilization/</td><td>16</td></tr></table></td><td>Proposed indicators

Proposed indicator 1 “50% reduction of MOs reporting capacity gaps in the following areas”
• Advocacy and lobbying
• Monitoring, Evaluation and Knowledge Management
• Marketing and participatory guarantee system
• Resource mobilization/ proposal development/donor linkages</td></tr>
</table>

[6] *Double barreled indicator that is more of an output indicator, other indicators recommended*

[7] *More of an output indicator, another indicator recommended*

[8] *Difficult to measure so replace it, other indicators recommended*

Project Objective	Expected Results	Indicators	Baseline Values	Remarks/Recommendations
			proposal development/donor linkages | Policy development | 14 Agroecological practices | 14 Financial management and accountability | 12 Climate change mainstreaming/ adaptation/resilience | 12 Joint initiatives and collaborations | 12 Gender mainstreaming | 9 Governance | 8 Project management | 8 Human resources | 7 Data not collected on MOs reporting enhanced functioning and effective delivery of services as a result of capacity building by the PELUM Kenya Network.	• Policy development • Agroecological practices • Financial management and accountability • Climate change mainstreaming/ adaptation/resilience • Joint initiatives and collaborations • Gender mainstreaming • Governance • Project management • Human resources ***Proposed indicator 2 "75% of the of the MOs reporting enhanced functioning and effective delivery of services as a result of capacity building by the PELUM Kenya Network."***
		Indicator 4.2		
		At least eight new member-driven joint initiatives and collaborations in the network by December 2023.	6 ongoing	
		Cross cutting indicators		
	Gender mainstreaming in Network	At least 75% of women in SHF and pastoralists involved in decision making	51%	
		At least 15% of youth in SHF and pastoralists involved in decision making	5%	

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

This baseline study set out to gather relevant baseline data and information to provide and basis for subsequent programme performance monitoring, results measurement of the intervention. The study was guided by four project objectives mainly to strengthen PELUM Kenya network to advocate for integration of Agroecology in policy as an effective strategy for food security and resilience building; to enhance agro-enterprise initiatives among SHF & Pastoralist for increased household incomes and adoption of agro-ecological practices; to enhance resilience of smallholder farmers and pastoralists on effects of climate change and environmental degradation; The governance, management, and operations of PELUM Kenya Network institutions are functioning and delivering services effectively. Involvement pf women, youth and other special interest groups was evaluated. These baseline values will be a basis for undertaking endline project impact evaluation. The study collected both qualitative and quantitative data from the three landscapes along the three outcome indicators.

On advocacy and awareness creation on integration of agroecology, the buy-in into agroecology at the National and County level was still low albeit there being increased public interest and dialogue on agroecological practices. It is important to note that engagement with Government agencies has been enhanced. This has culminated with the national government establishing a desk at the Ministry of Agriculture, Livestock and Fisheries (MOALF) to coordinate issues of organic agriculture. A draft national organic agriculture strategy has been developed through strong support from PELUM MOs but is yet to be adopted. A key milestone in government integration of agroecology is the formation of the Intersectoral Forum for Agrobiodiversity and Agroecology (ISFAA) which provides a platform through which stakeholders at the intersection of biodiversity conservation and agricultural production can interact to discuss, share knowledge and information, influence policy, fundraise, implement joint programmes, and monitor and review progress towards mainstreaming biodiversity and ecosystem services in the agricultural sector and landscapes. At the County level, there has been some gravitas towards integration of agroecology into the County policies and strategies. PELUM Kenya network has supported development of agroecological policies in Kiambu and Murang'a Counties. Meru, West Pokot, Busia and Makueni Counties are in the process of developing agroecological policies with support from the Network. In addition, the Network has played a role in influencing development of climate change policies in 14 Counties. The PELUM MOs have been playing a major role in influencing the integration of agroecology in the County Integrated Development Plans (CIDPs). Understanding of agroecology coupled by limited financial and technical capacities within the network are major gaps in advocacy and lobbying. There is no organized tracking of the implementation of the policies and strategies that have been adopted and ensuring that the interventions proposed are included in the CIDPs, annual plans and budgets.

On enhancing incomes of SHF and pastoralists and marketing for agroecological products, the average annual income for the interviewed smallholder farmers and pastoralists was Kshs 118,613. Crops, livestock, and forest products accounted for about 55% (Kshs 64, 754) of the household incomes. However, the level of value addition was very low with only value-added livestock and crops products accounting for 2.3% of the household income. products. PENELI IV intervention in enhancing value addition and incomes will come in handy in increasing household incomes. Reliance of farm gates and middlemen were the most prominent marketing channels in all the four (4) zones as indicated by 46.6% and 36.6% of the small

holder farmers and pastoralists respectively. Marketing through well-defined or organized markets such as groups/co-operatives/associations/contract marketing was utilized by only 6.8% of the smallholder farmers and pastoralists. The main challenges to marketing were price instability, lack of reliable market information, poor market infrastructure, transport, expensive and cumbersome certification process and limited capacity of value addition.

On adoption of climate resilient agroecological practices, awareness of climate change among the SHF&P was very high at 94.4%. Radio and TV are the most widely accessed communication devices, and the project would gain more visibility through these channels. Some of the climate resilient agroecological practices adopted were agroforestry, Bio-intensive/organic farming, crop diversification, kitchen gardening, conservation agriculture, use of manure, small livestock enterprises, soil and water conservation, permaculture, Integrated pest management, bio-controls (push and pull), vermiculture, voluntary savings and loans, irrigation, bee keeping, diversified, climate resilient livelihood options, in situ water harvesting technologies, seedbank cereals, value addition, and pasture conservation and management. Adoption of solar technology was highlighted as a key technology adoptable in the ASAL areas.

On governance, management and operations of PELUM Kenya network institutions, horizontal and vertical networking was on a positive trajectory. However, there were gaps in having a strong monitoring and evaluation (M&E) system and M&E technical capacity. Resource mobilization strategies and financial management strategies are also important areas that could be tweaked to expand from the traditional donors. Member Organizations also identified some capacity needs including but not limited to advocacy and lobbying; monitoring, evaluation and knowledge management; marketing and participatory guarantee system; resource mobilization/ proposal development/donor linkages; policy development; agroecological practices; financial management and accountability; climate change mainstreaming/ adaptation/resilience; joint initiatives and collaborations; gender mainstreaming; governance; project management; human resources; and use of social media/online platforms for communication. Member driven joint initiatives and collaborations have been growing steadily and should be encouraged and enhanced.

Concerted efforts were made to involve women, youth and other special interest groups in agroecological activities. It was noted that involvement of women was successful. However, the involvement of youth was not very successful.

4.2 Recommendations

Arising from the findings of this study, the following recommendations are given for consideration by PENELI IV Programme.

- *Stakeholder engagement and coordination*. The project should leverage on engagement forum for stakeholders outside the network including national and county governments and partners with common interest. This can be through a county forum that will create synergy and collaboration and ensure horizontal and vertical information exchanges between PELUM Kenya and county government as well as with national government departments. This will be an important strategy for successful advocacy and lobbying on climate resilient agroecological practices.
- *Adequate sensitization*: There is need to sensitize the project beneficiaries and clarify their roles and expectation before the project is rolled out for implementation. This will enhance their participation, management of their expectation and facilitate tracking of project implementation.

- *Building on existing achievements*. According to the findings, there are some initiatives on the ground congruent with PENELI IV objectives. There is need for the project to prioritize these in the initial years as it seeks to introduce new innovations. Focusing on this low hanging fruits will ensure smooth transition and build trust and confidence. For example, the project should leverage on the achievement of PENELI III. In addition, leveraging on other projects, programs and initiatives such as Global Advocacy Project (GAP), EOA-I, Knowledge Centre for Organic Agriculture (KCOA) Project and Intersectoral Forum for Agrobiodiversity and Agroecology (ISFAA) should be emphasized to enhance complementarity and the impacts of the interventions.
- *Continuous capacity building of farmers*. There is need to invest in capacity building for the community and project executants to fully internalize the intended project outcomes. This will aid a paradigm shift from business-as- usual towards focusing on outcomes and impacts. The programme needs to adopt more practical training and demonstration of technologies. There is a need for more exchange visits and educational tours to areas where some of the technologies have been very successful so that the farmers can exchange ideas and learn some of the success factors.
- *Continuous capacity building of Secretariat and Network members*. This should be done based on the training needs assessment and refresher courses should be done bearing in mind the turnover of staff in Member Organizations.
- *Joint fundraising and enhance lobbying* to other donors is important in sustaining the PELUM Network activities.
- *Tracking implementation of policies and strategies*. There is need for a tracking mechanism of the implementation of the policies and strategies that have been adopted and ensuring that the interventions proposed are included in the CIDPs, annual plans and budgets.
- *Gender mainstreaming:* Sensitization on men, women, youth and special interest groups involvement in agroecology needs to be enhanced. Gender mainstreaming should be a continuous process. Agroecology should be made business oriented to attract youth.
- *Upscaling of climate resilient practices/technologies:* Agroforestry through drought resistant fruit trees growing should be adopted because they serve the purpose of increasing tree cover thus absorbing carbon emissions and reducing desertification and they improve food and nutritional security through providing fruits. In-situ water harvesting, and roof catchments are technologies that could assist in water conservation for production services. Solar driven irrigation technology is a very viable climate change adaptation mechanisms that could be adopted by the SHF &P. This is a technology when integrated with soil and water harvesting technologies such as use of Zai pits and conservation agriculture would have a lot of value for the communities especially those in the ASAL areas. Diversification of livelihoods by integrating crops production, livestock production, agroforestry and beekeeping This integrated with use of manure and integrated pest management as well as seed banking will enhance sustainable agriculture. Pasture management and conservation and water harvesting technologies such as terracing, small pans, roof water harvesting and storage are important interventions in the ASALs.
- *Monitoring and evaluation:* There is a need to establish robust monitoring and evaluation system that articulates project monitoring and evaluation processes and procedures for ease of project performance tracking.

- *Leverage on County Development Planning:* The project beginning towards the end of the current CIDPs (2017-2022) gives an opportunity to agroecology to be adequately anchored on the CIDPs of (2023-2027).
- *Programme Indicators:* recommendations on revision of Programme indicators are in Table 3.17
- Mid-term and End line evaluations should be conducted using the same methodology to allow comparison of findings and measuring of attribution/contribution of the project to the results.

5 APPENCICES

5.1 Appendix 1- Assignment TORs

TOR for PENELI IV Baseline Study.pdf

Double click to open

5.2 Appendix 2: Data Collection Tools

PENELI IV BaselineTools.zip

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5.3 Appendix 3: List of Supporting Documentation Reviewed

i. PELUM Kenya Application Financial Support-Revised
ii. PENELI III End Term Evaluation Report
iii. PELUM Kenya January to December 2020 Annual Report
iv. PELUM Kenya Strategic Plan (2021-2026).
v. PELUM Kenya Quarterly Policy Updates- 2018-2020

5.4 Appendix 4: List of FGDs Conducted

Group (s)	Member Organization	Zone	County	Thematic Area
• **Bidii Farmers Group** • **Bethsaida Farmers Group** • **Purity Farmers Group** • **Githima Farmers Group**	Grow Bio intensive Agricultural Center of Kenya (GBiACK)	Nairobi/Central Zone	Kiambu	Support farmer groups to engage in Adaptive farmer led research on agro-ecological production and soil health aspects
• **Amani Self Help Group** • **Kigumo Water Users Association** • **Gitiri Self Help Group** • **Gachuha Self Help Group** • **Smart Jedidah Women Group**	Sustainable Agriculture Community Development Programme. Kenya. (SACDEP)		Murang'a	Support Small and Medium Enterprises (SMEs) on value addition and processing projects at Zonal level for the select value chain
Kianjugu Organic Farmers Group	Organic Agriculture Center – Kenya (OACK)			Establish agro-ecological demonstration site in each zone
Ruire Group	Care – Murang'a			Support establishment and maintenance of community tree nurseries.
• **Middle Mwitasyano Water Resources Users Association**	INADES	Lower Eastern/ Coastal Zone	Machakos	Support establishment / rehabilitation of water sources in ASAL areas
• **Ngwaka Self Help Group**	UDO		Makueni	Support women and youth farmer groups to engage in community saving/financing activities such as COSALO/VSLA and establish linkages with reliable Micro financing institutions in zones
Ntoiye Emolel Group	Neighbors Initiative Alliance		Kajiado	2 Support Small and Medium Enterprises (SMEs) on value addition and processing projects at Zonal level for 4 select value chains.
Kitungati CBO	ADS Eastern		Kitui	3 Support farmer groups to engage in Adaptive farmer led research on agro ecological production and soil health aspects
Laikipia Permaculture Group	Laikipia Permaculture Center	Upper Eastern/ Northern Kenya	Laikipia	Support women and youth farmer groups to engage in community saving/financing activities such as COSALO/VSLA and establish linkages with reliable Micro financing institutions in the zones
Galole Self Help Group	Food for the Hungry		Marsabit	Support one initiatives on value addition of livestock products for pastoralist communities in ASAL areas
Digital Group	CARITAS – Meru		Meru	Establish one agro ecological demonstration site in the zone

Group (s)	Member Organization	Zone	County	Thematic Area
Mparakuoni Group	Nanyoiye		Samburu	Support Small and Medium Enterprises (SMEs) on value addition and processing projects at Zonal level for 4 select value chains
Kadenge Gendro Self Help Group	Support for Tropical Initiatives in Poverty Alleviation (STIPA)	Rift/Western Zone	Siaya	Support establishment and maintenance of 1 community tree nurseries
Lead Farmers Group	Maendeleo Endelevu Action Programme (MEAP)		Nakuru	Establish 1 agroecological demonstration site in each zone
Totum Women Group	Sustainable Mobilization of Agricultural Resources Technologies - Initiative		West Pokot	Support Small and Medium Enterprises (SMEs) on value addition and processing projects at Zonal level for 1 select value chains
• **Jikuze Self Help Group** • **Tazama Mbele Self Help Group** • **Upendo Kagawa Self Help Group** • **Vision Self Help Group**	Network For Eco-Farming in Africa (NECOFA)		Nakuru	Support women and youth farmer groups to engage in community saving/financing activities such as COSALO/VSLA and establish linkages with reliable Micro financing institutions in zones

5.5 Appendix 5: List of KIIs Conducted

No.	Name	Organization	Designation	Zone
1.	Rosinah Mbenya	PELUM Kenya	Country Coordinator	Secretariat
2.	Ndiki Ndungu	PELUM Kenya	Finance and Administrative Manager	Secretariat
3.	Manei Naanyu	PELUM Kenya	Programmes Operations Manager	Secretariat
4.	Jeff Kahuho	PELUM Kenya	Senior Programme Officer-Institutional Development	Secretariat
5.	Mary Irungu	PELUM Kenya	Programme Officer-Advocacy and Communication	Secretariat
6.	Edward Muiruri	PELUM Kenya	Programme Officer-Agro-enterprise Development	Secretariat
7.	Beth Omae	PELUM Kenya	Zonal coordinator	Rift Valley and Western Kenya
8.	Benson Isohe	PELUM Kenya	Zonal coordinator	Upper Eastern and Northern Kenya
9.	Ngunjiri Kihoro	PELUM Kenya	Zonal coordinator	Lower Eastern
10.	Sarah Wambui	PELUM Kenya	Zonal coordinator	Central and Nairobi
MEMBER ORGANIZATIONS				
11.	Joseph Lentunyoi	Laikipia Permaculture	CEO	Upper Eastern and Northern Kenya
12.	Magdalene Lesoloyia	Nanyoiye Community Development Organization	Assistant Director	
13.	Habadasso Mule	Food For the Hungry	Officer	

No.	Name	Organization	Designation	Zone
14.	Zipporah Kihoro		Cluster Manager- Buuri	
15.	Morris Kirimi	CARITAS Meru	Director	
16.	George Gitau		Head of Programmes	
17.	David Mwangi	Manor House Agricultural Centre (MHAC)	Ag. Director and PELUM Kenya Board Member	Rift Valley and Western Kenya
18.	Joseph Karangathi	Maendeleo Endelevu Action Program (MEAP)	Chief Executive Officer	
19.	Pamela Opiyo	Support For Tropical Initiatives in Poverty Alleviation (STIPA-Kenya)	Team Leader	
20.	Calvins Otieno		Livelihood & Advocacy Officer	
21.	Richard Langat	Tenwek Community Health and Development	In-charge -Food Security	
22.	Kenneth Ogola	Busia Environmental Management. Program (BERMA)	Field Operations Manager	
23.	Zacchaeus Masake	Trans Community Organization (TRANSCOM)	CEO	
24.	Jackson Wafula	SMART Initiative (Sustainable Mobilization of Agricultural Resource Technologies)	Executive Director	
25.	Collins Othieno	Community Rehabilitation and Environment Protection Program (CREPP)	Executive Director/ Chairman PELUM Kenya	
26.	Lucy Mathenge	Network For Eco farming in Africa (NECOFA)	Administrator	
27.	Paul Karanja	Sustainable Agriculture Community Development Programme (SACDEP)	Deputy Executive Director	Central and Nairobi
28.	Duncan Ndirangu	Organic Agriculture Centre of Kenya (OACK)	Programme Manager	
29.	Collins Chibole	Grow Bio-Intensive Agriculture Centre of Kenya (GBIACK)	Field Technical Assistant	
30.	Susan Kiura	Resource Oriented Development Initiative (RODI)	Project Officer	
31.	Abel Omariba	Caritas Nairobi	Monitoring Evaluation Accountability and Learning Coordinator	
32.	Moses Mwaura	Youth Action for Rural Development (YARD)	Field Extension Officer	
33.	Susan Gichohu	Care Muranga	Programme Officer	
34.	Japheth Mutuku	Anglican Development Service Eastern (ADS Eastern)	Project officer	Lower Eastern and Coast
35.	Esther Wangari Kiruthi	Community Sustainable Agriculture and Healthy Environmental Program (CSHEP)	Director	
36.	Sisina Kelempu	New Neighbours Initiative (NIA)	Project Officer	
37.	Dryland Natural Resource Centre	Nicholas Syano	CEO & Founder	
38.	Utooni Development Organization	Kevin M. Kamuya	CEO	
39.	Katoloni Mission CBO	Regina Muthama	Chairperson	
40.	BIDII	John Mwaniki	Team Leader	

No.	Name	Organization	Designation	Zone
41.	Girl Child Network	Peris Mootian	Programme Coordinator	
NON- STATE ACTOR OUTSIDE NETWORK				
42.	Anne Maina	Biodiversity and Bio-safety Association (BiBA)	CEO	
GOVERNMENT DEPARTMENTS				
43.	Robinson Jomo	ASDSP-Department of Agriculture, Livestock and Fisheries, Laikipia	Monitoring and Evaluation In-charge	Upper Eastern and Northern Kenya
44.	Patrick Gacharana	Ministry of Agriculture, Samburu	Agricultural Officer-In charge Locust Control coordination	
45.	Joseph Chege		Value Chain Officer ASDP II	
46.	Leah Leparyo	Ministry of Environment, Samburu	Institutional and Capacity Development Officer	
47.	Ms. Muslima	Ministry of Agriculture, Marsabit	Extension Officer-Uran Ward	
48.	Bessy Mukiama	ASDSP-Department of Agriculture, Livestock and Fisheries, Meru	Technical Officer/ Monitoring and Evaluation	
49.	James Sankale	Ministry of Environment and Natural Resources, Kajiado	Chief Officer	Lower Eastern and Coast
50.	Moses Leteyio Murunya	Ministry of Agriculture, Kajiado	In-charge - Agriculture and Fisheries	
51.	Sammy Mbuko	Kenya Forest Service, Kitui	Sub-County Conservator	
52.	Kilonzo Munyua	Department of Agriculture, Livestock and Fisheries, Kitui	Ward Agricultural Officer	
53.	Helen Kioko	Department of Agriculture, Livestock and Fisheries, Machakos	Sub-county agricultural officer - Katangi	
54.	Mr. Ngatia	Department of Agriculture, Livestock and Fisheries, Murang'a	Sub-county agricultural officer - Gatanga	Central and Nairobi

5.6 Appendix 6: Photo Plates per Zone

PENELI IV Baseline Study Photo Plate

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5.7 Appendix 7: Detailed Analysis of PELUM Kenya MOs Mapping List, 2020

Analysis of PELUM Kenya MOs Mapping

Double click to open

5.8 Appendix 8: Validation Workshop Attendance List and Photos

PARTICIPANT LIST

ACTIVITY: Validation WorkShop For PEHELI IV Baseline Survey, Value chain Analysis & Advocacy strategy

VENUE: RODI KENYA CENTRE DATE: 3/02/2022

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ACTIVITY: Validation Workshop

VENUE: RODI Kenya Centre DATE: 3/02/2022

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ACTIVITY: Validation Workshop

VENUE: Rodi Kent Centre DATE: 03/02/2022

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ACTIVITY: Validation Workshop

VENUE: KODI Kenta Centre DATE: 03/02/2022

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