Biovision Africa Trust

A STUDY ON STATUS AND READINESS OF AGROECOLOGY POLICY DEVELOPMENT IN 16 SELECTED COUNTIES IN KENYA

Prepared by

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Study undertaken by:

Hydro Sentient Consultants

eoa ECOLOGICAL ORGANIC AGRICULTURE

Growing Sustainably

Acknowledgement

As with any research, this study benefited from consultations, interactions and insights from numerous stakeholders in the field of agriculture in the 16 counties. We acknowledge contributions and support from the County Executive Committee Members (CECs) in charge of Agriculture and County Directors of Agriculture in the participating counties for supporting coordination and linkage to the farming communities in their counties. Insights from various county directors in the Agricultural sector offered during the focus group discussions and key informant interviews was highly valuable.

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Executive summary

Key Highlights:

Kenya has operationalized a National Agroecology Strategy for Food Systems Transformation (2024-2033), positioning agroecology as a sustainable pathway for food systems transformation by ensuring food security and nutrition, climate resilient livelihoods and social inclusion for all. However, at the county level where actual implementation occurs, policy development remains fragmented. This study, commissioned by Biovision Africa Trust and funded by Porticus, assessed 16 counties for their agroecological transition (CAET) and policy readiness for policy development & implementation. Data collection involved a digital household survey questionnaire (based on FAO's TAPE tool), focus group discussions, and key informant interviews. The study applied indices from the TAPE too to evaluate the status of agroecological practice adoption.

Main Findings:

a) Only two (2) counties (Murang'a, and Vihiga) had operational agroecology policies while seven (7) had their agroecology policies at the approval stage. Three (3) counties had working draft policies and four (4) counties did not have any working drafts.

b) All the 16 counties were within the acceptable range (4-6) of agroecology transition. However, counties within the Medium potential areas (Kiambu and Nakuru) showed the highest agroecology transition scores (mean CAET score: 5.09), followed by medium-low potential counties (Meru, Embu, Tharaka Nithi, Kitui, Makueni, West Pokot, Likipia) – (4.98) and high potential counties (Busia, Bungoma, Vihiga, Kakamega, Kisii, Nyandarua & Muranga) – (4.83) and

c) Murang'a (5.43), Busia (5.29), Laikipia (5.26) Kiambu (5.13) and Nakuru (5.04) showed relatively stronger performance across several key areas, especially in resource efficiency, participation, soil and animal health. These were followed by Meru (4.96), Bungoma (4.94), Vihiga (4.87), Tharaka Nithi (4.83), West Pokot (4.79), Kisii (4.75), Kitui (4.69), Kakamega (4.67), Embu (4.65) and Nyandarua (4.58)

d) Most Counties demonstrated stronger performance in principles of participation, efficiency animal health, connectivity, soil health and land & natural resource governance. However, adoption of principles of social values & diet, co-creation of knowledge and recycling weak.

e) Policy readiness varied, with Muranga, Embu, Tharaka Nithi and Busia leading the pack. However, generally most counties scored poorly on availability of marketing infrastructure for agroecology products, financial resource availability and tracking of biodiversity and environmental changes. These were amplified by weak extension services.

f) Some counties (e.g., Tharaka Nithi and Embu) even though having strong policy readiness (legal framework and policies) do not show corresponding high level of transition. Meaning policy readiness must be accompanied with action to realize meaningful agroecology transition. Local innovation

g) Some counties like Laikipia, Busia and Kiambu had high transition rates without legal instruments. This highlights a disconnect between development of legal instruments and implementation. The counties rely on local innovations and demand to drive agroecology transition.

h) Macro environmental factors such as politics and biophysical environment (climate change) are the greatest inhibitors of agroecology transition.

i) Agroecology is mainly donor driven

Conclusions:

a) There is moderate but uneven agroecology transition and policy readiness across the 16 counties.

b) Counties are integrating sustainable agricultural practices variably into the County Integrated Plans (CIDPs) and environment related policies, however not from agroecology principles lens. Major gaps were attributed to weak legislation, limited technical capacity (weak extension), inadequate financing, and weak market infrastructure.

c) National-level commitment is not yet fully matched at the county level, hindering effective grassroots implementation.

Recommendations:

1) Develop County-Specific Agroecology Policies and legislation: Counties without policies should initiate inclusive, evidence-based development processes.
2) Strengthen Institutional Capacity: Invest in training, multi-stakeholder platforms, and integration of agroecology in agricultural extension services.
3) Enhance existing and alternative financing: Establish County agroecology budget lines and mobilize support from donors and leverage on public-private partnerships.
4) Promote information sharing and Knowledge Exchange: Support co-creation platforms that blend indigenous and scientific knowledge; and institutional exchanges and visits for experiential learning
5) for agroecologically produced goods, including certification and branding.
6) Leverage National Frameworks: Align County strategies with the National Agroecology Strategy and climate change commitments.

This report provides a foundation for targeted interventions to enhance county-level readiness and drive Kenya's agroecological transformation.

ABBREVIATIONS AND ACRONYMS

AE: Agroecology

ASAL: Arid and Semi-Arid Land

ATC: Agricultural Training Center

BvAT: Biovision Africa Trust

CAET: Characterization of the agroecological transition

CIDP: County Integrated Development Plan

FGD: Focus Group Discussion

FSRP: Food Systems Resilience Project

GDP: Gross Domestic Product

HLPE: High Level of Panel of Experts

KII: Key Informant Interview

KNBS: Kenya National Bureau of Statistics

NAVCDP: National Agricultural Value Chain Development Project

NGO: Non-Governmental Organization

TAPE: Tool for Agroecology Performance Evaluation

TVET: Technical Vocational Educational Training

Definition of terms

Agroecology: An integrated approach to agriculture that combines science, traditional knowledge, and social movements to create farming practices that are environmentally sound, economically viable, and socially just.

Agroecological Transition: The shift towards more sustainable and resilient agricultural and food systems based on ecological principles.

Household: The basic social and economic unit often a family or group of individuals responsible for managing and making decisions about agricultural activities and natural resource use.

Household Income: The total earnings generated by all members of a household from diverse, sustainable, and ecologically sound activities within and around the farm system.

Productivity: A measure of the efficiency with which inputs are converted into outputs.

Sustainable Practices: Methods and approaches that meet present needs without compromising the ability of future generations to meet their own.

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INTRODUCTION

1.1 Background

1.1.1. Agriculture sector in Kenya and its socio-economic development, potential and main challenges

The agricultural sector is a cornerstone of Kenya's economy, contributing approximately 21.8% of the national gross domestic product (GDP), employs 40% of the total population and about 60% of the rural population (KNBS, 2024). The sector supports food security, employment, and industrial raw materials, playing a crucial role in socio-economic development. Kenya's diverse agro-ecological zones enable the cultivation of various crops, including staple cereals, horticultural produce, cash crops (such as tea and coffee), and livestock farming. Likewise, Kenya's vast rangelands and inland water bodies makes livestock and fisheries crucial in food security, income generation, and exports especially dairy, beef, poultry, and aquaculture. With vast rangelands and inland water bodies, the sub-sector holds significant growth potential.

Despite its significant contribution to Kenya's economy, the agricultural sector faces numerous challenges that threaten its sustainability and productivity. Climate change has led to erratic rainfall patterns, prolonged droughts, and extreme weather events, all of which adversely impact crop yields and livestock production. Additionally, soil degradation, driven by unsustainable farming practices, deforestation, and excessive use of agrochemicals, has resulted in declining soil fertility, making it increasingly difficult to maintain high agricultural output. Water scarcity and pollution further compound these issues, as poor water management and contamination from agricultural runoff affect both irrigation systems and drinking water sources. Moreover, rapid urbanization and encroachment into arable land have reduced the availability of productive farmland, limiting the sector's capacity to meet growing food demands. Smallholder farmers, who form the backbone of Kenya's agriculture, also struggle with limited market access and significant post-harvest losses due to inadequate storage

facilities and fluctuating market prices. Further, diseases, land degradation, limited access to quality inputs, and poor infrastructure are major concerns. These challenges highlight the urgent need for sustainable agricultural practices and policies that promote resilience and long-term productivity. Strengthening value chains, adopting climate-smart practices, and investing in research and extension services can enhance productivity and resilience in crops, livestock and fisheries production, driving inclusive and sustainable development.

1.1.2 Role of Agroecology in Addressing Agricultural Sector Challenges

Agroecology offers a sustainable solution to many of the challenges facing Kenya's agricultural sector by integrating ecological principles into farming systems. It promotes environmentally friendly and socially equitable food production while enhancing resilience to climate change and other stressors. A key aspect of agroecology is soil health management, which involves organic farming practices such as composting and crop rotation to restore and maintain soil fertility. Water conservation is also central to agroecological practices, with techniques such as rainwater harvesting, agroforestry, and integrated water management ensuring efficient use of water resources. Additionally, agroecology enhances biodiversity by promoting diversified cropping systems and agroforestry practices, making farms more resilient to pests, diseases, and climatic variations. By reducing the reliance on synthetic agrochemicals, agroecology encourages natural pest control and the use of organic fertilizers, thereby minimizing environmental pollution and safeguarding human health. Beyond environmental benefits, agroecology empowers farmers by fostering knowledge-sharing platforms, training programs, and community-based resource management. Through these approaches, farmers gain the skills and resources needed to adopt sustainable practices, improve their livelihoods, and contribute to food security and ecological balance.

The High-Level Panel of Experts on Food Security and Nutrition organized the key constructs of agroecology into 13 principles (HLPE, 2019). These principles are further grouped into two categories with the first seven (7) having the greatest impact on agroecosystems while principles number 8 to 13 speaks into food systems. The first category (Agroecosystem focused) include: (1) Recycling-Preferentially use local renewable resources and close as far as possible resource cycles of nutrients and biomass; (2) Input Reduction-Reduce or eliminate dependency on purchased inputs; (3) Soil Health – Secure and enhance soil health and functioning for improved plant growth, particularly, by managing organic matter and enhancing soil biological activity; (4) Animal Health-Ensure animal health and welfare; (5) Biodiversity-Maintain and enhance diversity of species, functional diversity and genetic resources and maintain biodiversity in the agroecosystem over time, and space at field, farm and landscape scale; (6) Economic diversity-diversify on farm incomes by ensuring small scale farmers have greater financial independence and value addition opportunities while enabling them to respond to demand from consumers; (7) Synergy-Enhance positive ecological interactions, synergy and integration and complementary amongst the elements of agroecosystems (Plants, animals, trees, soil, water).

The second category (Food systems focused) include; (8) Co-Creation of Knowledge-Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange; (9) Social values and diets-Build food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally, culturally appropriate diets; (10) Fairness- Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment and fair treatment of intellectual property rights; (11) Connectivity-Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and re-embedding food systems into local economies; (12) Land and Natural Resources Governance- Recognize and support the needs and interests of family farmers, smallholders and peasant food producers as sustainable

managers and guardians of natural and genetic resources; (13) Participation- Encourage social organizations and greater participation in decision making by food producers and consumers to support decentralized governance and local adaptive management of agricultural food systems.

Not to lose the significant role of farm efficiency/productivity and resilience building by muffling them out in the 13 principles, this study explicitly considered these two elements independently. Where, (14) Efficiency/Productivity – optimizing resource use towards achieving desired outcomes with the least number of resources, time, and effort; (15) Resilience – Building farmers' capacity to withstand, adapt to, and recover from various shocks and stresses that can impact their livelihoods and agricultural production.

1.1.3 Biovision Africa Trust (BvAT) and Its Role in Promoting Agroecology

BvAT has implemented several projects aimed at supporting the transition to agroecological farming in Kenya and in the continent. One of such continental initiatives driving policy is the AUC Ecological Organic Agriculture Initiative (EOA-I). Through the EO-I the AU CAADP framework has currently mainstreamed EOA into its Biennial Review Reporting (BRR) cycle, beginning with the 3rd BR Report. The Secretariat conducted a pilot study on EOA Indicators, and the 4th Biennial Review tracked three indicators comprehensively, particularly to hold governments accountable for implementing the EOA Initiative. These indicators are:

1) Total arable land under organic fertilizers;
2) Share of agricultural land under EOA/Agroecology practices, Share of agricultural land under EOA/Agroecology practices)
3) 3) Existence of Farmer Managed Seed Systems (FMSS) within national seed policy/strategy frameworks.

The 4th report also provided the status of the Implementation of Decision on the Ecological Organic Agriculture in Africa (Decision: Ex. CL/Dec. 631 (XVIII)), 2011.

The Farmer Communication Programme (FCP) focuses on enhancing agroecological farming systems within smallholder communities, equipping farmers with sustainable practices to improve productivity while preserving natural resources. A key component of this project is the establishment of demonstration farms, which serve as practical learning centers where farmers can observe and adopt best agroecological practices. These farms showcase techniques such as intercropping, organic farming, and soil conservation methods, providing hands-on experience and guidance. To address soil degradation, the project also includes soil regeneration programs that encourage the use of organic fertilizers, composting, and minimal tillage techniques. By improving soil health, these efforts enhance long-term agricultural productivity and sustainability. Water management is another crucial focus area, with the introduction of innovative irrigation techniques and rainwater harvesting systems. These strategies help smallholder farmers optimize water use, particularly in regions affected by erratic rainfall and prolonged dry spells. Additionally, the project promotes biodiversity conservation by encouraging the cultivation of indigenous crops and the use of integrated pest management techniques. By preserving local plant varieties and reducing reliance on chemical pesticides, the initiative strengthens the resilience of farming systems against climate change and pest outbreaks. Through these efforts, BvAT is actively driving the adoption of agroecological principles, ensuring that smallholder farmers have the knowledge and resources needed for a more sustainable and productive agricultural future.

This study is supported by the Porticus Project. The project seeks to address several interrelated challenges that hinder the adoption and implementation of agroecological practices in Kenya. At the forefront is the dominance of conventional farming methods, which has led to severe environmental degradation, including soil depletion, loss of biodiversity, and reduced agricultural productivity. These issues are compounded by the accelerating impacts of climate change, which pose a significant threat to food security and the livelihoods of smallholder farmers. Agroecology offers a promising solution by integrating ecological principles into farming systems, thereby enhancing

soil fertility, conserving biodiversity, and improving the resilience of agricultural systems to climate change. The project seeks to address several interrelated challenges that hinder the adoption and implementation of agroecological practices in Kenya.

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The project aims to Enhance Evidence-Based Policy Development and Decision-Making Processes for Agroecology in Kenya (47 Counties). The project will facilitate the generation of evidence-based data and insights to inform the development and implementation of agroecology policies across all 47 counties in Kenya. This will contribute to a robust policy framework that promotes sustainable farming practices, enabling policymakers to make informed decisions that support agroecological principles at both county and national levels.

1.1.4 Project by BvAT in Addressing Agroecology Issues

BvAT has implemented several projects aimed at supporting the transition to agroecological farming in Kenya. One such initiative focuses on enhancing agroecological farming systems within smallholder communities, equipping farmers with sustainable practices to improve productivity while preserving natural resources. A key component of this project is the establishment of demonstration farms, which serve as practical learning centers where farmers can observe and adopt best agroecological practices. These farms showcase techniques such as intercropping, organic farming, and soil conservation methods, providing hands-on experience and guidance. To address soil degradation, the project also includes soil regeneration

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1.1.5 Why the Current Study and How It Will Help in The Process

Despite ongoing efforts to promote agroecology, significant knowledge gaps remain regarding the impact and scalability of these practices. While agroecological interventions have demonstrated potential in improving agricultural sustainability, there is a need for a deeper understanding of their effectiveness in enhancing soil health, water conservation, and biodiversity within different farming contexts. This study aims to assess the real-world impact of agroecological practices by evaluating their contributions to soil regeneration, efficient water use, and ecological resilience. By analyzing these factors, it will provide insights into the sustainability and productivity benefits of agroecological approaches. Additionally, the study seeks to identify both the challenges and opportunities associated with scaling up agroecology among smallholder farmers. Limited access to resources, technical knowledge gaps, and policy constraints often hinder widespread adoption, and understanding these barriers will be crucial in formulating effective strategies for expansion. Furthermore, the study will generate empirical data to support evidence-based policymaking. By providing concrete findings on the successes and limitations of agroecological interventions, it

will help guide policymakers, development agencies, and stakeholders in crafting policies that foster the adoption and institutionalization of agroecological principles. By addressing these critical aspects, this study will contribute to the refinement of agroecological strategies in Kenya, paving the way for a more sustainable, resilient, and productive agricultural sector.

1.2 Study Rationale

Agroecology has gained global recognition as a sustainable approach to food production that enhances environmental resilience, promotes biodiversity, and supports rural livelihoods. In Kenya, the adoption of agroecological principles is increasingly seen as a viable solution to address challenges such as climate change, soil degradation, water scarcity, and food insecurity. At the national level, Kenya has developed an agroecology (AE) strategy to guide the transition towards sustainable and resilient food systems. However, in the counties where actual implementation takes place there are notable gaps. Despite growing interest in agroecology, policy development and implementation at the county level remain fragmented, with significant shortcomings in legislative and institutional frameworks

The transition towards agroecological food systems requires well-structured policies that provide clear guidelines, institutional support, and resource allocation for effective implementation. Counties play a critical role in shaping agricultural policies, but their readiness to adopt and integrate agroecology into existing governance structures varies widely. Understanding the status and preparedness of counties is essential to identify strengths, weaknesses, and opportunities for policy development.

This study is therefore necessary to evaluate the extent to which selected counties have embraced agroecology, analyze existing legislative and institutional barriers, and offer practical recommendations for improving policy formulation. By developing county-specific policy briefs, the study will provide tailored insights to guide decision-makers, development agencies, and advocacy groups in promoting agroecological transitions. The findings will contribute to a more coordinated and evidence-based approach to

agroecology policy development in Kenya, ensuring that smallholder farmers, local communities, and stakeholders benefit from sustainable and climate-resilient agricultural practices.

1.3 Objectives of the Study

1.3.1 Broad Objective

The study aimed to assess the status, readiness, and challenges of agroecology policy development in selected counties in Kenya and provide evidence-based recommendations to enhance policy formulation, implementation, and advocacy efforts.

1.3.2 Specific Objectives

The study aimed to:

1) Evaluate the status and readiness of selected counties in adopting agroecology policies and strategies.
2) Analyze limitations in existing legislative and institutional frameworks and identify opportunities for improvement.
3) Provide targeted recommendations for addressing barriers to policy development.
4) Develop county-specific policy briefs to inform decision-making and advocacy efforts.

1.4 Limitations, challenges and mitigation measures of the study

By addressing the limitations and challenges listed below through strategic mitigation measures, the study was able to generate reliable and actionable insights to guide the development of agroecology policies across the selected counties in Kenya.

Limitations

a) Limited Availability of Data – Some counties lacked comprehensive historical data on agroecology, making it difficult to assess past trends and progress in policy development.

b) Variability in Stakeholder Engagement – Differences in the level of awareness, interest, and involvement of county governments and stakeholders may affect the consistency of responses.
c) Time and Resource Constraints – Conducting an in-depth policy readiness assessment across 16 counties requires significant time, financial resources, and logistical coordination.
d) Policy Dynamics and Changes – The evolving nature of policy discussions and reforms at the national and county levels may impact the relevance of findings over time.
e) Potential Bias in Responses – Stakeholder perspectives on agroecology policy development may vary based on institutional interests, leading to possible biases in data collection.

Challenges

a) Lack of Clear Agroecology Policies – Many counties did not have specific agroecology policies, leading to difficulties in assessing policy readiness.
b) Institutional and Bureaucratic Barriers – Lengthy approval processes, bureaucratic hurdles, and political dynamics slowed down engagement with county officials.
c) Limited Awareness and Understanding – Some policymakers and stakeholders had limited knowledge of agroecology, affecting their ability to provide informed responses.
d) Inconsistencies in County-Level Implementation – While national frameworks may support agroecology, county-level implementation varies widely, making it difficult to generalize findings.

Mitigation Measures

a) Use of Multiple Data Sources – To address data gaps, the study relied on diverse sources, including government reports, stakeholder interviews, and field surveys.

Comparing information from different stakeholders and secondary sources was used to enhance reliability and validity of the findings.

b) Request for additional time– Additional time was sought to accommodate counties with lengthy approval processes.

c) Engagement with a Broad Range of Stakeholders – Ensuring inclusivity by consulting policymakers, researchers, farmers, civil society organizations, and private sector actors to gain a holistic view.

d) Continuous Monitoring of Policy Changes – Regular updates and follow-ups with key informants to track any emerging policy developments during the study period.

CHAPTER TWO

APPROACH AND METHODOLOGY

2.1 The Study Area

The study was carried out in 16 select counties out of the 47 counties in Kenya. A sample size of 16 was considered adequate given that, generally for populations under 1,000, a minimum ratio of 30% is advisable to ensure representativeness of the sample (Mugenda & Mugenda, 2003). The selection of the 16 counties considered regional distribution and aridity indices. According to State Department of ASALs and Regional Development (2019), in Kenya there are 18 non-ASAL counties, 8 Semi-Arid counties with 10-29% aridity, 13 Semi-Arid counties with 30-84% aridity and 8 Arid Counties with 85-100% aridity (SDALRD, 2019). This study covered, 7 non-ASAL counties, 2 Semi-Arid counties with 10-29% aridity and 7 Semi-Arid counties with 30-84% aridity. This allowed the study to capture a range of agroecological conditions, providing insights into how different environmental contexts influence agroecology adoption.

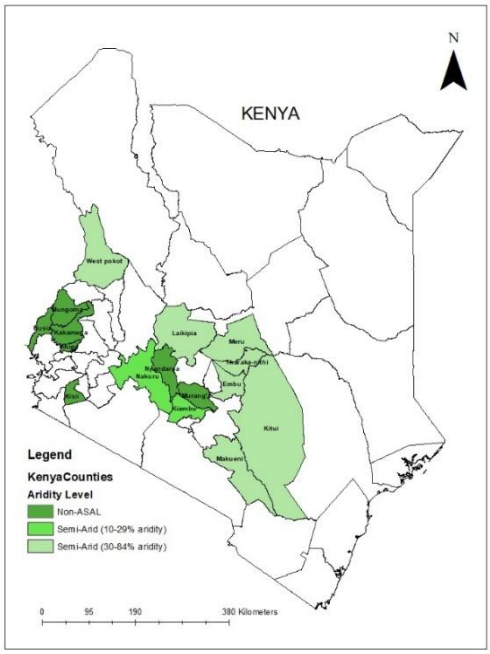

Figure 1: Study Area

2.2 Study Approach

The study adopted a mixed methods approach where both primary and secondary data was collected. The primary data was collected from farming households, key informants, and Focus Group Discussion panellists. The secondary data was collected from review of various publications, policies, strategy documents and reports by government agencies and key stakeholders.

2.3 Sampling Methodology

Different sampling techniques were used, depending on the target group to derive the final sampling framework.

1) **Farming Households:** For primary data collection from the farming households, data was collected from a target sample of 40 households in each county as explained in section 1 (b) below. This sample size ensured that the central limit theorem requirements of at least 30 respondents is met. The following sampling methods were used:
   a) Random Sampling of Wards: Ten percent of the wards were randomly selected per county. This was adjusted to 4 wards where the percentage resulted in less than 4 wards. Measures were taken to ensure that randomization does not capture only wards in one region.
   b) Random Sampling of Respondents: This was used in selecting participating households. According to the Kenya National Bureau of Statistics (KNBS), there are 6,612 sublocations and 1,450 wards in Kenya, implying an average of 5 sublocations per ward. In this study, sub locations and farmer groups were considered as clusters. First, in each ward, 5 sub locations were selected randomly using a random number selector. However, due to expansiveness of counties like West Pokot and Laikipia, a minimum of 2 sub locations were considered but ensuring wider distribution of the respondents. Secondly, with the help of the Ward Agricultural Officers, all the farmer groups registered by the Ward office was used as the sampling frame. For the selected sub locations, 5 farmer groups from the listed groups were again randomly selected. Thirdly, from each of the selected farmer groups, two farming households (one male and one female headed) were selected randomly per group.

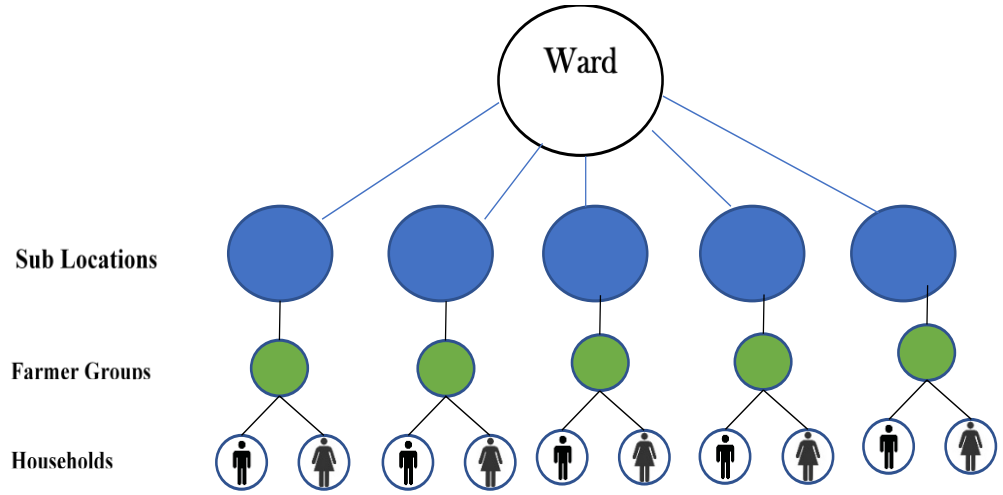

Figure 2: Sampling Approach

2) **Key Informants and Focus Group Discussion Participants:** Sampling of this category was purposive based on professional relevance of the target participants. Key individuals who participated in the KII and FGD were drawn from the following expertise list in Table 2.

Table 1: Target Key Informants and FGD Panellists

FGD Panellists	Key Informants
1) CASSCOM Executive 2) County Director of Agriculture 3) County Director of Economic Planning 4) County Director of Water 5) County Director of Livestock 6) County Director of Cooperative Development 7) County Director of Environment 8) Reps of Universities/ County Director of education (TVET) and research institutes 9) Relevant Project County Coordinators (NAVCDP/FSRP) 10) Agriculture NGO Representative 11) Farmer association and producer groups	1) County Director of Agriculture 2) Agriculture development Stakeholder's forum leadership 3) Agriculture NGO caucus representative 4) Private sector caucus representative 5) Farmer association representative

2.4 Data Collection

2.4.1 Desk Review

This involved a comprehensive and systematic process of document and literature review to gather the necessary information on the subject. The process begun with scoping and setting objectives of the review. This involved determining the thematic areas of interest to guide the review. An analytical framework or matrix was developed, outlining key indicators and criteria for evaluation of the quality of the review.

The next step involved identifying and gathering relevant sources. This entailed collecting a wide range of documentation, including national and county policy documents, legislation, regulations, strategic plans, and guidelines. Reports from various institutions including NGOs, research institutions, and international organizations were also be considered, along with case studies on agroecology initiatives. Information was sourced from online databases, websites and institutional repositories. A list of policies, strategies, legislations, regulations/guidelines reviewed are provided in Annex 5.

To ensure accuracy and credibility, findings were cross-checked against multiple sources. The validated insights were then compiled into a detailed report, presenting the findings in a clear and structured manner.

2.4.2 Primary Data Collection

Primary data was collected from two main sources. Farming households and policy drivers at the county level. Data was collected using three main complementary tools.

Survey: As a fore mentioned, primary data was collected from 40 farmers in each county. To assess the status and performance of agroecology, the Tool for Agroecology Performance Evaluation (TAPE)[1] developed by the Food and Agriculture Organization (FAO, 2019) was adopted and presented in a questionnaire form (Annex 1 &4). The questionnaire sought to establish the status of the agroecological practices at the household level. This was useful in providing information for evaluating each county's agroecology performance and transition level. The questionnaire had multiple choice questions, rating scales, open ended questions covering the 13 principles of agroecology and 2 more elements (efficiency and resilience). The survey data was digitized using KOBO-Collect. Data was collected in the months of February and March 2025.

Focus Group Discussions (FGD): This was designed to gather diverse perspectives and insights from a small, interactive group of participants. In the context of studying the readiness of counties to implement agroecological practices and policies, FGDs played a crucial role in exploring collective experiences, opinions, and attitudes among stakeholders. Nine to twelve (9-12) participants were drawn from Table 2 to take part in the FGD. One FGD was conducted per county in the months of February and March 2025. Tool in Annex 2 was used together with analysis framework in Annex 5 for interpretation.

Key Informant Interviews: The was used to gather in-depth information from individuals with specific knowledge, expertise, or experience relevant to agroecology adoption in the county. In the context of assessing the readiness of counties to implement agroecological policies, KIIs was vital tool to complement desk reviews and

[1] https://openknowledge.fao.org/items/8511c796-c7d1-4a04-895d-a28115731ce0

provide nuanced insights into the practical, institutional, and socio-economic aspects of policy adoption. Information was sought from 5 key informants per county as outline in Table 2 in the months of February and March 2025. Tool in Annex 3 was used together with analysis framework in Annex 6 for interpretation.

2.4.3 Stakeholders Engagement

The stakeholder engagement was a continuous process among stakeholders including the government ministries and state agencies, private sector, non-governmental organisations and private sector and the client starting from inception to validation of the findings. This engagement aimed to ensure a common understanding of the Terms of Reference, promoted ownership and validated the findings. The stakeholders were consulted through online meetings and calls for clarifications and document request. The county government departments provided relevant policies, strategies, programmes and projects documentation to aid in the desk-review and facilitate the identification of relevant individuals to be contacted for focus group discussions, key informant interviews and consultation throughout the assessment and the final validation.

The stakeholders from county government departments, Environment and Natural Resources, Agriculture and Livestock Development, Climate Change and Forestry; Health; Education; Investment, and Trade and Industry. In addition, key private sector and non-governmental organisations were also engaged. Stakeholders from the non-state actors included local and international NGOs, Community based organizations (CBOs), producer organizations and private sector actors. These organisations carry out programmes and projects on agroecology namely building capacity, influencing policy, resource mobilization, advocacy, sector coordination and networking to scale up the transition.

2.5 Data Analysis

Data analysis was both qualitative and quantitative in nature. The figure below shows the overall summary approach in data analysis.

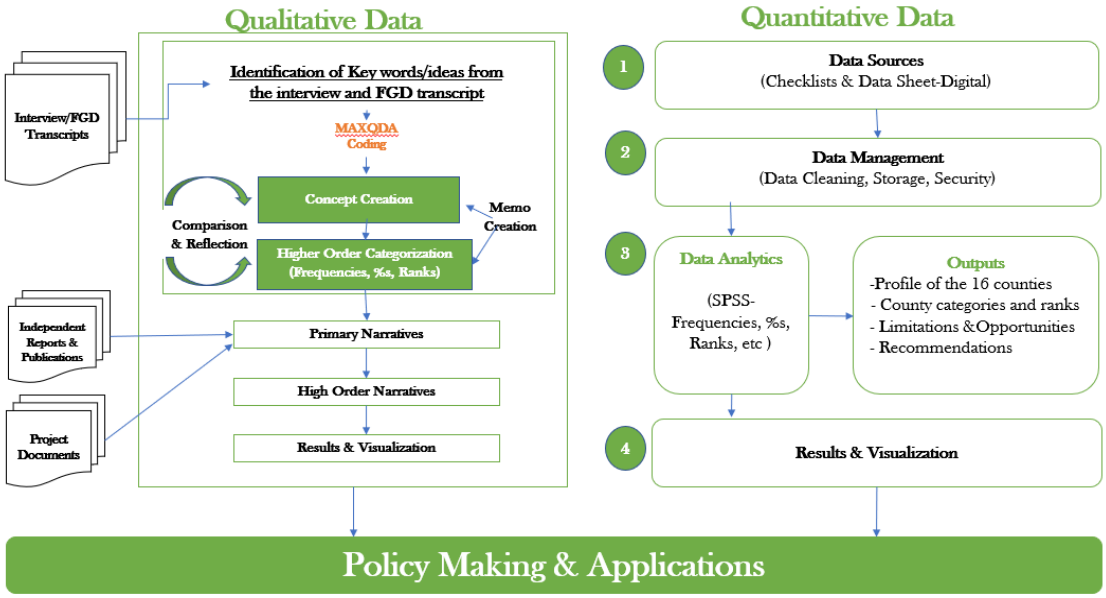

Figure 3: Data Analysis Framework

Qualitative Data Analysis: The analysis begun with organizing the data into clearly defined categories based on the themes and objectives of the study. Data from desk reviews, such as policy documents and reports, were analysed to identify patterns, gaps, and opportunities in existing frameworks. Thematic analysis was applied to qualitative data from KIIs and FGDs, focusing on recurring themes, divergent opinions, and unique insights. The process involved systematically coding to break the data into categories of themes, concepts, or issues.

From the categorization, key themes related to policy readiness, agroecology performance and transition were identified. Sub-themes will also be explored to understand nuanced issues. This informed pattern recognition of recurring ideas, common barriers, or shared priorities among stakeholders.

Quantitative Analysis: Involve numerical data, such as statistics on resource allocation, funding, or agricultural productivity, which were analysed using appropriate statistical tools (SPSS & Excel). The results were then summarized into visual representations like graphs, charts, and tables for better interpretation.

Comparative Analysis: Findings were then compared across the counties to identify variations in readiness levels, challenges, and opportunities. This helped in pinpoint region-specific issues that require targeted interventions.

Data Integration: Integration involve synthesizing insights from the various data sources to create a unified narrative. Qualitative findings were combined with quantitative data findings to provide context, explain trends, and highlight practical implications.

2.6 County Scoring

2.6.1 Measuring County Agroecology Transition (Status)

Data for evaluating county agroecology transition (status) with regards to adoption of agroecological practices was collected using the household surveys. For this tool, the 13 principles of agroecology (Gliessman, 2007; HLPE, 2019) and additional attributes of efficiency/productivity and resilience were used as shown in Table 4.

Table 2: Fifteen (15) Agroecology Principles

Agroecosystem Levels	Food Systems Levels
1) Recycling	9) Co-creation of knowledge
2) Input Reduction	10) Social Values and diet
3) Soil Health	11) Fairness
4) Animal Health	12) Connectivity
5) Biodiversity	13) Land and resource governance
6) Synergies	14) Participation
7) Economic Diversity	15) Resilience
8) Efficiency/Productivity	

2.6.2 Measuring County Readiness

Data for readiness for development and implementation of agroecology policies partly came from the household survey, KII and the FGDs. The readiness data was based on 10 key dimensions. These dimensions were weighted before computation of the overall county readiness score.

Table 3: Proposed County Readiness Score

Data Dimension	Key Types of Data/Indicators
Political Will and Commitment	▪ Status of operationalization of agroecology policy/strategy ▪ Number of Political statements or public commitments e.g., public declarations or pledges by political leaders supporting agroecology. ▪ Government budget allocation: Financial resources allocated to agroecology or sustainable agriculture programs in the county budgets. ▪ Documentation of Agro ecological practices in County Integrated Development Plans ▪ Number of other policies or strategies related to agroecology (in agricultural, environmental, or climate policies)
Institutional Capacity	▪ Number of government institutions with mandates for supporting agroecology ▪ Number of trained professionals or experts in agroecology within key institutions. ▪ Existence of multi-stakeholder platforms, commissions, or task forces dedicated to agroecology policy development.
Legislative and Regulatory Framework:	▪ Number of laws and regulations supporting agroecology (related to land use, biodiversity conservation, agrochemicals, organic farming, or other aspects). ▪ Compliance with international agreements (like the Convention on Biological Diversity, the Paris Agreement, or FAO guidelines on sustainable agriculture). ▪ Number of agricultural projects or practices subjected to environmental impact assessments that consider agroecological principles.
Financial Resources and Support:	▪ Amount of government funds directed to agroecological research, extension services, and farm Investment levels from private companies, NGOs, or international organizations in agroecological practices or enterprises. ▪ Availability of financial incentives or subsidies (e.g., subsidies, tax breaks, levy breaks) for agroecological practices, organic farming, or biodiversity conservation. ▪ Availability of funding from other sources which support agroecological practices
Technical and Scientific Knowledge:	▪ Number of agroecology-related research projects focused on agroecology or sustainable agriculture. ▪ Research funding for agroecology (e.g., amount of funding allocated to agroecology-focused research institutions, universities, and research centres. ▪ Presence of agroecology training programs (Number of formal and informal educational programs (universities, NGOs, extension services) offering training on agroecological practices.
Social Acceptance and	▪ Number of awareness campaigns or initiatives promoting agroecology.

Data Dimension	Key Types of Data/Indicators
Stakeholder Engagement:	▪ Level of engagement in public consultations, policy dialogues, and meetings involving agroecology (e.g., number of stakeholders attending meetings). ▪ Farmer adoption rates of agroecological practices
Market Infrastructure and Value Chains:	▪ Percentage of the agricultural market occupied by agroecologically certified products (e.g., organic products, fair trade goods). ▪ Number of established value chains that connect agroecological producers with consumers (e.g., organic certification schemes, local food networks). ▪ Presence of agroecology-specific markets, cooperatives, or retail outlets (e.g., organic farmers' markets).
Extension Services:	▪ No. of training canters offering extension on agroecology extension services. ▪ Number of Agroecology-focused extension services available to farmers, including field demonstrations and farmer field schools. ▪ Effectiveness of extension services aimed at building the capacity of stakeholders (e.g., farmers, policymakers, NGOs) in agroecology.
Environmental and Ecological Readiness:	▪ Measurements of soil organic matter, soil fertility, and soil erosion rates as indicators of ecological readiness for agroecological practices. ▪ Presence of biodiversity indices tracking system such as species richness, that indicate ecosystem health and the potential for agroecology to maintain or enhance biodiversity. ▪ Presence of tracking indicators of water quality (e.g., nutrient loading, pesticide residues) and water availability in agricultural regions that could influence agroecological practices
Cultural and Social Factors:	▪ Presence of policies or programs that integrate indigenous agricultural knowledge into agroecological practices. ▪ Presence of measures of gender equality, land tenure security, and the inclusion of marginalized groups (e.g., women, youth, indigenous peoples) in agroecology initiatives. ▪ Level of local communities or farmers involved in agroecology-related decision-making processes, such as land-use planning or policy devpt.

2.6.3 Identifying External Influence

Apart from internal capabilities, the study also explored external factors which influence agroecology transition. These are macro factors external to the country control. Data collection was structured around the PESTELI framework using the KII tool as shown in Table 6.

Table 4: PESTELI Framework

Components	Examples of Key Elements/Indicators
Political	▪ National Tax policy on organic products ▪ National Labour laws and their effect on farm labour ▪ International Trade policies & Tariffs on agricultural produce ▪ International Trade restrictions
Economic	▪ Inflations ▪ Interest rates ▪ Currency exchange rates ▪ Customer income levels ▪ Customer confidence ▪ Demand and supply
Social	▪ Demographics (population growth rate, age distribution), ▪ Involvement of different age categories ▪ Attitudes towards organic food ▪ Cultural barriers
Technological	▪ Agricultural mechanization and mechanization policies ▪ Use of ICT, ▪ Emerging technologies- robotics,
Environmental	▪ Status of pollution of ecosystems. ▪ Climate change. ▪ Forest degradation; De-forestation; Desertification;
Legal	▪ Laws governing agroecological practices. ▪ Legal and regulatory barriers

CHAPTER THREE

FINDINGS AND DISCUSSION

3.1 Context

This study on status and readiness of agroecology policy development in 16 select counties in Kenya was commissioned by Biovision Africa Trust and carried out by Hydro Sentient Limited between February and March 2025. The study involved determining agroecology transition across & county readiness in supporting the transition. To actualize this study, three tools were used. The Tool for Agroecology Performance Evaluation (TAPE)[2] developed by the Food and Agriculture Organization (FAO, 2019) was applied in alignment with the local context for measuring transition. The tool (questionnaire in Annex 1) was administered to a total of 657 households across the 16 counties and interpreted using the analysis framework in Annex 4.

Secondly, a focus group discussion tool based on 10 dimensions of political, institutional, legal, financial, technical knowledge, social acceptance, market infrastructure, extension services, environmental, and culture (Annex 2) was used to collect data from county stakeholders on the readiness of the counties in supporting agroecology transition. Framework in Annex 5 was used for interpretations. The respondents included county directors of crops, livestock, environment, water, economic planning, cooperatives as well as representatives of agricultural tertiary institutions, agriculture development projects, agriculture sector platform, farmers and agriculture sector NGOs. Thirdly, a key informant tool (Annex 3) was used for understanding the influence of macro environment on agroecology transition. Analysis framework in Annex 6 was used for interpretation. The key informants were director in charge of agriculture, agriculture sector platform leadership, NGO representative, private sector representative and farmer representative.

[2] https://openknowledge.fao.org/items/8511c796-c7d1-4a04-895d-a28115731ce0

3.2 Performance of Agroecology

The 16 counties were categorized into three zones depending on the aridity level. This was useful in presenting regional perspectives because most of the counties fall in common agroecological zones. The three regions were, High potential areas (Non ASAL counties), Medium Potential Areas (with Aridity between and 20%) and Medium-Low potential areas (with 30-84% aridity)[3].

3.2.1 Description of Systems and Context

Zone	Counties	Context Summary
Non-ASAL/ High potential areas (7)	Busia, Bungoma, Kakamega, Vihiga, Kisii, Muranga, Nyandarua	A total of 286 households from 7 high potential counties in Kenya (non-ASAL) participated in the study. Lower midland to Upper highlands, characterized by reliable mean annual precipitation (750–2,200 mm) at an altitude of 900–2,400 m above sea level and experiencing a mean annual temperature of 20°C to 27°C. Main sources of income are mixed smallholder farming (63.6%), small scale crop farming only (19%), small scale livestock farming only (10.0%), informal jobs (3.8%) and formal employment (2.4%). The average land holding is 2.6 acres with 57% having title deeds and an average household size of 5.5. Livestock species mostly kept farmers are chicken, dairy cattle and their crosses, local cattle, sheep and goats. The main type of crops are maize, sugarcane, potatoes, bananas and horticulture. Earnings per acre for 55% was above the national average while 21% earned between 80 and 100% of the national average, 9.1% earned between 61 and 80% of the national average, 7.6% between 30 and 60% of the national average, 4.5% between 15 and 30% of the national average and 2.5% earned below 15% of the national average.
Semi-Arid (10-29% Aridity)/ Medium potential area (2)	Kiambu Nakuru	A total of 81 households from 2 medium potential counties in Kenya (10 and 29% aridity) participated in the study. Lower midland to Upper highlands, with many areas characterized by irregular and unpredictable rainfall with annual rainfall average between 1,200 and 1700 mm and at an altitude of 1,200–2,900 m above sea level and experiencing an average annual temperature between 12°C to 25°C. Main sources of income are small mixed smallholder farming (62.9%), small scale crop farming only (34.5%), livestock farming only (2.4%) and informal jobs (1.2%). The average land holding is 2.4 acres with 70% having title deeds and an average household size of 5.5. Livestock species mostly kept farmers are indigenous chicken, dairy cattle and their crosses, improved chicken varieties, local

[3] SDALRD. (2019). *State Department for the ASALs and Regional Development.* Retrieved from State Department for the ASALs and Regional Development: https://www.asalrd.go.ke/

		cattle, sheep and goats. The type of crops are maize, sugarcane, bananas and horticulture. Earnings per acre for 44% was above the national average while 19.7% earned between 80 and 100% of the national average, 8.6% earned between 61 and 80% of the national average, 14.8% between 30 and 60% of the national average, 3.7% between 15 and 30% of the national average and 8.6% below 15% of the national average.
Semi-Arid (30-84% Aridity)/ Medium-Low potential areas (7)	Embu, Kitui, Makueni, Meru, Tharaka Nithi, Laikipia, West Pokot	A total of 290 households from 7 medium low potential counties in Kenya (30 and 84% aridity) participated in the study. The areas fall between LM6 in the lower parts of Makueni to Upper Highlands in Meru County. Irregular and unpredictable rainfall win most parts of the areas (30%-80%) with annual rainfall average between 300 and 1600 mm and at an altitude of 250–2,900 m above sea level and experiencing an average annual temperature between 20°C to 25°C. Main sources of income are mixed smallholder farming (61.0%), small scale crop farming (26.5%), small scale livestock farming (6.8%), informal jobs (1.7%) and formal employment (2.0%). The average land holding is 5.15 acres with 59% having title deeds and an average household size of 6.1. Livestock species mostly kept farmers are indigenous chicken, dairy cattle and their crosses, improved chicken varieties, local cattle, sheep and goats. The main type of crops are maize, sugarcane, bananas and horticulture. Earnings per acre for 23.5% was above the national average while 14.8% earned between 80 and 100% of the national average, 8.6% earned between 61 and 80% of the national average, 21.4% between 30 and 60% of the national average, 135% between 15 and 30% of the national average and 18.5% below 15% of the national average.

3.2.2 Characterization of The Agroecological Transition (CAET)

Characterization of the transition was done on a scale of 1-10. Where, < 2 (Highly unsustainable), 2.0-3.9 (Unsustainable), 4.0-5.9 (Acceptable), 6.0-8.9 (Desirable) and >9.0 (Highly desirable). The regions were grouped into three main categories comprising of high potential areas (Busia, Bungoma, Kakamega, Vihiga, Kisii, Muranga, Nyandarua), medium potential areas (Kiambu and Nakuru) and medium low potential areas (Embu, Kitui, Makueni, Meru, Tharaka Nithi, Laikipia, West Pokot). The result revealed a **moderate (Acceptable) level of transition to agroecology across the three regions** with extremely small maximum difference across the regions (0.26 points). Comparatively, **Medium** potential areas had the highest transition level (5.09), followed by **Medium-Low** potential areas (4.93) and lastly by the **High** potential areas (4.83). This indicates that comparatively, **Medium** potential regions have greater shift towards more sustainable and resilient agricultural and food systems based on

ecological principles. For **Medium-Low** potential areas, the scores on performance of the 15 agroecology principles ranged between 2.4 to 6.77. For **Medium** potential areas, the scores ranged between 1.83 to 7.44 while for **High** potential areas, the scores ranged between 2.50 and 6.97. Generally, Medium potential areas often see higher agroecological transitions compared to low and high potential areas (Padró & Tello, 2022). Comparatively, medium (intermediate) potential areas have more stable conditions (soil fertility and water availability) to benefit most form from agroecological practices. Conversely, medium-low and low potential areas are prone to high risks of extreme climatic and environmental vulnerabilities and are more motivated to explore and adopt agroecological practices for improved productivity and sustainability. Meanwhile, high potential areas already have established, high input farming systems, making a shift to agroecology potentially challenging due to established practices, lowering initial incentives for change.

Figure 4: CAET Transition across Regions

The difference between the categories is most pronounced for the principles of efficiency, recycling, land and natural resource management.

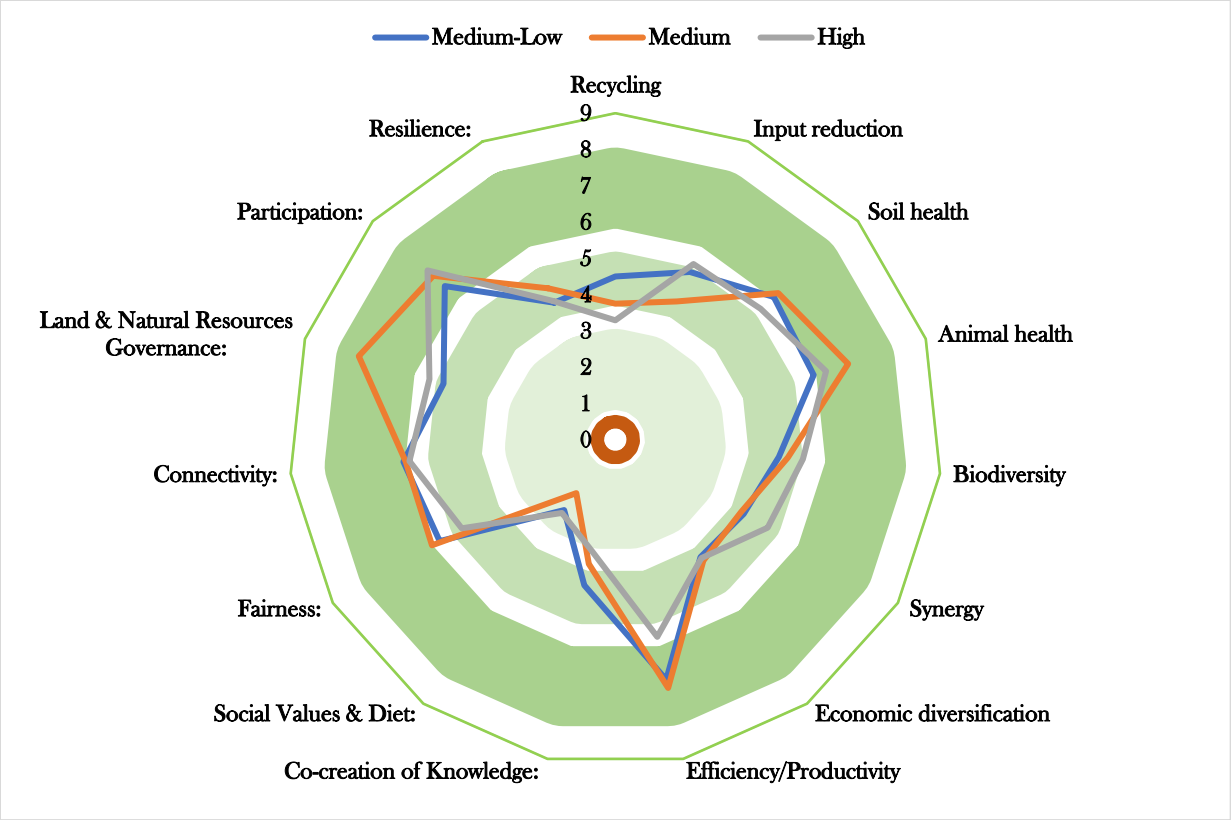

Figure 5: Average CAET Scores for the Medium-Low, Medium and High potential areas

An in-depth observation (Table 6) shows that generally, the studied regions exhibited higher level of efficiencies/productivity in comparison to the national average[4] with medium and medium-low potential areas registering comparatively higher performance than high potential areas. The high performance for medium-low areas on efficiency is attributed to high value enterprises (livestock) and low inputs for the enterprises. Levels of farmers' participation (citizen engagement) and promotion of animal health is equally high.

The results also show that there is good transition towards input reduction, improved soil health, fairness, connectivity and sustainable land and natural resource governance practices. Even though there is moderate trend towards enhanced biodiversity, synergy, economic

[4] NB: Maize grown by 98% of smallholder farmers used as the base of estimating average earning per acre. Average Yield (90 kg bags) per acre = 18 bags per acre (Farmers with commercial, orientation but < 10 acres). Revenue (Yield *KES 4,500 at harvest-2024) = KES 81,000. Cost of Production per acre = KES 54,550. Marginal income = KES 26,450 per acre Source: https://www.foodsystemsdashboard.org/countries/ken/subnational-data/indicators/admin-1/food-supply-chains/production-systems-and-input-supply/maize-yield/map

diversification and resilience building, efforts are required to promote agricultural enterprise diversification, synergy and enhanced adaptability and resilience development.

Nonetheless, transition towards sustainable recycling practices, co-creation of knowledge, social values and diets still remain low and are within the unsustainable levels. Generally, it will require deliberate efforts to ensure a holistic approach to transitioning farming households to full adoption of agroecology principles.

Table 5: Results of CAET for the Medium-Low, Medium and High potential areas in Kenya

Dimension	Medium-Low	Medium	High	Average
Recycling	4.50	3.75	3.29	3.84
Input reduction	5.06	4.17	5.30	5.07
Soil health	5.88	6.04	5.39	5.67
Animal health	5.75	6.75	6.11	6.04
Biodiversity	4.54	4.78	5.20	4.88
Synergy	4.09	4.00	4.85	4.44
Economic diversification	4.00	4.13	4.04	4.03
Efficiency	6.77	7.00	5.56	6.23
Co-creation of Knowledge:	4.11	3.50	3.13	3.58
Social Values & Diet:	2.40	1.83	2.50	2.38
Fairness:	5.60	5.83	4.89	5.29
Connectivity:	5.88	5.81	5.71	5.79
Land & Natural Resources Governance:	4.98	7.44	5.39	5.46
Participation:	6.33	6.75	6.97	6.68
Resilience:	4.13	4.56	4.18	4.21
Mean Score	4.93	5.09	4.83	4.90

Considered individually, Murang'a (5.43), Busia (5.29), Laikipia (5.26) Kiambu (5.13) and Nakuru (5.04) came out relatively stronger. These counties show relatively strong performance across several key areas, especially in resource efficiency, participation, soil and animal health. These were followed by Meru (4.96), Bungoma (4.94), Vihiga (4.87), Tharaka Nithi (4.83), West Pokot (4.79), Kisii (4.75), Kitui (4.69), Kakamega (4.67), Embu (4.65) and Nyandarua (4.58). The level of agroecology transition across the 16 counties studied remained within the acceptable region and showing positive trends agroecology transition.

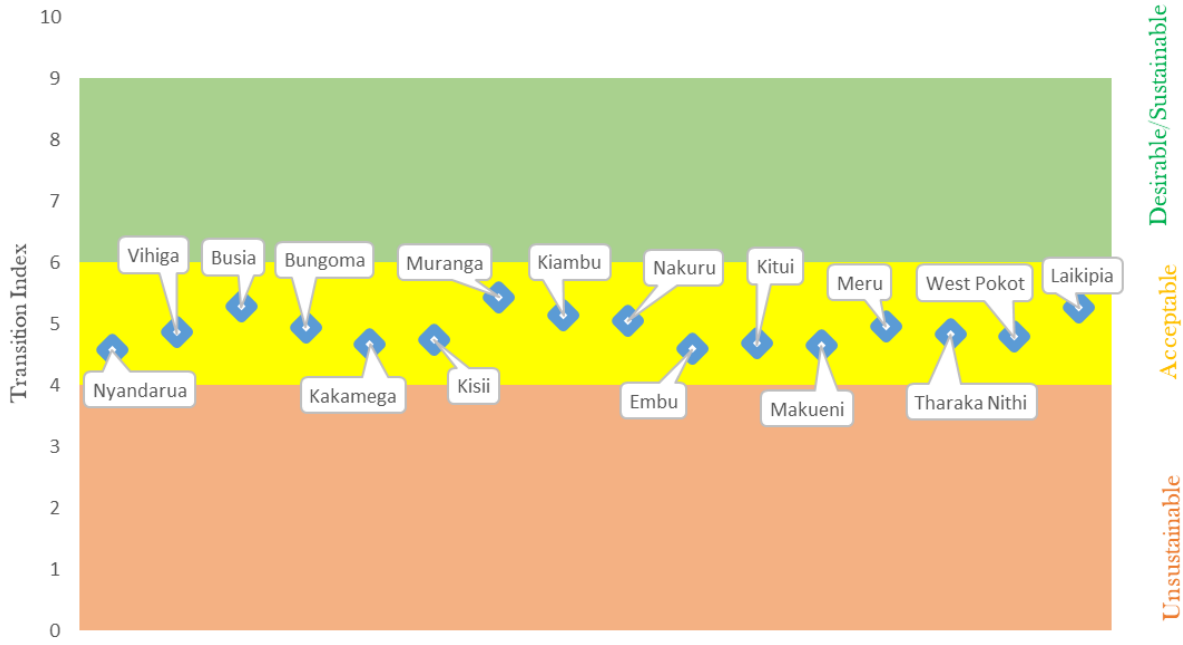

Figure 6: Agroecology Transition

However, performance across individual agroecological principles widely varied across the counties, reflecting both local strengths and localized gaps. In terms of recycling of resources, Kisii (6.00) and Busia (5.50) emerged as leaders, suggesting that farmers in these areas have adopted effective techniques for nutrient and organic matter cycling as well as use of alternative sustainable energy sources. However, Embu and Meru counties recorded much lower scores of 2.38 and 2.50 respectively, indicating limited use of recycling practices and alternative sustainable energy sources.

On input reduction, Laikipia (6.92) and Kakamega (6.75) scored highly, reflecting a notable shift towards minimizing synthetic inputs such as chemical fertilizers and pesticides. This is a likely pointer to stronger awareness of agroecological alternatives or better access to organic inputs. Conversely, Nyandarua (4.08), Kiambu (3.58) and Tharaka Nithi (3.25) had lower scores, which may signal ongoing reliance on conventional, input-intensive farming methods.

In the area of soil health, Busia (7.92) once again led the way, followed closely by Kiambu (7.58) and Bungoma (6.83). These counties appear to prioritize practices that

maintain or improve soil structure and fertility critical for long-term productivity. On the other end, Meru's low score (3.42) suggests a need for improved soil testing and soil conservation strategies, such as cover cropping or reduced tillage.

Animal health was another domain where Laikipia (7.25), Kiambu (7.17) and Meru (7.08) stood out, suggesting more effective livestock management systems or better veterinary support services. Meanwhile, counties like Kakamega (4.67) and Kitui (4.42) scored lower, possibly reflecting challenges such as inadequate animal husbandry training or limited animal healthcare and animal welfare.

In biodiversity Makueni (6.25), Tharaka Nithi (5.69) and Laikipia (5.81) demonstrated better integration of diverse crops and animals into farming systems, fostering ecological balance. In contrast, Vihiga (4.06) and Kisii (3.88) scored relatively low, indicating more homogeneous farming practices.

Tharaka Nithi (6.38), Meru (5.50) and Laikipia (5.50) scored comparatively high on Synergy and showing more beneficial interactions between farm components and enterprises. However, performance of Kakamega (2.88), Kisii (3.25), Vihiga (3.38), Kitui (3.50) and Makueni (3.75) requires more efforts to enhance complementary biological, enterprise and knowledge diversification.

Regarding economic diversification, which measures the presence of multiple income sources on the farm, overall scores were low. Tharaka Nithi (4.75), Kakamega (4.75), Murang'a (4.50) and Makueni (4.50) showed some promise, suggesting efforts to engage in mixed livelihoods. However, Meru (3.25) and Vihiga (3.25) had the weakest performance, indicating a heavy dependence on single crops or enterprises—leaving farmers more exposed to market and climatic risks.

In terms of efficiency/productivity, which looks at optimal use of available resources, Murang'a was the highest scoring county (8.63), with Busia (8.13), Vihiga (7.88) and Bungoma (7.88) not far behind. These high scores reflect systems that maximize productivity with minimal waste. Meanwhile, Kitui (3.75) and Kisii (4.25), with lower

scores, may benefit from improved water harvesting, crop-livestock integration, or cost-saving technologies.

Co-creation of knowledge, the principle emphasizing participatory learning and innovation was notably weak across most counties. Kitui had the lowest score (1.25), reflecting minimal engagement between farmers, researchers, and extension agents. Even relatively better performers like Murang'a, Bungoma and Nyandarua (4.63) only achieved moderate results, suggesting that knowledge exchange platforms remain underdeveloped across board.

The principle of social values and diet, which highlights culturally appropriate food and social wellbeing, was uniformly low across all counties with all counties scoring less than 3.00 except Kitui and Vihiga which scored a moderate 5.25 and 5.5 respectively. This reflects a probable broader systemic oversight, where nutrition and social inclusion may not yet be prioritized in agroecological planning and policy.

Regarding fairness, which captures equity in access to resources and decision-making, Vihiga (7.50), Busia (6.67), Meru (6.67), Nyandarua (5.83), Nakuru (5.83) and Kiambu (5.83) scored the highest. This suggests stronger efforts towards inclusive participation and gender equity. Most other counties scored in the mid-range, with no county showing particularly very low or very high disparity.

Connectivity, which involves community links and market access, was strongest in Kisii (7.13) and Laikipia (6.75). These counties likely benefit from established farmer networks or infrastructure that enables knowledge sharing and trade. Other counties like Nyandarua and West Pokot showed more moderate connectivity, indicating room for stronger social cohesion and institutional support.

In terms of land and natural resources governance, Nakuru (8.88), Laikipia (8.50) and Murang'a (8.13) demonstrated excellent local management of resources, possibly benefiting from effective land laws or community land use plans. Makueni (3.13) and

Busia (3.50), however, scored lower, pointing to challenges in access to land ownership documents and relatively lower perception on land rights.

The principle of participation revealed generally high levels of engagement, particularly in Kitui (8.13), Nakuru (7.94), Makueni (7.81), Meru (7.81), Busia (7.75), Bungoma (7.00) and Embu (7.00), where community involvement in decision-making and local initiatives appears strong. Lower scores were registered in counties like Nyandarua (5.38), Vihiga (5.31) and Laikipia (5.31). Although these scores where within the mid-range suggesting positive strides towards institutional inclusion and farmer representation in agroecology governance dialogue and management structures.

Finally, resilience, the ability to adapt and recover from shocks was highest in Kakamega (5.19) and Busia (5.00), both of which seem better equipped to handle climate variability or economic instability. Nyandarua had the lowest resilience score (2.50), underscoring potential vulnerabilities due to a lack of risk management strategies or adaptive capacity.

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Table 6: Results of CAET for 16 Counties in Kenya

Principles of Agroecology	Nyandarua (018)	Vihiga (038)	Busia (040)	Bungoma (039)	Kakamega (037)	Kisii (045)	Muranga (021)	Kiambu (022)	Nakuru (032)	Embu (014)	Kitui (015)	Makueni (017)	Meru (012)	Tharaka Nithi (013)	West Pokot (024)	Laikipia (031)	Average	Rank
Recycling	4.38	3.25	5.50	3.88	3.88	6.00	4.63	4.38	3.13	2.38	3.25	3.50	2.50	4.00	3.25	3.63	3.84	13
Input reduction	4.08	4.67	4.17	5.25	6.75	5.67	4.83	3.58	4.75	5.42	5.92	6.00	5.17	3.25	4.67	6.92	5.07	8
Soil health	5.75	5.00	7.92	6.83	4.00	5.75	5.92	7.58	4.50	5.00	5.17	6.58	3.42	5.67	5.00	6.58	5.67	5
Animal health	5.58	5.83	6.58	5.33	4.67	6.33	5.92	7.17	6.33	6.75	4.42	5.75	7.08	5.42	6.17	7.25	6.04	3
Biodiversity	4.25	4.06	4.31	5.25	4.38	3.88	5.63	4.63	4.94	4.25	5.13	6.25	4.75	5.69	4.81	5.81	4.88	9
Synergy	5.00	3.38	5.00	4.00	2.88	3.25	5.13	4.13	3.88	4.25	3.50	3.75	5.50	6.38	5.50	5.50	4.44	10
Economic diversification	3.50	3.25	3.50	4.25	4.75	4.25	4.50	4.25	4.00	3.25	3.75	4.50	3.25	4.75	5.00	3.75	4.03	12
Efficiency	5.75	7.88	8.13	7.88	4.88	4.25	8.63	6.88	7.13	5.38	3.75	4.38	6.50	7.00	5.88	5.38	6.23	2
Co-creation of Knowledge:	4.63	3.25	3.63	4.63	3.63	4.38	4.63	3.88	3.13	3.25	3.50	2.63	2.88	2.63	3.25	3.38	3.58	14
Social Values & Diet:	1.70	5.50	1.95	1.90	2.00	2.15	1.60	1.90	1.75	2.05	5.25	1.60	2.00	2.25	2.35	2.15	2.38	15
Fairness:	5.83	7.50	6.67	5.00	5.00	4.17	5.00	5.83	5.83	4.17	5.00	4.17	6.67	4.67	4.17	5.00	5.29	7
Connectivity:	5.13	5.25	5.75	5.00	6.50	7.13	6.38	6.50	5.13	5.25	4.50	6.00	6.50	5.75	5.13	6.75	5.79	4
Land & Natural Resources Governance:	5.25	5.00	3.50	3.88	5.00	4.13	8.13	6.00	8.88	5.88	4.63	3.13	5.88	4.50	5.13	8.50	5.46	6
Participation:	5.31	5.38	7.75	7.00	6.63	6.06	6.19	5.56	7.94	7.00	8.13	7.81	7.81	6.19	6.81	5.31	6.68	1
Resilience:	2.50	3.88	5.00	4.06	5.19	3.88	4.44	4.75	4.38	4.56	4.44	3.69	4.44	4.31	4.81	3.00	4.21	11
Grand Average	4.58	4.87	5.29	4.94	4.67	4.75	5.43	5.13	5.04	4.59	4.69	4.65	4.96	4.83	4.79	5.26	4.90	
Rank	16	8	2	7	13	11	1	4	5	15	12	14	6	9	10	3		

3.3 County Readiness for Agroecology Policy Development and Implementation

3.3.1 Integration of Agroecological Principles in Existing County Legal and Policy Framework

The integration of agroecology principles in existing county legal and policy framework was assessed through document review of relevant laws, regulations, policies and strategies across the 16 counties and at the national level. Below is a list of documents reviewed across the 16 counties and at the national level.

Table 7: List of Reviewed Documents

County	Relevant Document
Nyandarua (018)	i) Nyandarua County Integrated Development Plan (CIDP) III (2023–2027)
	ii) Nyandarua County Climate Change Action Plan (2023–2027)
	iii) Productive Sector Plan (2023–2033)
	iv) Natural Resource Management Policy (2024)
	v) Nyandarua County Potato Strategy
Vihiga (038)	i) Vihiga County integrated development plan (CIDP2023-2027),
	ii) Vihiga County Agroecology Policy 2024
	iii) The Vihiga County Solid Waste Management Policy of 2019
	iv) Vihiga County Climate Change Action Plan, 2023-2027
	v) The Vihiga County Environment Policy 2019
	vi) The Vihiga County Agroforestry Policy, 2019
Busia (040)	i) Busia County Climate Change Action Plan (2023-2027)
	ii) Busia County Integrated Development Plan-CIDP (2023-2027)
	iii) Busia County Biodiversity Policy
	iv) The Busia County Fisheries and Aquaculture Bill, 2016
Bungoma (039)	i) Bungoma County Integrated Development Plan-CIDP (2023-2027)
	ii) Bungoma County Climate Change Policy, 2020
	iii) The Bungoma County Co-Operative Societies Act, 2023
	iv) Bungoma Agricultural Land Lease Guidelines 2023
	v) Bungoma County Agricultural Soil Management Policy, 2023
	vi) Bungoma County Food Safety Policy, 2023
Kakamega (037)	i) The Dairy Development Policy for Kakamega County,2018
	ii) Kakamega County Draft Food Safety policy, 2021
	iii) Kakamega county climate change action plan 2021-2026.
	iv) Kakamega County Integrated Development Plan (CIDP) 2023-2027
Kisii (045)	i) The Kisii County Water Management and Water and Sanitation Services Act, 2014
	ii) Kisii County Climate Change Framework Policy-2019
	iii) Kisii County Climate Change Action Plan 2023-2027
	iv) Kisii County CIDP 2023-2027
Muranga (021)	i) Murang'a County Agroecology Policy (2022–2032)
	ii) Murang'a County Integrated Development Plan (CIDP) 2023–2027
	iii) Murang'a County Climate Change Action Plan (2023–2027)
	iv) Murang'a County Agroecology Development Act (2022)

County	Relevant Document
Kiambu (022)	i) Kiambu County Integrated Development Plan (CIDP) 2023–2027
	ii) Kiambu County Climate Change Action Plan (KCCCAP) 2023–2027
	iii) Kiambu County Climate Change Act, 2021
Nakuru (032)	i) Nakuru County Integrated Development Plan 2023-2027
	ii) The Nakuru County Agricultural Development Fund Act 2014
	iii) Nakuru County Climate Change Act, 2021
	iv) Nakuru County Waste Management Policy
	v) Nakuru County Climate Change Action Plan 2023-2027
Embu (014)	i) Embu County Integrated Development Plan-Cidp (2023-2027)
	ii) Embu County Climate Change Action Plan ECCAP (2023-2027)
	iii) The Embu County Environment Management Act, 2015
	iv) The Embu County Water Act, 2015
	v) Embu County Integrated Solid Waste
Kitui (015)	i) Kitui County Integrated Development Plan-CIDP (2023-2027)
	ii) The Kitui County Climate Change Action Plan (2023–2027)
	iii) The Kitui County Abattoirs Act (2014)
	iv) Kitui County River Basins Sand Utilization and Conservation Policy, 2023
	v) Kitui County Agri-Nutrition Implementation Strategy 2023-2027
Makueni (017)	i) Makueni County Integrated Development Plan-CIDP (2023-2027)
	ii) Makueni County Animal Feed Strategy 2023
	iii) Makueni County Sand Conservation & Utilization Authority Quality Policy
	iv) Makueni County Water Policy, 2019
	v) Makueni County Agriculture and Livestock Policy, 2021
	vi) Makueni County Cooperative Development Policy 2021
	vii) The Makueni County Sustainable Forest Management and Tree Growing Bill, 2023
Meru (012)	i) Meru County Integrated Development plan 2023-2027
	ii) Meru County Public Participation Act 2014
	iii) Meru County Disaster Management Act 2016
	iv) Meru County Wildlife and Conservancies Management Act, 2014.
	v) Meru County Participatory Climate Risks Assessment (PCRA) Report 2023
	vi) Meru County Climate Change
	vii) Action Plan (MCCAP) 2023- 2027
Tharaka Nithi (013)	i) County Integrated Development Plan 2023-2017 (CIDP)
	ii) Tharaka Nithi County Regenerative Agriculture for Food System Transformation Strategy, 2025-2030
	iii) Tharaka Nithi Agroecology Policy 2024
	iv) Tharaka Nithi Climate Change Fund Act 2019
	v) Tharaka Nithi County Climate Change Adaptation Plan 2023-2028
	vi) Tharaka Nithi Gender Mainstreaming Policy, 2021
West Pokot (024)	i) West Pokot County Climate Change Action Plan- 2023-2027
	ii) West Pokot Third County Integrated Development Plan (CIDP)- 2023-2027
	iii) West Pokot County Climate Change Framework Policy; Sessional Paper No. 2 of 2021
	iv) West Pokot County Climate Finance Policy; Sessional Paper Number 3 of 2021
	v) County Climate Change Fund Act 2021
	vi) The West Pokot County Climate Change Fund Regulations 2022
Laikipia (031)	i) Laikipia County Climate Change Action Plan 2023-2027

County	Relevant Document
	ii) Laikipia County Integrated Development Plan 2023-2027
	iii) The Laikipia County Community Engagement and Resilience Act, 2022
	iv) The Laikipia County Climate Change Act 2021
	v) The Laikipia County Youth Service Act, 2020
National	i) National Agroecology for Food Systems Transformation Strategy-2024
	ii) Agriculture Policy-2021
	iii) Agricultural Sector Growth and Transformation Strategy-2019
	iv) Kenya National Agroforestry Strategy-2021
	v) National Agricultural Soil Management Policy-2020
	vi) National Climate Change Response Strategy-2020
	vii) National Land Use Policy-2017
	viii) The Livestock Policy-2020
	ix) Seeds and Plants Varieties Act 2012

A total of 90 related policy documents were reviewed (9 from the national government and 81 from the 16 counties). The documents were analysed to identify integration of enabling provisions in agroecology related policy documents for agroecology transition across the counties. The review reveals variation in the integration of the agroecology principles across counties and among the principles themselves. Despite only two counties having specific operational agroecology policies (Vihiga & Muranga), it is evident that the relevant principles of agroecology are well integrated in other sectoral policies and strategies. These principles are broadly presented under sustainable management practices with different principles receiving different levels of emphasis.

Top Emphasized Principles: Participation (emphasized in 72% of the documents), Resilience (68%) and Land & Natural resource governance (67%) are the most frequently addressed principles across county policies. This reflects an emphasis on inclusive decision making for sustainable land use and improved capacity of communities to withstand and adapt to shocks likely due to increasing climate-related challenges. Recycling (58%), efficiency/productivity (53%) and economic diversity (50%) also rank highly, indicating a strong policy focus on environmental stewardship through sustainable nutrient management practices for resource optimization to reduce economic vulnerability in agriculture.

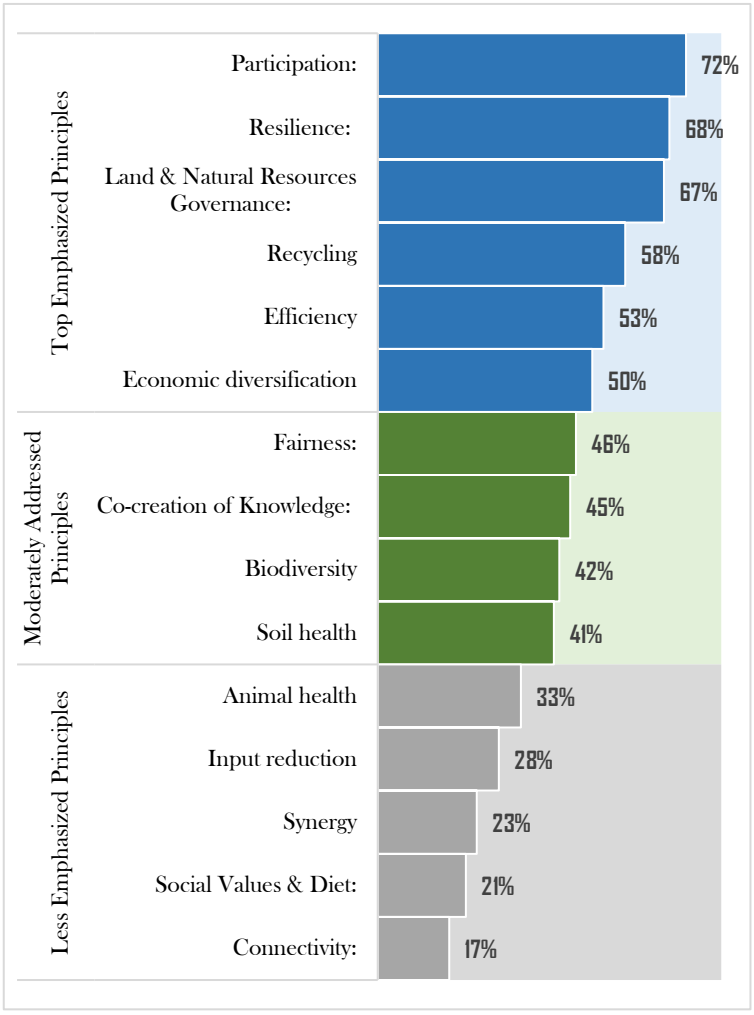

Figure 7: Integration of Agroecology Principles in County Related Policies

Moderately Addressed Principles: Fairness (46%), Co-creation of knowledge (45%), Biodiversity (42%) and Soil health (41%) show moderate integration. Fairness is linked to equitable access to opportunities, resources, services as well as inclusion of the vulnerable members of the community in agricultural development projects. Co-creation of knowledge is mostly on blending of local traditional knowledge and scientific approaches to promote community-led initiatives while biodiversity involves protecting and broadening plant and animal gene base.

Less Emphasized Principles: Animal health (33%), Input Reduction (28%), Synergy (23%), Social Values & Diet (21%), Connectivity (17%) receive comparatively limited attention. These are crucial for reducing external dependencies, enhancing local knowledge systems and enhancing broader systems thinking.

The findings also reveal significant variation in the integration of the agroecology principles across counties. Counties like Tharaka Nithi and Makueni show higher engagement with agroecological principles, indicating more progressive or comprehensive policy environments. In contrast, Kiambu, and West Pokot show low integration of these principles in reviewed documents suggesting either limited policy attention to agroecology or gaps in documentation.

These disparities require among other interventions, policy harmonization. The uneven integration suggests a need for national guidance or frameworks that encourage uniform consideration of agroecological principles. Moreover, support for underserved principles is needed to boost awareness and their implementation. Additionally, counties with low integration might benefit from technical support to embed agroecological thinking in their policy formulation processes.

Table 8: Emphasis of Agroecology Principle in County Related Policy Documents

Principles	Nyandarua (018)	Vihiga (038)	Busia (040)	Bungoma (039)	Kakamega (037)	Kisii (045)	Muranga (021)	Kiambu (022)	Nakuru (032)	Embu (014)	Kitui (015)	Makueni (017)	Meru (012)	Tharaka Nithi (013)	West Pokot (024)	Laikipia (031)	Total	Percentage (N=81)
Recycling	2	4	3	3	4	3	4	3	2	4	1	3	2	3	4	2	47	58%
Input reduction	1	4	1	1	1	2	4	2		1		1		2	2	1	23	28%
Soil health	2	3	1	2	1	2	4	2	2	3		2	2	3	2	2	33	41%
Animal health	2	3	2	1	2	2	2	2	2	2				2	3	2	27	33%
Biodiversity	4	4	1	1		3	2	1	1	5	4	4	2	1	1		34	42%
Synergy	2	2	1	1	1	1	1	1		2	3	2		1	1		19	23%
Economic diversification	1	4	4	1	2	3	4		3	3	2	3	1	4	4	2	41	51%
Efficiency	3	4	3	3	2	2	4	2	2	2	2	3	2	3	4	2	43	53%
Co-creation of Knowledge:		2	1	1	1		2	1	4	2	5	5	2	6	1	3	36	44%
Social Values & Diet:		2			1		2		2	1	1	2	1	4	1		17	21%
Fairness:		3	2	3	1	2	2	1	4	2	4	5	2	2	3	1	37	46%
Connectivity:	1	1	1	1	1	2	1	1		1		2		1	1		14	17%
Land & Natural Resources Governance:	4	4	3	4	2	4	4	2	2	3	5	3	4	4	4	2	54	67%
Participation:	3	4	4	2	1	3	4	3	4	5	2	6	3	5	4	5	58	72%
Resilience:	2	3	3	4	1	3	4	3	4	2	3	5	4	6	4	4	55	68%

Table 9: Emphasis vs CAET

Agroecology Principle	Transition Score	Emphasis
Recycling	3.84	58%
Input reduction	5.07	28%
Soil health	5.67	41%
Animal health	6.04	33%
Biodiversity	4.88	42%
Synergy	4.44	23%
Economic diversification	4.03	51%
Efficiency	6.23	53%
Co-creation of Knowledge:	3.58	44%
Social Values & Diet:	2.38	21%
Fairness:	5.29	46%
Connectivity:	5.79	17%
Land & Natural Resources Governance:	5.46	67%
Participation:	6.68	72%
Resilience:	4.21	68%

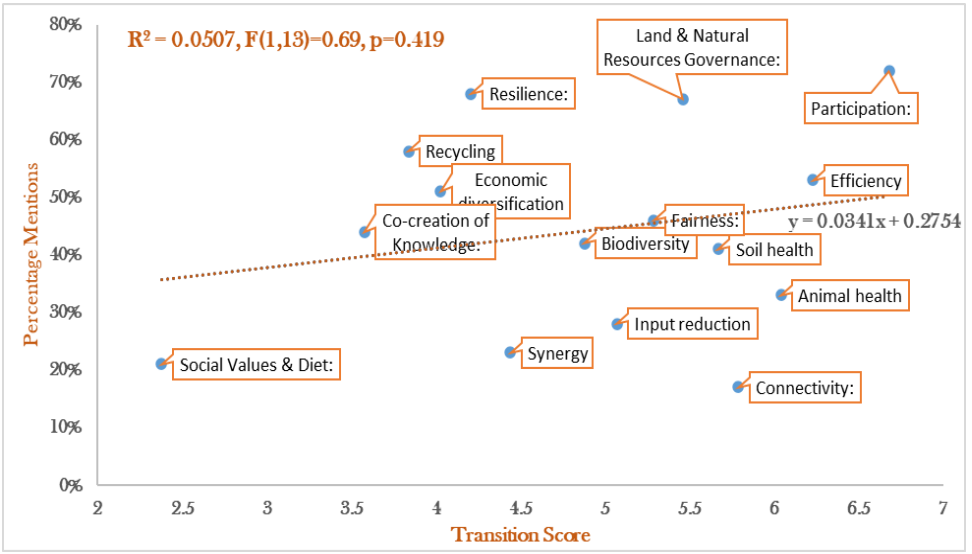

Figure 8: Emphasis in Policies vs CAET

Even though there is a positive correlation between the number of mentions of agroecology principles in related policies/strategies documents and transition scores, the relationship is not significant at 5% significance level. Meaning, having a mention of agroecology principle in policy/strategy documents does not automatically translate into higher rate of adoption. Thus, strategic intents (in policies/strategies) require much more effort to support full transition.

From the 16 counties surveyed, two (2) had operational agroecology policies while seven (7) had their agroecology policies at the approval stage. Three (3) had draft policies while four (4) counties did not have any working drafts.

Table 10: Status of Agroecology Policy/Strategy

County	Operational policy/Strategy	Draft at approval at stage (Public participation/Cabinet/Assembly)	Working Draft	No draft
Nyandarua				◆
Vihiga	◆			
Busia			◆	
Bungoma		◆		
Kakamega		▲	◆	
Kisii				◆
Muranga	◆			
Kiambu			◆	
Nakuru				◆
Embu		◆		
Kitui			◆	
Makueni		◆		
Meru		◆		
Tharaka Nithi		◆		
West Pokot		▲		
Laikipia				◆
Total	2	7	4	4

Key: ▲ Strategy: ◆ Policy

Stage

- ⇨ Approved by the county assembly awaits official launch
- ⇨ At public participation stage
- ⇨ At Cabinet

- At County Assembly
- Zero draft (with technical departments)

3.3.2 Overall Readiness Ranking of the 16 Select Counties

The county support to agroecology transition is influenced by various factors, including local political support, institutional capacity, legal frameworks, financial resources, technical expertise, social acceptance, market development, extension services, environmental conditions, and cultural factors. These dimensions are vital in determining how prepared counties are to implement policies that foster agroecology. The readiness scoring was also done on a scale of 1-10. Where, < 2 (Very Weak/Highly unsustainable), 2.0-3.9 (Weak/Unsustainable), 4.0-5.9 (Moderate/Acceptable), 6.0-8.9 (Strong/Desirable) and >9.0 (Very Strong/Highly desirable).

This analysis provides a comprehensive overview of how each county is positioned to support the transition to agroecology. Counties such as Muranga (6.98) Embu (6.62) and Tharaka Nithi (6.18) demonstrate the highest readiness levels. They are within the desirable range. They show higher readiness scores across multiple dimensions, including political, institutional, technical knowledge, and social factors. All the other remaining counties are within the moderate/acceptable level of preparedness.

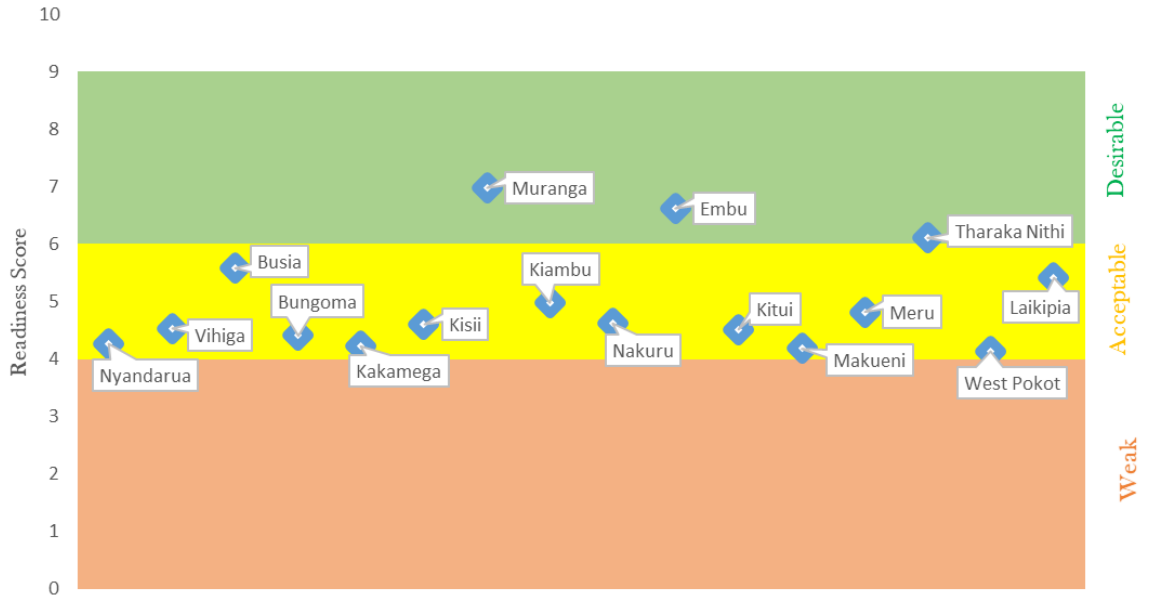

Figure 9: County Level of Preparedness

However, counties of Kitui, West Pokot, Makueni, Kakamega, Nyandarua and Bungoma, face challenges in areas such as financial resource allocation, technical knowledge, market infrastructure and environmental factors which may hinder their ability to effectively implement agroecological practices. Tailored interventions will be required to address these gaps and ensure a more widespread adoption of agroecology.

Political Will is a crucial determinant of how counties support agroecology. This is demonstrated by evidence of public declarations or pledges in support of agroecology initiatives coming from both the legislative and executive arms of the county governments as well as other non-state leaders in the county. This (political good will) is to be supported by financial resource allocation for sustainable agriculture programs, documentation of agroecology supporting programs in the County Integrated Development Plans and presence of other county supporting policies. Bungoma (8.67), Muranga (8.67), Vihiga (8.67) Busia (8.00) and West Pokot (8.00), exhibited strong political backing for agroecology transition. Other counties showed moderate to strong political will, suggesting a favourable political climate in support of agroecology across the counties. Nonetheless, eight in ten of the counties still do not have dedicated agroecology policies/strategies and relies on other related policies/strategies in promoting agroecology related programs. There is need for these counties to develop specific agroecology policies to enhance focus, increase visibility of agroecology as well as prioritize the transition through coordinated efforts.

Institutional Support reflects the readiness of local institutions to promote agroecology. This includes presence of government institutions with mandates for supporting agroecology, trained professionals or experts in agroecology within key institutions and multi-stakeholder platforms dedicated to agroecology policy development and implementation. Tharaka Nithi (8.89) had the highest score in this

dimension, suggesting that it has strong institutional frameworks capable of supporting agroecology. Other counties like Nyandarua (7.78), Busia (7.78), Muranga and Meru (7.78) also scored high, indicating a solid institutional base. However, Kisii (5.56), Kitui (5.56), Kiambu (4.44), and Nakuru (4.44) had the lowest scores, indicating gaps in the institutional capacity to drive agroecology initiatives. The average score for institutional readiness was 6.67, indicating a generally supportive institutional environment across the counties.

Legal Readiness is another essential dimension, as it encompasses the laws and regulations supportive of the strategies/policies for agroecology transition. This dimension looked at the combined index for the number of laws and regulations supporting agroecology, compliance with international agreements and number of agricultural projects or practices subjected to environmental impact assessments that consider agroecological principles. Muranga (8.89) and Embu (8.89) performed well in this area, suggesting that these counties have strong legal frameworks to support agroecological transition. In contrast, Nyandarua (2.22), Vihiga (3.33) and Kakamega (3.33) scored poorly, indicating that these counties face challenges due to weak or inadequate legal structures. The overall average for legal readiness was 5.76, reflecting high legal preparedness across the counties.

Financial Resource allocation by both public and private is crucial for implementing agroecological practices. Resources which come from both the public and private sector. Unfortunately, many counties recorded low scores in this dimension, with Nyandarua, Vihiga, Busia, Bungoma, Kakamega, Kisii, Kitui, Makueni, Meru, West Pokot all scoring below 3.00. Tharaka Nithi, Muranga and Nakuru had a slightly higher score of 4.44, indicating that the counties have deliberate measures to allocate adequate resources to agroecology initiatives. The low financial scores, with an average of 2.85, highlight the challenge of securing sufficient funding to support agroecology transitions across most counties.

Technical Knowledge is essential for the successful application of agroecological practices. Particularly, shared knowledge generated from agroecology-related research projects, agroecology training programs and farmer knowledge co-creation. Busia (10.00), Embu (10.00), Kiambu (8.89), Muranga (8.89) Makueni (8.89) and Laikipia (8.89) demonstrated exemplary presence of supportive agroecology related research and agroecology training institutions accessible to the farming communities. This suggests a strong capacity for agroecology knowledge transfer to the farming communities. On the other hand, Nyandarua (3.33) and Meru (2.22) scored the least, indicating that these counties face challenges in acquiring the necessary technical expertise to support agroecological practices. The average technical readiness score was 6.18, indicating a high level of technical capacity across the counties surveyed.

Social Acceptance and Stakeholders Engagement is aligned to the extent to which local communities are engagement in agroecology dialogue and their willingness to adopt agroecological practices. Measured by the number of awareness campaigns or initiatives promoting agroecology, level of engagement in public consultations, policy dialogues, and meetings involving agroecology and farmers' adoption rates of agroecological practices. Tharaka Nithi (8.89), Embu, Muranga, Meru and Vihiga had the highest scores, reflecting strong community engagement and community participation in agroecology initiatives. Busia (6.67), Kisii (6.67), Kakamega (5.56), Bungoma (5.56), Kakamega (5.56) and Nakuru (5.56) also demonstrated relatively high levels of social acceptance. However, Makueni (2.22), Kitui (3.33) and Nyandarua (3.33) scored lower, indicating that there are challenges in gaining widespread social support for agroecology. The average social acceptance score across all counties was 5.83, suggesting moderate social readiness to embrace agroecology.

Market Development is a critical factor for the sustainability of agroecology, as it ensures that agroecological products have access to markets. This considered percentage of the agricultural market occupied by agroecologically certified products, number of established value chains that connect agroecological producers with

consumers and presence of agroecology-specific markets, cooperatives, or retail outlets. Unfortunately, most counties scored 0.00 in this dimension, indicating limited market development for agroecological products. Muranga (6.67), Embu (6.67) and Tharaka Nithi (4.44) had higher scores, showing that these counties have made some progress in establishing markets for organic products. For example, in Tharaka Nithi, there is Meru Herbs which is producer, processor and marketer of a range of certified organic products, available through Fair Trade distribution channels. The institution also serves other neighbouring counties of Embu and Meru. These efforts are supported Food Agriculture Organization (FAO), Farm Africa, Caritas, National Council of Churches (NCCK), Rural Initiatives Development Programme (RIDEP), Hand in Hand and Climate Pact. The overall market readiness score was 1.96, reflecting significant challenges in market development across counties.

Extension Services play a vital role in disseminating knowledge and supporting farmers in adopting agroecology. Presence of training centres offering extension on agroecology, availability of agroecology-focused extension services to farmers, including field demonstrations and farmer field schools and effectiveness of extension services aimed at building the capacity of stakeholders including farmers, policymakers, NGOs on agroecology. Muranga (6.67), Embu (6.67), Nyandarua (5.56), Kisii (5.56), Tharaka Nithi (5.56) and Laikipia (5.56) scored well in this dimension, suggesting that these counties have strong extension systems in place to assist farmers. Bungoma (3.33), Kiambu (3.33), Nakuru (3.33), West Pokot (3.33) and Makueni (2.22) had lower scores, indicating that the availability of extension services may be limited in these areas. The average score for extension services was 4.51, reflecting moderate access to extension support.

Environmental Factors reflect the suitability of environmental conditions to support agroecology. For instance, soil organic matter and soil fertility are thus critical in adopting responsive sustainable farming practices. Moreover, biodiversity and water quality tracking are important in ensuring appropriate support for sustainable practices

with the lens of inclusive ecological considerations. Nyandarua (6.67) had the highest score, suggesting that the county is better positioned to promote agroecology due to favourable environmental conditions and tracking systems. In contrast, Kitui (1.11), Busia (2.22), Embu (2.22) and Makueni (2.22) had lower scores, highlighting environmental fragility. The average environmental readiness score was 3.26, indicating that environmental conditions and the tracking systems in many counties may not be fully supportive of agroecology.

Finally, Cultural Factors are important for ensuring that agroecological practices align with local customs and traditions. Particularly, presence of policies or programs that integrate indigenous agricultural knowledge into agroecological practices, presence of measures of gender equality, land tenure security, and the inclusion of marginalized groups (e.g., women, youth, indigenous peoples) and level of local communities or farmers involved in agroecology-related decision-making processes, such as land-use planning or policy development. Busia (6.67), Embu (6.67), Kiambu (6.67), Nakuru (6.67), Kitui (6.67) and Tharaka Nithi (6.67) had the highest cultural readiness scores, suggesting that the counties are deliberate in aligning agroecology implementation to local cultural values to ensure compatibility between culturally norms and agroecology practices promoted. The overall average for cultural readiness was 5.42, indicating that there is still room for improvement in aligning agroecology with local traditions.

Table 11: Readiness Indices of for 16 Counties in Kenya

Readiness Dimensions	Nyandarua (018)	Vihiga (038)	Busia (040)	Bungoma (039)	Kakamega (037)	Kisii (045)	Muranga (021)	Kiambu (022)	Nakuru (032)	Embu (014)	Kitui (015)	Makueni (017)	Meru (012)	Tharaka Nithi (013)	West Pokot (024)	Laikipia (031)	Average	Rank
Politics	6.00	8.67	8.00	8.67	6.67	6.00	8.67	5.33	4.00	7.33	7.33	7.33	6.00	6.67	8.00	5.33	6.88	1
Institution	7.78	6.67	7.78	6.67	6.67	5.56	7.78	4.44	4.44	6.67	5.56	6.67	7.78	8.89	6.67	7.78	6.74	2
Legal	2.22	3.33	7.78	5.56	3.33	5.56	8.89	7.78	7.78	8.89	7.78	4.44	5.56	6.67	4.44	5.56	5.97	4
Finance	2.22	2.22	2.22	2.22	2.22	2.22	4.44	3.33	4.44	3.33	2.22	2.22	2.22	4.44	2.22	3.33	2.85	9
Technical knowledge	3.33	4.44	10.00	4.44	5.56	4.44	8.89	8.89	4.44	10.00	6.67	8.89	2.22	5.56	4.44	8.89	6.32	3
Social acceptance	3.33	7.78	6.67	5.56	5.56	6.67	7.78	4.44	5.56	7.78	3.33	2.22	7.78	8.89	4.44	5.56	5.83	5
Market	0.00	0.00	0.00	0.00	0.00	0.00	6.67	3.33	3.33	6.67	0.00	0.00	3.33	4.44	0.00	3.33	1.94	10
Extension	5.56	4.44	4.44	3.33	4.44	5.56	6.67	3.33	3.33	6.67	4.44	2.22	4.44	5.56	3.33	5.56	4.58	7
Environmental	6.67	3.33	2.22	3.33	3.33	4.44	4.44	2.22	2.22	2.22	1.11	2.22	3.33	3.33	3.33	4.44	3.26	8
Culture	5.56	4.44	6.67	4.44	4.44	5.56	5.56	6.67	6.67	6.67	6.67	5.56	5.56	6.67	4.44	4.44	5.63	6
Grand Average	4.27	4.53	5.58	4.42	4.22	4.60	6.98	4.98	4.62	6.62	4.51	4.18	4.82	6.11	4.13	5.42	5.00	
Rank	13	10	4	12	14	9	1	6	8	2	11	15	7	3	16	5		

3.3 Agroecology Transition and County Readiness

While the transition to agroecology is increasingly recognized as a sustainable pathway to enhancing food security, improving livelihoods, and building climate resilience, particularly in agriculture-dependent regions, the pace and success of this transition vary significantly across regions, influenced by factors such as institutional readiness, policy support, community engagement, and existing farming practices. The matrix in Figure 7 provides a visual representation of how the 16 counties are positioned in terms of their current level of agroecological performance (transition level) and readiness to support agroecological transition. By plotting these two dimensions, the matrix helps to identify counties that are leading the transition, those with strong potential yet to be realized, and others that require more foundational support. This categorization offers valuable insights for policymakers, development agencies, and other stakeholders aiming to support agroecological development in a targeted and strategic manner.

Overall, all the 16 counties are either within or above the acceptable level of transition and preparedness. The counties can be grouped in four (4) categories. Category one includes counties with high transition and high level of preparedness (Muranga, Busia and Laikipia). These counties emerge as front-runners and are well-positioned to serve as models for replication and peer learning.

Category two includes counties of Kiambu, Nakuru and Meru. These counties are right at the margins of transitioning to category one, displaying both high readiness and strong performance in agroecology transition. These counties require to maintain their trajectory to join the leading pack.

Category three has counties of Bungoma, Vihiga, Kisii, Kitui, Kakamega, Nyandarua, Makueni and West Pokot. These counties are within the acceptable range of transition and readiness. These counties will require increased institutional or infrastructural support for them to improve even more. They likely rely on grassroots efforts or local

innovations making these counties natural innovators and will require institutionalization of these efforts to improve further. These counties need foundational interventions and capacity building to begin meaningful agroecology transition journey. Thus, may be considered for priority support to create an enabling environment for agroecological transition.

Category four has Tharaka Nithi and Embu showing high readiness but have not yet translated this into significant agroecology outcomes, suggesting the need for targeted support to bridge this gap. This is a category with underutilized potential and targeted interventions can easily rapidly accelerate their progress.

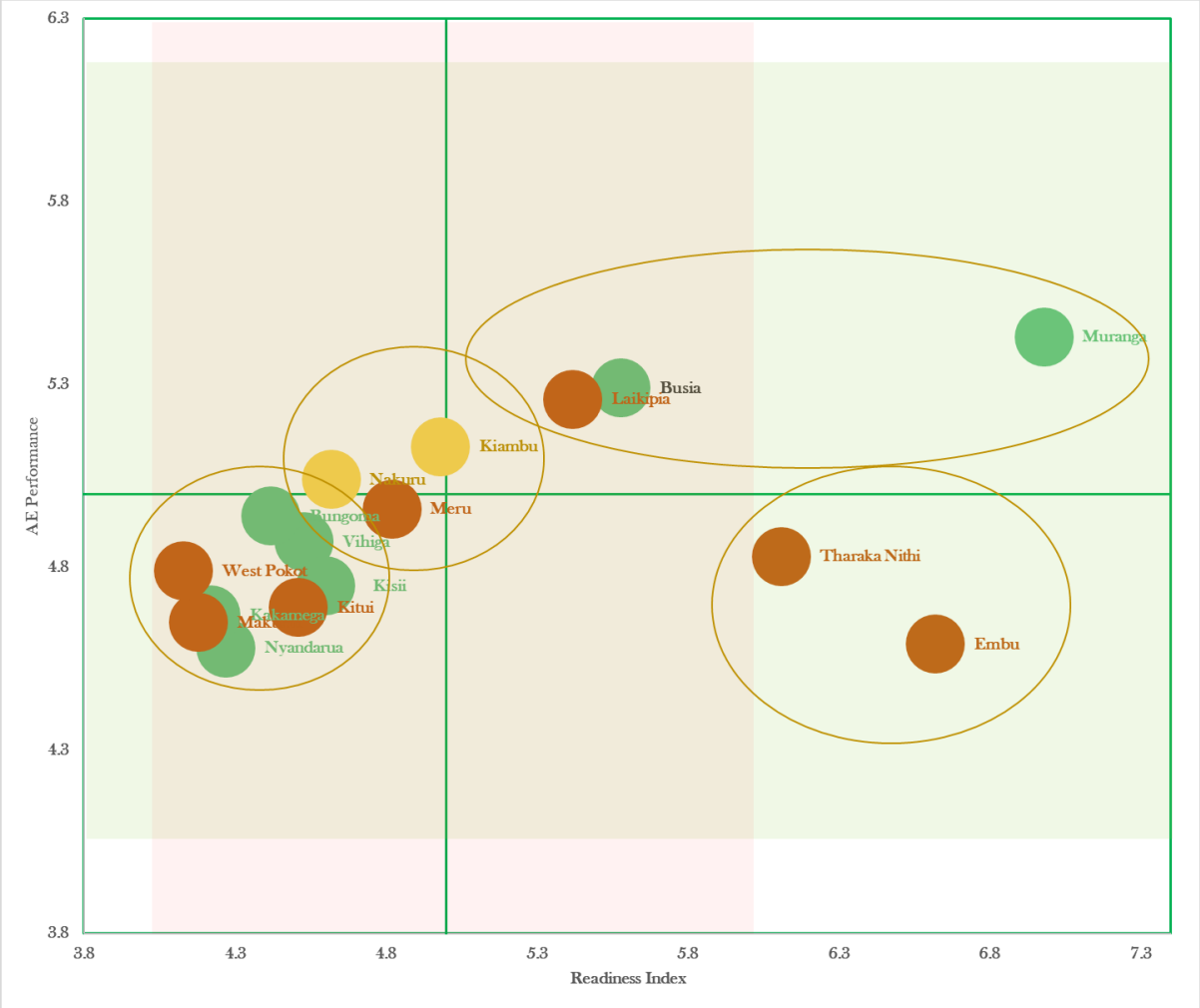

Figure 10: County Agroecology Transition and Readiness Nexus

3.4 External Influence on Agroecology Policy Development and Implementation

Apart from county specific context, the macro environment plays a crucial role in shaping the transition to agroecology across counties. The findings presented in the Table 11 reflect the view points of the respondents on the effects of macro-environmental factors on agroecology transitions. These included key external factors (outside the counties control) such as political, economic, social, technological, environmental, legal, and institutional. These factors were ranked on a scale of 1-10 with <2 (Strong Inhibitor), 2.0-3.9 (Moderate inhibitor), 4.0-5.9 (Minimal Impact), 6.0-7.9 (Moderate Enabler) and > 8.0 (Strong Enabler).

Overall, the counties with the highest grand average scores were Busia (6.24), Bungoma (5.69), Nyandarua (5.51) and Kakamega (5.51). These counties tend to have better positive impacts across multiple factors, especially in social, economic, technological and institutional dimensions. These counties have favourable effects from macro-environments, which supports agroecology transition. Conversely, counties such as Makueni (4.35), Kitui (4.49), Nakuru (4.52) and Muranga (4.55), which had lower overall scores, face more challenges due to inhibiting effects of macro political, legal, and institutional support, along with economic and technological constraints.

On individual macro environmental dimensions, political factors including national tax policies, labour laws, and trade tariffs were identified to have strong inhibitory effects on agroecology transition across the counties **(overall low average score of 1.30).** The prevailing national tax policies do not favour sustainable agricultural practices. Generally, there are no tax breaks on inputs/produce for farmers adopting agroecological practices. Further, there are no subsidies for organic inputs to necessitate switching to agroecology. There was a general feeling among the stakeholders that while strides have been made in reforming agricultural tax policies in Kenya, there remains a gap in tax policies tailored to the needs of agroecology

embracing agriculture. Addressing this gap requires a nuanced approach that balances revenue generation with the promotion agroecology.

On labour laws, while the laws and regulations aim to improve the welfare of farm workers, enforcement in the agricultural sector has been near non-existence, especially among smallholders whose farm labourers are not unionised leading to disparities in actual wages paid to farmworkers. This inconsistency sometimes results in labour shortages, as workers may seek better-paying opportunities elsewhere, thereby affecting farm productivity. Moreover, while national laws mandate specific working conditions, including working hours, rest periods, and occupational safety, enforcement is also near non-existence, especially among smallholders. Compliance with these regulations is essential for maintaining a healthy and efficient workforce. Non-compliance often lead to increased absenteeism, high turnover rates, and reduced productivity.

On tariffs, it was noted that tariffs highly discourage adoption and sustainability of agroecological practices across the counties. However, the tariffs affect the general agricultural production. Trade tariffs directly impact the cost and competitiveness of agricultural products. The high tariffs imposed on imported sustainable agricultural inputs (organic fertilizers, biopesticides, and soil enhancers) lead to farmers struggling to access affordable inputs, markets, limiting their ability to scale up agroecological practices.

Cumulatively, the economic factors such as inflation rates, interest rates, currency exchange rates, customer income level, customer confidence, demands and supply trends, and agribusiness environment stood out to have minimal impact on county agroecology transition (5.07). Even though inflation rates, interest rates and currency exchange rates had inhibitory effects, customer income level, customer confidence, demands and supply trends, and agribusiness environment had major enabling effect leading to an overall minimal effect. In counties like Busia (6.79), Muranga (6.43) and

Nyandarua (6.07) macro-economic factors had a moderate enabling effect providing relatively stronger economic opportunities that could support agroecology transitions. Nonetheless, counties such as Laikipia (3.21) and Meru (3.21), with lower scores, face macro-economic challenges that could hinder agroecological practices or the scaling up of agroecology initiatives.

The social factors were identified to exhibit moderate enabling effect with relatively high average score (7.24), indicating that social factors including population growth, level of involvement of youth/women/men and attitudes toward organic foods play a significant role in the adoption of agroecology. Counties of Bungoma, Meru, Tharaka Nithi, West Pokot and Laikipia (scoring 8.33) indicated strong enabling macro-social effect on agroecological transitions. On the other hand, counties such as Embu and Makueni (scoring 5.83) showed somewhat lower social scores, indicating that social factors have less robust positive effect on agroecology transition.

Technological factors, with an average score of 6.61, also appear to show moderate enabling macro-technological environment in support of agroecology transitions, particularly in counties like Busia (9.17), Nyandarua (8.33) and Kiambu (8.33), which indicated high level of access to agroecology mechanization and farmer adoption of information communication technology (ICT). However, counties of Nakuru, Embu, Laikipia and Kitui (scoring 5.00) affirmed relatively lower benefit from macro-technological environment. Adoption and success of agroecological practices require technological innovation for improving farm productivity, enhancing resource efficiency, enabling climate-smart practices, facilitating knowledge sharing, and reducing labour intensity. Technologies such as precision farming tools, organic input production techniques, soil and water monitoring systems, and digital platforms for market access and extension services play a crucial role in supporting farmers to implement, manage, and scale agroecological approaches effectively and sustainably.

The overall environmental factor received an average score of 4.64, indicating moderate inhibitory effect across the study counties. Counties of Nyandarua, Vihiga, and Kakamega (scoring 6.67) confirmed a more favourable bio-physical environmental setting, which could support agroecological transitions. In contrast, Embu, Tharaka Nithi, West Pokot and Laikipia all with a score of 4.17, suggesting moderate inhibitory effect of the environment related to ecosystem pollution, climate change effects, reducing tree cover and lack of focus on sustainability on promotion of agroecology transition.

National and International Legal frameworks and policies influencing agroecology were identified to exhibit minimal effect across the counties (5.70). This was particularly with regards to effectiveness of laws/regulations as well as level of access of information by the farming communities. Counties of Bungoma, Meru, Tharaka Nithi, West Pokot, Kiambu and Laikipia (scoring 7.5) confirmed stronger support from national and international legal structures, which support the implementation of agroecology initiatives in the county. However, counties of Muranga, Nakuru, Kitui, Makueni, Busia and Embu (scoring 3.75) scored lower, indicating gaps in national/internal legal support for sustainable agricultural practices. Particularly, Kenya's Seeds and Plant Varieties Act, 2012 was cited as a major inhibitor to sharing and exchange of seeds among farmers. Even though the law sought to regulate the seed industry and protect intellectual property rights, it inhibits agroecology transition as it hinders farmers ability to share and use indigenous seeds.

National institutional factors supporting service accessibility, institutional support (funding/grants, capacity building, advocacy, research and development, market linkages) and collaborations are crucial in supporting agroecology transition. Institutional factors were identified to have minimal effect on transition (5.39), suggesting that external institutional frameworks for supporting agroecology are present but uneven. Busia (8.13) and Embu (6.88) had the highest scores, indicating strong enabling effects from the external institutional context in implementing

agroecological practices. On the other hand, counties of Bungoma, Kitui, Meru, Tharaka Nithi, West Pokot and Laikipia (scoring 4.38), have minimal effect from the external institutional framework.

The findings suggest that while several counties in Kenya experience strong positive macro environmental effect for agroecology transitions, there are notable disparities across the counties. Counties with higher scores in social, economic, and technological factors are better positioned for success, while those with lower scores in political, legal, and institutional factors may need additional support to foster sustainable agricultural practices.

Table 12: Level of Macro-Environmental Influence

External Factors	Nyandarua (018)	Vihiga (038)	Busia (040)	Bungoma (039)	Kakamega (037)	Kisii (045)	Muranga (021)	Kiambu (022)	Nakuru (032)	Embu (014)	Kitui (015)	Makueni (017)	Meru (012)	Tharaka Nithi (013)	West Pokot (024)	Laikipia (031)	Average	Rank
Political	0.83	0.00	3.33	2.50	0.00	0.00	4.17	0.00	0.83	2.50	1.60	0.00	2.50	0.00	0.00	2.50	1.30	7
Economic	6.07	5.00	6.79	4.64	5.00	4.64	6.43	4.64	5.36	5.36	5.00	5.00	3.21	4.64	4.64	4.64	5.07	5
Social	6.67	7.50	7.50	8.33	7.50	7.50	6.67	8.33	7.50	5.83	6.67	5.83	8.33	8.33	8.33	5.00	7.24	1
Technological	8.33	6.67	9.17	7.50	7.50	6.67	4.17	8.33	5.00	5.00	5.00	6.67	5.83	7.50	7.50	5.00	6.61	2
Environmental	6.67	6.67	5.00	5.00	6.67	5.83	1.67	1.67	4.17	4.17	5.00	4.17	4.17	4.17	4.17	5.00	4.64	6
Legal	5.00	6.25	3.75	7.50	6.25	6.25	3.75	7.50	3.75	3.75	3.75	3.75	7.50	7.50	7.50	7.50	5.70	3
Institutional	5.00	5.63	8.13	4.38	5.63	5.00	5.00	5.63	5.00	6.88	4.38	5.00	4.38	4.38	4.38	7.50	5.39	4
Grand Average	5.51	5.39	6.24	5.69	5.51	5.13	4.55	5.16	4.52	4.78	4.49	4.35	5.13	5.22	5.22	5.31	5.14	
Rank	3	5	1	2	4	11	13	9	14	12	15	16	10	7	7	6		

CHAPTER FOUR

LIMITATIONS, OPPORTUNITIES, CONCLUSION AND RECOMMENDATIONS

4.1 Limitations and Opportunities

Agroecology, with its focus on ecological principles and social equity, offers a powerful framework for using and managing a shared destiny, particularly in the context of food systems, by promoting sustainable practices, knowledge sharing, and community resilience. However, agroecology transition across the 16 counties surveyed faces significant limitations, which include challenges in scaling up agroecological practices, coordinating policy and governance, and addressing economic and social factors hindering adoption. Nonetheless, there are numerous opportunities which can be tapped into to accelerate the transition. Opportunities lie in harnessing the power of increased demands for agroecology products, increased international drive for sustainability, strong networks, strong information communication technology (ICT) infrastructure and robust legal framework to promote adoption of agroecology principle towards improved food security, enhanced environmental sustainability, and fostering social equity within food systems.

4.1.1 General Policy Inhibitors:

1) **Lack of National Coordinated Policy Development Framework for the Counties:** In a devolved government structures like in Kenya, where counties have significant autonomy, counties are expected to develop and implement policies tailored to their local needs. However, due to lack of a national policy development coordination framework, counties end up holding different views on how to develop the supportive legal framework. While counties like Vihiga and Muranga started by rolling out agroecology policies, a county like Bungoma choose to develop agroecology strategy instead of a policy. Without anchoring a strategy on county approved policy would weaken its implementation of and funding. Additionally, counties tend to hold different views and focus only on what is deemed most important without considering the wholesome requirement of the agroecology

concept. For instance, while Murang'a county agroecology policy emphasizes market access and agribusiness of agroecology product, Vihiga's agroecology policy focuses more on indigenous knowledge and community-led sustainable farming practices. This disconnects leads to inconsistencies and hamper full realization of the agroecology intentions.

Opportunity

a) Strengthened Inter-County Collaboration and Knowledge Sharing: Counties can establish inter-county forums, joint task forces, or policy networks to harmonize approaches on shared challenges and approach of mainstreaming agroecology.

2) **Limited Resource Support:** Most Counties reported inadequate resource allocation for agroecology policy development and implementation. Even when counties have well-designed policies, insufficient financial resources can hinder their execution, leading to stalled projects, poor service delivery, and unmet development goals. The underfunding in agroecology limits the development of agroecology research, extension services, and farm investments that are crucial for scaling up agroecological practices. Moreover, no county indicated availability of financial incentives or subsidies (e.g., subsidies, tax breaks, levy breaks) for agroecological practices, organic farming, or biodiversity.

Opportunities:

(a) Leveraging local innovation can be a key strategy to address the low funding of agroecology. By focusing on community-led initiatives, utilizing local knowledge, and fostering collaborations & partnerships, agroecology initiatives can become more sustainable and accessible to a wider range of actors. This approach not only reduces reliance on external funding but also promotes the empowerment of local communities and the preservation of traditional practices.

(b) International drive for sustainable production systems. It's crucial to leverage international drives for sustainable production systems and align them with agroecological principles. This can involve integrating agroecology into county strategies, promoting private sector incentives, and mobilizing diverse funding sources. By demonstrating the economic, social, and environmental benefits of agroecology, funding can be attracted from a wider range of stakeholders, including governments, private sector, and international organizations.

(c) Counties to dedicate certain percentage of their budget towards agroecology

(d) Coordinated advocacy for agroecological funding among the county executives

3) **Contradicting National Programmes**: Bias to high investment in conventional agriculture is reinforced by national strategies such as Kenya's Vision 2030, Agriculture Sector Transformation and Growth Strategy and the National Fertilizer Subsidy Program, which focuses on increasing agricultural productivity and production by enhancing access and availability of fertilizers and hybrid seeds negating efforts towards input reduction.

Opportunity

a) Redirecting County Budgets to Counter National Bias: Counties can reallocate their own budgets to support agroecology, even if national funds favour industrial agriculture.

4) **Fragmented Policies across various sub sectors**: Out of the 16 counties surveyed, only 2 had fully pledged agroecological policies in place. And even where available, operationality and enforcement were still low. In most counties agroecology supporting initiatives are implemented in bits across the various agricultural sector departments (Agriculture, Livestock, Fisheries, Cooperatives, Water, Land and Environment) with lack of horizontal integration across the departments often leading to inconsistent actions, fragment resource allocation and diffusing of accountability for results and outcomes.

Opportunity

(a) **Existence of National Government Policies:** Counties can leverage on the existing National Agroecology Strategy for Food System Transformation (NAS-FST) to develop their context specific policies for enhancing agroecology transition. This includes adapting agroecological approaches to their specific context, promoting farmer participation, and strengthening collaboration with other stakeholders.

(b) Harmonization of policies related to agroecology

5) **Weak Coordination of Agroecology initiatives:** Stakeholders Coordination efforts by CASSCOMs are hampered by lack of direct budget allocation, where the units rely on other partners to fund their operational activities. This creates inefficiencies in operation and diminishes the units' coordination efforts and independence in decision making.

Opportunity

(a) Existence of County Agriculture Sector Steering Committees (CASSCOMs): Counties can effectively leverage on CASSCOMs to coordinate promotion of agroecology. CASSCOM's mandate to coordinate agricultural sector activities at the county level provides a framework for integrating agroecological practices into county plans and programs. By establishing technical working groups within CASSCOM, counties can develop and implement agroecology strategies tailored to their specific agro-ecological zones and needs. Further, entrenching CASSCOM funding within the legal framework will enhance the effectiveness of the unit in coordinating agroecology programs.

(b) Institutionalize policy making at county levels for sustainability

(c) Strengthen partnerships for synergy building, resource mobilization, participatory monitoring, evaluation and learning

6) **Focus on commercialization:** Most counties have commercialization strategies/policies with focus on opening more land using heavy machineries (tractors) negating efforts towards mainstreaming agroecology.

Opportunity

a) Pilot agroecology models that outperform contradictory national programmes, using evidence to push for policy reform
b) Deliberate agroecology main streaming in programs and projects
c) Capacity building of technical officers and stakeholders on benefits of agroecology

7) **Extension Officers orientation towards conventional agriculture:** Existing extension programs and officers are geared towards conventional yield-maximizing agronomic practices. Across the counties extension services lack full integration of agroecological practices. There is need in promotion principles like social values and diets, co-creation of knowledge, recycling, resilience building and economic diversification.

Opportunity

a) Partnerships with Universities & NGOs: Leverage the existing trust in extension officers by upskilling them in agroecology converting them from chemical advocates to holistic advisors.
b) Redirecting County Input Subsidies to Agroecology: Counties can reallocate budgets from chemical subsidies to agroecology inputs using officers as distribution channels.
c) Digital Tools to Bypass Conventional Bias: Use apps and AI to give farmers direct access to agroecology knowledge reducing reliance on biased officers.
d) Counties to embrace alternative extension models e.g., Farmer Field Business Schools (FFBS), Village Based Advisors (VBAs, agri-preneurs model, lead farmers
e) Retooling of county service providers towards agroecology

8) **Varying understanding of the term "Agroecology" among Stakeholders:** Even though practices supporting agroecology were widespread among stakeholders, the term "agroecology" could not easily be defined by majority of the implementing against such as front-line agricultural officers and the farming communities. This presented different interpretations of agroecology by different stakeholders

(farmers, policy agents, NGOs). Farmers mostly perceived "agroecology" as low-cost traditional knowledge and techniques, other stakeholders emphasized biodiversity, soil health, and ecosystem resilience. Still agricultural officers mostly framed "agroecology" as "climate-smart agriculture" for food security. This becomes a barrier to cohesive action. However, this diversity can be harnessed as an opportunity to create more inclusive, adaptable, and locally relevant agroecology movements.

Opportunities:

(a) Co-Creation of a "living definition" for Agroecology: Instead of imposing a rigid definition, counties can facilitate participatory dialogues to develop a shared but flexible understanding. This involves participatory engagement of local stakeholders in discussions to co-define agroecology within their specific contexts. This approach ensures that the concept is grounded in local realities, facilitating more meaningful and effective field work.

(b) Development of "Agroecology Pathways" for different Stakeholders: Since agroecology serves multiple goals (productivity, sustainability, equity), counties can create tailored roadmaps for each group while aligning under a common vision. For instance, smallholder farmers can be trained on recycling (composting), input reduction (integrated pest management e.g., push and pull technologies), drought-resistant crops while commercial farmers can be supported with agroecology branding and export linkages. The other pathways could be development of agroecology sourcing contracts and processing hubs for private actors and mainstreaming of agroecology in CIDPs and county budgets to build stronger, more resilient agroecology movements that are scientifically sound, practically useful and politically powerful.

4.1.2 Other Limitations

1) **Underdeveloped market infrastructure** was identified as one of the weakest links in agroecology transition across the surveyed counties. There is little investment in agroecology market infrastructure, non-allocation of physical spaces dedicated for

selling of agroecology products in existing agricultural markets and lack of business incentives to promote agroecology. Moreover, limited presence of agroecology-specific markets, cooperatives, or retail outlets (e.g., organic farmers' markets) and limited presence of established value chains that connect agroecological producers with consumers (e.g., organic certification schemes, local food networks) hamper connectivity between consumers and producers as well as opportunity for fair trade and embedding food systems in local economies.

Opportunities:

(a) Increasing demand for agroecology products. The demand for agroecology products is increasing due to rising consumer awareness about healthy living and food sustainability, coupled with a growing need for sustainable farming practices to address climate change and food security. This presents an opportunity for counties to invest in agroecology market development, a venture with potential of positive returns on investment as well as achievement of broader goals of sustainability and socio-economic development.

To tap into this opportunity, counties must make deliberate efforts to strengthen development of agroecology markets, which requires awareness creation among elected leaders and other elites who shape public investment choices and policies that support agroecology transition. Secondly strengthening community participatory policy dialogue is necessary for effective advocacy and lobbying for market development.

(b) Strong Networks of Farmer Groups: Across the surveyed counties, there is a strong network of farmer organization in form of self-help groups, common interest groups, cooperatives and Saccos. These groupings can be strengthened and used as a basis for promoting agroecology and market development by forming partnerships, sharing knowledge, accessing resources and generating critical product mass. These groups can also advocate for policies that support agroecological practices and create markets for agroecological products.

(c) Strong ICT Base in Kenya: Counties can leverage on Kenyan' strong ICT footprints to promote market networks and market participation by producers and value chain actors. The strong ICT infrastructure can significantly boost agroecology market development by facilitating information exchange, enabling direct transactions, and promoting sustainable practices among farmers. Digital platforms like DigiCow, Mkulima Young, Mfarm, and Digifarm can reduce information asymmetry, connect farmers with buyers, and provide access to financial services, ultimately enhancing market access and improving livelihoods.

(d) Organization of agroecology hubs or cooperatives to support marketing of agroecology products.

2) **Weak Environmental tracking systems:** Weak tracking of organic matter, soil fertility, soil erosion rates, biodiversity changes, water quality (e.g., nutrient loading, pesticide residues) and water availability was a major limitation in most counties. This hinders the adoption of agroecology by making it difficult to monitor and evaluate the benefits and impacts of agroecology practices. Moreover, it limits the opportunity of exposing the negative impacts of conventional farming practices.

Opportunities:

(a) Community Participatory Research and Monitoring: Involves communities actively participating in scientific research, particularly in environmental studies, by collecting data, analysing information, and sharing their findings with experts. This approach empowers communities, increases awareness of environmental issues, builds local ownerships, creates large-scale low-cost data networks and can lead to more informed decisions and solutions. Simple tools such as test strips, observation logs and mobile apps can be employed to monitor various such as pollinators, tree species, or turbidity in nearby water sources.

(b) Availability of Several Open-Access Platforms to facilitate data integration and open access for biodiversity monitoring, including the Global Biodiversity Information Facility (GBIF), Data Observation Network for Earth (DataONE), iNaturalist, and eBird. These platforms enable the sharing and analysis of vast

datasets, contributing to a more comprehensive understanding of biodiversity trends and patterns. Additionally, apps like miniSASS, LivHealth, and respectivelyMAKENYA (Mammal Atlas Kenya) are used for water quality monitoring, livestock disease surveillance, and monitoring and tracking mammals respectively Kenya.

3) **Limited extension services:** Counties are greatly affected low number of public extension agents. The public extension in most counties is a service characterized by aging staff and low staff coverage. Further, the number of trainings centre's offering extension on agroecology as well as extension services including field demonstrations and farmer field schools are scarce and inaccessible to most farmers raising questions on effectiveness of extension services aimed at building the capacity of stakeholders (e.g., farmers, policymakers, NGOs) in agroecology. There is need in promotion principles like social values and diets, co-creation of knowledge, recycling, resilience building and economic diversification.

Opportunities:

(a) Strong ICT (Information and Communication Technology) FootPrints: With the high literacy level and high Mobile phone connectivity in the counties, leveraging ICT can address the challenge of a limited number of agroecology extension agents by providing access to a wider range of information and services for farmers, thereby empowering them to make informed decisions. ICT-based extension can offer real-time advisories, market linkages, and capacity-building programs, enhancing farming practices and improving farmer productivity. Additionally, ICT can help bridge the information gap and promote equitable access to information, leading to more sustainable and productive agricultural practices.

(b) Public–Private Partnership: Public-Private Partnerships can effectively address the issue of a shortage of agroecology extension agents by leveraging the strengths of both the public and private sectors. The private sector can provide expertise, resources, and innovative technologies, while the public sector can

offer regulatory support, market access, and funding for public programs. Counties can further promote the "agri-preneur" model currently being rolled out by the national government to bridge the numbers' gap.

(c) **Wide networks of village Technical and Vocational Education and Training (TVET):** TVETs, local polytechnics and agricultural training centres (ATCs) can play a crucial role in addressing the shortage of skill base by integrating agroecology principles into their agricultural curricula and providing specialized training programs. This can lead to a workforce more equipped to promote and implement sustainable agricultural practices, ultimately boosting agricultural productivity and sustainability. Moreover, these institutions can act places for technology trails, demonstrations and field days with ease of access to local communities. Further, 4K Clubs (Kuungana, Kufanya, Kusaidia Kenya) can be used to promote agroecology by equipping young people with practical skills and knowledge in sustainable agriculture. Additionally, farmer/pastoral/fourth field schools can be modelled to support technology demonstrations.

4) **Low youth inclusion in agroecology initiatives:** There is a general perception that agroecology is about traditional practices. This perception makes agroecology less attractive to the younger negation. Stakeholders should re-orient messaging to provide clear sustainability value proportion and targeting of the youth in the agroecology programmes.
5) **Sustainability of agroecology implementation when there is a regime change:** Like any government, whenever there is a regime change a cross the counties, this comes with change in areas of focus by the new leadership based on development orientation. Addressing this required proper anchoring agroecology in the county legislation.
6) **No developed standards for agroecology products:** Lack of unified standards for agroecology products limits product traceability and market participation by agroecology embracing farmers. Stakeholders should work with Kenyan and

regional Standards institutions (e.g., KEBS) for development of standards for these products

7) **Poor linkage between agroecology research and extension:** Even though scientific efforts in development best practices for agroecology, there remains gaps in smooth conveyance of the findings to the farming communities. Deliberate efforts should be made to enhance engagement and inform sharing between the research and extension communities.
8) **Inadequate incentives for agroecological inputs.** Limited inputs such as organic pesticides have derailed farmers' transition.

4.2 Conclusion and Recommendations

This study provides a comprehensive evaluation of the status and readiness of 16 selected counties in Kenya to develop and implement agroecology policies. The findings highlight significant regional variations in the adoption of agroecology principles and the capacity of counties to integrate these principles into existing governance structures.

At the national level, Kenya has shown strong commitment to agroecology, with the adoption of the National Agroecology Strategy for Food System Transformation (2024), which provides a strategic framework for sustainable agricultural development. However, at the county level, where actual implementation takes place, there are notable gaps. While some counties, such as Murang'a, and Vihiga, have made considerable strides in developing and operationalizing agroecology policies, many others still lack formal policy frameworks. The lack of dedicated agroecology policies in several counties has resulted in fragmented policy implementation, with many counties relying on related agricultural, environmental, or climate change policies.

In terms of agroecological transition, the study found that counties in **medium potential areas** (Kiambu and Nakuru) exhibited the highest levels of agroecological transition (average CAET score of 5.09). This is followed by Medium-Low potential

areas (Embu, Kitui, Makueni, Meru, Tharaka Nithi, Laikipia, West Pokot) -(CAET score 4.93) and lastly by the High potential areas (Busia, Bungoma, Vihiga, Kakamega, Kisii, Nyandarua and Muranga) (Average CAET score 4.83. Factors such as political will, institutional support, and social acceptance were identified as major determinants of readiness, while underdeveloped market infrastructure, low financial resource allocation, weak environmental tracking, weak extension services and fragmented policies emerged as significant weak links to full agroecology transition.

Overall, while there is a growing interest in agroecology, the transition is uneven, with some counties well on their way to integrating agroecological principles and others still in the early stages. The study concludes that to achieve the desired agroecological transformation, more focused efforts are needed at both the county and national levels.

Recommendations:

To facilitate a successful transition towards agroecology and enhance county readiness, the following recommendations are made:

1) Develop County-Specific Agroecology Policies: Counties without operational agroecology policies should prioritize the development of such policies to provide a clear roadmap for transition to agroecology. This process should be inclusive, involving farmers, local governments, NGOs, and other stakeholders. Counties should also seek to integrate agroecological principles into their County Integrated Development Plans (CIDPs) and climate change strategies.
2) Strengthen Institutional Capacity for Agroecology: There is a need for enhanced institutional support for agroecology at the county level. This includes:
    a) Establishing dedicated departments or units within county governments responsible for agroecology initiatives
    b) Providing training programs for county staff on agroecology and sustainable farming practices. These can be anchored on local TVETs and ATCs for ease of farmer access.

c) Promoting the creation of multi-stakeholder platforms to foster collaboration among government agencies, farmers, NGOs, and the private sector.

3) Funding Solutions: Counties should allocate specific budgets for agroecology-related projects and initiatives. This can be done through:

   a) Introducing **financial incentives** for farmers adopting agroecological practices, such as subsidies or tax breaks for organic farming and biodiversity conservation.
   b) Seeking funding from national government sources, international donors, and the private sector to support agroecological projects.
   c) Establishing **agroecology-focused funds** to support research, farmer training, and the development of agroecological value chains.
   d) Leveraging on local innovations to reduce reliance on external funding but also promotes the empowerment of local communities and the preservation of traditional practices.

4) Promote Knowledge Co-Creation and Capacity Building: Counties should promote knowledge-sharing platforms that combine **scientific research** with **local, indigenous knowledge** to strengthen the practical application of agroecology principles. Recommendations include:

   a) Expanding farmer field schools, demonstration farms, and farmer-to-farmer extension services.
   b) Supporting the establishment of agroecological research and training centres at local TVETs, ATCs, 4K Clubs and farmer/pastoral/youth field schools that serve as hubs for innovation and best practices.
   c) Encouraging partnerships with research institutions to develop localized solutions for agroecological challenges.
   d) Leveraging on **Strong ICT (Information and Communication Technology) Footprints** in Kenya for farmer networking and extension services.

5) Enhance Market Access for Agroecological Products: Developing market infrastructure and value chains for agroecologically produced goods is crucial for the sustainability of agroecology. Counties should:
   a) Facilitate the creation of **market linkages** for farmers practicing agroecology, including both local markets and international export channels for certified organic and sustainable products.
   b) Support the establishment of **cooperatives** and **farmers' groups** to enhance bargaining power and market access for agroecological produce.
   c) Invest in **agroecological certification schemes** and **branding initiatives** to promote agroecological products in the marketplace.
6) Strengthen Policy Coordination Between National and County Governments: There is a need for greater coordination between national and county governments to ensure that agroecology policies are aligned and effectively implemented. The **National Agroecology Strategy** should be used as a guiding framework for county-level implementation, with regular monitoring and evaluation to track progress and identify gaps.
7) Address Socio-Cultural Barriers and Promote Social Inclusion: It is essential to address the socio-cultural barriers that hinder the widespread adoption of agroecology. This includes:
   a) Promoting **gender equity** and **youth involvement** in agroecology programs, ensuring that women and marginalized groups have equal access to resources and decision-making processes.
   b) Raising awareness about the benefits of agroecology through **public education campaigns** and community engagement activities.
   c) Incorporating **local food systems** and **traditional agricultural knowledge** into agroecological strategies to ensure cultural relevance and acceptance.
8) Monitor and Evaluate Agroecology Implementation
   Counties should develop robust monitoring and evaluation frameworks to assess the progress of agroecology policies and practices. This includes:

a) Regularly measuring the **adoption rates of agroecological practices** among farmers using tools like **TAPE** (Tool for Agroecology Performance Evaluation).
b) Using citizen participatory research and community monitoring approaches which will empower communities and increase awareness of environmental issues, builds local ownerships, creates large-scale low-cost data networks and can lead to more informed decisions and solutions
c) Conducting **impact assessments** to evaluate the effectiveness of agroecology policies in improving sustainability, food security, and resilience.
d) Tracking the **financial and environmental benefits** of agroecological practices, including improved soil health, water conservation, and biodiversity.

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ANNEXES

ANNEX 1: HOUSEHOLD SURVEY TOOL

Introduction

Good [morning/afternoon],

My name is [Your Name], and I am a survey enumerator working with Hydro Sentient Limited. Hydro Sentient Limited with funding from Biovision Africa Trust in collaboration with the Ministry of Agriculture is conducting a survey to gather information on status of adoption of agroecological practices by farmers across 16 select counties in Kenya.

Your household has been randomly selected to participate in this survey. The information you provide will help policymakers to better understand and improve planning for service provision to farming households both at the county and national level. Your participation is completely voluntary, and all responses will be kept strictly confidential. The information collected will be used for research purposes only and will not be shared in a way that identifies you or your household. If you choose to participate, the survey will take approximately 45 minutes to complete.

Would you like me to clarify anything?

Do you now allow me to proceed with the interview?

Yes [] No, [] If yes, proceed with the survey. If no, thank the respondent for their time.]

A. GENERAL INFORMATION

1) Date of the Interview

   ……...

2) Name of the Enumerator……Enumerator Telephone no…….....

3) County

   ……..……
   ……..

4) Ward name……
……

5) Village name……
……

6) Name of the Respondent (Optional)……

7) Telephone number of the Respondents (Optional)……

8) Respondent's gender: Male [] Female []

9) Age of the respondent: 18 – 35 years [] 36 – 45 years [] 46 – 55 years [] 56 -65 years [] More than 65 years []

10) Respondent's Highest Education level: No formal education [] Primary level [] Secondary level [] Post primary certificate [] post-secondary certificate [] Diploma [] Degree []

11) Name of the household head (note that this could be different from the Respondent)
……

12) Gender of household head: Male [] Female []

13) Age of the household head: 18–35 years [] 36- 45 years [] 46 – 55 years [] 56 -65 years [] More than 65 years []

14) Highest education level for the household head: No formal education [] Primary level [] Secondary level [] Post primary certificate [] post-secondary certificate [] Diploma [] Degree []

15) Relationship between the respondent and the Household Head? Spouse [] Son [] Daughter [] Extended family member [] Worker []
Other……

16) Please categorize your household membership based on age and sex using the matrix below.

Sex	Less than 18 years	18-34 years	35 years and above	Total
Male	……	……	……	……
Female	……	……	……	……

17) What is household's main source of income?
Livestock farming [] Crop farming [] Mixed livestock and crop farming [] Formal employment [] Informal jobs [] Other (specify)……

18) What is the estimated total income (KES) per month for the household (in the past 2 years) ……?

19) No. of years the household has been practicing farming: Less than 1 year [] 1-2 years [] 3-5 years [] 6-10 years 11-20 years [] More than 20 years

20) What the household's main agricultural value chain?.....

B. AGROECOLOGY ATTRIBUTES

1) Land and natural resource governance

(a) How many years has the household lived in this area?

.....

(b) What is the current total land holding by your household (in acres)? (Regardless of type of ownership e.g., freehold, rented, communal, borrowed etc).....

(c) What is the size of your household land holding (in acres) under the following land tenure systems?.....

	Less than 1 acre	1-2 acres	3-5 acres	6-10 acres	11-20 acres	More than 20 acres
Freehold	……..	……..	……..	……..	……..	……..
Leasehold	……..	……..	……..	……..	……..	……..
Communal	……..	……..	……..	……..	……..	……..
Corporate/Company	……..	……..	……..	……..	……..	……..
Other……	……..	……..	……..	……..	……..	……..

(d) Does your household have documentation (title deeds/certificate of lease/land rent certificate or contract) for parcel (s) of land owned? Yes [] No []

(e) What was the average land size in acres for your household in the following periods?

	Less than 1 acre	1-2 acres	3-5 acres	6-10 acres	11-20 acres	More than 20 acres
Less than 1 year ago	……..	……..	……..	……..	……..	……..
3-5 years ago,	……..	……..	……..	……..	……..	……..
5-10 years ago,	……..	……..	……..	……..	……..	……..
10-20 years ago,	……..	……..	……..	……..	……..	……..

(f) Indicate whether your household have free access to carry out the following on land owned

Category	Usage for farming	Right to sell	Right to bequeath	Right to inherit	Right to use for collateral to access credit	Other
Freehold		……..	……..	……..	……..	……..
Leasehold		……..	……..	……..	……..	……..
Communal		……..	……..	……..	……..	……..
Corporate/Company		……..	……..	……..	……..	……..
Other……		……..	……..	……..	……..	……..

(g) In case there is a change in land size in (g) above, what are likely causes of changes in the land sizes owned by your household?

……

(h) In case there is change in land size in (g) above, has it affected your crop production practices? Yes [] No []

If yes, explain how your crop production practices have changed

.....

(i) In case there is change in land size in (g) above, has it affected your livestock production practices? Yes [] No []

If yes, explain how your livestock production practices have changed

…… .....

(j) If there has been no change in your household's land use activities, indicate main reasons you think this may be

so……..…..

(k) Currently, what factors influence your choice of land-use practices for.

i) Crops

grown……

ii) Species of livestock kept

……

iii) Type of trees

grown…….

(l) Are you aware of institutions regulating land-use practices in your area? Yes () No (). If yes, indicate the name of the institution, category and roles using the table below.

Name of the institution	**Category of the Institution** (National government agency, county government department, community land management groups, Cooperative societies, NGO, Other (specify))	**Role of the Institution**
1. ……..		
2. ……..		
3……		

2) ECONOMIC DIVERSIFICATION

i) Livestock Production (Applicable only to livestock farmers or mixed enterprise farmers)

(a) Does your household keep livestock? Yes [] No []

(b) Which type of livestock do you keep? Indicate the number of livestock your household currently you own.

Livestock species	Number

(c) What size of your land in acres is under livestock production activities (pasture, grazing, housing etc)?

……

(d) Is the land size in (c) above adequate for sustaining all your livestock? Yes [] No []

(e) If the land in above is not capable of sustaining all your livestock, why is that so?

……

(f) If land above is not capable of sustaining all your livestock, what practices do you carry out in your land to enable you to feed your livestock each season?……

(g) What practices do you carry out to support livestock management in your farm?

……

(h) Indicate the amount of income you generated from livestock production in the last 3 months in KES? ……

(i) Indicate the amount of cost you incurred for livestock production in the last 3 months in KES?

……

(j) What has been the trend on your livestock income over the last five years? Increasing [ ] No change [ ] Declining [ ]

(k) What are the problems you encounter in keeping your livestock? (List from the most important to the least important)

(l) Do you do value addition of your livestock produce before sale? Yes [] No [].

(m) If you do value addition, which is the main livestock produce you value add?……

(n) If you do value addition, what percentage of the livestock produce mentioned in (m) above do you value add?……

(o) If you do value addition, what are the products of the livestock produce mentioned in (m) above ……

(p) If you do value addition of livestock produce, to what extent does value addition increase your incomes from livestock produce? Very great extent [] Great extent [] Small extent [] No change

(q) Indicate the amount of earnings from the main livestock value added product in (m) above in the last 3 months in KES?……

ii) Crop Production (Applicable only to crop farmers or mixed enterprise farmers)

(a) Does your household grow crops? Yes [] No []

(b) What type of cropping system does your household have? Monocropping [] Multiple Cropping []

(c) Which type of crop (s) do you grow? (Name up to 4 main crops)

……

(d) What size of land is under crops in your households' farm? …… acres

(e) Is the land size in above adequate for your household crop production needs? Yes [] No []

(f) What other 5 main practices do your household carry out to enable you manage your crops each season?

(g) What crop production practices do you carry out in your land for management of the following?

- Pest and disease control……
- Weed control……..
- Soil fertility ……..
- Water management ……

(h) What is the estimated cost and income you generated from the 4 main crops in the last season in KES?

Crop	Cost (KES)	Income (KES)
1.		
2.		
3.		
4.		

(r) What has been the trend on your crop production income over the last five years? Increasing [] No change [] Declining []

(i) What are the problems you encounter in crop farming in the last one year? (List from the most important to the least important)

(j) Do you do value addition of your crop produce before sale? Yes [] No [].

(k) If you do value addition, which is the main crop produce you value add?.....

(l) If you do value addition, what percentage of the crop produce mentioned in (k) above do you value add?.....

(m) If you do value addition, what are the products of the crop produce mentioned in (k) above .....

(n) If you do value addition of crop produce, to what extent does value addition increase your incomes from livestock produce? Very great extent [] Great extent [] Small extent [] No change

(o) Indicate the amount of earnings from the main crop value added product in (k) above in the last 3 months in KES?.....

3) Input reduction

(a) Do you fertilizer your soils for crop production? Yes [] No []

(b) If yes, which type of fertilisation do you use in your farm? Inorganic chemical fertilizer only [] Organic fertilizer only [] Both Organic and Inorganic []

(c) If you use chemical fertilizers, which type do you use and in what frequency?

Type	Frequency of application per season	Quantities per acre (Kg) (each application)
NPK		
CAN		
UREA		
DAP		
Lime		
Folia		
Other……		

(d) Do you use pesticides on your farm?

(e) If you use pesticides on your farm, which type do you use and in what frequency?

Type	Frequency of application per season	Quantities used per acre (Litres) with each application
Insecticides		
Fungicides		
Herbicides		
Rodenticides		
Organic pesticide		
Other……		

(f) If you use pesticides in your farm, do you practice safe use of pesticides? Yes [] No []

(g) If yes, what safety precautions do you take into consideration when using pesticides?

……

(h) Do you use indigenous knowledge in managing your farm enterprises? Yes [] No []

(i) If yes, please provide details of the indigenous knowledge and the farm enterprise where it is applicable.

……..

4) Soil health

(a) Do you ever consider soil health in your farming activities? Yes [] No []

(b) If yes, what do you do to determine your farm's soil health?

……...

(c) How often do you check your soil health?.....

(d) How do you manage soil health in your farm?.....

(e) To what extent do you understand and use the following practices in your farm?

Practices	Level of knowledge					Practicing	
	Not at all	A little	Somewhat	Well	Very well	Yes	No
Cover cropping							
Crop rotation							
Minimum tillage							

(f) Do you harvest rainwater on your farm? 1) No 2) Yes If Yes, provide details

……

(g) To what extent do you understand the following use the following technologies in your farm?

Practice	Level of knowledge					Practicing	
	Not at all	A little	Somewhat	Well	Very well	Yes	No
Zai pits							
Contour Bunds							
Fanya Juu and Fanya Chini Terraces							
Ripping							
Semi-Circular							
Trapezoidal Bunds							
Other……							

5) Social values and diets

(a) Who makes decisions in your household about the following?

Cropping farming activities

……

…

Livestock keeping activities

……

…..

(b) Who makes decisions about the control and use of income in your household……...……?

(c) How often does your household consume these types of foods?

Food category	Daily	Once in 3 days	At least once per week	Occasionally
Grains and grain product	[]	[]	[]	[]
Roots, tuber, green bananas	[]	[]	[]	[]
Legumes and pulses	[]	[]	[]	[]
Nuts and seeds (groundnuts, simsim)	[]	[]	[]	[]
Dairy/milk products (Milk, butter, yoghurt, mala)	[]	[]	[]	[]
Eggs	[]	[]	[]	[]
Red meat (Liver, meat)	[]	[]	[]	[]
White meat (fish, chicken)	[]	[]	[]	[]
Orange/yellow fruits (Pawpaw, carrots, pumpkins, mangoes, orange)	[]	[]	[]	[]
Dark green leafy vegetables (Kales, traditional vegetables)	[]	[]	[]	[]
Other vegetables (cabbages, broccoli, green peas)	[]	[]	[]	[]
Other fruits (pineapple, passion fruits, bananas, peas)	[]	[]	[]	[]

(d) How many meals does your family members routinely take per day?

Category	1 meal	2 meals	3 meals	4 meals	5 or more
Children under five years					
Children between 5 and 12 years					
Children between 12 and 18 years					
Youth between 18 and 34 years					
Adults					

(e) What proportion of food produced from your farm is sold .....% Consumed at home.....%

Other uses (specify).....%

6) Fairness

(a) To what extent are the following family members have a say in your farm financial resources?

Level	Male adult	Female adult	Male youth	Female youth	Children (<18 years)
Full decision-making power					
Significant say					
Some say					
Little say					
No say at all					

(b) What proportion of family farm labour is contributed by the following household member?

Category	Male adult	Female adult	Male youth	Female youth	Children (<18 years)	Total
Percentage						100%

(c) How often do the following family members get an opportunity to participate in agricultural training, workshops, or extension services?

Category	Male adults	Female adults	Male youth	Female youth	Children (<18 years)
Always					
Most of the time					
Some of the time					
Rarely					
Never					

(d) How often do the following household members receive financial incentives for their contributions to household farming activities?"

Category	Male adults	Female adults	Male youth	Female youth	Children
Always					
Most of the time					
Some of the time					
Rarely					
Never					

(e) Who receives the highest number of financial incentives? Male adult [] Female adult [] Male youth [] Female youth [] Children (<18 years)

7) Participation

(a) To what extent are adult males in your household involved in the following farming decisions?

Category	Fully involved	Highly involved	Moderately involved	Rarely involved	Not involved
Farming enterprise selection					
Farm management practices					
Farm investment					
Labour and workforce management					
Marketing and sales of far produce					
Technology adoption					

(b) To what extent are adult females in your household involved in the following farming decisions?

Category	Fully involved	Highly involved	Moderately involved	Rarely involved	Not involved
Farming enterprise selection					
Farm management practices					
Farm investment					
Labour and workforce management					

Marketing and sales of far produce					
Technology adoption					

(c) To what extent are youths in your household involved in the following farming decisions?

Category	Fully involved	Highly involved	Moderately involved	Rarely involved	Not involved
Farming enterprise selection					
Farm management practices					
Farm investment					
Labour and workforce management					
Marketing and sales of far produce					
Technology adoption					

(d) To what extent are children (<18 years) in your household involved in the following farming decisions?

Category	Fully involved	Highly involved	Moderately involved	Rarely involved	Not involved
Farming enterprise selection					
Farm management practices					
Farm investment					
Labour and workforce management					
Marketing and sales of far produce					
Technology adoption					

8) Co- creation of knowledge

(a) Have you ever participated in any form of training in farm management in the past 2 years? Yes [] No [].

(b) If yes, provide details of the training, the institution (s) involved

Training	Institution

(c) Have you participated in any of the following activities in the last 2 years?

- Farmer field schools []
- Participatory research to develop/validate farming techniques []
- Contribution on digital platform to share insights with other farmers []
- On farm demonstrations for farming techniques []
- Farmer exchange visits []
- Experimentation of on new varieties/ farming practices []

- Community based seed bank []
- Participatory scenario planning []

(d) Are there any other ways you have participated in co-creation of farming knowledge? ……

(e) Other than you, who else has participated in any form of farmer training in your household in the past 2 years? HH head [] adult children [] worker [] Extended family member [] Others specify) ……

(g) Other than you, who else has participated in any form of farming knowledge co-creation in your household? HH head [] adult children [] worker [] Extended family member [] Others specify) ……..

9) Social connectivity

(a) Do you belong to any social/farmer grouping? Yes [] No []

(b) If yes, what type of group (s)?

Type of group	Tick applicable type
Farmer producer groups	[]
Farmer marketing groups (cooperatives)	[]
Savings and Credit Groups	[]
Farmer Field Schools (FFS)	[]
Agroforestry and Conservation Groups	[]
Livestock Keepers' Associations	[]
Irrigation and Land Management Groups	[]
Community-Based Seed Banks	[]
Digital and Online Farmer Networks	[]
Social groups	[]
Other (Specify)	[]

(c) To what extent do you believe these groups satisfy their intended purposes? Very great extent [] Great extent [] Moderate extent [] Small extent [] Not at all []

10) Recycling

(a) Do you recycle waste products from your farm? Yes [] No [].

(b) What percentage of organic waste is reused as compost or biofertilizer in your farm?.....

(c) What are the sources of energy in your household? (Multiple options allowed)
Wood [] Charcoal [] Solar [] Biogas [] Kerosine [] Liquified gas []
Other……

(d) What is the mostly used source of energy in your household? (Choose one)
Wood [] Charcoal [] Solar [] Biogas [] Kerosine [] Liquified gas []
Other……..

11) Animal health and welfare

(a) Do you carry out routine vaccination of your livestock? Yes [] No [].

(b) If yes, in (a) which livestock species do you routinely vaccinate?

……

(c) If yes, in (a) state the diseases against which vaccination is carried out……

(d) If yes, (a) do you strictly follow the vaccination regime? Yes [] No [] Not sure [].

(e) What type of farm structures do you own? provide details……..

(f) Do you use indigenous knowledge to manage livestock health? Yes [] No []. If yes, provide details of the ITK and where it is used……

……..

12) Biodiversity

(a) What percentage of the farm is under trees/wood lots…….....

(b) What percent of productive area is covered by natural or diverse vegetation…….....

(c) What type of trees are found in your farm and to what extent?

Type of tree	Yes/No	If yes, Indicate proportion of tree cover by type
Non fruit Exotic trees	Yes [ ] No[ ]	
Non fruit Indigenous (Native) trees	Yes [ ] No[ ]	
Exotic Fruit trees	Yes [ ] No[ ]	
Indigenous fruit trees	Yes [ ] No[ ]	
Other……	Yes [ ] No[ ]	

(d) Do you do bee farming? Yes [] No [].

(e) If yes, what factors influenced the location of the beehive?

…….....

13) Synergy

(a) Do you have any other enterprises in your farm apart from the main value chain indicated in part 1

Yes [] No []?

(b) If yes, provide the list of these enterprises……

(c) How do the enterprises list above benefit from each other?

……..

(d) How do you rate the extent of your farm diversification (e.g., multiple crop varieties, livestock species, agroforestry) to reduce the risk of total crop or livestock failure? (Use scale of 1 to 4 with 1 being No diversification, only a single crop or livestock type; 2- Some diversification, but still dependent on one or two main products; 3- Moderate diversification with multiple crops or livestock species; 4- High diversification with a wide variety of crops, livestock, and practices)

…….

14) Resilience

(a) On a scale of 1 to 4, how well does your farm manage to continue producing crops or livestock during extreme conditions (e.g., droughts, floods, storms) (Scale = 1- not well at all; 2 Somewhat but there are significant losses; 3- Well with minimal disruptions; 4- Very well, with little to no impact)?.....

(b) Do you have access to or use alternative sources of income or food in case your main farm production faces challenges? Yes [] No [].

(c) If yes, explain these sources……
…….

(d) In the face of economic or market shocks, how flexible is your farm in adapting to changes (e.g., changes in demand, input costs, or market prices)? (Use scale of 1 to 4 with 1 being extremely Not flexible, struggle to adapt; 2- Some flexibility, but faces significant challenges; 3- Fairly flexible, can adjust with moderate effort; 4- Very flexible, can quickly adapt to changes without major disruptions) …….

(e) How effective is your farm in managing pest and disease outbreaks without relying heavily on chemical inputs? (Use scale of 1 to 14 where 1 - Not effective, rely heavily on chemical pesticides; 2- Somewhat effective, using a mix of chemicals and traditional methods; 3- Moderately effective, primarily using integrated pest management (IPM) practices; 4- Very effective, mostly relying on natural pest control methods and biodiversity)

……
…….

(f) How well does your farm incorporate local or indigenous knowledge into farm management practices to adapt to environmental and climatic changes? (Use scale of 1 to 4 where, 1- No use of local or indigenous knowledge; 2- Limited use, with some traditional practices in place; 3- Moderate use, regularly incorporating local knowledge into farm decisions; 4- Extensive use,

integrating a wide range of traditional practices alongside modern techniques).....

.....

(g) Do you have an insurance cover for your farm enterprises? Yes () No (). If yes, what is covered?.....

ADDITIONAL QUESTIONS

On a scale of 1 to 5 (with 1 being extremely irrelevant and 5 extremely relevant), how would you rate the importance/ relevance of the following on performance of your farm?

Parameter	Rate
Land ownership and administration system	
Economic diversity of my farm enterprises	
Ability to reduce farm inputs by adopting alternative Technologies, Innovations and Management practices	
Ability to make independent decisions about my farming activities	
Fair access to resources for my farming activities	
Access to equal opportunities in making farming decisions	
My participation in community demos and group trainings	
Social/farmer group support and linkages	
Good soil management practices adopted	
Use of organic manure and recycling of farm waste/by products	
Good animal husbandry practices (e.g., vaccination and welfare) adopted	
Diverse nature of plants and animals (including insects) in the farm	
Complementary nature of my farm enterprises	

Closure

Ask the farmer for permission and take photo of the farm or the farmer with farm structures (seek consent before taking the photo)

Take GPS coordinates

ANNEX 2: FOCUS GROUP DISCUSSION GUIDE

Introduction:

This FGD is part of a study on Status and Readiness of Agroecology Policy Development in 16 selected Counties in Kenya by Hydro Sentient Limited with funding from Biovision Africa Trust. The goal of this discussion is to gather insights from knowledgeable individuals like yourselves to better understand the status of adoption of agroecological practices across the counties. Your responses will remain confidential, and the information collected will be used solely for research purposes. There are no right or wrong answers—we are interested in your honest perspectives based on your experiences. This interview will take approximately 60 minutes.

In this study, the understanding of the key term and principle is as follows;

Agroecology: A holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems. It seeks to optimize the interactions between plants, animals, humans and the environment while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced. Agroecological approaches favour the use of natural processes, limit the use of purchased inputs, promote closed cycles with minimal negative externalities and stress the importance of local knowledge and participatory processes that develop knowledge and practice through experience, as well as more conventional scientific methods, and address social inequalities.

Principles of Agroecology: High Level Panel of Experts on Food Security and Nutrition, a Committee on World Food Security (CFS) have identified 13 non-repetitive but comprehensive set of principles of agroecology including animal health, Biodiversity, Economic diversification, input reduction, recycling, synergies, connectivity, co-creation of knowledge, social values and diets, fairness, participation and land resource governance (HLPE, 2019).

Before we begin, do you have any questions? If you are comfortable, we can proceed.

1) Political will and commitment

i) Policies and Strategies

(a) Does your county have agroecology related policies/strategies either in draft or completed form? If yes, list them and indicate stage of development.

Category	Name	Status of Developed	Area of Focus	Gaps in agroecology	Operational status (Operational/Not operational)
Policy	▪				
	▪				

	▪				
Strategy	▪				
	▪				
	▪				

(b) What policies/strategies have had a significant impact on agroecology in your county?

Category	Name	Area of focus	Type of Impact
Policy	▪		
	▪		
	▪		
Strategy	▪		
	▪		
	▪		

(c) In your opinion, are these policies or strategies (as drafted or complete ones if any) adequate to support the adoption of agroecology in the county? Explain your answer……

ii) Political Statements or Public Commitments

(a) Have there been any public declarations or pledges by political leaders supporting agroecological practices in your county? Ye [] No. If yes cite examples……..

(b) If yes in (a) above, how have these statements influenced the adoption of agroecological practices at the county and local levels?……

(c) If yes in (a) above what are some of the key factors that determine the success or failure of political statements and commitments related to agroecology?

Success Factors	Inhibitory factors

iii) County Development Goals

(a) In your opinion, are promotion of agroecological practices clearly documented in the County's Integrated Development Plan (CIDP)? (Explain your answer) ……

(b) Do you think these documentations adequately reflect the potential of agroecology to address the county's agricultural and environmental challenges?……

(c) To what extent does the funding of agroecology in the county align with the county's overall development goals?……

2) Institutional capacity

i) Government Institutions Supporting Agroecology

(a) How many government institutions or agencies in the county are mandated to support agroecology? Can you name some of these institutions and describe their specific roles in promoting agroecology?

(b) Are there any challenges or gaps in the coordination between these institutions in advancing agroecology? If so, how can these be addressed?

ii) Trained Professionals or Experts in Agroecology

(a) Is the county adequately resourced with professionals trained in agroecology within key institutions (such as government departments, universities, or research organizations)? How is their expertise being utilized in policy development and program implementation of agroecology?

(b) What are the key areas where more training or capacity building is needed in the field of agroecology, and how can these needs be met? and by which institutions

iii) Multi-Stakeholder Platforms or Task Forces

(a) Are there any multi-stakeholder platforms, commissions, or task forces dedicated to the development of agroecology policies in the county? Yes [] No []. Give examples if any and explain the platform's work……
…

(b) If yes, in (a) above, how effective have these platforms been in bringing together different stakeholders, such as government, NGOs, farmers, and the private sector?……

(c) In your view, what improvements could be made to strengthen these platforms (If yes, in (a) above,) or create new ones that focus on agroecology policy development?……

3) Legislative and regulatory framework

i) Laws and Regulations Supporting Agroecology

(a) What laws or regulations are in place within the county that specifically support agroecology, such as those related to land use, biodiversity conservation, agrochemicals, or organic farming? Can you provide examples of these laws or regulations if any?……

(b) If in (a) above, do you feel that these laws and regulations are effectively supporting the transition to agroecological practices?
……..

(c) In your opinion, what improvements could be made on laws/regulations to strengthen the implementation of agroecological practices within the county?.....

ii) Compliance with International Agreements

(a) How does the county ensure compliance with international agreements related to agroecology, such as the UNFCCC, Convention on Biological Diversity, the Paris Agreement, or the FAO guidelines on sustainable agriculture? .....

(b) Can you identify any challenges the county faces in aligning its agroecological policies and practices with these international agreements? .....

(c) How can these challenges (if any) be overcome?.....

iii) Environmental Impact Assessments (EIA)

(a) How frequent are agricultural projects or practices in the county subjected to environmental impact assessments (EIAs) that specifically consider agroecological principles? Very frequent [] Frequent [] Sometimes [] Rarely [] Very rarely []

(b) Do you know of any project (s) that have been assessed using agroecological criteria? List them……..

(c) How well are agroecological principles and elements integrated into the EIA process? In your opinion, should there be more emphasis on these principles, and if so, how can this be achieved?.....

4) Financial resources and support

i) Government Funds for Agroecological Research, Extension Services, and Farmer Support

(a) Do you think the amount of government funding allocated to agroecology initiatives in your county is sufficient to meet the needs of farmers and practitioners? Yes [] No []

(b) Do you know of any funding currently directed toward agroecological research, extension services, and farmer support programs? Share examples of any such programs……..

(c) What additional funding or resources would be necessary to scale-up agroecological practices in the county?.....

ii) Private Sector, NGO, or International Investments in Agroecology

(a) What level of investment has private companies, NGOs, or international organizations made in agroecological practices or agroecological enterprises in the county? .....

(b) Can you share examples of any successful collaborations or initiatives on promoting agroecology in the county or other counties across the county?

Within your county	In other counties in Kenya

(c) What factors influence the investment decisions of these organizations in agroecology, and how can these investments be increased?.....

iii) Financial Incentives or Subsidies for Agroecology

(a) Does your county have financial incentives for agroecology? If yes, state examples and explain .....

(b) Are there any challenges or barriers in securing funding for agroecology programs, and if so, what are they?.....

5) Technical and scientific knowledge:

i) Agroecology-Related Research Projects and Programmes

(a) Do you know of any research projects related to agroecology or sustainable agriculture previously or currently being conducted in the county? .....

(b) Can you share examples of any ongoing or completed projects that have had a significant impact on agroecology?.....

(c) In your view, what are the key areas within agroecology or sustainable agriculture that need more research attention?.....

ii) Agroecology Training Programs

(a) Are their institutions with the county offering specific trainings in agroecology or related areas?

Name of the institution	Program name

(b) Do you think there is enough access to agroecology training for farmers and practitioners in your county?.....

(c) What more could be done to expand or improve training programs to better support the adoption of agroecological practices?.....

6) Social acceptance and stakeholder engagement:

i) Awareness Campaigns or Initiatives Promoting Agroecology

(a) Have there been awareness campaigns or initiatives launched in the county to promote agroecology? If any, who has organized the campaigns, and can you describe the key messages or strategies used in these campaigns?.....

(b) In your opinion, how effective have these awareness campaigns (if any in (a) above) been in raising understanding and interest in agroecology among the public and farmers? .....

(c) What improvements could be made to increase the awareness level?.....

ii) Engagement in Public Consultations and Policy Dialogues

(a) How actively are stakeholders (farmers, NGOs, government, etc.) engaging in public consultations, policy dialogues, and meetings related to agroecology? .....

Category	Level of active engagement
Farmers/Communities	
NGOs	
County Government departments	
National government departments/agencies	
Other development partners	
Others (specify)	

(b) Can you provide examples of meetings or discussion for where agroecology was a key topic?.....

(c) What can be done to ensure greater involvement of all relevant stakeholders in agroecology policy dialogue?.....

iii) Farmer Adoption Rates of Agroecological Practices

(a) How would you describe the current adoption rates of agroecological practices among farmers in the county?

.....

.....

(b) Do you know of any other county where the adoption rates of agroecological practices are high and factors contributing to this?.....

(c) Are there specific practices that are more commonly adopted than others? (Indicate which ones) .....

(d) What do you think are the main factors influencing farmers' decisions to adopt or not adopt agroecological practices?

.....

.....

(e) How can these factors be addressed to increase adoption rates?.....

7) Market infrastructure and value chains

i) Percentage of Agricultural Market Occupied by Organically Certified Products

(a) Estimate the percentage of the agricultural market in the county currently occupied by agroecologically certified products, such as organic products or fair-trade goods?

.....

(b) Are there any noticeable trends in consumer demand for these products?.....

(c) Are there value chains within your county which have agroecological (organic) certifications?

.....

(d) What challenges do producers face in obtaining agroecological (organic) certifications, and how can these challenges be overcome to increase the market share of certified products?

Challenge	Strategy to overcome

ii) Established Value Chains Connecting Agroecological Producers and Consumers

(a) How many value chains have been established in the county that connect agroecological producers (such as organic farmers) with consumers?

.....

(b) Can you provide examples of any successful value chains or initiatives?.....

(c) What are some of the key factors that make these value chains successful, and what improvements or support are needed to strengthen them?.....

iii) Presence of Agroecology-Specific Markets, Cooperatives, or Retail Outlets

(a) Are there any agroecology-specific markets, cooperatives, or retail outlets (e.g., organic farmers' markets) in the county where agroecological products are sold? ……..

(b) How accessible are these markets (if any in (a) above) to farmers and consumers?.....

(c) How do you assess the demand for agroecologically produced goods in these markets? ……

(d) What more can be done to expand access to these markets for both producers and consumers?.....

8) Education and capacity building:

i) Schools, Universities, and Training Canters Offering Agroecology-Related Programs

(a) Are there known training canters (Universities, colleges, tertiary) offering Agroecology courses? which training institutions are these? ……..

(b) If any in (a) above, ere these programs primarily focused on theory, or do they incorporate practical fieldwork and real-world applications?.....

(c) How accessible are these educational programs (if any in (a) above) to local farmers, young people, and other stakeholders interested in agroecology? (Explain)……

(d) What improvements can be made to make these programs (if any in (a) above) more inclusive?.....

ii) Agroecology-Focused Extension Services Available to Farmers

(a) Are there agroecology-focused extension services available to farmers in the county? Can you share examples?.....

(b) How effective are these extension services (if any in (a) above) in building farmers' knowledge and skills in agroecology?

(c) Are there any gaps or challenges in reaching farmers with agroecology extension? (Explain)……

9) Environmental and ecological readiness:

i) Measurements of Soil Organic Matter, Fertility, and Erosion Rates

(a) How do farmers in the county currently measure/determine the following?

Parameter	Type of measurement
Level of Soil organic matter	

Soil fertility level	
Soil erosion level	

(b) In your experience, what are the typical soil types in the county and how do they affect the potential for adopting agroecological practices?

Major soil types	Effect on potential for adopting agroecological practices

(c) Are there regions in the county where wide application of agroecological practices has improved soil health? Give examples.....

ii) Biodiversity Indices and Ecosystem Health

(a) Is there a biodiversity tracking system in place in the county (such as one that measures species richness)? If any, provide details.....

(b) How aware are farmers and other stakeholders of the importance of biodiversity in agroecological systems?

.....

(c) What can be done to strengthen the integration of biodiversity conservation into agroecological practices?.....

iii) Tracking Water Quality and Availability

(a) Are there any indicators in place to track agricultural water quality (e.g., nutrient loading, pesticide residues) agricultural regions within the county?

.....

(b) How do these indicators (if any in (a) above) impact on the adoption of agroecological practices?.....

(c) What challenges do farmers face regarding water availability and quality, and how do agroecological practices address these challenges?

.....

(d) What recommendations would you make for improvement of agricultural water quality in the county?.....

10) Cultural and social factors:

1) Policies or Programs Integrating Indigenous Agricultural Knowledge

(a) Are there any policies or programs in the county that integrate indigenous agricultural knowledge into agroecological practices? ……

(b) In your opinion, how effective are these programs in preserving and utilizing indigenous knowledge for agroecology?.....

(c) What could be done to better integrate this knowledge into modern agricultural practices?.....

2) Inclusion

(a) Are there any specific measures in place to ensure inclusion (of men, women, youth, and vulnerable groups) in agroecology initiatives? ……

(b) How do these measures support the participation of these groups in agroecological practices?.....

(c) What challenges do marginalized groups face in accessing or benefiting from agroecology programs, and what strategies can be implemented to ensure greater inclusion and equity?.....

3) Local Communities or Farmers in Decision-Making Processes

(a) Are local communities or farmers involved in decision making related to agroecology projects and to what extent?.....

(b) How would you describe the level of influence that local communities or farmers have in these decision-making processes? ……

(c) Are they represented by county agriculture committees and which ones? ……

(d) What steps can be taken to ensure that their voices are more effectively heard and acted upon?.....

ANNEX 3: KEY INFORMANT INTERVIEW GUIDE

Introduction:

This KII is part of a study on Status and Readiness of Agroecology Policy Development in 16 selected Counties in Kenya by Hydro Sentient Limited with funding from Biovision Africa Trust. The goal of this interview is to gather insights from knowledgeable individuals like yourself to better understand the status of adoption of agroecological practices across the counties. Your responses will remain confidential, and the information collected will be used solely for research purposes. There are no right or wrong answers—we are interested in your honest perspectives based on your experiences. This interview will take approximately 45 minutes.

In this study, the understanding of the key term and principle is as follows;

Agroecology: A holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems. It seeks to optimize the interactions between plants, animals, humans and the environment while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced. Agroecological approaches favour the use of natural processes, limit the use of purchased inputs, promote closed cycles with minimal negative externalities and stress the importance of local knowledge and participatory processes that develop knowledge and practice through experience, as well as more conventional scientific methods, and address social inequalities.

Principles of Agroecology: High Level Panel of Experts on Food Security and Nutrition, a Committee on World Food Security (CFS) have identified 13 non-repetitive but comprehensive set of principles of agroecology including animal health, Biodiversity, Economic diversification, input reduction, recycling, synergies, connectivity, co-creation of knowledge, social values and diets, fairness, participation and land resource governance (HLPE, 2019).

Before we begin, do you have any questions? If you are comfortable, we can proceed.

A. Political

Tax Policies

1) Are there tax incentives or exemptions for organic farming inputs or products in your county?

	No	Yes	Not Sure	If yes, specify
Inputs				
Products				

2) What is your perception of the current tax policies related to organic agricultural products in your county?

.....

.....

3) What changes or improvements in tax policies would you recommend encouraging production and consumption of organic products in your county?

.....

.....

Labour Laws

1) How does current labour laws affect the availability and productivity of farm labour in your county?

.....

.....

2) Do you think existing labour laws protect the rights and welfare of farmworkers effectively? Rate your responses using the scale below. Strongly agree [] Agree [] Neutral [] Disagree [] Strongly disagree []

3) What specific changes to labour laws would help improve access to affordable and skilled farm labour?

.....

.....

Trade Policies & Tariffs

1) How do tariffs on agricultural produce affect the adoption and sustainability of agroecological practices in your county? Highly encourages [] Encourages [] Neutral [] Slightly discourages [] Highly discourages []

2) What changes in tariff policies would benefit agroecological farming?

.....

.....

3) Which trade restrictions most impact agroecology practices in your county?

.....

.....

B. Economic

1) How has the following affected adoption of agroecological practices in your county?

Economic Parameter	Effect
Inflation rate	
Interest rates	
Currency exchange rates	
Consumer Income Levels	
Customer confidence	
Demands and supply trends	

2) To what extent does the current agribusiness environment (e.g., private sector involvement, value chain development) support agroecology in your county? Strongly supports [] Somewhat supports [] Neutral [] Slightly hinders [] Severely hinders []

3) What specific improvements in the agribusiness environment would enhance agroecology in your county?

.....

.....

C. Social

1) To what extent does the population growth rate in your area affect the adoption of agroecological practices? Strongly promotes adoption [] Somewhat promotes adoption [] No noticeable impact [] Somewhat hinders adoption [] Strongly hinders adoption []

2) What level of involved are the following age groups in implementation of agroecological practices in the county?

	Level of Involvement (Fully involved (4); Highly Involved (3) Little Involvement (2) Not involved (1))	Role played
Youth (18–35 years)		
Middle-aged (36–55 years)		
Elderly (56+ years)		

3) What are the prevailing attitudes toward organic foods in your county? Highly positive [] Moderately positive [] Neutral [] Moderately negative [] Highly negative []

4) What cultural or social barriers exist in promoting agroecological farming practices?

.....

.....

D. Technology

1) How accessible is agricultural mechanization (e.g., tractors, irrigation systems) for farmers practicing agroecology in your area? Easily accessible [] Moderately accessible [] Not accessible [] Not applicable []

2) Are there government policies or programs promoting mechanization for agroecological farming? Yes [] No [] Not sure. If yes, provide details

.....

.....

3) What are the main challenges farmers face in accessing agricultural machinery for agroecology?

.....

.....

4) How widely are ICT tools (e.g., mobile apps, farm management software) used to support agroecological practices in your county? Widely used [] Moderately used [] Rarely used [] Not used at all []

5) What emerging technologies would you recommend to improve agroecological farming practices in your community?

.....

.....

E. Environment

1) What are the main sources of pollution affecting agricultural ecosystems in your county?

.....

.....

2) How significant is the impact of ecosystem pollution (e.g., soil, water, air) on agroecological farming practices? Very significant [] Somewhat significant [] Neutral [] Minimal [] No impact []

3) What measures are currently in place to mitigate pollution in farming ecosystems in your county?

.....

.....

4) How has climate change (e.g., erratic rainfall, prolonged droughts) affected agroecological farming in your county? Severely impacted [] Moderately impacted [] No noticeable impact [] Positively impacted []

5) What adaptive measures are farmers using to respond to climate change in your county?

.....

.....

6) What is the status of tree cover/forest resources in your area? Increasing [] Stable [] Declining []

7) What are the main drivers of tree cover increase/loss in your region?

Increase (if any) .....

Loss (if any) .....

8) Explain the impact of tree cover increase/loss (if any) on adoption of agroecological practices in the various agroecological zones in your county

Major Agroecological zone	Impact of tree cover increase (if any)	Impact of tree cover loss (if any)

F. Legal

1) How effective are these laws/regulations in promoting the adoption of agroecological practices? Very effective [] Somewhat effective [] Neutral [] Slightly ineffective [] Very ineffective []

2) What legal barriers, if any, hinder the implementation of agroecological practices in your county?

.....

.....

3) What changes or new laws would better support agroecological farming in your county?

.....

.....

4) How accessible is information on agroecological policies and regulations for farmers in your area?

Easily accessible [] Moderately accessible [] Not accessible

5) What recommendations do you have to improve policies and regulations supporting agroecology?

.....

G. Institution

1) What role do public establishments play in supporting agroecological practices in your area?

.....

.....

.....

2) What role do private establishments play in supporting agroecological practices in your area?

.....

.....

.....

3) On a scale of 1-5, indicate the extent to which the following establishments provide support for agroecology in your region?

Category	5-Very large extent	4-Large extent	3- Small Extent	4-Very Small extent	1-None
Public institutions (e.g., government agencies, research centres)					
Private sector (e.g., agribusinesses, cooperatives)					
NGOs					
Others.....					

4) What type of support does these institutions provide for agroecology? (Select all that apply)

Category	Funding and grants	Training and capacity building	Advocacy and awareness	Research and development	Market linkages	Other (Specify)
Public institutions						
Private sector						
NGOs						
Other						

5) How accessible are the services (e.g., funding, training, or resources) provided by public and private establishments for agroecology?

Category	Very accessible	Moderately accessible	Not accessible
Public institutions			
Private sector			
NGOs			
Others……			

6) How effective are these institutions in supporting agroecology through policies, training, and funding?

Category	Very effective	Somewhat effective	Neutral	Slightly ineffective	Very ineffective
Public institutions					
Private sector					
NGOs					
Others……					

7) What additional roles should ministries/private sector/NGOs take to enhance agroecology in your county?

Ministries: ……

Private Sector……

NGOs: ……

8) Are there established collaborations or partnerships between public and private sectors to promote agroecology in your region?

Category	Many collaborations	Some collaborations	No collaborations	Not sure
Public institutions				
Private sector				
NGOs				
Others……				

9) How strong are the linkages between different stakeholders (e.g., government, private sector, NGOs, and farmers) in supporting agroecological practices? Very strong [] Moderately strong [] Neutral [] Weak [] Very weak []

10) What new collaborations or partnerships could strengthen agroecology adoption in your area?

……

……

Additional questions

In your opinion, to what extent do the following factors act as enablers to adoption of agroecological practices in your county.

	Very great extent (5)	Great extent (4)	Moderate extent (3)	Small extent (2)	Not at all (1)
Political factors					
Economic factors					

Social factors					
Environment factors					
Legal factors					
Institutional factors					

Annex 4: Scoresheet for Ranking Level of Adoption of Agroecology Principles (Survey)

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
1) Recycling-5%	Percentage of recycling	None	<40%	40-60%	61-80%	>80%
	Sources of energy	One source	2 sources	3 sources	4 sources	>4 sources
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0
2) Input Reduction-7%	Fertilizer	Only use inorganic fertilizer	Quantity of organic fertilizer used is <30%	Quantity of organic fertilizer used is 30-60%	Quantity of organic fertilizer used is 60 – 80%	Quantity of organic fertilizer used is > 80%
	Pesticides	Only use inorganic pesticides		Use both organic & inorganic		Use organic pesticides only
	Safe use of pesticides	No precautionary measures	1 precautionary measure	2 precautionary measures	3 precautionary measures	>3 precautionary measures
	Sub Aggregate	<2.0	2.0-4.9	5.0-7.9	8.0-10.9	11.0-12.0
3) Soil Health-7%	Frequency of checking soil health	Never	Every 2-5 years	Once per year	Once per season	Every month
	No. of soil management practices adopted	None	One practice	2 practices	3 practices	More than 3 practices
	Level of understanding of CA practices	None	One practice	2 practices	3 practices	More than 3 practices
	Sub Aggregate	<2.0	2.0-4.9	5.0-7.9	8.0-10.9	11.0-12.0

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
4) Animal Health-7%	Vaccination %	No vaccination done	Few animal species (<30%)	Some animal species (30-60%)	Some animal species (30-60%)	Significant no. of animal species (>60%)
	Adherence to vaccination regime	No/not sure	Infrequently	Sometimes	Frequently	Always
	Housing	No housing/Not sure	Not Comfortable	Somehow comfortable	Comfortable	Very comfortable
	Sub Aggregate	<2.0	2.0-4.9	5.0-7.9	8.0-10.9	11.0-12.0
5) Biodiversity-10%	Species of animals raise	No animal raised	One species raised	Few species (2) raised	Several species (3-5)	Several species (> 5) raised
	No. of Crops species grown	No Crops	One crop	Two - three crops	More than 3 crops	More than 3 crops
	% Land cover under trees	No tree	Few trees (<2% of land cover)	Some tree (2-5% of land cover)	Significant number of trees (6-10% of land cover)	High number of trees (> 10% of land cover)
	Tree species	No trees	One type	2 types	3 types	>3 types
	Sub Aggregate	<3.0	3.0-6.9	7.0-10.9	11.0-14.9	15.0-16.0
6) Synergies-8%	Number of enterprises	Only 1 enterprise	2 enterprises	3 enterprises	4 enterprises	>4 enterprises
	Extent of farm diversification	No agriculture enterprise	No diversification, only a single crop or livestock type	Some diversification, but still dependent on one or two main products	Moderate diversification with multiple crops or livestock species	High diversification with a wide variety of crops, livestock, and practices

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0
7) Economic Diversification-7%	No. of economic activities	One productive activity only (e.g., selling only one crop)	Two or three productive activities (e.g., selling 2 crops, or one crop and one type of animals)	More than 3 productive activities	More than 3 productive activities and one service (e.g., value addition, ecotourism, transport of agricultural goods, training etc.)	More than 3 productive activities, and several services
	Sub Aggregate	0.0	1.0	2.0	3.0	4.0
8) Efficiency-7%	Productivity value per acre	<15% of the national average	15-30 of the national average	31-60% of the national average	61-80% of the national average	>80% of the national average
	Perception of income trends	Extremely decreasing	Income is decreasing	Income is stable	Income is increasing	Extremely increasing
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0
9) Co-Creation of Knowledge - 7%	Participation in co-creation of value	No	1 activity	2 activities	3 activities	> 3 activities
	Number of family members who have participated	None	1 member	2 members	3 members	> 3 members
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
10) Social Values & Diets-7%	Decision on control and use of HH income	Decision made by none HH members	Decision made by one adult	Decision made by HH and the other adult (s)	Decision made by adults and youth	Joint HH decision (Children included)
	HH Diet Diversity	<2 food groups/day	2 food groups/day	3 -4 food groups/day	5 -7 food groups/day	>7 food group/day
	No. of meals-children	1 meal	2 meals	3 meals	4 meals	5 or more meals
	No. of meals-youth	1 meal	2 meals	3 meals	4 meals	5 or more meals
	No. of meals-adults	1 meal	2 meals	3 meals	4 meals	5 or more meals
	Sub Aggregate	<4.0	4.0-7.9	8.0-11.9	12.0-15.9	16.0-20.0
11) Fairness-5%	Say on financial resources	Only the HH head	HH and spouse	HH, spouse and male/female youth	HH, spouse and all youth	HH, spouse, youth and children
	Contribution to family labor	Only one adult member	More than 1 adult members	More than 1 adult and male/female youth	More than 1 adult and all youth	All family members (including children)
	Incentives for family labor	Only the HH head	HH and spouse	HH, spouse and male/female youth	HH, spouse and all youth	HH, spouse, youth and children
	Sub Aggregate	<2.0	2.0-4.9	5.0-7.9	8.0-10.9	11.0-12.0
12) Connectivity-5%	No. of social groupings	None	1 Social group	2 Social groups	3 groups	> 3 groups
	Satisfaction with intended purpose	Not at all	Small extent	Moderate extent	Great extent	Very great extent

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0
13) Land & Resources Governance- 7%	Land Documentation	No land legal document	Have legal documentation for < 30% of holdings	Have legal documentation for 31- 60% of holdings	Have legal documentation for 61-80% of holdings	Have legal documentation for > 80 of holdings
	Perception to free access	No right perceived	1 perceived right	2 perceived rights	3 perceived rights	>3 or more perceived rights
	Sub Aggregate	<1.0	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.0
14) Participation- 5%	Adult males	0 farm decisions	1 farm decision	2 farm decisions	3 farm decisions	> 3 farm decisions
	Adult females	0 farm decisions	1 farm decision	2 farm decisions	3 farm decisions	> 3 farm decisions
	Youth	0 farm decisions	1 farm decision	2 farm decisions	3 farm decisions	> 3 farm decisions
	Children	0 farm decisions	1 farm decision	2 farm decisions	3 farm decisions	> 3 farm decisions
	Sub Aggregate	<3.0	3.0-6.9	7.0-10.9	11.0-14.9	15.0-16.0
15) Resilience - 10%	Resilience post extreme conditions	None	Not well at all	Somewhat but there are significant losses	Well with minimal disruptions	Very well, with little to no impact
	How flexible is the farm in adapting to changes	None	Not flexible	Some flexibility	Fairly flexible	Very flexible
	Effectiveness in managing pest and disease outbreaks	None	Not effective, rely heavily on chemical pesticides	Somewhat effective, using a mix of chemicals	Moderately effective, primarily using integrated	Very effective, mostly relying on natural pest

AE Principle	Key Indicators	Highly Unsustainable (0)	Unsustainable (1)	Acceptable (2)	Desirable (3)	Highly desirable (4)
	without relying heavily on chemical inputs			and traditional methods	pest management (IPM) practices	control methods and biodiversity
	No. of items insured	None	1 item	2 items	3 items	>3 items
	Sub Aggregate	<3.0	3.0-6.9	7.0-10.9	11.0-14.9	15.0-16.0

NB: Weights are based on relative importance for fostering sustainability, resilience, and equity in agroecosystems

Annex 5: Scoresheet for County Policy Development and Implementation Readiness (FGD)

Data Dimension	Key Types of Data/Indicators	Strong (3)	Moderate (2)	Weak (1)	None (0)
Political Will and Commitment (15)	1) Presence of agroecology policy	Operational policy	Draft Policy either before the cabinet or assembly for approval	Draft policy subjected to stakeholders' inputs	No draft policy
	2) Political statements or public commitments e.g., public declarations or pledges by political leaders supporting agroecology	Coming from different leaders' wit power of influence	Coming from different leaders	Coming from just one individual	None
	3) Government budget allocation: Financial resources allocated to agroecology or sustainable agriculture programs in the county budgets.	Adequate resources allocated	Inadequate	Extremely inadequate	None
	4) Documentation of Agro-ecological practices in County Integrated Development Plans	Explicitly captured	Mentioned alongside other sustainable strategies	Mention in generalities	No mention
	5) Presence of other county supporting policies	More than 5 alternative sources (3)	More than 3-5 alternative sources (2)	Two main alternative sources (1)	No alternative sources (0)
	Sub Total	11-15	6-10	1-5	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Institutional Capacity (9)	1) Number of government institutions with mandates for supporting agroecology (departments, or agencies)	More than two institutions (3)	Two institutions (2)	One institution (1)	None (0)
	2) Number of trained professionals or experts in agroecology within key institutions.	Adequate (3)	Inadequate (2)	Very inadequate (1)	None (0)
	3) Existence of multi-stakeholder platforms, commissions, or task forces dedicated to agroecology policy development.	Operational with strong mandate (3)	Operational but weak mandate (2)	Existing but not operational (1)	None (0)

Data Dimension	Key Types of Data/Indicators	Strong (3)	Moderate (2)	Weak (1)	None (0)
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Legislative and Regulatory Framework: (9)	1) Number of laws and regulations supporting agroecology (related to land use, biodiversity conservation, agrochemicals, organic farming, or other aspects of agroecology).	More than 2 (3)	Two (2)	One (1)	Non existing (0)
	2) Compliance with international agreements (like the Convention on Biological Diversity, the Paris Agreement, or FAO guidelines on sustainable agriculture).	Fully compliant	Compliant to great extent	Compliant to some extent	Not compliant
	3) Percentage of agricultural projects or practices subjected to environmental impact assessments that consider agroecological principles	> 80%	60-80%	30-60%	< 30%
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Financial Resources: (9)	1) Amount of government funds directed to agroecological research, extension services, and farm Investment levels from private companies, NGOs, or international organizations in agroecological practices or enterprises.	Very Adequate	Adequate	Inadequate	No budget
	2) Availability of financial incentives or subsidies (e.g., subsidies, tax breaks, levy breaks) for agroecological practices, organic farming, or biodiversity conservation.	Largely Available	Available to a small extent	Available to very small extent	None existing
	3) Availability of funding from different sources which support agroecological practices	Largely Available	Available to a small extent	Available to very small extent	None existing

Data Dimension	Key Types of Data/Indicators	Strong (3)	Moderate (2)	Weak (1)	None (0)
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Technical and Scientific Knowledge: (9)	1) No. of agroecology-related research projects focused on agroecology or sustainable agriculture.	More than two	Two	One	None
	2) Research funding for agroecology (e.g., amount of funding allocated to agroecology-focused research institutions, universities, and research centres.	More than two	Two	One	None
	3) Presence of agroecology training programs (Number of formal and informal educational programs (universities, NGOs, extension services) offering training on agroecological practices.	More than two	Two	One	None
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Social Acceptance and Stakeholder Engagement (9)	1) Number of awareness campaigns or initiatives promoting agroecology.	More than two (3)	Two (2)	One (1)	None (0)
	2) Level of engagement in public consultations, policy dialogues, and meetings involving agroecology (e.g., number of stakeholders attending meetings).	Available to a great extent (3)	Available to a moderate extent (2)	Available to very small extent (1)	No engagement (0)
	3) Farmer adoption rates of agroecological practices	High (> 25%)	Moderate (10-25%)	Low (< 10%)	No adoption
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
	1) Percentage of the agricultural market occupied by agroecologically certified	High (> 25%)	Moderate (10-25%)	Low (< 10%)	Non adoption

Data Dimension	Key Types of Data/Indicators	Strong (3)	Moderate (2)	Weak (1)	None (0)
Market Infrastructure: (9)	products (e.g., organic products, fair trade).				
	2) No. of established value chains that connect agroecological producers with consumers (e.g., organic certification schemes, local food networks).	More than two	Two	One	None
	3) Presence of agroecology-specific markets, cooperatives, or retail outlets (e.g., organic farmers' markets).	More than 5	2-5	One	None existing
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	0.0-3.9	0
Extension services: (9)	1) No. of training canters offering agroecology extensions services	More than two	Two	One	None
	2) Adequacy of Agroecology-focused extension services available to farmers, including field demonstrations and farmer field schools.	Vey adequate	Adequate	Inadequate	None
	3) Effectiveness of extension services aimed at building the capacity of stakeholders (e.g., farmers, policymakers, NGOs) in agroecology.	Vey many	Many	Few	None
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Environmental: (9)	1) Measurements of soil organic matter, soil fertility, and soil erosion rates as indicators of ecological readiness for agroecological practices.	Done by many farmers (> 25%)	Done by few farmers (10-25%)	Done by very few farmers (< 10%)	Not done
	2) Presence of biodiversity indices tracking system such as species richness, that indicate ecosystem health and the potential for	Tracking frequently done	Tracking rarely done	Present but not being tracked	Not present

Data Dimension	Key Types of Data/Indicators	Strong (3)	Moderate (2)	Weak (1)	None (0)
	agroecology to maintain or enhance biodiversity.				
	3) Presence of tracking indicators of water quality (e.g., nutrient loading, pesticide residues) and water availability in agricultural regions that could influence agroecological practices	Tracking frequently done	Tracking rarely done	Present but not being tracked	Not present
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
Cultural and Social Factors: (9)	1) Presence of policies or programs that integrate indigenous agricultural knowledge into agroecological practices.	Operational with strong mandate	Operational but weak mandate	Existing but not operational	None
	2) Presence of measures of gender equality, land tenure security, and the inclusion of marginalized groups (e.g., women, youth, indigenous peoples) in agroecology initiatives	Operational with strong mandate	Operational but weak mandate	Existing but not operational	None
	3) Level of local communities or farmers involved in agroecology-related decision-making processes, such as land-use planning or policy devpt.	High	Moderate	Low	None
	Sub Total	7-9	4-6	1-3	0
	Weighted Score	7.0-10.0	4.0-6.9	1.0-3.9	0
OVERALL READINESS SCORE		65-96	43-64	1-42	0
AGGREGATE WEIGHTED SCORE		7.0-10.0	4.0-6.9	1.0-3.9	0

Annex 6: Scoresheet for Macro Influence on Agroecology Transition (KII)

Agroecological Principle	Indicator	Enabler (4)	Moderately positive impact (3)	Moderately negative impact (2)	Inhibitor (1)	No effect (0)
Political	Tax Policy	Existing but have high positive effect	Existing but have low positive effect	Existing but have low negative effect	Existing but have high negative effect	Not existing
	Labor laws	Existing but have high positive effect	Existing but have low positive effect	Existing but have low negative effect	Existing but have high negative effect	Not existing
	Trade tariffs	Existing but have high positive effect	Existing but have low positive effect	Existing but have low negative effect	Existing but have high negative effect	Not existing
	Aggregate Score	9-12	5-8	1-4	0-3	0
Economic	Inflation rate	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Interest rates	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Currency exchange rates	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Consumer Income Levels	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Customer confidence	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Demands and supply trends	Highly encourages	Encourages	Slightly discourages	Highly discourages	No effect
	Agribusiness Environment	Strongly supports	Somewhat supports	Slightly hinders	Severely hinders	Neutral
	Aggregate	23-28	15-22	7-14	0-6	0
Social	Population growth	Strongly promotes	Somewhat promotes	Somewhat hinders	Strongly hinders	No noticeable
	Level of involvement of all (youth/women/men)	Fully involved	Highly Involved	Little Involvement	Not involved	
	Attitudes toward organic foods	Highly positive	Moderately positive	Moderately negative	Highly negative	Neutral

Agroecological Principle	Indicator	Enabler (4)	Moderately positive impact (3)	Moderately negative impact (2)	Inhibitor (1)	No effect (0)
	Aggregate	9-12	5-8	1-4	0-3	0
Technological	Access to agricultural mechanization for AE	Easily accessible	Moderately accessible	Somehow inaccessible	Not accessible	Not applicable
	Policies of mechanization	Existing but have high positive effect	Existing but have low positive effect	Existing but have low negative effect	Existing but have high negative effect	Not existing
	Use of ICT	Widely used	Moderately used	Rarely used	Not used at all	
	Aggregate	9-12	5-8	1-4	0-3	0
Environmental	Impact of ecosystem pollution	No impact	Minimal impact	Somewhat significant	Very significant	
	Effect of climate change	Positively impacted	No noticeable impact	Moderately impacted	Severely impacted	
	Impact of tree	Increasing	Stable	Declining		
	Aggregate	9-12	5-8	1-4	0-3	0
Legal	Effective are these laws/regulations	Very effective	Somewhat effective	Slightly ineffective	Very ineffective	Neutral
	Information access	Easily accessible	Moderately accessible	Difficult to access	Not accessible	
	Aggregate	7-8	5-6	3-4	1-2	0
Institutional	Institutional support	Very large extent	Large extent	Small Extent	Very Small extent	
	Accessibility of services	Very accessible	Moderately accessible	Difficult to access	Not accessible	
	Effectiveness of institutional support	Very effective	Somewhat effective	Slightly ineffective	Very ineffective	Neutral
	Effectiveness of collaborations	Many collaborations	Some collaborations	Few collaborations	No collaborations	Not sure
	Aggregate	13-16	9-12	5-8	1-4	0
Aggregate		76-100	51-75	26-50	1-25	0

Annex 7: Ward List

County	Ward
1) Bungoma	Kamukuywa
2) Bungoma	Kabula
3) Bungoma	Kibingei
4) Bungoma	Kimaeti
5) Bungoma	South Bukusu
6) Bungoma	Bumula
7) Busia	Busibwabo
8) Busia	Bukhayo West
9) Busia	Angorom
10) Busia	Township
11) Embu	Ruguru Ngandori
12) Embu	Mbeti South
13) Embu	Nthawa
14) Embu	Central Ward
15) Kakamega	Ingotse Matia
16) Kakamega	Butsotso Central
17) Kakamega	Butsotso East
18) Kakamega	Esumeiya Shikomari Shinoyi
19) Kiambu	Ndeiya
20) Kiambu	Githiga
21) Kiambu	Ikinu
22) Kiambu	Ndenderu
23) Kisii	Riana
24) Kisii	Bomariba
25) Kisii	Bogiakumu
26) Kisii	Bomorenda
27) Kitui	Kyangwithya East
28) Kitui	Kauwi
29) Kitui	Yatta/Kwavonza

County	Ward
30) Kitui	Ikanga/Kyatune
31) Laikipia	Umande
32) Laikipia	Thingithu
33) Laikipia	Tigithi
34) Laikipia	Segera
35) Laikipia	Marmanet
36) Makueni	Ukia
37) Makueni	Wote-Nziu
38) Makueni	Mukuyuni
39) Makueni	Kako/Waia
40) Makueni	Muvau/Kikumini
41) Meru	Nyaki East
42) Meru	Abo- West
43) Meru	Ruiri Rwarera
44) Meru	Abo/ Central
45) Muranga	Kangari Ward
46) Muranga	Gaichanjiru
47) Muranga	Kamahuha
48) Muranga	Township
49) Nakuru	Bahati
50) Nakuru	Mburuk/Eburu
51) Nakuru	Gilgil
52) Nakuru	Subukia
53) Nakuru	Elburgon
54) Nakuru	Kabazi
55) Nyandarua	Gathara
56) Nyandarua	Engineer
57) Nyandarua	North Kinangop
58) Nyandarua	Githioro
59) Nyandarua	Murungaru

County	Ward
60) Tharaka Nithi	Magumoni
61) Tharaka Nithi	Igambang'ombe
62) Tharaka Nithi	Chogoria
63) Tharaka Nithi	Muthambi
64) Vihiga	Chavakali
65) Vihiga	Mwibona
66) Vihiga	Wamuluma
67) Vihiga	Luanda South
68) West Pokot	Batei
69) West Pokot	Chepareria
70) West Pokot	Kapenguria
71) West Pokot	Siyoi

Annex 8: Participants

County	Tool	Participant Name	Title	Institution/Department	Contact
Busia	FGD	Agnes Oningo	County Director	Crops Development	0725313980
		Chirande Denis	County Director	Environment	0704622028
		Alfred Makokha	Deputy County Director	Livestock Production	0723406475
		Rachael Mohindi	Farmer Rep	Farmer Rep	0721791594
		Samwel Owino	Deputy Director	Agriculture Projects Coordinating Unit	0723211899
		John Garama	NGO Rep	USTADI- WEZESHA 3	0723948810
		QS Laureen Akinyi	County Director	Public Works	0705848492
		Florence Kigunza	Deputy County Director	Agricultural Extension	0721292403
	KII	Agnes Oningo	County Director	Crops Development	0725313980
		Alfred Makokha	Deputy County Director	Livestock Production	0723406475
		Florence Kigunza	Deputy County Director	Agricultural Extension	0721292403
		Rachael Mohindi	Farmer Rep	Farmer Rep	0721791594
Bungoma	FGD	Herbert Muliro	County Director	Irrigation	0729058130
		Fredrick Wotia	County Director	Crops Development	0720693751
		Lilian Wamalwa	County Director	Livestock Production	0720107360
		Victor Mutibila	Farmer Rep	Farmer Rep	0798067566
		Mary Situma	Deputy County Director	Extensions	0720906440
		Suhah Waliaula	NGO Rep	CREADIS	0704809832
		Emanuel Kisebe	Project Officer	NAVCDP	0726927581
		Moses Welikhe	County Commissioner	Cooperatives	0703962469
	KII	Fredrick Wotia	County Director	Crops Development	0720693751
		Victor Mutibila	Farmer Rep	Farmer Rep	0798067566
		Suhah Waliaula	NGO Rep	CREADIS	0704809832
		Emanuel Kisebe	Project Officer	NAVCDP	0726927581
		Mary Situma	Deputy County Director	Extensions	0720906440
West Pokot	FGD	Karino Kenneth	County Director	Water	0722410864
		Philip Tinga	County Director	Agriculture	0729425244

County	Tool	Participant Name	Title	Institution/Department	Contact
		Masoud Mohammed	NGO Rep	Action Against Hunger	0723069850
		Lucas Matete	NGO Rep	Action Against Hunger	0714697030
		Raphael Magal	County Director	Water, Environment, Natural Resources and Climate Change	0722484725
		Elizabeth Kimng'ok	Deputy County Director	Agriculture Policy, Strategy and Coordination	0725363850
		Antony Wesonga	County Director	Livestock Production	0722146780
		Isaac Yarapuo	County Commissioner	Cooperatives	0727778108
		Robert Keitanyi	Project Officer	FSRP	0720669164
		Carren Kirungu	Deputy County Director	Land Reclamation (Environment)	0726761561
		Paul Serem	Farmer Rep	Farmer Rep	0792215520
	KII	Masoud Mohammed	NGO Rep	Action Against Hunger	0723069850
		Lucas Matete	NGO Rep	Action Against Hunger	0714697030
		Philip Tinga	County Director	Agriculture	0729425244
		Elizabeth Kimng'ok	Deputy County Director	Agriculture Policy, Strategy and Coordination	0725363850
		Carren Kirungu	Deputy County Director	Land Reclamation (Environment)	0726761561
		Paul Serem	Farmer Rep	Farmer Rep	0792215520
Kitui	FDG	Jacinta Museo	Director Environment	County Government of Kitui	0757334354
		Florence Ndeti	Partner	Caritas Kitui	0717303131
		John Kimanthi Mainga	Seed Merchant	Inyamandu CBO	0722250400
		Philiph Nzula	Director	Department of Water	0724463020
		Moftat Njoroge	CASSCOM	County Government of Kitui	0721285780
		Boniface K. Kamolo	Partner	Cereals Growers Association	0715186958
		Josephat Maluki	Director Livestock	County Government of Kitui	0722866389
		Japheth Mulu	Farmers Representative	Farmers Representative	0726491953
		Paul Kimwele	Director Economic Planning	County Government of Kitui	0724414422
		Mathew Mutuku	Education Officer	County Government of Kitui	0725085735
		Peter Liru	NAVCDP Representative	County Government of Kitui	0701651009

County	Tool	Participant Name	Title	Institution/Department	Contact
		Boniface Muli	Economist	County Government of Kitui	0728687813
	KII	Boniface Kilonzo Kamolo	Partner	Cereal Growers Association	0715186958
		Japheth Mulu	Farmer Rep	Farmers Representative	0726491953
		Francis Kitoo	County Director	Agriculture	0720893606
Embu	FDG	Stella Mukami		County Government of Embu. Agriculture	0723737644
		Genesio Muriithi	Agricultural Officer	County Government of Embu.	0724340548
		Julius Gikonyo	Extension	County Government of Embu	0721525723
		Eliud Kagete		KALRO	0721416503
		Rosa Kimotho	Coperatives	County Government of Embu.	0723508688
		John Mugabi		E Macadamia Coperative	0713568607
		Duncan Nyaga		Community Development CDDC	0707557334
		Alice Wamae		Agro Dealers Association	0722347970
		Catherine Gathee	Economist	Department of Economic Planning	0720175015
		Caroline Murugi	Environmental & Natural Resources	County Government of Embu	0702633697
		Patrick Nyaga		Farm Africa	0721868318
		Michael Mugushu		Kagari South (FCS) Farmers	0726213148
		Paul Kiige	Livestock	County Government of Embu	0721313353
		Stephen Musyoka	Director Livestock	County Government of Embu	0721568567
		Patrick Njeru	County Director of Agriculture	County Government of Embu	0720301565
	KII	Duncan Nyaga		Community Development CDDC	0707557334
		Patrick Nyaga		Farm Africa	0721868318
		Patrick Njeru	County Director of Agriculture	County Government of Embu	0720301565
		Michael Mugushu		Kagari South (FCS) Farmers	0726213148
		Alice Wamae		Agro Dealers Association	0722347970
Makueni	FGD	Esther Kivindyo	County Director Agriculture Administration	County of Makueni	0713872833
		Charles Kuhara	Director Coperatives	DALFCD Cooperatives	0723212185
		James Musili	Director Livestock	DALFCD Livestock	0790739181
		Eunice Muema		DALFCD Agriculture	0720250838
		Salome Ndunge	Director	ICPF (NGO)	0721974171

County	Tool	Participant Name	Title	Institution/Department	Contact
		Martin Munyao		DALFCD Agro Ecology Desk Officer	0720951896
		Ruth Mwende	Economist	Finance Department County Government Makueni	071135066
		George Musya	Farmer Representative	KAFOCO CBO	0720298436
		Caroline Mwende		Department of Environment	0705423723
	KII	Lydia Kiswii		Cereal Growers Association	0726177704
		Harriet Mutiso		Cereal Growers Association	0790135719
		Mutindi Kinama		Makamithi Agrovet (Agriprenure)	0707621184
		George Musya	Farmer Representative	KAFOCO CBO	0720298436
		Salome Ndunge	Director	ICPF (NGO)	0721974171
Kisii	FGD	Nathan Soire	County Director	Crops -Agriculture	0721599967
		Wiliam Odera	Agribusiness Development Officer	County Government	0796535781
		Samwel Nguka	NGO Rep	Kenya Climate Innovation Centre	0703488648
		Kennedy Osoro	County Director	Livestock Production	0720563268
		Thomas Nyakweba	County Director	Water /Environment	0725860594
		John Katibwa	Director	Fisheries development	0721417915
		Marrione Aminga	D/Director	Environment	0706127411
		Morara Debrah	D/Director	Finance & Economic Planning	0701864812
		Evance Nyambane	Director	Irrigation and Land reclamation	0716899631
		Ndege Fidelis	Director	NEMA	0713631074
	KII	Kennedy Osoro	County Director	Livestock Production	0720563268
		Ndege Fidelis	Director	NEMA	0713631074
		Evance Nyambane	Director	Irrigation and Land reclamation	0716899631
		Marrione Aminga	D/Director	Environment	0706127411
		John Katibwa	Director	Fisheries development	0721417915
		Samwel Nguka	NGO Rep	Kenya Climate Innovation Centre	0703488648
Kakamega	FGD	Titus Omengo	Director	Crop Agriculture	0721320058
		Albert Ochenge	D/Director	CASSCOM Secretariat	0712824130
		Merina Adhiaya	Coordinator	NAVCDP	0723798401
		Peris Walera	Crops Officer -Value chains	Agriculture	0722439369
		Borter Dan	D/Director	Finance and Economic Planning	0721252453

County	Tool	Participant Name	Title	Institution/Department	Contact
		Simon Ndunei	Director	Monitoring and Evolution	0799085856
		Johana Simiyu	Director	Environment & Natural Resourses	0718693408
	KII	Titus Omengo	Director	Crop Agriculture	0721320058
		Peris Walera	Crops Officer -Value chains	Agriculture	0722439369
		Albert Ochenge	D/Director	CASSCOM Secretariat	0712824130
		Simon Ndunei	Director	Monitoring and Evolution	0799085856
		Merina Adhiaya	Coordinator	NAVCDP	0723798401
		Albert Ochenge	D/Director	CASSCOM Secretariat	0712824130
Vihiga	FGD	Alunga Joseph	Director	Livestock Production /AE technical working group	0722899949
		Toney Anduvate	Director	Crops Development	0707353984
		Anyonyi Octavian Jonathan	Director	Fisheries Development	0722117737
		Humphrey Khalechi	Director	Veterinary Services	0716858100
		Sarah Adoli	D/Director	Cooperative Development	0713565046
		Reuben Chumba	Director	Crops -Agriculture	0722756892
		Jane A. Otieno	CADO	NAVCDP	0721294269
	KII	Alunga Joseph	Director	Livestock Production /AE technical working group	0722899949
		Toney Anduvate	Director	Crops Development	0707353984
		Anyonyi Octavian Jonathan	Director	Fisheries Development	0722117737
		Humphrey Khalechi	Director	Veterinary Services	0716858100
		Sarah Adoli	D/Director	Cooperative Development	0713565046
Nyandarua	FGD	Joseph K. Mutuma	D/Director	Agriculture	0720234972
		Samuel Bakari	D/Director	Climate Change & Natural Resource Management	0721470215
		Fredrick Mbondo	Partner-NGO Rep	Cereals Growers Association (CGA)	0712267806
		Teresia Wambui	Farmer Rep	Farmer Representative	0798235833
		Catherine Wanjiru Nderi	D/Director	Agricultural Mechanization- Machinery Rings	0703982085
		Ngungi Mwangi Elius	D/Director	Water	0711269529
		Robert Maina	D/Director	Environment	0725821446

County	Tool	Participant Name	Title	Institution/Department	Contact
		Michael Ngigi	D/Director	Climate Change & Natural Resource Management	0702574388
		Edward Kanyari	D/Director	Livestock & Fisheries	0724285557
		Domnic Wainaina	D/Director	Agriculture	0700781979
	KII	Joseph K. Mutuma	D/Director	Agriculture	0720234972
		Fredrick Mbondo	Partner-NGO Rep	Cereals Growers Association (CGA)	0712267806
		Teresia Wambui	Farmer Rep	Farmer Representative	0798235833
		Catherine Wanjiru Nderi	D/Director	Agriculture Mechanization- Machinery Rings	0703982085
Nakuru	FGD	Charles Githiri	County Director	Livestock	0720350435
		Christopher Auma	County Director	Veterinary Service	0733763919
		James Kamau	Member	CASSCOM	0723929266
		Mrs Wandahwa	Sub-County Agricultural Officer	Rongai Gilgil	0712899831
		Mr Peter Murage	Partner	Biovision Africa Trust- Nakuru	0724331375
		Mrs Monica Kiinama	Farmer Rep	Champion Framer and Youth Leader in Agroecology	0700692419
		Linette Echessa	County Agricultural Officer	Agriculture	0705687264
		Dr Naomi Muriuki	County Director	Environment and Climate Smart Agriculture Officer	0725789085
		Zacheaus Opiyo	Assistant Lecturer	Egerton university	0707932065
	KII	Isaac Soita	Director	Restore Hope International	0722231296
		Samwuel Kamau	Youth Rep	Youth Leader, Subukia ward	0723929266
		Peter Murage	Partner	Biovsion Trust Africa	07243311375
		Mr John Matika	Veterinary Officer	Gilgil	0717691333
		Brian Oyugi	Partner	CEO Enigma Four Limited	0733125678
		Peter Koech	Sub-county Livestock Officer		0729630096
Kiambu	FGD	Samwuel Kiarie	County Director	Natural Resources	0723519144
		George Mburu	Farmer Rep	ICE	0703500729
		Lucy Njuguna	Legal Offier,	Department of Agriculture	0725174580
		Hellen Makori	CASSCOM	Sub-County Agricultural Officer,	0721362072
		Jane Njoki Njue	County M&E Officer-Agriculture	Department of Agriculture	0724232305

County	Tool	Participant Name	Title	Institution/Department	Contact
		Samwuel Kirera	Deputy Director	Water & Natural Resources	0725829566
		Esther Kiruthi	Agriculture NGO representative		0727977009
		Elsa Achieng'	Biovision Trust Africa		0707178698
		Godfrey Nambafu	Stakeholder	Climate Smart Agriculture Multistakeholder platform	0725467102
		Dr Kenneth Gor	Consultant	Hydro Sentient	0721627585
		Dorothy Amwata	Consultant	Hydro Sentient	0721599870
	KII	Bernard Maina	Agriculture NGO Representative		0716219369
		Elsa Achieng'	Biovision Trust Africa		0707178698
		Godfrey Nambafu	Stakeholder	Climate Smart Agriculture Multistakeholder platform	0725467102
		Ruth Nganga	County Director	Agribusiness and Marketing	0726719695
		Sylivia Kuria	Farmer Association Representative		0722493202
		Samwuel Kiarie	Deputy Director	Water & Natural Resources	0723519144
Muranga	FGD	Julius Mwangi	County Director	Environment and Natural Resources	0736019345
		Mr Isaaic Gichuki	County Director	Water Services	0708149065
		Daniel Gitahi	County Director	Devolution	0707613302
		Peter Kuria	Partner	African Conservation Tillage Network	0722451704
		Peter Muchiri	County Director	Agriculture	0726591694
		Alice Wariga	NGO Rep	Community Organisation for Trainer in Risk Reduction	0723960092
		Derrick Ngigi	Partner	Global Open Data for Agriculture and Nutrition Initiative (GODAN)	0790566616
		Joseph Mwaniki Muya	Technical Officer-Flocca	Flocca Focal Person	0712259911
		Prof. Benson Mwangi	Director	Mariira Campus	0722386263
		Dorothy Amwata	Consultant	Consultant	0721599870
	KII	Faith Gikunda	Former Communication, Advocacy, Gender Officer	At ICE	0720900738
		Charles Ikutwa	Farm Manager,	Kenyatta Agricultural Training Centre	0720852048

County	Tool	Participant Name	Title	Institution/Department	Contact
		Bernard Karuma	Partner	Murang'a County Agroecology Multistakeholder platform	0725612693
		Hannah Kigamba Nguyai	Project Management Specialist,	ABN	0728615773
		Elizabeth Njoka	Partner	Diabetes Awareness Trust (DAT)	0716070588
		Fredrick Ngatia	Agricultural Officer	Muranga County	0748496311
Tharaka Nithi	FGD	Nicholus Mukaya	County Director of Agriculture	Agriculture	0723856041
		Antony Karagita	Lecturer	Chuka University	0723586209
		Fidelis K Kaburu	Assistant Director	Agriculture (CASSCOM representative)	0720572719
		Micheal N.J Kamakia	Farmer Representative	CDDC- NAVCPD	0721716962
		Daniel Kirigia	Director Cooperatives	TNC- Cooperatives/(CASSCOM)	0721244505
		Josphine Mumbua	Director	TNC- Economic Planning	0723454725
		Stephen Mworia	Assistant Director	TNC- Agriculture (Policies)	0723992502
		Fidelis Kioko	Director	TNC- Livestock Production	0722379068
		Magret Wairimu	Director	TNC- Water and Irrigation	0724558293
	KII	Nicholus Mukaya	County Director of Agriculture	Agriculture	0723856041
		Micheal N.J Kamakia	Farmer Representative	CDDC- NAVCPD	0721716962
		Stephen Mworia	Assistant Director	TNC- Agriculture (Policies)	0723992502
		Fidelis K Kaburu	Assistant Director	Agriculture (CASSCOM representative)	0720572719
Laikipia	FGD	Leah Njeri	CECM-	Water, Environment, Natural Resource	0723233223
		Stephen Lapian	Chief Officer	Water Environment Laikipia	0701259871
		Elizabeth Kariuki	Ag. Director	Tourism	0725548561
		Kenneth Njagi	Environmental Officer	NEMA	0715885645
		John Abudo Gindole	Regional Manager	Ewaso Nyiro North Development Authority -Laikipia	0720960373
		Elizabeth Mwangi	Chief Officer /CDA	Agriculture and Irrigation	0725887322
		Elijah Mbugua	Deputy Director	Agriculture	0721304114
		Sarah Waruo	Environmental Officer	NEMA	0720313790
		Joseph Gakunga	CEO	Laikipia Development Authority	0721572407
		Gladys Wambura	Representing Director	Environment County Government of Laikipia	0745751883

County	Tool	Participant Name	Title	Institution/Department	Contact
		Peterson Njeru Njue	Director Fisheries	Fisheries	0720283535
		Jackiline Mboroki	Director representative	Water Resource Authority	0715080859
		Julius Kingori	Director	Budget	0721360149
	KII	Elizabeth Mwangi	Chief Officer	Agriculture and Irrigation	0725887322
		Elijah Mbugua	Deputy Director	Agriculture	0721304114
		M'Mburugu Cecilia Wambui	Farmer Representative / Civil Society Representative	GROOTS	0721308625
		Ann Tome	NGO representative	Lakipia Permacultre Centre	0726787085
Meru	FGD	Paul Kiriinya	Deputy Director	Department of Agriculture	0723265115
		John Muchiri	Dean	KEMU	0705269086
		Mukuria Gabriel	Director	Economic Planning Meru	0724822201
		Dr. Missi Mutungi	Director	Agriculture Livestock Meru (Livestock)	0721891885
		Janet K.M. Mwongo	Farmer Representative	Murimi Bananas S.H.G	0720558817
		George Gitau	Head of Programmes	Caritas Meru	0720200418
		Njeru Zachary	Director	CGM (Cooperative)	0722222661
		John Ruteere	Deputy Director	Agriculture Livestock Meru (Project)/CASSCOM	0722406738
	KII	Dr. Missi Mutungi	Director	Agriculture Livestock Meru (Livestock)	0721891885
		Janet K.M. Mwongo	Farmer Representative	Murimi Bananas S.H.G	0720558817
		George Gitau	Head of Programmes	Caritas Meru	0720200418
		Paul Kiriinya	Deputy Director	Department of Agriculture	0723265115

Annex 9: Documents Reviewed

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
Nyandarua	Nyandarua County Integrated Development Plan (CIDP) III (2023–2027)	While Nyandarua County may not have a standalone agroecology policy, the following documents which were reviewed collectively contribute to the promotion of agroecological principles within the county's agricultural sector. The five-year plan outlines the county's development priorities, emphasizing: ✧ Promotion of value addition in agriculture. ✧ Strengthening of market linkages for farmers. ✧ Investment in rural infrastructure to support agricultural activities. These initiatives aim to enhance sustainable livelihoods and align with agroecological principles.
	Nyandarua County Climate Change Action Plan (2023–2027)	This action plan focuses on climate change mitigation and adaptation strategies, including: ✧ Promotion of climate-resilient agricultural practices. ✧ Conservation of natural resources. ✧ Enhancement of food and water security. These strategies support the transition towards sustainable and resilient agricultural systems.
	Productive Sector Plan (2023–2033)	This long-term plan aims to boost the county's agricultural productivity through: ✧ Development of agro-processing facilities. ✧ Promotion of value addition in agricultural produce. ✧ Establishment of industrial parks to support agribusiness. These efforts are geared towards enhancing the economic viability of agriculture in the county.
	Natural Resource Management Policy (2024)	This policy provides a framework for sustainable management of the county's natural resources, focusing on: ✧ Land use planning to support sustainable agriculture. ✧ Conservation of forests and wildlife habitats. ✧ Addressing challenges related to land ownership and resource use. The policy supports agroecological practices by promoting sustainable land and resource management.
	Nyandarua County Potato Strategy	Recognizing the importance of potato farming in the county, this strategy outlines measures to: ✧ Enhance mechanization in potato farming. ✧ Improve access to quality seeds and inputs. ✧ Promote sustainable farming practices to increase productivity. These interventions aim to support farmers and promote sustainable agricultural practices.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
Vihiga	Vihiga the 3rd generation county integrated development plan (CIDP2023-2027),	1) Animal health. o Enhance disease surveillance and animal movement control o Routine and strategic animal vaccination programs o Enhance veterinary public health programs o Promote Establishment of cold chain infrastructure and modern slaughterhouses. o Establish a subsidized Artificial Insemination program o Establish Veterinary laboratory 2) Biodiversity o Promotion of agroforestry and organic farming for sustainable small holder production o Promote conservation of Agro biodiversity 3) Co-creation of knowledge o Promote agricultural extension services through Farm Resource Management model 4) Economic diversification o Promotion of Value Addition and commercialization in Agriculture 5) Fairness/social inclusion in agriculture. o Promote Agri-food entrepreneurial for youths (Agri-Jobs for Youth) in collaboration with GIZ o Establish youth Engagement programmes (4K Clubs, Young Farmers Club) o Promote smart technologies friendly to Youth, Women and PWDs
	Vihiga County Agroecology Policy 2024	Strategies for Key Thematic Areas Production and Soil Health - Promote sustainable soil health and circularity of nutrients within the agri-food systems; efficient water harvesting and utilization systems. - Promote sustainable and climate smart agri-food systems for mitigating and adapting to climate change - Promote the production and use of local germplasm, bio-inputs (bio fertilizers, bio pesticides) and other Indigenous Technical Knowledge (ITK) - Promote restoration, conservation of local germplasm, through community seedbanks and multiplication centres - Facilitate participatory agroecology extension services to build the capacity of farmers and stakeholders - Promote eradication of eucalyptus and other invasive species from common farm boundaries Food and Nutrition - Develop and promote production and utilization of diversified food and feed. - Promote food and feed quality and safety to prevent food and feed related hazards.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Encourage change in knowledge, attitude and practices towards utilization of healthy, traditional and culturally appropriate foods from early childhood. - Promote safe production, processing, value addition and handling of food products from crops, livestock, fisheries and aquaculture to safeguard the consumer Agroecology Enterprises and Agriculture Market Development - Promote branding, certification and standardization of local Agroecology inputs and products to enhance access to markets - Enhance access to benefit sharing of patented local products and germplasm (e.g., mushrooms, ALVs, beans and others) - Promote public-private partnerships in Agroecology (e.g., crop and livestock insurance, contract farming among others) - Promote and incentivize agroecology value chain activities - Promote establishment of conducive agricultural market infrastructure (e.g., Designated markets) - Promote procurement of traditional foods (eg., ALVs among others) in public institutions. Social and Cultural Inclusivity - Involve youth, women, PWDs and marginalized groups in agroecology activities. - Strengthen conservation and dissemination of indigenous agricultural knowledge. - Promote cultural food festivals on a regular basis. Agroecology Research, Linkages and Innovation - To strengthen research-extension linkages in co-creation and innovation - To enhance Agroecology extension services, appropriate technologies and innovations. - To promote documentation and establish repositories on Agroecology. - Establish agroecology training, innovation and demonstration center(s) through ATIC(s). - Establish a linkage with KAFU and other institutions of higher learning for development and promotion of an agroecology curriculum
	The Vihiga County Solid Waste Management Policy of 2019	Provides for safe, compliant, environmentally, and sustainable solid waste management systems. Support - Recycling - Input reduction (Composting) - Enterprise diversification - Community Participation - Sustainable land and natural resource utilization

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	Vihiga County Climate Change Action Plan, 2023-2027	Promotes - Sustainable land and natural resource governance and management: Environmental conservation and protection activities, agro-forestry - Recycling-Water harvesting - Biodiversity: Pollution control - Economic diversity – agro livelihoods - Animal Health: Animal disease surveillance and control - Soil health: Control of soil erosion - Input reduction: Crop pest surveillance, planting drought tolerant varieties - Resilience: Through capacity building, insurance promotion, - Agro-ecology principles (CSA) - Co-creation: Use of ITK - Participation: Community investments
	The Vihiga County Environment Policy 2019	Supports promotion of; - Biodiversity: Pollution control - Land and Natural resource governance: Land policy, Valuation of environmental and natural resource Reclamation, rehabilitation, and restoration of degraded landscapes - Recycling: Waste management, green energy - Participation: Civic education - Fairness: Conservation of shared natural resources - Soil Health: Soil conservation, soil mapping - Input reduction: Support organic farming - Animal Health: County Livestock Policies and Acts
	The Vihiga County Agroforestry Policy, 2019	Supports - Land and natural resource governance: Governance of forests, land tenure systems - Participation: ITK in forest management, community Silvi-Pastoral Systems - Biodiversity: Introduction of bamboo and Silvi-Pastoral Systems - Economic diversity: Introduction of bamboo - Resilience: Promotion of insurance
Busia	Busia County Climate Change Action Plan (2023-2027)	Promotes 1) Participation: o Community-led action on climate change initiatives o Participatory Climate Change Risk Assessment (PCRA) o Development of climate cation coordinating units (County & Ward levels)

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Multi-stakeholders' participation 2) Land Resource & Governance ○ Disaster risk reduction, environmental conservation, land reclamation, water resources conservation, resilient irrigation, soil conservation, afforestation & agroforestry, water catchment & watershed conservation, 3) Economic Diversification ○ Crop diversification and development ○ Livestock diversification and development ○ Nature-based livelihoods 4) Recycling ○ Circular economy strategies ○ Use of clean energy, ecosystems restoration, implementation of green growth 5) Animal Health ○ Vaccinations ○ Mainstreaming climate action budget in the county budget (2%) 6) Resilience ○ Climate smart agriculture ○ Post-harvest management ○ Climate information systems climate data access
	Busia County Integrated Development Plan-CIDP (2023-2027)	No mention of agroecology. However, promotes; 1) Economic Diversification ○ Diversified crop/livestock production 2) Resilience ○ Agricultural market access (In general) ○ Enhancement of farmers access to affordable credit Facilities ○ Strengthening extension services ○ Climate resilience agricultural production systems ○ Climate Smart Agriculture ○ Adoption of water resilient technologies ○ Value addition 3) Animal Health ○ Animal vectors and disease control 4) Land and Resources Governance ○ Soil testing & liming

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Fodder establishment ○ Water quality management, environmental conservation and management (pollution control, afforestation, agro-forestry, catchment & watershed conservation, natural resource management, nature-based livelihoods), increased access to irrigation infrastructure 5) Input Reduction ○ Reduction on use of chemicals by promoting use of hermetic bags for pest control 6) Fairness ○ Social and economic inclusion (Women, men, VMGs) ○ Enhancement of gender equality (gender mainstreaming) 7) Participation ○ Participatory Farmer-led irrigation ○ Community action 8) Recycling ○ affordable clean energy,
	Busia County Biodiversity Policy	Proposes measures such as 1) Biodiversity ○ Delineation of and ring-fencing of biodiversity hotspots in Busia County and formulating conservation development plans ○ Conservation and protection of biodiversity hotspots ○ Partnerships and community action on biodiversity conservation ○ Coordinated approach to biodiversity protection and conservation ○ Attitudes and perception change on biodiversity conservation benefits ○ Indigenous biodiversity products and by products domestication and intensify production of indigenous and emerging biodiversity species to ease pressure on natural habitats ○ processing of sourced biodiversity components to enhance value addition and commercialization of biodiversity products and services 2) Soil Health ○ Integrated land use and soil management initiative 3) Recycling ○ Waste and pollution management control 4) Participation ○ Partnerships for collective action (Stakeholders and farming community) 5) Economic diversity ○ Commercialization of biodiversity resources

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Biodiversity Utilization 6) Fairness ○ Gender mainstreaming in biodiversity conservation ○ Equitable sharing of benefits accrued from utilization of biodiversity 7) Resilience ○ Climate change adaptation and mitigation ○ Biodiversity Research and Development
	The Busia County Fisheries and Aquaculture Bill, 2016	Promotes 1) Land & Natural Resource Governance ○ Sustainable fishing practices (net sizes, prohibitive methods such as use of explosives) ○ Control of fish breeding areas 2) Economic Diversification ○ Fish safety and quality control (handling and marketing) ○ Fish Enterprise diversification 3) Participation ○ Collective action by fishers
Bungoma	Bungoma County Integrated Development Plan-Cidp (2023-2027)	No mention of the term agroecology. However, proposes measures such as 1) Resilience ○ Climate Smart Agriculture ○ Insurance for crop, livestock and fishery enterprises ○ Climate change mitigation ○ Disaster Risk Management (DRM) ○ Climate change action planning, mitigation and adaptation 2) Fairness ○ Gender, Youth and Persons with Disability (PWD); 3) Recycling ○ Mainstreaming cross-cutting issues such as green growth and green economy ○ Waste management ○ Investment in renewable sources of energy 4) Land & Natural Resource Governance ○ Environmental conservation protection and management ○ Pollution control ○ Rehabilitation and protection of catchment areas

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Water quality and pollution control; forest conservation and management; Natural resources management; afforestation and reforestation
	Bungoma County Climate Change Policy, 2020	No mention of the term agroecology. Seeks to enhance 1) Land & Natural Resource Governance ○ Control of soil erosion, pollution, over exploitation of riparian areas, overfishing ○ Proper siting boreholes and pit latrines ○ Catchment protection, ○ Efficient water use including irrigation systems, ○ Conservation practices such as afforestation and re-forestation in the water catchments Remote sensing and geographic information system (GIS) techniques for monitoring temporal changes in natural resources ○ Climate-smart agriculture with an emphasis on adoption of appropriate farm forestry practices ○ Land management (avoiding over fragmentation of land) 2) Soil Health ○ Soil fertility management, 3) Recycling ○ Recycling of wastewater and management, ○ Rainwater harvesting and gravity flow water supply schemes, ○ Water harvesting 4) Input Reduction ○ Crop pest and disease control, 5) Resilience ○ Development of livestock feeds and feed conservation ○ Climate resilient fish species ○ Extension services, ○ Agricultural market development 6) Fairness ○ Gender mainstreaming in climate action
	The Bungoma County Co-Operative Societies Act, 2023	Promotes 1) Resilience ○ Collective Marketing

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	Bungoma Agricultural Land Lease Guidelines 2023	Promotes 1) Land and Natural Resource Governance o Reliable agricultural land tenure (structured way for leasing agricultural land for farming) o Conflict resolution (involving family members) o Collective responsibility
	Bungoma County Agricultural Soil Management Policy, 2023	Proposes action that promotes, 1) Soil Health o Soil fertility management (farm mechanization, soil sampling, soil testing and soil analysis, soil testing subsidies) o Compliance programmes to fertilizer safety and quality standards o Soil Cover o Soil and water conservation o Compliance with existing soil erosion control laws and regulations o Public awareness in soil erosion control. 2) Participation o Partnership in soil erosion control 3) Land and Natural Resource Governance o Afforestation and re-afforestation. o Compliance with existing forestry laws and regulations. o Capacity building and public awareness on forest conservation o Sustainable land use programs o Development of affordable and appropriate technologies and innovations and establish incentives to facilitate adoption for sustainable land management. o Climate early warning system to enhance preparedness in managing climate variability and weather extremes o Climate smart agriculture and associated technologies o Public soil management extension services o Adaptive research on matters of sustainable land management 4) Recycling o Use of clean sources of energy and alternative non- wood products. o Proper farm waste management strategies o Carbon credit programmes 5) Economic Diversification

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Alternative sources of livelihoods to people residing near forest to reduce pressure on use of forest resources.
	Bungoma County Food Safety Policy, 2023	Promotes 1) Participation o Coordination and enforcement of existing food laws and regulations (operationalize the County Food Safety Coordination Committee). 2) Resilience o Knowledge and skills in food safety (information management system on food safety, institutional capacities to offer training on food safety). o Traceability systems in the food chains (guidelines on traceability of food, feeds and their ingredients). o Monitoring & Surveillance Systems for food safety (food safety validation, inspection, certification and self-assessment system) 3) Fairness o Gender and social inclusion in food safety
Kakamega	The Dairy Development Policy for Kakamega County,2018	Promotes 1) Animal health o Disease control-limiting use of acaricides o Promotes safe use of pesticides o Artificial inseminations (AI) o Cross breeding with superior breeds o Assisted reproduction technologies (ARTs) 2) Recycling: o Fodder production and use of farm wastes as livestock feed o Feed formulation and use of maize bran 3) Input reduction o Milk quality control and assurance -reduction in use of chemical 4) Co -creation o Extension and advisory services provision through SMART pathways such as; ATCc, Digital platforms and Value chain platforms
	Kakamega County Draft Food Safety policy, 2021	Promotes; 1) Economic diversification 2) Connectivity 3) Input reduction

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		4) Recycling 5) Social values & Diet
	Kakamega county climate change action plan 2021-2026.	1) Land resources & Governance o Rehabilitation of riparian corridors to stabilize riverbanks and reduce siltation. o River training to reduced riverbank erosion and o downstream flooding. o Hill slope conservation to reduce surface run off and o siltation of water bodies, enhanced recharge of ground water o sources and increased forest cover. o Installation of rainwater harvesting and storage systems in o institutions to increase water storage, reduce surface run off o and pollution. o Demarcation and de-siltation of dams to increases water o storage for domestic and agricultural use. o Promotion of awareness on climate change impacts in the o water sector including public awareness on water o conservation (recycling, wastewater management) and o efficient water use. o Operationalization of the Kakamega County Rural Water o Company. o Vulnerability assessment. o Capacity building of water actors. 2) Recycling o Promotion of multiple uses, reuse and recycling to increase water efficiency. o Promotion on the use of green energy in the sector and other technologies that enhance water resource efficiency. 3) Soil health o Promotion of agro-forestry and use of appropriate farming practices. o Soil fertility management. o Integrated pest and disease management. o Promote land-based conservation practices that minimize soil erosion such as agro-forestry. Co-creation of knowledge

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	County Government of Kakamega County Integrated Development Plan (CIDP) 2023-2027	1) Economic diversification o Promote high yielding crop varieties and agricultural diversification 2) Land & resources governance o Establish soil improvement and rehabilitation programmes. 3) Animal health 4) Recycling o Promote green energy
Kisii	The Kisii County Water Management and Water and Sanitation Services Act, 2014	Support agroecology through; - Biodiversity management: Water pollution control - Land and Natural Resource Governance: Management of water resource
	Kisii County Climate Change Framework Policy-2019	Speaks to; - Participation: Mainstreaming gender, youth and VMGs in climate action/public participation - Recycling: Use of renewable energy sources. cleaner, lower emission and less carbon intensive development - Resilience: Reduce vulnerability to the impacts of climate change by building adaptive capacity, - Land and Natural resource governance: mobilize resources for Kisii County's climate change response and ensure effective and transparent utilization of the resources. - Fairness: Equity and social inclusion - Economic diversification: Crop Diversification:
	Kisii County Climate Change Action Plan 2023-2027	Speaks to; - Input reduction: Post harvest management, control of biochemical use - Renewable energy: Promotion of solar energy, utilization of crop by products as livestock feed, biogas, BSF technology - Efficiency: Increased access to steady supply of sufficient quantities of nutritious fodder, silage conservation, enhanced productivity - Economic diversification: BSF technology, value addition, greenhouse farming promoted - Biodiversity enhancement: Introduction of bamboo, pollution control - Animal health: Surveillance and research on invasive species and pathogens conducted - Soil health: Organic composting and use in farms

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Land and natural land resource governance: Soil/ land conservation measures implemented (terraces, gabions, retention ditches) - Participation: Campaigns for community removal of eucalyptus tree species from riparian lands - Fairness: Inclusion of VMGs
	Kisii County CIDP 2023-2027	Speaks to - Input reduction: Use of quality inputs - Soil health: - Animal Health: Vaccinations, Disease surveillance - Biodiversity: Promotion of sustainable Agriculture/climate smart agriculture, bee production - Land and Natural Resource governance: Promotion of sustainable Land use & management, promotion of Agro forestry - Social Values & Diet: promotion of orphan/ traditional high value crops - Resilience: Promotion of urban & peri-urban agriculture - Economic diversification: Introduction of fish farming & apiculture - Recycling: Promotion of biogas production - Participation: Support cooperative movement - Efficiency: Improved dairy breeds
Muranga	Murang'a County Agroecology Policy (2022–2032)	o Murang'a County has enacted the Murang'a County Agroecology Policy 2022–2032, aiming to promote sustainable agricultural practices and enhance food security. This policy provides a framework for the development and promotion of the county's organic food industry, emphasizing the use of organic farming practices and the production of organic products.
	Murang'a County Integrated Development Plan (CIDP) 2023–2027	o The Murang'a County Integrated Development Plan (CIDP) 2023–2027 outlines the county's development priorities, emphasizing sustainable agriculture and environmental conservation. It integrates agroecological principles by promoting climate-smart agriculture, sustainable land use, and the conservation of natural resources.
	Murang'a County Climate Change Action Plan (2023–2027)	o The Murang'a County Climate Change Action Plan (2023–2027) focuses on climate change mitigation and adaptation strategies, including the promotion of climate-resilient agricultural practices and the conservation of natural resources. These strategies support the transition towards sustainable and resilient agricultural systems.
	Murang'a County Agroecology	o Complementing the Agroecology Policy, the Murang'a County Agroecology Development Act (2022) provides a legal framework for the implementation of agroecological practices. The Act

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	Development Act (2022)	promotes the use of organic farming practices and the production of organic products, aiming to enhance food security and environmental sustainability in the county. o The Act supports the adoption of organic farming, conservation agriculture, and indigenous knowledge systems to enhance food security, environmental protection, and resilience to climate change. The Act mandates the county government to develop supportive programs, provide extension services, and collaborate with stakeholders in research, training, and certification. It also provides for the establishment of an Agroecology Advisory Committee to oversee implementation and monitoring. Overall, the Act institutionalizes agroecology as a strategic approach to achieving sustainable and inclusive agricultural development in Murang'a County
Kiambu	Kiambu County Integrated Development Plan (CIDP) 2023–2027	This five-year plan outlines the county's development priorities, emphasizing: ✧ Promotion of sustainable agriculture through capacity building. ✧ Enhancement of food security and nutrition. ✧ Support for climate-resilient farming practices. These initiatives aim to enhance sustainable livelihoods and align with agroecological principles.
	Kiambu County Climate Change Action Plan (KCCCAP) 2023–2027	This action plan focuses on climate change mitigation and adaptation strategies, including: ✧ Promotion of climate-resilient agricultural practices. ✧ Conservation of natural resources. ✧ Enhancement of food and water security. These strategies support the transition towards sustainable and resilient agricultural systems.
	Kiambu County Climate Change Act, 2021	This legislation provides a framework for sustainable management of the county's natural resources, focusing on: ✧ Land use planning to support sustainable agriculture. ✧ Conservation of forests and wildlife habitats. ✧ Addressing challenges related to land ownership and resource use. The act supports agroecological practices by promoting sustainable land and resource management.
Nakuru	Nakuru County Integrated Development Plan 2023-2027	The word agroecology is not mentioned proposed in the CIDP, but it recognises regenerative agriculture as Climate change adaptation in agriculture strategy. The CIDP promotes 1) Participation: o Upskilling of community-based management committees and project management committees

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		2) Soil Health o Enhancing soil and water conservation and water harvesting o Soil testing lab establishment o Soil testing kits (PH meter) procurement 3) Land Resource & Governance o Community involvement and empowerment in utilization and conservation of the forest resource o Restoration of excavated lands through tree growing o Support fruit tree and agroforestry nurseries 4) Economic Diversification o Commercial tree farming o Bee farming o Tree nursery establishment o Promotion of eco-tourism 5) Recycling o Energy conservation devices installation o farmers/ youth training on energy conservation and clean energy use 6) Fairness o Developing programmes to involve youth in Agriculture o Promote adoption of urban and disruptive agriculture o Youth engagement in other nodes of the agricultural value chain such as marketing o Gender and youth mainstreaming in the livestock value chain 7) Animal Health o Collaboration with other stakeholders for support to increase vaccination coverage o Diseases and vector surveillance using modern technologies o Carry out timely vaccinations o Construct and renovate tick control facilities (crushes and dips) 8) Resilience o Enhanced farmer managed natural regeneration practices o Encourage farm Management and Natural regeneration o Increase funds to support CSA initiatives o Invest more on water conservation structures such as water pan for irrigation purposes o Investment on post-harvest structure- cold store, fresh produce sheds, warehouses and solar dryers

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Awareness creation on posts harvest management ○ Investment in water conservation and irrigation structures ○ Develop County early warning and response systems ○ Improved access to irrigation water 9) Co-creation of knowledge ○ Training of regenerative agriculture to staff and farmers ○ Trainings on use of clean energy ○ Training on responsible use of pesticides 10) Society and diet ○ Recognition of cultural and religious values provided for by the forest ○ Diversification in crop and animal farming ○ Investment in water conservation and irrigation structures ○ Training on food utilization and preservation ○ Farmer trainings on Agri nutrition ○ Increase public awareness on food safety ○ Improved fish-eating culture 11) Biodiversity ○ Census of available species of wildlife both flora and fauna to guide on conservation
	The Nakuru County Agricultural Development Fund Act 2014	The Act seeks to: 1) Resilience ○ Fund irrigation infrastructure such as boreholes, dams, shallow wells and water pans ○ Facilitating the development of appropriate storage, bulking and processing facilities strategic areas with potential for increased agricultural production, 2) Land Resource & Governance ○ Soil and water conservation, 3) Economic Diversification ○ Creation and expansion of agricultural products markets, ○ Promote development of value-addition infrastructural facilities including provision of electricity and water in rural areas, ○ Creation and expansion of agricultural products markets 4) Participation ○ Promotion of cooperative societies within the count 5) Co-creation

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Conduct farmers' training programs aimed at increasing their knowledge on production technologies and on market potentials and prospects for various types of crops, through farmer training institutions, 6) Animal Health o Animal disease control
	Nakuru County Climate Change Act, 2021	The Act seeks to: 1) Resilience o Mainstreaming climate change responses into development - planning, decision making and implementation; o Implementing coordinated and integrated response to climate change and its impacts by all actors and stakeholders; o Facilitating "effective management of climate Change impacts by enhancing adaptive capacity, strengthening ' resilience and, reducing vulnerability to climate change; o Promoting, support "and facilitate community-based and community-initiated adaptation and mitigation activities; o Enforcing duties and provide incentives for the private sector to ' contribute to achievement of low ' carbon' climate' resilient development; o Establish frameworks and mechanisms for mobilization and ' transparent and accountable management of financial and other resources for climate change response o Establishing and implementing mechanisms to promote and facilitate climate change research development, innovations, technology development; training and capacity building; (i) integrate climate change into the exercise of power and functions of all levels of the county government, including in decentralised units and enhance cooperative climate change governance between the county, neighbouring counties an d the national government. 2) Fairness o Investments focused on achieving equitable benefits. 3) Participation o Establishment of County Climate Change Steering Committee o Facilitate public participation in climate change response through capacity development, ' awareness creation, consultative,' representation and access to information. o Establishment of Ward Planning Committee

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ The Steering Committee to ensure that the Planning Committee and Ward Planning Committees implement comprehensive programmes of capacity building to equip individual citizens and communities ○ Ward Planning Committee to support and facilitate communities to establish Community-Based Organizations and other frameworks for mobilization and engagement with climate governance and response issues in the county 4) Co-creation ○ Flexible learning-approach to, addressing challenges of climate change;
	Nakuru County Waste Management Policy	The policy seeks to: 1) Fairness ○ Promote and facilitate establishment of intermediary community-based waste sorting centres which shall be integrated with the county waste management system ○ Develop initiatives for women, youth, persons with disabilities or other vulnerable groups to participate in co-management of waste collection points and waste collection services for purposes of promoting economic empowerment of the groups ○ Provide preferential treatment to youth, women and persons with disabilities in accessing thirty percent of county government contracts for waste collection services 2) Recycling ○ Provide incentives for promoting waste recycling and waste material recovery which may include reduced fees, levies and charges for enterprises engaged in the two processes
	Nakuru County Climate Change Action Plan 2023-2027	The Action plan seeks to: 1) Resilience ○ Desilt water pans and construct new water pans to promote water harvesting, conservation, and utilization for domestic and agricultural use ○ Promote production of drought resistant varieties ○ Promote use of organic farming ○ Promote appropriate irrigation techniques such as drip irrigation ○ Promote innovative water harvesting techniques ○ Invest in early warning systems to determining cropping cycles ○ Promote indigenous knowledge in crop production ○ Uptake of insurance ○ Adoption of appropriate livestock breeds ○ Investing in production and storage of drought resistant fodder crop ○ Promote timely culling and destocking

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Invest in disaster preparedness. 2) Economic Diversification o Promote value addition of harvested crop o Introduce alternative livelihood options 3) Fairness o Engaging youth, women, and other vulnerable groups in appropriate commercial farming technologies o Engaging youth, women and other vulnerable groups in fish production 4) Participation o Engaging vulnerable groups (including youth, women and indigenous communities) in habitat restoration, water harvesting o Support adoption of Participatory Forest Management 5) Land Resources and Governance o Promote agroforestry activities o Enforcement of pollution control measures and standards o Promote water catchment conservation and restoration using appropriate tree species o Reforestation to achieve a 10% forest cover o Reduce deforestation and forest degradation by introducing alternative energy sources to households o Restore degraded landscapes in riparian habitats and water catchment areas using indigenous vegetation. 6) Co-creation o Train smallholder farmers and pastoralists in Nakuru County on how to adopt appropriate technologies in fodder production and animal husbandry o Train fish farmers on how to adopt sustainable modern fish farming technologies (e.g aquaponics) o Awareness creation and information sharing o Capacity building Beach management units 7) Culture and Diet o Diversification of crops and adoption of kitchen garden 8) Soil Health o Adopt innovative soil and water management techniques (gabions, terraces)

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
Embu	Embu County Integrated Development Plan-CIDP (2023-2027)	No mention of the term agroecology. However, proposes measures such as 1. Diversification of Farming Systems o Encouraging farmers to adopt high-value crops and livestock, such as Hass avocado, macadamia, dairy goats, and beehives. o Reduces dependency on traditional crops like tea, coffee, maize, and beans, offering farmers alternative income sources and enhancing food security. 2. Soil Health o Climate-smart practices, o Conservation agriculture techniques like mulching, furrow planting, and crop rotation. These methods improve soil fertility, water retention, and resilience to climate variability. 3. Promotion of Biodiversity o Through initiatives like the Ukama Ustawi project, the CIDP encourages the integration of diverse plant species, such as orange-fleshed sweet potatoes and drought-resistant grasses like Brachiaria. 4. Community Participation and Knowledge Sharing o emphasizes participatory approaches, involving farmers in decision-making processes and promoting knowledge sharing. o The use of "mother and baby" demonstration farms facilitates peer learning and the dissemination of sustainable farming techniques, fostering community engagement and empowerment. 5. Synergy o The plan advocates for the integration of crop and livestock systems, where livestock provide manure that enhances soil fertility, and crop residues serve as animal feed. o This holistic approach improves resource use efficiency and supports the agroecological principle of synergy between different farming components. 6. Recycling and Resource Efficiency o Sustainable land use o environmental conservation to enhance soil fertility and reduce dependency on external inputs. Soil Conservation and Organic farming
	Embu County Climate Change Action Plan ECCAP (2023-2027)	No mention of the term agroecology. However, proposes measures such as 1. Diversification of Farming Systems o Promotes diversification through the introduction of modern irrigation techniques, such as drip irrigation and solar-powered water pumps.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o These methods enable farmers to cultivate a variety of crops throughout the year, reducing reliance on rain-fed agriculture and enhancing food security. 2. Soil Health – (Climate-Smart Agricultural Practices) o The plan emphasizes the adoption of climate-smart practices, including the promotion of biochar and insect-composted organic fertilizer (ICOF). o These practices improve soil fertility, enhance crop yields, and contribute to sustainable agriculture. The initiative also focuses on creating job opportunities along the biochar and ICOF value chains, with special attention to women and youth. 3. Promotion of Biodiversity and Ecosystem Services o Rehabilitation and conservation of forests, wetlands, and riparian zones. For instance, the National Environment Management Authority (NEMA) has undertaken wetland restoration efforts in Embu County, focusing on bamboo cultivation and strategic fencing to facilitate natural regeneration. o Plans to plant five million trees over five years, involving youth and women's groups in the process. 4. Community Participation and Knowledge Sharing o The involvement of special interest groups, including youth, women, the elderly, and people with disabilities, in climate action initiatives. o The Dallas ASILI project, for example, focuses on developing a Green Infrastructure Plan and designing Nature-based Solutions, with active community participation through awareness and capacity-building activities. 5. Synergy - Integration of Crop and Livestock Systems o Integration of crop and livestock systems, the promotion of sustainable agricultural practices and the focus on enhancing soil fertility through organic fertilizers
	The Embu County Environment Management Act, 2015	Speaks to - Land and Natural resource management - Biodiversity protection: Control of pollution - Soil health: Waste and disease-causing pests and ensure a clean healthy environment. - Animal health: Waste and disease-causing pests, and ensure a clean healthy environment. - Recycling of wastes - Participation: Communities being involved in action
	The Embu County Water Act, 2015	Speaks to - Land and Natural resource governance

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Participation of communities in management of natural resources - Fairness & Equity: to resource access - Biodiversity through conservation efforts - Recycling through water harvesting
	Embu County Integrated Solid Waste Management Plan 2023-2028	Speaks to - Recycling: Waste management, renewable energy - Biodiversity: Pollution control - Participation: Community involvement
Kitui	Kitui County Integrated Development Plan-CIDP (2023-2027)	No mention of the term agroecology. However, proposes measures such as Recycling o Sustainable Agricultural Practices o Rainwater Harvesting o Reduced synthetic inputs Biodiversity o Agroforestry o Improved ecosystem services o Biodiversity Conservation Synergy o Integration of farming system crops, livestock and forestry Co-Creation Involvement of stakeholders
	The Kitui County Climate Change Action Plan (2023–2027)	1. Diversification of Farming Systems o Emphasizes climate-smart land-based practices. This includes promoting drought-tolerant and indigenous crops such as sorghum, millet, pigeon peas, cowpeas, and green grams, which are well-suited to Kitui's semi-arid conditions. o These efforts aim to increase resilience and reduce dependency on a limited number of crops. 2. Biodiversity o Reforestation, afforestation with indigenous tree species, and the protection of critical ecosystems like wetlands and riparian zones. o Restore ecological balance, enhance biodiversity, and improve soil and water conservation. 3. Promotion of Local Knowledge and Participation

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Participatory approach to identify climate risks, ensuring that local communities are actively involved in decision-making processes. o This inclusive strategy fosters the integration of indigenous knowledge and practices into climate adaptation and mitigation efforts. 4. Synergies Between Food Security, Biodiversity, and Climate Resilience o Focuses on empowering women and youth by promoting sustainable agricultural practices. o Improve nutritional outcomes and bolster the resilience of smallholder farmers. o It also seeks to provide better market access for agricultural products. 5. Equity and Fairness o Prioritize marginalized groups, including women, youth, and vulnerable communities. o Programs such as the climate-smart agriculture initiative and the agroecology project specifically target these groups to ensure equitable access to resources, knowledge, and opportunities. 6. Sustainable Use of Resources o Emphasizes sustainable land use practices, forest conservation, and the rehabilitation of degraded ecosystems. o These measures aim to ensure the long-term availability of natural resources while minimizing environmental degradation. 7. Co-Creation and Sharing of Knowledge The county's collaboration with Biovision Africa Trust and other partners in launching agroecology initiatives exemplifies a commitment to knowledge sharing and capacity building.
	The Kitui County Abattoirs Act (2014)	1. Diversification of Farming Systems o Encourages the development of diverse meat processing facilities tailored to different scales of operation. o Support smallholder farmers by providing access to local, appropriately scaled meat processing options, thereby integrating livestock into diversified farming systems. 2. Promotion of Local Knowledge and Participation o The Act requires the appointment of qualified meat inspectors and veterinarians, ensuring that local expertise is utilized in maintaining meat safety and quality. o This reliance on local professionals fosters community involvement and the application of indigenous knowledge in livestock management and meat processing. 3. Synergies Between Food Security, Biodiversity, and Climate Resilience

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Contributes to the production of safe and nutritious meat products. This supports food security and can complement agroecological practices that enhance biodiversity and climate resilience within the livestock sector. 4. Equity and Fairness ○ Registration and licensing of abattoirs, along with its emphasis on hygiene and operational standards, can create a more equitable environment for meat processing. By ensuring that all operators adhere to the same standards, the Act promotes fairness and can support small-scale farmers in accessing meat processing services. 5. Co-Creation and Sharing of Knowledge Appointment of qualified personnel and the establishment of operational standards facilitates the sharing of knowledge and best practices in meat processing.
	Kitui County River Basins Sand Utilization and Conservation Policy, 2023	Speaks to - Participation: Community involvement in conservation - Land and Natural resource governance: Resource management committees - Fairness: Equitable sharing of resources, mainstreaming gender
	Kitui County Agri-Nutrition Implementation Strategy 2023-2027	Speaks to - Social values and diet: Natural foods - Fairness: Equitable access to quality foods - Land and Natural Resource governance: Resource planning - Resilience: Develop, produce, and disseminate social behavior change and communication materials for implementing officers and the community. - Participation: To enhance ownership and sustainability of NSA initiatives through engagement, participation, resource mobilisation, and investments by non-state actors for improved food and nutrition security
Makueni	Makueni County Integrated Development Plan-CIDP (2023-2027)	No mention of the term agroecology. However, proposes measures such as 1. Diversification of Farming Systems The CIDP emphasizes the development of diverse agricultural sectors, including: ○ Fruit and horticultural crops: Establishing farmer cooperatives linked to the Makueni Fruit Processing Plant and supporting the establishment of fruit nurseries managed by youth and women. ○ Industrial crops: Increasing the area under production of macadamia, sisal, and cotton by 2,600 hectares.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Livestock production: Enhancing beef, dairy, and honey production through infrastructure development and improved management practices. 2. Soil Health ○ Soil and water conservation: Increasing the area under soil and water conservation by 65,000 hectares through agroforestry, terracing, and farm water harvesting. ○ Irrigation development: Supporting irrigation infrastructure along rivers and promoting kitchen gardens at the household level. 3. Promotion of Local Knowledge and Participation The CIDP emphasizes community involvement through: ○ Farmer cooperatives: Strengthening fruit and milk producer organizations to benefit from economies of scale. ○ Extension services: Establishing 30 plant and livestock farmer clinics at the ward level to offer on-farm training and automate extension services to widen their reach. ○ Public participation: Engaging citizens in the development process to ensure that the plan reflects their aspirations and priorities. 4. Synergies Between Food Security, Biodiversity, and Climate Resilience The CIDP aims to enhance food security by: ○ Promoting irrigation and conservation agriculture: Targeting 18 wards for increased household agricultural production. ○ Reducing post-harvest losses: Improving grain storage facilities and establishing a grain processing plant. ○ Enhancing livestock productivity: Through improved management practices and infrastructure development. 5. Equity and Fairness ○ Targeting marginalized groups: Supporting youth and women in agricultural activities, such as managing fruit nurseries and establishing cooperatives. ○ Providing access to resources: Ensuring that all farmers have access to inputs, extension services, and markets. ○ Promoting inclusive development: Ensuring that development benefits are equitably distributed across the county. 7. Co-Creation and Sharing of Knowledge ○ Training and capacity building: Establishing training and demonstration farms to enhance farmers' skills.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Data management: Establishing an agricultural data and information management system to support decision-making. Collaboration: Working with development partners and stakeholders to implement agricultural programs.
	Makueni County Animal Feed Strategy 2023	1. Diversification of Farming Systems ○ Integration of diverse livestock species and feed sources, including the use of Black Soldier Fly larvae for poultry feed. 2. Integration of Ecological Processes ○ By encouraging the use of locally available and sustainable feed ingredients, the strategy supports nutrient cycling and reduces reliance on external inputs. ○ Initiatives like regenerative agriculture and the use of insect-based feeds contribute to soil health and biodiversity. 3. Promotion of Local Knowledge and Participation ○ Community involvement through training programs and workshops. 4. Synergies Between Food Security, Biodiversity, and Climate Resilience ○ The use of diverse and sustainable feed sources also supports biodiversity and resilience to climate change. 5. Equity and Fairness ○ The strategy targets marginalized groups, including women and youth, by providing access to affordable and sustainable feed solutions. ○ Innovations like Black Soldier Fly production units have empowered these groups economically and socially. 6. Co-Creation and Sharing of Knowledge ○ Collaboration among farmers, researchers, and policymakers through workshops and training programs. This collaborative approach ensures the sharing of knowledge and best practices, enhancing the effectiveness of feed strategies.
	Makueni County Sand Conservation & Utilization Authority Quality Policy	1. Recycling of Biomass and Nutrients ○ Sand conservation helps maintain water tables and soil moisture, which improves the organic matter content and supports nutrient cycling in agroecosystems. ○ Better water retention in riverbeds and catchments promotes vegetation growth and soil health. 2. Improving Soil Health and Biodiversity

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Preventing illegal or excessive sand harvesting protects riparian zones and riverbanks, preserving soil structure and reducing erosion. o Helps maintain native plant diversity and the microhabitats critical for beneficial insects and microorganisms. 3. Synergies and Integration o Works with farmers, community groups, and local authorities, promoting integrated management of land and water resources. o Supports polyculture systems and livestock integration through reliable water sources and reduced land degradation. 4. Efficiency in Resource Use o Through regulated sand harvesting and watershed management, water use efficiency improves in agriculture. o Rainwater harvesting and sand dams increase water availability in dry seasons, benefiting both crops and livestock. 5. Resilience o Conservation of sand enhances water security and mitigates the effects of drought and climate change. o Resilient landscapes support farming even in erratic weather, reducing the vulnerability of smallholders. 6. Co-creation and Sharing of Knowledge o Community training and involvement in decision-making on sand resource use. o Local knowledge is blended with scientific approaches to promote community-led conservation. 7. Cultural and Food Traditions o By protecting ecosystems and farming systems tied to local identity and survival, the policy indirectly preserves cultural practices. o Sustains traditional farming techniques that are well-adapted to local ecologies. 8. Participation / Responsible Governance o The policy is a model of decentralized, participatory governance of natural resources. Empowers local communities to manage their environment and benefit from its sustainable use
	Makueni County Water Policy, 2019	Speaks to - Recycling: Water Harvesting, renewable energy - Input reduction: renewable energy

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Resilience: Conservation agriculture - Participation: Partnerships with communities, community empowerment - Social and cultural values: Promotion of ITK and species, - Co-creation: Farmer managed regeneration forest. - Land and Natural Resource governance: Environmental governance units - Connectivity: Support for cooperatives - Fairness: Inclusion principles
	Makueni County Agriculture and Livestock Policy, 2021	Speaks to - Efficiency: Livestock and Crop development - Economic diversification: Emerging livestock enterprises - Social values and diets: Promotion of indigenous crops and quality food - Resilience: Pasture and fodder production and conservation - Animal Health: Disease control - Input reduction: Quality farm input promotion - Connectivity: Strengthening producer organizations - Participation: Community empowerment and involvement
	Makueni County Cooperative Development Policy 2021	Speaks to - Connectivity: Development of farm cooperatives and market linkages - Efficiency: Promote collective production to reduce overhead costs as well as value addition - Recycling: Support cooperatives to adopt environmental conservation through adoption of green energy concepts and adherence to environmental conservation programmes; Build capacity of cooperatives on waste management. - Participation: Support youth and women initiatives to participate in the leadership of co-operative Societies. - Fairness: To promote gender inclusivity in the cooperative membership, leadership and equity in employment opportunities; and Create awareness on HIV/AIDs and non-communicable diseases.
	The Makueni County Sustainable Forest Management and Tree Growing Bill, 2023	Speaks to - Land and Natural resource governance - Participation: Community involvement - Economic diversification: Nature enterprises - Biodiversity: Several tree species

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Co-Creation: Involvement of communities in management of indigenous forests - Participation: Community participation
Meru	Meru County Integrated Development plan	The word agro ecology is mentioned once indicating lack adequate staff to promote agricultural diversity and agroecology and the following strategies have been proposed: Participation: o Integration of Participatory Scenario Planning (PSP) into agricultural planning and implementation. o Formation of cooperatives for all livestock enterprises, SACCOs and dairy management groups o Target farmers especially youth Soil Health o Soil and water conservation o Soil testing o Soil and water management and conservation Land Resource & Governance o Establishment of a mega commercial nursery at ATC Kaguru to enhance availability of assorted certified seedlings. o Reseeding to reclaim overgrazed land o Reseeding grazing areas with quality hay o Promoting proper grazing lands management Economic Diversification o Promote production of emerging livestock o Promotion of apiculture and honey value addition. o Promotion of dairy, beef, apiculture, poultry and goat farming Recycling o Promotion of clean cooking technologies o -Construction of a tannery Animal Health o Establish regional diagnostic laboratories o Establish county vaccine bank Resilience o Early warning system o Water harvesting technology capacity building and empowerment o Construction of farm ponds and water pans for irrigation agriculture o Establishment of hay barns

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Bulking of traditional high value food crops Co-creation of knowledge o Adopting curriculum-based training in three value chains (aquaculture, Horticulture and dairy production). o Exposure visits o Training on technology and ICT o E-extension o Establishment of demonstration Centres and trial sites o Society and diet o Introduction of modern fish farming technologies e.g. cage fish culture in dams, faster growing species.
	Meru County Public Participation Act 2014	1) Participation: o Established a committee to be known as Public Participation Advisory Committee o Each county department or agency shall develop and implement a stakeholder engagement plan 2) Fairness: o transparency and accountability in decision making; o inclusiveness in representation of views including vulnerable groups and marginalized
	Meru County Disaster Management Act 2016	The act proposes the following; 1) Resilience o The ACT provide for a more effective organisation of disaster risk reduction and mitigation of, preparedness for, response to and recovery from emergencies and disasters 2) Participation: o Disaster Management Committee established under section 4 of this Act. 3) Resilience: Examine the vulnerability of different parts of the county to different disasters and specify prevention, reduction or mitigation measures;
	Meru County Wildlife and Conservancies Management Act, 2014.	The Act proposes to: 1) Biodiversity o Promote development and conservation of wildlife and conservancies in the county

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ In collaboration with local communities and other agencies, initiate and coordinate management of programs for sustainable conservation and management of wildlife and conservancies and for control of human wildlife conflict. 2) Fairness ○ Promote programs or projects for the benefit of the communities living along the boundaries of a conservancy;
	Meru County Participatory Climate Risks Assessment (PCRA) Report 2023	The PCRA report recommends; 1) Resilience ○ Water harvesting and storage at household, community and institution level as well and on farms through water and soil conservation structures conservation of water catchment areas ○ Adoption of Climate Smart Agriculture (CSA) specifically early maturing and drought tolerant crops 2) Land and Natural Resource Governance ○ Reforestation and afforestation of degraded lands ○ Soil and water conservation structures ○ Afforestation 3) Biodiversity ○ Promotion of wood lot or farm forestry Co-creation of knowledge ○ Capacity building of the community members on soil erosion conservation mechanisms
	Meru County Climate Change Action Plan (MCCAP) 2023- 2027	The action points are: 1) Land and Natural Resource Governance ○ Afforest and reforest degraded and deforested area. ○ Enhance protection/conservation of degraded catchment areas 2) Recycling ○ Waste management strategies by Promoting PPP in recycling, reduce and re use of waste ○ Increase renewable energy generation
Tharaka Nithi	County Integrated Development Plan 2023-2017 (CIDP)	The word agro ecology is not mentioned in the CIDP but some of the agroecology principles have been noted 1) Soil Health ○ Control of soil erosion ○ soil conservation ○ Adoption of soil health maintenance mechanism by farmers 2) Land Resource & Governance

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Establish tree planting campaigns o Promote programmes on non- wood forest products. o Promote agro-forestry programmes o Rehabilitation and protection of river o Enforcement of laws and regulations on water use o Water pollution control o Rehabilitation of degraded lands 3) Economic Diversification o Create new high value niche product e.g., cultural tourism, eco-tourism, agro tourism o Value chain development and marketing o Investing in construction of fish hatchery o Agricultural diversification (poultry, animal husbandry and fisheries) o Revitalization of industrial crops 4) Recycling o Promotion of clean and renewable energy sources o Value addition of Leather Development 5) Participation o Establish forest associations o Strengthening of water resource user associations 6) Animal Health o Operationalization of veterinary laboratory o Diseases and Pest, Prevention, Control and Surveillance o Vaccinations 7) Resilience o Infrastructure for irrigated agriculture o Green Grams & sorghum aggregation centres o Agriculture risks and resilience management o Establish post-harvest structures (Grain stores, milk coolers) o Climate information and early warning systems o Enhance fodder production and bulking 8) Co-creation of knowledge o Strengthen agriculture and extension service linkages. o Digitization of extension services o Recruitment of extension officers

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Staff training and capacity building o Provision of office accommodation and equipment Enhance staff mobility. o Formulate extension policy. 9) Society and diet o Promotion of high value traditional crops o Enhanced Community nutrition through aquaculture
	Tharaka Nithi County Regenerative Agriculture for Food System Transformation Strategy, 2025-2030	The strategy proposes to; 1) Soil Health o Develop and enforce standards for commercial regenerative agriculture inputs 2) Land Resource & Governance o Promote sustainable irrigation and efficient water management system o Promote and support conservation and protection of watersheds and water bodies o Support and promote agroforestry, afforestation, reforestation, reseeding, gulley treatments, and water conservation and management structures to reclaim degraded lands 3) Economic Diversification o Promote nature-based enterprises e.g., apiculture, silk production, gum production 4) Recycling o Promote sustainable clean and green energy o Promote and support circular and solidarity economies 5) Participation o Strengthen Community Forest Associations and Water Resource Users Association o Establishment of community committees to manage landscape restoration, rehabilitation and sustainability of identified degraded Agro Ecological hotspots 6) Resilience o Promote the use of climate information for early warning and preparedness o Streamline climate change adaptation in agricultural development programs and policies that include Regenerative agriculture 7) Co-creation of knowledge o Train and motivate the young entrepreneurs and other actors in the value chain to visualize huge opportunities in regenerative agriculture and hence embrace regenerative agriculture as a business o Promote exhibitions, trade fairs and shows on regenerative agriculture produce, products and food o Promote farmer demand driven research in Regenerative agriculture

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		8) Society and diet o Create awareness on regenerative agriculture produce and products and their benefits to human health and wealth creation o Promote nutrient rich food through increased production, diversification and bio fortification 9) Input reduction o Promote measures that reduce cost of agricultural production
	Tharaka Nithi Agroecology Policy 2024	The policy intents to: 1) Cost reduction o Promote measures that reduce cost of agricultural production 2) Land Resource & Governance o Support and promote agroforestry, afforestation, reforestation, reseeding, gulley treatments, and water conservation and management structures to reclaim degraded lands and enhance livelihood systems and environmental resources o Promote and support conservation and protection of watersheds and water bodies 3) Economic Diversification o Establish and promote Agro ecological aggregation centres for collective marketing to ensure sustained supply for the market o Promote nature-based enterprises e.g., apiculture, silk production, gum production o Create awareness on Agroecological opportunities for entrepreneurs to encourage investment 4) Recycling o Promote sustainable clean and green energy 5) Participation o Establishment of community committees to manage landscape restoration, rehabilitation and sustainability of identified degraded Agro Ecological hotspots o Strengthen Community Forest Associations and Water Resource Users Association o Facilitate the formation of Agro ecological stakeholders' platform o Participatory Rural Appraisal to establish and document the use of indigenous knowledge, agrobiodiversity and local resources for education, participation, ownership and oversight of Agroecology response 6) Resilience o Promote sustainable irrigation and efficient water management systems

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Document practical indigenous technical knowledge on Agroecology and sustainable food systems 7) Co-creation of Knowledge ○ Build the capacities of stakeholders, actors and civil society organizations on Agroecology to enhance extension capacity ○ Set up Agroecology demonstrations and trial farms 8) Culture and Diet ○ Promote nutrient-rich foods through increased production, diversification and bio-fortification ○ Promotion of sustainable food production systems
	Tharaka Nithi Climate Change Fund Act 2019	The act intends to: 1) Participation ○ Established Ward Planning Committee ○ Establishment of County Planning Committee 2) Fairness ○ Ensure equitable allocation of the moneys available in the Fund regarding the projects received by the County and Ward Planning Committee 3) Co- creation of Knowledge ○ Coordinate capacity building for Climate Change Awareness and Climate Finance. 4) Resilience ○ Financing of climate change programs. ○ Initiating and coordinating of climate change adaptation and mitigation activities at the community level;
	Tharaka Nithi County Climate Change Adaptation Plan 2023-2028	The plan intends to; 1) Resilience ○ Promoting climate-resilient agricultural practices ○ Enhancing access to climate-smart technologies and practices ○ water harvesting techniques for crop cultivation ○ Promoting water conservation and efficiency measures 2) Co-creation ○ Capacity Building by providing training and capacity-building programs to farmers, extension workers, and other stakeholders to ensure they can effectively adopt and utilize climate-smart practices and technologies.

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Information Sharing. Establishing platforms for sharing information and knowledge on climate-smart solutions, including successful case studies and best practice 3) Participation ○ Community Engagement: Engaging local communities in the decision-making process to ensure that climate-smart solutions align with their needs and preferences. 4) Culture and diet ○ Promoting and mass-producing drought-tolerant traditional high-value crops 5) Soil Health ○ Conservation agriculture ○ Crop rotation 6) Biodiversity ○ Intercropping 7) Land Resource and Governance ○ Afforestation. ○ Agro-forestry
	Tharaka Nithi Gender Mainstreaming Policy, 2021	The policy intends to: 1) Economic Empowerment ○ Enhance women's participation in fisheries sector 2) Fairness ○ Mainstream Gender in County development planning as well as resource allocation ○ Promote equitable access for both women and men to and control over resources, knowledge, information, land and business ownership, and services ○ Empower women, men and persons of interest groups to have access to and control over economic opportunities and resources ○ Eliminate discrimination in access to employment, promotion and training including equal remuneration to enhance income security for men and women 3) Co- creation of Knowledge ○ Enhance extension services and avail agricultural information and appropriate technologies to particularly benefit vulnerable women in agricultural practices. 4) Resilience ○ Facilitate and enhance adoption of engendered climate processes, smart inputs and out markets, to ensure that agricultural and other livelihood practices are climate resilient
West Pokot	West Pokot County Climate Change	Promotes 1) Land and Natural Resource Governance

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	Action Plan- 2023-2027	o Early warning systems o Flood Monitoring and Warning System in flood prone areas/Rivers o Protection and Conservation of Water Springs o Community Tree planning initiatives o Pasture development o Weather information systems 2) Resilience o Animal feed conservation 3) Animal health o Vaccinations) 4) Input Reduction o Efficient water use (drip irrigation) 5) Recycling o Use of Energy saving and high efficiency firewood and charcoal jikos o Renewable energies (solar) o Solid waste management to control pollution o Water harvesting 6) Fairness o Inclusion of vulnerable in climate action
	West Pokot Third County Integrated Development Plan (CIDP)- 2023-2027	No mention of agroecology. However, promotes 1) Land and Natural Resource Governance o Water catchment protection and conservation o Water quality and pollution control o Community sensitization, awareness, and training on forest protection o Afforestation, agroforestry and re-afforestation o Mainstream climate change in all sectors o Ecosystems protection from degradation o Land use management o Sustainable land and water management o Rangeland management and conservation 2) Recycling o Wastewater treatment and re-use o Water harvesting o Renewable and efficient green energy technologies

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Sustainable waste management and control 3) Participation o Collective action: Formation of Forest Conservation Committees o Participatory Climate Risks Assessment 4) Economic Diversification o Nature-based enterprises through community group support. 5) Soil Health o Soil erosion control o Land reclamation (Promote fodder, crops and trees growth in the reclaimed lands.) 6) Resilience o Posy harvest management o Value addition, food processing, preservation and utilization o Mainstreaming climate change adaptation o Enhancing extension services o Pasture establishment and conservation o Agricultural market development 7) Animal Health o Enhancement of pest and disease surveillance, management and control o Improve Veterinary Extension services, disease surveillance & control 8) Fairness o Mainstreaming gender and special interest groups 9) Participation o Strengthening of County Agriculture Sector Steering Committee 10) Economic Diversification o Diversification of crop/livestock-based livelihood
	West Pokot County Climate Change Framework Policy; Sessional Paper Number 2 of 2021	In this policy, there is a provision that elaborates intervention measures, strategies and plans that enable West Pokot County to adapt to climate change and achieve the goal of low carbon climate resilient development through the Department of Environment, Forestry and Climate Change Unit
	West Pokot County Climate Finance Policy; Sessional	The Policy provides for climate financing mechanisms to facilitate adaptive capacity and resilience to climate change while promoting low carbon sustainable development in West Pokot County

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
	Paper Number 3 of 2021	
	County Climate Change Fund Act 2021	This is an Act for West Pokot County Assembly to put in place the framework and mechanisms for mobilization and facilitation of the County Government, communities and other stakeholders to respond effectively to climate change, through appropriate adaptation and mitigation measures and actions and for connected purposes
	The West Pokot County Climate Change Fund Regulations 2022	This is the West Pokot County Legislative Supplement No. 1 aiming at operationalization of the West Pokot County Climate Change Fund Act 2021
Laikipia	Laikipia County Climate Change Action Plan 2023 – 2027	The strategies of the action plan are; 1) Participation: o Community-led action on climate change initiatives o Participatory Climate Change Risk Assessment (PCRA) o Development of climate cation coordinating units (County & Ward levels) 2) Input reduction o Promote Organic Farming 3) Soil Health o Promote climate smart soil and water conservation technologies such as soil and water (Gabions, grass strips, terraces, side drains) 4) Land Resource & Governance o Increases adoption of technologies that reduce greenhouse gas emission such as conservation agriculture, agro-forestry o Afforestation and reforestation 5) Economic Diversification o Promote high value crops integrated with livestock to diversify food security and households' income o Support youth, women, elderly, and PLWDs in nature-based enterprises and climate smart farming technologies- Apiculture, nature-based ecotourism, 6) Recycling o Promote farmer led small-scale irrigation by supporting farmers on water saving and renewable energy technologies such as use of solar water pumps o Biogas production from slaughterhouses 7) Participation

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		○ Multi-stakeholders' participation 8) Animal Health ○ Vaccinations ○ Livestock disease surveillance 9) Resilience ○ Establishment of drought tolerant pastures ○ Irrigated pasture ○ Early warning systems ○ water harvesting and storage strategies; tanks, pans and dams 10) Co-creation Capacity building of different stakeholders
	Laikipia County Integrated Development Plan 2023-2027	The CIDP has no mention of the term Agroecology, but the following strategies were identified; 1) Participation: ○ Integration of Participatory Scenario Planning (PSP) into agricultural planning and implementation. 2) Fairness ○ Implement a Kenya Youth Agribusiness Strategy (KYAS), gender and social inclusion in the sector. 3) Soil Health ○ Safe use and disposal of agrochemicals (containers) 4) Land Resource & Governance ○ Identify, map and regulate zones for agricultural practices in terms of type of resource, land tenure systems, climatic and ecological diversities. ○ Promote soil and water access and management programmes. ○ Protect and conserve catchment areas to enhance water and environmental resources 5) Economic Diversification ○ Promote production of emerging livestock 6) Recycling ○ Promote adoption of green energy and energy saving devices 7) Participation ○ Establishment of a Youth Agricultural and Innovation Fund. 8) Animal Health ○ Livestock vaccination against notifiable diseases. ○ County diagnostic laboratory rehabilitation

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		o Vaccination crushes establishment o Establish county vaccine bank 9) Resilience o Strategic food and feed reserve o Sign MOUs between community and conservancies and KFS for dry season grazing o Strengthen early warning systems and response mechanism o Promote drought tolerant crops o Construct strategic feed reserves o Strengthen insurance approaches, products and frameworks on crops and livestock o Irrigation development and management 10) Co-creation o Support the development and packaging of transformative agricultural technologies, information and business opportunities in the agricultural sector o Develop capacity of producer's /producer organizations
	The Laikipia County Community Engagement and Resilience Act, 2022	The Act intends to; 1) : Participation o Hold County Community Engagement Forum twice per year to a. identify exclusion and marginalization among vulnerable groups or areas with respect to service delivery and development. b. propose interventions that reduce vulnerability and build economic resilience. c. propose areas of affirmative action. o Community engagement forum at the ward level after every three months
	The Laikipia County Climate Change Act 2021	1) Participation o Establishment of Ward Planning Committee o Establishment of County Planning Committee o Project to provide platform for stakeholder engagement 2) Resilience o Identify project that promotes climate resilience in the locality through Climate Mitigation or Adaptation 3) Co- creation of Knowledge o Project to use in-built skills and technology transfer
	The Laikipia County Youth Service Act, 2020	The Act intends to; 1) Participation

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Promote participation of the youth in development programs including agriculture, Tourism, sports, cultural activities, entertainment, health, forestry, urban development, rehabilitation - Provide for coordination and collaboration with other government agencies and to support implementation of national policies on youth in the county
National	National Agroecology for Food Systems Transformation Strategy-2024	Promotes; - Use of organic farm inputs (reduce input) - Water use efficiency & conservation () - Incentives for local research - In farm diversification - Collective action - Biodiversity conservation - Social & Economic inclusion - Use of indigenous knowledge - Conservation and use of indigenous germplasm ()
	Agriculture Policy-2021	Promotes - Protection conservation of biodiversity - Sustainable natural resources use to support sustainable agriculture. - Integrated soil management practices (use of farm manure) - Recycling (use of animal waste as farmyard manure) - Water harvesting and conservation, - Crop diversification, management of farm-level biodiversity conservation, - Functional diversity, including farm forestry, economic diversification and pasture management. - Youth involvement in agriculture - Conservation of water catchment areas and riparian areas - Use of indigenous knowledge - Water harvesting and conservation to increase water productivity (development of strategies to provide incentives for efficient water use including recycling for crops, livestock and fisheries)
	Agricultural Sector Growth and Transformation Strategy-2019	Promotes - Crop diversification, - Nutritious traditional crops, - Climate-smart natural resource management practices, - Soil health and catchment protection - Fodder, feed management, - Index-based insurance

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Animal health - Collective marketing and price negotiation - Livelihood protection (cash transfers) - Soil fertility management (liming)
	Kenya National Agroforestry Strategy-2021	Promotes - Agroforestry for soil and water management (soil restoration, no-till farming, cover crops, nutrient management, manuring and sludge application, improved grazing, and efficient irrigation - Indigenous agroforestry knowledge and practices, innovation and technologies which correspond to the diversity of indigenous peoples and their different contexts - Agroforestry for sustainable intensification (multipurpose trees) of production of critical staple foods with environmental resilience. - Agroforestry revolving fund for value addition - Inclusion of men, women, youth, and other vulnerable groups in agroforestry enterprises
	National Agricultural Soil Management Policy-2020	Promotes - Use of organic fertilizers - Discontinuation of use of DAP a basal fertilizer - Integrated soil fertility management (ISFM) practices (proper management of manure) - Conservation of cultural and indigenous knowledge and conservation of biological resources - Organic farming and certification - Community-based soil and water conservation efforts - Adoption of agroforestry through increased access to high quality agroforestry planting materials. - Identification of and mapping degraded soils - Land rehabilitation - Establishment of public complaints committee for environmental degradation-related issues. - Integrative approaches to natural resources management (NRM)
	National Climate Change Response Strategy-2020	Promotes - Crop diversification - Climate smart indigenous crops such as cassava, millet, sorghum - Conservation agriculture: Soil cover (mulching), minimal tillage, crop rotation - Use of organic manure - Use of crop residue as animal feeds - Agroforestry

County	Reviewed Documents (Policies, Strategies, Regulations, CIDPs)	Summary Findings on Integration of Agroecological principles
		- Soil and water conservation (stone bunds, grass strips, contour levelling, trees or hedgerows. - Use of indigenous knowledge - Livestock diseases management especially in pastoral systems
	National Land Use Policy-2017	Promotes - Efficient and sustainable land use management - Ecological sustainability - Food security - Technology adoption in land use management, - Equity and transparent decision-making, - Effective public participation
	The Livestock Policy-2020	Promotes - Conservation of locally adapted/indigenous breeds livestock germplasm - Diversification of forage types and promotion based on agroecological zones - Appropriate grazing management practices - Irrigated forage production - Control of pests and diseases (both fodder & livestock) - Management of invasive plant species - Community based planning, development and use of rangeland resources
	Seeds and Plants Varieties Act 2012	- It hinders the traditional exchange and use of indigenous seeds, potentially limiting crop diversity and farmer autonomy, which are crucial aspects of agroecology.

Biovision Africa Trust

Biovision Africa Trust (BvAT)
Secretariat and Executing Agency to the
Ecological Organic Agriculture Initiative for Africa
P. O. Box 30772 – 00100,
Kasarani off Thika Rd, Nbi Kenya
info@eoai-africa.org
Tel: +254 719 052 113

Biovision Africa Trust @BiovisionAfrica