

WORKSHOP ON CO-DESIGNING CONTEXT-APPROPRIATE AND GENDER-RESPONSIVE LAND RESTORATION OPTIONS FOR MAKUENI COUNTY



October 27th 2021, Kusyombunguo Hotel, Wote, Makueni County

Workshop Report

Key Stakeholders: County Government of Makueni| Kenya Forest Service (KFS)|Kenya Forestry Research Institute (KEFRI)| African Sand Dam Foundation (ASDF)| Farmers| Ward Agricultural Officers| Community Based Organisations (CBOs)

Report prepared by: Christine Magaju, Ann Wavinya, Mary Crossland and Leigh Winowieki



1. Introduction

The stakeholder workshop on co-designing context-appropriate and gender-responsive land restoration options for Makueni county was held on 27th October 2021 in Wote, Makueni County. The workshop brought together twenty-nine participants from the County Government of Makueni, the Kenya Forest Service (KFS), the Kenya Forestry Research Institute (KEFRI), the African Sand Dam Foundation (ASDF), farmers and Ward Agricultural Officer among others. The workshop was organized as part of the ICRAF-led project on Promoting nature-based solutions for land restoration while strengthening the national monitoring technical working group in Kenya funded by UK-PACT.

1.1 Opening remarks

The meeting began by welcome remarks from Catherine Muthuri, who took the opportunity to introduce herself and welcome participants to the workshop.



Figure 1: Dr. Catherine Muthuri, CIFOR-ICRAF Kenya Country Coordinator and lead, the UK-PACT project.

The welcome remarks were followed by an exercise to gather the participants' perspective on the need for options by context approaches to restoration and consideration of factors other than biophysical conditions. In the exercise, the participants stood next to the card that best represented their views with reference to the statement: "*Climate, soil texture and slope are the most important factors to consider when matching restoration options to local conditions*". The cards were laid out on the floor and ranged from strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree.

Table 1: Number of the participants who responded to each card with reference to the statement 'climate, soil texture and slope are the most important factors to consider when matching restoration options to local conditions.

Response	No. of people	Men	Women
Strongly disagree	3	1	2
Somewhat disagree	3	3	0
Neither agree nor disagree	0	0	0
Somewhat agree	7	3	4
Strongly agree	10	5	5

Below are the responses:

Strongly Agree

- Because when we restore land, we must consider the slope basically because of soil degradation. Therefore, we must work towards the slope issues as water causes a lot of erosion.
- Because they determine nature.
- Because they control soil water and determine suitable plant varieties for better results.
- Because the soil profile matters in tree planting. The climate determines which tree survives in a particular area.
- Climate is an aggregate of several weather conditions and influences which activity to be undertaken in the soil. Texture and slope as a great influence on what to plant.
- Because they influence water availability, soil moisture retention and water infiltration.
- Because soil moisture matters.
- Important to look at the vegetation that could adapt in the area.
- Due to species site matching, restoration is specific to these factors.

Somewhat agree

- Water retention/release are site specific
- They are important but not the only factors

Somewhat disagree

- There are others that influence the three e.g., gender roles, cultural norms, education levels, and income levels.
- Other than the three, other factors like the trees planted regulate water flow, infiltration, and moisture retention.
- The available resources have a role to compliment the soil texture, climate, and slope.
- Other factors like the gender, household size and composition, farm size, rainfall patterns and the land use have a role to play.
- It also depends on the farmers interests and goals.

Strongly disagree

- The factors are context-specific
- Restoration is site specific
- Focus on water retention
- Because we have human activities as a factor.
- We have other factors to consider like social, cultural and land tenure.

1.2 Objectives of the workshop

Christine Magaju, the workshop facilitator, shared with participants the workshop objectives, the principles of engagement for the workshop, and gave a brief overview on what participants would expect during the workshop process. The objectives of the workshop were to:

- 1. Showcase the Options by Context (OxC) approach to land restoration and introduce the UK PACT Project.
- 2. Promote knowledge sharing and the co-design of inclusive and context-appropriate land restoration options for Makueni County.
- 3. Identify promising and ongoing land restoration activities in the county and the contextual factors conditioning their suitability for different user groups.
- 4. Foster collective reflection on how the social dimensions of land restoration can generate constraints and opportunities for scaling up restoration efforts.
- 5. Identify opportunities for integrating OxC and gender-responsive approaches into ongoing and future restoration activities in the county.

The expected outcomes of the workshop included:

- 1. Increased understanding and capacity for OxC approaches to land restoration.
- 2. Increased awareness of the importance of inclusivity and cross-cutting nature of social factors such as gender, youth and wealth dynamics.
- 3. Opportunities for integrating OxC and inclusive approaches into ongoing restoration activities identified.
- 4. Contextual information and OxC matrices that can be used to guide the selection of context-appropriate and gender-responsive restoration options.

1.3 Introduction to the UK PACT project

Catherine Muthuri, CIFOR-ICRAF Kenya country co-ordinator and the project lead, introduced the UK PACT project to the workshop participants. The project, titled 'Promoting nature-based solutions for land restoration while strengthening the national monitoring technical working group in Kenya, aims at establishing a national restoration monitoring technical working group in Kenya and promoting gender-transformative restoration activities and knowledge products that enable their scaling. She emphasised the importance of matching land restoration options to local circumstances for achieving impact at scale and improving people's livelihoods. She further highlighted the crucial

role of rural women and youth as catalysts of change in the county. More information about the project can be found <u>here.</u>

1.4 Introduction to the Option by Context approach to land restoration

Mary Crossland, a system scientist at CIFOR-ICRAF, introduced the options by context approach to land restoration to the participants. In her presentation, Mary defined options as things that farmers and communities can do/were doing differently but may also include actors at multiple scales (e.g., NGOs, local and national governments) and context as the ecological, economic, and social situations in which the options were implemented. Options are not just technological but can include innovations aimed at improving the enabling environment for change (e.g., market interventions, extension systems, policies). Options interact with 'context' to determine their performance and as such Option by Context approaches (OxC) aim to match 'options' to local 'context'. Mary also presented on overcoming some of the barriers to scaling by using gender transformative approaches. These are approaches go beyond considering gender norms, roles and relations and instead aim to transform existing gender norms and underlying power imbalance (Figure 3).

Gender-responsive: Considers gender norms, roles and relations and how these affect access to and control over resources. Responds to women's and men's specific needs.

Gender-transformative: actively examines, questions and aims to transform gender norms and underlying power imbalances.

GENDER-UNEQUAL Perpetuates gender inequalities GENDER-BLIND Ignores gender norms, discrimination and inequalities

GENDER-AWARE Acknowledges but does not address gender inequalities GENDER-RESPONSIVE Acknowledges and considers women's and men's specific needs

GENDER-TRANSFORMATIVE Addresses the causes of gender-based inequalities and works to transform harmful gender roles, norms and power relations

Figure 3: Key Gender terminologies (adapted from https://www.unicef.org/media/58196/file)

The presentation was complemented by a data wall displaying displaying results from the OxC analysis using the IFAD-EC Land restoration case study and an example OxC matrix that the participants could explore.



Figure 4: Benedict Manyi, a farmer, goes through the gender results on the data wall.

1.5 Introduction to the Makueni Resource Hub

In line with the project's expected outcomes – increased capacity for monitoring and reporting of restoration approaches at county and national levels – Ivy Okutoyi, a consultant with CIFOR-ICRAF, gave an overview of the Makueni County Resource Hub. This online dashboard was developed to support the County Government's efforts to bring together the diverse partners and data sources to enhance coordination, planning, communication, and evidence-based decision making. The open-source dashboard is available online and can be accessed <u>here</u>.

Arising questions from the participants on the resource hub included:

- What are the units of measurement for the agricultural production data?
 - o Tonnes
- Is it possible to incorporate the distances via the actual roads?
 - o Yes
- Is there a link to prices?
 - Not yet
- Is biomass accounted for even during crop failure?
 - No, but more information will be sought from the relevant county departments



Figure 2: A screenshot of the Makueni Resource Hub's home page.

2. Groups Activity: Identifying on-going and promising land restoration activities (options) in Makueni County

To identify restoration activities implemented in Makueni County, participants were divided into groups based on the key land uses in the County (i.e., agriculture/Crop Land/Horticulture, forest, and pastureland). In the groups, the participants identified which restoration options were implemented in each land use, who was involved in their implementation and who benefited from the restoration options. Overall, the identified options included tree planting, grass reseeding, dryland agroforestry, farmer managed natural regeneration (FMNR), terracing, rainwater harvesting, composting and agroecology (Table 2). The participants also identified the main successes to scaling the restoration options as well as the challenges to scaling. Each group then presented, in plenary, the options they had identified as well as the success and constraining factors to scaling.



Figure 5: Restoration options in pastureland identified by workshop participants

Land use	What restoration options are	Who is involved (by	Who benefits the	Main successes to	Main challenges to
category	being used?	whom?)	most (for whom?)	scaling	scaling
Agriculture/Crop Land/Horticulture	 Terracing Planting basins (Zaipits) Agroforestry trees Water harvesting Soil fertility improvement/management Grass re-seeding Tree planting Drip irrigation Creation of buffer zones around riparian areas Mulching Fertility basins 	 The farmer KFS MOALFD KEFRI Women Men Youth 	 Men 60% Woman 40% Children Farmer 	 Incentives to farmers Farmer field schools Farmer to farmer learning Exchange visits Funding partners Increased incomes Food security Improved soil fertility 	 Poor choice of enterprise Inadequate capital/resources Topography (slope) Marketing Land ownership Unwillingness to adopt new ways of farming Climate change Land policies Environmental factors Limited skills and information
Forest	 Reafforestation & afforestation FMNR IGA's (bee keeping and mushroom farming 	 KFS KEFRI County government NGOs 	CommunityGovernment	 Partnerships Awareness creation Capacity building 	 Limited resources Deforestation Forest fires

 Table 2: Overview of land restoration options identified for different land use categories in Makueni County.

	 Soil conservation structure (gabions, terraces) Policy and governance structures Protection of water catchment areas 	- Community			
Pastureland	 Fencing for restoration from erosion by animals Soil conservation structures such as Terraces Reseeding (shrubs, grass, pasture) Natural regeneration Pruning Cut and carry hay 	 Conservation partners (NGOs, government institutions) Extension officers The farmer's family Local administrations 	 The farmer benefits. Man gets fodder for livestock and increased production, the woman is relieved the responsibilities of firewood fetching and thus save on time and energy that can be used somewhere else Increased biodiversity 	 Available pasture for livestock Source of income Improved biodiversity species Improved soil conditions Firewood (through pruning) Building materials Time saving 	 Land tenure Rainfall variability Fire

The last exercise in this session saw the participants identify the ways in which the restoration options identified earlier on were monitored including the key indicators assessed. Below is the feedback from the groups.

i. How are restoration activities being monitored/measured?

Agriculture/Crop Land/Horticulture/forests

- Online data collection tools such as Kobo toolbox
- Regreening TOTs
- MOALF
- Farm records
- FGDs
- Surveys
- Seasonal assessments
- Partners reports
- Interviews
- Tabulating
- Observation

ii. What indicators are being used?

Agriculture/Crop Land/Horticulture

- Food and nutritional security
- Increased income
- Increased tree cover
- Percentage of tree cover
- Through increased productivity

Forests

- Number of seedlings planted
- Percentage of forest cover increase
- Tree survival rate



Figure 6: Dominic Omondi (left), Kalawa Ward Agricultural officer and Pius Kasimu (right) from the Africa Sand Dam foundation during the breakout group discussion.

3. Group Activity: Identifying key contextual factors conditioning the suitability of land restoration options

The participants, in the land use groups, identified the main contextual factors conditioning the suitability of the selected restoration option. They also considered the influence of gender, youth and wealth dynamics of the identified factors, and the key knowledge gaps regarding the option suitability. Then in plenary, each group presented back on key factors, the gender considerations that the group identified and the biggest knowledge gaps. Figure 7 shows the matrix on planting basins developed by participants and Table 3 summarises the discussion.



Figure 7: Options by Context Matrix for planting basins developed by participants

Option	Contextual factors				
	Agroecological	Socio-economic	Production objectives	Gender considerations	Knowledge Gap
Reseeding pastureland	 Soil texture Soil depth Slope Termite destruction by grasses Fire 	 Labour Financial capital Land tenure Tools and equipment Land size Storage facility Lack of participation by youth and men Market availability 	 Domestic use Sales Land restoration 		- Capacity
Water Harvesting	 Low rainfall Sparse rainfall Unpredictable rain onset Limited land size Land tenure Slope Porous soils (high) 	 Labour intensive High labour cost Inadequate skilled labour 	 Land restoration Increased tree cover Food security water availability (farm and household) Increased household income 		

Table 3: Overview of contextual factors affecting the suitability of different restoration options identified by the participants.

Tree planting (Afforestation and reafforestation)	 Water availability Soil structure/texture Soil fertility Climate variability 	 Labor cost Labour availability Land use, tenure, topography, and security source of capital Policies and regulations Tools 	 High productivity Increased income Risk reduction 	 Women Men Children Youth Mainstreaming 	 Proper tools Leadership Capacity Monitoring
Planting Basins	 Topography Amount of rainfall Soil texture/type 	 Land ownership and size Labour cost and availability Tool's cost Intensive labour Competing activities Communal work Health 	 Increased production Increased income 	 Women participate more Land tenure systems – most land is owned by men 	

4. Group Activity: Identifying constraints to scaling restoration options

Finally, the participants worked on identifying the constraints to scaling restoration options. Working as one large group, the following challenges were identified:

- Poor seed quality
- Inadequate skills/experience
- Lack of planting materials (trees)
- Land tenure
- Soil texture
- Soil porosity (for water harvesting)
- Drought
- Corruption
- Covid 19
- Financial instability
- Few tree nurseries
- Costly capital i.e., dam liners
- Poor tree selection
- Pests and diseases
- Poor nursery management
- Labour intensive nature of restoration options
- Ignorance
- Discouragement from failed projects



Figure 8: challenges to scaling restoration options identified by participants.

Afterwards, the participants then broke out into their groups and conducted problem tree analysis to identify the key issues that underpinned the identified challenges. In the problem tree analysis, the challenge is placed in the centre of a page to simulate the trunk of a tree. The causes of the challenge are placed below the challenge simulating the roots and the effects placed above the challenge simulating the leaves. For each identified cause, the participants ask, "Why does this problem exist?", "What are the situations or factors that have caused this barrier?", resulting in the multiple layers of factors that contribute to the challenge. Figure 9 and figure 10 below show two of the problem trees developed by participants.



Figure 9: Problem tree developed by participants on land tenure as a challenge to scaling restoration



Figure 10: Problem tree analysis developed by participants on discrimination of women and youth as a challenge to scaling restoration.

5. Next steps and workshop evaluation

The workshop concluded with an outline of next steps for the project and presentation of the timeline of the upcoming workshops (Annex 2). These workshops will include a capacity development and training workshop on the use of gender transformative facilitation methods and approaches, a reflective multi-stakeholder workshop to collate and reflect on the gender transformative co-design process, formulate lessons learned and identify ways to continue supporting gender transformative change, and inter-county and national level workshop with targeted government agencies and non-state actors to communicate the lessons and influence policies.

Finally, the participants evaluated the workshop by filling in the UK PACT questionnaire. They evaluated the workshop in terms of the overall content (usefulness, relevance, and methods), learning (how much they learnt about the topic of the workshop) and behaviour (likelihood of using the information and knowledge gained in the workshop). In terms of lessons learned, feedback from workshop participants highlighted a need for more time during workshops and to increase the number of participants to ensure greater representation of all stakeholder groups. While participant numbers were limited due to COVID-19, this feedback will be considered when planning future project activities (i.e., multi-day workshops).

Annex 1: Meeting Agenda

Time	Activity	Facilitator
09:00 - 09:50	Workshop opening & introductions	Dr. Catherine Muthuri, ICRAF Mary Mbenge, Makueni County Government
09:50 – 10:40	Introduction to the UK PACT project & the Option by Context approach to land restoration	Dr. Catherine Muthuri, ICRAF Christine Magaju, ICRAF
10:40 - 11:00	Tea break	·
11:00 - 12:00	Group activity: Identifying on-going and promising land restoration activities in Makueni County Knowledge sharing from all participants, highlighting restoration activities they are engaged in. Group activity: Identifying key contextual factors conditioning the	Christine Magaju, ICRAF Mieke Bourne, ICRAF
12.02 14.00	suitability of different land restoration options	
13:00 14:00		
14:00 - 15:00	Group activity: Identifying key opportunities & constraints to scaling restoration options	Christine Magaju, ICRAF
15:00 - 16:30	Group activity: Reflection & next steps	
16:30 - 17:00	Workshop evaluation, closing & tea	Christine Magaju, ICRAF Mary Mbenge, Makueni County Government

Annex 2: workshop series timeline

