Lessons Learned and Best Practices in Natural Resource Management and Rural Entrepreneur Access Project (REAP) Integration for the CJRF Project

REPORT



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Acronyms

ASAL:	Arid and Semi-Arid Lands.
CFAs:	Community Forest Associations.
CGR:	Community Group Ranches.
CJRF:	Climate Justice Resilience Fund.
EMC:	Environmental management committees.
EMCA:	Environmental management and Coordination Act.
FAO:	Food and Agriculture Organization.
FGDS:	Focus Group Discussion.
ILRI:	International Livestock Research Institute.
IMPACT:	Indigenous Movement for Peace Advancement and Conflict Transformation.
KFS:	Kenya Forest Services.
KII:	Key Informant Interview.
KWS:	Kenya Wildlife Service.
NDMA:	National Drought Management Authority.
NGO:	Nongovernmental Organizations.
NRM:	Natural resource management.
NRT:	Northern Rangeland Trust.
REAP:	Rural Entrepreneurship Access Project.
SACOs:	Savings and Credits Organizations.
SDGs:	Sustainable Development goals.
SMEs:	Small Scale Enterprises.
WRUAs:	Water Resources User Associations.
WUA:	Water User Associations.



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Disclaimer: This study report has been produced at the request of BOMA project. The opinions expressed are those of the Consultants, and do not necessarily reflect those of the BOMA project and partners. Responsibility for the opinions expressed in this report rests solely with the authors.

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Executive Summary

Background: This report document lessons learnt and best practices from NRM program that targeted BOMA's REAP beneficiaries in Samburu County, Kenya. The BOMA NRM/CJRF project objectives were two-fold: i) to increase BOMA's capacity to embed best practice NRM and climate resilience learning in its programs, and ii) to increase the capacity of 2,100 BOMA women to influence NRM policy and practices and gain access to climate, NRM and resilience information and services.

Study Approach: Both qualitative and quantitative approaches were used to collect data and information. The documentation followed a deductive analytical process to draw the conclusions. Lessons learnt and best practices are inferences made from study key findings under the following overreaching themes: *capacity development, gender equality and responsiveness, transformational change and policy reforms, stakeholders' engagement, community and government ownership, financial and socio-economic sustainability, risk management systems, inter-institutional collaboration, innovation and private sector engagement and scalable solutions.*

Lessons learned was defined as "generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations" (OECD 2002). On the other hand, best practices have been defined to mean successful initiatives which have a demonstrable and tangible potential impact on improving people's quality of life; and are the result of effective partnerships between BOMA project and partners.

Key Findings: The findings are from data and information collected, but lesson learned, and best practises have been deduced from both intended and unintended discerned from the intervention as opposed to the project *Ab initio*.

In capacity development, the NRM trainings undertaken exposed BOMA Project staff to the required knowledge and information to effectively champion climate justice, natural resources conservation, women rights, and support of climate resilient livelihoods through REAP. The training changed the mind set on conservation, management, and sustainable use of natural resources within the area of operation. The field officers interviewed responded that they were able to incorporate NRM messaging during business mentorship and coaching sessions. Similarly, interview with a mentor in charge of groups from *Lodokejek* and *Kirimon*, established that community members were eager to join the trainings including the non-BOMA project participants. For the REAP beneficiaries, the NRM trainings gained led to establishment of nature-based enterprise such as apiculture, nursery establishment, and *Aloe species* production. At household level, an overwhelming 99% of respondents reported having satisfied with the trainings and achieved fair knowledge in NRM and women's role and rights in environmental conservation and management.

For gender equality and responsive interventions, household survey undertaken revealed that BOMA trained women reported awareness of various community structures they can join to cascade their knowledge in NRM. Women that were aware of Forest Management Committees constitute 82.9% of the respondents, 65.1% were aware of grazing land management committees, 56.4% were aware of the WRUAs while only 5% were not aware of any local NRM structures. In the six FGDs conducted, the discussants reported awareness of forest management committees. The project participants interviewed mentioned that they are currently joining and registering in the local NRM management committees and associations for policy influencing and taking leadership roles. In addition, there has been improved representation of women in leadership roles in the local committees. In the existing NRM committees (CFAs and Water User Associations) a total of 404 women officially got registered as members of various NRM committee and user right groups including taking management committees leadership position.

Under stakeholder engagement, BOMA partnered with relevant stakeholders during the NRM training. A joint project technical steering committee was formed, and partners complemented each other. Synergies throughout the implementation informed good practices. It enhanced information sharing and peer learning across partner organizations. Stakeholders' engagement also enhanced complementarity of activities. However, the partners lacked a joint coordination framework and work plan during the implementation which led to some extent duplication of activities. BOMA also recognized the importance and existence of community local structure in advancing learning in NRM. These included the Community Forest Associations (CFAs), Community environmental management committees and Water user associations. During HH survey, more than 97% of respondent reported having satisfied with the contribution and roles of the county government and partner stakeholders in safeguarding and securing natural resources. Those who remained undecided were 2% while those reporting dissatisfaction were only 1% of the total respondents.

To address transformational change, the program led to creation of awareness of women's right in NRM and currently more women have risen to leadership roles in NRM. BOMA Project team trained women have joined community structures championing NRM. In addition, the county government are currently adopting the climate change policies. The policies that are currently under county assembly review are *Samburu County Rangeland management policy; Samburu County Forest Conservation policy* and *Samburu County wetland/water tower conservation policy*. At community level, women have adopted adaptive climate resilient practices through diversification of sources of livelihood. Based on survey results more than 96% of respondents reported having been engaged in NRM policy awareness creation while 88% were familiar with policies on EMCA.

Based on patriarchal nature of the targeted community, the NRM training program championed gender mainstreaming in development and NRM which is in line with the sustainable development goal (SDG 5) number five. During FGDs, women reported having risen to community leadership roles. The formation of savings groups and corresponding registration to SACCOs is trajectory for financial and socio-economic sustainability. BOMA also ensured capacity development both at the head office and cluster office through staff training, training of mentors and provision of navigation motorbikes to mentors across all training locations to address logistical challenges. This study revealed that 90% of the respondents agreed that currently women have championed on climate smart nature-based enterprises over men. Those in the savings groups have access to credit and loan services to start tree nursery, bead making, forage production and making of animal feed blocks among others. Those who still don't believe that women own most of such enterprises were less than 8% while those who reported not aware were merely 2%.

Lessons Learned: The use of community-based mentors as trainers enabled project beneficiaries to develop a lot of interest and actively participate in the NRM initiatives. It allowed for easy expression of the training items into the participants' local language. Being one of their own, it allowed remorseful atmosphere for mutual understanding and mono-cultural communication throughout the training. These therefore improved participants' interest and reduced miner prejudices during the trainings



There was effective engagement of community, especially women from the onset with the right livelihood diversification trainings and knowledge for effective climate adaptation and transformational change. The active participation of women in the local level technical forums also provide an excellent opportunity to influence policy reforms. The discussion with two CFAs during the study reaffirmed BOMA NRM trained women active involvement in environmental and water resources conservation campaigns in the community.

Similarly, the community from which BOMA NRM participants come from are aggressive and eager to embrace adult learning. From the Six *FGDs* conducted, the discussants reported having a lot of interest in learning NRM practices. The CFA in *Naramat* through their chairperson reported having gained a lot of experience in one eco-tourism they attended in *Garbatula* in *Isiolo*. The study also established that both men and women who are non-BOMA project members are reaching out to the committees to learn and share knowledge in NRM practices.

Currently, the county government of Samburu is in the process of adopting climate change policy. Some of the policies under county assembly review for Government adoption are Samburu County Rangeland management policy, Samburu County Forest Conservation policy and water tower conservation policy among others. The prolonged drought (nearly more than a year) have discouraged purchases of the seedlings for planting by the private individuals and the Kenya forest service. Many NRM participants have embraced leadership positions in their respective groups the actual number of women in leadership position within the local community NRM structured wasn't established.

Best Practises: Leveraging on synergies with development partners and strategic involvement of government line ministry provided a pathway for sustainability. Consultative meetings and creation of a joint project steering committee with partner stakeholders allowed for information sharing and learning. Building the capacity of BOMA project staff and indigenous community members/mentors to train participants fast-tracked the learning progress since they share not only common dialect but also cultural practices.

The consultative meetings at the project inception involved both men and women. This provided a trajectory through which men were able to express their views and concerns on women involvement on NRM. This allowed men to feel part of the programme even if it was targeting women. Hence, it eliminated prejudices and perception of men feeling neglected from the programme. It was a good practice by BOMA mainstreaming SDGs 5 in their development programming for "Achieving gender equality and empower all women and girls".

Determinant of Success: The determinant of success factors in the NRM implementation were identified which are linked to strong partnership and collaboration between BOMA, State and Non-state actors working in the targeted locations. Capacity building of the BOMA staff on NRM and REAP, creation of savings groups and use of existing local structures, willingness of County government to adopt climate change policies and the two third gender policy in their programmes were some of the key determinants of success. Information from survey indicated optimal level of commitment that whiffs sustainability with state actors and none-state toping the ladder by 81.6%, 78.5%, for WRUAs/WUAs and KFS respectively. These are being closely followed by NGOs at 54.2% and WARMA at 41.1% while Kenya water tower agency, financial institutions and NEMA level of commitment were reported at 20.2%, 9.7% and 1.9% respectively.

Recommendations: BOMA project should adopt integrated NRM approaches to respond to climate related challenges effectively. The approaches like layering NRM on REAP cohorts are short-term and are meant to cover the lean season with the hope that the effects transcend beyond the period of the implementation. An integrated NRM approaches on the other hand which promote more proactive adaptation and anticipatory approaches would be more effective in building communities' resilience to climate change. An integrated approaches will definitely promote self-reliance while at the same time protecting the natural, agricultural, livestock and entrepreneurship resource to ensure food security/ resilience to drought and overall effects of climate change.

BOMA project should continue to liaise with partners particularly the programme line ministries to provide technical support services to beneficiaries across all the locations targeted by the project actions. The participants of NRM trainings had fair knowledge and experience in climate smart nature-based enterprises which if coupled with adequate technical support it would improve on their productivity and livelihoods in beneficiary households. There is also the need for development actors involved in NRM to come together around a coherent set of strategies and implementation framework.

BOMA should mainstream a more social inclusive intervention especially in capacity building and awareness creation response in the future programming. Shared knowledge between men and women will build a steady ground for behavioural change and transformation to a more knowledgeable resilient community. It should also redesign trainings to fit inclusion. It should take into consideration target groups with hearing and seeing impairments among other forms of disability that may hinder such learning approach. Though yet to be implemented, there is stills room to adjust and meet measures addressing inclusion.

Conclusion: The lesson learned, best practices and conclusions documented in this report can serve as leads towards acknowledging the importance of the NRM interventions for enhancing climate resilience in ASALs of Kenya. Finally, addressing the issues of NRM capacity among women who plays a critical role in influencing NRM policies, conservation and management practices was found to be critical as confirmed by project participants. The contextual risks which include COVID-19, outbreak of desert locust, ongoing drought situation in Samburu County are discussed in the report. Other programmatic risks such as lack of Complaints and Feedback Mechanisms (CFM) have been highlighted to enhance accountability, transparency, empowerment, monitoring and evaluation, and programme improvement, and to provide early warning of any impending challenge in future NRM interventions.



1. Introduction

1.1 CJRF Program

In September 2020, BOMA project initiated a programme with an objective to increase BOMA's capacity to embed best practice NRM and climate resilience learning in its programs, and also to enhance the capacity of 2,100 BOMA women to influence NRM policy and practices and gain access to climate, NRM and resilience information and services. The NRM interventions which was a major part of the program were layered on Rural Entrepreneur Access Project (REAP) activities aimed at increasing and enhancing capacity of REAP participants through trainings, set up and management of nature-based enterprise and capacity development. This was to ultimately enable targeted persons to participate in the management and governance of local NRM institution's affairs and activities including institutional governance, and decision-making processes.

The 36-months strategic project was funded through Climate justice Resilient Fund (CJRF) and was implemented in partnership with Samburu County government department of Natural Resources, Water, and Energy, and collaboration with relevant government agencies, non-state actors and local institutions. The key partner institutions were Community Forest Association (CFA), Water resource user Association (WRUA), grazing land management committee, and community group ranches among other stakeholders. At county level, BOMA partnered with Kenya Forest Service (KFS), Kenya Wildlife Service (KWS), National Drought Management Authority (NDMA), Ministry of Environment water and Energy, and County department of livestock production. This in addition to non-state actors which include Food and Agriculture organization (FAO), Mercy Corps, and IMPACT, Christian Aid and Caritas *Samburu*. The private sector investment actors involved in the project were Samburu Beekeepers producer and marketing cooperatives, Samburu Dairy Producers and Marketing Cooperative and *Ngarri* tree Nursery.

In the course of project implementation, BOMA project used customized modules and experiential learning tools to deliver micro-trainings to build capacity of women enrolled under REAP - to enhance their knowledge on sustainable use and management of land, water, and pasture. To achieve this, BOMA collaborated with the Samburu County government extension officers from the departments of livestock production, water, and environment in the respective wards to leverage their technical expertise in delivering the trainings and supporting the women to come up with resource use maps and plans. The training modules focused on resource mapping, communal land use planning, water resource management, climate change adaptation, conflict management and drought early warning as critical areas in ensuring peaceful co-existence and sustainable use of resources among the communities¹.

The trained participants are the change agents that lead and influence their communities in advocating for NRM practices. Through the two-year mentorship period, the intervention has also improved linkages between the women, their leaders, community organizations and County government. These interventions ensured that participants are part of the evolution in participatory management of land, water, and pasture². The programme has also promoted the principles of climate Justice which include but not limited to gender equality and equity, participatory decisions making in climate change, transparency, and accountability, respect for human rights and protection.

1.2 Study Rationale

BOMA together with other partners working in the Arid and semi-arid lands (ASALs) of Samburu County have supported projects on NRM and climate change resilience. However, lessons learned have often not been documented and properly communicated. The available project reports tend to get lost, and lessons learned, and good practises are forgotten. There is no doubt that many practitioners shy away from reading lengthy reports generated in most NRM and climate change programmes in ASALs. The paucity of highly synthesized lesson learned, and documentation of good practices undermines the effectiveness of funded projects. It is against this background that BOMA project commissioned this study. The lessons learned, and good practises documentation are captured in the integrated natural resource management and graduation model (REAP) program in the dry lands of Kenya, as it focuses on community NRM, climate-supportive and climate-resilient livelihoods and women's rights.

Natural resources are a critical component of ASALs livelihood systems, with most of the pastoralist like the case of Samburu's is anchored on natural resource base. Given the high reliance upon a limited natural resource base and impact of climate change, the productivity of these resources such as land, water and pasture are critical for the overall wellbeing of women and their communities. Equitable access to and sustainable use of these resources is one way of unlocking the development potential in ASALs. Sustainable utilization of NRM by communities through climate smart nature-based enterprises in a pathway to climate change adaptation.

This lesson learned report document how REAP's participants, specifically women were able to apply the knowledge and skills gained

through this CJRF project interventions. Best practices on grazing management systems and improvement, water use and storage, livestock health and nutrition, business development services targeting livestock owners and other homegrown innovative climate resilient approaches are also documented. The learning and documentation exercise has explored the various overreaching themes on motivations for engaging in NRM activities, community, stakeholder and government engagement and ownership, transformational change that include policy reforms, gender dimensions, capacity development, financial and socio-economic sustainability, collaboration, innovation and as well as opportunities for sustainability of NRM activities.

The Organisation for Economic Co-operation and Development (OECD) defines lessons learned as "Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations" (OECD, 2002)³. Though "Best Practise" is defined as example of outstanding contributions to improving the living environment. In this report, it has been

¹ BOMA CJRF participants field practicum report

² BOMA CJRF project proposal

³ Organization for Economic Co-operation and Development (OECD)

used to mean successful initiatives which have a demonstrable and tangible potential impact on improving people's quality of life; and are the result of effective partnerships between BOMA project and partners. The project initiatives which are also socially, culturally, economically, and environmentally sustainable.

1.3 Project Theory of Change

The project theory of change (ToC) assumes that if women are trained on NRM practices, rights and policies, sustainable livelihoods, and access to savings as well as establishment of inclusive Environmental management and coordination, then this will contribute to increased knowledge on their rights and NRM policies, and transformative capacities. Women will also have increased awareness and adopt NRM practices that enhances climate resilience capacities.

Similarly, the theory proposes that access to savings and sustainable livelihoods will champion household food security and coping capacities of the vulnerable women. In addition, it will ensure women have higher and diversified incomes to warrant adaptive capacities. These will in turn ensure that women have increased autonomy and control over household decision making and resources. Ultimately, project communities become more climate resilient.

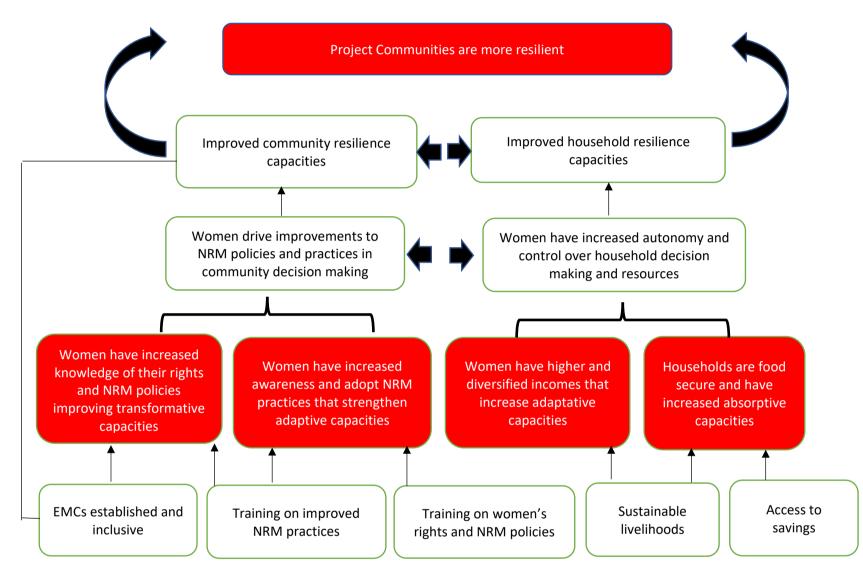


Figure 1: Project Theory of Change

Appendix 1 present detailed activities matrix implemented directly with pastoral women and stakeholders in Samburu, where BOMA project and partners provided technical support on local NRM policy and practice to build climate resilience capacities.

Critique: Whereas the theory clearly indicates the inter-linkages and pathway for the desired change, the proposed modalities to achieve the required outcome can be affected by various factors in the course of implementation. Some of these factors observed in Samburu include but not limited to restriction of movement as a result of COVID-19 outbreak; coordination of activities and - risks assumed e.g., socio-economic practices of the targeted group. It is therefore important to note that having different theories needs to be explored to enrich programme learning. It could be useful to explicitly choose a number of different 'theories' to explore, as they can suggest different pathways to influence outcomes. Developing two or three pathways and triangulating between them can become a point of learning and reflection to open up new approaches for innovations.

2. Methodology

During this exercise undertaken between February and March 2022, both qualitative and quantitative approaches were used to collect data and information. The documentation followed a deductive analytical process where conclusions on lesson learned, and best practices were drawn on the basis of information gathered through different data collection techniques described below.

2.1 Qualitative approaches

The study utilized four methods to gather qualitative data namely: Key informant interviews, literature review, focus group discussions and observation.



2.1.1 Literature review

The study employed in-depth review of various relevant internal documents. The rational was to have a deep background insight into the project proposal, implementation progress updates, project's Theory of Change (ToC) and the various approaches and strategies used in the implementation. The documents reviewed are in Table 1.

Table 1: Document Reviewed

No.	Documents reviewed
	✓ NRM field practicum report,
	✓ NRM policy assessment updates/ reports,
	✓ 2021 Report to the Climate Justice Relief Fund,
	✓ CJRF project learning agenda.
	✓ CJRF Project proposal
	✓ CJRF end line evaluation Report,
	✓ BOMA impact measurement framework

- ✓ BOMA performance insight and data tracking framework.
- ✓ Samburu County Policy Ecosystem 2016/2017 Budget Priorities
- ✓ Samburu County, second Integrated Development Plan (CIDP 2018-2022)

2.1.2 Key Informant Interview

The semi-structured individual interviews were conducted with key informants who had in-depth knowledge of the project. The KII respondent were the key project BOMA staff, representatives from different government institutions who were involved in the project, non-state partner organizations representatives. In total, seventeen (17) interviews with personnel from BOMA project, Samburu County government, partner NGOs - IMPACT, private sector, and Community NRM associations, and one UN agency - FAO-Kenya was undertaken as indicated in the Annex 3.

Table 2: Categories of organizations

GOVERNMENT	NGOS	COMMUNITY ASSOCIATIONS	UN AND OTHERS
Ministry of Environment, Water and Energy	BOMA Project	Samburu Conservator	FAO - Kenya
National Drought Management Authority- NDMA	IMPACT	Community Forest Association –Naramat CFAs	Mentor
County Department of Livestock	Mercy Corps	Samburu Dairy Producers and Marketing Cooperative	
Kenya Forest Service -KFS		Samburu Beekeepers producer and marketing cooperatives	

2.1.3 Focus Group Discussion

To corroborate information from Household's survey and KII, a total of Six (6) focus group discussions were held with direct participants of the project on various aspects of implementation. These were done to gauge their perception with regards to the progress and impact of the NRM trainings. Such perception expressed both individually and in group context were useful in the evaluation particularly in assessing immediate and potential long-term impact of the project to inform scalability. The selection of groups for FGD was purposive, participants were drawn from the savings groups from different locations in Samburu East and Central who directly participated in the NRM trainings.

The selection of the FGD groups adhered to the COVID-19 containment measures of not having more than ten (10) individuals per group.

Discussants were to wear masks and keep social distancing as well as frequent sanitization. The study held discussions with the following groups:



Table 3: Groups for FGDs by sub-County

Sub-County	Location	Туре	FGD Language	# Females	# Males	TOTAL
Samburu Central	Shaaba	Women savings group	Samburu & Swahili	6	0	6
Samburu Central	Shaaba	CFAs	Samburu & Swahili	9	3	12
Samburu Central	Lodokejek	Women savings group	Samburu & Swahili	6	0	6
Samburu Central	Lodung'okwe	Women savings group	Samburu & Swahili	8	0	8
Samburu East	Wamba	CFAs	Samburu & Swahili	3	4	7
Samburu East	Wamba	Women savings group	Samburu & Swahili	6	0	6

2.2 Quantitative approach

For the quantitative approach, the study utilized the household survey.

2.2.1 Household Survey

A survey constituted the primary means of collecting quantitative information on the key indicators cutting across all thematic areas. The survey employed purposive approach to target REAP savings groups who participated in NRM trainings. The survey asked relevant questions that investigates best practices and lessons learnt across all thematic areas. The sampling methods ensured adequate sample was obtained in order to capture information with sufficient precision. The sample size was calculated using standard method based on key dichotomous variables to be determined.

To determine the sample size, the following formula was used:

Where:

n = required sample size

t = confidence level at 95% at standard value of 1.96

p = Proportion of Population reached by BOMA through NRM trainings in Samburu upon the population of vulnerable Women targeted.

M =margin of error at 5% at standard value of 0.05

The study worked with an assumption that half of the target population received NRM trainings. Hence, from the above formula, a total of 385 respondents (NRM participants) were targeted for Household Interviews, however, due to access and logistical challenges only 325 respondents participated in the household survey.

2.3 Data Analysis and Reporting

The data collected through digital data collection tool was downloaded in Ms Excel format from where analysis was also carried out. Both quantitative and qualitative data were collected. The collected data were then collated and verified in order for inferences, judgments and conclusions be made. The type of data collected allowed for various comparisons and the essential comparison was to check for consistency and coherence of information.



3. Findings

To establish lessons learnt and best practices, the study sort key information about challenges faced and how such challenges were addressed under the following thematic areas: Capacity development, Gender equality and responsiveness, Transformational change and policy reforms, Stakeholders engagement, community and government ownership, Financial and socio-economic sustainability, Risk management systems, Inter-institutional collaboration, innovation and private sector engagement and Scalable solutions. The study used both qualitative and quantitative approaches to establish and document lessons learnt and best practices for the programme.

The study assessed how inclusion and *Do No Harm* principle, pragmatic coordination of activities during the intervention were mainstreamed as a proxy- measure of Lessons learnt and best practices. In addition, Lessons learnt have also been drawn from the results – intended and unintended discerned from the intervention as opposed to the project *Ab initio*.

N/B: It is important to note that the determination and establishment of lessons learnt, and good practices are in relation to inferences made from the study key findings nexus to the predetermined programme thematic areas and not overall program end results. Hence, participants involvement in the study were to assist in corroborating pertinent issues and concerns regarding level of engagement, coordination of training and adherence to DAPs framework (dignity, Access, participation and safety during the training to inform good practices.

3.1 Capacity Development

The first objective of the CJRF/NRM project was to increase BOMA's capacity to embed best practice NRM and climate resilience learning in its programs. Capacity development is central to the agenda of NRM in ASALs of Kenya, including Samburu County. Effective capacity development needs to value and draw upon different value and knowledge systems (e.g., scientists, policymakers, media commentators, indigenous peoples). To address NRM knowledge gaps and its drivers among REAP beneficiaries and create awareness of women's right to NRM, BOMA Project trained 48 officers that composed of 5 Field Officers, 17 mentors in Samburu East and Central and 19 technical Staff on fundamentals of climate change and adaptation, principles of natural resource management as foundation for understanding the intersections between Climate Resilience, Livelihoods, and environmental conservation. The trainings were informed by learning needs assessment (LNA) for the community-based mentors and participants which in turn informed development of training curriculum as discussed with the BOMA project staff.

Discussants with key informants indicate that the training exposed BOMA project staff to the required knowledge and information to effectively champion climate justice, natural resources conservation, women rights, and support of climate resilient livelihoods through REAP. The training changed the mind set on conservation, management, and sustainable use of natural resources within the area of operation. The mentors that were trained and provided with motorbikes to ease their navigation to the training sites, and and field officers interviewed responded that they were advised to incorporate NRM messaging during business mentorship and coaching sessions during the trainings. Similarly, interview with a mentor in charge of groups from *Lodokejek* and *Kirimon*, established that community members were eager to join the trainings including the non-BOMA project participants.

In the FGDs, the members reported to have learnt about rangeland management, water and environmental management practices and tree nursery management. There is no doubt that capacity development opportunities that engage and mutually educate local community members on NRM practices can be a useful strategy to achieve the desired outcomes of climate resilient communities. Some women were able to switch to new business to adapt on the current conditions. For example, during market closure because of disease outbreak brough by change of climate, they switched to a new business including establishment of new one. The training gained also led to establishment of nature-based enterprise such as apiculture, nursery establishment, and *Aloe species* production. At household level, an overwhelming 99% of respondents reported having satisfied with the trainings and achieved fair knowledge in NRM and women's role and rights in environmental conservation and management.

Level of satisfaction on NRM training and

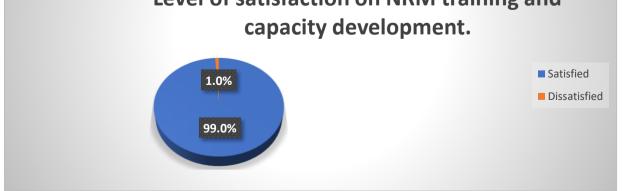


Figure 2 Participants level of satisfaction on NRM trainings

Key Lessons



- The use of community-based mentors as trainers enabled project beneficiaries to develop a lot of interest and actively participate in the NRM initiatives. It allowed for easy expression of the training items into the participants' local language. Being one of their own, it allowed remorseful atmosphere for mutual understanding and mono-cultural communication throughout the training. These therefore improved participants' interest and reduced miner prejudices during the trainings. From the six FGDs conducted in Samburu County, the discussants reported having a lot of interest in learning NRM practices conducted by the mentors. For instance, the CFA in *Naramat* through their chairperson reported having gained a lot of experience in one eco-tourism they attended in *Garbatula* in *Isiolo*. The study also established that both men and women who are non-BOMA project participants are reaching out to the committees to learn and share knowledge in NRM practices.
- Samburu communities are strategically intertwined with indigenous traditional knowledge in natural resource management due to their continued interaction with dry lands resources as observed during the field exercise. In the capacity building sessions by the mentors, discussion with the KII respondents indicate that there were attempts to incorporate the indigenous NRM practices in the trainings, though the scope was limited to pasture and grazing management. Traditional seasonal grazing management patterns by pastoralist normally ensure that certain areas are left at certain times of the year or season to allow regeneration of certain plant species that are palatable for the livestock, or to minimize use of certain species that are used for rituals and ceremonies such as boys' circumcision ceremonies and age-set naming ceremonies among other uses⁴.

3.2 Gender Equality and Responsive Interventions

The CJRF/NRM project was also designed with an objective to increase the capacity of 2,100 BOMA women to influence NRM policy and gain access to climate, NRM and resilience information and services. In eliminating social exclusion of women and bridging the gender gap in leadership and participatory community resource management, the BOMA project targeted and trained vulnerable women on their right in NRM, therefore, promoting gender equality and responsive interventions in NRM creates sustainable benefits for households and communities while advancing human wellbeing outcomes^{5'6}. The project training sessions for women were designed to build their capacity in influencing NRM policies and gain access to climate resilience information and services as well as creating awareness of avenues to explore while advocating for NRM.

In the household survey, BOMA project trained women reported awareness of various structures they can join to cascade their knowledge in NRM. Women that were aware of Forest Management Committees constitute 82.9%, 65.1% were aware of grazing land management committees, 56.4% were aware of the WRUAs while only 5% were not aware of any local NRM structures. In the six FGDs conducted, the discussants reported awareness of forest management committees. The study established that project participants are currently joining and registering in the local NRM management committees and associations for policy influencing and taking leadership roles. In addition, there has been improved representation of women in leadership roles in the local committees. In the existing NRM committees (CFAs and Water User Associations) a total of 404 women officially got registered as members of various NRM committee and user right groups including taking management committees leadership position.

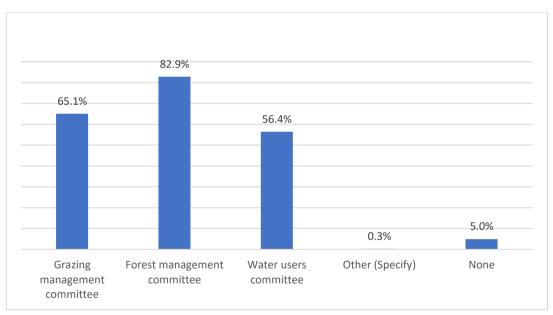


Figure 3 Trained women awareness on various NRM structures

Some of the sentiment gathered from the various FGDs conducted on the role of the project in ensuring gender equality were as follows.

"The project has greatly empowered us, initially we were dependent on our men for everything but now we are also able to bring food unto the table. We are now able to assist with paying school fees for our children" (FGD interview with Women at Wamba)

"The project was an eye opener, and it has greatly empowered us. We are now able to buy food for our households from the savings or profits obtained from business. Provision of food was traditionally mandate of the men"(FGD interview with Women at Lodokojek)

"The project has greatly empowered us, as we have realized a tremendous change; we are now able to plant trees, do business, help our families and able to understand our rights ..." (FGD interview with Women at Shaba)

"The project helped us to know our rights and those of our child. It has also enabled us to contribute to the various household needs and imparted on us the saving skills. We are now able to share our views in the meetings and also be part of committees' leadership structures. Additionally, we are now able to sell livestock, the mandate that was previously bestowed to men...." (FGD interview with Women at Lodung'okwe)

⁴ UNESDOC 2017 - The Use of indigenous traditional knowledge for ecological and bio-diverse resource management by the Laikipia Maasai and the Samburu.
 ⁵ A Gender-Responsive Approach to Natural Resources, July 2021: <u>A Gender-Responsive Approach to Natural Resources | Chicago Council on Global Affairs (thechicagocouncil.org)</u>
 ⁶ WFP, 2018. Promoting Equal Engagement of Women, Men and Youth in Rural Resilience Programmes in Arid and Semi-Arid Zones. Field Practitioners Guide No. 5. Rural Resilience Programme, World Food Programme, Nairobi.



Key Lessons

- Inference from KII indicate that to promote gender equality and responsive interventions in NRM programmes, it is important that gender considerations are explicitly spelled out in the project documents, this will ensure that women are internationally targeted by the project interventions. Since women are disproportionately affected by climate change impacts on NRM, interventions that amplify women leadership roles, rights and opportunities as designed in this project ultimately could reduce their climate change vulnerability.
- From the project documents reviewed, the needs for women with hearing and seeing impairment were not factored in the training material and delivery approach used. Therefore, there's need to put structures in place that do not disadvantage any member who falls within the beneficiary bracket in the community.
- In addition, the involvement of all the community members during the project entry point in the community through the elders and local leadership is critical. As Mr. Ng'ang'a from Samburu County Department of livestock and fisheries put it "There's need to involve the entire community. Most of land in this area are communal and currently, most committee are almost 80% dominated by men. Therefore, the project sustainability will be realized by engaging the entire community....."

3.3 Transformational Change and Policy Reforms

During Interviews with key relevant stakeholders both from County government, partners and project staff, the evaluation discerned steady progress towards NRM practices. However, outbreak of covid-19 undermined timeframe through which the training activities were to be conducted. BOMA requested additional time to complete the training programs while adhering to the pandemic containment measures – these were further undermined by the prolonged drought that severely affected participants commitment to trainings being a pastoral community. As a matter of fact, mentors kept meeting completely new faces whenever they scheduled for NRM trainings. During the FGDs in Shaaba, participants reported having acquired more knowledge on REAP than on NRM since they attended more trainings in REAP programme. The Push and Pull approach adopted by BOMA in poverty alleviation programme created a trajectory for policy reform and positive transformation through the lenses discussed below.

Development of NRM training curriculum: BOMA through the NRM project steering technical committee developed and shared across partners an NRM training curriculum. The curriculum was used to develop NRM training topics that was used to train Participants. BOMA planned to translate the content of the curriculum/training module, create an audio lesson and share with participants through electronic media devices. However, the curriculum is yet to be translated into either written or audio local language to be shared across the participants. There is need for more time allocation for BOMA to achieve that since the implementation time frame was affected by the Covid-19. This will showcase BOMA capacity in using media to create awareness and building capacity of vulnerable women in Samburu County.

Capacity development on diversification of livelihood: The training program has addressed major knowledge gaps among the target groups. NRM training participants during FGDs in Wamba reported to have had enough skills in venturing to alternative climate smart enterprises. Therefore, the trainings have enhanced innovation and transformation from relying on livestock production to diversification of livelihood. The participants can now venture into other climate resilient nature based businesses. This includes Gums and resins harvesting, Apiculture, tree nursery productions, Forage production and making of animal feed blocks from *prosopis juliflora*, artisanal work, making briquette and aloe Vera production.

Advocacy for NRM policy reforms: The BOMA push approach did not only create pathways for transformation among participants but also to the host County government. Emphasise on government stakeholders' involvement was strategic advocacy by BOMA for the adoption of feasible natural resource management and climate change policies and practices. During interview with key informant from FAO and NDMA, the evaluation discerned three main policies having been adopted by county government. They include Samburu County Rangeland management policy; Samburu County Forest Conservation policy and Samburu County wetland/water tower conservation policy. More than 96% of respondents surveyed reported having been engaged in NRM policy awareness creation while 88% were familiar with policies on EMCA.

Transformational Change and Policy Reforms Yes No					
Familiarity with the policies and practices under the	88.0%	12.0%			
Environment Management and Coordination Act (EMCA)?					
Engagement in NRM policy awareness creation?96.0%4.0%					

Table 4: Transformational Change and Policy Reforms



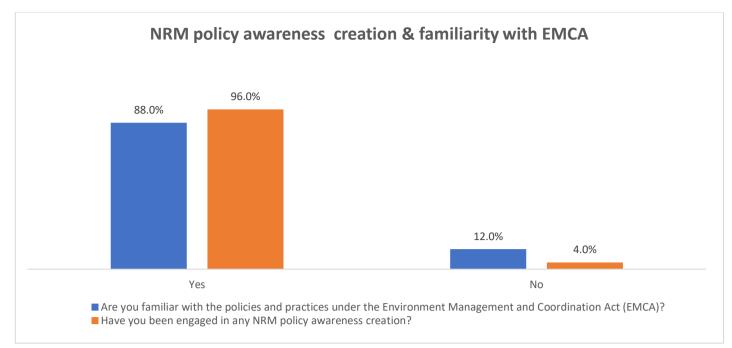


Figure 4: Natural Resources Management Policy awareness creation and familiarity with EMCA

Key lessons

- Currently, the county government of Samburu is in the process of adopting climate change policy. Some of the policies under county assembly review for Government adoption are Samburu County Rangeland management policy, Samburu County Forest Conservation policy and water tower conservation policy among others.
- Engagement of community, especially women from the onset with the right livelihood diversification trainings and knowledge for effective climate adaptation and transformational change informed best practices. In the six FGDs held, NRM participants expressed their interest in climate smart nature-based enterprises for livelihood diversification. For example, some of the project participants who ventured into tree nursery in partnership with KFS, were guaranteed purchase of their seedlings. A group reported to have their seedling purchased the previous season before the onset of the drought by KFS. However, the ongoing prolonged drought (nearly more than a year) have discouraged purchases of the seedlings for planting by the private individuals and the Kenya Forest Service as reported in the FGDs.
- Active participation in local level technical forums provide an excellent opportunity to influence policy reforms. The discussion with two CFAs during the study reaffirmed BOMA NRM trained women in environmental and water resources conservation campaigns in the community. The policy reforms around rangeland management, forest conservation and water tower conservation which materialized in the course of this project intervention will ultimately trigger far reaching positive outcome towards the community becoming more climate resilient. BOMA played the critical role in creating awareness and conceptualizing such policies among women and community local environmental management structures such as the CFAs.

3.4 Stakeholder Engagements and Ownership

In the CJRF project, BOMA Project engaged and collaborated with relevant stakeholders throughout the project implementation for ownership and better governance. The private sectors such as Samburu Dairy Producers and Marketing Cooperative, and Samburu Beekeepers producer and marketing cooperatives in the project were engaged for commercial reasons. Existing community structures such as Community Forest Associations (CFAs), Water Resources User Associations (WRUAs) and Women Forest scouts were also engaged in the initiatives as an important mechanism to ensure natural resource management sustainability. Ideally government agencies should take the lead in coordinating and supporting NRM programs. This is important for continuity and sustainability.

The County government line ministries and agencies such as NDMA, KFS, KWS, Department of Environment, water, and energy played a critical role in the implementation of the project. The government also provided the overall coordination with other key stakeholders engaged in NRM including the establishment of a joint technical steering committee. BOMA leveraged on county line ministry departments such as County NRM officers with robust expertise to deliver the trainings to both mentors and the target participants. These informed the strategy for sustainability, government, and community ownership upon BOMA exit.

For effective liaison, synergy and networking as well as complementarity required in the NRM projects, The study through KII established that BOMA Project partnered with a number of NGOs that included Mercy Corps, IMPACT, and UN FAO. These agencies also provided material input to same beneficiaries/communities that were trained by BOMA for complementarity of activities. For example, during interviews with key partner stakeholders, the study realized that IMPACT, Mercy Corps and FAO supported the communities by providing beehives, rich soil for tree nursery, Environmental and soil conservation learning and Watering Bowsers respectively for synergy. The partnering agencies also provided corresponding training on their interventions to the communities. FAO majorly supported the CFAs and women forest scout volunteers to engage in forest protection and monitoring. During the FGDs with CFA in east, the discussants reported having registering women trained by BOMA into the CFA an environmental conservation group. The CFA group interviewed are engage in tree nurseries establishment and tree planting as well as nurturing.

As shown in Figure 5, more than 97% respondent from the household interviews reported that they were satisfied with the contribution and roles of the county government and partner stakeholders in safeguarding and securing natural resources. Similar sentiments were echoed by members of the various FGD conducted and also the individuals who participated in the KIIs.



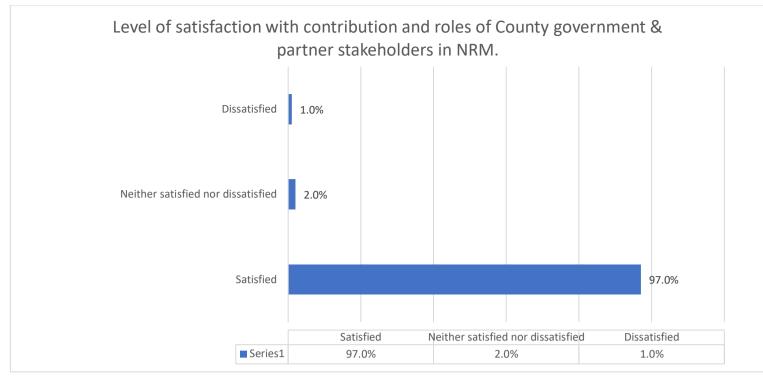


Figure 5: Stakeholders level of Satisfaction in NRM project

Some of the responses given by the respondents on the level of satisfaction are shown in the excerpts below:

"The county government under National Agricultural and Rural Inclusive Growth Project (NARIGP) and other stakeholders such as FAO has greatly assisted us. We have proposed for more support/trainings (esp. Financial trainings) and provision of water/solar and, be assisted with marketing...." (FGD interview with Women at Shaba)
"We are grateful for all the stakeholders for their support. We would like to really appreciate BOMA and our county government for providing us with the training and the vital resources. Also we are grateful for the private individuals who hired more scouts to protect the forest and ACTED for training us on water harvesting...." (FGD interview with Women at Lodung'okwe)
"Both the county and national governments were fully involved. The county government. being involved through ministry of environment and National Agricultural and Rural Inclusive Growth Project (NARIGP) while national government through KFS. The county government under National Agricultural and Rural Inclusive Growth Project (NARIGP) greatly assisted us in fencing of the seedling place/nursery and also provided water tanks......." (FGD interview with CFAs members at Wamba)
"The presence of different stakeholders drawn from different agencies such as forest personnel's', KWS, County Commissioner, chiefs and county government officials have immensely contributed to the prudent conservation of the forest......" (FGD interview with CFAs members at Wamba)

Reviewed literature shows that engagement of key natural resource management stakeholders is increasingly being emphasized as a way to address integrated natural resource management issues and implement adaptive management strategies^{7,8}. Collaborative engagement and management of NRM are intended to bring ownership, reduce resource-based conflicts, facilitate learning, and increase consensus among stakeholders⁹.

Key findings from KIIs and 6 FGDs on the utilization of existing local structures indicate that their willingness to absorb, accommodate and share learning with NRM training participants provided best pathways for women to engage in these existing local structures. All BOMA NRM trained women respondent at the time of the study reported to have fair knowledge on NRM and corresponding policies. Local NRM structures having been auxiliary to the county government for example the women forest scouts are fully aware of the basic principles of forest conservation and management. Such structures were the CFAs, WRUAs, Water user groups, Tree nursery and bee keeping and marketing groups, grazing land management committees, Volunteer women forest Scouts/guards and savings groups who have been registered and are entitled to various social, political and economic opportunities. These has provided a sense of self-worth among BOMA NRM trained women as reported by in the FGDs.

Key lessons:

The lack of joint coordination framework and shared work plan across partners undermined efficiency and effectiveness of the NRM programme. Lack of shared coordination framework and implementation plan did not allow for county government interdepartmental sense of responsibility. In addition, it led to duplication of activities to same beneficiaries by some partners. The

discord between NRM training curriculum and REAP training module contents made it difficult for mentors to facilitate two different inter-linked training programmes.

Adequate multi-stakeholder technical forum created for coordination for local, county and national NRM stakeholders is key in ensuring that existing initiatives are supported and discussed at the local level beyond the project duration. The county level technical working group initiated is critical for this process.



⁷ IUCN – May 2021: Stakeholder Engagement in IUCN projects

⁸ OECD, 2017, Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector; OECD, 2015, Stakeholder Engagement for inclusive Water Governance. ⁹ FAO - An introduction to natural resource conflicts, collaborative management and sustainable livelihoods. Link <u>Negotiation and mediation techniques for natural resource</u> <u>management (fao.org)</u>

Leveraging on synergies with development partners and strategic involvement of government line ministry provided a pathway for sustainability. Consultative meetings and creation of a joint project steering committee with partner stakeholders allowed for information sharing and learning. Building the capacity of indigenous community members to train participants fast-tracked the learning progress since they share not only common dialect but also cultural practices.

3.5 Financial and Socio-economic Sustainability

This project in its Theory of Change assumed that if all the activities are implemented as designed, women will have higher and diversified incomes that increases their adaptive capacities for financial and socio-economic sustainability. The BOMA project trained the women savings groups on NRM, and more women participants had joined the village savings groups at the time of this evaluation. Through the savings group representatives in the FGDs conducted, women reported to have championed leadership positions which in turn has improved women's voices and advocacy in NRM, asset ownership and community development. Previous studies reviewed show that women saving group programmes have emerged as one of the most powerful tools to draw together the many vulnerable people within communities¹⁰. Because they are controlled and operated by community members themselves. Savings and loan programmes build a community's own resource base for socio-economic growth and financial sustainability.

During the survey 90% of the respondents agreed that currently women have championed climate smart nature-based enterprises. Those in the savings groups have access to credit and loan services to start tree nursery, Bead making, forage production and making of animal feed blocks among others. Those who still don't believe that women own most of such enterprises were less than 8% while those who reported not aware were merely 2%.

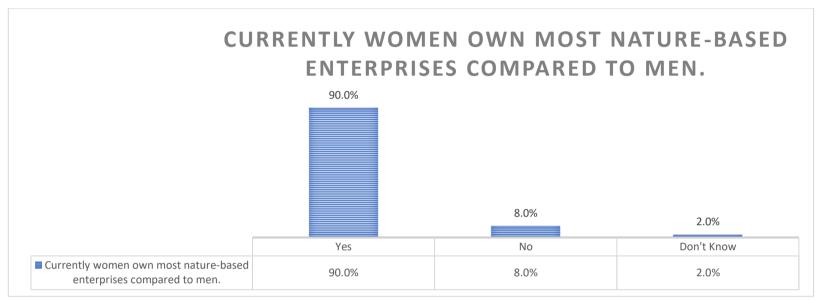


Figure 6: Women owned nature-based enterprises compared to men

Discussion with the project participant indicates that formation of registered savings groups has provided a trajectory for financial and asset ownership by the NRM trained women. The discussants during FGDs reported to have joined various savings groups where they have access to loans at affordable interest rates to improve and or begin a climate smart enterprise of their choice. This has improved the socio-economic wellbeing of the group members. During FGD engagement at Wamba, the members affirmed that they were able to access loan at a constant interest rate of 5% and use the money to meet their family needs and also use it to practice diversification in both their businesses and agriculture. The FGD group conducted at other locations also ascertained that they were able to access loans from their saving groups and the pay later at a lower interest rate.

The targeted Samburu community are highly dependent for their livelihoods on natural resources, which include forests, pasture, land, and water. These resources are a major source of a variety of goods including food, fodder, building materials, honey, fuel and medicinal plants among others, which are important sources of sustenance or income for many these people. Some of the goods provided by natural resources are traded in formal markets in Maralal for income. These has been accentuated through household survey where respondents immensely agreed on having improved and or average personal wellbeing compared to before the project.

Well-Being Dimensions	Respondents			
	Satisfactory	Average	Deprived	Total
Livelihood diversification and management	47.0%	52.0%	1.0%	100.0%
Knowledge of women's right in NRM and life skills	48.0%	52.0%		100.0%
Access to water and pasture for livestock	38.0%	58.0%	4.0%	100.0%
Knowledge and skills on Entrepreneurship	40.0%	59.0%	1.0%	100.0%
Environmental management and quality	34.0%	66.0%		100.0%
Access to loans, incentives, and credit services	35.0%	61.0%	4.0%	100.0%
Safety (socio-economic and political)	34.0%	62.0%	4.0%	100.0%
Social connection and social protection nests	34.0%	63.0%	3.0%	100.0%
Civil engagement	34.0%	64.0%	2.0%	100.0%

¹⁰ Government of Kenya - Ministry of Public service and Gender (MPSG) Women Economic Empowerment Strategy 2020-2025



The market linkages were created with the various private investment's vehicles, where the trained women registered with the SACCOs. Private investment vehicles included but not limited to the Samburu Dairy Producers and Marketing Cooperative, Samburu Beekeepers producer and marketing cooperatives, Forage and animal feed block production and bulking groups. To fully achieve market linkages, BOMA recruited and trained cluster linkages officer. However, this was affected by the staff turnover. However, the ongoing drought in northern Kenya has severely affected direct and active coordination of the trained women with private investors.

Key Lessons

- The drought has severely affected the savings patterns of the NRM trained savings group as discussed in the FGDs. At the time of evaluation, very few savings groups were receiving new members as opposed to during rainy seasons. Most of the participants have resorted to drought crisis coping strategies by minimising expenditure during the lean season.
- The NRM trainings were based on the premise that rains would return at the end of lean season and production of tree seedlings, Livestock fodder and forage production and animal produce would flowerish to provide income to beneficiaries which was not the case at the time of evaluation. The lean season extended beyond the anticipated limit and therefore ravaged the practical application of the skills achieved by the women from the trainings. Secondly, livestock production would increase and the sales thereof.

3.6 Risk Management

The BOMA Project developed a strong partnership with County Government especially the NRM line ministries as risk management strategy. The Samburu County Government is establishing community environmental management committees (EMCs), to serve as platforms for community engagement to implement the Environmental Management and Coordination Act. The Ministry of Environment, Natural Resources also has a plan for a community-based resource center for climate change in Samburu County, the initiative if supported will also help educate the communities on climate risks.

During the project implementation, there was severe and prolonged drought condition in the entire Samburu County which impacted negatively the NRM trainings. For example, in some areas, the discussants from the FGDs reported having been moving from one area to another in search of pasture and water for their livestock. This made it difficult to ascertain the commitment to learning by participant during the training period. Some of the participants attended only one training session while others did not attend any singly training. As drought risk adaptation strategy to drought, the community were trained on pasture, water, and grazing management to complement their long-held traditional knowledge and skills on natural resource management.

The enforced lockdowns, movement restrictions, stay at home messages and containment measures as a result of COVID-19 pandemic delayed the start of project implementation. During interview with key project coordinators, the study realized there were hick-ups between the project inception and actual implementation due to COVID-19 containment measures from the ministry of health and it took relatively longer time to re-establish the implementation processes.Because of COVID, the in-person meetings became impossible. Suddenly, the CJRF project team had to adapt quickly. The team had to utilize video conferencing technology to continue with regular meetings with key stakeholders to keep the projects on track. This challenge posed by COVID crisis led to shortage of time within which the training programmes were to be delivered. BOMA requested for more time from the donor to implement the training programme through to January 2022 to ensure full achievements of the programme expected results.

Desert locust invasion: the abrupt desert locust invasion in addition to the extreme climate conditions further slowed down the start of NRM training program. The discussants in the six FGDs held reported that they could not attend nor fully concentrate in the trainings when their livelihoods were at risk of destruction by desert locusts. In addition, the chemicals that were used to control the desert locust also killed their bees among those who ventured in apiculture. This prompted them to move to further areas in search for pasture and water for their animals. This protracted situation of perverted hazards further strained the smooth flow of training programs.

Key Lessons

- At the time of the evaluation, some groups during the FGDs especially in Samburu East target areas reported to have only attended one training session. Such groups were not as much knowledgeable about the contents of the training curriculum as those who attended both the trainings and the refresher recaps. In the FGDs conducted, some of the group members were barely aware of the NRM curriculum contents. It is therefore clear that one training session was not enough to cover all the training lessons and was insufficient for the participants to fully grasp and understand the concept of Climate change and natural resource management.
- BOMA adhered to the ministry of health covid-19 containments measures and protocol when program resumed. Each group trained did not exceed ten participants. During the discussion with the FGDs, the discussants reported that, social distancing, wearing of Masks and Sanitization were emphasized by the mentors.

3.7 Inter-Institutional Collaboration

In a bid to enhance collaboration between partner institutions, BOMA Project took a proactive and strategic involvement of key partner and government institutions in NRM capacity development. This was evident through the key partner stakeholder representatives interviewed during this lesson learning documentation. BOMA sourced a lot of learning from state and non-state institutions during the implementation of NRM capacity building program. Government institutions such as National drought management authority and Ministry of Natural Resources, water and energy provided vital information and insights in learnings from Ending Draught Emergency in



ASAL programmes of 2012 across all the project partners. This assisted in identification and establishment of Knowledge gaps that informed the BOMA NRM training among vulnerable women in Samburu.

During the implementation, all partners contributed towards the project overall goal with county government line departments playing a key role in provision of relevant information. FAO Kenya reported to have championed the actions towards natural resources management and played a key role in complementarity of the BOMA activities. FAO and Mercy Corps in collaboration with County government created the CFAs and women Forest scouts whom they trained on environmental management practices. Similarly, BOMA targeted vulnerable women through REAP, formed savings groups and trained them on NRM practices and their rights in NRM. Even though there was no effective coordination framework during the implementation, the partner joint project technical committee were holding progress meetings and discussions on ad hoc basis.

On the other hand, Ministry of livestock coordinated the programs undertaken by the International Livestock and Research institute (ILRI) in conducting an Index Based livestock Insurance among vulnerable men and women in the targeted communities. IMPACT and ACTED provided training on Soil conservation practices and climate resilient nature-based enterprises respectively. In addition, IMPACT provided the vulnerable women with skills on sustainable utilization of Natural resources as well as providing women with beehives, and rich soil for tree nursery production, aloe Vera planting and apiculture.

At community level, the existence of Water user Associations and the Kenya Water Tower Agency (KWTA) in Kirisia Forest in conjunction with KFS and KWS coordinated with NDMA county departments to absorb BOMA trained women in the leadership roles in the respective associations. KFS played the role of providing tree seeds to CFAs in the tree seedling production and also purchasing the seedlings from the producers/CFAs upon maturity for reforestation. During interview with County government forest conservator, it was reported that the KFS previously purchased more than three thousand tree seedlings from the producers before the onset of the drought.

Key Lessons

- The project benefited immensely from the inter-agencies' collaboration. BOMA benefited from the various entities participating in the joint technical committees who brought together their perspectives, knowledge, and expertise on NRM through an iterative process of consultation and planning.
- Currently the county government department of Forest service and Wildlife service records low forest encroachment by community members. The evaluation realized that communities who were in the forest are voluntarily moving out from the forest. This has reduced forced relocation of communities out of the forest and therefore has built good relation between communities and the government.

3.8 Innovation and Private sector engagement

The BOMA project, believes in its programmes that private sector engagement is among the most powerful forces that can strengthen communities and build climate reliance. This CJRF NRM project analysis show that relevant private and cooperatives societies were actively involved in the project implementation. The private sector was engaged to provide support to the commercialization, and market linkages for sustainable utilization of natural resources.

To address the market gap, BOMA trained market linkages officers and conducted community resource mapping .Relevant existing private and cooperatives were actively involved during the programme. Such private sectors included the dairy farmers who are strategic in providing value chain to communities and targeted women in livestock and forage production. Wax manufacturing companies were not exempted from linking up with savings groups' women in *Gums* and *resins* harvesting.

Discussion with private sector partners during interview revealed that BOMA Project developed linkages with the Samburu Dairy Producers and Marketing Cooperative who are strategic in providing value chain to communities and targeted women in livestock and forage production. Wax manufacturing companies were not exempted from linking up with savings groups' women in *Gums* and *resins* harvesting. In this report, we define the private sector somewhat loosely as individuals and organizations that operate as commercial ventures.

The KII reported that engaging with private sector stakeholders' linkages from early on and throughout a project's duration can help sustain support and momentum for adaptation work over the long term. Fostering market linkages with private sector that promote empowerment of women and other vulnerable groups can help ensure long-term project sustainability of NRM initiatives.

Key Lessons

The training programme has enhanced creativity in the diversification of climate resilient livelihoods. BOMA trained women are currently able to explore various options in SMEs ranging from artisanal work, nature-based enterprises as avenues for personal developments such as table-banking and registering in SACCOs

3.9 Scalable Solutions

Both project participants and the BOMA Project staff during the FGDs and KII respectively reported to have the capacity and expertise to implement these modalities to scale having gained knowledge and experience gained in the trainings. Scalability is on the basis that natural resource management knowledge and practises learnt should be apriority especially in the future interventions targeting ASAL areas. Through stakeholders and partners KII, this study captured NRM initiatives which are of priority and BOMA have the capacity to implement to scale through collaboration with partners. The sectors and initiatives documented in table 4 by stakeholders could be explored by BOMA Project in the future NRM interventions with partners.



Sector	Initiatives for scale-up	Key contributing partners and or
		organizations
Agriculture,	Trainings in climate smart agriculture	IMPACT, FAO and Mercy corps
rangeland and	Briquette and aloe Vera production	IMPACT
Forestry	Micro-irrigation trainings and setting-up	FAO, CFAs, WRUA
	Training in Climate Smart Agriculture	ILRI
	Rangeland management	ILRI
	Promotion of livestock and non-livestock value chains and	ILRI, IMPACT and BOMA
	creating/advocacy for market linkages.	
Business	Income generation activities /Rural Access Entrepreneurship. SMEs	BOMA
	and Savings initiatives	
Livestock production	Range land management /natural Resource Management trainings	County Government (KFS, KWS, NDMA,
	and Ecotourism.	department of livestock production) and
		partners e.g. FAO and Mercy Corps, BOMA
Water	Provision of water Bowsers to community CFA in tree seedling	FAO and KFS
	production	
Gender policy	Advocacy on gender mainstreaming on development. Promoting	IMPACT, BOMA and County government.
development	women involvement in leadership and environmental conservation	
	and management.	

Table 4 summarizes the initiatives by sector with potential scale-up in Samburu County

4. Synthesis of Best Practices

Some of the project contributions and successful initiatives which have a demonstrable and tangible potential impact on improving natural resource management and people's quality of life are synthesized.

4.1 Summary of Case Findings

The good practices in this report were developed based on BOMA strategic programme management plan, levels of coordination and partner involvement, ability to manage risks and challenges. It was also based on proactive sustainability planning, level of inclusion and application of dignity, participation, and access to reduce social and cultural harm during the implementation. In addition, some best practices were drawn from all the processes that brought about success during the implementation. This involved BOMA actions towards ensuring efficiency, effectiveness, and accountability during the implementation.

4.1.1 Grazing Management

Grazing management is a practise that seek to optimize livestock production and maintain productive pastureland by minimizing overgrazing, improving forage production and increasing plant and animal diversity. Grazing, when well-managed, allows healthy pastures to be sustained, livestock to meet socio-economic requirements and other plants and livestock to flourish. Well-managed grazing techniques can reverse damage and help to restore rangeland health.

For effective grazing management, the BOMA NRM trained participants jointly with community environmental conservation associations on some of the best practices. The organization included water user associations, rangeland management associations, and Kenya water tower agency in Kirisia and Forest Scouts. The community rangeland management committees were also able to absorb the NRM participants. From this linkage created during the project implementation, the REAP/NRM women can now cascade the knowledge and skills obtained from the training on grazing management pattern, harvesting and conservation of *Acacia tortilis* pods for animal feeds in case of drought.

In the FGD discussion with women saving groups and CFA committees, the participants reported having done community resource mapping and are directly involved in grazing management control, livestock grazing planning and are fully aware of the rangeland livestock requirement for effective management. In addition, the groups in Samburu central were also trained on nature-based initiative where they learnt how to make animal feed blocks from *Prosopis Juliflora* pods as a way to manage the invasive species.

In the semi-arid and arid rangeland, recurrent drought conditions, degraded rangelands and reduced access to traditional grazing lands have left pastoral communities more vulnerable and facing severe livestock feed shortages¹¹. Building capacity of the local community on pasture management and restoration of degraded lands as a best practice is critical for improved livestock body condition and health, and reduced mortality. In addition to reduced conflict over natural resources, including water and pasture; and for the development of buffer zones for use during extreme climate events.

¹¹ Opiyo, F., Wasonga, O., Nyangito, M. *et al.* Drought Adaptation and Coping Strategies Among the Turkana Pastoralists of Northern Kenya. *Int J Disaster Risk Sci* **6**, 295–309 (2015). https://doi.org/10.1007/s13753-015-0063-4



4.1.2 Water Use and Storage

The Community water user's association, wetland management committees were reported to be the structural hubs for sustainable use of water and water resources. These committees come together on *ad hoc* basis to discuss water resources and consumption plans as well as review and develop water resources management policies. BOMA trained women have since joined these groups involved in water management.

4.1.3 Livestock Health and Nutrition

The department of livestock were directly involved and consulted at the project inception as a key partner in the project. During the interview with KII from livestock department, the evaluation discerned a strong commitment of the department in coordinating livestock extension services to specifically vulnerable female headed households as their priority. They train community members both men and women alike, on animal nutrition and health. In addition, Commitment to information sharing and creation of awareness of livestock diseases courtesy of the Livestock disease surveillance committees has enhance response against loss of livestock. The department of livestock have encouraged BOMA trained women to join the Livestock disease surveillance committees. In supplementary, BOMA women were trained on alternative livestock feeds during drought. For example, the harvesting of acacia seeds and making animal feed blocks from *Prosopis juliflora* for storage and use during prolonged drought. Since livestock health and nutritional challenges facing pastoralists are critical in Samburu, as best practice, efforts to address challenges at the community level should focus on health and nutrition education as an integral approach within the broader NRM programmes by all stakeholders implementing interventions in pastoralist areas.

4.1.4 Business Development Services

The private sector and dairy cooperative society in conjunction with county government department of livestock have a ready fodder bulking facilities within Samburu to aid purchases and bulking of fodder and forage for animal consumption. BOMA Project trained a linkages officer at cluster level to provide market insights and guide participants against exploitation by brokers and external cartels. However, not much has been achieved in terms of value chain development since the program begun at the onset of prolonged drought.

BOMA women were trained on basic advantages and disadvantages of commercial livestock offtake during drought. In the course of project implementation, the trained cluster market linkages officer was transferred to *Marsabit* County. To address the gap, BOMA recruited and trained a new market linkages officer in replacement.

4.2 NRM and REAP success findings

BOMA REAP beneficiaries who participated in the NRM training program have gained fair amount of knowledge on the fundamental principles of Climate change and NRM practices. During the discussion with FGDs selected, the discussants expressed their wish for the continuity of the training program to reach members who were not able to access the trainings initially. They reiterated having learnt and gained knowledge on the following areas:

- ✓ Basic understanding of rangelands resources and management Women were made aware on the concept of rangeland; Understanding Effects of Drought; Understanding how to prepare for droughts.
- ✓ What women can do to save and protect the rangelands. The role of women and institutionalization of natural resources governance among others. The discussants also highlighted some of the nature-based climate resilient income generating activities they learnt such as beekeeping; essential oils; ecotourism; forage production; tree nursery; artisanal mining; wild vegetables and tomatoes; and non-wood forest products.
- ✓ Organized groups: the project has also played a greater role in bringing up the women together to form organized groups which can be engaged in other similar projects in the future.

4.3 Determinant of Success

The determinant of success factors in the NRM implementation were identified which are linked to strong partnership and collaboration between BOMA, State and Non-state actors working in the targeted locations. Capacity building of the BOMA staff on NRM and REAP, Creation of savings groups and existing local structures, willingness of County government to adopt climate change policies and the two third gender policy in their programmes. Information from survey indicated optimal level of commitment by various stakeholders in NRM programmes among the targeted communities that whiffs sustainability with state actors and non-state toping the ladder by 81.6%, 78.5%, for WRUAs/WUAs and KFS respectively. These are being closely followed by NGOs at 54.2% and WARMA at 41.1% while Kenya water tower agency, financial institutions and NEMA level of commitment were reported to be at 20.2%, 9.7% and 1.9% respectively.



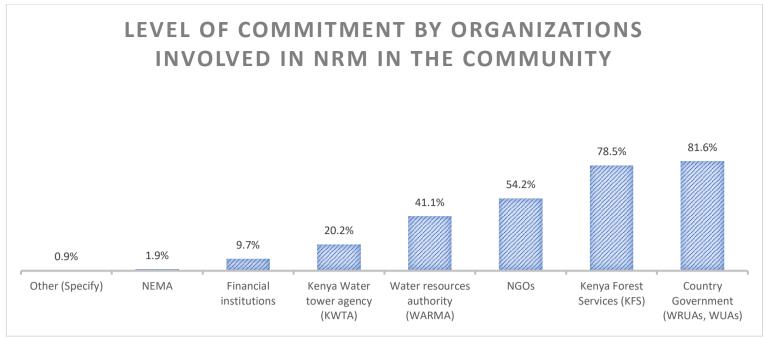


Figure 2 Level of Commitment by organization involved in Natural Resource Management

Other success determinant have been identified to include:

- Tapping into the surge capacity of the BOMA *Samburu* Cluster office and county government technical support on training.
- Community members willingness to join the Natural resource management groups and associations
- Cluster Operational capacity: BOMA obtained vehicles, office equipment, trainings for both staff and mentors to enhance their capacity for service delivery to beneficiaries in REAP and NRM learning activities.
- Incorporating private sectors such as Dairy Producers and Marketing Cooperative, involving key county government stakeholders such as the department of livestock production in the programming of NRM trainings is strategic response to ensure both community and government ownership of the programme.
- BOMA provided motorbikes to all the mentors in all the training locations. These made it easy for the trainers to easily navigate training sites. It also enhanced efficiency in delivering and coordinating training activities. In Kirisia, some of the BOMA NRM trained women who joined the forest scouts' gourds have been taken for forest guard training by the general service unit courtesy of County government.
- There was complementarity of activities among partners during the implementation of the NRM program. Each partner directly contributed to the project overall objective and improving women's role in NRM. Some of the agencies like FAO, Mercy Corps and KFS supported the initiative the CJRF project participants were trained on.
- BOMA adhered to the ministry of health COVID-19 containments measures and protocol when program resumed. Each group trained did not exceed ten participants. During the discussion with the FGDs, the discussants reported that, social distancing, wearing of Masks and Sanitization were emphasized by the mentors.
- The consultative meetings at the project inception involved both men and women. This provided a trajectory through which men were able to express their views and concerns on women involvement on NRM. This allowed men to feel part of the programme even if it was targeting women.

5. Challenges and Recommendations

These key challenges, and recommendations provide a context for the development of next steps for the NRM/CJRF programme in arid and semi-arid rangelands of Kenya.

5.1 Challenges

COVID-19 Outbreak: The Covid-19 outbreak brought about socio-economic and psychosocial imbalance among the targeted communities. The containment measures introduced by the government slowed down and delayed the start of this project. Lockdown, travel bans outside Nairobi, extension of curfew hours, accessibility of project sites, and shifting priorities in favor of immediate health measures for the staff and communities occasioned the delay in the project. However, BOMA adhered to the Ministry of Health COVID-19 containments measures and protocol when the project resumed.

Prolonged Drought Conditions: The prolonged drought conditions caused by cumulative impacts of two consecutive poor rainy seasons, coupled with the COVID-19 pandemic have severely impacted female headed household which are often disproportionately affected by hazards. Among women participants, it was reported that drought leads to reduced or irregular food consumption, with increased physical strain and mental stress, which also cause adverse health issues. Many vulnerable participants lost a lot of livestock during the drought while the poor economic conditions and high living conditions exacerbated by the previous Covid-19 lockdowns left many communities hopeless with their livelihoods disoriented.

Inadequate Joint Coordination framework: The in-adequate joint coordination framework and sharing of work plan across partners, as well as inadequate monitoring personnel dedicated on NRM training activities might have undermined efficiency and effectiveness of the NRM programme. During the interview with mentors, the study realized that during trainings, sometimes mentors could miss their schedules on the basis that the participants had joined other partner organizations activities. This coincidence and duplication manifested mostly between FAO and Mercy Corps. There could be three or more different sessions engaging similar community members on the same



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day at almost the same time. Lack of shared coordination framework and implementation plan did not allow for county government interdepartmental sense of responsibility. In addition, it led to duplication of activities to same beneficiaries to an extent. The disconnect between NRM training curriculum and REAP training module contents made it difficult for mentors to facilitate two different inter-linked training programmes.

The project joint steering committee on NRM did not establish a coordination plan for the BOMA NRM training. At BOMA level, only existing staff were trained who were running other programs alongside NRM hence had a congested program schedule to run and monitor the NRM trainings efficiently. Similarly, same mentors who were continuing with capacity building on REAP programs were expected to also deliver the NRM trainings which rendered them overwhelmed. Only two BOMA staff at the headquarters were monitoring the program. Therefore, it was understaffed.

Lack of Complaints and Feedback Mechanisms: There was no complaints and feedback mechanism. The reasons for establishing a feedback mechanism are to support accountability, transparency, empowerment, monitoring and evaluation, and programme improvement, and to provide early warning of any impending problems. This was a challenge in the NRM/CJRF project, where beneficiaries had not established channel for complaints or to suggest how to improve future interventions. Feedback mechanisms are risk management mechanism and are important mechanism for detecting project issues, challenges, and shortcomings which could have been avoided.

It is important to note that there were no clear records of the number of NRM participants who benefited from the trainings and whether the participants attended expected number of the training modules. During the KII with trainers, the study established that there was no proper record of specific individuals attending NRM training sessions nor attendant roster.

5.2 Recommendations

In general, BOMA project should adopt integrated NRM approaches to respond to climate related challenges effectively. The approaches like layering NRM on REAP cohorts are short-term and are meant to cover the lean season with the hope that the effects transcend beyond the period of the implementation. An integrated NRM approaches on the other hand which promote more proactive adaptation and anticipatory approaches would be more effective in building communities' resilience to climate change.

An integrated approaches envisage development and implementations of the Natural Resource management plan. To do so, there will be need for a task force to conduct climate resilience and NRM related activities including forecasting, monitoring, impact assessment, response and recovery and planning to build back better against drought. Furthermore, this approach could promote the concept of risk management, although it cannot ignore the need for government/donor assistance for some sector/area during extended periods of severe drought. In addition, the integrated approaches promote self-reliance while at the same time protecting the natural, agricultural, livestock and entrepreneurship resource to ensure food security/ resilience to drought and overall effects of climate change.

BOMA project should continue to liaise with partners particularly the programme line ministries to provide technical support services to beneficiaries across all the locations targeted by the project actions. The participants of NRM trainings had fair knowledge and experience in climate smart nature-based enterprises which if coupled with adequate technical support it would improve on their productivity and livelihoods in beneficiary households. There is also the need for development actors involved in NRM to come together around a coherent set of strategies and implementation framework.

Other more specific recommendations include:

- BOMA should look forward to having an integrated NRM training and capacity development indicator tracking within the Performance insight system. At the time of evaluation, the study realized that there was no inventory to capture information about level of attendance of the trainings, no record of number of participants attending the trainings and the number of trainings attended by each participant.
- The training created awareness and enhanced resilience among communities targeted. BOMA should expand the training activities to reach *Samburu* north participants who were equally affected by the prolonged drought. The trainings should not only target participants with and around areas covered by forest but also areas that are likely to be encroached by desertification.

- BOMA needs to redesign the proposed listenership component of the training to fit inclusion. It should take into consideration target groups with hearing and seeing impairments among other forms of disability that may hinder such learning approach. Though yet to be implemented, there is stills room to adjust and meet measures addressing inclusion
- BOMA should incorporate a comprehensive training with psychosocial support components in future programming. The Covid-19 outbreak brought about psychosocial imbalance among communities. This was further severed by the impact of the prolonged drought especially among female headed homes in Samburu. Many vulnerable participants lost a lot of livestock during the drought while the poor economic conditions and high living conditions exacerbated by the previous Covid-19 lockdowns left many communities hopeless with their livelihoods disoriented.
- * In addition, BOMA should formulate and document partner engagement framework and work plan detailing specific deliverables to reduce unnecessary coincidence of events / activities and duplication during implementation in the future programming.

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- It is important for BOMA to follow-up with the respective Mentors and field officers to ensure full completion of the training despite closure of the program. During this evaluation, actions in NRM trainings were work in-progress in both Samburu East and Central.
- BOMA should improve on efficiency in future programming. The intervention ought to have begun during and or at the onset of rainy season. BOMA ought to have anticipated that the participants would put the knowledge into practice and a market linkage technical advisory ought to have been formed to provide participants with best and timely insights on when to invest nexus to drought crisis.
- BOMA should mainstream a more social inclusive intervention especially in capacity building and awareness creation response in the future programming. The modalities that were used in NRM training interventions did not factor in the special needs for persons with hearing and seeing impairment especially the proposed and unaccomplished listenership programme. The programme targeted 2,100 community women whom there could be special groups having such disabilities and even when scaling the programme to other areas. Shared knowledge between men and women will build a steady ground for behavioural change and transformation to a more knowledgeable resilient community.
- Finally, since complaints and feedback mechanisms wasn't established, future programming should establish CFM to support accountability, transparency, empowerment, monitoring and evaluation, and programme improvement, and to provide early warning of any impending challenge with the participants.

In conclusion, the lesson learned, best practices and conclusions documented in this report can serve as leads towards acknowledging the importance of the NRM interventions for enhancing climate resilience in ASALs of Kenya. Finally, addressing the issues of NRM capacity among women who plays a critical role in influencing NRM policies, conservation and management practices was found to be critical as confirmed by project participants.



Appendix 1: Activity Matrix

Objective 1: Increase BOMA's capacity to embed best practice NRM and climate resilience learning in its programs

- Engage BOMA graduates and develop a NRM and climate resilience training curriculum for BOMA participants on community rights in NRM, climate-supportive and climate-resilient livelihoods and women's rights. It is likely that the curriculum will include livestock health and nutrition, pasture and range use and improvement, growing fodder for use and market, fodder banking, water use and storage, veterinary drugs and services, producing and selling enriched feed and establishing fodder banks for use and sale during dry times. The curriculum will be guided by experiential learning tools and based on participatory methodology.
- Train at least 30 BOMA mentors and field officers to deliver the new training curriculum using best practice in adult learning for low literacy populations.
- Develop a learning agenda to incorporate NRM and climate resilience learning into 100% of BOMA's projects throughout the ASALs.
- Develop an end-of-project document outlining the model, key lessons learned and strategies for incorporating NRM, climate resilience and advocacy activities in other programs.
- Share project learning with national and county governments and other NRM stakeholders in fora such as County Steering Group meetings, the Partnership for Resilience and Economic Growth, the ASALs Stakeholders Forum, Grazing for Change, Sankalp Africa and other relevant research, academic and policy forums and conference.
- Share learnings from the project with relevant communities of practice including other CIRF grantees and the Bill and Melinda Gates Foundation Women and Girls at the Centre of Development Learning Cluster.

Objective 2: Increase the capacity of 2,100 BOMA women to influence NRM policy and gain access to climate NRM and resilience information and services Test, Learn, Refine, Implement (first 4-6 months)

- Conduct a participatory consultation with women in extreme poverty on their concerns and experiences with traditional and government led NRM policies and practices.
- Assess existing government policies, plans and available technical assistance in Samburu County on traditional NRM management structures, climate resilience and NRM improvement programs, as well as INGO and donor initiatives through consultations with County government entities and other NRM stakeholders (click to see an initial assessment of current policy environment and list of laws and policies relevant to the project).
- Solicit insights and learning from Mercy Corps and other NGOs on their work on climate resilience and traditional rangeland management structures, the successes and challenges of EMCs in Wajir County, women's role in those processes, and potential points of influence to promote improved NRM policies and practices in Samburu.
- Facilitate a consultative process among NRM stakeholders, including pastoral women and men. Samburu County Government and County Environment Committees, to identify and develop a consensus around the optimal structure for improved community-based NRM that integrates women's voices, whether that is the EMC, the new community-based resource center for climate change, grazing committees or other.
- Refine project design and lay out the learning agenda at month six. We will pause and reflect quarterly, with input from local stakeholders, to test if our hypotheses and theory of change remain valid. Taking this learning and adapting approach ensures activities in this dynamic environment are informed by current assumptions and can achieve project outcomes and that the learning agenda evolves to capture the most important learnings.

Training and Capacity Building

- Train 900 REAP graduates in Samburu County as well as the 2,100 Objective 3 participants on climate change, NRM, community rights in NRM and women's rights.
- Support 2,100 women to participate in local structures (EMCs/other) to engage with county government on NRM priorities.
- Support the County government in the establishment of appropriate structure, by mobilizing communities, facilitating communication and ensuring women are significantly represented in membership as well as leadership positions.

Advocacy

- Conduct workshops with REAP participants and NRM, community and government, stakeholders in Samburu County to identify key changes and services needed in local NRM. ٠
- Support the newly formed Natural Resource Management Committees (the water and land use committees) to conduct community outreach forums (barazas) to validate those key changes and incorporate them in community plans.
- Train REAP participants and their communities on effective advocacy strategies to engage county government on priority community NRM issues
- Train and support the local NRM committees and REAP savings groups to act collectively, advocate for equitable distribution and sustainable use of local natural resources and seek county government support.
- Establish effective information dissemination and communication channels for NRM stakeholders, including radio broadcasts, public meetings and participants' savings groups, to increase public awareness of County and local community NRM work, potential climate hazards, National Disaster Management Authority (NDMA) advisories and relevant issues.

Objective 3: Empower 2,100 of the poorest women in Samburu County to graduate from extreme poverty, develop more climate-resilient livelihoods, and participate in local NRM

- Train 2,100 participants on improved arid lands NRM practices including resource mapping, communal land use planning, water resource management, climate change adaption, conflict management and drought early warning.
- Provide 2,100 women a package of livelihood support services including business and gender focused life skills training, market linkages, asset transfers and two years of mentorship through REAP.

Appendix 2: Key Informant Interview

No:	Location/County	Designation	Key personnel	DATE OF interview
1	BOMA Project	Country Program Director	Sam Owili	-
2	BOMA Project	Program Coordinator/Officer	Dorcas Ekalale	20 th /2/2022
3	BOMA Project	Market System and NRM	David Kanda	
4	Branches (Samburu cluster office)	Cluster programme manager	Tom Lenaruti	$20^{\text{th}}/2/2022$
5	Branches (Samburu cluster office)	Cluster Field Officer	Sarah Lenasunya	17 th /2/2022
6	Branches (Samburu cluster office)	Linkages Officer	Jacqueline Leshornai	$17^{\text{th}}/2/2022$
7	Branches (Samburu cluster office)	Mentor	Fred Lelelit	19 th /2/2022
8	County Government	Ministry of environment water and energy	John lediipo Jamaica	21 st /2/2022
9	County Government	NDMA coordinator	Alex Leseketeti	21 st /2/2022
10	County Government	Samburu conservator KFS	Charles Ochieng	18 th /2/2022
11	County Government	County Department of livestock and fisheries	Francis K.Ng'ang'a	21 st /2/2022
12	Community NRM structures	Community Forest Association –Naramat CFAs	Douglas Leboiyare	$18^{\text{th}}/2/2022$
13	Private Investors	Dairy cooperative	Julius Lampaa	18 th /2/2022
14	Private sector	Apiculture Cooperative	John Lelesiit	18 th /2/2022
15	UN agency	FAO-Kenya	Kambaki Lalaikipiani	
16	Partner NGOs	MERCY CORPS	Lesingiran Timothy	$17^{th}/2/2022$
17	Partner NGOs	IMPACT field office admin	Priscila Senteina	$17^{th}/2/2022$

Appendix 3: Evaluation Tools

HH Survey tool	HH Tool revised 11.02.2022.docx
BOMA and partner KII	BOMA Implementing staff I
County government KII	KII - Government stakeholders 09.02.
FGD guide	FGD-CJRF Guide_project_Final

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