

Participatory rangeland management

Lessons from Farm Africa's experience in co-managing rangelands in Ethiopia

 Ethiopia



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Front cover photo: Adam Harum, pictured with his cattle in the lowlands of the Bale Eco-region in Oromia, Ethiopia. Photo: Farm Africa / Nathan Siegel

Background

Rangelands refer to extensive areas of grass and/or shrub that receive annual rainfall of below 750 mm and are primarily used for grazing domestic and wild animals¹. They account for about 62% of Ethiopia’s terrestrial land area and host over 10 million people, primarily pastoralists, whose livelihoods mainly depend on rearing livestock² - mainly cattle but also camels, goats and sheep. The health of livestock is dependent on the availability of water and grass, but population growth is putting pressure on communal grazing land, meaning that many rangelands are becoming barren during the dry season.

The pressure these vital ecosystems are under is being compounded by numerous other challenges including climate change, bush encroachment, banning of some traditional rangeland management practices (eg prescribed fire burning), and soil erosion as a result of a shift to agro-pastoralism in some areas³.

Responding to these challenges needs innovative and coordinated actions under the umbrella of a robust institution. Participatory Rangeland Management (PRM) is a collaborative approach to managing rangeland resources, primarily led by local communities with close support from the local government and other stakeholders. It was developed in 2010 from the lessons learnt during the two-year USAID-funded Enhanced Livelihoods in the Mendera Triangle (ELMT) programme, led by CARE, which was implemented from 2007 to 2009 in cross-border pastoral areas of Ethiopia, Kenya and Somalia⁴. PRM is an innovative approach that promotes participatory and inclusive governance of rangelands via collective decision-making, planned management and utilisation to realise resilient and sustainable rangelands⁴.

In 2012, Farm Africa piloted a PRM initiative in the Dello Mena district of Ethiopia’s Bale Eco-region (BER), adapting the Participatory Forest Management (PFM) approach. Prior to that, Farm Africa had implemented a rangeland management project in Afar to reclaim rangelands from invasive weeds, mainly *Prosopis juliflora*⁵.

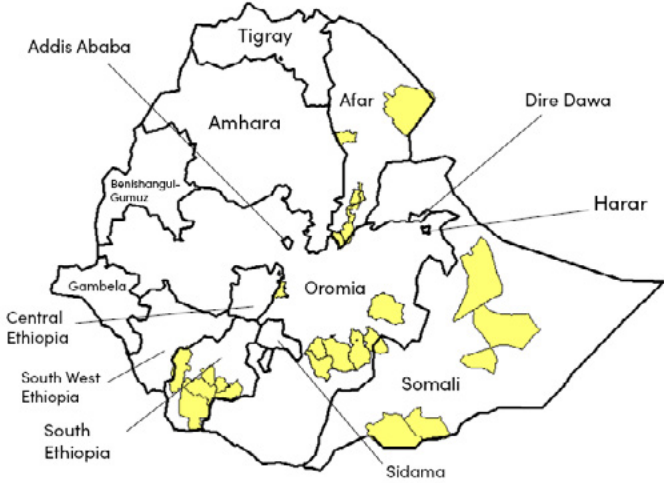
The initial aim of the pilot PRM project in Dello Mena was to reduce pressure on highland forests from the seasonal migration and settlement into forests of pastoral communities from the adjacent lowlands where pasture had dried up by engaging communities in sustainable rangeland management.

Since then, PRM has been a core component of most Farm Africa projects involving pastoral areas. Accordingly, it has been expanded to several woredas in the Bale Eco-region through the EU funded SHARE I and BER phase II projects and scaled up to other areas, including the Central Rift Valley (CRV) and Somali Regional State with the financial support of SIDA, South Omo with the financial support of UK aid from the UK government, and Afar with the financial support of the African Development Bank (AfDB).

Farm Africa adopted and used eight standard steps, clustered under three stages: Investigation, Negotiation and Implementation⁶. However, we have learnt that following all eight steps sequentially as per the guideline is a lengthy process that does not suit project-based interventions with a pre-defined project lifetime: some activities can be done simultaneously to save time.

1 <https://www.fao.org/4/t7488e/t7488e02.htm>
2 <https://doi.org/10.1016/j.jindc.2024.100413>
3 <https://doi.org/10.57647/j.jrs.2025.1503.22>
4 Flintan, F., & Eba, B. (2023). Participatory rangeland management: A vehicle for pastoralist women’s empowerment in Ethiopia. *Pastoralism*, 13(1), 23.
5 <https://www.farmafrica.org/video/clearing-prosopis-in-afar-ethiopia/>
6 Awgachew, S., Flintan, F. E., & Bekure, S. (2015). Participatory rangeland management planning and its implementation in Ethiopia.

Project locations



Farm Africa rangeland intervention woredas, Ethiopia, 2012–2025



Farmers attending to their cattle in the regenerated rangeland in Keraru village in the Central Rift Valley, Ethiopia.

Figure 1: Stages and steps of PRM as designed by Flintan and Cullis (2010)²

Stage 1

Investigation

- **Step 1:** Identifying rangeland resources and users

Stage 2

Negotiation

- **Step 2:** Setting up or strengthening rangeland management institutions
- **Step 3:** Defining the rangeland management unit and preparing the rangeland resource assessment
- **Step 4:** Developing the rangeland management plan
- **Step 5:** Establishing the rangeland management agreement

Stage 3

Implementation

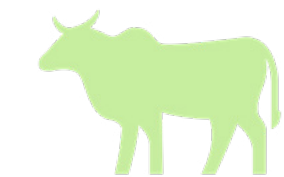
- **Step 6:** New roles for communities and rangeland management advisors
- **Step 7:** Arresting and reversing declining rangeland productivity
- **Step 8:** Participatory monitoring and evaluation

The main PRM interventions Farm Africa promotes to restore, protect and enhance the productivity of rangelands include:

- Revitalisation of relevant customary institutions to reduce conflicts related to natural resources.
- Rotational grazing: areas of rangeland are closed off to livestock in rotation, to allow the pasture time to regenerate naturally before livestock return.
- The cut and carry system: farmers grow fodder that they cut and carry back to livestock kept in enclosures, rather than letting livestock graze freely.
- Bush clearing: cutting back invasive thorny bush species like *Prosopis Juliflora*.
- Improved fire management.
- Over-seeding of degraded rangelands with new grass varieties like Rhodes grass to supplement natural regeneration of local grass from seedbanks⁷.
- Development of communal water points.
- Using artificial insemination⁸ to introduce improved breeds of cattle with higher productivity of milk and meat, meaning herd sizes can be reduced.
- Improving animal health services through the use of Community Animal Health Workers.
- Promotion of income-generating activities dependent on healthy rangelands.

⁷ <https://www.farmafrica.org/wp-content/uploads/2024/07/rnd-the-triumph-of-partic-range-land-mgmt-digital.pdf>

⁸ Flintan, F. E., & Cullis, A. (2010). Introductory guidelines to participatory rangeland management in pastoral areas.



Cows drinking water provided by the Water Access Project in the Haro Chama pond, Ethiopia, in the Bale Eco-region.

Achievements and impacts

Since piloting PRM in 2012, Farm Africa and its partners have supported communities to successfully manage 639,197 hectares of rangeland sustainably up to June 2025. As a result, the initiative has achieved the following:

Environmental/ecological benefits

In the Bale Eco-region, the annual conversion of rangelands to farmland has decreased by 18%, from 3% to 2.45%. The conversion of rangelands to farmland increases the risk of encroachment by invasive species, intensifies overgrazing by reducing the size of rangelands, and reduces vegetation cover, biodiversity and soil carbon, thereby leading to ecological degradation⁹. Thus, PRM discourages the conversion of rangelands into farmlands to ensure their resilience by promoting proven and compatible uses of rangeland¹⁰.

Likewise, seasonal mobility of livestock herds into high forests during the dry season has declined by 20%, with the duration of forest stays reduced by up to two months – both of which have reduced negative impacts on forest undergrowth from grazing and browsing.

Also, vegetation cover and biodiversity conservation have improved due to the adoption of sustainable rangeland management practices, such as clearing bushes, promotion of controlled grazing and 'cut and carry' techniques. Use of such sustainable management practices have minimised degradation from overgrazing, restored degraded and invaded rangelands, and reduced siltation and sedimentation in water bodies like lakes.

639,197

hectares of rangeland sustainably managed by communities supported by Farm Africa

Economic/livelihood improvement

The PRM schemes have generated substantial revenue from income-generating activities associated with rangelands, such as cattle fattening, selling fodder grass and beekeeping. For instance, 20 PRM cooperatives (PRMCs) supported by Farm Africa's BER Phase II programme, funded by the European Union, earned a total of 833,266 ETB (5,525 USD)¹¹ from honey and 119,034 (789 USD) ETB from gum and resin between 2019 and 2024¹².

Likewise, a PRMC in the CRV earned a net profit of about 23,000 USD within a year of starting two rounds of cattle fattening using seed money of about 3,500 USD provided by Farm Africa¹³. Also, this PRMC anticipated, in mid-2024, over 136,000 USD revenue from the sale of thousands of commercial grass bundles¹³.

Furthermore, improved management of rangelands and water resources has boosted livestock productivity and thereby enhanced the food security and economic wellbeing of households. Additionally, infrastructure development, including the construction of PRMC offices, water ponds and animal health posts, has improved access to critical inputs like animal medicine and health services. Reduced mobility and local migration in search of pasture and water have improved labour productivity, as they have saved time for other activities.

Moreover, the provision of goats via a kid transfer system has strengthened social bonds and improved food and nutrition security by increasing the availability of goat milk for families' consumption. The system involves selected women receiving female goats on the understanding they pass on the first-born goat kids to a secondary group of women, while retaining the mother goats themselves.

Social

Institutionalisation of the PRMCs has led to the establishment of 52 PRMCs in four regional states, with 24,396 members, including 2,887 women (about 12.5%). The PRMCs are formally registered and have obtained legal recognition from the pertinent regulatory authorities, which has enabled some of them to engage in businesses.

With the support of continuous capacity development work, PRMCs have developed their own bylaws, and contextually adapted PRM manuals and Participatory Rangeland Resource Appraisal (PRRA) guidelines.

Traditional institutions have been revitalised, such as the Gadaa system in Oromia and Dagu in Afar, which are being used according to local customs and contexts. The Oromo Gadaa System is a UNESCO registered traditional institution of the Oromo people that evolved from accumulated knowledge over generations.

It is a comprehensive governance mechanism that promotes conservation of nature, participation, inclusivity and peaceful co-existence with other people, including the use of conflict resolution mechanisms like Jaarsummaa¹⁴.

For example, a series of consultations and negotiations have led to the establishment of the "Dhaddachaa" Pastoralist Forum, which represents the interests of pastoralists in the Bale Eco-region. Inclusive and participatory rangeland governance mechanisms have been established. As a result, conflicts over rangeland and water resources decreased, inter-community networks grew stronger, traditional institutions were revitalised and gender equality improved.

The inclusion of women and young people in PRMCs and leadership roles enhanced social equity (including gender). Additionally, the technical capacity of local experts and the community was enhanced through a series of need-based capacity-building training courses. Community mobilisation efforts encouraged community members to contribute labour and materials, promoting community ownership and cohesion.

⁹ <https://doi.org/10.57647/j.jrs.2025.1503.22>

¹⁰ <https://doi.org/10.3390/environments2010001>

¹¹ <https://www.combanketh.et/exchange-rates> (USD = 150.8286 ETB, Date: 28/11/2025)

¹² Farm Africa (2024). FINAL NARRATIVE REPORT [1st May 2019 to 30th June 2024] SCALING OUT INTEGRATED AND MULTI-SECTORAL ECO-REGIONAL APPROACH IN BALE ECO-REGION. <https://farmafrica.sharepoint.com/sites/ProjectsandProgrammes/Projects/Forms/Ethiopia.aspx>

¹³ Farm Africa (2024). REVIVING NATURE'S SYMPHONY: The triumph of participatory rangeland management in transforming a degraded landscape (<https://www.farmafrica.org/wp-content/uploads/2024/07/rnd-the-triumph-of-participatory-rangeland-mgmt-digital.pdf>)

¹⁴ <https://ich.unesco.org/en/RL/gadaa-system-an-indigenous-democratic-social-political-system-of-the-oromo-01164>

Key lessons

➤ Empowering and engaging the community

from the beginning in PRM initiatives likely leads to acceptable and desirable outcomes. The key achievements mentioned are largely attributed to Farm Africa's participatory approach, which engaged communities in assessing rangeland resources and co-planning and co-implementing the interventions. The process should be inclusive and participatory from the start, ensuring that marginalised groups, including women, young people, people with disabilities and ethnic minorities are involved.

➤ Economic integration and market linkages

are crucial factors in the success of PRM initiatives, as seen in the CRV and other intervention areas. The integration of income-generating activities, such as beekeeping, cattle fattening and commercial grass production, has demonstrated viable business models that ensure the sustainability of PRM initiatives by giving communities an economic incentive to manage rangelands sustainably.

➤ Context-specific and flexible approaches

are necessary, as there is no single solution that fits all situations. It is crucial to customise implementation mechanisms in a way that suits local resources, sociocultural contexts, contemporary challenges and opportunities. Furthermore, integrating traditional and modern rangeland management systems would create more resilient and acceptable models.

➤ Local ownership

is key to sustainability, as it ensures that PRM initiatives can continue beyond the initial project duration by relying on local resources and community leadership, which requires investment in tailored capacity-building training to develop the technical and leadership capacity of local communities.

Recommendations

To further enhance the PRM approach, we propose the following recommendations:

- Continuous follow-up and technical backup are necessary in critical gap areas. This involves monitoring of the performance of the PRM cooperatives after projects finish, and training them on new techniques in the areas where they lack practical experiences such as diversification of livelihoods, and participatory and inclusive governance. For that it is imperative to link the PRM cooperatives with stable government structures and multi-stakeholder platforms.

- Integrate livelihood improvement packages into PRM. Including income-generating activities like cattle fattening, selling fodder grass, livestock trade and beekeeping enhances the sustainability of PRM initiatives and improves communities' resilience to climate change.

- Legally recognise new PRM cooperatives.

- Integrate relevant indigenous knowledge and traditional institutions to enhance the sustainability of the system.

- Establish an inclusive governance system that ensures the participation of women and young people in key leadership positions through suitable affirmative actions.

- Include PRM within pertinent national policies eg land-use and legal frameworks.

- Allocate dedicated Federal and regional government budgets to scale up PRM.



Ahmed, a village elder, with cattle.

The PRM process would be best implemented in three phases:

Phase I: Mobilisation

- **Stakeholder analysis and institutionalisation of PRM:** involves identifying and mapping of stakeholders, establishing community-based management institutions (PRMCs) and orienting them to PRM objectives.

- **Familiarisation with PRM processes:** includes engaging with stakeholders, providing training and defining community groups and resource users.

Phase II: Planning

- **Participatory rangeland resource assessment and planning:** includes conducting participatory resource mapping, developing management plans and organising legal community institutions.

- **Signing rangeland management agreements between PRMCs and local government pertinent office:** encompasses finalisation and signing of rangeland management agreements to formalise the roles and responsibilities of all parties.

Phase III: Implementation

- **Capacity building and skill development of PRMC members and local government staff:** this stage involves strengthening institutional capacities and providing technical training to ensure the effective implementation of the PRM plan.

- **Monitoring, evaluation and revision:** includes monitoring and evaluation of the PRM activities, with necessary revisions made to improve outcomes.

Mandia Yaka Lalesa PRMC



Restoration of grasslands at Desta Abijata has reduced wind erosion and siltation at the adjacent lake, improving water quality and fish stocks.

The Mandia Yaka Lalesa rangeland management cooperative (MYL-PRMC) was established in 2019 by Farm Africa's Central Rift Valley (CRV) project, funded by SIDA.

The cooperative's 560 cooperative members have worked to restore and manage 97 hectares of barren rangeland in Keraru kebele of the Negelle Arsi woreda in Oromia Regional State, Ethiopia. The cooperative has been registered and obtained a legal certificate from the Negelle Arsi woreda Cooperative Promotion Office, to engage in suitable businesses.

Following training and technical support provided by the project, the traditional free grazing system was changed to a controlled cut and carry system with zero free grazing. The land was divided into blocks for ease of management, with the grazing land closed to allow it to regenerate and become productive again. Members work in shifts to protect the land from further grazing and other unsuitable uses. After the onset of the first rainy season, the land showed visible ecological changes such as sprouting of grass and other plant species from the underlying dormant seedbank, and the return of wild animals like hippos, warthogs and birds that had disappeared due to the severe degradation of the land.

Later on, springs that had dried up long ago started to flow again, and the regeneration improved local biodiversity and became a buffer

for the Langano lake and reduced siltation and sedimentation.

To integrate economic incentives to support the conservation of the grazing land, the project also supported the MYL-PRMC to start suitable businesses like cattle fattening, beekeeping, soap making, small-scale irrigation and poultry production.

For instance, more than 300 members have engaged in cattle fattening and some are in their 15th round of fattening (each round lasts three months). So far, 350 bulls have been fattened and sold generating an average profit of 20,000 ETB (132.6 USD) per bull. With the considerable profit from the fattening, they bought a multi-purpose crop thresher and are providing threshing services for local communities, generating further income for the cooperative. This has created employment opportunities for over 30 people (mainly unemployed young members) and enabled the cooperative to save over 1.2 million ETB (7956.05 USD).

The MYL-PRMC has now evolved into a self-governing institution with its own bylaws. Its success lies in its participatory and inclusive approach and the integration of economic incentives to conserve rangelands. This successful approach has been scaled up by the Desita Abijata PRMC in the neighbouring Adami Tullu Jido Kombolcha woreda of same region.

Hurufa Dero PRM and Multipurpose Cooperative

This cooperative was established in 2015 with 120 members (100 men and 20 women) by Farm Africa's SHARE project, funded by the EU, at the Naniga Dera kebele of the Dello Mena District.

Following its legal establishment, the project conducted a preliminary skill gaps assessment and provided capacity building training and technical assistance in areas such as leadership, property management, rangeland management, business development and entrepreneurship, and women's empowerment.

These interventions enabled the PRMC to successfully manage 23,722 hectares of rangeland and recruit 704 new members (444 men and 260 women) – significantly expanding its community engagement and collective management capabilities.

The cooperative mobilised its members to clear bushes from 696 hectares of rangeland and plant improved forage species to enhance the production and productivity of the rangelands. To further improve communities' livelihoods, the project constructed a community pond to improve access to water for livestock and domestic uses, mobilised communities to conserve soil and water along the watersheds, and established livelihood improvement groups like Village Savings and Loan Associations (VSLAs), women's goat husbandry groups, and Climate-Smart Agriculture (CSA) user groups. The interventions brought considerable impacts, such as:

- Development of a grazing system in the rehabilitated rangelands – free for PRMC members and with a fair payment payable per animal for non-members.



Kadiya Oumer milking cows.



Sheik Abdo Ali and his cattle.

- Improved access to pasture and water.
- Reduced mobility of animals into the forest for feed and water. Controlled migration only occurs during critical times like drought, with modest user fees per animal.
- Reduced land degradation and loss of biodiversity from unregulated free grazing.
- Improved wellbeing – the PRMC instituted a social welfare system in which members purchase consumables like grain, oil, sugar and improved seeds at fair prices especially during times of critical need like drought and food scarcity.
- Diversified livelihoods – the PRMC members and livelihood groups are engaged in various businesses like petty trade of mung beans, grains and goats; notably supplying goats to Luna Slaughterhouses for export.
- Accumulated assets worth over one million ETB. Also, it distributed dividends to its members and purchased school materials like textbooks and exercise books for 30 students (15 boys and 15 girls), mainly orphans and needy children chosen from their community. Also, 20 destitute people (15 men and five women) received financial assistance from the cooperative.
- Women's empowerment – three out of seven members of the executive committee are women, including the deputy chair and a cashier.



This brief captures Farm Africa's experiences in implementing participatory rangeland management (PRM) systems in Ethiopia and offers strategic recommendations for future enhancements. It demonstrates the potential for PRM to sustainably manage resources, reduce environmental pressures and improve the livelihoods of pastoral communities. By refining and expanding this approach, PRM can serve as a model for rangeland management across diverse regions.

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