GOVERNING MULTIFUNCTIONAL LANDSCAPES

Assisted natural regeneration and participatory forest action planning in Nchelenge and Mufulira, Zambia

As part of the Governing Multifunctional Landscapes (GML) project in Zambia

The problem

Woodfuel production and unsustainable forest management have emerged as major contributors to forest loss and landscape degradation in Zambia, directly affecting the livelihoods and resilience of many households and weakening efforts for poverty alleviation and climate change adaptation and mitigation.

The project

To combat the continuous loss of forested landscapes and mitigate and reduce the corresponding threat to local livelihoods, CIFOR, under its EU-funded Governing Multifunctional Landscapes (GML) project, supported Participatory Forest Action Planning (PFAP) and Assisted Natural Regeneration (ANR) in Zambia as potential solutions for more sustainable woodfuel management. The objective of the project was to develop policy options for sustainable woodfuel production.

Project	Governing Multifunctional Landscapes (GML)
Objective	To analyse and develop policy options for improving woodfuel values chains and their impacts on livelihoods
Project area	Mufulira, Nchelenge
Donor	EU
Implementation	CIFOR, Forestry Department of Zambia
Running time	2017–2022
Status	Finalized

ANR and PFAP

ANR is a cost-efficient landscape restoration approach aiming at restoring degraded and deforested areas. It revolves around nurturing natural regeneration of forested landscapes by reducing or removing barriers for regeneration such as animal browsing, competition for nutrients, fires and wood harvesting.

PFAP is a stakeholder-owned form of collective natural resource management. With PFAP, communities and stakeholders in forest management, often acting in informal and complex institutional settings, are supported in defining and enforcing regulations for forest governance. The objective of PFAP is to promote collective actions towards the sustainable use and management of forest resources as well as resilient livelihoods.

Communities in Nchelenge

In June 2017, CIFOR together with the Forestry Department of Zambia initiated the first scoping activities in the target area, identifying charcoal and fuelwood production, in addition to hunting, honey production and agriculture, as local people's main livelihood strategies, and overexploitation and forest fires as the main threats to forests. In 2019, the villages of Kepipa and Nshoka were chosen for implementing ANR and PFAP activities with the support of CIFOR and the Forestry Department.

Activities

Embedded in participatory decision making and collective learning, tree nurseries and ANR test plots were established in the target communities. Seeds were provided by the Forestry Department and CIFOR, and the nurseries taken care of and maintained by the communities. CIFOR provided information on effective replanting of trees in surrounding landscapes and offered lessons on ANR measures that were applied to the test plots. These included spot weeding and reforestation, and fire management measures such as border cutting, early burning and the removal of unwanted vegetation.

Impact

The communities appreciated capacity strengthening on landscape management and forest regeneration. They stated that they felt better able to manage their forests, acknowledge

Figure 1. Test nursery protected by a thatch grass fence in Kepipa, Nchelenge

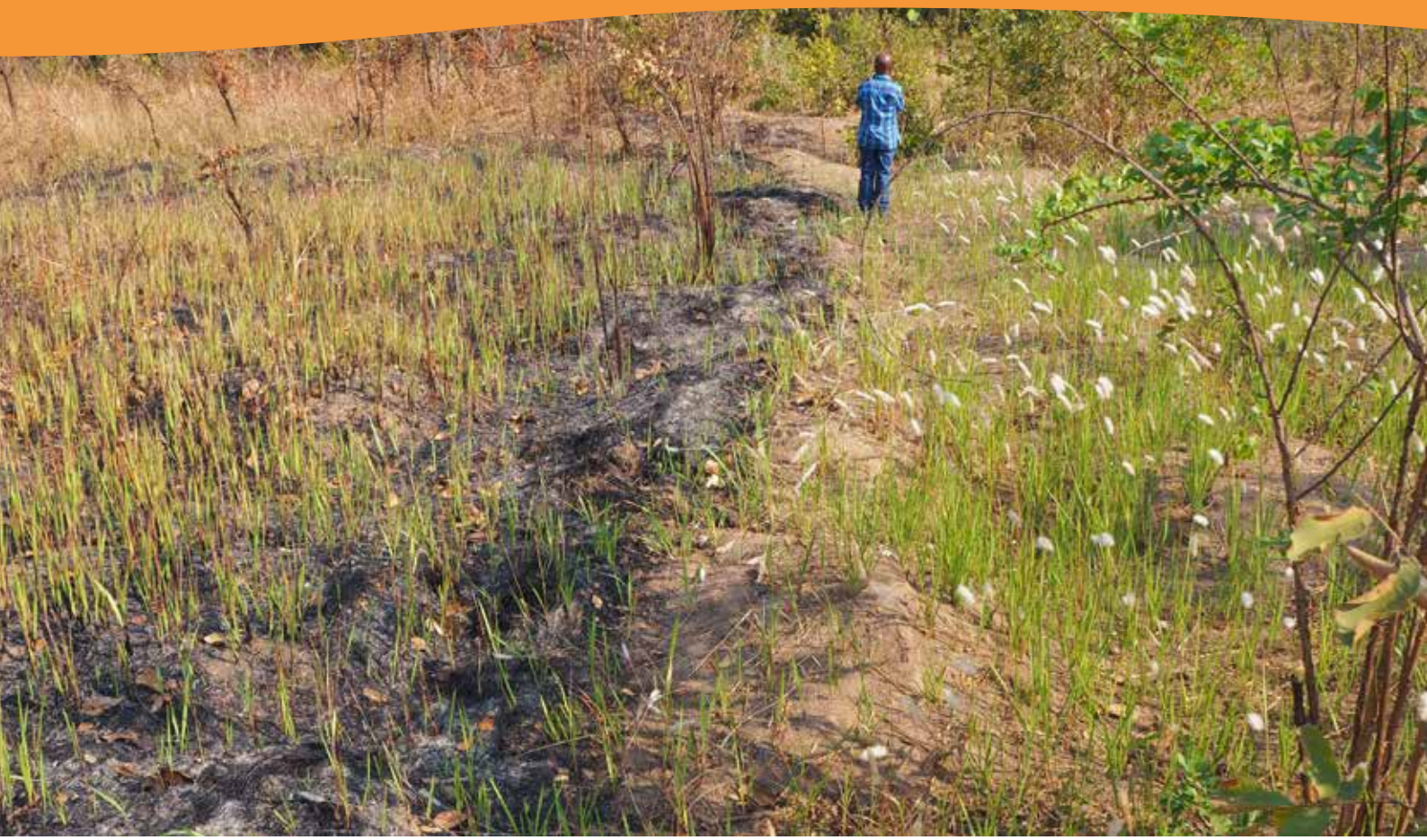

Figure 2. Test plot (left) showing the impact of ANR measures in protecting against wildfires

their responsibilities in managing them, and make use of their resources by keeping bees and maintaining fruit trees in their landscapes, for instance. The test plots were especially appreciated as they clearly demonstrated the impact of the ANR measures. The communities plan to continue applying their new knowledge, share it with local youth, and continue to plant more trees after CIFOR leaves the project area.

Communities in Mufulira

In Mufulira province, CIFOR engaged with the village of Ngala in the implementation of ANR. Prior to CIFOR's engagement in Ngala, the target community had little knowledge on the management of their forest landscape, and as a result struggled with the effects of overexploitation and forest loss. According to community members, the landscape was mostly devoid of many species of mushrooms, fruit and medicinal trees due to the constant loss of forest. Charcoal production was identified as the main livelihood strategy in the area at the time, and the community heavily depended on it as a source of income.

Figure 3. Bicycle used as a typical means for transporting charcoal in Mufulira province

Activities

Similarly, to Nchelenge, CIFOR, in cooperation with the Forestry Department, assisted the community in setting up a tree nursery, built capacities by sharing knowledge on effective reforestation and landscape management, and promoted sustainable and participatory management of forest resources. Additionally, an ANR test plot was set up to demonstrate the impacts of ANR methods.

Figure 4. Community members standing in the ANR test plot among recovering vegetation following a fire

Impact

Community members claimed that following the introduction of ANR methods and a collectivisation of management practices, mushrooms reappeared in the landscape. The community especially appreciated the newly found understanding of the importance of forest management, and started considering themselves as the "custodians" of the land they inhabit. The cutting of trees has been reduced, burning activities now occur earlier in the year, and tree preservation and reforestation measures have increased. The ANR demonstration plot, which had been impacted by fire, demonstrated to the community how the new methods help land recover more quickly and increase landscape resilience. The villagers were so convinced by their experiences that they plan to share their new skills and knowledge with neighbouring communities.

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