



RISK ASSESSMENT GUIDANCE MANUAL

COMMUNITY FMNR DEMONSTRATION PLOT ESTABLISHMENT



FMNR FOR COMMUNITY RESILIENCE PROGRAMME

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Foreword

Farmer Managed Natural Regeneration (FMNR) is more than a land restoration technique; it is a beacon of hope for communities across Northern Ghana facing the twin challenges of land degradation and climate change. For over a decade, FONAR has championed FMNR as a low-cost, community-driven solution that restores degraded lands, enhances food security and builds resilience. The establishment of community FMNR demonstration plots is central to this mission, serving as living classrooms where farmers, students, and local leaders witness the transformative power of protecting and managing naturally regenerating trees.

However, we cannot ignore the risks that threaten the success of these demonstration plots. From insecure land tenure and bushfires to livestock browsing, community conflicts and funding gaps, the journey from establishment to maturity is fraught with challenges. Ignoring these risks would jeopardise not only the plots themselves but also the trust and investment of the communities and partners who support them.

This Risk Assessment Guidance Manual is a vital tool for our project staff, community facilitators and partners. It provides a structured, practical approach to identifying, analysing and mitigating risks before they undermine our work. By using this manual, we can anticipate challenges, plan effectively and ensure that every demonstration plot becomes a lasting testament to the power of FMNR.

I extend my sincere gratitude to our partners, the Awaken Trees Association and Heidehof Stiftung, for their unwavering support. I also thank the communities, traditional authorities, and District Assemblies who walk this journey with us.

Let us use this manual not as a bureaucratic requirement but as a compass for adaptive, resilient and community-centred action. We will grow trees, restore lands and build futures.

Sumaila Saaka
Executive Director
Forum for Natural Regeneration (FONAR)

Section 1: Introduction and Purpose

1.1 Background

The Forum for Natural Regeneration (FONAR) is a Bolgatanga-based national environmental NGO founded in 2014 to promote the widespread adoption of Farmer Managed Natural Regeneration (FMNR) as a simple and cost-effective technique for the restoration and re-vegetation of degraded lands in the communities in which it works. FONAR operates through education, advocacy, community mobilisation, research and partnerships with local and national government agencies and international partners.

FMNR is an easy and low-cost land and forest restoration technique used to increase the number of trees in the field without necessarily planting new trees but through the protection and management of existing trees and shrubs regenerated naturally from tree rootstocks, stumps and dispersed seeds by animals. It is used sustainably to combat poverty and hunger among poor subsistence farmers by increasing food and timber production and resilience to climate change.

FONAR has established FMNR Eco clubs and FMNR demonstration fields in primary schools in the Talensi District, with funding from the Awaken Trees Foundation of Austria and the Heidehof Stiftung of Germany. The organisation has been empowering basic school children in the district to protect the environment through FMNR, a low-cost and effective approach to restoring tree cover without planting new trees. This involves establishing eco-clubs basic schools and equipping pupils with knowledge and tools to protect the environment. FONAR also implements FMNR among farmers in the Nabdam District.

1.2 Purpose of This Manual

This Risk Assessment Guidance Manual provides a structured framework for identifying, analysing, evaluating, and mitigating risks associated with the establishment of community FMNR demonstration plots. It is designed to be used by FONAR project staff, community facilitators, lead farmers, school eco-club coordinators and partner organisations during the planning, establishment and early maintenance phases of demonstration plot development.

The manual aims to:

1. Provide a systematic approach to risk identification and assessment specific to FMNR demonstration plots.
2. Enable project teams to anticipate and mitigate risks before they materialise.
3. Ensure consistency in risk assessment across multiple demonstration plot sites.
4. Support adaptive management by linking risk monitoring to project decision-making.
5. Protect FONAR's investment and reputation by ensuring demonstration plots succeed as learning sites.

1.3 Scope

This manual applies to all community FMNR demonstration plots established by FONAR or its partners, including:

- School-based FMNR demonstration plots (Eco-club plots).
- Community-managed FMNR demonstration fields.
- Lead farmer demonstration plots.
- Communal conservation and regeneration sites.

The manual covers risks arising from the planning phase through to the first three years of plot establishment, after which standard maintenance and monitoring procedures apply.

Section 2: Risk Assessment Methodology

2.1 Risk Assessment Framework

This manual employs a qualitative risk analysis framework based on two dimensions:

- **Likelihood:** The probability that a risk event will occur, rated as Low (1), Medium (2), or High (3).
- **Impact:** The severity of consequences if the risk event occurs, rated as Low (1), Medium (2), or High (3).

Risk Level is calculated as: Likelihood × Impact

Risk Score	Risk Level	Required Action
1–2	Low	Monitor; routine management
3–4	Medium	Active management; assign responsibility
6–9	High	Priority mitigation; contingency plan required
Critical (if Likelihood=3 and Impact=3)	Critical	Immediate action; escalate to management

2.2 Risk Categories

Risks are assessed across six domains:

Domain	Description
A. Land Tenure and Access	Risks related to land ownership, use rights, and secure access for FMNR establishment.
B. Environmental and Climatic	Risks from weather, fire, pests, livestock, and ecological factors.
C. Social and Community	Risks from community dynamics, expectations, and participation.
D. Institutional and Governance	Risks related to traditional authority, local government, and institutional support.
E. Operational and Technical	Risks in implementation, resources, and technical capacity
F. Sustainability and Scaling	Risks to long-term viability and expansion of FMNR practices

2.3 Risk Assessment Process

Step 1: Context Analysis – Gather information about the proposed demonstration plot site, community, land tenure, and local dynamics.

Step 2: Risk Identification – Use the risk registers in Sections 3–8 to identify applicable risks.

Step 3: Risk Analysis – For each identified risk, assign likelihood and impact ratings based on site-specific evidence.

Step 4: Risk Evaluation – Calculate risk scores and prioritise risks requiring action.

Step 5: Mitigation Planning – Develop mitigation measures for Medium, High, and Critical risks.

Step 6: Monitoring and Review – Assign responsibility, set review dates, and update the assessment as conditions change.

Section 3: Land Tenure and Access Risks

3.1 Context

A sizeable number of farmers consider that weak land and tree tenure is a constraint to investing in FMNR. This is despite the fact that majority of farmers consider that they have strong farming rights to land. However, some tenant or settler farmers in some communities may have moderate to weak farming rights, and this group may include shared cropland farmers who find it difficult to retain higher tree densities on their farmlands. Research indicates higher degradation on land subject to share-cropping and lower tree density.

The main driver of FMNR adoption is plot tenure, and for FMNR intensity it is community wealth: farmers who own their plot are more likely to adopt, and poor farmers are less likely to adopt. A potential barrier to take-up of FMNR is insecure land rights, as farmers may not be willing to adopt this long-term process on land where their access is insecure. A future risk is that land-allocating lineages would reclaim part of those lands for cultivation once soil fertility was enhanced as a result of FMNR.

3.2 Risk Register: Land Tenure and Access

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
A1	Insecure land tenure Farmer or community lacks documented or recognised rights to the land, discouraging investment in long-term FMNR practices.	High	High	Critical	Conduct land use rights assessment (see Annex A); obtain written consent from landowner(s); document customary allocation; engage Tindana or Chief for formal recognition.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
A2	Reclamation risk — Land-allocating lineage reclaims land for cultivation once soil fertility improves, displacing FMNR plot.	Medium	High	High	Formalise agreement with landowner specifying duration and purpose; include reversion clause; engage community in monitoring; consider communal land for demonstration plots.
A3	Boundary disputes — Disagreement over plot boundaries between families, communities or institutions.	Medium	High	High	Conduct participatory boundary mapping; involve traditional authorities in boundary verification; document agreed boundaries with sketch maps and GPS coordinates.
A4	Tree tenure ambiguity — Unclear rights to trees on the land, leading to conflict over tree products or pruning rights.	Medium	Medium	Medium	Clarify tree tenure in agreement; specify who has rights to pruned materials, fruits, and timber; document in community byelaws.
A5	Encroachment by external actors — Illegal mining, charcoal production or herders encroaching on demonstration plot.	Medium	High	High	Establish community monitoring system; engage local authorities; clearly demarcate plot boundaries; integrate with district land use planning.
A6	Land use rights conflicts with existing users – Sharecroppers, tenants, or other users claim rights to land allocated for FMNR demonstration.	Medium	Medium	Medium	Conduct stakeholder mapping; consult all existing users before plot establishment; provide alternative arrangements where necessary.



3.3 Guidance Notes

Land Tenure Assessment: Before establishing any FMNR demonstration plot, complete the Land Use Rights Assessment Form (see Annex A). This form captures tenure type, ownership, existing users, encumbrances and consent documentation.

Community Land Option: For communal conservation areas, consider the model used by CIKOD in the Kalsagri and Pavuu communities in Lawra Municipality in Upper West Region, where FMNR practices were first piloted on highly degraded communal land. This serves as a test ground and learning site, which has attracted the interest of farmers from different communities. The successful creation of this conservation area has helped to resolve land disputes between the Pavuu and Kalsagri communities.

Documentation: All land agreements should be documented in writing, witnessed by at least two community members, and where possible, endorsed by the traditional authority and the District Assembly.

Section 4: Environmental and Climatic Risks

4.1 Context

Farmers' use of protective material for trees has possibly increased in recent years, but the salience of culturally mediated protection of trees (social fencing) has declined across northern Ghana. This has been hastened by the rising commoditization of non-timber forest products. While it was once taboo to cut shea, the cutting and processing of shea for commercial charcoal production threatens its natural regeneration in contemporary northern Ghana. Changes in cultural beliefs regarding trees also facilitate or intersect with political and agroecological changes.

Livestock browsing pressures is a challenge in many communities where FONAR works, specifically with respect to *Faidherbia albida*, which provides good fodder for livestock. Farmers use three types of protection for seedlings in their compound fields: metal wire fencing, mosquito nets supported by poles, and cement blocks stacked on top of one another in the shape of a ring. However, protective measures are more often observed for trees that farmers had planted, whereas germinating seedlings are left unprotected.

4.2 Risk Register: Environmental and Climatic

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
B1	Bushfire damage – Uncontrolled fires destroy regenerating trees, seedlings and protective infrastructure.	High	High	Critical	Establish firebreaks around plot perimeter; engage community fire volunteers; integrate with Ghana National Fire Service bushfire prevention programmes; implement early burning protocols.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
B2	Livestock browsing – Free-ranging livestock (cattle, goats, sheep) browse on regenerating stems and seedlings.	High	Medium	High	Construct fencing (wire or thorny brush); engage herders and livestock owners; establish community byelaws on grazing near demonstration plots; consider bee-hive fencing as deterrent.
B3	Drought stress – Prolonged dry spells and dry season kill seedlings and weaken regenerating stumps.	Medium	High	High	Select drought-tolerant species (e.g., <i>Faidherbia albida</i> , <i>Adansonia digitata</i>); implement water harvesting techniques; mulch around regenerating stems; prioritise plots with better soil moisture retention.
B4	Pest and disease attack – Insects, termites or fungal diseases damage regenerating trees.	Medium	Medium	Medium	Monitor for pest outbreaks; use integrated pest management; avoid monoculture; maintain species diversity.
B5	Invasive species competition – Aggressive weeds (e.g., <i>Striga</i> spp.) or invasive shrubs outcompete regenerating trees.	High	Medium	High	Regular weeding around regenerating stems; prioritise plots with lower invasive pressure; integrate with <i>Striga</i> management programmes
B6	Wind damage – High winds break stems or uproot young trees.	Low	Medium	Low	Select deep-rooted species; avoid exposed ridge-top sites; stake vulnerable seedlings where necessary.
B7	Flooding and erosion – Runoff damages plots in low-lying areas or on slopes.	Medium	Medium	Medium	Select sites with good drainage; construct contour bunds or stone lines on sloped plots; avoid flood-prone valley bottoms.

4.3 Guidance Notes

Fire Management: Bushfire is the single greatest environmental threat to FMNR demonstration plots in Northern Ghana. FONAR has previously partnered with the Ghana National Fire Service and the Talensi District Directorate of Education to conduct bushfire prevention awareness for pupils and to establish community fire volunteer squads in Nabdam District. This partnership should be strengthened for each demonstration plot.

Livestock Management: The use of beehive fencing has been proven effective in places like Kenya, reducing elephant crop raids by up to 86 percent during peak seasons. This approach can be adapted for livestock deterrence and provides an additional livelihood benefit through honey production.

Species Selection: Prioritise indigenous species with high survival rates and multiple benefits. Key species for Northern Ghana include: *Faidherbia albida* (winter thorn), *Vitellaria paradoxa* (shea), *Parkia biglobosa* (dawadawa), *Adansonia digitata* (baobab), *Tamarindus indica* (tamarind), and *Ziziphus mauritiana* (jujube).

Section 5: Social and Community Risks

5.1 Context

There is a risk that requirements associated with external funding, as well as different perceptions on FMNR development, do not fit local needs or expectations. Encroachment of herbalists was often experienced as a threat to FMNR practitioners, and species promoted by FMNR are associated with traditional knowledge. Overcome farmers' perceived risks, including fear of reduced crop yields as a result of competition and shading from trees, and fear of losing management rights over trees on their land.

Community cohesion is a condition for the long-term success of FMNR. Increased community cohesion allows for effective implementation of FMNR and suppression of uncontrolled bushfire. When there is a greater degree of fire reduction in communities, FMNR uptake becomes cheaper. Community togetherness was identified as the most important perceived benefit of FMNR by 51% of respondents in an ELD household survey, with 38% rating it as important.

5.2 Risk Register: Social and Community

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
C1	Community opposition or apathy – Lack of community buy-in or active resistance to demonstration plot establishment.	Medium	High	High	Conduct inclusive community consultations; use participatory site selection; ensure benefits are visible to community; engage traditional leaders early.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
C2	Unrealistic expectations – Community expects immediate or disproportionate benefits from demonstration plot.	High	Medium	High	Clearly communicate objectives and timelines; manage expectations through community meetings; document agreed expectations in project agreements.
C3	Elite capture – Benefits of FMNR demonstration plots accrue disproportionately to local elites or powerful families.	Medium	High	High	Ensure transparent governance of plot; involve marginalised groups (women, youth, herders) in decision-making; establish community monitoring committee.
C4	Conflict with herders – Herders perceive fencing or plot protection as restricting traditional grazing routes.	High	Medium	High	Consult herders before plot establishment; design plots to allow corridor access; explore integrated crop-livestock-FMNR systems; engage in conflict mediation.
C5	School-community tension – If school-based, community members may feel excluded from school FMNR plots.	Medium	Medium	Medium	Establish community-school liaison; invite community members to eco-club activities; share benefits (e.g., pruned wood, fruits) with community.
C6	Gender inequity – Women excluded from decision-making or benefits of FMNR demonstration.	Medium	Medium	Medium	Ensure women's participation in plot management committees; prioritise species with women's livelihood benefits (e.g., shea, baobab); collect gender-disaggregated data.
C7	Loss of traditional knowledge – FMNR practices displace or conflict with indigenous tree management systems.	Medium	Medium	Medium	Document traditional ecological knowledge; integrate customary practices into FMNR management; engage elders as knowledge holders.

5.3 Guidance Notes

Participation Framework: Use Ostrom's principles for governing the commons as a guide: consider local norms and social context prior to FMNR introduction, guarantee benefits for the community, ensure recognition by authorities and establish participatory decision-making and responsibility for resource monitoring.

Conflict Sensitivity: Existing power dynamics between farmers, chiefs and higher authorities can be enforced by FMNR projects. Ensure that project implementation does not inadvertently reinforce inequitable power relations. Conduct a conflict sensitivity analysis before plot establishment.

Community Byelaws: Support communities to develop and enforce local byelaws for plot protection, fire prevention, and equitable benefit-sharing. These byelaws should be endorsed by the traditional authority and District Assembly where possible.

Section 6: Institutional and Governance Risks

6.1 Context

Disincentivising state regulations and permit procedures for management of trees on private property can be barriers for scaling up FMNR. The legal recognition of Community Forest Management Areas may be seen as reclaiming gazetted forested land for community use; thus, it is reasonable to prioritise access to land for local communities.

FONAR works with communities, civil society organisations, local and national government agencies, and international partners to promote FMNR practice through advocacy, education, research and community mobilisation for adoption and mainstreaming into development policies. The Talensi District Chief Executive has expressed commitment to making environmental regeneration a cornerstone of local development, noting that the successes of the Talensi FMNR project have put the district on the map.

6.2 Risk Register: Institutional and Governance

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
D1	Weak institutional support – Lack of sustained support from District Assembly, GES or traditional authority after project launch.	Medium	High	High	Formalise partnerships through MoUs; establish district-level FMNR steering committee; integrate FMNR into district medium-term development plans.
D2	Policy barriers – National regulations on tree harvesting or land use discourage FMNR adoption.	Medium	Medium	Medium	Engage with Forestry Commission on tree registration; advocate for policy reforms through FONAR's national advocacy work; document and share good practices.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
D3	Traditional authority disputes – Competing claims between Tindana, Chief, and family heads over land or tree rights.	Medium	High	High	Map traditional authority structures; engage all relevant authorities in consultation; document agreements.
D4	Project staff turnover – Loss of trained FONAR staff or lead farmers disrupts plot management.	Medium	Medium	Medium	Document all procedures; train multiple lead farmers per plot; maintain institutional memory through written records and photos.
D5	Funding discontinuity – Project funding ends before demonstration plot is self-sustaining.	High	High	Critical	Develop sustainability plan from project outset; diversify funding sources; build community capacity for self-management; plan for gradual handover.
D6	Coordination failures – Poor coordination between FONAR, schools, community, and government agencies.	Medium	Medium	Medium	Establish clear roles and responsibilities matrix; hold regular coordination meetings; designate focal points for each partner.

6.3 Guidance Notes

Institutional Mapping: Before establishing a demonstration plot, map all relevant institutions and their roles: FONAR (facilitation and technical support), District Assembly (local governance and byelaw endorsement), GES (school-based plots), Forestry Commission (tree registration and technical advice), NADMO (disaster risk reduction), and traditional authorities (land and community governance).

Policy Engagement: FONAR's advocacy for the integration of FMNR into national programmes such as the Tree for Life Initiative represents an opportunity to address policy barriers at scale. Demonstration plots should be used as evidence for policy advocacy.

Section 7: Operational and Technical Risks

7.1 Context

The basic steps of FMNR include: selecting which stumps to leave (10–200 stumps per hectare) based on growth habit and potential to produce useful products such as firewood, fruit or fodder. On cropland, there must be a distance of 10–15 metres between stumps or tree seedlings to avoid shading of crops. Out of 10–15 stems that may sprout from a stump, select the healthiest, tallest and straightest that will grow into trees. About five stems per stump can be selected. Remove all unwanted stems and side branches. Return regularly to prune any excess stems and side branches for best results.

A critical issue to address is access to propagation materials for indigenous species and appropriate capacity, training and extension on propagation methods. Use of fencing or enclosures in communal land may conflict with traditional open grazing practices.

7.2 Risk Register: Operational and Technical

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
E1	Poor site selection – Plot established on land with few viable stumps, poor soil or high degradation.	Medium	High	High	Conduct pre-establishment site assessment (see Annex B); identify degraded site which can best demonstrate impact of FMNR as a restoration option; verify presence of living stumps or root systems.
E2	Incorrect pruning technique – Improper pruning damages stems or reduces growth potential.	High	Medium	High	Provide hands-on training for all lead farmers and eco-club coordinators; use sharp tools and cut upwards carefully; conduct follow-up monitoring and refresher training.
E3	Insufficient stump density – Too few viable stumps in plot to demonstrate FMNR effectively.	Medium	Medium	Medium	Survey stumps before plot selection; if density is low, consider enrichment planting or selecting alternative site.
E4	Lack of tools and equipment — Inadequate pruning tools, protective gear, or fencing materials.	Medium	Medium	Medium	Procure tools before plot establishment; FONAR has previously distributed 75 pairs of wellington boots, 75 pairs of hand gloves, 75 cutlasses, and 75 pruning knives valued at GH¢12,000 to eco-clubs; ensure equitable distribution.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
E5	Inadequate training – Lead farmers, teachers, or community members lack sufficient knowledge of FMNR principles and practices.	Medium	High	High	Develop standardised training curriculum; train multiple individuals per plot; provide refresher training; use FMNR Field Manual resources.
E6	Poor fencing or protection — Inadequate physical protection allows livestock or wildlife to damage regenerating trees.	High	Medium	High	Use multiple protection methods (wire fencing, thorny brush, bee-hive fencing); engage community in fence maintenance; consider communal herding arrangements.
E7	Monitoring and data gaps — Insufficient monitoring of plot progress, leading to undetected problems.	Medium	Medium	Medium	Establish monitoring protocol with clear indicators; train community monitors; conduct quarterly site visits; use GPS and photographs for baseline documentation.

7.3 Guidance Notes

Site Selection Criteria for Demonstration Plots:

1. *Visibility and Accessibility:* Plot should be visible to community members and accessible for training and demonstration activities.
2. *Degradation Level:* Ideally a degraded site that can best demonstrate the impact of FMNR as a restoration option.
3. *Stump Availability:* Minimum of 50–100 viable stumps per hectare.
4. *Land Tenure Security:* Documented agreement with landowner(s).
5. *Community Commitment:* Evidence of community interest and willingness to participate.
6. *Low Conflict Risk:* No active land disputes affecting the site.
7. *Water Availability:* Adequate soil moisture or potential for water harvesting.

Pruning Protocol:

Step	Action	Timing
1	Survey farm, note tree species and stump locations	Before establishment
2	Select stumps for regeneration (10–200 per hectare)	Dry season
3	Select 3–5 healthiest, tallest, straightest stems per stump	Dry season
4	Prune side branches to roughly half the stem height	Dry season
5	Remove all unwanted stems and side branches	Dry season
6	Return regularly to prune excess regrowth	Ongoing

Section 8: Sustainability and Scaling Risks

8.1 Context

One of the main constraints to further upscaling FMNR is insufficient access to rural funding. The implication is that the cost-benefit analysis provides a conservative, lower-bound estimate of the true profitability of adopting FMNR farming.

There must be constant sensitisation of communities on the benefits of FMNR, and there must be regular monitoring of communities and logistics of farmers and fire volunteers. Inhabitants of Tongo Beo affirm that because of FMNR, their livestock have grown healthier, and fruits have grown more and larger.

8.2 Risk Register: Sustainability and Scaling

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
F1	Funding gap for maintenance – No dedicated budget for ongoing plot maintenance after initial establishment.	High	High	Critical	Integrate maintenance costs into project budget; explore community contribution mechanisms; link with district assembly support.
F2	Weak community ownership – Community does not feel ownership of demonstration plot, leading to neglect.	Medium	High	High	Establish community management committee; ensure benefits flow to community; celebrate successes publicly; integrate into school and community calendars.
F3	Lack of scaling strategy – Successful demonstration plot does not lead to wider adoption of FMNR.	Medium	High	High	Develop scaling plan from outset; conduct farmer-to-farmer exchange visits; document lessons learned; share through FONAR networks and FMNR Hub.
F4	Monitoring and evaluation gaps – Insufficient data to demonstrate impact and attract continued support.	Medium	Medium	Medium	Establish baseline data; track core FMNR indicators (number trained, number adopting, area under FMNR, tree density); conduct annual impact assessment.

Risk ID	Risk Description	Likelihood	Impact	Risk Level	Mitigation Measures
F5	Climate change impacts – Increasingly erratic rainfall and higher temperatures reduce FMNR success rates.	Medium	High	High	Select climate-resilient species; implement water harvesting; diversify livelihood options linked to FMNR; integrate with climate adaptation planning.
F6	Market access barriers – Limited markets for FMNR products (firewood, fruits, fodder) reduce economic incentive.	Medium	Medium	Medium	Link FMNR to value chain development; support processing and marketing of non-timber forest products; explore shea and baobab value chains.

8.3 Guidance Notes

Sustainability Planning: From the project design phase, develop a sustainability plan that addresses:

- Who will manage the plot after project funding ends?
- What resources (financial, human, material) are required for ongoing maintenance?
- How will benefits be shared equitably?
- How will lessons be documented and shared?
- What is the exit strategy and timeline?

Scaling Strategy: Use demonstration plots as centres for farmer-to-farmer learning. Organise exchange visits, field days, and practical training sessions. Document and share success stories through FONAR's networks, FMNR Hub, and district platforms.

Core FMNR Indicators for Monitoring:

Indicator	Definition	How to Measure
Number trained in FMNR	Individuals who completed FMNR training	Training records, disaggregated by sex and age
Number adopting FMNR	Individuals using FMNR on own or communal land	Site visits, follow-up surveys
Area under FMNR	Hectares where FMNR is practised	GPS measurement, community mapping
Average tree density	Trees per hectare in target area	Sample plot counts
Community cohesion	Perceived community togetherness	Household surveys, focus group discussions

Section 9: Risk Monitoring and Review

9.1 Monitoring Responsibilities

Role	Responsibility
FONAR Project Manager	Overall risk management oversight; review risk register quarterly
Community Facilitator	Conduct site visits; update risk status monthly; report new risks
Lead Farmer / Eco-Club Coordinator	Daily monitoring of plot conditions; report incidents to facilitator
Community Management Committee	Review plot status monthly; address local risks; enforce byelaws
District Partners (GES, Assembly, Forestry)	Provide technical support; participate in quarterly reviews

9.2 Review Schedule

Review Type	Frequency	Participants	Output
Daily visual check	Daily	Lead farmer / custodian	Log entry
Monthly monitoring visit	Monthly	Community facilitator	Updated risk status
Quarterly risk review	Quarterly	Project team, community representatives	Updated risk register
Annual comprehensive review	Annually	All stakeholders	Revised risk assessment, lessons learned
Post-incident review	After major event	Relevant stakeholders	Incident report, corrective actions

9.3 Risk Register Template

Risk ID	Description	L	I	Score	Mitigation	Responsible	Status	Review Date

Status Codes: Open / In Progress / Mitigated / Closed / Escalated

Section 10: Contingency Planning

10.1 Trigger Events

The following events trigger activation of contingency plans:

Trigger	Response
Bushfire damage	Assess damage within 48 hours; document losses; replant or protect surviving stumps; review fire prevention measures.
Major theft or vandalism	Report to police; document for insurance or replacement; review security arrangements.
Land dispute	Suspend all activities on plot; engage traditional authority and District Assembly for mediation; document dispute.
Extended drought	Implement emergency watering if feasible; prioritise protection of surviving stumps; document lessons for species selection.
Funding shortfall	Prioritise essential maintenance; seek bridge funding; reduce scope if necessary; communicate transparently with community.
Community conflict	Pause plot activities; engage conflict resolution mechanisms; resume only when tensions are resolved.

10.2 Emergency Contacts

Role	Name	Phone	Email
FONAR Executive Director	Mr Sumaila Saaka		
FONAR Project Manager			
District NADMO Officer			
District Fire Officer			
Traditional Authority (Tindana/Chief)			
GES District Director	Madam Christiana Azure		
Forestry Commission Range Manager	Mr Ekow Bentum Manful		

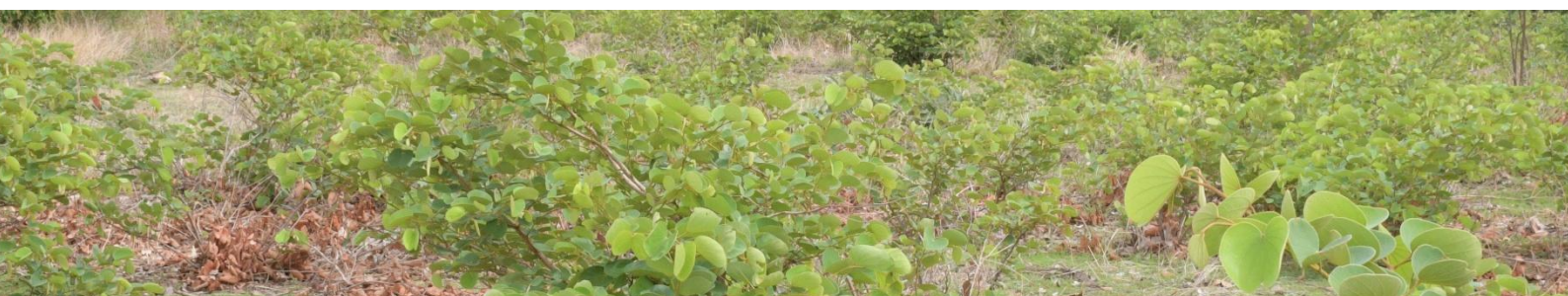


Annex A: Land Use Rights Assessment Form

(Adapt from the Damol-Tindongo Land Use Rights Assessment Form template)

Annex B: Site Assessment Checklist

Item	Yes/No	Notes
Land tenure documented		
Landowner consent obtained		
Community consultation conducted		
Traditional authority engaged		
Site accessibility confirmed		
Minimum 50 stumps/hectare present		
No active land disputes		
Firebreak potential identified		
Water source or harvesting potential		
Fencing materials available		
Training conducted for lead farmers		
Community management committee established		
Baseline data collected (GPS, photos, species count)		
Monitoring plan in place		
Sustainability plan developed		



Annex C: FMNR Demonstration Plot Agreement Template

Community FMNR Demonstration Plot Agreement

Between: Forum for Natural Regeneration (FONAR) and [Community/School Name]

Plot Location: [GPS Coordinates]

Plot Size: [Hectares]

Landowner/Authority: [Name and Title]

Agreed Terms:

1. The landowner/community agrees to allocate the above land for FMNR demonstration purposes for a period of [X] years.
2. FONAR agrees to provide technical support, training and initial materials for plot establishment.
3. The community agrees to maintain the plot, enforce protection measures and participate in monitoring.
4. Benefits from the plot (pruned wood, fruits, fodder) shall be shared as follows: [Specify].
5. Either party may terminate this agreement with [X] months' written notice.

Signed:

For FONAR

Date: _____

For Community/Landowner

Date: _____

Witnesses:

_____ Date: _____

_____ Date: _____

Annex D: Monitoring Form

Date	Plot ID	Visit Type	Observations	Actions Taken	Photos	Next Visit
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