Moving beyond forestry laws in Sahelian countries

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Executive summary

Sahelian rural populations’ needs are sourced from on-farm indigenous tree species. Access, use and management of indigenous tree species within their territories are restricted however, by forestry laws hence limiting livelihoods. This has built suspicion and discontent between foresters and natural resource users. Natural resource users argue that they own trees on their farms. By contrast, the state owns protected indigenous trees on-farms as stipulated in the forestry laws. These mismatches have increased deforestation. To deal with these mismatches, we recommend that Sahelian governments work with rural communities and other stakeholders to amend their forestry laws to: i) facilitate negotiation support among stakeholders, ii) operationalize decentralization and power transfer initiatives for management of agroforests, iii) recognize and facilitate formulation and use of local bylaws to control access, use and tree management, iv) use permits and licenses to regulate access and use of indigenous trees only in state controlled “classified” forests, v) provide extension services to natural resources users, vi) promote agroforestry as a business, vii) review land and tree tenure laws, and vii) enhance collaborative work among Sahelian governments, development partners and research institutions.

Policy conclusions

Policy recommendations for the Sahelian governments to improve management of agroforests within respective territories include:

i) Facilitate a negotiation support system: Create a platform involving users of natural resources, policy makers, foresters, rural development planners and development partners to address problems of natural resource laws on access, use and management of indigenous tree species.

ii) Operationalize decentralization and transfer initiatives for management of agroforests: Start joint management of agroforestry systems by actively involving rural communities in managing agroforests within their territories.

iii) Recognize, facilitate formulation and use of local bylaws to manage agroforests: Allow users of natural resources to use local bylaws in regulating access and use of natural resources.

iv) Regulate access and use of indigenous tree species by using permits and licenses: Permits and licenses currently used to regulate access, use and management of indigenous tree species in agroforestry parklands should only be used in classified forests. Recognize local bylaws and use them to regulate natural resource access, use and management in agroforestry parklands.

v) Provide extension services to natural resource users: Review forestry education curricula in order to integrate the provision of extension services, and shift the focus of training from policing to technical support and partnership.

vi) Promote agroforestry as a business: Indigenous trees on-farm provide various goods and services to natural resource users. Promoting businesses will require building strategic partnerships with the private sector (both external investors and the local small scale enterprises), creating incentive measures (e.g., digging boreholes and wells for water), and enhancing access to credit in order to promote smallholder production and commercialization of a range of products from native tree species.

vii) Review and clarify land and tree tenure laws: Facilitate a process whereby natural resource users gain user rights over indigenous tree species. Since user rights are closely linked to land tenure, governments need to open and maintain a dialogue with natural resources users to identify and implement equitable land ownership policies.

Enhance collaborative work among Sahelian governments, development partners and research institutions: Sharing lessons, experiences and approaches for natural resource management will build synergy and promote cross-country learning.

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Indigenous tree and shrub species provide essential goods and services to both rural and urban populations, such as fuelwood, fodder, fruits, fibre, timber, herbal medicines and ecological functions like soil erosion control and improvement of soil fertility. As a result, indigenous tree and shrub species influence the rate at which Sahelian governments can meet the millennium development goals. However, as rural populations have increased and droughts have become more frequent and persistent, the abundance of many valuable indigenous trees/shrubs and associated agroforests have declined. Such decline threatens food security, reduces income generating opportunities and increases resource-based conflicts. Governments’ responses include stricter policies and laws aimed at organizing and regulating access, use and management of indigenous trees/shrubs in parkland agroforests. Sahelian forestry laws recognize the significance of indigenous trees/shrubs to people’s livelihoods, but they do not advance approaches to promote the sustainable management and conservation of these natural resources. Instead access, use and management of agroforests stipulated in the forestry laws have actually contributed to deforestation. This is despite stringent penalties and use of permits and licenses. Application of the law has encouraged suspicion, fear and discontent between foresters and rural communities. Addressing inadequacies in the forestry laws is urgent in order to balance socio-economic and ecological objectives of Sahelian governments.

Policy reforms across Sahelian countries were aimed at different objectives and have had varying socio-economic and ecological impacts. In some countries forestry laws severely limit agroforestry adoption, restrict use of trees and advance state interests. Management of protected indigenous trees within village territories does not balance socio-economic and ecological objectives as specified in the law. Decentralization and power transfer proposals for agroforestry are not operational. Natural resource user rights to land and tree resources are not recognised. Local bylaws are rarely recognised in the forestry laws and where there is some degree of recognition, like in Niger, lessons and experiences are not replicated. The law is clear on management of state controlled “classified” forests, but unclear on the management of agricultural land and agroforestry. Despite the exclusion of agroforests in the forestry
law, access and use of some valuable indigenous tree species in village territories are still protected. Foresters argue that the application of the law on access, use and management of on-farm indigenous trees species is guided by the need to “avoid running the risk of anarchy in the management of resources” (Sahel Eco, 2006).

Successes have been reported in countries where bylaws have been recognised and used in managing agroforests. Recognition of natural resource users’ rights and responsibilities enhance access, use and management of indigenous trees (Ly et al. 2006). In Niger, for example, improved natural regeneration and management practices of trees are attributed to recognition of customary laws and wise application of the forestry law (see box 1 for details). Given Niger’s lessons and experiences, why have agroforests in other Sahelian countries continued to degenerate rather than regenerate? Is this because of the implementation of the forestry laws?

Box 1
Matching laws and reality: The cases of Niger and Mali

Mali and Niger have contrasting approaches to forestry laws. In Mali, permit and licensing systems have built discontent and distrust between local communities and foresters. Local communities are rarely involved in the management of protected indigenous tree species. Access, use and management of protected indigenous tree species are, therefore, limited by the Malian forestry law. The law ignores bylaws and does not provide for strong monitoring and evaluation systems to enforce the forestry law. Malian law does not clearly define agroforestry and forestry. It is silent on what should happen in agroforest parklands, but clear on activities and control of indigenous trees within state controlled forests.

In Niger, by contrast, the government has overcome this problem by devolving access, use and management of agroforests to rural populations. It also recognizes use of bylaws as well as involving natural resource users in tree management. The Niger government has promoted ‘contract farming’ in state controlled forests. Natural resource users are encouraged to plant trees for timber, fuelwood and for ecological purposes. Protected indigenous tree species are not controlled on-farms, but natural resource users are trained in sustainable use, and a monitoring and evaluation system is in place to ensure sustainable use. Niger’s case study has been successful because bylaws were used to control use of trees.
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Action research in Mali and Niger, and a review of the forestry laws across Sahelian countries identified several problems. In order to determine the degree to which different provisions of the law support or work against each other at the local levels, compatibility analyses were undertaken. Through this process, protection of native tree species on-farms, protecting usage rights of adjacent communities, compliance with different provisions of the law, use of uniformed forest officers (the ‘military’) to enforce the forestry law, and state ownership of land and native tree species were isolated as having potentially adverse effects on balancing social, economic and ecological options as stipulated in the law. These were further subjected to sustainability tests using sustainability appraisal matrices and associated sustainability record sheets. Sustainability appraisals were undertaken in four villages each in Mali and Niger. Foresters and other partners completed and returned the sustainability appraisal matrices which were analyzed based on a three point criteria: effects on natural resources, social/cultural conditions and the economy. At the community level, participatory action research involved the use of: i) participatory resource mapping with villages to develop geospatial perceptions of landscapes by capturing geo-physical features, locating different land uses relative to their villages, delineating access rights and defining their relationship to particular natural resources, including native tree and shrub species; ii) understanding the links between the provisions of the forestry law, practice and impacts on natural resource utilisation and management; iii) defining roles of the different stakeholders through the understanding of their rights, responsibilities, benefits and their relationships; and iv) establishing the potential and/or existing impacts of the critical provisions of the law identified through compatibility analyses.

Major results of the research include:

- **Differences between states’ and natural resource users’ interests**: Forestry laws were generally observed to promote the interests of governments rather than those of natural resource users. Land is held in trust by the government and indigenous trees on-farm are strictly protected by the state. Stringent regulations on access, use and management of protected indigenous trees have affected natural resource users’ investments in tree management. In contrast to the state, local communities believe that the land is theirs.
The law either forbids cutting or strictly controls access and use of trees, leaving natural resource users with no incentive to protect or plant trees. This has adversely affected access, use and management of indigenous trees.

- **Inconsistent laws:** Many natural resource laws are contradictory, sector-based and lack coordinated implementation. Ongoing reviews do not consider initiatives in other sectors. Integrated policy reviews and coordinated implementation is lacking. However, there are opportunities for formulating subsidiary regulations and integrating them into the existing forestry laws.

- **Ignorance of local laws and local conventions:** The forestry law does not recognise the use of local laws (i.e. bylaws) to regulate access, use and management of protected on-farm indigenous tree species. Natural resource users argue that bylaws would be more effective in managing trees relative to the provisions of the forestry law.

- **Enforcing forestry laws:** Foresters are trained police officers and enforce the law as such. This has instilled fear among natural resource users. Rural populations, however, agree that without foresters, indigenous trees could disappear. Foresters are seen as ‘necessary evils’ in the protection of agroforests. Villagers agree that the permit and licensing systems are important instruments, but should only be used to regulate access and use of tree in classified forests. Instead, bylaws should be recognised and used to manage agroforests within village territories. Transforming foresters in ‘military’ uniform from policing to extension service providers was seen as urgent.

- **Recognising agroforestry in the law:** Forestry laws focus on classified and protected forests but are unclear about the management of protected indigenous trees on agricultural land. This leaves both natural resource users and foresters in a dilemma. Foresters continue to regulate protected indigenous trees on-farm, while the rural populations consider such trees as theirs. In some countries, agroforestry is treated as forestry and subjected to forestry laws, rarely considering the interest of rural populations and thereby limiting regeneration of indigenous tree species.

### Rooting for policy change

In Mali, for example there is support for addressing differences between provisions of the forestry law and practices on tree access, use and management. The Director General of Fonds de Développement en Zone Sahélienne (FODESA), an IFAD loan-financed investment project, and the Direction Nationale de la Conservation de la Nature observed that the Malian forestry law has negatively affected natural resource users’ investment in their lands.

Revising forestry laws will, therefore, improve investment in agroforestry. The transfer of natural resource management to communes under the Decentralization Policy Law 96/050 will:

- recognize and integrate bylaws in the forestry law to manage indigenous trees and agroforests,
- recognize natural resource users’ contributions, and
- the Forest Directorate takes up a facilitative and oversight role.

Decentralization policy encourages the development of a management plan for agroforestry parklands. In such a plan, adjacent communities will be allowed to access, use and manage indigenous trees. Lessons and experiences from Niger are useful for adjusting the forestry laws in Mali and other Sahelian countries.

Review of the forestry law in Sahelian countries is urgent given the status of protected indigenous tree species on-farms. In Niger, unlike in most Sahelian countries, the forestry law has changed natural resource users’ perceptions, users’ behaviour and indigenous tree management and has resulted in improved living standards.

### Implications of the policy options

Overall, the recommended policies would improve indigenous tree access, use and management. They would lead to the use of bylaws, clarity about the rights of natural resource users and foresters, and sharing in the responsibility of managing parklands between users and foresters. Adopting these policy options would mean increased expenses for re-training foresters and farmer involvement. Investment in agroforestry will involve new bylaws and efforts to facilitate natural resource users to use agroforests sustainably. This will require improvements in indigenous tree products as well as existing market and regulatory conditions. The forestry laws in Sahelian countries have obvious distortions. These affect access, use and management of on-farm indigenous trees species protected by law. In countries where natural resource users and bylaws have been recognised and integrated in conventional law, there is improved access, use and management of indigenous tree species. Review of the forestry code will, however, need to be linked to the decentralization policy and it must be participatory. Natural resource users need to be seen as important stakeholders in this process.
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a) The IFAD-supported programme on strengthening livelihood strategies in the West African Sahel through improved management and utilisation of parkland agroforests.

Diversifying and improving the management of native trees and shrubs in parkland agroforests, and increasing the marketing of products. Native tree species could help reduce poverty by enabling rural poor communities to earn a more diversified and consistent livelihood, and improve food and health security for all members of the family. The project facilitates a process in which rural poor communities empower themselves: (a) analyze current trends in natural resource management, their root causes and existing attempts to counteract the degradation dynamics; (b) develop and implement sustainable strategies to diversify, manage, utilize and conserve useful native trees and shrubs in the parkland, which valorise their own knowledge combined with scientific knowledge; (c) design and conduct participatory research projects with national partners to investigate genetic variation in native trees and shrubs that the communities identify as priority species, in order to determine the most effective criteria and methods to select superior germplasm, and ultimately produce selected germplasm for local planting and sale; (d) revive or form organizations for collective natural resource management and experimentation, and relationships between users and producers so they can market high-value products from native trees and shrubs as community-based enterprises; (e) improve their livelihoods based on a more diverse and productive parkland; (f) catalyze a dialogue about local natural resource policies with local authorities; and (g) participate directly in defining priorities for agroforestry and forestry research and extension with national research and extension institutes and universities.

b) The EU-supported project on harmonizing policy for environmental stewardship and rural development.

Environmental policies in the developing world often reflect an inter-play between international conventions and financing arrangements, regional geo-politics, pressure from international and national interest groups, and initiatives from local government agencies with varying levels of accountability to local residents. Common results from this inter-play are disjointed programmes that ignore the needs of women and the poor as well as command-and-control regulations that emphasize the conflicts and tradeoffs between environment and development. In the process, women are generally ignored, while smallholders are more often seen as causes and obstacles of environmental degradation, than as interested parties and implementers of solutions. As a result, environmental policies are often viewed piecemeal and are disconnected with higher-profile poverty reduction and economic growth policies. This disconnection can be particularly damaging for agroforestry: many policies put in place to safeguard natural forests undermine the incentives of smallholder farmers to plant and manage trees on-farm. Furthermore, the lack of involvement of local communities also threatens the sustainable use of trees in natural landscapes.

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