Lessons from an integrated sustainable forest plantation model in West Africa

The case of Form Ghana





The Integrated Sustainable Forest Plantation Management project Establishing an integrated forest plantation Key lessons from the project References

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Introduction

Ghana has an annual deforestation rate of around 2% alongside widespread degradation due in large part to agricultural expansion, uncontrolled timber harvesting, and illegal mining. While forest reserves are intended to be a safeguard against such threats, evidence suggests that the highest rates of deforestation and degradation in Ghana occur within protected areas (Mongabay, 2019).

Ghana's forest reserves are regulated by the Ghana Forestry Commission, the public agency responsible for the management and coordination of policies regulating forests and wildlife. However, due to limited resources and weak governance, encroachment and illegal chainsaw operations within forest reserves continue to thrive (Adom, 2017). It is estimated that only half of forest reserves in Ghana are in reasonable condition while the rest have been badly degraded (FAO, 2001) thus underscoring the need and urgency for increased investments into reforestation.

This knowledge product uses the case of Form Ghana to demonstrate how private sector companies and other interested stakeholders can successfully plan and implement an integrated sustainable restoration business that is socially, economically and environmentally responsible. It is intended for private sector companies involved in forest restoration, teak growers and processors, eco-entrepreneurs and potential forest plantation developers.

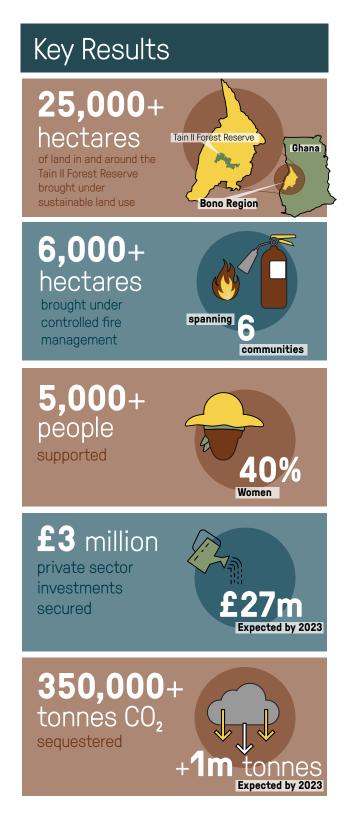


The Integrated Sustainable Forest Plantation Management project

In the Bono Region of Southern Ghana, the Forestry Commission has leased 19,400 hectares of the degraded Tain II Forest Reserve to Form Ghana. Form Ghana is a forest plantation management company primarily focusing on reforesting degraded Forest Reserves. It is also the largest private teak plantation company in Africa and has an ambition to restore 100,000 hectares of degraded land by 2030. With support from Partnerships for Forests (P4F), Form Ghana is collaborating with communities and landowners located in and around the Tain II landscape to implement an integrated forest plantation and agroforestry project. The main objective of the project is to restore the Tain II forest by introducing intercropping of food and tree crops that will provide incomes, food, and market access to community members in the landscape.

Historically, uncontrolled fires were the main driver of degradation in the landscape. Fires were used to clear farmland, stimulate regrowth for livestock grazing and chase wildlife from vegetation into open land for hunting. These activities left the landscape with heavily degraded soils, dwindling livelihood opportunities, and a huge loss of ecosystems for flora and fauna.

Form Ghana is certified under the Forest Stewardship Council (FSC) and has committed to socially, ecologically, and economically responsible value chain operations. Central to its business model is the restoration of badly degraded landscapes that do not offer any conservation value in their current state but can provide a viable business model for commercial forest plantations – specifically through the planting of teak and indigenous tree species which provide financial and biodiversity benefits in the landscape.



Establishing an integrated forest plantation

To ensure secure investments and responsible operations, Form Ghana implemented key strategic actions on land tenure, fire management, and community inclusion.

1. Securing investments for an integrated forest plantation model

Private investors often consider restoration to be risky because of its long-term returns on investments. It was therefore imperative for Form to effectively manage risks in order to secure private investments. P4F's initial grant funding supported Form to develop a business case and pilot an agroforestry and community fire management system with communities. Additionally, P4F provided technical support that enabled Form to conduct due diligence, develop a risk management plan, and an investment prospectus that allowed the company to accelerate discussions with impact investors. As a result of demonstrating the viability of the business model, Form Ghana was able to secure its first private investment to scale the restoration program.

2. Strategic landscape categorisation for agroforestry

leaseholders, chiefs, and families own adjoining areas of the Tain II landscape. Added to this, other parts of the landscape are managed under customary law by traditional authorities and private families. To secure Form Ghana's investment, Form, with support from P4F, collaborated with surrounding leaseholders, landowners, and existing communities within the landscape to reduce fire and theft risks around the plantations. This was done through a participatory process that involved categorising land use to ensure continued access to farmland for non-landowners while providing incentives to farmers to motivate their participation in the project. This process gave the community a sense of ownership in managing and securing the plantation. Incentives such as free food crop seedlings and access to markets has encouraged community entrepreneurship and improved livelihoods. The land use system introduced by Form Ghana involves the classification of tenure into four categories (see Figure 1).

Beyond the lease agreement between Form Ghana and the Forestry Commission, other



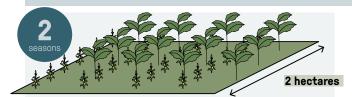
FIGURE 1

Form Ghana's tenure classification system

Taungya System (TS)

Modified Taungya System (MTS)

In both Taungya systems, selected farmers from communities neighbouring Form's leasehold area are each assigned 2 hectares to plant teak seedlings.



Under TS, Form Ghana allows Taungya farmers to plant maize as an intercrop on the new plantation blocks and provides them with certified maize seeds, fertilizers, and pesticides.

Support is provided for two cropping seasons and farmers are guaranteed new planting areas each year as Form expands its plantations.



In addition to the benefits of the regular Taungya Model, Form Ghana pays MTS farmers to maintain teak trees during the first four years of planting and also offers a share in future tree revenues calculated as a percentage of standing tree value.

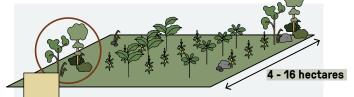
2 hectares

This benefit sharing mechanism is backed by an agreement signed between Form Ghana, the Forestry Commission, Traditional landowners, and communities.

Admitted Farms

Admitted farms are isolated and under-developed plots of customary land encapsulated by the Tain II Forest Reserve but not part of the reserve.

To develop these lands and restore tree cover, the project is implementing an agroforestry system of teak, maize and cashew on individual plots of 4-16 hectares.



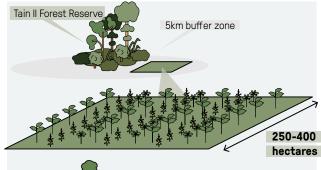
Form and the landowner sign an agreement formalising the commitment to implement agroforestry plots while preserving existing forest cover and forest remnants.



Besides paying the farmers for the labour put into planting teak seedlings, Form provides free maize inputs, teak stumps and improved cashew planting material.

Off-Reserve Farms

Unlike admitted farms, off-reserve farms are located beyond the perimeter of the Tain II Forest Reserve and within a 5km buffer zone around the forest reserves.





Under this model, a block-size approach of 250-400 hectares is planted with a mix of cashew, maize and teak.



3. Improving community livelihoods through agroforestry

Community participation in the landscape project has improved household incomes through the stratified revenue streams provided by the intercropping varieties. In addition to introducing the intercropping of maize, cashew and teak, small research plots (demonstration farms) have been planted with cassava, plantain, and okro with technical support from the Ministry of Food and Agriculture (MoFA). Agroforestry smallholders will also be supported with finance solutions that will include linking farmers to finance, agro-input suppliers, aggregators, and processing industries.

The project has also organised and trained farmers on best practices and quality standards to help them improve their yields and revenue. Off-taking of high-value crops has been secured through buyer agreements signed with identified agricultural off-takers, guaranteeing fair and competitive prices to farmers. Form has also improved the road network into farms to make it easier to transport inputs, harvests, and technical services.

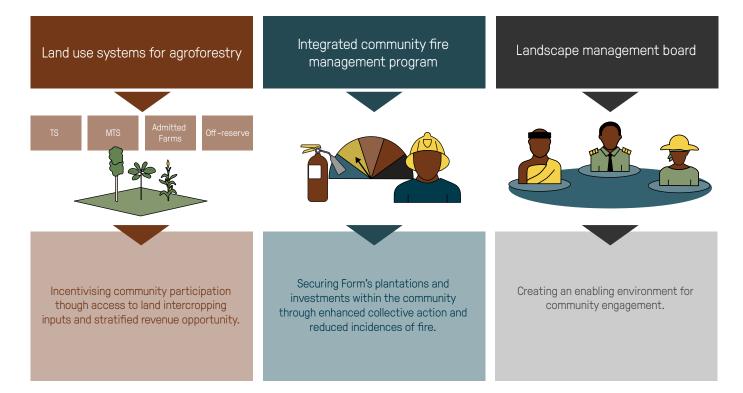
Through these additional activities, Form is ensuring that its activities achieve positive social and ecological impacts and communities have an incentive to maintain and develop Form's plantations.

4. Addressing operational risks through a community fire management programme

Fire is an important tool for farmers and is used in the preparation of land for planting. However, due to improper fire management, uncontrolled fires pose a serious threat to Form's investments and to the remnants of forests and biodiversity in the Tain II Forest Reserve. To address this risk, since 2018 Form Ghana has been implementing an integrated community fire

FIGURE 2

Integrated sustainable plantation operations



management project with communities around their plantations. Under this project, woodlots of fastgrowing indigenous tree species such as Ofram are used to create green fire belts. Beyond this, local by-laws on the use of farm fires have been revised to include legal and safety issues pertaining to the use of farm fires during the dry season. The project has also introduced the Fire Danger Index, a global tool used to guide the process of controlled fires, and collaborated with the Fire Protection Association of South Africa and the Ghana Fire Service.

Additionally, existing fire volunteer structures have been revived and made operational again. This was done through consultative community meetings and agreements signed with members from the Community Fire Squads. These squads represent community members that have been trained to execute controlled burns during the fire season. Form pays a monthly allowance to the fire squads and provides them with personal protection equipment and tools such as beaters, rake hoes, and torch lights. Squad leaders are also given a cell phone and monthly credit to communicate with all the members. The fire management project has reduced the number of uncontrolled fire outbreaks by 79 percent compared to previous years.

5. Engaging community stakeholders through a Landscape Management Board (LMB)

Form has set-up and operationalised a LMB involving community members, traditional councils and authorities, and municipal assemblies of Berekum and Tain districts. The LMB provides oversight on project implementation, coordinates the fire management program, and offers a collaborative platform between Form, communities, and traditional authorities. It also ensures that benefits accrued from the project are distributed equitably to all stakeholders in the landscape.

Key lessons from the project

1. Landscape-level collaboration and collective action is imperative for sustainable restoration outcomes

The integrated forest plantation project demonstrates the importance of public, private, and community partnerships in forest restoration. Prior to the project, the Ghana Forestry Commission and local farmers, under the Modified Taungya System (see Figure 1), made attempts to plant and manage a teak plantation in a section of the Tain II Forest Reserve. Due to the absence of private sector investment, coupled with poor management, fires, and pre-mature felling of the trees, farmers received little to no benefits. Form Ghana's Forest Restoration Program however has rehabilitated and protected existing teak trees while ensuring farmers have access to markets and, in turn, are able to financially profit from teak thinnings and harvests. This has created a relationship of trust and mutual understanding between Form and communities which have also contributed to unlocking private sector investments.

2. Forest restoration creates a positive business case for the private sector

Due to the additional value of the restoration project, Form has agreed with its shareholders to make the integrated forest plantation model part of its core business strategy. The program plays a critical role in Form Ghana's engagement with investors, demonstrating how the company is working closely with communities to reduce operating risks and safeguard their natural capital. As a result, other private sector companies have demonstrated interest in committing investments to help Form scale their activities under the project. Finally, the planting of indigenous trees creates an opportunity for carbon sales through its potential for ecosystem regeneration. The project is expected to produce over 1 million metric tonnes of carbon credits by 2030.

3. Establishing a clear land tenure system is essential

Addressing conflicting land tenure, access, and use rights is often challenging especially with respect to the long maturity period of restoration projects. It is therefore imperative to establish a clear land tenure system from the outset to address issues related to both landowners and non-landowners.

4. Grant finance has an important role in de-risking private sector restoration efforts

Financial support from the public sector through P4F has reduced the cost of piloting the project and facilitated the processes of integrating smallholder communities to ensure that socioeconomic and ecological impacts are secured. This has enabled Form to develop a proof of concept that has helped attract additional investments for scaling the model to new regions and potentially by other companies.



References

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Agyarko, T. (2001). Forestry Outlook Study for Africa (FOSA). FOSA Country Report, Ghana Ministry of Lands and Forestry, Accra. ftp://ftp. fao. org/docrep/fao/003/AB567E/AB567E00. pdf (accessed 18 August 2008).

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Adom, D. (2017). Challenges to the efficacy of forestry and wildlife policies in Ghana for environmental protection: A review. African Journal of Agricultural Research, 12(39), 2858-2876.

https://news.mongabay.com/2019/08/we-havecut-them-all-ghana-struggles-to-protect-its-last-oldgrowth-forests/ Lessons from an integrated sustainable forest plantation model in West Africa

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