



Programme

Landscape restoration in Tain II Forest Reserve, Brong Ahafo, Ghana.

Goal

Restoration of 1,000 hectares of indigenous forest within Forest Reserve Tain II, improving the health of 400 hectares of existing neglected forest, and promoting climate-smart farming and establishment of agroforestry farms on 800 hectares of community farmland around the reserve. These activities will turn the Forest Reserve into a refuge for biodiversity, secure sustainable land use and actively improve the livelihoods of farmers in and around the reserve.

Partner

Form International and Form Ghana.

Best of both worlds

Applying commercially acquired techniques to forest restoration

Until recently, Ghana's Tain II Forest Reserve was a degraded forest reserve, surrounded by community subsistence farmland with poor road access. On these farms, farmers predominantly cultivated annual crops. In and around the reserve, logging, unsustainable farming, cattle herding and poaching has developed without much hindrance, resulting in a highly degraded forest landscape that is victim of bushfires every year. As of today, about 500 hectares have been restored through agroforestry. By intercropping high-value (tree) crops with the crops required for subsistence farmers are secured of food and extra income. So far, 200 local farms are involved and over 400 jobs have been created thanks to these agroforestry activities. Next to that, 1,000 hectares of degraded land in the Forest Reserve have been reforested by planting and maintaining indigenous trees, which in the future will harbour an increased biodiversity and a healthier soil. The key to this success? Form International's and Form Ghana's commitment to find solutions with the communities around the Reserve to sustainably manage the landscape, strengthen already existing organisational structures and develop sustainable tree-based business cases with farmers.





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Form Ghana runs a commercial teak plantation in the Bono region in Ghana. Form International is a forest management, landscape restoration, and forest and climate advisory company based in the Netherlands. During their long-term relationship, these two companies have built expertise in data collection and innovative and sustainable forest management. Together they apply techniques to restore the 2,200 hectares in and around the Tain II Reserve.

A wealth of data

Forest restoration requires an in-depth knowledge of soil and land management. That's why the organisations dedicate time, resources and energy to research, data collection and training. Over the years, they collected a wealth of data with various state-of-the-art forest inventory systems. The data that are collected, range from fauna inventories and biodiversity assessments, to weather measurements, tracking of bushfires, determining tree coverage, and even social monitoring and drone footage. 'Our role is to collect information at landscape level - mapping, zoning, GIS - and communicating with all stakeholders to provide a solid basis for landscape governance. Improved landscape governance will lead to restoration of the landscape, providing benefits such as a reduced fire risk, more efficient production and enhanced biodiversity conservation', states project manager Rosa Diemont.



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Experimental plots and nurseries

One of the keys to success are the carefully maintained nurseries and experimental plots. In the experimental plots different indigenous tree species, exotic fruit trees, cash crops and even different fertilizers are tested. An example is the demonstration farm in which agroforestry models are tested. Annual crops, such as maize, yam, ginger, turmeric are intercropped with cashew, moringa, white star apple and other exotic and native fruit trees. The well-maintained nurseries provide planting material for the reforestation and regeneration of the threatened Eastern Guinean Forest type along the Tain river.

In the past two years, 10 species were re-introduced into the Forest Reserve. This year the nursery contains 49 different species. The programme will increase the total number of tree species in Tain II Forest Reserve from 56 species to 70 species. Amongst these new species is *Talbotiella gentii*. This tree species is endemic to Ghana and critically endangered because it is restricted in distribution to the margins of the dry forest zone of Ghana where there has been extensive fire damage in recent decades. It occurs as isolated populations, some of which show little seedling regeneration. As the species occurs on farms and in forest remnants of low protection, it runs a great risk of extinction. It is still cut for clearing farmland and for firewood. To protect the species from extinction and to avoid further genetic erosion, Form Ghana plants a gene bank in a number of well protected locations.



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Support and involvement local community

The expertise of the companies is greatly enriched by farmer's knowledge and the implementation cannot be done without the involvement of the local community. For long lasting restoration and grass roots implementation, it is crucial to know which trees the farmers are willing to plant and why. For instance, the farmers are less interested in planting timber tree species for which they have to wait twenty years for the tree to yield. They are however very happy with the trial in which shorter-term timber trees and fruit trees are promoted.

Form's approach is an interesting combination of hands on restoration field work with a scientific and systematic approach in forest restoration. It also shows that the expertise of commercially driven companies can be valuable to forest restoration.

[Watch the YouTube movie here](#)