

**Restoration of Fayantina degraded
grassland area in Eastern Highlands,
Papua New Guinea**

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UNIQUENESS OF THE PROJECT

- First time for a joint venture forestry project between the landowners and the Papua New Guinea Forest Authority (PNGFA).
- It is one of the five areas selected for piloting REDD project and is the first for enhance REDD.
- Under this Joint Venture arrangement , the landowners have provided their land as their equity and have also provided Manpower for labour, while PNGFA provided the overall project Management and both Financial and technical resources.

- **Fyantia afforestation project is located in the Haganofi District of Eastern Highlands Province.**
- **The aims of the project are to rehabilitate the degraded grassland, provide the landowners employment and to share the financial benefits amicably among the landowners and PNGFA.**
- **The project started in 1987 following successful negotiations with the landowners comprising 13 registered Integrated Landowning Groups (ILGs) resulting in an MOU signed between the 13 ILGs and PNGFA to form a Joint Venture.**
- **The agreed MOU requires that PNGFA provides the financial resources to assist in developing and establishing the project and install processing plant to process the timber when the plantation is harvested.**
- **To date the project has covered a total area of over 1,000ha of the 2,000ha customary land that the landowners have given to the project.**
- **The plantation comprises mostly of Pinus patula and P. strobus.**
- **The project is managed by PNGFA**

Fayantina Plantation

145°30'0"E 145°31'0"E 145°31'30"E 145°32'0"E 145°32'30"E 145°33'0"E 145°33'30"E 145°34'0"E 145°34'30"E 145°35'0"E 145°35'30"E 145°36'0"E 145°36'30"E 145°37'0"E

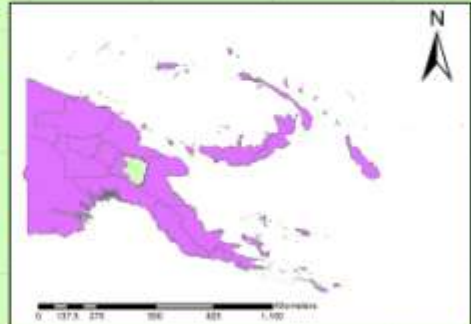
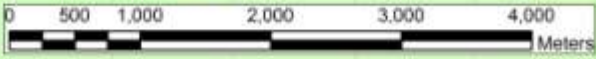
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NAME	AREA
Compt 1	86.8402
Compt 9	84.11
Compt 8	104.389
Compt 6	79.9034
Compt27	27.1356
Compt 25	6.41223
Compt 12	16.8295
Compt 11	4.74822
Compt 24	15.8503
Compt 7	11.0691
Skai	20.2272
Tufao 1	51.4956
Tufao 2	34.1836
Menif	38.8068
Compt 28	5.34413
Compt 17	49.2757
Compt 16	47.2719
Compt 15	31.2344
Compt 10	19.9342
Compt 2	88.1939
Compt 3	89.4272
Compt 18	54.4777
Compt19	24.0695
Compt 13	12.7457
COMPT 5A	56.5784
Kurulu Compt 23	13.374
Kurulu Compt 20	24.3688
Compt 21	11.1946
Kurulu Compt 21	5.40607
Kurulu Compt 22	3.13481
Kurulu Compt 26	3.67071
Kurulu Compt 28	16.8419
Compt 23	5.29875
Compt 14	25.1991
Compt 4a	56.2953
Compt 4b	25.3365

Legend

- Fayantina_Plantation_region
- Eastern Highlands Province



145°30'0"E 145°31'0"E 145°31'30"E 145°32'0"E 145°32'30"E 145°33'0"E 145°33'30"E 145°34'0"E 145°34'30"E 145°35'0"E 145°35'30"E 145°36'0"E 145°36'30"E 145°37'0"E

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FAYANTINA RESTORATION PROJECT



ECOSYSTEM TYPE

Prior to area becoming grassland, it was covered by low and mid montane forests typical of high altitude areas

The forests were deforested and degraded by traditional agriculture through shifting cultivation over a long period of time

Initially, the early cultivators made minimal impacts on the forests, but as population grows and the need for more food increases, the cultivators clear more forested land. However, faced with limited land for cultivation and coupled with population growth and the demand for more land for food, the cultivators were forced to intensify cultivation on the same land with shorter rotation periods. This resulted in the decline of soil fertility, thus promoting the invasion of grasses and weeds which today remain grassland. Burning also assisted in maintaining grasses. Further, people were also forced to clear more land uphill that may have rendered the exposed slopes to become susceptible to landslips which further degraded the land to be transformed into grassland.

REMNANT OF THE MONTANE FOREST ON THE MOUNTAIN TOPS IN FAYANTINA AREA



PROBLEMS AND THREATS

- **Availability of funds to expedite on planned project activities**
- **Availability of planting materials (seeds & seedlings)**
- **Land disputes between (i) the different land owning groups (13 ILGs) that may result in tribal fights and compensation and (ii) between the landowners and PNGFA**
- **Fire – deliberate or controlled during normal dry or prolonged drought periods;**
- **Climate Change, especially that of increasing temperatures (loss of soil moisture and fire) and also increasing precipitation (landslips on slopes and flooding in the valleys)**

FIRE: A MAJOR THREAT TO RESTORATION OF DEGRADED FOREST AREAS



Fyantina Forest fire 2011

PROJECT DESCRIPTION

The Fayantina restoration project is located within the Fayantina LLG area, Haganofi District of Eastern Highlands Province. The Fayantina LLG covers a large area, but for the Restoration project only 2,000ha was provided by the 13 land owning groups of the area for this project.

The PNGFA started negotiation with the landowners in 1987 and took a while before an agreement was reached culminating in the signing of the MOU for setting up the joint venture between the 13 landowner groups and PNGFA to develop the project. Since then a total of 1,197.32ha have been planted using two species of pines (*Pinus patula* and *P. strobus*). Funding and technical inputs have been provided by PNGFA while the landowners provided the land and labour.

The 2,000ha project area has been divided into 36 compartments of varying sizes ranging from just over 3 ha to over 100ha.

Roads and fire breaks have been established within and around the compartments to ease movements of vehicles and labour conducting maintenance work in the project area as well as for fire protection and control purposes.

PROJECT ACTIVITIES

The activities undertaken under this project include the following:

- the demarcation of areas selected for afforestation into 36 compartments in which the planting of pine seedlings took place.
- preparations of the compartments for transplanting
- accessing seeds for sources and raising the seedlings at the nearby PNGFA Lapegu Nursery. Once the seedlings attained the required size, these were then transported to the Fayantina project site where they were planted.
- maintenance – tending, replacements and thinning
- Establishments of fire breaks within and between compartments
- Conduct awareness on climate change, its impacts and communities can do to mitigate and adapt to such impacts
- Awareness and training on REDD

LAPEGU NURSERY



LESSONS LEARNT

- **Landowner negotiations and registration of landowning groups took more time than expected.**
- **Be prepared to manage disputes between the landowners and between landowners and PNGFA**
- **Conduct more awareness on good forest management practices, including fire management, climate change and on the aims of the project.**

FUTURE DEVELOPMENTS

- **Fayantina has been selected as an area for piloting the Enhanced REDD mechanism.**
- **This will be established through more planting on the degraded areas and merging with the remnant montane forest.**
- **This will entail more negotiations and registration of all other landowning groups not earlier included as part of the current project.**
- **The trees to be planted will consist of both exotic and native to the area.**