



PROJECT DESCRIPTION: Development investment proposal

NAME OF CLIENT	BIOALLEY B.V. (NETHERLANDS) (“AFRICAN BAMBOO”)
WEBSITE CLIENT	https://www.african-bamboo.com/
REGION	AFRICA
COUNTRY	ETHIOPIA
SECTOR	AGRO-FORESTRY
SIGNING DATE	30 DAYS FROM PUBLICATION AT WEBSITE
TOTAL FINANCING	€ 350,000
FUND	GRANT FUNDING (ORIGINATION FACILITY “OF”)

- **Who is our (prospective) client?**

African Bamboo Group was established in 2012 in both the Netherlands and in Ethiopia. In its home country, Ethiopia, deforestation had resulted in significant loss of native tree species, while the cost of importing timber from abroad became prohibitively high. Confronting these challenges, African Bamboo’s founders set out to utilize an otherwise unutilized resource. Bamboo is abundantly available with over 1 million hectares of natural bamboo forest in Ethiopia alone, which can be sustainably harvested at low cost.

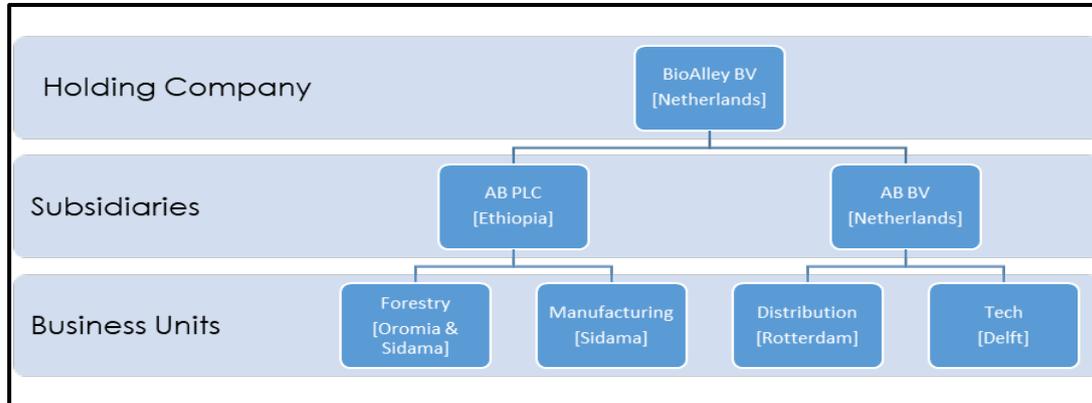
In 2011, a group of scientists and engineers decided to establish a bamboo processing industry in Ethiopia in collaboration with the German development organization GIZ. This concept became African Bamboo.

The parent company of African Bamboo, BioAlley B.V, is owned by Durriyyun B.V. incorporated in the Netherlands. The ultimate beneficiaries of Durriyyun B.V. the Duri family, UBO Hajera Mume (Ethiopian) and Amal Abob(English). The Duri and Kellow families both of whom are respected company builders in Ethiopia have invested time and effort to establish several businesses together and exited multiple others successfully.

AB Netherlands is a 100% subsidiary of BioAlley B.V. (Netherlands) – both incorporated in Netherlands. BioAlley has another wholly-owned subsidiary called African Bamboo PLC (AB Ethiopia) incorporated in Ethiopia. Both AB Netherlands and AB Ethiopia have subsidiary business

units registered in Ethiopia dealing with forestry and manufacturing for the former then distribution and technology for the latter.

The Group ownership structure is depicted below:



- **What is the intended funding objective (type of activity)?**

The application seeks approval of grant funding amounting to **EUR 350,000** from the DFCD (among other grant providers) to assist in financing several Origination Facility activities (OF).

African Bamboo Forestry (AB Forestry) and African Bamboo Manufacturing (AB Manufacturing) operate under AB PLC. African Bamboo Distribution (AB Distribution) and African Bamboo Tech (AB Tech) operate under AB BV. AB Forestry supplies bamboo culms to AB Manufacturing, as well as utilizes waste to produce bamboo pellets destined for European markets. AB Manufacturing processes culms into Tropical Bamboo Decking. AB Distribution markets, sells and distributes all African Bamboo products from its own value chain as well as from off-take agreements with licensed affiliates. AB Tech is the official agent for the bamboo processing equipment from Germany which it will promote in Ethiopia, Kenya, Uganda and other bamboo growing countries of West Africa. AB Manufacturing will be the first official client and license recipient from AB Tech.

- **The grant will be used for undertaking:**

i) Technical and Financial Feasibility

To ascertain a) the technical efficacy of the equipment to be used in the factory, its ability to produce the expected volumes and quality and b) confirm the potential financial and economic viability of the business case and prove that the origination project will ensure that this greenfield project will enable African Bamboo to “*turn the corner*” after years of limited activities.

ii) ESG support and GESI assessment

Support and coach Gender Equality and Social Inclusion (GESI) on African Bamboo’s governance and policy development as well as conduct a GESI awareness assessment through a self-assessment process. Provide coaching on GESI sensitive evaluation and documentation, reporting and monitoring. This will be funded through TA with some contribution from the company.

iii) **Bank Forestry Readiness**

To include a) survey of bamboo farmer holdings to establish individual and co-operative hectares, state of knowledge and potential for a 10-year forest management plan; b) Nursery development and c) Forest Landscape Restoration activities; d) Farmer capacity development. This is important in order to ascertain the willingness, number of farmers keen to continue with / engage in bamboo farming as well as the size of land allocated to such activity as this will then inform African Bamboo of the size of its catchment area and in turn, throughput expected for the factory. The surveys will cover the key bamboo producing areas targeted by the company, that is Musenaj, Oromia Regional State and community plantations in Sidama.

iv) **Manufacturing Readiness**

Manufacturing preparations for the scrimberboard factory to validate product and manufacturing parameters and operations via a contract manufacturer. Currently, there is only an empty factory at Hawassa. Work is still required to study the dimensions, configure various scenarios of the factory set up in order to have an efficient / optimal workflow process when the machines are acquired and installed.

v) **Group Carbon Strategy**

Developing and better defining future carbon projects as well as measuring and reporting on the Group's footprint in accordance with the GHG protocol. This scheme has not been developed yet but the company, through the Origination Facility, will endeavor to have the building blocks (framework for eligibility) put in place in readiness for commencement at an appropriate time.

vi) **Waste-to-energy fuel production**

Conducting a full feasibility study for the proposed pellet plant, defining pre-processing operations, and developing the engineering plans to bring operations to fruition under AB Phase 02.

vii) **Multi-stakeholder engagement**

Workshops in Musenaj, Oromia Regional State and Sidama. with national and local authorities including relevant ministries, national environmental management authority, standards bureau, farmers' organisations, community leaders etc to explain AB Netherlands' vision, mission and goals with the proposed bamboo project and to obtain all-round buy-in from interested parties.

• **Why do we fund this project?**

The DFCD grant funding and technical assistance are needed to de-risk and further consolidate the African Bamboo Group project which intends to,

- ✓ set up bamboo plantations and collection centers in various plantation areas where farmers can deliver their harvests, assisted by vehicles supplied by the company;
- ✓ acquire handling equipment such as forklifts and front-end loaders will also be bought for the centers;

- ✓ purchase bamboo cutting and processing equipment for the factory in Hawassa and used for manufacturing roof and floor tiles, other bamboo construction materials, furniture and cutlery;
- ✓ set up distribution centers and offices;
- ✓ invest in initial working capital to aggregate and source raw materials and other stocks to kickstart the company's operations.

- **Environmental and social rationale**

The company is committed to reporting its progress in achieving sustainability in accordance with the GRI reporting initiatives sustainability reporting framework. African Bamboo have completed an initial evaluation for forest operations including selecting target indicators. It is noted that African Bamboo seeks not only forestry expansion through bamboo plantations but agro-forestry expansion and diversification through compatible crops being tested. The project will bring about

- Sustainable intensification of agriculture with bamboo intercropping
 - ✓ Improved farmer adaptability to climate change while strengthening resilience, sustainability and household income diversification.
- Sequestered GHG emissions in tCo2eq per annum: >1.2 M tCO2e
 - ✓ Carbon will be sequestered from improved stand productivity in the outgrower and natural forest operations and more substantially from reforestation activities in the plantation and under the FLRP;
- Avoided GHG emissions in tCo2eq per annum
 - ✓ 182,000 tCO2e from diesel substitution
 - ✓ 228,000 tCO2e stored in product over 10 years.
 - ✓ 185,000 tCO2e from substitution of fossil fuels.

The project generates avoided emissions from use of a Combined heat and power plant in the scrimber board factory displacing emissions from use of back up diesel generators – as well as storing carbon in product over its 20 year life span, and finally from use of pellets to substitute fossil fuels e.g. heating oil.

- Hectares of farmland under sustainable management improving resilience to climate change
 - ✓ 2,000 ha bamboo plantation [Free Phase 02]
The project bamboo agroforestry systems include the planting of bamboo at 5x5m spacing and intercropping between rows. Bamboo therefore provides additional livelihood options for local people compared to the baseline.
- Hectares of forest under sustainable management or other improved practices, contributing to increased adaptive capacity of ecosystems and livelihoods against climate change
 - ✓ 1,850 ha small holder bamboo [Phase 01]
 - ✓ 10,000 ha natural forest bamboo [Phase 02 & Phase 03]
 - ✓ 5,000 ha under the Forest Landscape Restoration Program (FLRP) [Free Phase 03]
The project will sustainably manage all bamboo resources in accordance with the FSC forest management and chain of custody standard and the FSC Small low intensity managed forest standard.

- Number of people employed by the project
 - ✓ Total Direct: 12,000
 - ✓ Total Indirect: 100,000
 - ✓ Direct Women: 3,000
 - ✓ Indirect Women: 30,000
 - ✓ Direct Men: 9,000
 - ✓ Indirect Men: 70,000
 - ✓ Estimate number of beneficiaries at project maturation: 500,000

Environmental and Social Co-benefits:

The project will contribute to the following SDGs:

- SDG 1 No Poverty: The bamboo forestry plantations and intercropping opportunities through outgrower schemes will provide livelihood/income earning opportunities for 12,000 households over ten years
- SDG 5 Gender Equality: inclusion of women in the bamboo sector economic activities
- 13 Climate Action: African Bamboo's investment will contribute to both climate adaptation and mitigation goals.
- SDG 15 Life on Land

The company also applies the IFC's E & S Performance Standards on community, indigenous groups, and principles for responsible investment.

There will be no displacement of people in the expansion as the company will utilize the smallholder farmers' existing land parcels, state land under long term concession and its own land. FSC and carbon credits certification will be pursued once the forestry and intercropping program has been implemented to 50% or more.
