goc Ingo Overview GoCongo Project Portfolio Kamina

Agroforestry business plans for change in land use Haut Lomami, Democratic Republic of Congo **Kinshasa June 2024**



Background



Currently, corn is mostly imported into the DRC. This is one of our maize fields



GoCongo uses GPS guided, large-scale, and modern agricultural equipment



We stock our crops in modern, ventilated silos and provide stable supply of produce across the year



We are milling all of our maize and sell it mostly in 25kg bags under the well-known brand: Twiga



We are the only producer of wheat in the DRC, a country with >100m inhabitants



With proper agronomic techniques, it is today possible to grow wheat in subtropical conditions



Growing wheat requires modern centre pivot irrigation



There is a huge demand for biscuits which are consumed as a snack during the day and for breakfast

Our most well known brand is Extra...

We have 56.000 cattle grazing on 750.000 ha land. Land which we will soon reforest...

...we are feeding them bran, a waste-product from our wheat and maize mills...

...We also feed them the stover from our fields and use their manure to reduce imported fertilisers

We now have 19 schools and more than 5.200 students

The first graduate from our professional training program: a female operator of a high tech tractor

Lubombo 2003

Lubombo

Lubombo 2022

Lubombo

Malambwe 2002

Malambwe 2021

Stade de Football MOBA Sport

Explosive growth in Malambwe, village nearest our farm, vs other comparable villages on the same road

Kamina Land Use change project portfolio

The ranches are situated in the Haut-Lomami Province of the Katanga region, DRC.

- → GoCongo ranches cover ca. 750,000 hectares north west of Kamina.
- → The total area of this region is ca. 3M hectares with a population of ca. 500.000 and is characterised by abject poverty, is inaccessible by road for six months of the year.
- → Herd of 55,000 cattle and >2,000
 employees managed for 80-90 years in 200 kraals and 20 Sections
- → Currently very inefficient and unsustainable due to:
 - Low fertility of soils and cattle
 - High mortality
 - Low biodiversity
 - No CO2 sequestration

We've started to implement a drastic modernization/ Intensification of the ranches

- → Introduce closed breeding season to enable cows to use full rainy season to produce milk for calves and get pregnant
- → Grow cattle feed (protein-rich grazing grasses like Panicum Maximum) and bale feed for dry season to enable calves to grow in their first dry season
- → Refresh & improve genetics with AI
- → Intensify paddock-based ranching prioritising the best 50,000 ha available
- → Bring in experienced cattle managers
- → Integrate with GoCongo feedlot when cow is 18 months/250kg

terms of available land and workers? 750,000 hectares Land - 250,000 (forest & swamps) - 50,000 (paddock ranching) 450,000 ha of savannah, grasslands available >2,000 staff on ranches **Employees** - 200 needed for paddock ranching ca. 2,000 available

What does this ranch restructuring mean in

So, what are our plans?

What are the relevant parameters for the design brief of our program?

- → Agroforestry focus, no mining
- → Our North Star is import substitution
- → Prioritize labour intensity
- → Focus on sustainability
- → Keep things simple
- → Focus on intrinsic profitability metrics
- Strictly focus on crops tolerant of local climatic
 & soil conditions

So, what did we come up with then?

PROJECTS UNDER PRELIMINARILY EVALUATION

0 - Ranch transformation (Core Business)

1 - Cassava

2a - Bamboo

2b - Local Timber

3 - Palm Oil

4 - Cashew

5 - Rice

6 - Reforestation (non commercial)

7 - Infrastructure (non commercial)

GoCongo Core Business. There is net import of cattle. Modern cattle practices would result in potentially unbeatable economics. Great synergies with tree plantation (intercropping).

Great source of local carbohydrates, local growing expertise, unbeatable economics.

Lowest cost of cellulose for many applications—all of which imported presently. Can be a competitive source of many local products (tissue, paper, textiles, plywood, MDF, furniture).

Local fast growing varieties selected for establishment if local timber projects are competitive and sustainable.

Agronomically competitive w/low cost irrigation. Huge regional demand across spectrum of downstream products (soap, cooking oil, mayonnaise,candles, cosmetics, biodiesel, etc.)

Agronomically viable. Opportunity to introduce crop into national diet as protein alternative + introduce a first export cash crop.

Climate and soil conditions adapted to paddy-rice. Rice is widely consumed and mostly imported in the whole of southern Africa.

Huge potential to use available local labour to kickstart massive forest regeneration on GoCongo lands with simple fire prevention and tree trimming intervention.

Comprehensive program to build local and regional infrastructure to enable development (road, trains, power, health, education, local production).

What	Quantum	Max individual Liquidity need (USD)	Outcomes (after 8 years)
0 – Reforestation	10,000 ha increase per year	3,300,000*	50,000 ha restored forest ecosystems and >200.000 tons of carbon sequestration
1 – Cassava	1000 ha increase per year	1.900,000	20,000 tons cassava flour from 4.000 annually harvested hectares on 16.000 ha of planted land
2a – Bamboo	1000 ha increase per year	3,500,000	50.000 m3 of bamboo timber for plywood and, MDF and Lumber applications and 8,000 ha planted
2b– Local timber	1,000 ha increase per year	3,500,000	
3 – Palm Oil	1000 ha increase per year	19,000,000	>10.000 tons of CPO harvested from 2.000 ha harvested and 8.000 ha of land planted but mostly still in development
4 – Cashew	200 ha increase per year	1.500,000	1,600 tons raw cashew nut \rightarrow 320 tons kernels, 320 tons cashew nut liquid, 32 tons testa, 11,200 tons cashew nut apples from 3.000 ha of mature and 5.000 ha of planted land
5 – Rice	1000 ha increase per year	7,500,000	30.000 tons of paddy rice from 6.000 ha of planted and harvested land

Rural Development Infrastructure in/around GoCongo Concession for blended finance

Category	Rationale	What	Quantum	\$ Capex	3 yr. Opex	Targeted Achievement
Roads	Roads essential condition for rural development	GoCongo to purchase road building machines and operates on its own budget	Excavator, bulldozer, loader, compactor, bowser 2 trucks, 2 pickup trucks, mobile workshop/mgt housing	2,500,000	1,500,000	Ca. \$65,000/month to upgrade/build ca. 100km of roads mostly on GoCongo concession open for third parties
Trains	Trains will allow evacuation of locally produced products	GoCongo to purchase train/wagons and operate on its own budget	Train, wagons, mobile workshop wagon, track repair equipment	2,500,000	1,200,000	\$25-30,000 operating costs to run trains to move GoCongo produce from Kamina to Katanga and bring year round supplies into Haut-Lomami
Fertiliser Production	Gamechanger for local Ag and Forestry Industry Development	Solar powered Ammonia plant	3.000 tons per year plant and AG equipment for application as well as tanks	20,000,000	900,000	Operating and distribution cost of low cost, locally produced, sustainable fertiliser
Power	Multiple, decentral solar/battery microgrids only real option for rural areas	GoCongo to purchase, install and operate in all of its kraals/villages	10kWp panels, inverters and 25kWh battery packs. 200 units for all kraals and villages	3,000,000		No need to support on opex

Elements of Blended Investment Items for Rural Development in/around GoCongo Concession

Category	Rationale	What	Quantum	\$ Capex	3 yr. Opex	Targeted Achievement
Housing	Renovation/ reconstruction of 200 hamlets/kraals with basic housing units	Renovation/new building of 10,000 housing units in all krals/villages	35m ² housing units with common toilets/showers/kitchen s on a kraal/village level for USD 2,000 each	20,000,000		No need to support on opex
Health	Renovation of existing clinics, construction of new clinics and low income health care services	Build 10 new clinics on own and adjacent territory	Each clinic with 300m², OR, maternity ward, basic lab, treatment room and 5 beds for 500,000	5,000,000	4,000,000	Provision of basic primary health care services for a population of >100.000 in 40,000 km ² of area in Haut Lomani for 3 - 5 years
Schools	Development of secondary and tertiary programs	Renovate 19 schools and build 20 new schools on own and adjacent territories. GoCongo to run schools on its own budget	Each school with 12 classrooms for 30 students and ancillary facilities for USD 50,000	2,000,000	1,800,000	3 - 5 years of budgets for 40 schools (primary, secondary, professional training)

CASSAVA

- Concept—
 - Low input mechanized cassava cultivation and processing
 - Identification of best performing internationally available varieties
- → Identification of minimal available inputs (chemicals, foliar fertiliser to avoid leaching in sandy low PH soils)
- → Mechanization in ripping, disking, ridging, planting, spraying, weeding, lifting and possibly collecting.
- Processing through sun-drying and hammer mill or a small competent cassava processing line
- → Start with 1.000 ha MVP and increase by 1.000 ha each year

- → Parcel out pasture on both sides of the Kamina–Kiabukwa Road to plant one annual plot of 1.000 ha with the most adapted local bamboo variety.
- → Before planting, pasture will be reseeded with Panicum and a 3x2 planting grid will allow mowing and baling until canopies close after 3 years, avoiding manual annual weeding.
- → Output—initially panicum bales to feed cattle during dry season, later bamboo to be processed locally and sold in Katanga.
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- → Before planting, pasture will be reseeded with Panicum and a 3x2 planting grid will allow mowing and baling until canopies close after 3 years, avoiding manual annual weeding.
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- \rightarrow Continue planting 1.000 ha per year for 5 years

SUSTAINABLE PALM OIL

- → Seed 1.000 hectares of panicum pasture
- → Construction of primary and secondary palm oil nursery selecting locally adapted palm varieties
- \rightarrow Plant palm oil trees in a 7x9m grid, irrigated by well/solar pumps and microsprays.
- → Intercrop panicum until competition for nutrients starts, then build a FFB/CPO plant in Year 3 to start harvesting and processing CPO from Year 4.
- → Continue planting 1.000 ha per year for 5 years

What is the Sustainable Palm Oil opportunity?

Palm oil is widely consumed in the DRC but the country is a net importer after its palm oil industry went into decline—DRC used to be the second largest global producer of palm oil, meaning the land and climatic conditions are ideal.

GoCongo's palm oil production would avoid and in fact reverse many of the principal pitfalls of palm oil production elsewhere:

- 1) Revenues from DRC's significant palm oil purchases will contribute to **domestic economic growth** rather than be sent out of the country.
- 2) Palm tree growth would take place **entirely on existing GoCongo land** not pegged for reforestation or conservation measures, and **away from settled communities**.
- 3) Palm trees will **revitalise already-degraded savannah grasslands instead of converting forests**, improving biodiversity, restoring ecosystems, and reduce land degradation and erosion.
- 4) GoCongo is working in partnership with PalmElit, a member of the **Roundtable on Sustainable Palm Oil (RSPO)** to develop **Certified Sustainable Palm Oil**.
- 5) Palm industry on GoCongo concessions would **create employment opportunities for the truly destitute**, many of whom will lose jobs due to the ranching intensification.

- → Development of annual paddy rice increments in swamp plains on GoCongo grazing lands across the concessions
- → Will include a central shelling and cleaning facility
- → Continue planting 1.000 ha per year for 5 years

- → Use the 200 kraals/hamlets that are currently the backbone of GoCongo's cattle operation to create 200 5 hectare cashew plantations
- → Utilize surplus labour in kraals resulting from intensification of the cattle operation to run a nursery and plant cashew trees around the kraals to the tune of 1.000 ha per year.
- → Install a central sorting, processing and packaging facility and to sell the product in Kinshasa/Katanga.
- → Continue planting 1.000 ha per year for 5 years

REFORESTATION/ CONSERVATION

- → Large scale regeneration of degraded Nyombo woodland
- → Preempt large late season fired by burning grasses in the early dry season.
- → Workers to spend the first 3-4 months of dry season burning grasses with "cool fires" and the remainder of year trimming trees back to one single stem, collecting firewood.
- → Within the space of 5 years, expectation that the woodlands will be restored and have closed canopy, preventing grasses from growing sufficiently to cause large fires.
- → Work to be done in the three locations, Biano, Kiabucua, Katangola and extended to 3 new locations in the West and North of our concession
- → 10,000 ha industrial trial

