

MAURITIUS SUGAR INDUSTRY

BEST GREEN PRACTICES ENGAGEMENT IN THE SUGAR CANE FIELDS

NATURALLY ENRICHED



**Maritime subtropical
climate**



**Well-drained humid
soils of volcanic origin**



**Vegetative and
maturation phases
coincide with our
summer and winter**



Sunshine all year round



Canes ripen naturally



**Specialty sugars are
rich in molasses and
minerals**

ENL Agri - Two distinct Regions



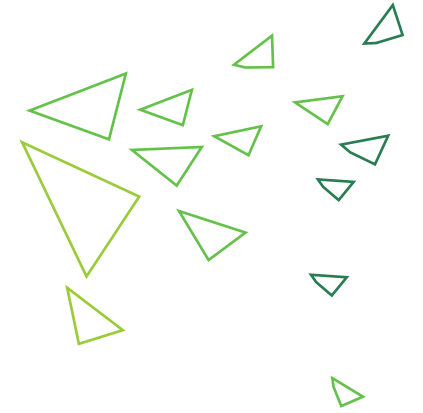
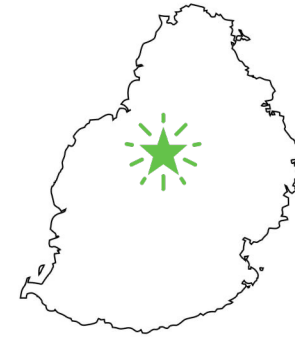
Moka Region

3,312 Hectares



Savannah Region

2,903 Hectares



Moka Region

Sugar Cane Activities

- Around 2,000 hectares of sugarcane harvested annually sent to Alteo Ltd Mill
- 100,000 T of cane harvested
 - 55% Mechanical harvest
 - 45% Manual harvest
- No cane burning done in mechanically harvested cane to keep trash blanket
 - Improve soil organic matter
 - Conserve humidity
 - Protection from run-off and rainsplash
- Fertilisation
 - Use inorganic fertilisers and some natural fertiliser/compost
 - Approx. 120 T of inorganic Nitrogen applied annually
- Weed management
 - Use of herbicides
 - Manual weeding also performed but very costly



Natural Areas



Forests

Mountainous forests
Riparian zones



Fresh water Wetlands

Reservoirs, swamps,
marshes, streams & rivers



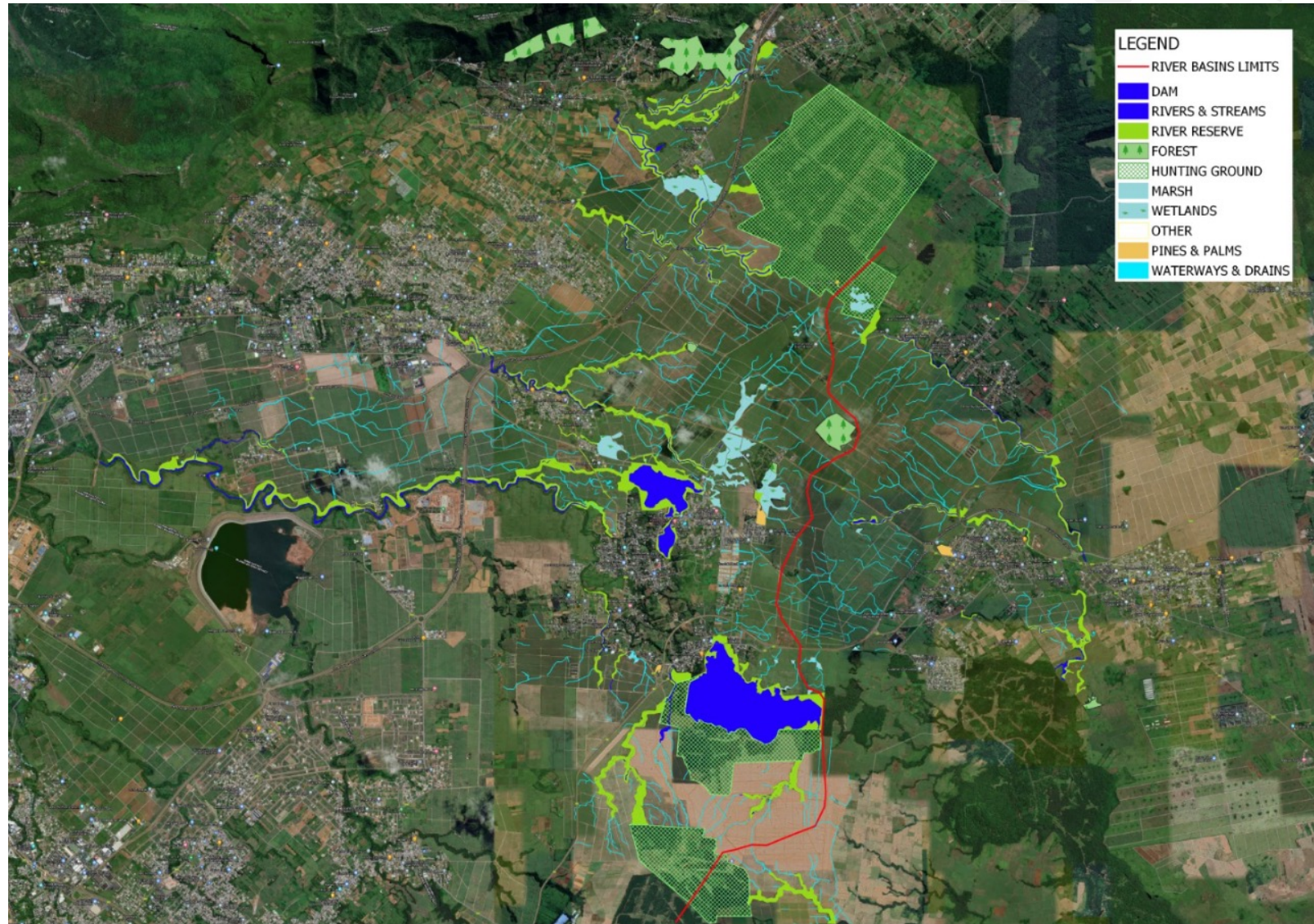
Biodiversity hotspots

Rare endemic flora &
fauna



Moka – Hydrology

- Part of two major river basins
 - Grande Riviere Nord Ouest basin
 - Riviere Cascade & tributaries
 - Riviere Profonde & tributaries
 - Riviere Moka & tributaries
 - Grand Riviere Sud Est basin
 - Riviere Francoise & tributaries
- Two man made reservoirs used to store irrigation water
 - Dagotiere Reservoir
 - Valetta Reservoir
- Three freshwater wetlands
 - Alma Wetland
 - Beau Bois Wetland
 - Bar le Duc Wetland



Natural Areas - Wetlands

- Alma Wetland & surrounding forest
 - Approx. 25 ha with potential to reforest poor yielding sugarcane fields
- Beau Bois Wetland & surrounding forest
 - Approx. 11 ha
- Smaller wetlands:
 - Bar le Duc – 4 ha
 - Verdun – 4 ha
- Wetlands are highly susceptible to illegal waste dumping in Mauritius
- Key buffer zones in high rainfall areas to reduce risks of flooding downstream



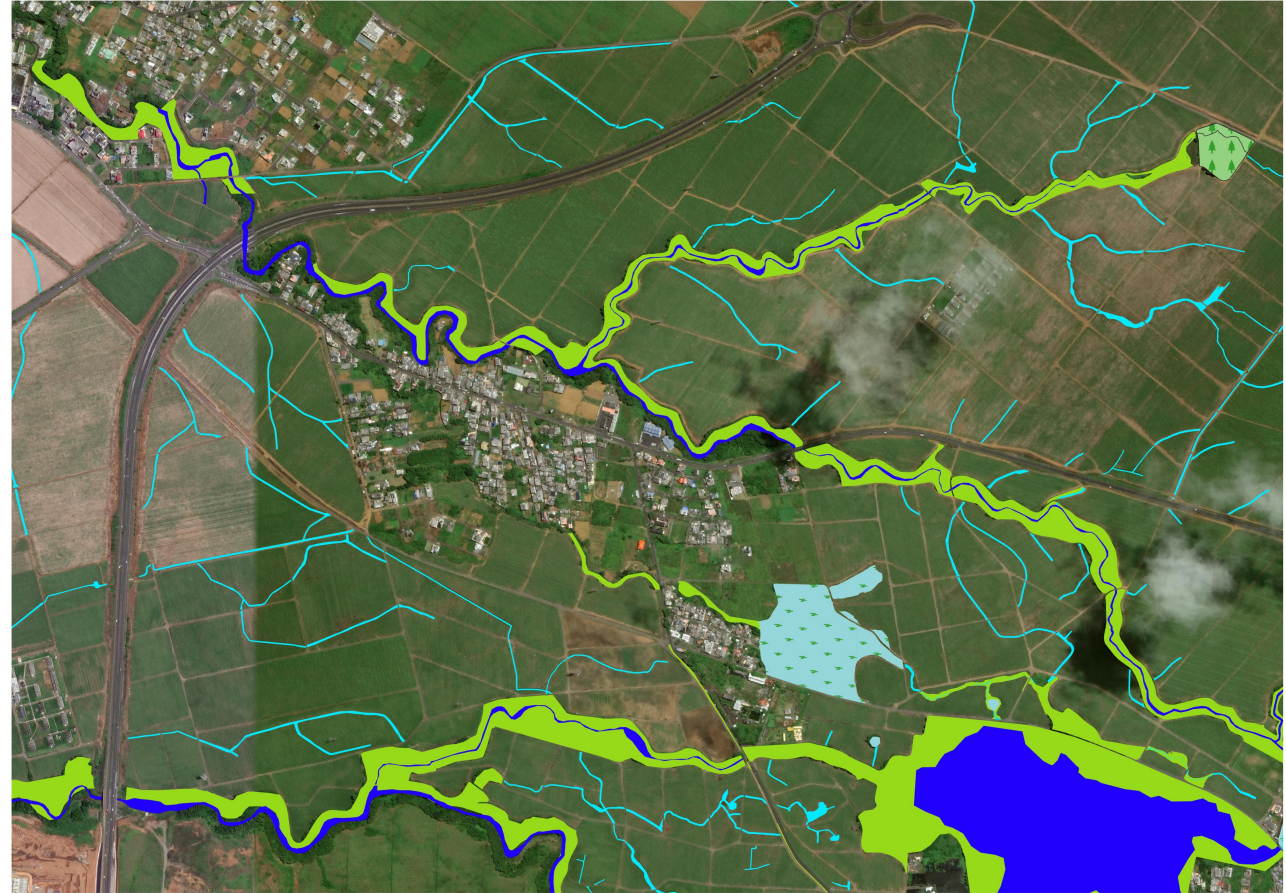
Natural Areas - Forests

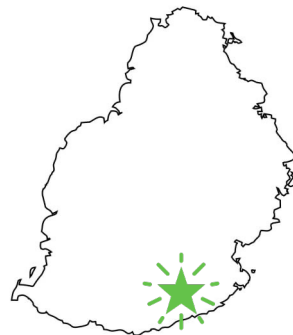
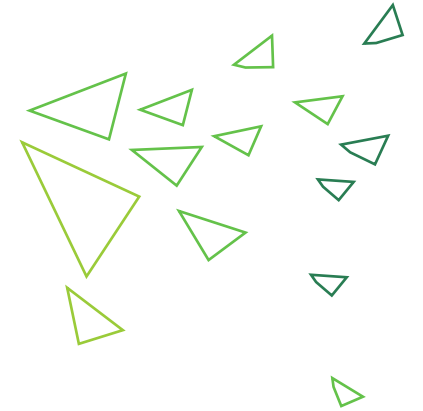
- ENL has approx. 54 hectares of land that can be classified as forests in the Moka Regions
 - Mountaineous forest on the Moka Range:
 - Les Mamelles – 26 ha
 - Peter Both – 15 ha
 - Other forest
 - Alma Hill pine forest – 10 ha
 - La Motte a Therese – 1 ha
 - Forests in hunting areas
- Key Conservation areas to consider
 - La Motte a Therese – high native/endemic biodiversity although quite degraded
 - Bar le Duc crater – rare endemic fern and orchid species and other native flora present although under high pressure from exotic species
- Potential for restoration of native forests and expansion through reforestation of neighbouring sugarcane fields
 - Les Mamelles



Natural Areas - Rivers, Streams and River Reserves

- Approx. 48 km of Rivers and streams flowing through or adjacent to ENL land
- Approx. 175 km of waterways flowing through agricultural land and feeding rivers and streams
 - active during high rainfall events
- Approx. 160 ha of river reserves on ENL land
- Vulnerable riparian zones of high importance
 - Reduction of erosion along river banks
 - Protect rivers and streams from excess nutrients and sediment surface runoff – which would end up in the sea or sources of water for domestic purposes
 - Provides habitat for wildlife
 - Reduction of downstream flooding





Savannah Region

Pellentesque habitant morbi tristique senectus et netus
et malesuada fames ac turpis egestas. Proin pharetra
nonummy pede. Mauris et orci

Sugar Cane Activities

- Around 2,100 hectares of sugarcane harvested annually sent to Omnicane Ltd Mill
- 140,000 T of cane harvested
 - 85% Mechanical harvest
 - 15% Manual harvest
- No cane burning done in mechanically harvested cane to keep trash blanket
- Some cool burning done in manually harvested cane if needed
- High instance of criminal fires
- 480 ha of irrigated sugarcane
- Fertilisation
 - Use inorganic fertilisers and some natural fertiliser/compost
 - Approx. 180 T of inorganic Nitrogen applied annually
- Weed management
 - Conventional use of herbicides
 - Manual weeding also performed but very costly



Natural Areas



Forests

Riparian Zones
Coastal Zones



Coastal Vegetation



Fresh water Wetlands

Springs, swamps, streams
and rivers



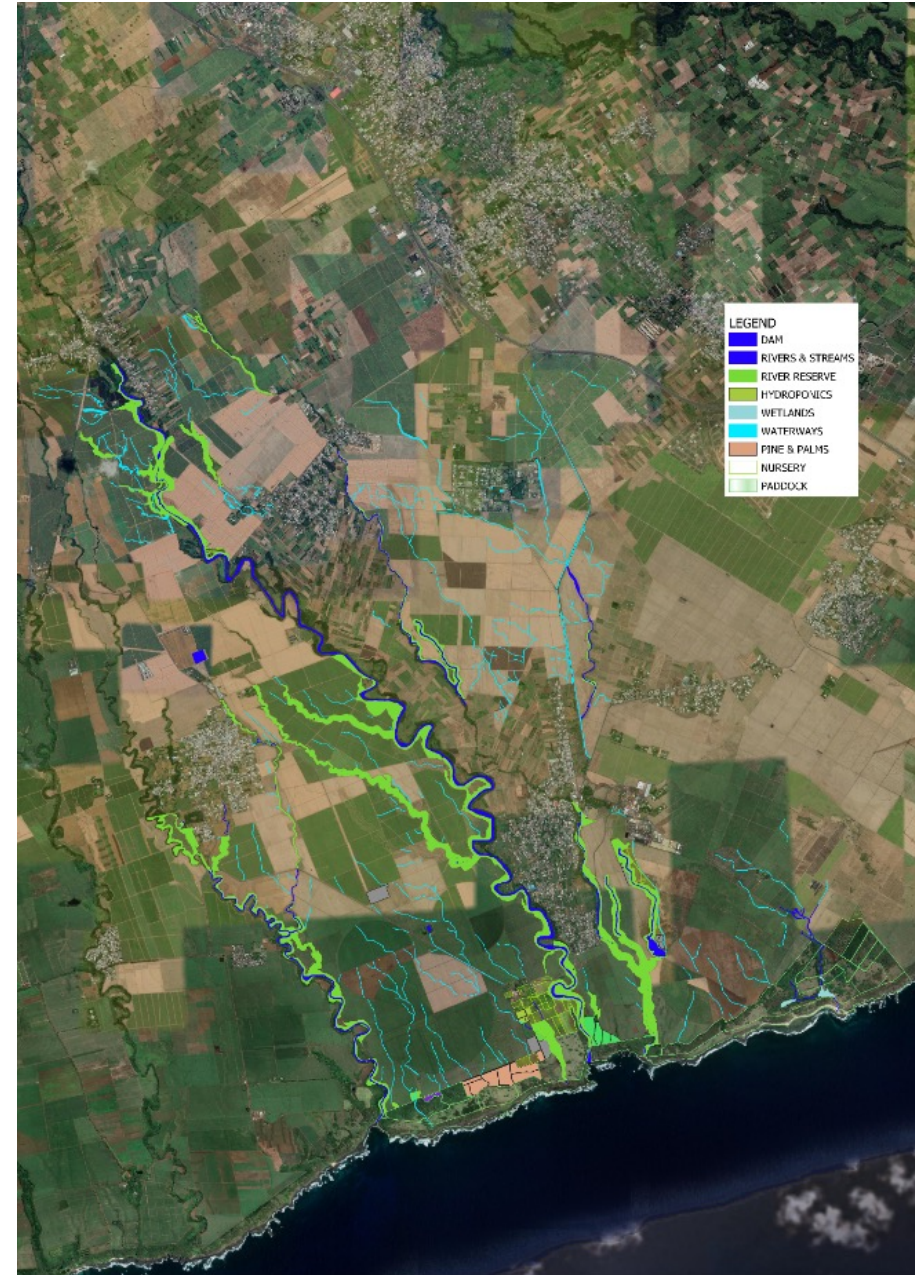
Natural Areas - Forests

- No proper natural forests in the Savannah region
- 20 ha planted for Silviculture but never exploited
 - Mahogany Trees and other species
- 24 ha of degraded forest patches in grazing area
 - Mixed with edible palm plantation



Savannah – Hydrology

- Part of three river basins
 - Riviere du Poste
 - Riviere Tabac
 - Riviere St. Amand
- Two small irrigation reservoirs
 - Bassin Tronche
 - Savinia Dam
- Springs rising from Savannah Land
 - Aldar Spring, feeding Savinia Dam
 - Savinia Springs
- Swamps
 - Small swamp network in coastal areas fed by Savinia Springs



Savannah Natural Areas - Wetlands

- Aldar Spring feeding Irrigation Dam
- Savinia Springs Feeding swamps in pastoral area
 - Springs not protected from sediment and nutrient runoff from adjacent sugarcane fields



Natural Areas - Rivers, Streams and River Reserves

- Approx. 57 km of Rivers and streams flowing through or adjacent to ENL land at Savannah
- Approx. 115 km of waterways flowing through agricultural land and feeding rivers and streams
 - active during high rainfall events
- Approx. 170 ha of river reserves on ENL land at Savannah
- Vulnerable riparian zones of high importance
 - Some riparian zones need to be re-establish to help mitigate flash flooding during high rainfall events
 - Reduction of erosion along river banks
 - Protect rivers and streams from excess nutrients and sediment surface runoff – which would end up in the sea or sources of water for domestic purposes
 - Provides habitat for wildlife
 - Reduction of downstream flooding



Current Agricultural Context

- Increase in sugar prices, and remuneration of bagasse is giving ENL Agri and the sugar industry a breath of fresh air after several years of financial stress
- Investments in replantation and mechanisation being done to increase productivity and decrease costs.
- ENL Agri Ltd has recently become a member of Bon Sucro and is starting the journey towards certification in 2022.
- Investment in rehabilitation of endemic/native forests and other project
- Inclusive agriculture model in food crops production
- Waste management program to reduce waste sent to landfill
- Carbon footprint exercise starting in 2022