Tropical Seeds LLC

PROPOSAL TO ALLEVIATE EXTREME POVERTY IN SOUTH EASTERN AFRICAN COUNTRIES

ONE PLAUSIBLE ALTERNATIVE



OUR GOAL

IN AN INITIAL STAGE, TO REACH OUT 10 MILLION SMALL SCALE FARMERS WITH MINIMAL AGRICULTURAL PRODUCTION, AND MOSTLY IN NEED OF FOOD SUBSIDIES FOR SURVIVAL



OUR TOOLS

TECHNOLOGICAL PACKAGE BASED IN IMPROVED FORAGE SEEDS COMBINED WITH TECHNICAL ASSISTANCE, FOR YEAR ROUND SUSTAINABILITY

ANTECEDENT

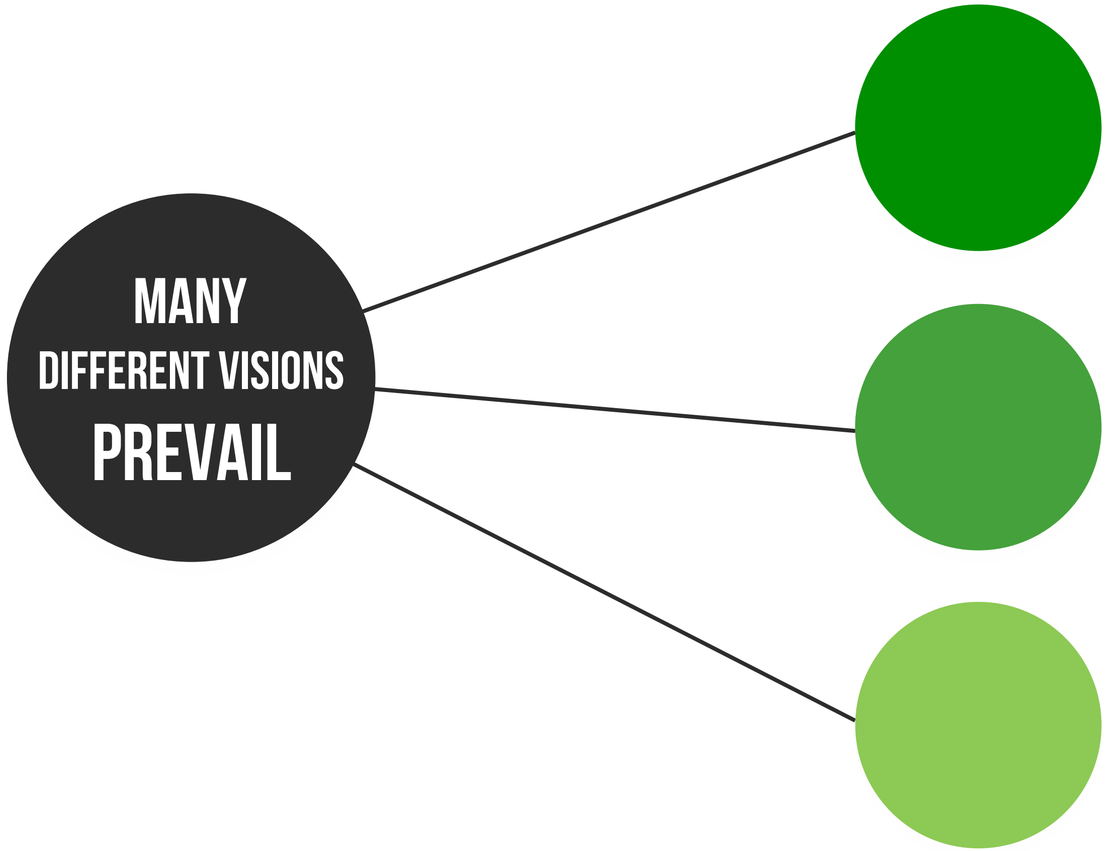
We believe that by introducing a clear formula that can become the pivotal aspect for economic activities, growth over time will emerge.



So many institutions, public and private, NGO's, philanthropic foundations, have taken as primary objective the hard task of *eradicating poverty*.

ANTECEDENT

We believe that by introducing a clear formula that can become the pivotal aspect for economic activities, growth over time will emerge.



MULTIDISCIPLINARY WORK

is underway in various parts of the world.

THERE ARE SUCCESS STORIES.

Efforts that have been able to combat this extreme poverty, that finds strong roots in structural, historical, political and organizational circumstances. Conflict of interests are also present.

HEALTHY AND MEANINGFUL INTENTIONS

are present

ANTECEDENT

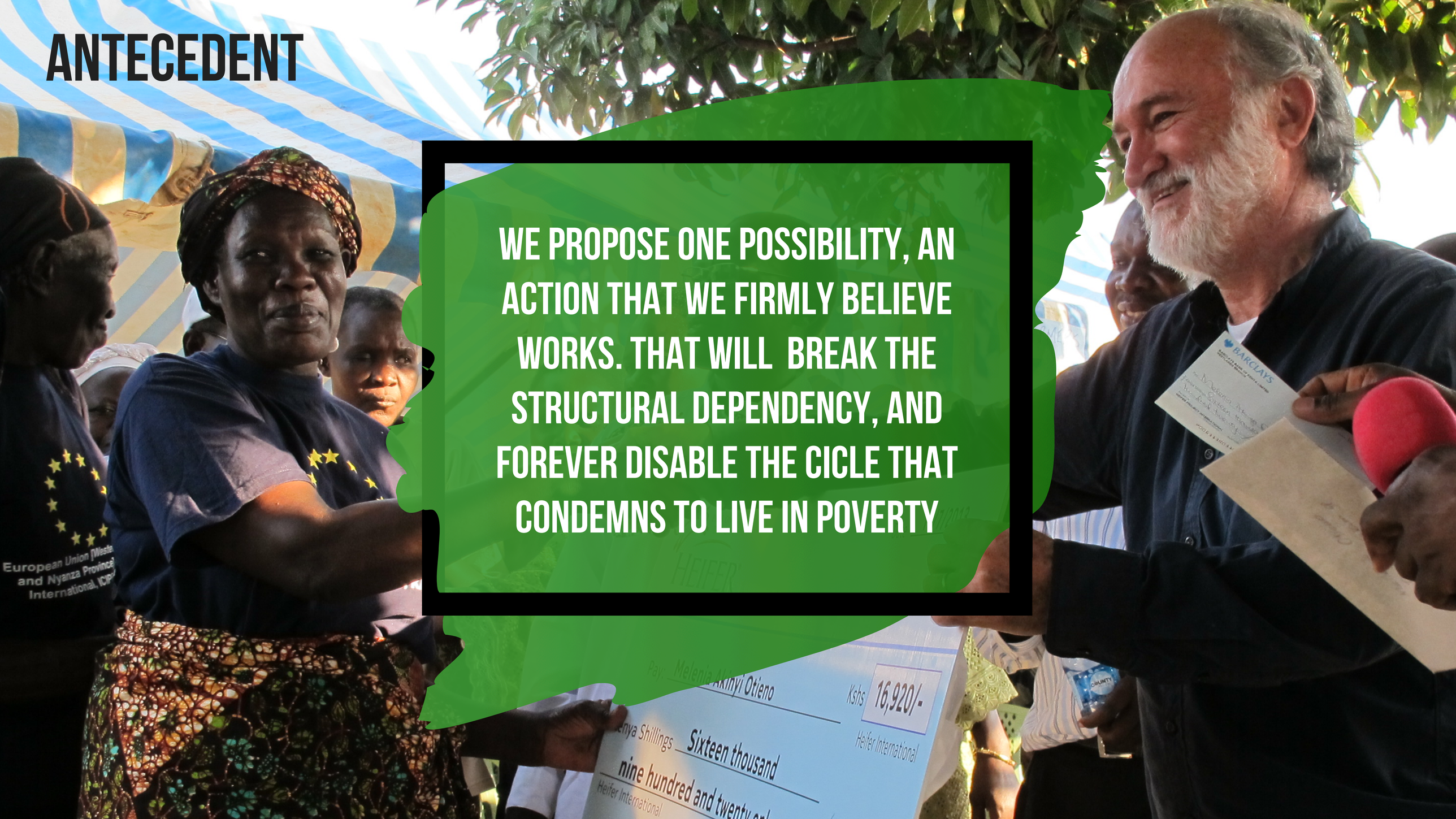
Education, job creation, health, economic growth, opportunities, appropriate policies, interdisciplinary cooperation, are the basis of actions aimed to incorporate large sectors of the world's population, particularly in third world countries, into improved living conditions to ameliorate their dramatic deficiencies.



WE BELIEVE THAT FOR THIS PROGRAMS TO SUCCEED, SELF SUFFICIENCY AND SUSTAINABLE INITIAL ACTIONS HAVE TO BE THE FOUNDATION OF A FRUITFUL PROJECT.

ANTECEDENT

WE PROPOSE ONE POSSIBILITY, AN ACTION THAT WE FIRMLY BELIEVE WORKS. THAT WILL BREAK THE STRUCTURAL DEPENDENCY, AND FOREVER DISABLE THE CICLE THAT CONDEMNS TO LIVE IN POVERTY



OUR FORMULA:
FORAGE VARIETIES

SUPPORTED BY STRONG AND CONTINUOUS RESEARCH















VARIETIES

CIAT HYBRIDS

INTERNATIONAL CENTER FOR TROPICAL AGRICULTURE (CIAT, ITS SPANISH ACRONYM)

VERSATILE BRACHIARIA HYBRIDS, HIGHLY PRODUCTIVE AND WELL ADAPTED TO DIVERSE CLIMATIC CONDITIONS

DIVERSE ANIMAL HUSBANDRY ACTIVITIES CAN BE IMPLEMENTED FOR DIFFERENT ANIMALS









VARIETIES

CIAT HYBRIDS



PUSH PULL SYSTEM
HAY PRODUCTION

BAILES
SILAGE
ENSILAGE

CUT AND CARRY
DIRECT GRAZING

VARIETIES: CIAT BRACHIARIA HYBRIDS



WE ARE RETURNING TO SOUTH EAST AFRICA WHAT THIS REGION GAVE TO THE TROPICAL WORLD:

BASIC GERMPLASM MATERIAL AS BASIS FOR IMPROVING ANIMAL HUSBANDRY

CIAT BRACHIARIA HYBRIDS

- INCREASES BEEF/MILK PRODUCTION
- ADAPTS TO ACID SOILS OF LOW FERTILITY
- SPITTLEBUG RESISTANT
- INSECT TOLERANT
- DROUGHT RESISTANT
- EXCELLENT RATIO LEAVE/STEM
- HIGHLY PALATABLE AND DIGESTIBLE
- HIGH PROTEIN AND FIBER



MULATO II

MAIN CHARACTERISTICS

- More meat and more milk with improved nutritional quality
- Higher stocking rates
- Highly palatable
- Highly digestible
- Tillered, with semi-decumbent growth
- Greater tolerance to drought and summer stress
- Resistant to diseases and pests (spittlebug)
- Uses: Direct grazing, cut and carry, hay, silage, ensilage



BRACHIARIA HYBRID CV CIAT 36087

BRACHIARIA RUZIZIENSIS X B. BRIZANTHA X B. DECUMBENS

MULATO II



Mulato II was officially launched by the Minister of Agriculture in Fiji December 7, 2016



A farmer in his well established Mulato II pasture plot in Kenya



Mulato II research in Thailand

MULATO II



Goats fed with Mulato II
in Kenya

Mulato II cut-and-carry
pasture in Thailand





Cows feeding on Mulato II
in Chiapas, Mexico.

CAYMAN



CAYMAN





BRACHIARIA HYBRID CV. CIAT BR 02/1752

SIMILAR CHARACTERISTICS AS MULATO II
PLUS WATERLOGGING RESISTANCE

CAYMAN

MAIN CHARACTERISTICS

- More meat, more milk with improved nutritional quality
- Higher stocking rate
- Highly palatable
- Highly digestible
- Tillered, with semi-decumbent growth
- Resistant to moist soils
- Tolerant to waterlogging
- Tolerant to drought
- Resistant to diseases and pests (spittlebug)
- Uses: Grazing, hay, fresh in feeding trough; its quality and production also make it adequate for use as silage



BRACHIARIA HYBRID CV. CIAT BR 02/1752

CAYMAN



Cayman in Congo DR



Paddock being fed with Cayman



Cayman forage for milking cows

CAYMAN



Cayman in Thailand

Cayman grazing trial with high stocking rate





Look at the legs of the bull stained with water and Cayman well-established

COBRA



COBRA

BRACHIARIA HYBRID CV. CIAT BRO2/1794

Its growth in erect tussocks—explaining its name—makes cutting easy while the grass remains tender, even when mature. Ideal as cut-and-carry grass and for both hay and silage production, Cobra responds well to fertilization in intensive systems

The Cobra hybrid is the best alternative to achieving high green and dry matter production in intensive cut-and-carry grass systems, not only offering fresh grass to livestock but also producing hay and silage. This hybrid has also proven to be highly efficient for cattle grazing when farms need to increase the amount of grass available for animal consumption

COBRA

MAIN CHARACTERISTICS



- High quality protein
- It has an erect growth habit, which is ideal for cut-and-carry. This type of growth allows it to quickly recover from both cutting and grazing.
- Highly palatable
- Highly digestible
- Excellent cut and carry
- Excellent hay and silage
- Tolerant to drought
- Resistant to spittlebug attack
- This grass is easy to handle because its stems are not thick and do not have high water content like those of marafalfa.
- There is no need to chop this grass.
- It is easy to transport

BRACHIARIA HYBRID CV. CIAT BR02/1794

COBRA

COBRA PRODUCTION IN GUATEMALA













COBRA

COBRA PRODUCTION IN LAOS

2015-16 HARVEST









CAMELLO

IN THE PROCESS OF INTRODUCTION

MAIN CHARACTERISTICS

- Very tolerant to drought
- Suitable for tropical areas
- An alternative for areas of scarce and erratic precipitation
- Great adaptation to arid and semi-arid zones
- Tolerance to low temperatures up to 5 degrees celsius



2019

TALISMAN (SILVOPASTORAL)

CAYMAN 2 (FASTER TO ESTABLISH)

VÉRTIGO (EROSION CONTROL)

2018

BRACHIARIA HYBRID CV. CIAT BR04/3025

CAMELLO

CAMELLO PRODUCTION IN MEXICO

OAXACA AND CHIAPAS 2018













Camello resisting after 227 days of drought and over 45 degrees Celsius at CIPAT, Oaxaca

SIAMBASA / MOMBASA

MAIN CHARACTERISTICS

- Siambasa differs from Mombasa produced in other countries for its high purity, not only in terms of the seed, but in its varietal purity, 100% Mombasa seed. A high germination is also due to its handicraft production in Thailand, harvested by hand by skilled farmers, mainly women.
- High protein content (14-16%) and its high leaf: stem ratio, with 82% of leaves, which explains why animals find this grass highly appetizing and more succulent than other forages
- Its high levels of digestibility are closely linked to its high percentage of leaves.
- Excellent percentages of protein, fiber, energy and digestibility
- High germination with 100% purity since the seed never touches the soil, besides being not contaminated by nematodes or weeds
- High production of green and dry matter, excellent content of protein, energy, fiber and high digestibility
- Very high production reaching yields between 20-30 tons of dry matter.
- Great regrowth capacity with cuts after 30 days



PANICUM MAXIMUM
CV MOMBASA

LEGUMES / CROTALARIA JUNCEA SUNN HEMP

MAIN CHARACTERISTICS

- Source of green manure and fodder of unsurpassed quality
- Can be used as hay and silage
- Its palatability is excellent
- It helps control nematodes
- Produces 8 to 10 tons of organic matter in the form of easily decomposable plant material
- Produces up to 200 units of nitrogen fertilizer per crop cycle
- Form a vegetative layer that prevents erosion
- Reduces the use of agrochemicals by 40%
- Improves the physical and chemical characteristics of the soil
- Increase the yield of future crops.
- It has a short vegetative cycle
- Contains high levels of protein (18-22%)



LEGUMES / OTHER VARIETIES WE OFFER

ARACHIS PINTOI

The company SEFO-SAM Cochabamba, Bolivia, produces for us seed of Arachis Pintoi by small producers engaged in artisan production

A legume for use in pastures, soil improvement and conservation, and as cover crop in fruit crops



UBON STYLO

Ubon Stylo is a stable blend of 4 stylosanthes guyanensis varieties, developed by Dr. Berth Grof, excellent for grazing combined with a grass.

Its high and rapid germination guarantees the fast establishment of the pastures. Excellent forage for animal feed



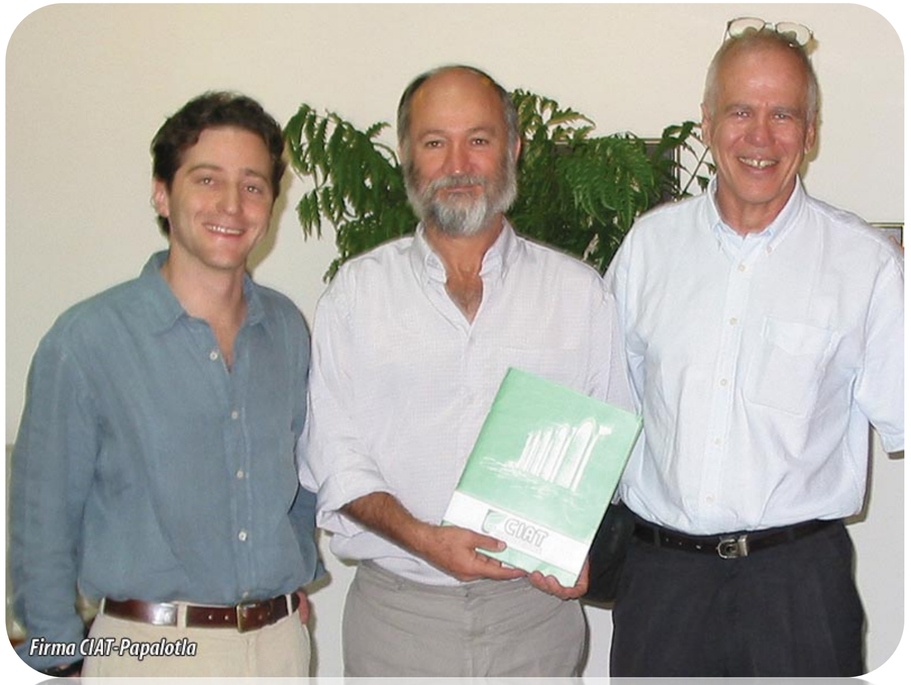
NEW SEED TECHNOLOGY APPLICABLE WORLDWIDE AND ACCESIBLE TO SMALL, MEDIUM AND LARGE SCALE PRODUCERS

OUR AIM IS TO EXPAND THE USAGE OF THIS NEW VARIETIES BEYOND THE TRADITIONAL MARKETS OF LATIN AMERICA.



As part of Grupo Papalotla, Tropical Seeds is devoted to expand the usage of this forage seeds varieties to all tropical and subtropical countries. They are the basis for competitive, intensive rather than extensive, ecological and sustainable animal production processes.

NEW SEED TECHNOLOGY APPLICABLE WORLDWIDE AND ACCESIBLE TO SMALL, MEDIUM AND LARGE SCALE PRODUCERS



Firma CIAT-Papalotla

Semillas Papalotla, Mexico, signed in 2000 a contract with CIAT to research, develop, produce, process and commercialize the new BRACHIARIA hybrids from their breeding program.

The objective was to have them readily available to all tropical and subtropical countries of the world.

Tropical SEEDS LLC

NEW SEED TECHNOLOGY APPLICABLE WORLDWIDE AND ACCESIBLE TO SMALL, MEDIUM AND LARGE SCALE PRODUCERS

WE PROMOTE THE NEW SEED TECHNOLOGY WE DEVELOP BEYOND LATIN AMERICA.

OUR AIM IS TO HELP EXPAND THE KNOWLEDGE OF THE BENEFITS OF THESE MATERIALS AND MAKE THEM AVAILABLE TO ANY PRODUCER IN THE TROPICAL AND SUBTROPICAL AREAS OF CENTRAL AND EAST AFRICA.

REGARDLESS OF SIZE AND TECHNOLOGICAL STRENGTH OF PRODUCERS.



RESEARCH AND PRODUCTION

RESEARCH

Agreements with different universities, such as Ubon Ratchathani University in Ubon Ratchathani, Thailand, and the University of Florida, USA, at its Ona Research Station, allow us to further validate and develop these varieties.



Ubon Ratchathani University

UFS

UF | UNIVERSITY of FLORIDA

We continue with R&D to have in our pipeline varieties that adapt to climate change, to saline soils, to scarce water, to silvopastoral projects, to control erosion, to recover degraded lands

RESEARCH AND PRODUCTION











PRODUCTION



WE PRODUCE IN SE ASIA,
BASICALLY THAILAND, INDIA, BOLIVIA,
THROUGH AGREEMENTS WITH
SMALL SEED PRODUCERS.
PRICE IS PRE-DEFINED IN A FAIR
TRADE BASE, TECHNICAL ASSISTANCE
IS OFFERED TO GUARANTEE HIGH
QUALITY SEED AVAILABILITY.

PRODUCTION / S.E. ASIA

WE HAVE BEEN WORKING IN S.E. ASIA SINCE 2002.
WE STARTED IN THAILAND, IN UBON RATCHATHANI PROVINCE.

Initially recommended by CIAT to produce seed in Asia, we finally signed an agreement with the faculty of agriculture of *Ubon Ratchathani*, our program is directed by Dr. Michael Hare.

TROPICAL SEEDS, THROUGH THIS WORK, HAS ALLOWED FOR THE UNIVERSITY TO GET FUNDING, MAINTAIN A GROUP OF WELL SKILLED RESEARCHERS IN SEED TRIALS, PRODUCTION AND SEED PROCESSING.



On going research.
Mun River panicum maximum.



Tropical SEEDS LLC

AFRICA

KENYA



CURRENTLY THE GOVERNMENT OF KENYA HAS APPROVED THE COMMERCIALIZATION OF MULATO II, COBRA AND CAYMAN

AFRICA



Since 2012, many small farmers have been utilizing Mulato II, primarily through ICIPE, in Kenya, Uganda, Tanzania and Ethiopia. Most of them in the push-pull system.

2018 will see growing distribution in Rwanda and neighboring countries.

THANKS TO EFFORTS LIKE THE ONE OF DR. CHARLES WASONGA FROM ACL (ADVANCED CROPS LIMITED) SMALL FARMERS ARE PARTICIPATING IN THE PROGRAM.

Tropical SEEDS LLC

AFRICA



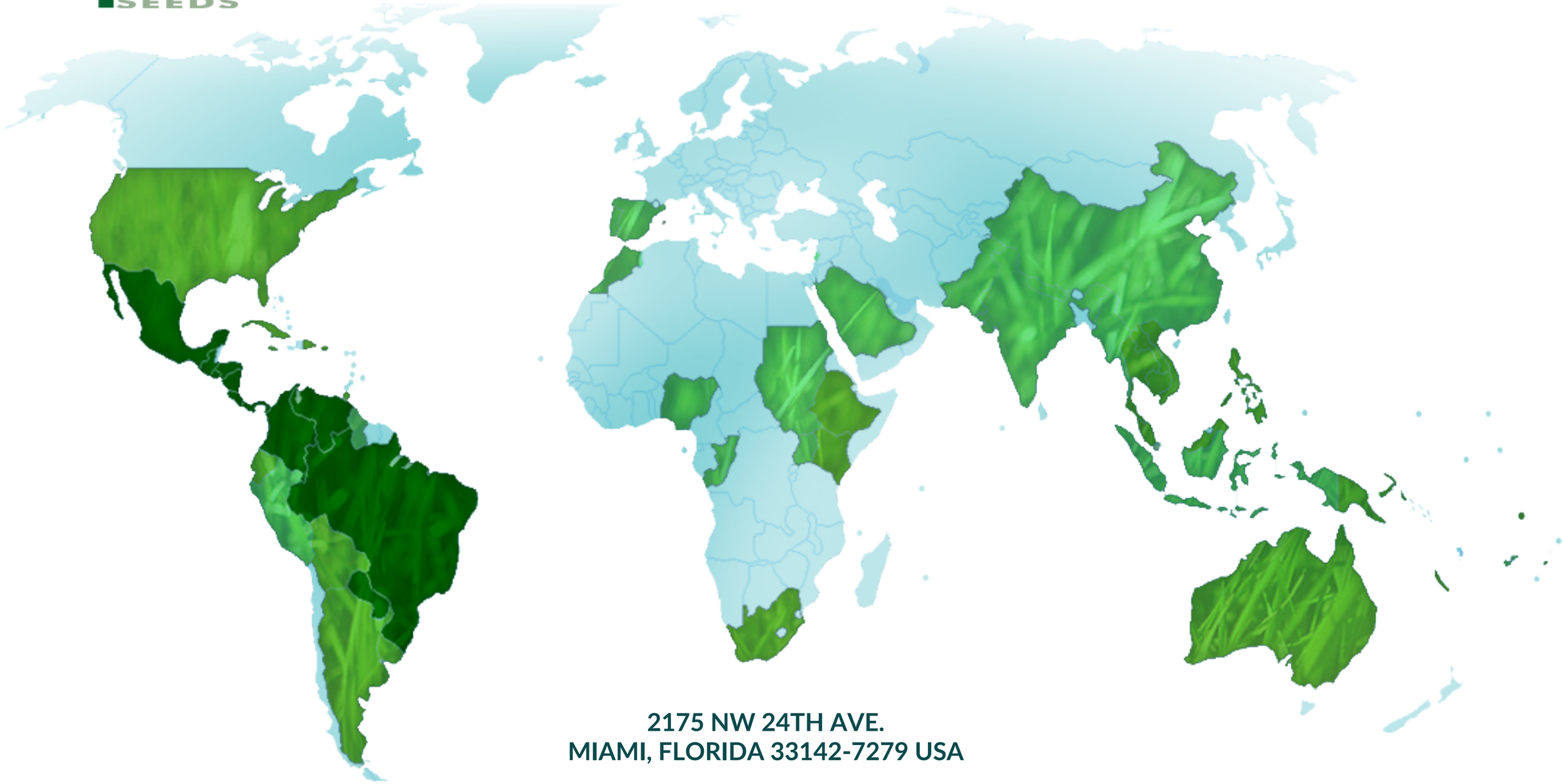
PARTNERS / STRATEGIC ALLIANCES

WE DEPEND ON OUR PARTNER COMPANIES TO DEEPEN OUR ACTIONS:

SEMILLAS PAPALOTLA, S.A DE C.V.	MEXICO
TROPICAL SEEDS DO BRASIL, LTDA.	BRAZIL
EFECTO SOLUCIONES, SL.	SPAIN
ACL (ADVANCED CROP LIMITED)	KENYA
UBON FORAGE SEEDS	THAILAND
GLOBAL TROPICAL SEEDS	SOUTH AFRICA



OUR PRESENCE IN THE WORLD



2175 NW 24TH AVE.
MIAMI, FLORIDA 33142-7279 USA

Tropical SEEDS LLC



www.tropseeds.com

Eduardo Stern
Director

2175 NW 24TH AVE.
MIAMI, FLORIDA 33142-7279 USA

Phone: +1 954 7536301

