

# PAE and bioplastic cassava derivatives

Large -scale production and marketing of cassava and bioplastic derivatives.

**Imagio Enterprises®**

EXPANDING BEYOND

UNLIMITED IDEAS

# WHAT IS THE PROJECT ABOUT

The project consists of the manufacture, assembly and tuning of an 8 thousand tons of bioplastic and yucca food derivatives, this plant includes a cassava processing area with starch extraction and food derivatives; and an area of starch transformation into thermoforming bioplastic.

IMAGIO ENTERPRISES

**Imagio Enterprises®**

EXPANDING BEYOND

UNLIMITED IDEAS

# What is the product

## PAE

The PAE is the school food program, which provides a complement to children and adolescents.

Cassava derivatives provide fiber, vitamin C, vitamin B1, manganese and potassium in any of the presentations: bread, arepa, sweet, cooked cassava, fried cassava, bakery starch and cassava flour.

Our derivatives supply school feeding needs.



**Imagio Enterprises®**

EXPANDING BEYOND

UNLIMITED IDEAS

## Bioplastic

A bioplastic is defined by being a plastic that starts from cellulose or vegetable starch, comes from renewable sources, presents characteristics such as biodegradability, sustainability and respect with the environment.

It also emits up to 3.2 tons less than a plastic that has been made from oil.

They are a series of compound made in this case from cassava starch with the same physical properties of traditional plastic but with the advantage of being biodegradable.

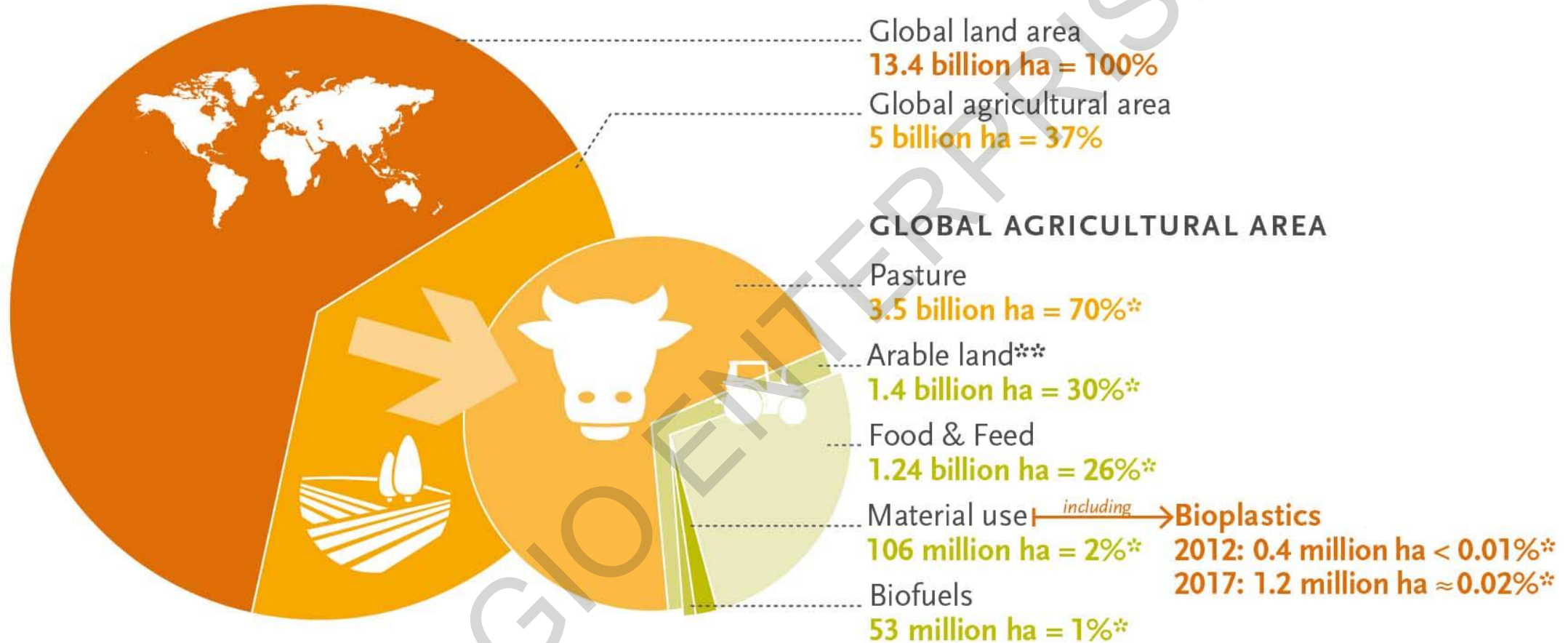


**Imagio Enterprises®**

EXPANDING BEYOND

UNLIMITED IDEAS

## Land use for bioplastics 2012 and 2017



Source: European Bioplastics | Institute for Bioplastics and Biocomposites (December 2013) / FAO 2011

\* In relation to global agricultural area

\*\* Also includes crop & 1% for biofuel

# Corporate social responsibility

With the tuning of this starch transformation plant we can use 50 direct employees and more than 1000 indirects, we will also arrive with education programs in sustainable crops, agricultural technification and formal jobs.

This accompanied by the assurance of the total purchase of cassava crops to small and medium growers, thus ensuring not only raw material, but also a support for peasant families.

IMAGIO ENTERPRISES

**Imagio Enterprises®**

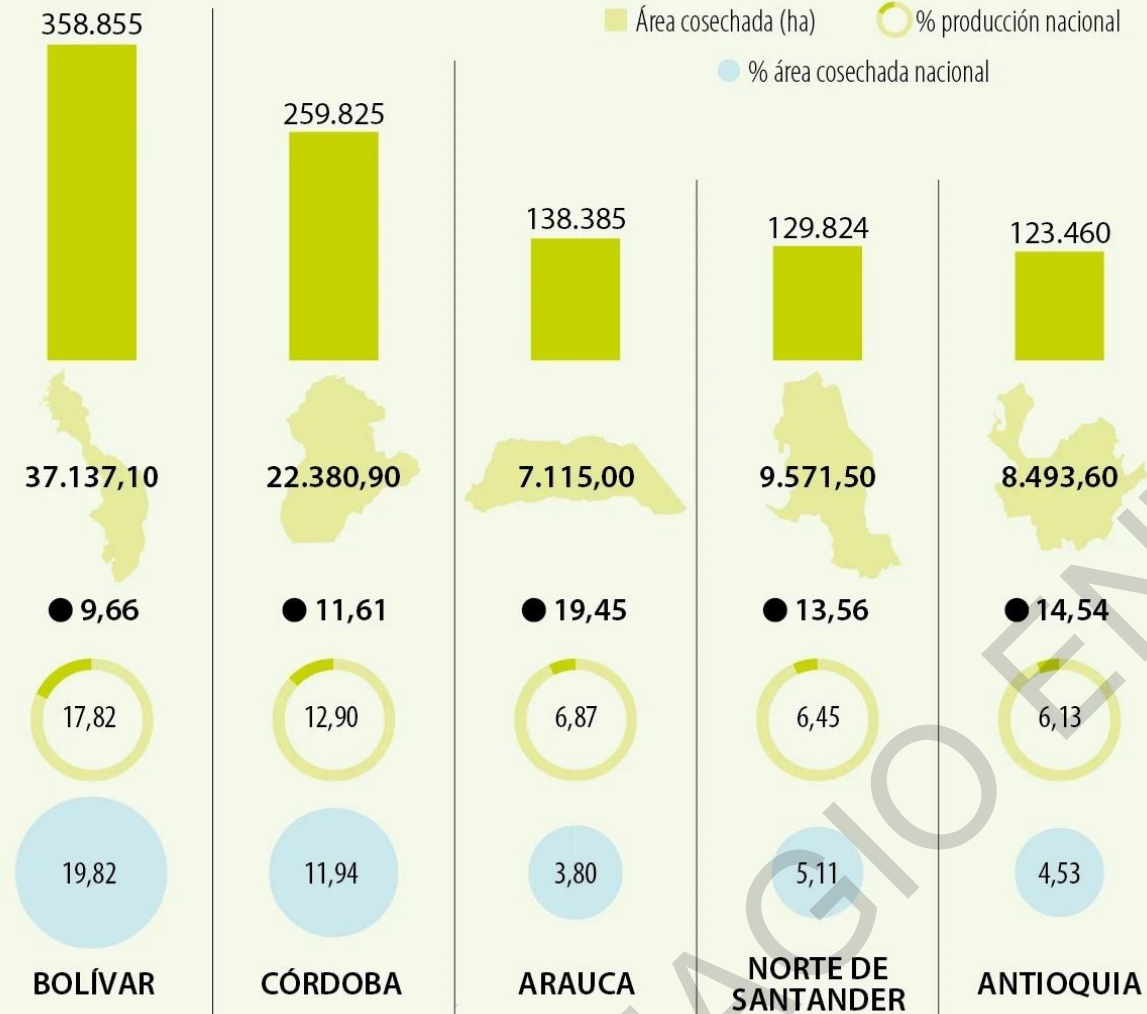
EXPANDING BEYOND

UNLIMITED IDEAS

# ASÍ AVANZA LA PRODUCCIÓN NACIONAL

## DEPARTAMENTOS LÍDERES

■ Toneladas producidas ● Rendimiento (ton/ha)  
 ■ Área cosechada (ha) ○ % producción nacional  
 ● % área cosechada nacional



Última producción nacional consolidada

2,01 millones de toneladas

Consumo de yuca industrial

269.000 toneladas = 12% de producción total

Rendimiento promedio

11 ton/ha

## LA PRODUCCIÓN GLOBAL ES DE 290 MILLONES DE TONELADAS

- África es el continente más productor con cerca de 125 millones de toneladas
- Nigeria es el país más productor con cerca de 50 millones
- De manera sostenible su rendimiento podría incrementar hasta en 400% según la FAO
- En Colombia con tierras más aptas se podrían alcanzar rendimientos de 25 toneladas por hectárea



Fuente: Agronet/Agrosavia/FAOStats Gráfico: LR-AL

## Usos

- ▶ El almidón se utiliza como materia prima para la fabricación de una amplia variedad de productos alimenticios e industriales como papel, cartón, textiles, etc.



- ▶ El almidón de yuca es uno de los principales componentes de la yuca, otras raíces y tubérculos, es usado en la industria de alimentos como ligante de agua, coadyuvante de emulsificantes, fuente de carbohidratos, espesante y agente texturizante. (IICA, 2004)



- ▶ se usa solo o mezclado en la elaboración de diversas harinas, con éstas se preparan: galletas, pasteles, bicochos, sonas, embutidos y...



Imagio Enterprises®

EXPANDING BEYOND

UNLIMITED IDEAS