



Organización de las Naciones  
Unidas para la Alimentación  
y la Agricultura



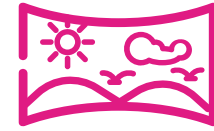
Iniciativa  
**Mano de la mano**

# Investment Rural Program Sustainable development and poverty reduction

Nicaragua



Presentation  
Nicaragua, 17th of october 2023



## OVERVIEW



# GENERAL DATA OF THE COUNTRY



**130,373.5 Km<sup>2</sup>**  
**Area**



**6.7 Million**  
**Population**



**10,407.3 Km<sup>2</sup>**  
**Lakes and Lagoons**



**21 Watershed**



# TRANSFORMATION OF NICARAGUA 2007-2022



**21** New hospitals  
**1,544** Community health centers



**+36 mil** Classrooms



Better road infrastructure of **Centroamérica**  
**5th** of Latin America



Electric coverage: **54%** (2006) vs **99.2%** (2022)  
Renewable production: **26%** (2006) vs **74.4%** (2022)



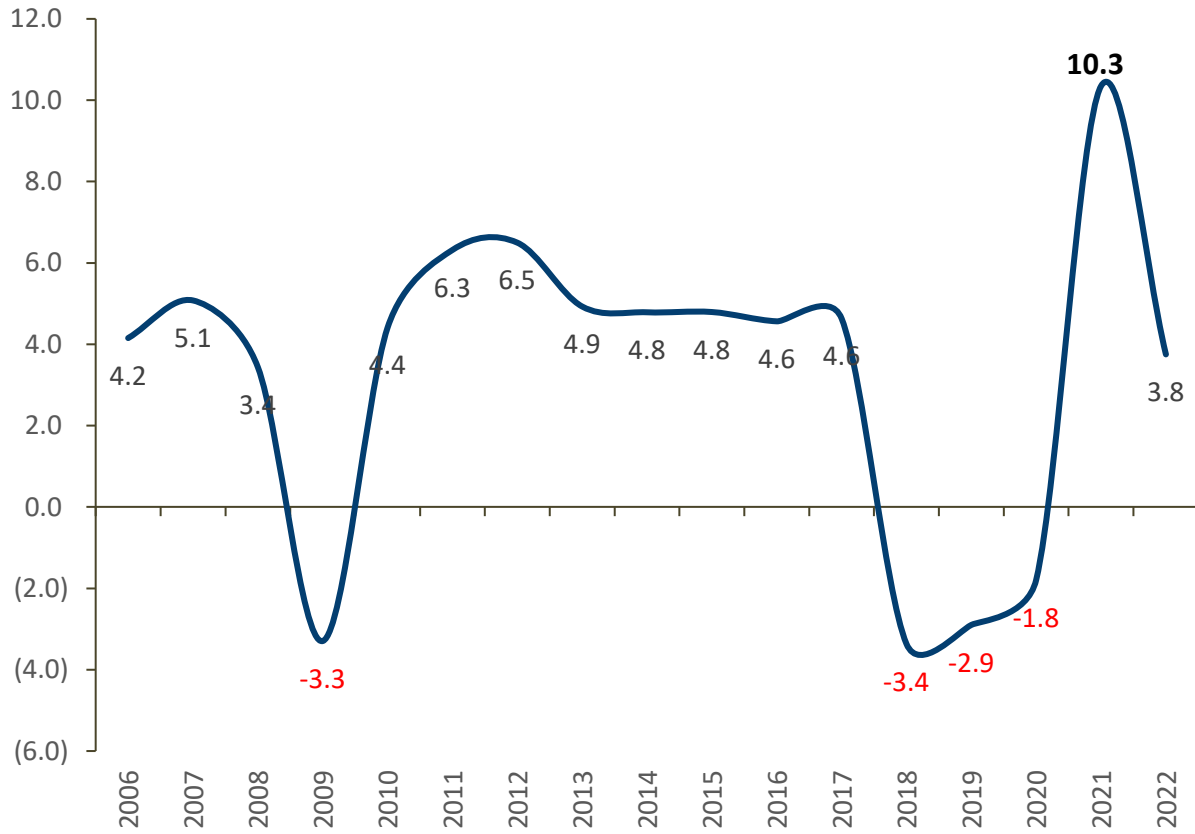
**90%** Food self-security



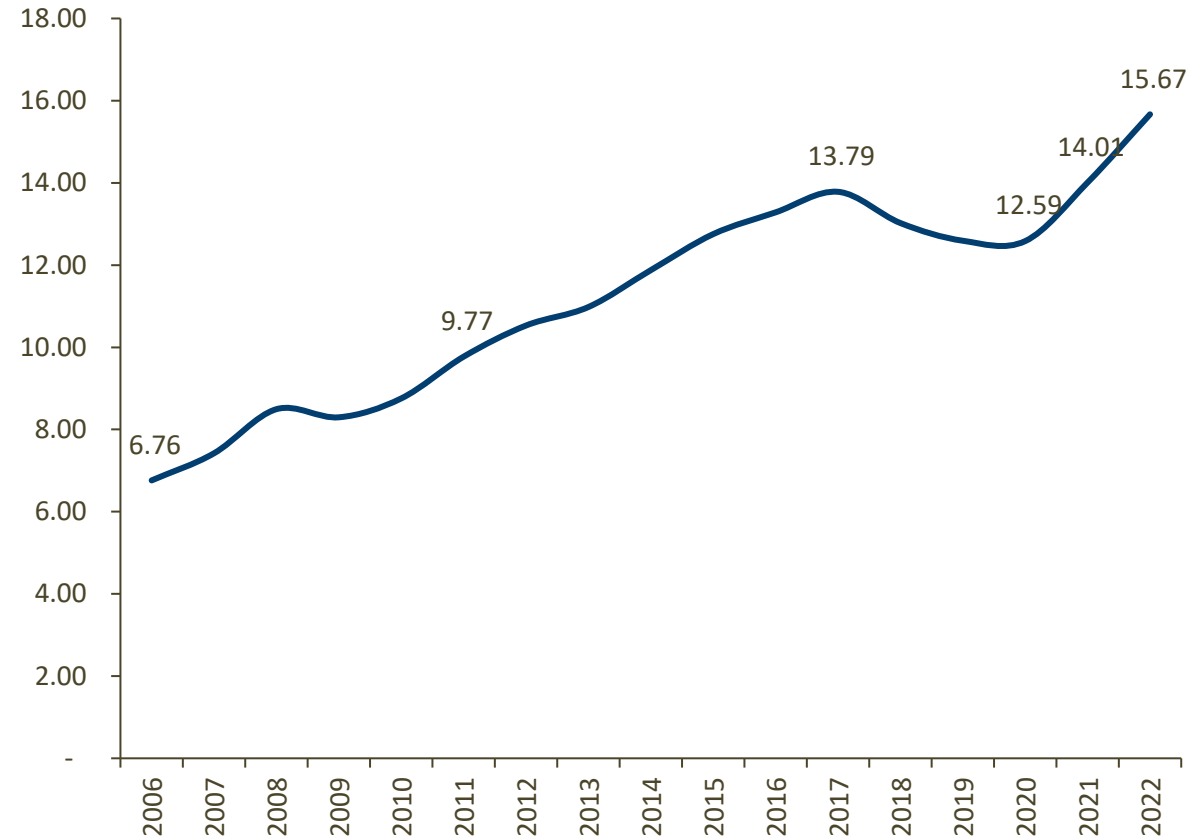
Water access:  
**65%** (2006) vs **94%** (2022)

# RESILIENT ECONOMY

### Economic growth: PIB constants prices (% Variation)



### GDP of Nicaragua 2006-2022 (Billion of US \$)

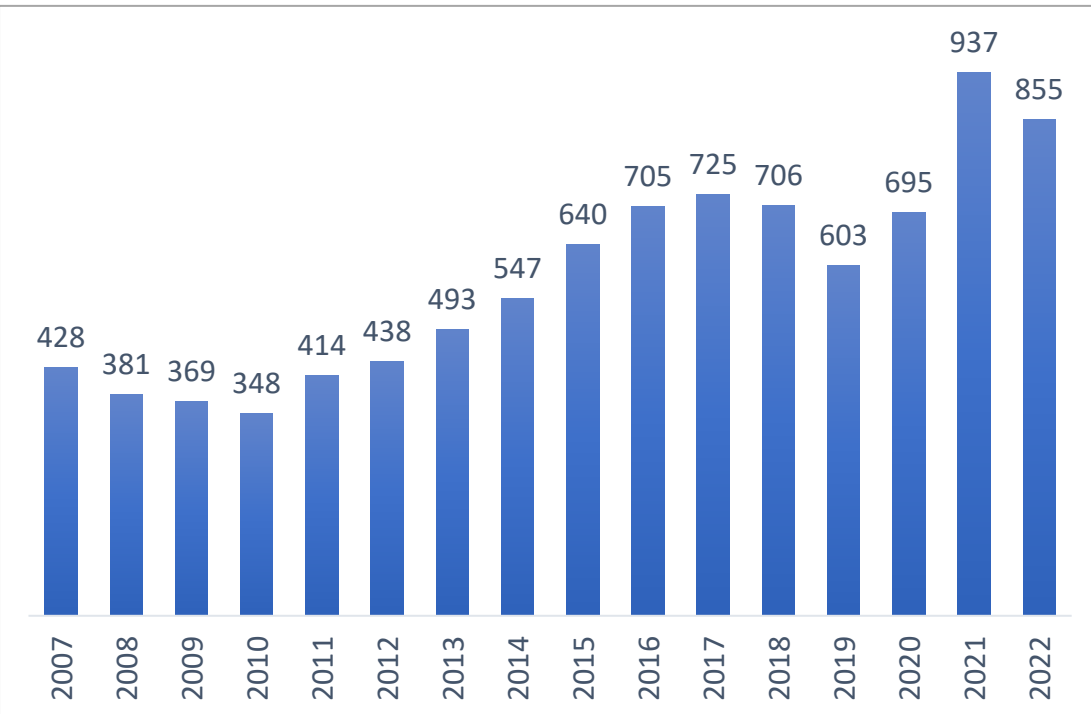


Source: BCN.

Source: BCN

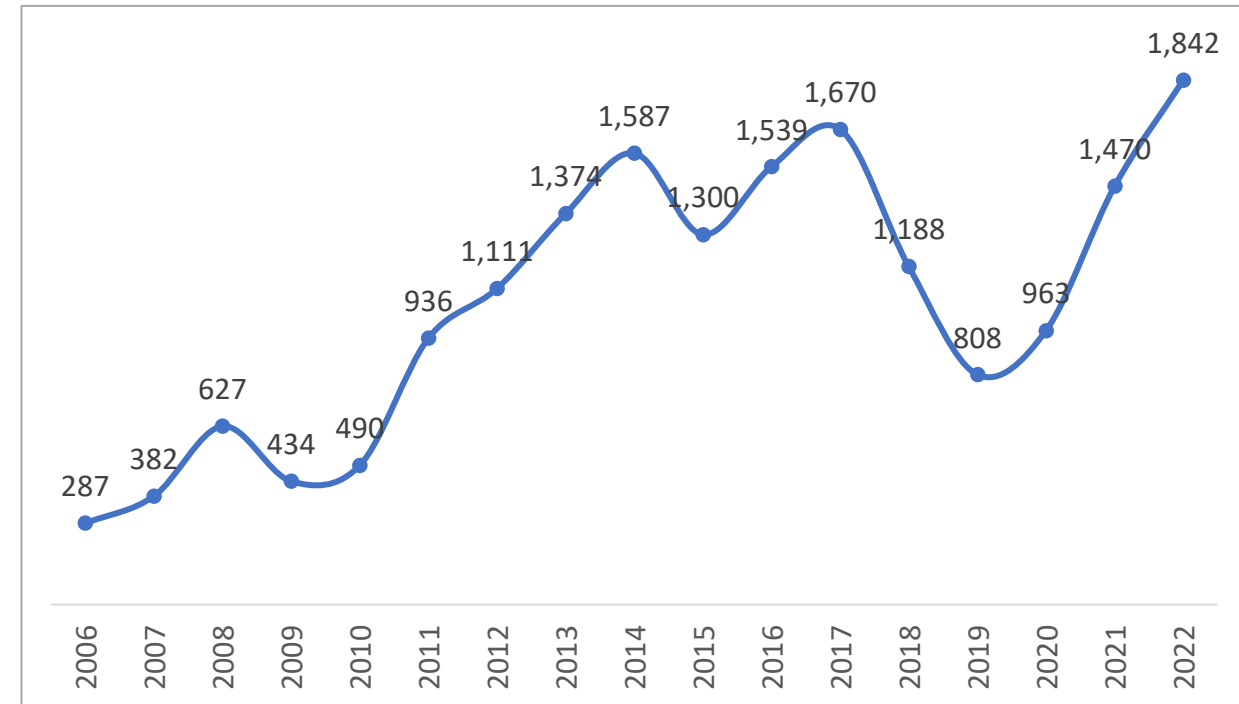
# RESILIENT ECONOMY

Public Investment Program PIP (2007 – 2022)  
 (Million of US \$)



Source: BCN

Foreign Direct Investment Income(2006 - 2022)  
 (Million of US \$)



Source: BCN



**US\$ 92.5 million**

Income FDI in agricultural sector 2022



Investment in production support: roads, energy, telecommunications, water and sanitation, health and education

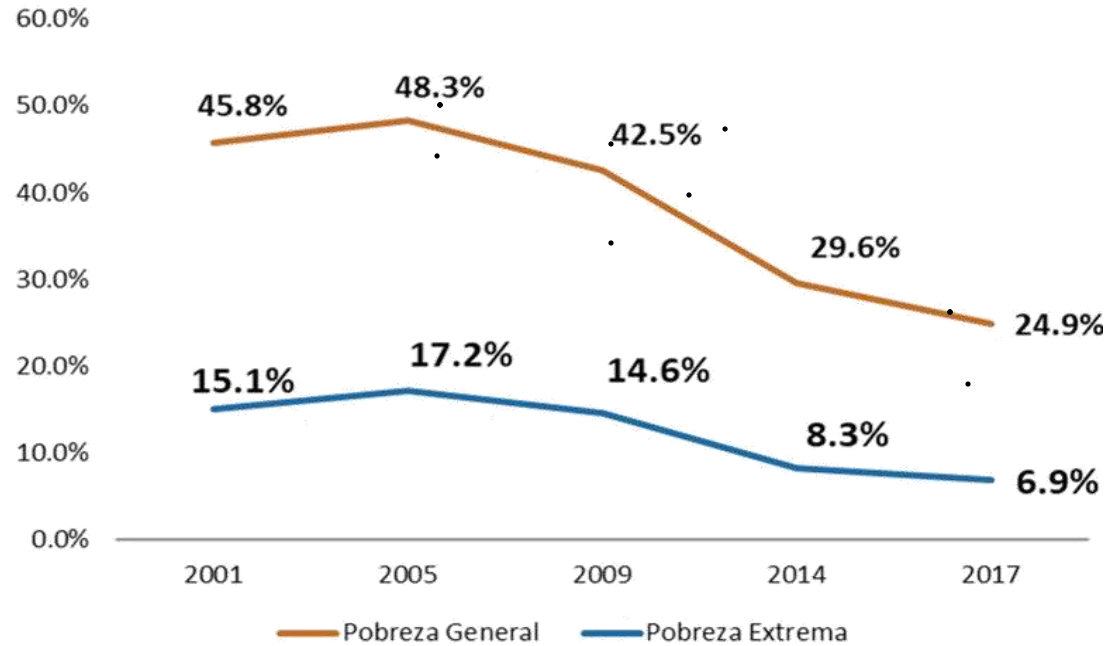


**30%**

Of national employment

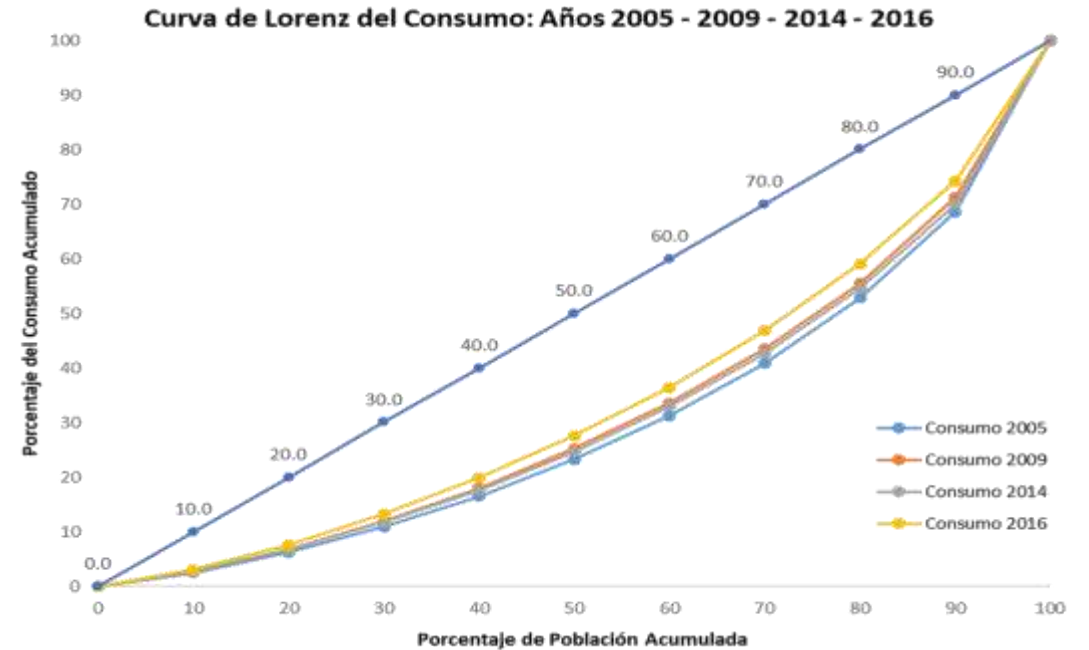
# POVERTY AND INEQUALITY REDUCTION

## Poverty Reduction



SOURCE: INIDE/EMNV 2001, 2005, 2009, 2014, 2017

## Lorenz curve of consumption: Years 2005 - 2009 - 2014 - 2016





# AGRIFOOD SYSTEM POTENTIAL





# AGRIFOOD SYSTEM POTENTIAL



**+ 20**  
Types of soil



**48.54 %**  
Land with high and  
medium priority



**+ 3.8 M. Has**  
Agricultural use



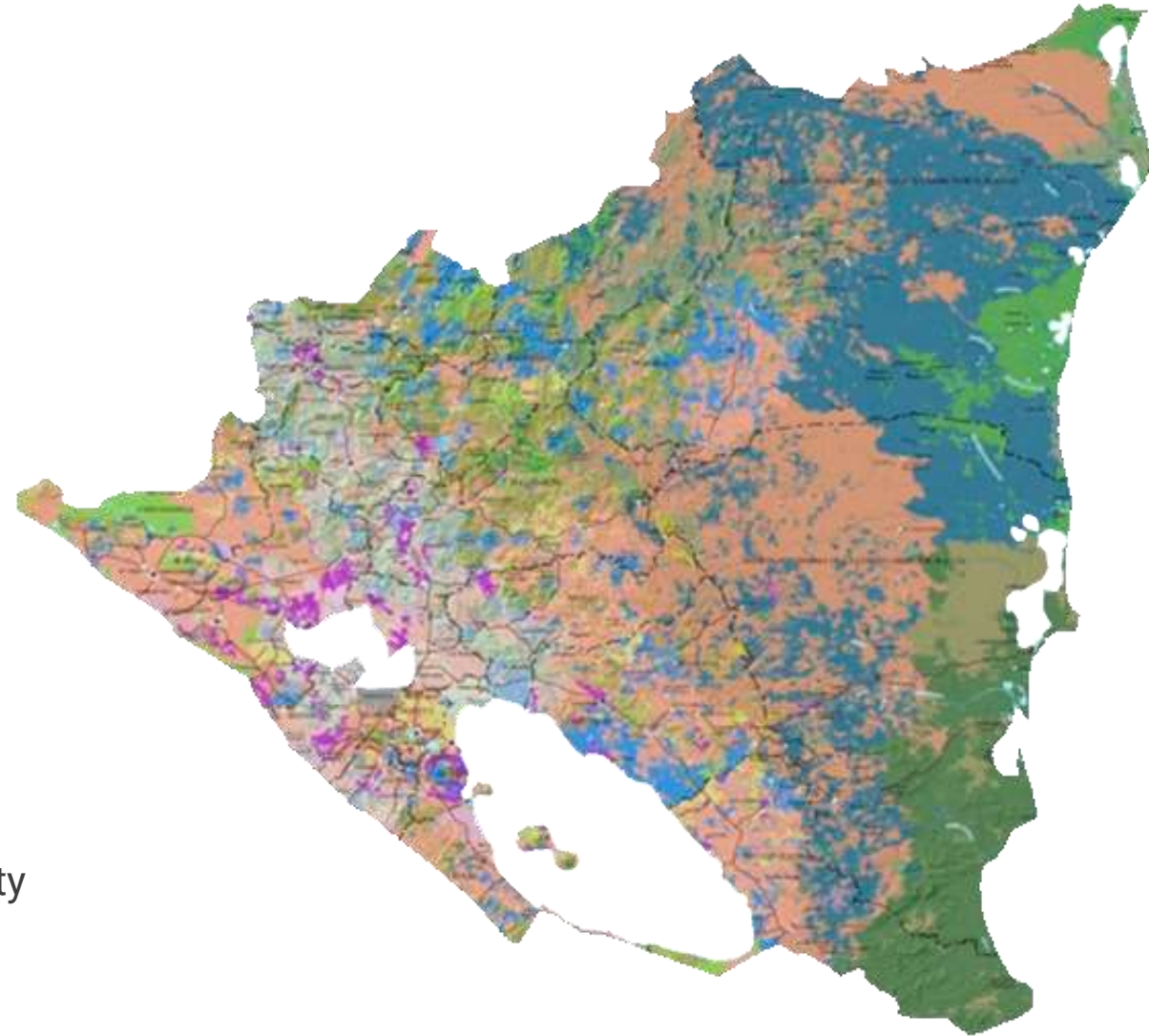
**15 %**  
Natural  
reserves



**+ 6 M. Has**  
Forestry use



**7 %**  
Of global biodiversity



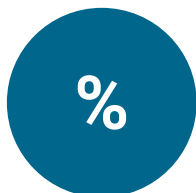
## Datos 2022:



Total export:  
**US \$ 7,731 million**



Growth vs 2021  
**13.0 %**, which  
represents **US \$865.6**  
Additional million



**40%**  
Agro-food export in  
2022

## Evolution of total agro-food exports (2012 – 2022) (Million of US \$)



## BEANS AND CATTLE BREEDING EXPORT + AGROINDUSTRIAL PRODUCTS (MEAT, DIARY): in US\$ MILLION

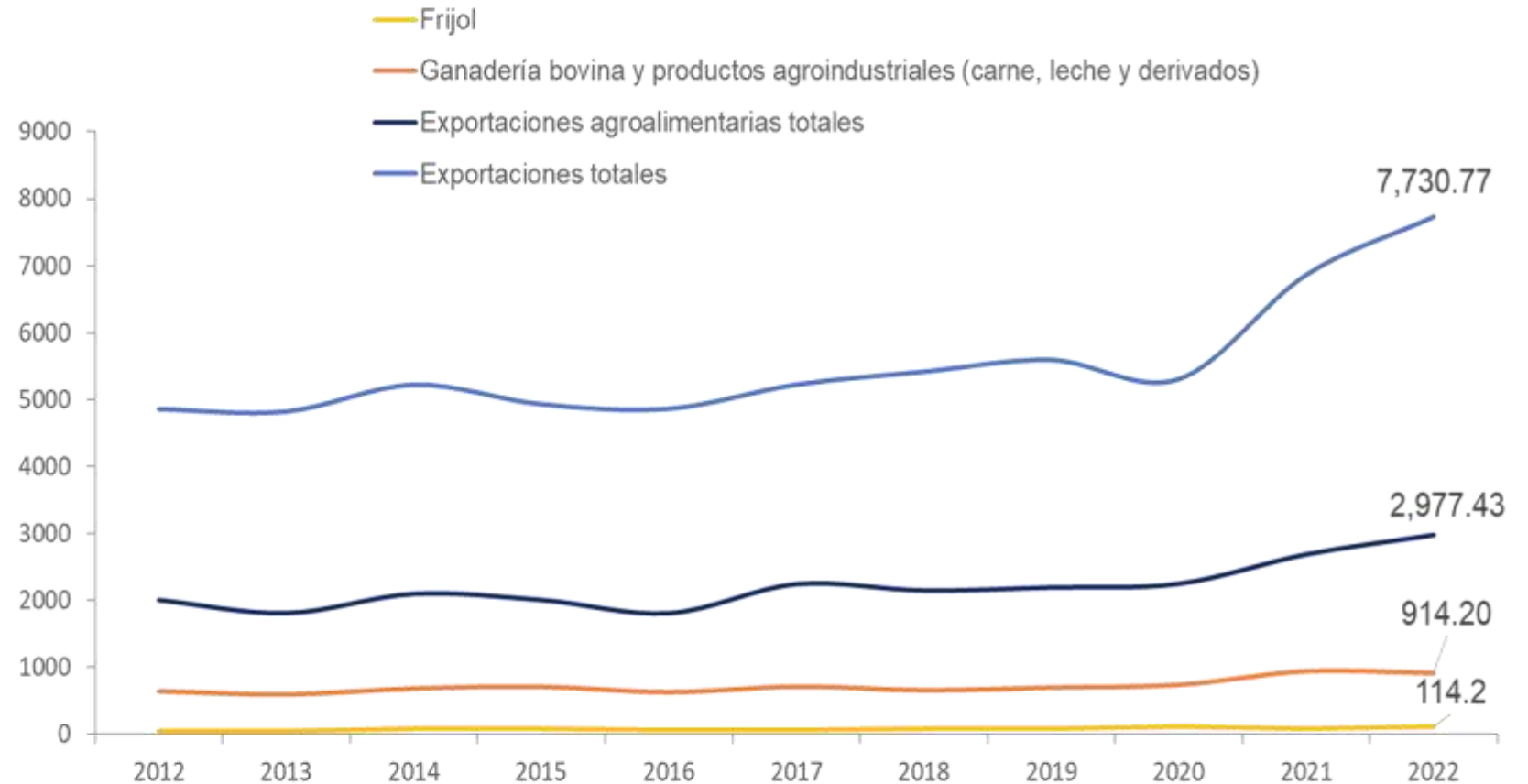
### 2022 DATA



Total export:  
**US\$ 7,731 million**  
+13% than 2021

Agricultural goods export: **40% of total exports**

Cattle Breeding exports: **5,8%** of GDP and **30%** of agricultural goods export.  
Exports of Bean: **4%** of agricultural goods export.



Nicaragua exports to: USA, Mexico, El Salvador, Guatemala, Japan and Panama

## □ CONDITIONS FOR INVESTMENT

### # 1 in Centralamerica – Why invest in Nicaragua:



Less time to open an enterprise



Less time in procedures to export



Without the presence of organized crime



Lower homicide rate

## □ RELEVANT DATA:



100% National coverage of mobile internet



76% Population under 40 years of age



21 mil New professionals



Aporx. 6 mil kms paved roads  
3.0X vs. 2006

**AGREEMENTS  
IN  
NEGOTIATION**  
Perú, Paraguay

## □ HIGH CONNECTIVITY:



Preferential access in 45 countries



20 Bilateral agreements to protect investments

### **FREE TRADE AGREEMENTS**

USA, Panama, México, Chile, E.U,  
China, United Kingdom, Dominican  
Republic, South Korea.

### **CENTRAL AMERICA COMMON MARKET**

Guatemala, El Salvador, Honduras,  
Costa Rica, Panama.

### **PARTIAL SCOPE AGREEMENTS**

Ecuador, Cuba, Venezuela, Colombia,  
China

# ALIGNEMENT WITH THE INITIATIVES



**National Program for Rural Investments (PIR)**  
To reduce poverty and for sustainable development of Nicaragua

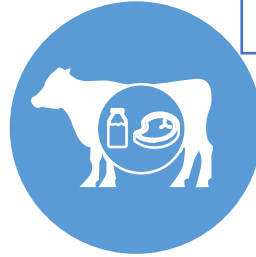


# RURAL INVESTMENT PROGRAM (PIR)

## PIR

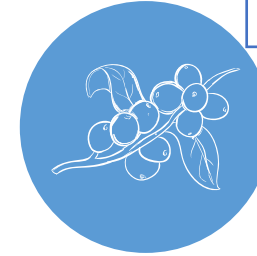
### 2022 - 2030

**ESTABLISH GOVERNMENT  
PRIORITIES AND  
RESOURCES**



**National program of low carbon livestock**

US \$225 million



**Resilient Coffee National Program**

US \$100 million



**Bean National Program**

US \$100 million












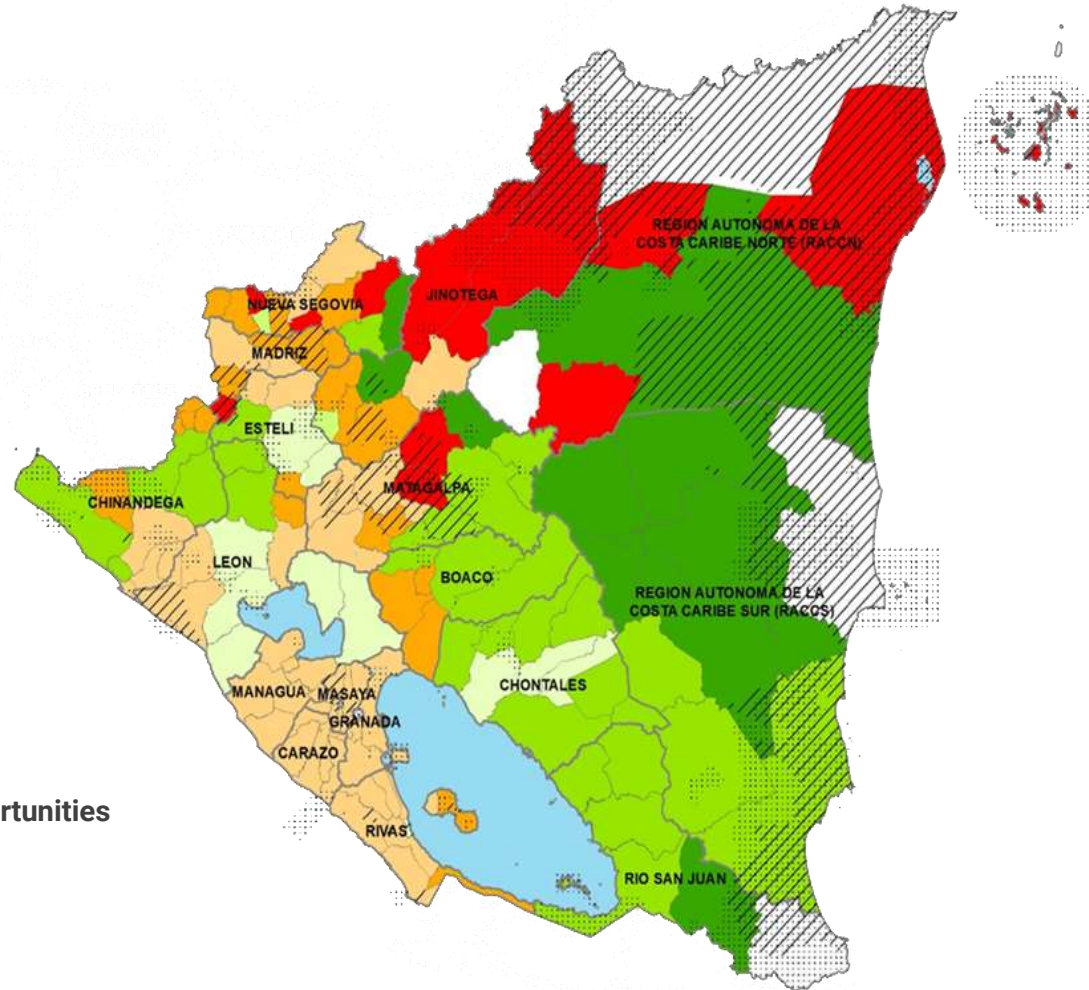
**Cocoa National Program**

USD 25 million

## TARGETING MODEL TO AGRICULTURAL INVESTMENT

### Clases (Kmean)

-  Protected Area
-  Indigenous territories
-  Critic with moderate opportunities
-  Medium priority with moderate agricultural opportunities
-  Low priority
-  High priority
-  Medium priority with high agricultural opportunities
-  Low priority with high agricultural opportunities
-  High performance



In 2023 Production, Commercialization and Consumption National System (SNPCC), institutionalizes Hand in Hand methodology (HiH) as a tool to targeting and prioritization agricultural investments

# RURAL INVESTMENT PROGRAM (PIR)

## Examples of agricultural investment targeting for socio-economic revitalization



Carne y Leche Bovina



Café



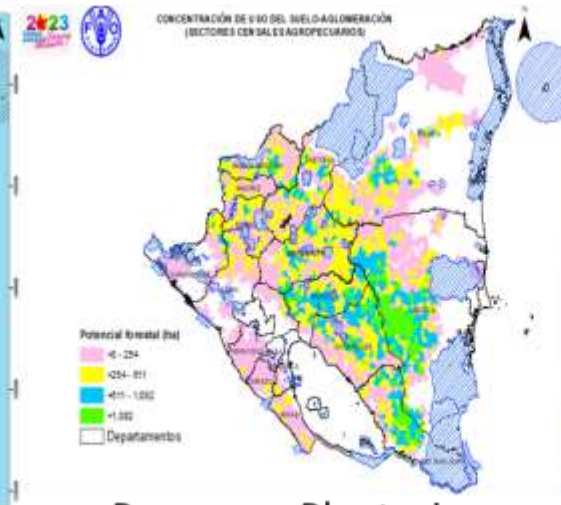
Frijol rojo



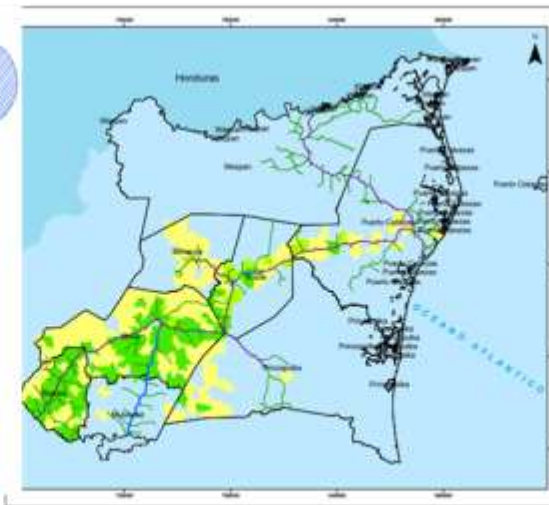
Frijol negro



Cacao



Bosques y Plantaciones



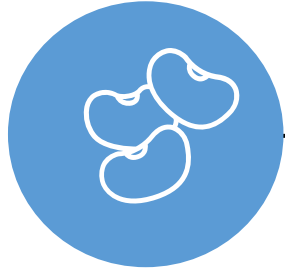
Leche en CCN



Leche en CCS



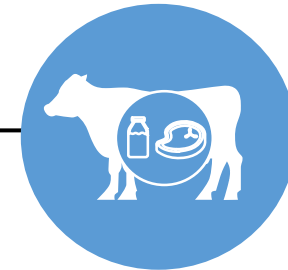
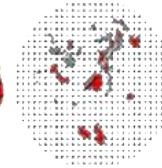
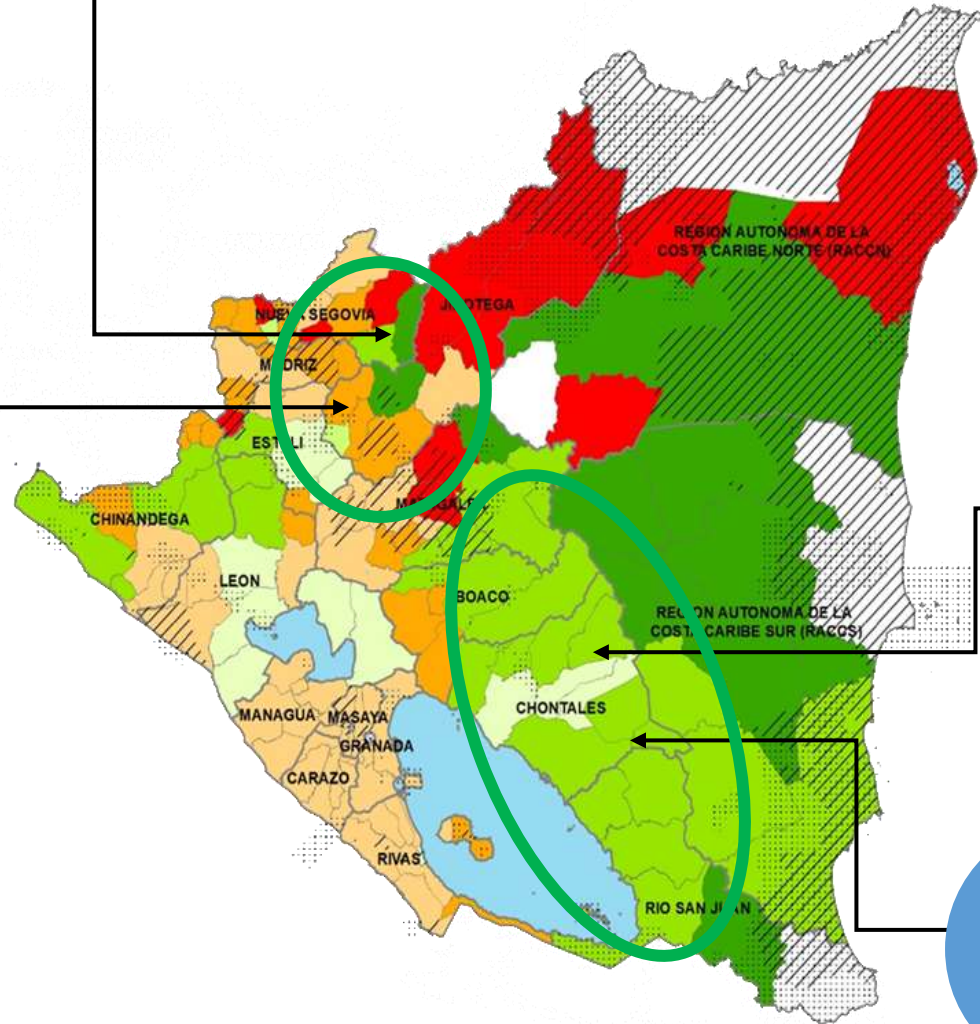
# INICIATIVAS DE INVERSIÓN



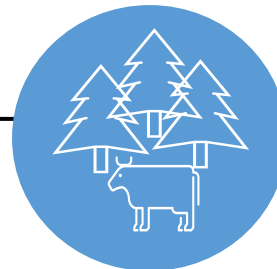
BEAN



COCOA



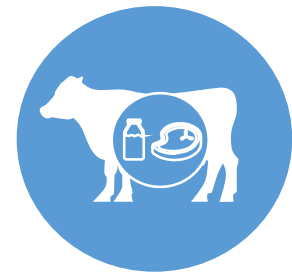
FORESTRY MEAT-DAIRY





## INITIATIVE 1

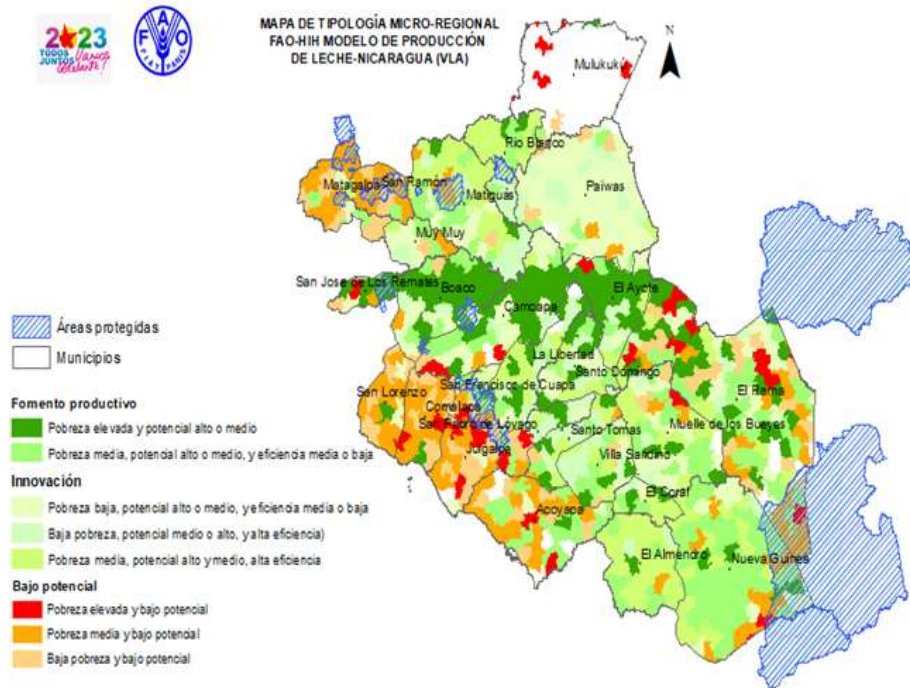
## FORESTRY-DAIRY SECTOR



# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



## Agroclimatic Transformation opportunities in primary chain



+80% of producers are **micro, small and medium** with systems of livestock production in diary and land

## Potential investors identified



Technical assistance NI-T1309 - **Sustainable livestock farming:** Improving opportunities for smallholders in the livestock sector

Identify areas of potential collaboration with private sector agricultural actors in the dairy chain (anchor companies)

Concept Note on **Agreement on Low Emissions Production in Meat + Dairy and Coffee**

Explore the partnership to support coffee producers implementing **agroforestry systems** in Nicaragua through a **voluntary carbon market**

# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



## NICARAGUA:

### LEADING EXPORTER IN CATTLE BREEDING AND DIARY IN CENTRALAMERICA

- ❖ 79% of the value of meat exports and 45% of dairy products come from Nicaragua.
- ❖ Main dairy products exported by Nicaragua: cheese, powder milk, cream of milk, lactose-free milk, fluid milk and icecreams.

### Nicaragua can export dairy products with 0% tariff to:

China, USA, Mexico, Chile, Dominican Republic, E.U, South Korea

**Main countries to which it is exported:** El Salvador, Guatemala, USA, Costa Rica y Honduras



### Nicaragua can export wood and wood articles with 0% tariff to:

USA, México, Panamá, Chile, Dominican Rep., E.U, United Kingdom

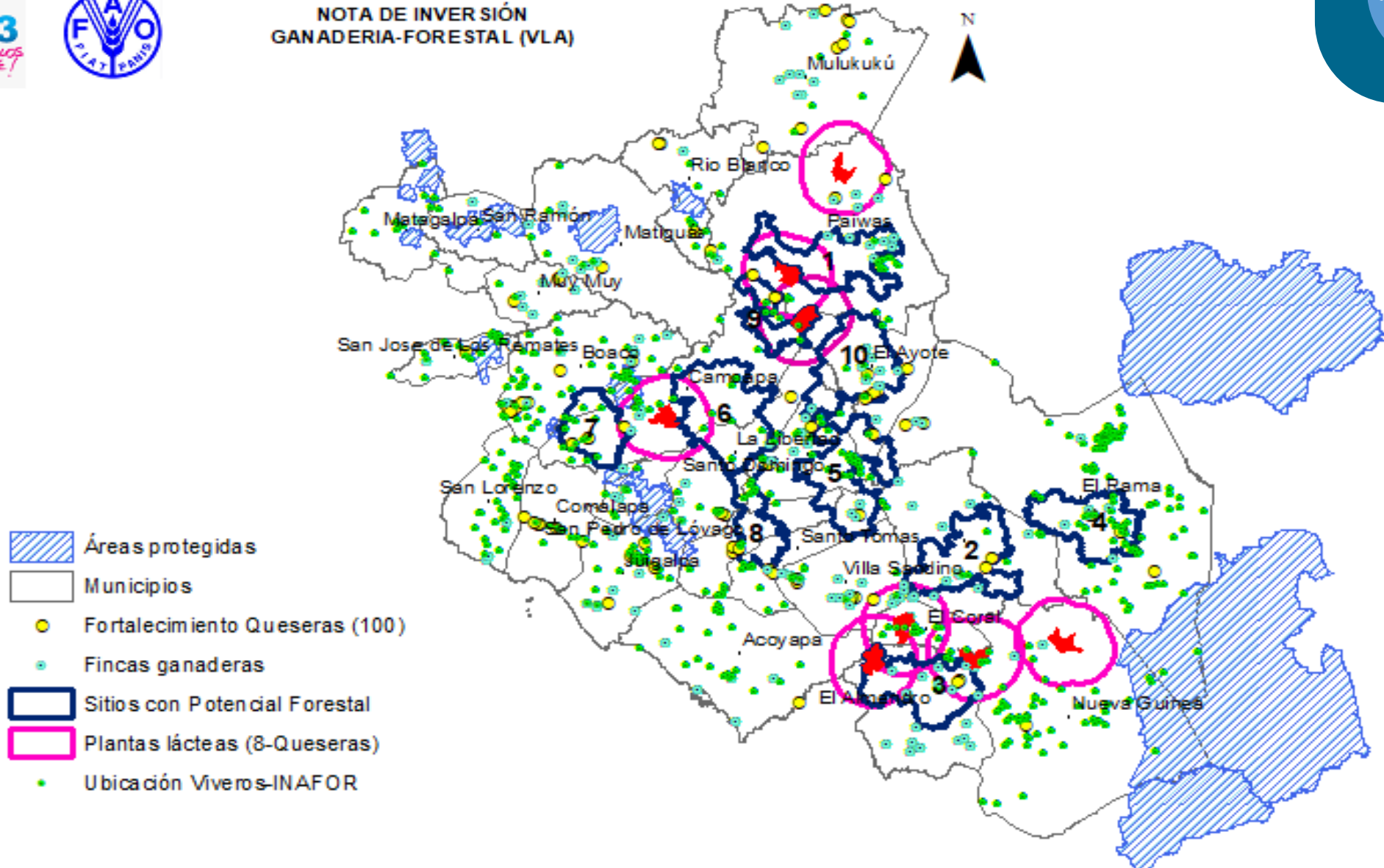
### Nicaragua can export dairy with 0% tariff to:

China, USA, México, Chile, Dominican Rep., E.U, South Korea

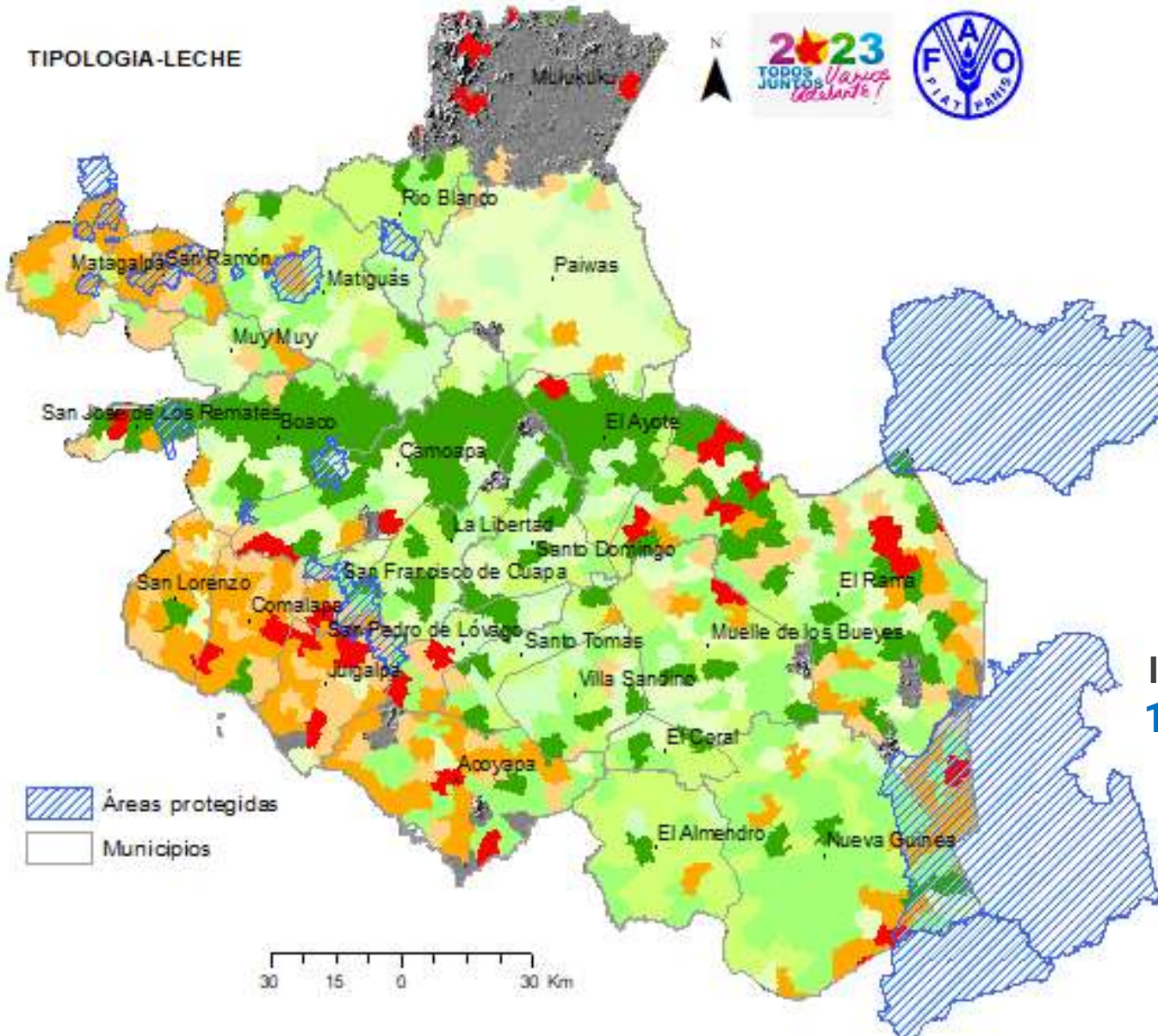
# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



NOTA DE INVERSIÓN GANADERIA-FORESTAL (VLA)



# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



Farm management with low carbon practices, including plantations  
**US \$41,529,815**



Development of infrastructure for processing 100 artisanal cheese factories and 8 plants  
**US \$ 39,337,582**



Capacities Development  
**US \$ 3,164,201**



**Total Investment:**  
**US \$ 84,031,599**

## Sustainability Benefits

**40,210**  
people

**33.8** million tCO<sub>2</sub>  
captured eq/ha/ year

## Cost-Benefits Metrics

IRR	NPV	B/C
19%	\$ 106,225,325	1.3

## Employment creation

**25,026**

# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



## COMPONENTS



Farm management with low carbon practices, including forestry plantations.



Infrastructure Development for dairy transformation.



Capacities Development

## INDICATORS

**+11.000** Ha SASP  
**33.8** tCO2 eq  
xHa/year

**23,930** Has  
With forestry  
plantation in 3,947  
farms between 5-50  
Ha

**314,000** m3 per  
year in raw wood

Colect and processing **25.5**  
million of liters

**8** industrial plants and  
**100** cheese factories

**8,042**  
Producers

## EXPECTED RESULTS

**21%** Productivity  
increase

Silvopastoral  
land increase

Increase in area and  
forest production

**26.1%** Added value  
increase

Improving  
sustainable practical  
capacities

# Development of the Transformation of the Livestock and Forestry Production Matrix in the territory of Via Láctea Ampliada



## COMPONENTES



1



2



3



### Farm management with low carbon practices, including forestry plantations.

- Implementation of farm plans that incorporate low carbon measures and practices (agrosilvopastoral systems, soil and water management and biodiversity) and good milking practices.
- For the development of forest plantations in 3,947 livestock farms:
  - Establishment of nurseries (Species, Infrastructure required, Necessary inputs and tools, Manpower and Technical assistance)
  - Thinning activities in SASP and PF, maintenance activities, productive systems activities and technical assistance of the Forest Regent in plantations.

### Infrastructure Development for dairy transformation.

- Improvement and expansion of facilities for aggregation of value in 100 artisan cheese makers.
- Equipment: Pasteurizer, Cooling tank, Mixer (cheese vat) and Biodigestors and solar panels.
- Strengthening of dairy quality control laboratory.

### Capacities Development

- Technical assistance in dairy reception techniques.
- Technical assistance in nurseries and management of forest plantations.
- Training in establishing forest plantations and SASP.
- Training in laboratory management and dairy equipment.
- Training in marketing of exportable dairy products.





## INITIATIVE 2

## BEAN

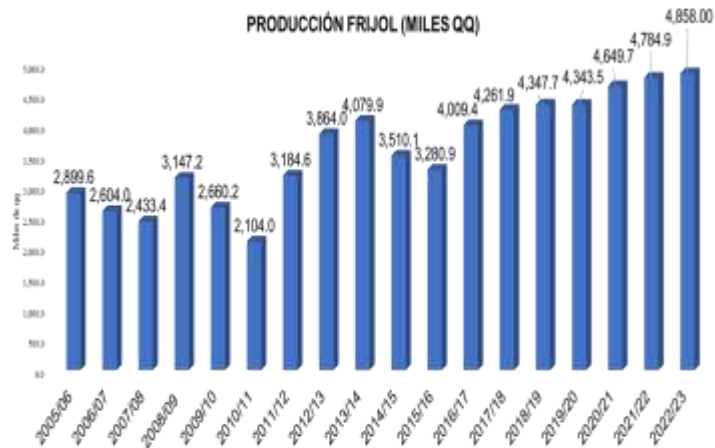


# VALUE ADDED AND ADAPTIVE MANAGEMENT OF BEAN CULTIVATION



## □ BEAN PRODUCTION AND EXPORTATION

PRODUCCIÓN FRIJOL (MILES QQ)



EXPORTACIONES DE FRIJOL, PRINCIPALES SOCIOS COMERCIALES DE NICARAGUA: PRODUCTO 071333



- El frijol ha experimentado un crecimiento de 120.6% en el valor de las exportaciones en 2022 en comparación con 2012.

### Main countries to which bean was exported in 2022:

Costa Rica, USA, El Salvador, Honduras, Guatemala, Cuba, Spain and Panama

### Nicaragua can export bean products with 0% tax to:

China, USA, Mexico, Chile, E.U, Cuba

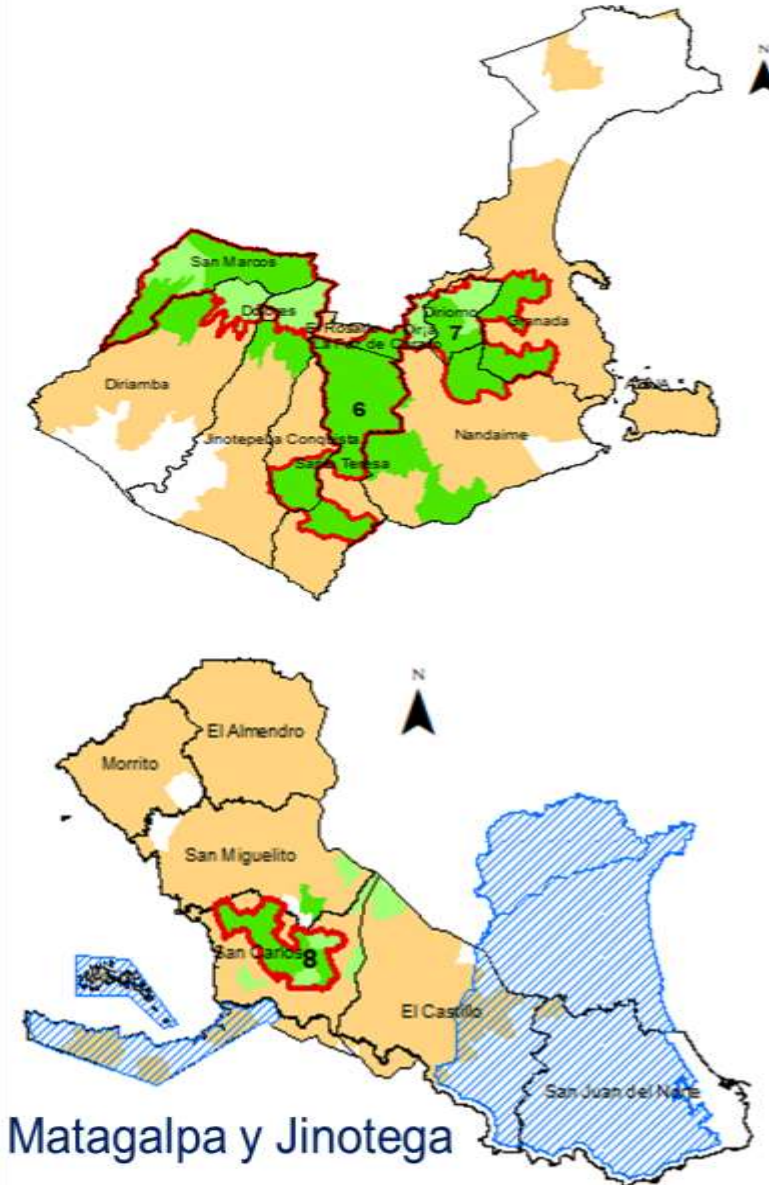
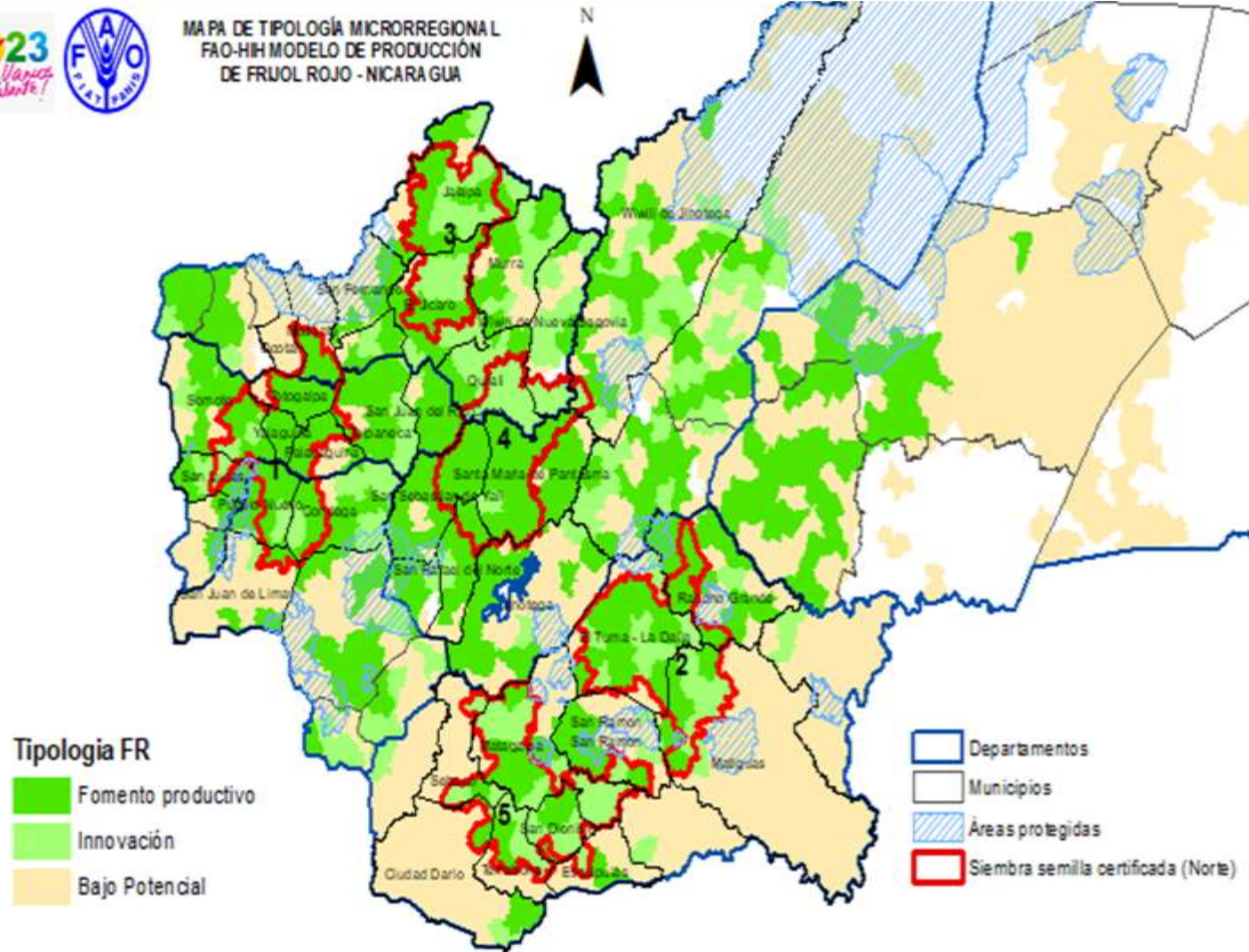
### Exported bean by type in 2022:

Frijoles rojos (94,81%), frijoles negros (4,05%), otros tipos (0,85%), frijoles blancos (0,29%)

# VALUE ADDED AND ADAPTIVE MANAGEMENT OF BEAN CULTIVATION



MAPA DE TIPOLOGÍA MICRORREGIONAL  
FAO-HI MODELO DE PRODUCCIÓN  
DE FRIJOL ROJO - NICARAGUA



5 Development areas of Bean: Madriz, Nueva Segovia, Matagalpa y Jinotega

# VALUE ADDED AND ADAPTIVE MANAGEMENT OF BEAN CULTIVATION



## COMPONENTS

1



Farm management with adaptive practices and seed production

2



Establishment of 5 plants for collection and processing red beans into grain

3



Establishment of 5 plants for processing and commercialization cooked and ground beans

## INDICATORS

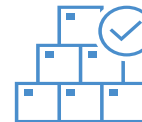


20% productivity increase

+ **1,662.77** Ha and production of **509,661** qq in 5 years of improved seeds



+**43,129** Ha with adapted practices



Increase of the exported value and volume of bean



Canned ground beans, and frozen ground beans : **862** Tons /year / 5 plants



**11,763** Producers

## EXPECTED RESULTS



Productivity improve



Production of (qq) **733,451.83** year



Total collect quantity: **264,000** qq/ year / 5 plants

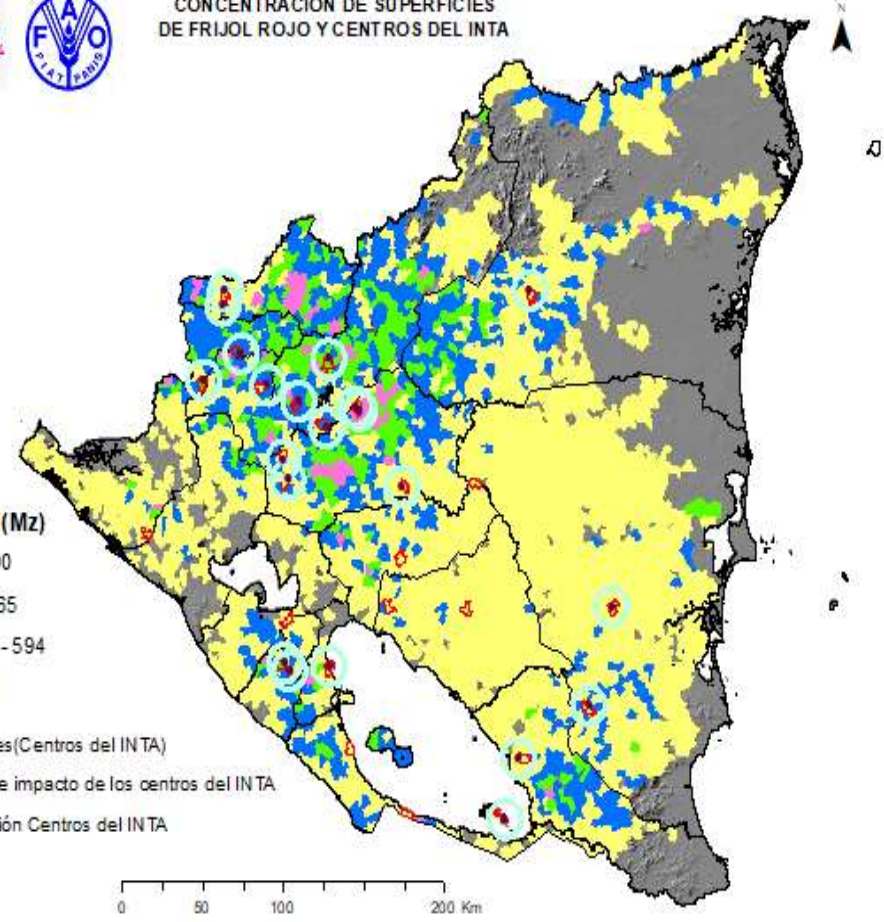


Strengthen/expand capacity of **5** cooked and ground bean processing plants

# VALUE ADDED AND ADAPTIVE MANAGEMENT OF BEAN CULTIVATION



CONCENTRACIÓN DE SUPERFICIES DE FRIJOL ROJO Y CENTROS DEL INTA



Farm management with adaptive and productivity practices  
**US \$67,063,501.13**



Establishment of 5 plants for the collection, added value and commercialization of red beans  
**US \$ 12,506,163**



Establishment of 5 plants for processing and commercialization cooked and ground beans  
**US \$ 3,383,017**



**Total Investment:**  
**US \$ 82,952,681**

## Sustainability Benefits

**58,813** people  
**274.5** Ton CO2 equivalent/ha during 12 years

## Benefit-Cost Metrics

IRR	NPV	B/C
<b>42%</b>	<b>\$175,710,321</b>	<b>1.92</b>

## Employment generation

**113,547**

# Agregación de valor y manejo adaptativo del cultivo de Frijol



## COMPONENTES

1



### Farm management with adaptive and productivity practices

- Certified red bean seed production.
- Training and technical assistance to seed producers for certified seed production.
- Institutional technical assistance from IPSA and INTA for seed certification and at the production stage.
- Promotion of adaptation and soil conservation practices.
- Technical assistance and input for the production of red beans.

2



### Establishment of 5 storage plants, added value and processing of red beans into grain

- Training and technical assistance to 5 cooperatives to expand collection and commercialization to producers in post-harvest management.
- Improvement and expansion of facilities.
- Equipment for preparation of red bean in grain of the plant.
- Facilitate process and packaging materials.

3



### Construction of 5 new plants for processing and marketing cooked and ground beans

- Built installations.
- Training and technical assistance to 5 new processing and commercialization plants.
- Equipment for processing cooked and ground beans.
- Facilitate process and packaging materials.

## SUMMARY

**US\$166.93 Million**  
Total investment

**31%**  
Average IRR

**99,023**  
Direct Beneficiaries: 19.805  
Indirect Beneficiaries:  
79.218

**US\$815**  
Per capita income  
increase

**5.5 MT**  
Per capita emissions reduction

## Investment initiatives



### Intervention:

Development of the Transformation of the Livestock and Forestry Production Matrix in the Vía Láctea Ampliada

### Cost (USD)

**US\$ 84.03 Millones**

### IRR (%)

19%

### VPN

US\$106.2 Millones

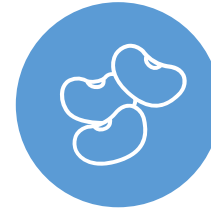
### Sustainability Benefits

Beneficiaries : 40,210

- Direct Beneficiaries: 8,042
- Indirect Beneficiaries: 32.168

Employment generation: 25,025

Emission reduction: 33.8 million tCO<sub>2</sub> eq/ha/ year



### Intervention

Value aggregation and adaptive management of bean cultivation

### Cost (USD)

**US\$ 82.9 Million**

### IRR (%)

42%

### VPN

US\$ 175.7 Millones

### Sustainability Benefits

Beneficiaries: 58,813

Direct Beneficiaries: 11,763  
Indirect Beneficiaries: 47.050

Employment generation: 113,547

Emission reduction:  
274.5 Ton CO<sub>2</sub> equivalent/ha  
during 12 years