



WORLD
FOOD
FORUM



Hand-in-Hand
Initiative



SICA
Sistema de la Integración
Centroamericana

Hand in Hand Initiative: Building Resilience in the Dry Corridor and Arid Zones of the SICA region

October 2026



In coordination with:



SIECA
SECRETARÍA DE INTEGRACIÓN
ECONÓMICA CENTROAMERICANA

cenpromype
Centro Regional de Promoción de la MIPYME

An initiative led by:



**Consejo
Agropecuario
Centroamericano**
Ministerio de Agricultura SICA



SICA
Sistema de la Integración
Centroamericana
SECRETARÍA GENERAL





Section 1: Progress



Investment notes

Committed resources

Resources in negotiation

Complementary Resources

35.2 million USD

469 million USD



Agricultural zoning of climate risk (AZCR)

2.4M



Digital soil mapping

12M



MSME´s and digital ecosystems

0.4M

15M



Integrated water solutions

20.4M



Strengthening of ARI in R&D

0.003M



Hub-AgriCER

2M

3 AZCR systems established in the country, **14 institutions** and **100 technicians** trained

2 national digital soil mapping systems established, **14 institutions** and **150 technicians** trained

Adapted **seed systems** in **3 countries**

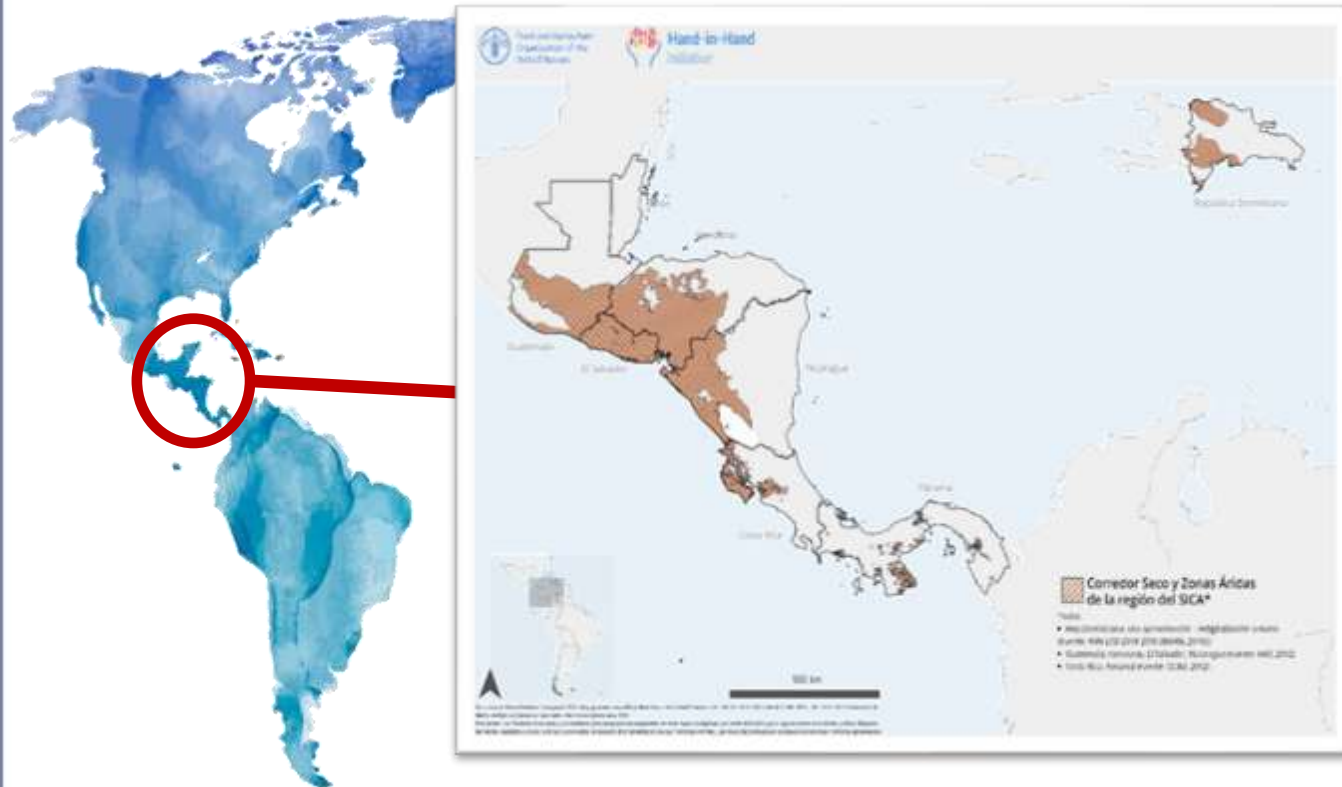
Characterization of **640 MSMEs** in **7 countries**

53,000 farmers benefited from RECLIMA

Investments	In millions USD
Flagship - Restoration	5
Ecosystem-based adaptation programme for the dry corridor and drylands/CABEI	268
RECLIMA	128
RELIVE	67
Strategic basin capabilities/AECID/CCAD	0.68
Climate Water Security/Korea/CCAD	0.32



Dry Corridor and Arid Zones



Characteristics

- Approximately **23 million people (49% women)** in rural municipalities, including the Dry Corridor and Arid Zones of the SICA region
- Agriculture generates between **23% and 30% of total employment (7% average women)**, with a strong presence of family farming and production of basic grains
- **More than a third of the rural population lives in poverty**, with significant gaps in access to water, services and productive infrastructure
- **Women play a fundamental role** in food production, gardens, conservation and conservation



Migration

- More than **5.7 million migrants** (49% women) from the SICA region reside in the U.S. (8% of the population).)
- **Emigration of young people, 22% between 20-29 years old**
- Expelling municipalities tend to be poorer, more rural and more agricultural
- The emigration of young people reduces the availability of labor and limits generational renewal in family farming.

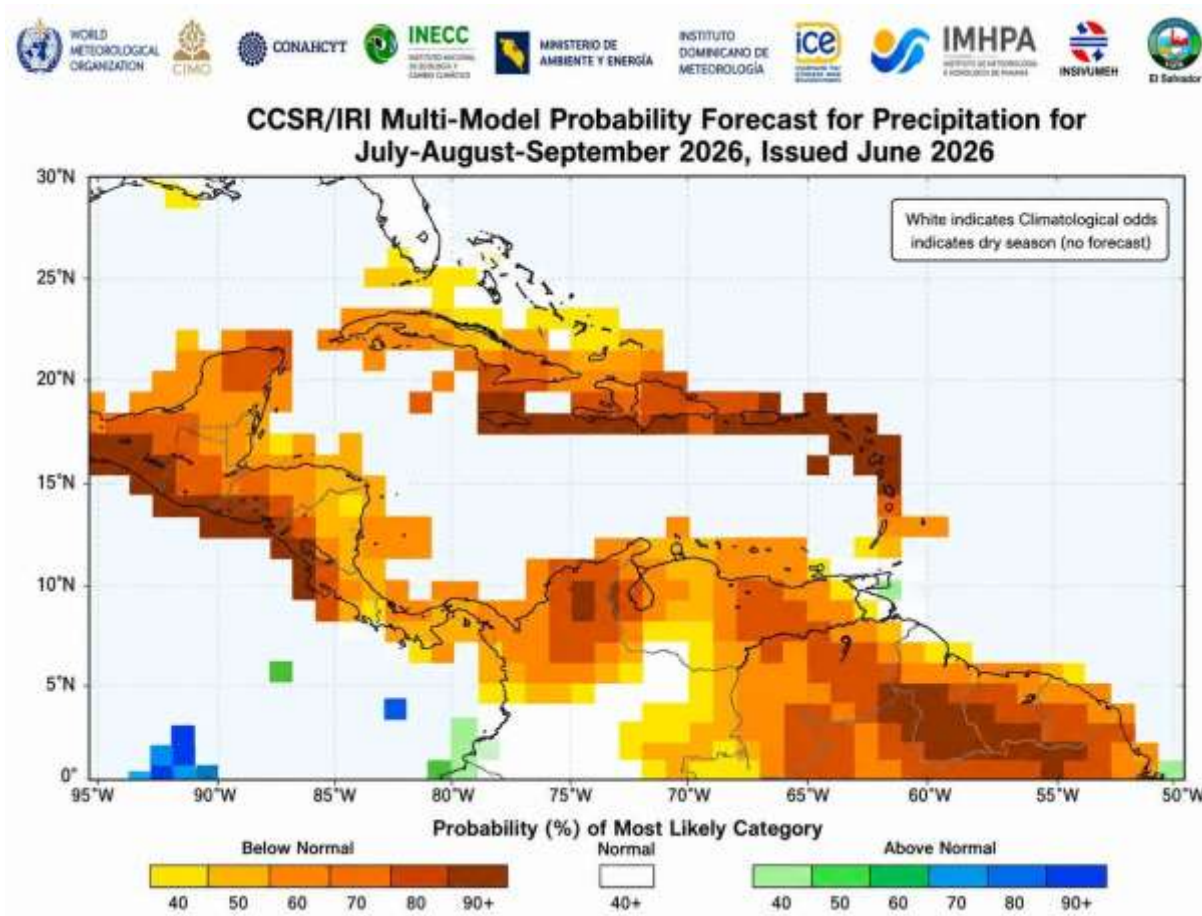
Section 2: Overview

Dry Corridor and Arid Zones



Vulnerability to climate risks

- **Extreme weather events:** prolonged droughts followed by heavy rains and floods
- Last decade: **3 severe El Niño episodes**, extreme hurricanes (Eta and Lota) and recurrent tropical storms
- Increasingly variable rainfall and heat wave patterns, **reducing agricultural predictability**
- **Increased risk to rainfed agriculture**, food security and rural livelihoods



Regional programmatic proposal and investments



Integrated water solutions



Anticipatory action, food security and nutrition, and livelihood recovery



Resilience and adaptation to climate change

Dry Corridor and Arid Zones Resilient Program

Economic development of rural territories



Transition to sustainable agricultural systems

MSME 's and digital ecosystems



Digital soil mapping



Agricultural zoning of climate risk



Strengthening of ARI in R&D

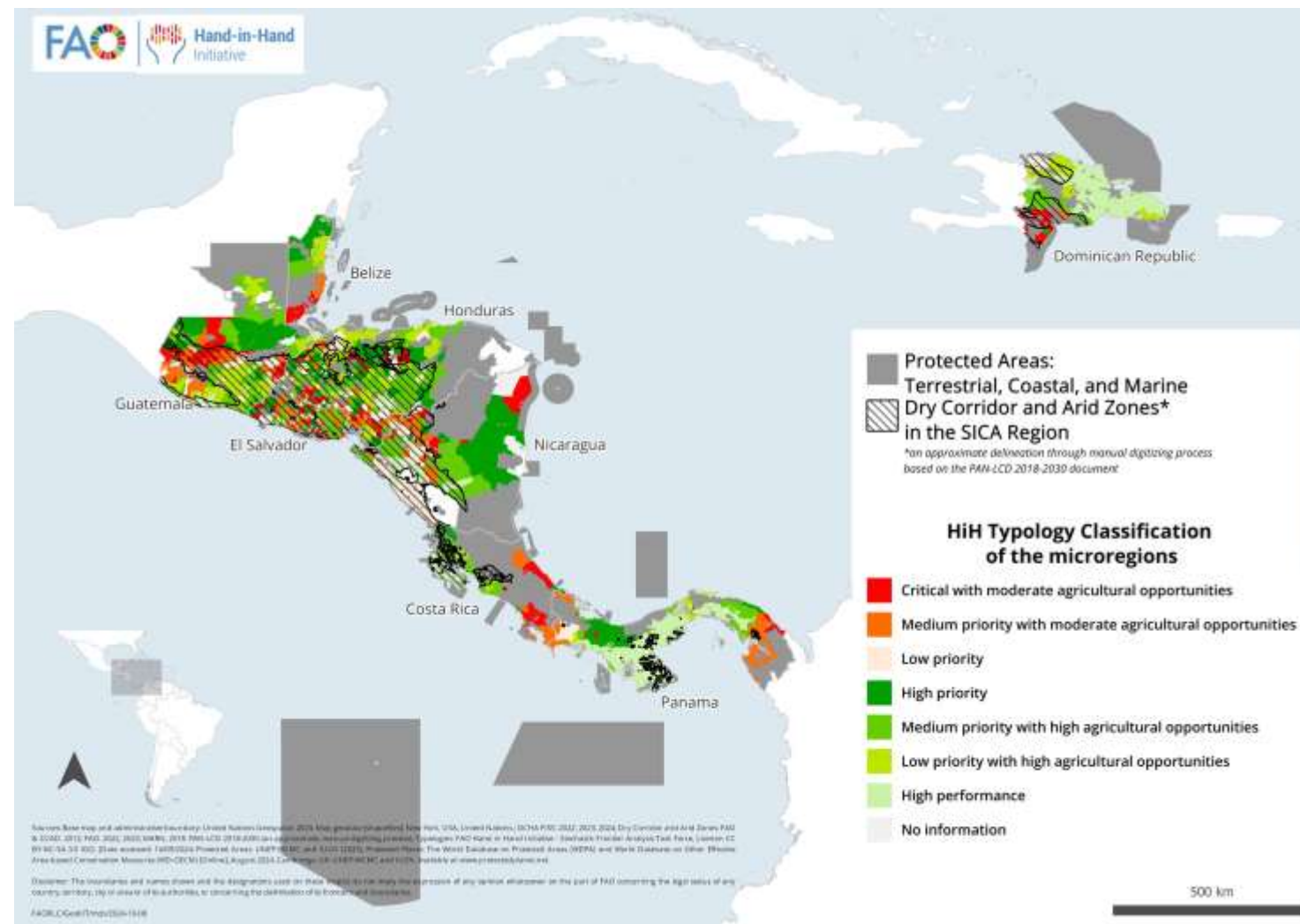


Hub Agri-CER



Hand in hand: territories of opportunities

- **Strategic natural assets**
- High undeveloped **agricultural potential**
- 44% of **young population**
- **Free trade agreements** within and with other countries
- Favorable **trade balance**: 45% of total exports correspond to food products
- Agriculture **represents** for 7% of regional GDP and one-fifth of employment
- Potential of **remittances** for financial inclusion (12% of GDP on average)
- **36.7% average poverty** incidence rate countries (World Bank, 2023)



Section 3: Investment climate

Partners and strategic allies



Unión Europea



MINISTERIO DE
RELACIONES
EXTERIORES



Canada



United Nations



Organización de las Naciones
Unidas para la Alimentación
y la Agricultura



SICA Bodies



Technical partners



Investment Note 1/6

Agricultural Zoning of Climate Risk (AZCR)

OBJECTIVE: Provide the Dry Corridor and Arid Zone countries new innovative tools to plan agriculture in the face of climate change

OPPORTUNITIES AND REACH

- Avoiding rainfed** crop losses in the face of climate variability and change
- Municipal maps by crop and planting date — **80% success rate**
- More financing and agricultural insurance** with lower climate risk
- Technical cooperation** with EMBRAPA and Brazil

FROM BOTTLENECKS TO KEY INVESTMENTS



Outdated agroclimatic information



Multi-criteria databases
1.3 M USD



Increasingly variable agricultural calendars



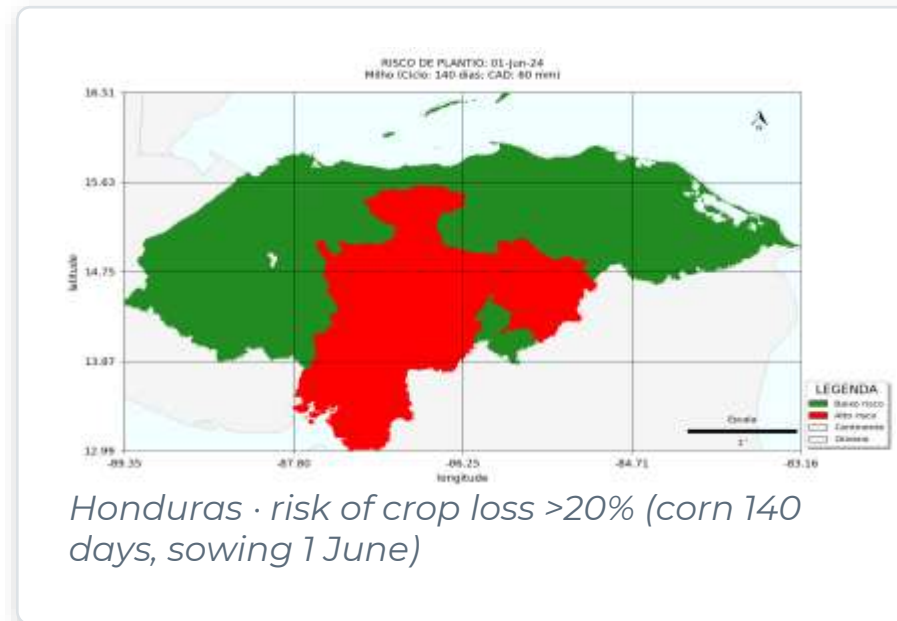
AZCR systems in 8 countries
11.9 M USD



Planting decisions without reliable data



Management and maintenance (12 years))
20.8 M USD



Investment Note 1/6

Agricultural Zoning of Climate Risk (AZCR)

INVESTMENT ANALYSIS

INVESTMENT
\$ 34M USD

NPV
22.3M USD

IRR
28%

92,000 direct + **414,000** indirect
basic grains producers in the 7 DCAZ
countries

\$214 / beneficiary / year

RISKS AND MITIGATION MEASURES

Insufficient climatic, soil and phenological data

Combined with satellite sources
and digital soil mapping

Low adoption by farmers

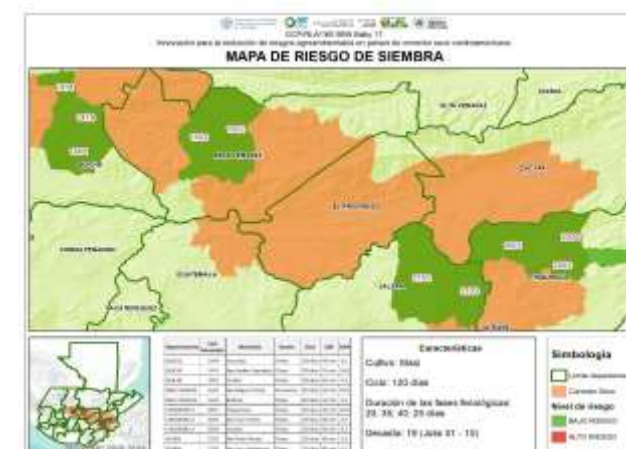
Training, demonstration and
liaison with research institutes

**Financial sustainability of the
system**

Additional public financing and
public-private partnerships



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Investment Note 2/6

Digital soil mapping



OBJECTIVE: Provide SICA countries with soil maps and data to improve agricultural nutrient management

OPPORTUNITIES AND REACH

-  More sustainable agriculture and soil management through improved nutrient use
-  Digital soil maps to support decision-making
-  Standardization of soil information between countries

FROM BOTTLENECKS TO KEY INVESTMENTS



Low soil fertility and productivity



Soil Laboratory Sampling and Equipment
27M USD



Lack of soil information for decisions



National databases, maps and information systems
15M USD



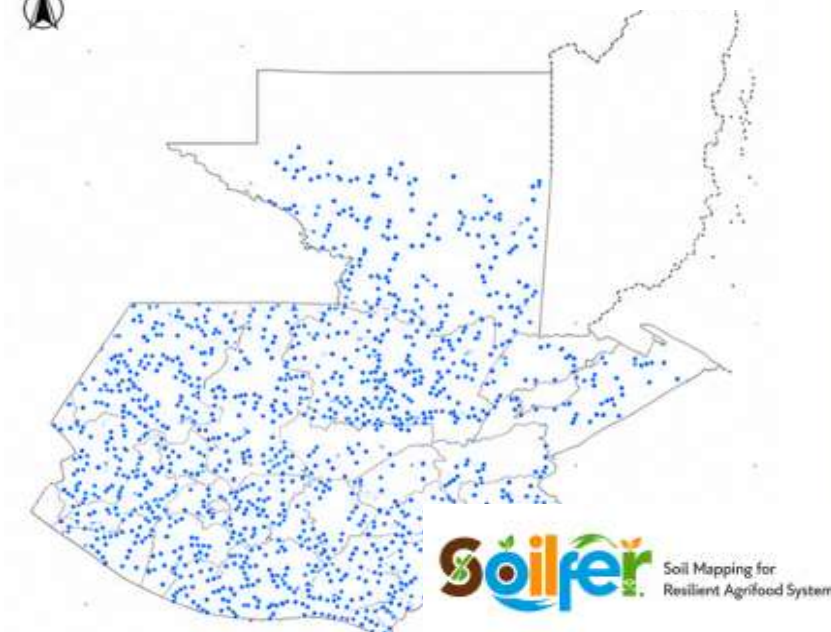
Low fertilizer use efficiency



Training, Management & Maintenance (11 years)
17M USD



Soil sampling – Guatemala
 SOILFER – Updated July 3, 2026



Investment Note 2/6

Digital soil mapping

INVESTMENT ANALYSIS

INVESTMENT
59M USD

NPV
69M USD

IRR
24%

511,000 direct + **2,3M** indirect
basic grains producers in the 7
DCAZ countries

\$145 / Beneficiary/Year

RISKS AND MITIGATION MEASURES

**Lack of technological
infrastructure and starting data**

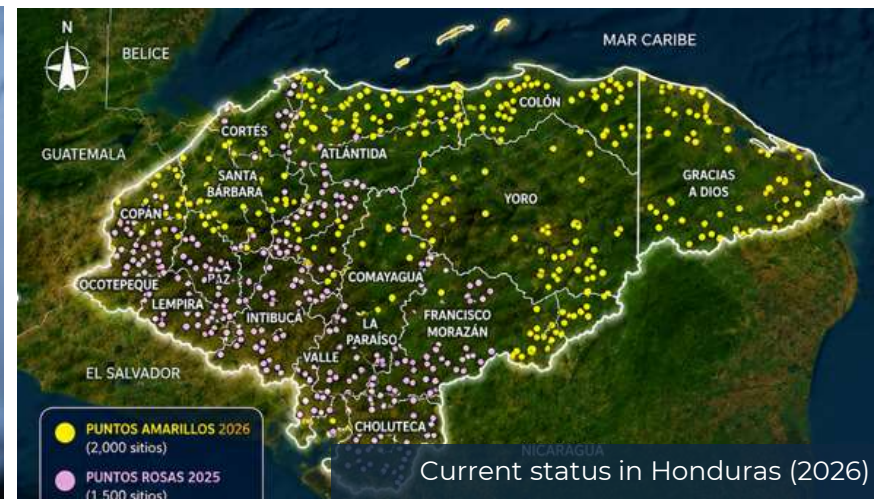
Initial planning and assessment

**Resistance to change and
insufficient training**

Continuous monitoring and
training programs

**Long-term financial
sustainability**

Public-private partnerships



Strengthening of Agriculture and Research Institutes (ARI)



OBJECTIVE: Strengthen the agricultural and forestry research, development and innovation capacities of SICA countries

OPPORTUNITIES AND REACH



More investment in agricultural research, development and innovation



Agile connection between science and the productive sector, with a focus on dry corridor



Operational CAC technical group, with methodological support from FONTAGRO

FROM BOTTLENECKS TO KEY INVESTMENTS



Low investment in agricultural R+D+i



ARI Regional Digital Innovation Platform
2.9M USD



Limited capacities of ARIS to formulate and evaluate projects



ARI Capacity Building
2.1M USD



Little funding for regional research



Fund leverage (FONTAGRO and others)
6.2M USD



CENTRO
NACIONAL DE
TECNOLOGÍA
AGROPECUARIA Y
FORESTAL



DIRECCIÓN DE CIENCIA
Y TECNOLOGÍA AGROPECUARIA
(SAG-DICTA)



Strengthening of Agriculture and Research Institutes (ARI)

INVESTMENT ANALYSIS

INVESTMENT
11.2M USD

NPV
2.4M USD

IRR
22%

7 SICA Agricultural and Forestry Research Institutes

RISKS AND MITIGATION MEASURES



Bureaucracy and restrictive regulations



Initial diagnosis and work with ministerial authorities



Lack of collaboration and coordination



Collaborative networking and facilitation of the CAC



Financial sustainability



Partnerships with public and private entities in LAC



©FAO/Mario Araujo

Description of the images:

FAO and CENTA, through RECLIMA, promoted the use of the CENTA Porrillo 2020 maize variety, developed by CENTA EL SALVADOR.

This seed is drought tolerant, improves productivity and has a high nutritional value.



©FAO/Mario Araujo



©FAO/Mario Araujo

Investment Note 4/6

MSMEs and digital ecosystems

OBJECTIVE: Strengthen business and digital skills of MSMEs, cooperatives and AFs to access markets and generate employment

OPPORTUNITIES AND REACH

- Digital ecosystems for MSMEs' access to markets
- Investment in ICT, applications and digital skills to improve competitiveness

FROM BOTTLENECKS TO KEY INVESTMENTS



Strong barriers to access to goods and services for the rural business fabric



Digital connectivity and public-private partnerships
29M USD



Limited capacities in innovation and technology for youth and smallholder agriculture



Digital skills development
12.4M USD



Limited capacities in innovation and technology for youth and smallholder agriculture



Application and content development
0.58M USD



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Investment Note 4/6

MSMEs and digital ecosystems

INVESTMENT ANALYSIS

INVESTMENT
42M USD

NPV
5.2M USD

IRR
24%

22,400 direct + **100,800** indirect
MSMEs

\$712 / Beneficiary/Year

RISKS AND MITIGATION MEASURES

Lack of digital literacy

Digital Training and Education for
End Users

Financial sustainability

Continuous monitoring and training
programs

Data security and privacy

Encryption and multi-factor
authentication



Integrated Water Solutions

Management and development of integrated water solutions for agricultural production and human consumption

1. Strengthening the water resources planning framework – public goods



1.1 Scalable information systems and tools for decision-making



1.2 Studies on water management, availability and quality, productive, environmental and social aspects, benefits, climate scenarios and impacts



1.3 Development/updating of national investment plans (up to pre-feasibility projects)

2. Implementing Water Supply Solutions



2.1 Rooftop water collection systems and storage cistern

- A. Human consumption (4,000 systems)
- B. Human and productive consumption (3,400 systems)



2.2 Artisanal wells: drilling (2,500 systems) and eventual maintenance/deepening



2.3 Comprehensive water supply systems for irrigation and other uses (100 systems)

Integrated Water Solutions

OBJECTIVE: Manage and develop water solutions for agricultural production and human consumption in vulnerable rural territories

OPPORTUNITIES AND REACH

- Pre-investment: information, studies and water management plans
- Investment: Water Supply Technology Solutions

FROM BOTTLENECKS TO KEY INVESTMENTS

⚠ Weak water governance; Lack of updated information for decision-makingsiones

⚠ Lack of policies for decentralized access and efficient use of water

\$ Water resources planning (information, studies, national plans))
14.2M USD

\$ 10,000 domestic and agricultural water supply solutions
42.3M USD



Integrated Water Solutions

INVESTMENT ANALYSIS

INVESTMENT
\$ **56.5M** USD

NPV
↑ **80M** USD

IRR
% **25%**

21,900 direct + 98,550 indirect
producers in the 7 DCAZ
countries

➦ **\$412** / Beneficiary/Year

RISKS AND MITIGATION MEASURES



**Climate variability and
overexploitation of water
resources**



Climate Resilient Water
Infrastructure



**Pollution and conflicts over
access to water**



Institutional strengthening and
risk identification



Lack of regional coordination



Cooperation among
Mesoamerican countries in water
management



Regional Hub on Responsible Business Conduct (RBC) in Agri-Food Chains Hub AgriCER

WHY COFFEE AND MEAT:

~64%
(~340,000 people)

coffee and livestock producers in the region are **small-scale** (533,509), a segment with the least capacity to comply with the **EUDR** on their own

- ✓ Extra-regional export value: 955.5 M USD **annual average**
- ✓ Growth in the value chain to generate **new jobs**
- ✓ Renewal of plantations and better practices **increase production per hectare**
- ✓ Increased potential for **carbon sequestration**, forest conservation, and reduction of losses from climate events

PANORAMA DRY CORRIDOR AND ARID ZONES

23–30% of total employment comes from agriculture (varies by country)



315k
Family Coffee Farmers



218k
Meat producers

SICA's STRONG INSTITUTIONAL COMMITMENT:

- ✓ Approved Environment-Agriculture **Intersectoral Agenda** (2026))
- ✓ **SICA EUDR intersectoral plan** approved (2025)
- ✓ **National and regional registration systems under development** (ICAFE, IHCAFE, ANACAFE, CSC, MIDA, CNC, DIGEGA, TrazaAgro)

Regional Hub on Responsible Business Conduct (RBC) in Agri-Food Chains

Hub AgriRBC



OBJECTIVE: Facilitate progressive compliance with sustainability regulations – in particular the EUDR – and Responsible Business Conduct, reducing barriers and risks of market access for small-scale SICA producers

OPPORTUNITIES AND REACH:



Regional AgriCER Hub on Digital Public Infrastructure, with pilots in key chains



Coffee and meat: high concentration of vulnerable producers, great weight in employment and rural income, high potential for scalability



Leverages existing registration and traceability systems (ICAFE, IHCAFE, ANACAFE, CSC, MIDA, CNC, DIGEGA, TrazaAgro) without duplicating them



Validation of scalability and national/regional integration, with financial sustainability

FROM BOTTLENECKS TO KEY INVESTMENTS:



Lack of coordination and regional governance that limits scaling



Hub Agricer
1.8M USD



Fragmentation, cybersecurity risks slow adoption



Digital public infrastructure
1.9M USD



High costs, uncertain incentives, and low recognition hold back adoption



Credentials and PilotsN1/N2
4.8M USD



Insufficient capacities



Capabilities, M&E and communication
4.3M USD



Regulatory changes faster than the ability to adjust



Regional programme management
1.2M USD

Investment Note 6/6

Regional Hub on Responsible Business Conduct (RBC) in Agri-Food Chains Hub AgriRBC

INVESTMENT ANALYSIS

INVESTMENT
14M USD

NPV
4.6M USD

IRR
23%

10,000 direct **+30,000** indirect +
24 associations
87,000 ha in coffee and meat · 6 Countries

\$456 / Beneficiary/Year

RISKS AND MITIGATION MEASURES



Financial sustainability of the Hub after the initial financing is completed



Quota/service model and public-private partnerships



Low appropriation by national traceability institutions



SICA-FAO shared governance with clear country roles



Changes to EUDR requirements during implementation



Continuous regulatory monitoring



Dependence on external co-financing (USD 20M) that does not materialize



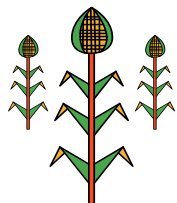
Phased phasing linked to co-financing milestones



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Synthesis of investments in the SICA Dry Corridor and Arid Zones

216.7 M USD Total investment	24.3% Average IRR	183.5 M USD NPV total	3,6 millions of beneficiaries	Δ average Income: 387 USD/year/bnf
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Agricultural Zoning of Climate Risk

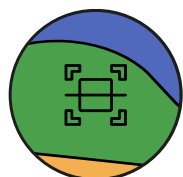
Investment: 34M USD

IRR: 28%

NPV: 22.3M USD

Beneficiaries:
506,000

Δ Income:
214 USD/year/bnf



Digital soil mapping

Investment: 59M USD

IRR: 24%

NPV: 69MUSD

Beneficiaries:
2.8M

Δ Income:
145 USD/year/bnf



Strengthening of ARI in R&D

Investment: 11.2M USD

IRR: 22%

NPV: 2.4M USD

Beneficiaries: 7
agricultural and forestry
research institutes



MSMEs and digital ecosystems

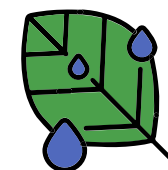
Investment: 42M USD

IRR: 24%

NPV: 5.2M USD

Beneficiaries:
123,200

Δ Income:
712 USD/year/bnf



Integrated Water Solutions

Investment: 56.5M USD

IRR: 25%

NPV: 80M USD

Beneficiaries:
120,450

Δ Income:
412 USD/year/bnf



Hub AgriRBC

Investment: 14M USD

IRR: 23%

NPV: 4.6 M USD

Beneficiaries:
40,000

Δ average income:
456 USD/year/bnf