



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 2024



In coordination with:



An initiative led by:



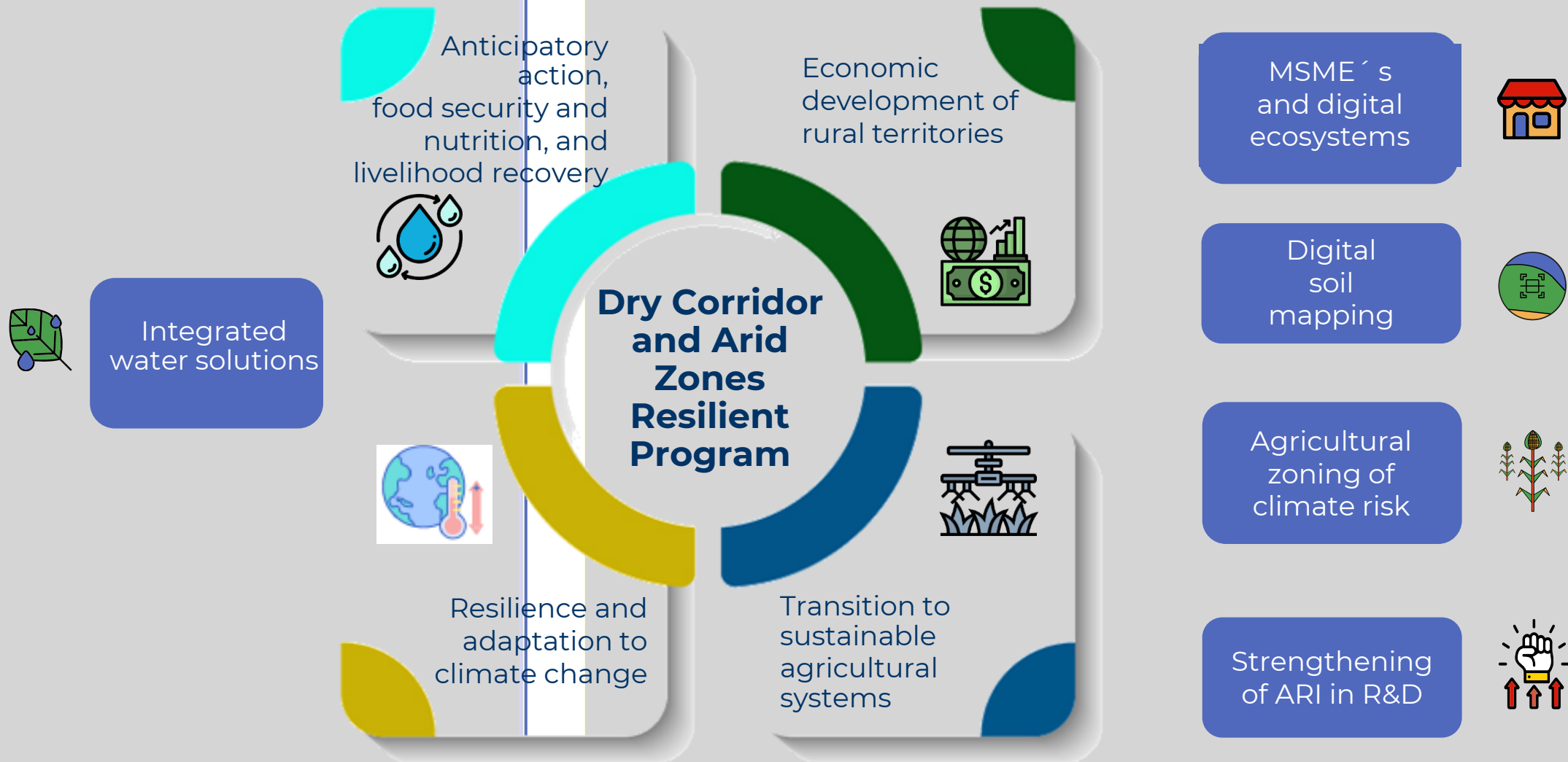
Consejo  
Agropecuario  
Centroamericano  
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SICA  
Sistema de la Integración  
Centroamericana  
SECRETARÍA GENERAL





# Regional programmatic proposal and investments



## Investment mobilization, political incidence and implementation

### Political incidence

- LVII Summit of Heads of State and Government (June 2023): backing and expansion from 4 to 8 countries
- High-level dialogue for the consolidation of alliances, El Salvador - July 2023.
- Special high-level event at the 38th LARC, Guyana, March 2024 Presentation at the “II Regional Dialogue on Amazonian Bioeconomy and Inclusive Rural Transformation”, Brazil, August 2024.
- With the World Bank, development of a subregional investment instrument *Multiphase Programmatic Approach (MPA)* including national and SICA region proposals prioritized by HiH



### Implementation

Agricultural zoning of climate risk

Digital soil mapping

MSMEs and digital ecosystems

Integrated water solutions

### Resources mobilized

13.7 million USD



GREEN CLIMATE FUND



Co-financiers



Governments countries

Flagship Project in 7 countries, 5 million USD

CABEI – Ecosystem-Based Adaptation Program for the Dry Corridor and Drylands of 7 Countries, 268 million USD

Reclima – El Salvador 128 million USD

Relive – Guatemala 67 million USD



Promoting the restoration of productive ecosystems in the Central American Dry Corridor



Governments countries



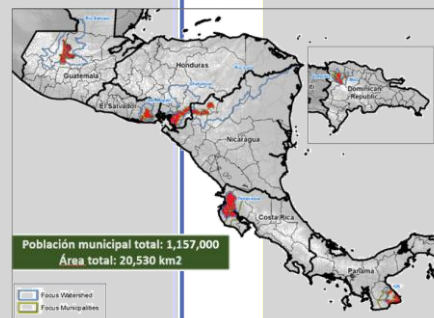
Increasing climate resilience measures in the agroecosystems of the dry corridor



Resilient Livelihoods of Vulnerable Smallholder Farmers in Maya and Dry Corridor Landscapes




Pilot areas



## Articulation of new investments - Integrated water solutions (5/5)

### Basin governance to the sea

- Donor 
- Large transboundary marine ecosystems: safeguarding marine and freshwater resources. In formulation
- Expected duration: 5 years (2025-2030)
- Amount: **19.3 million USD** (negotiation)

#### Components

- Policy and institutional framework
- Integrated watershed management (plans, capacities, governance)
- Innovative technologies and financing
- Knowledge management and learning
- M&Assessment, and adaptive management

### Strategic basin capabilities

- Donor: 
- Prioritized basin territories: water security (availability)
- Duration: 1.5 years (June 2025)
- Amount: **0.68 million USD** (implementation)

#### Components

- Diagnostic study (water, socioeconomics, environment) and cost-benefit analysis
- Strategic water investment plan (infrastructure projects and Nature-based solutions) and bankable project profile

### Water/climate security watersheds

- Donor:  
- + Regional Committee of Water Resources (CRRH)
- Duration: 1.5 years (February 2024)
- Amount: **0.32 million USD** (implementation)

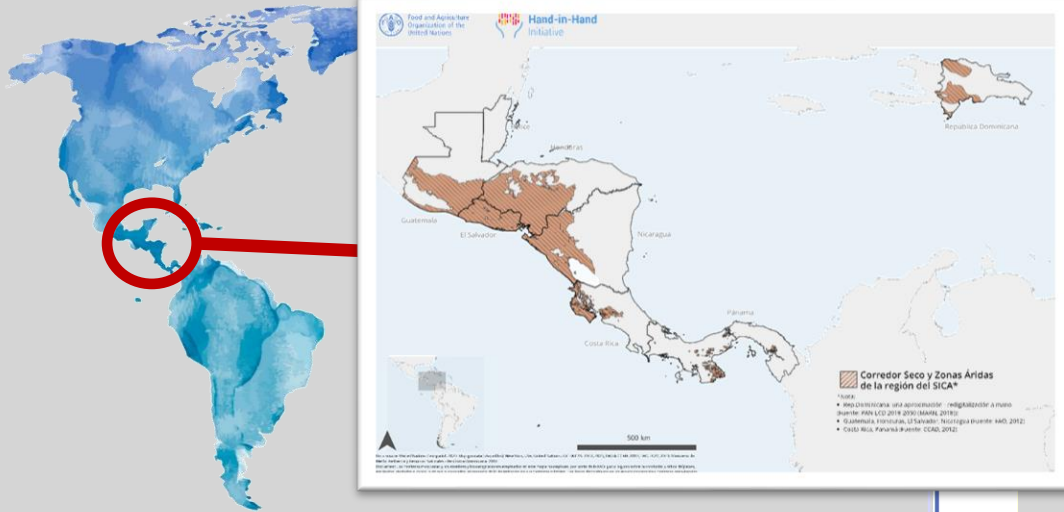
#### Components

- Prioritized basin territories: water security (climate risk management)
- Technical studies (climate risk maps) in basins/sub-basins
- Comprehensive climate risk management plans (time monitoring)
- Knowledge management, exchange of experiences and good practices (capacities, hydrometeorology App)



# Section 2: Overview

## Dry Corridor and Arid Zones (DCAZ)



### Characteristics

- Approximately 21 million people in rural municipalities
- More than 20% of employees are engaged in agriculture and basic grains production
- More than a third of the population (37.5%) in poverty (LP \$6.85) and 6.5% in extreme poverty (LP \$2.15)



### Vulnerability to climate risks

- Vulnerability to extreme weather events, long periods of drought followed by heavy rainfall
- Last 6 years: 2 years of drought, 3 hurricanes category 4 and 5, 3 tropical storms
- Altered rainfall patterns in recent decades
- El Niño phenomenon during 2023/24 until May; 66% chance of La Niña as of Sept/24



### Migration

- More than 5 million emigrants from the SICA region reside in the USA (8% of the population)
- Emigration of young people, 30% between 25 - 30 years
- Expelling municipalities tend to be poorer, more rural and more agricultural

# Section 3: Investment climate Governance and intersectoral of SICA

## LVII Summit of Heads of State and Government (June 2023): backing and expansion from 4 to 8 countries



### Excerpt from Declaratory

III —"The importance of the Hand in Hand Initiative: Building Resilience in the Dry Corridor of the SICA Region, we encourage to promote the regional approach in it, with the participation of all SICA Member States"



## Intersectoral Ministerial Meeting Environment Agriculture SICA ( July, 2023):

'New investment note with emphasis in agricultural innovation and transfer"



Construcción de Resiliencia en la región SICA bajo un enfoque sinérgico entre Mitigación y Adaptación enfocándose en el Sector Agricultura, Silvicultura y otros usos de la tierra (AFOLU)

## Value added of SICA

- Regional integration and coordination
- Regional policy, strategic and regulatory framework
- Generation of regional sustainable public goods
- Promotion of intraregional trade
- Promotion of South-South and Triangular Cooperation
- Data analysis to inform decision making

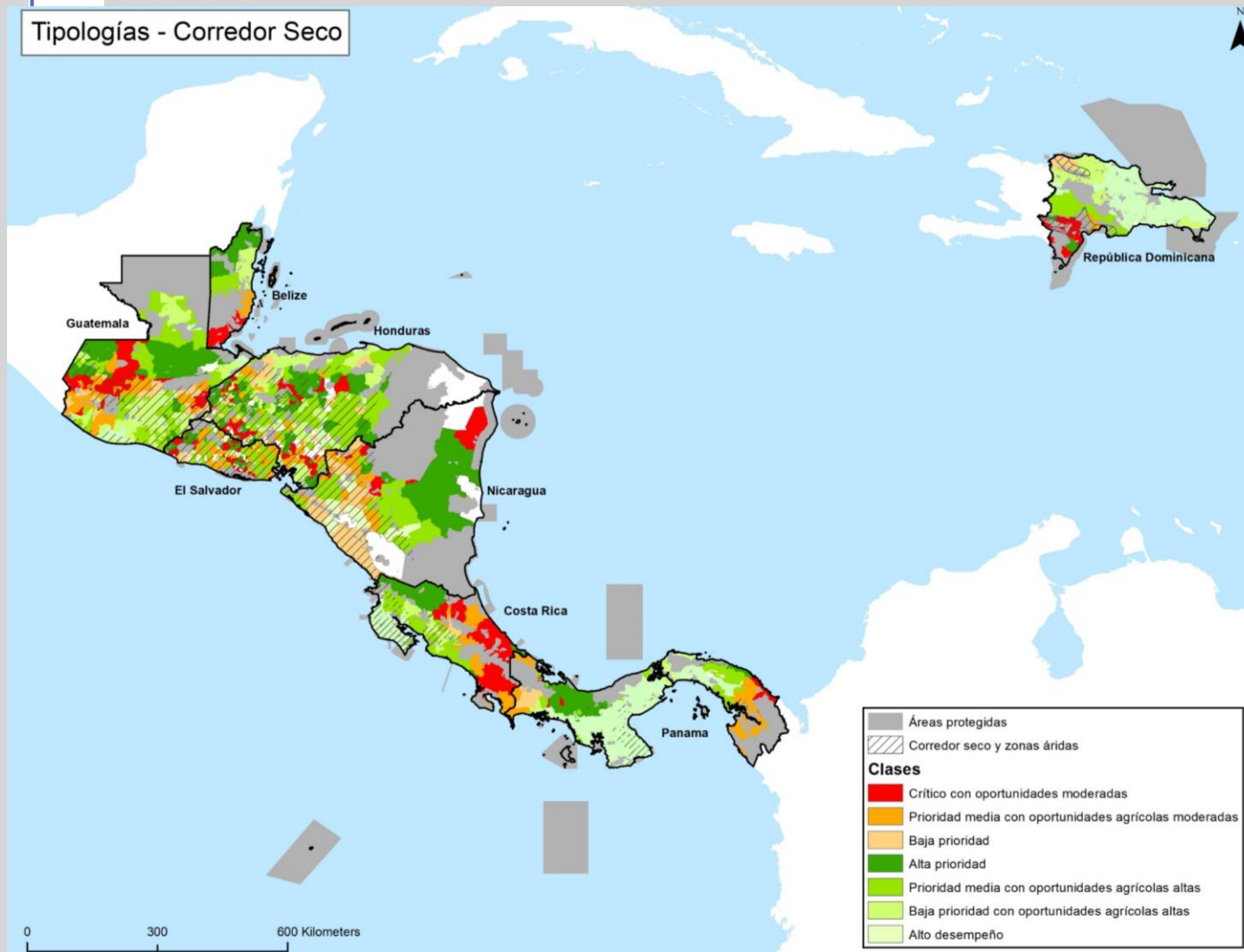


Estrategia agricultura sostenible adaptada al clima para la región del SICA (2018-2030)



## 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 agri-food products
- Agriculture **represents** the 7% of regional GDP and one-fifth of employment
- Potential of **remittances** for financial inclusion (13% of GDP on average)





## Partners and strategic allies



Unión Europea



MINISTERIO DE RELACIONES EXTERIORES



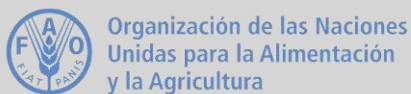
Canada



### United Nations

### SICA Instances

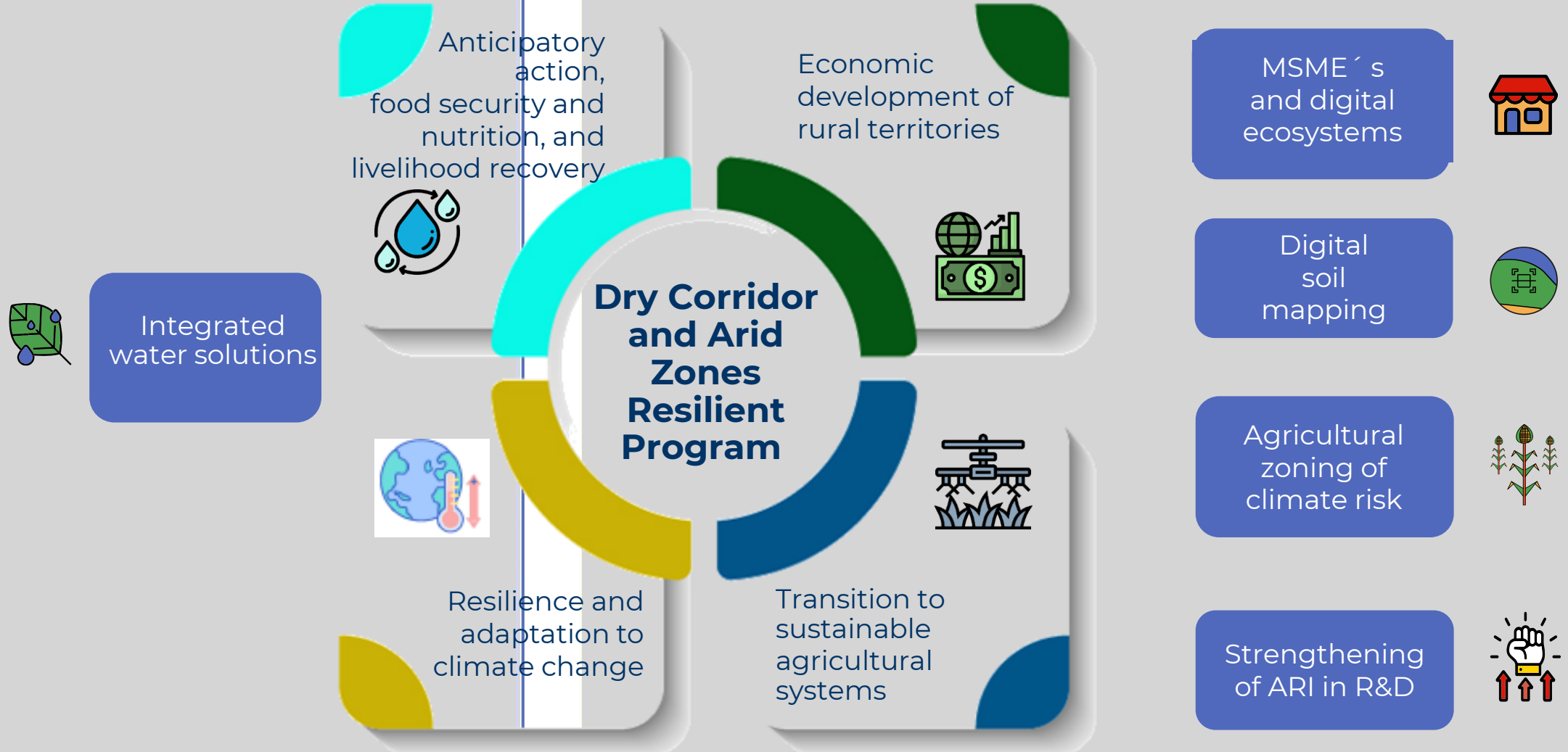
### Socios técnicos





# Section 4: Investment Note

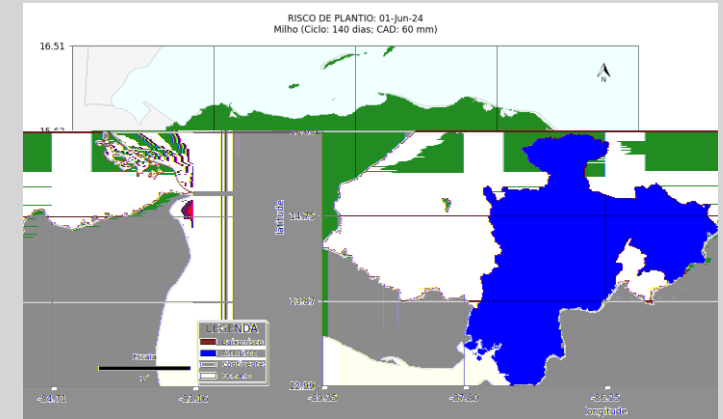
## Regional Investment and Program Proposal



## Agricultural Zoning of Climate Risk (AZCR)

<b>OBJECTIVES</b>	
<b>OOPPORTUNITIES AND SCOPE</b>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>

Bottlenecks	Key investments
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>



Map with departments of Honduras with risk of crop losses greater than 20% for corn planting of 140-day cycle on June 1.



Exchange between countries of the SICA region in Petrolina (Brazil) on the implementation of the AZCR. March, 2024.

### INVESTMENT ANALYSIS

Indicator	Value

### SOCIOECONOMIC INDICATORS

Indicator	Value
	•
	•
	•

### RISK ANALYSIS

Risks	Mitigation measures
•	•
•	•
•	•



Visit to the Dry Arch of Panama. Brazil-FAO cooperation. 2023.



Field visit of the Vice Minister of SAG Honduras to learn about the process of selecting plots for the validation of the AZCR methodology. August, 2024.

<b>OBJECTIVES</b>	
<b>OPPORTUNITIES AND REACH</b>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>

Bottlenecks	Key investments
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The Ministry of Agriculture, Livestock and Food (MAGA) of Guatemala and FAO, presenting the Mapping for Resilient Agrifood Systems in Central America and Sub-Saharan Africa (SOILFER) project. March, 2024.



Agricultural specialists conducting soil sampling in Honduras. April 2024.

## Digital soil mapping

### INVESTMENT ANALYSIS

Indicator	Value

### SOCIOECONOMIC INDICATORS

Indicator	Value
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

### RISK ANALYSIS

Risks	Mitigation measures
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>

### Historical data



Field Data Collection Tool



Laboratory Information Management System



National soil information systems



Applications for producers (cellular)



## Strengthening of Agriculture and Research Institutes (ARI)

<b>OBJECTIVES</b>		
<b>OPPORTUNITIES AND REACH</b>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<b>Bottlenecks</b>	<b>Key investments</b>	
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	



Photo courtesy of the National Center for Agricultural and Forestry Technology. El Salvador, 2024.

### INVESTMENT ANALYSIS

Indicator	Value

### SOCIOECONOMIC INDICATORS

Indicator	Value

### RISK ANALYSIS

Risks	Mitigation measures
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>



Workshop of the National Institutes of Agricultural Research of SICA member countries. August, 2023.



<b>OBJECTIVES</b>	
<b>OPPORTUNITIES AND REACH</b>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>

<b>Bottlenecks</b>	<b>Key investments</b>
<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>



Female leaders of MSMEs in face-to-face training for the management of business meetings. April 2023.



Results of the 9th edition of virtual business meetings. 2024.

### INVESTMENT ANALYSIS

Indicator	Value

### SOCIOECONOMIC INDICATORS

Indicator	Value
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>
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### RISK ANALYSIS

Risks	Mitigation measures
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>



Leaders of MSMEs in face-to-face training for the management of business roundtables. April 2023.



First Regional Intersectoral Meeting of the Inter-institutional Technical Committee for Rural MSMEs. Guatemala, June 2024.

### 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)



Hand-in-Hand Initiative

# Investment Note 5/5



## Integrated Water Solutions

<b>OBJECTIVES</b>	
<b>OPPORTUNITIES AND REACH</b>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>

<b>Bottlenecks</b>	<b>Key investments</b>
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•             <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul> </li> <li>•</li> </ul>



RECLIMA Project, El Salvador.

### INVESTMENT ANALYSIS

Indicator	Value

### SOCIOECONOMIC INDICATORS

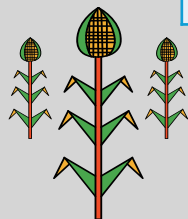
Indicator	Value

### RISK ANALYSIS

Risks	Mitigation measures
<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>



<b>203M USD</b> Total investment	<b>25%</b> Average IRR	<b>179M USD</b> NPV total	<b>647,000 beneficiary families</b> <b>2.9 million indirect beneficiaries</b>
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## Agricultural zoning of climate risk

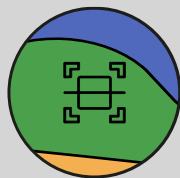
Investment: 34M USD

IRR: 28%

NPV: 22M USD

Beneficiaries:  
D: 92,000  
I: 414,000

Δ revenue:  
214 USD/year/bnf



## Digital soil mapping

Investment : 59M USD

IRR : 24%

NPV : 69M USD

Beneficiaries:  
D: 511,000  
I: 2.3M

Δ revenue :  
145 USD/year/bnf



## Strengthening of ARI in R&D

Investment : 11.2M USD

IRR : 22%

NPV : 2.4M USD

Beneficiaries : 8 agricultural and forestry research institutes



## MSMEs and digital ecosystems

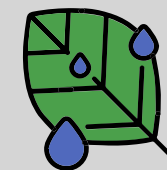
Investment : 42M USD

IRR : 24%

NPV : 5.2M USD

Beneficiaries :  
D: 22,400  
I: 100,800

Δ revenue :  
712 USD/year/bnf



## Integrated Water Solutions

Investment : 57M USD

IRR : 25%

NPV : 80M USD

Beneficiaries :  
D: 21,900  
I: 98,550

Δ revenue :  
412 USD/year/bnf