



Ministerio de  
**Agricultura,  
Ganadería y  
Alimentación**



**Food and Agriculture  
Organization of the  
United Nations**



## **Investment Program**

- **Access to irrigation infrastructure in the Dry Corridor and Petén**
- **Economic development of the Polochic Valley and Adjacency Zone.**

**Guatemala**

**Investment Forum | Rome, Italy | October 2024**



**Hand-in-Hand  
Initiative**

# Progress in 2024

## Resource Mobilization

	In negotiation (USD)	Committed (USD)
Public resources 2024 - Irrigation infrastructure for producer organizations		7.3 M
Public resources 2025 - Irrigation infrastructure for producer organizations	20 M	
EU Resources - Pre investment for irrigation system in Petén		90,000
Ireland Resources - Pre-investment to facilitate access to productive infrastructure in the Dry Corridor		168,000
FAO Resources - Implementation of the National Irrigation Policy and Investment Plan	180,000	
EU Complementary Resources - Driving the Green Transition in Petén ( <i>Team Europe Initiative</i> )		791,000

## Contributions to public policy instruments

- The Ministry of Agriculture, Livestock and Food launched the **2024-2027 Irrigation Investment Plan 2**, and the **2024-2028 Strategic Guidelines** based on the Hand in Hand methodology
- **SEGEPLAN's National Public Investment System -SNIPgt-** has incorporated HiH typologies in order to guide public investment in the country.

# General Overview

- **17.8 million inhabitants.**<sup>1</sup>
- **67.2%** of the total population is **of working age.**<sup>2</sup>
- **1.3 million households** are engaged in agribusiness.<sup>3</sup>
- **1 in 3** jobs comes from agribusiness.<sup>4</sup>
- **554 thousand young people** between 15 and 29 are employed in agriculture.<sup>2</sup>

The agricultural sector accounts for **9.3% of GDP**<sup>5</sup>

2023 Nominal GDP (USD millions)	Contribution from agriculture, livestock, forestry and fisheries (USD millions)
105,555.35	9,816.6

The main agricultural products contribute **20.6% of the country's exports.**<sup>6</sup>

**CHALLENGE:** Utilizing the potential of the agricultural sector to promote integrated rural development

- **66.4% of the rural population in poverty.**<sup>7</sup>
- **1.46 million people (9,5%) live on less than \$2,15 USD per day (World Bank, 2024)**

<sup>1</sup> INE 2024. Population estimates and projections

<sup>2</sup> INE. 2023. Agricultural EAP Estimates 2023.

<sup>3</sup> INE. 2022. National Employment and Income Survey

<sup>4</sup> INE. 2018. National Population and Housing Census.

<sup>5</sup> BANGUAT. 2023. Real gross domestic product measured by origin of production.

<sup>6</sup> INE. 2022. FOB value of exports - general trade in 2022.

<sup>7</sup> NSI. 2023. National Survey of Living Conditions.

# Enabling Environment

## Economic growth projections

Economic Growth	BANGUAT	World Bank	CEPAL	IMF	BCIE
End-of Year Estimate	3.5	3.4	3.4	3.5	3.5
2024 Projection	3.5	3.5	3.1	3.5	3.5

## Environment favorable to business

- **Foreign Direct Investment 2023:** USD 1.552 billion.
- **Macroeconomic stability:** 3.4% average growth.
- **Positive agricultural trade balance.**
- **Stable inflation level:** 4.2% over the last 12 years.

## Logistics Platforms



Direct Access to Pacific and Atlantic Coast, **250 miles from coast to coast.**



- **2 international airports, 9 aerodromes**
- **14 commercial airlines and 7 freight airlines operating.**



**The largest maritime cargo operation in Central America** (40.23%) in 3 main maritime ports.

# Enabling Environment

## Access to key markets

- Proximity and **Free Trade Agreement with the United States.**
- Gateway to the **largest market in Latin America, Mexico.**
- Opportunity to **access the Central American market** with a GDP of more than USD 320.6 million.
- **Customs union between Guatemala, Honduras and El Salvador** with trade worth over USD 5.77 billion in 2023.

## Special regimes for investors

Benefits	Law for the Promotion and Development of Export Activities (Decree 29-89)	Free Trade Zone Law (Decree 65-89)	Special Public Economic Development Zone (Decree 22-73)
Income Tax (ISR)	Exemption for 10 years (for specific activities)	Exemption for 10 years	Exemption for 10 years
Value Added Tax ( IVA ) and Import Duties (DAI) on raw materials or finished products	1 year suspension of payment	Exempt	Exempt
Value Added Tax (IVA) and Import Tariff Duties (DAI) for machinery	Exemption for 10 years	Exempt	Exempt
Local Sale	Payment of DAI and IVA (not exempt from ISR)	Payment of DAI and IVA (not exempt from ISR)	Payment of DAI and IVA (not exempt from ISR)

# Enabling Environment

## Doing Business

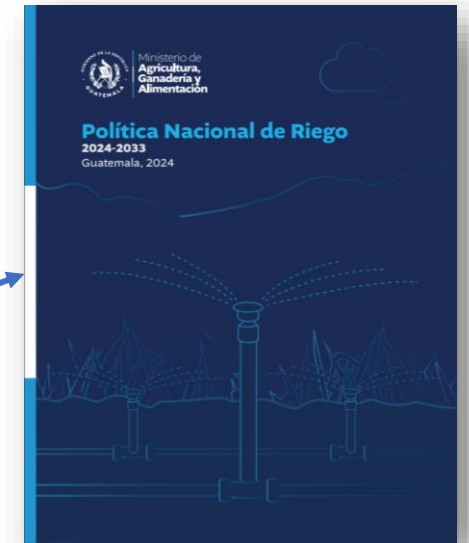
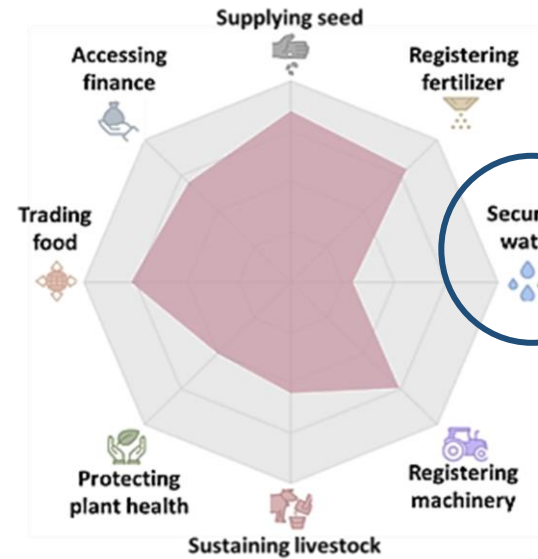
2010

2020



Source: WORLD BANK, 2020

## Enabling the Business on Agriculture 2019



**65.11**  
**Score**

Source: WORLD BANK, 2019

## Country Risk Ratings

**Fitch**  
Ratings

2020	2024
BB- negative outlook	BB stable outlook

**MOODY'S**

2020	2024
Ba1 negative outlook	Ba1 stable outlook

**STANDARD**  
& **POOR'S**

2020	2024
BB- stable outlook	BB positive outlook

# HiH investment notes - linkage with public policy



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## Government Strategic Framework

## HiH Investment Program



### *National Irrigation Policy*

Increase the current coverage of irrigated hectares for agricultural production.



**Access to irrigation infrastructure in the Dry Corridor and Petén**

### *A New Seed for Guatemala's Agriculture (MAGA)*

- Increase productivity.
- Facilitate access to innovation, technology and production support services.
- Promote inclusive value chains.



**Economic development of the Polochic Valley and Adjacency Zone.**

# Investment Program - Access to Irrigation Infrastructure in the Dry Corridor and Petén



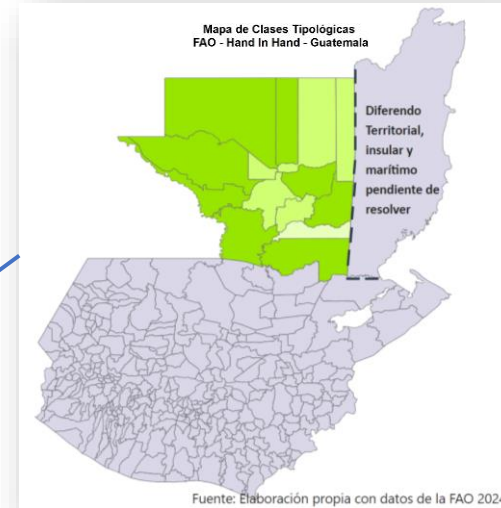
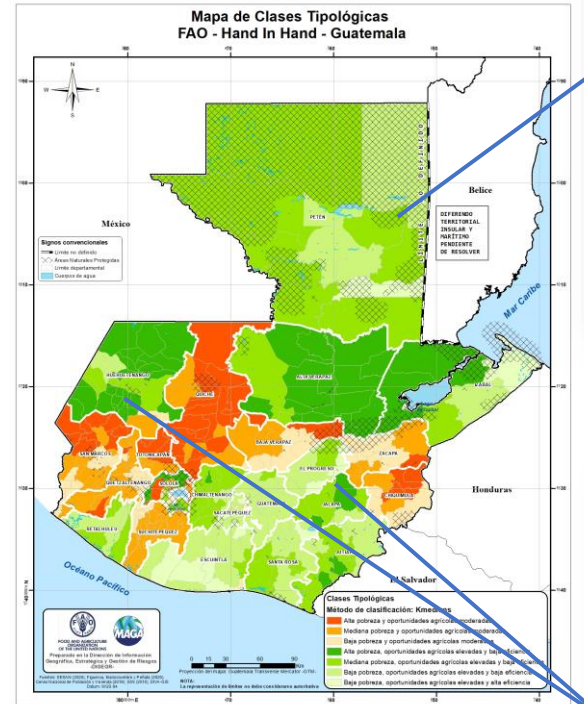
## Petén

### Objective

Enhance agricultural productivity and reduce poverty in the Dry Corridor and Petén by facilitating access to irrigation infrastructure.

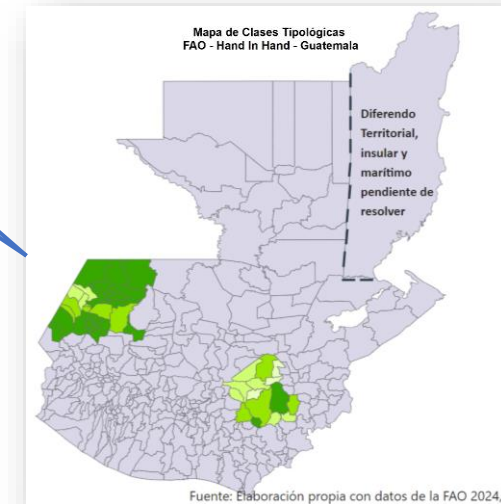
### Components

- Short pipeline systems for enabling development in the Dry Corridor
- Long pipeline systems to enable development in the Dry Corridor
- Long pipeline systems to enhance production in Petén



- Total population 622,409
- 60% of population in poverty
- 20.6% engaged in corn production
- 26.9% engaged in bean production

### Expanded Dry Corridor



- 81.3% of population in Huehuetenango live in poverty
- 79.9% of the population in Jalapa live in poverty
- 46.4% of population in El Progreso live in poverty



# Investment Program - Access to Irrigation Infrastructure in the Dry Corridor and Petén

Main Bottlenecks	Needed Strategic Investments
<ul style="list-style-type: none"> <li>• Dependence on seasonal water availability.</li> <li>• Weak governance for managing irrigation systems.</li> <li>• Insufficient technical staff to design and implement irrigation programs.</li> <li>• Limited financing to invest in irrigation.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of short pipe conduction irrigation systems (1,564 hectares) and long pipe conduction irrigation systems for small producers (5,340 hectares).</li> <li>• Institutional capacity building for the design, implementation and management of irrigation systems.</li> <li>• Development of pre-investment projects to be financed by public and private sources.</li> </ul>

Risks	Mitigation Measures
<ul style="list-style-type: none"> <li>• Lack of a water law that regulates the availability and access to water sources.</li> <li>• Social conflicts hinder access to water for food production.</li> <li>• Lack of public funding for irrigation infrastructure..</li> </ul>	<ul style="list-style-type: none"> <li>• Water Cabinet formed to work on a water law proposal.</li> <li>• Development of institutional capacities to manage agreements (rights of way).</li> <li>• Inter-institutional management to ensure public financing.</li> </ul>

Total Investment	IRR	NPV
USD 70.9 M	21 %	USD 49.8 M

Investment Description	Cost
Short pipeline systems	USD 10.3 M
Long pipeline systems	USD 30.3 M
Long pipeline systems in Petén	USD 30.2 M

**Investment Allocation:** inputs for the installation of irrigation systems, construction of irrigation systems, technical assistance, complementary investments, RUA.

**Target population:** Small and mid-size producers

**Irrigated hectares:** 6,905 Ha

**Beneficiaries:**  
1,815 direct  
9,075 indirect

**Income Increase:**  
16,765.27 USD per capita

**Source of Financing:** Public budget / non-reimbursable cooperation (grants)

**Type of financing:** Donation with labor contribution.

# Investment Program - Access to Irrigation Infrastructure in the Dry Corridor and Petén

## Investment

### Short pipe conduction systems



**Target population:** small and mid-size producers in the Dry Corridor

**Direct beneficiaries:** 1,174

**Indirect beneficiaries:** 5,870

**Irrigated hectares:** 1,564

**IRR :** 29%

**NPV (USD):** 7.4 M

**Increase in yearly per capita income (USD):** 4,263.29

## Investment

### Long pipe conduction systems



**Target population :** small and mid-size producers in the Dry Corridor

**Direct beneficiaries:** 391

**Indirect beneficiaries:** 1,955

**Irrigated hectares:** 840

**IRR:** 20%

**NPV (USD):** 17.3 M

**Increase in yearly per capita income (USD):** 16,000.11

## Investment

### Long pipe conduction systems in Petén



**Target population :** producers in Petén

**Direct beneficiaries:** 250

**Indirect beneficiaries:** 1,250

**Irrigated hectares:** 4,500

**IRR :** 34%

**NPV (USD):** 38.7 M

**Increase in yearly per capita income (USD):** 9,929.70

# HiH Investment Note - Coffee, Cocoa and Cardamom



## Investment Program - Economic Development of the Polochic Valley and the Adjacency Zone

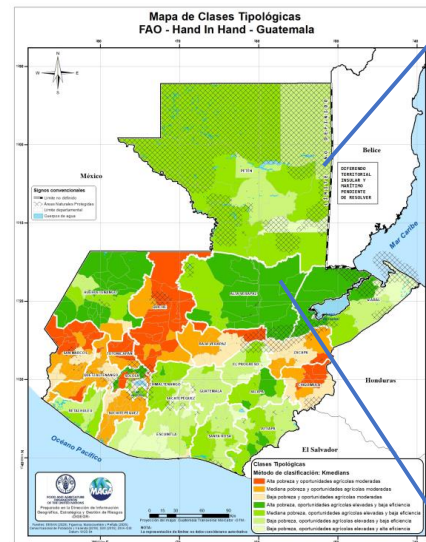
### Objective

Promote agricultural economic development by incorporating innovation, technology, infrastructure and production support services, thus contributing to the reduction of poverty and food insecurity.

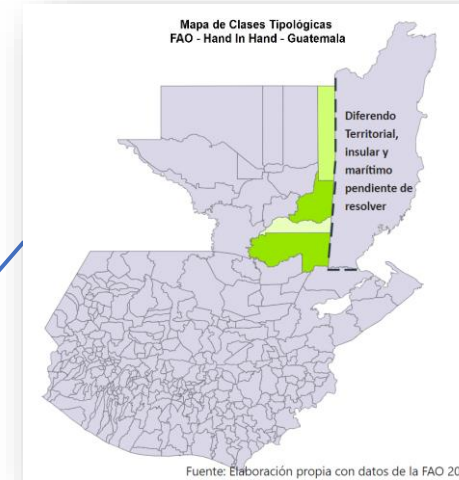
**Value chains prioritized:** cocoa, cardamom, and coffee

### Components

1. Inclusive and resilient agro-productive development in prioritized value chains.
2. Agroindustrial development and marketing.
3. Infrastructure for production and related services.
4. Sustainable management of natural resources and green transformation.

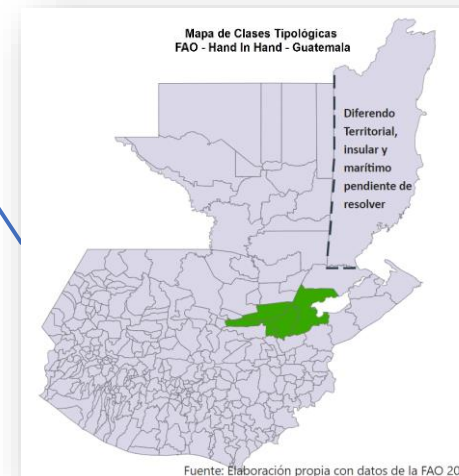


### Adjacency Zone



- Total population 174,211
- 70% are farmers
- 56% of population lives in poverty
- Potential production area (ha): cocoa 8,807, cardamom 36,868.

### Polochic Valley



- Total population 331,848
- 75% are farmers
- 91% of population lives in poverty
- Potential production area (ha): cocoa 4,605, cardamom 36,993, coffee 14,400.

# Opportunities to Catalyze Development

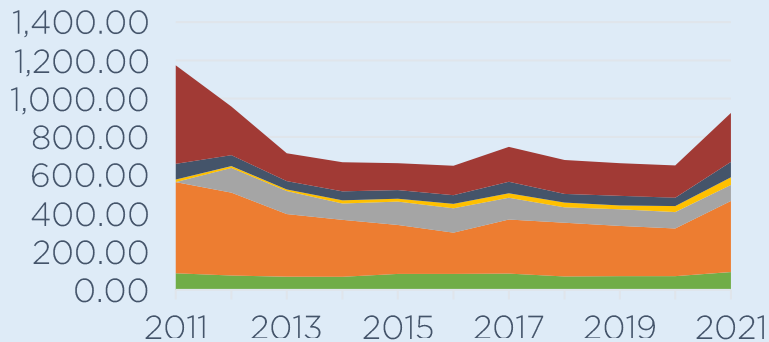
## COFFEE

25% of total agricultural exports

125 thousand families (97% of small producers), 953 organized producer groups

Potential area (ha): 14,400.

**Exports by destination country (USD millions)**



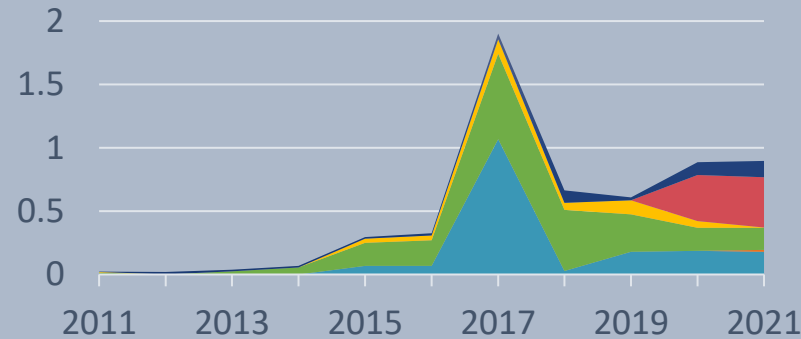
- Canada
- United States
- Japan
- Belgium
- Other

## COCOA

Connects companies, cooperatives and small producers that produce fine aroma cocoa.

Potential area (ha): 4,605 in the Polochic Valley, and 8,807 in the Adjacency Zone

**Exports by destination country (USD millions)**



- Other
- France
- Australia
- Italy
- United States
- Netherlands

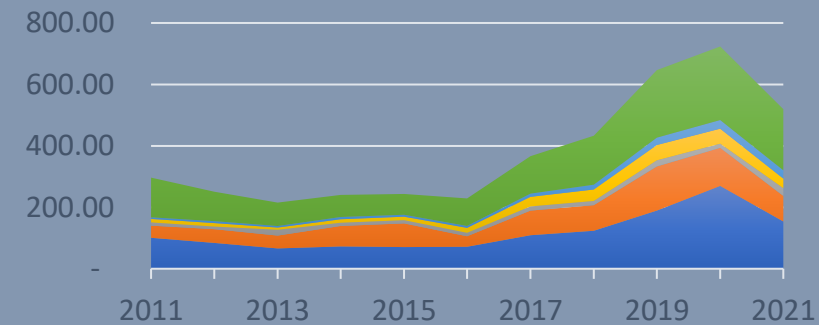
## CARDAMOM

14% of total agricultural exports

350 thousand families, 42 cooperatives and 21 associations are involved.

Potential area (ha): 36,993 in the Polochic Valley, and 36,868 in the Adjacency Zone

**Exports by destination country (USD millions)**



- Saudi Arabia
- United Arab Emirates
- Jordan
- Bangladesh

# Investment Program - Economic Development of the Polochic Valley and the Adjacency Zone.

Main Bottlenecks	Needed Strategic Investments
<ul style="list-style-type: none"> <li>Climate fluctuations affect harvests.</li> <li>Weak capacity for value generation and market integration.</li> <li>Lack of productive infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Inclusive and resilient agro-productive development on 15,420 hectares.</li> <li>Construction of 50 value addition centers.</li> <li>Opening 60 km, restoring 219 km and maintenance of 355 km of rural roads.</li> <li>Creation of 500 ha energy forestry and 200 ha riverbank forestry.</li> </ul>
Risks	Mitigation Measures
<ul style="list-style-type: none"> <li>Crop losses due to natural disasters.</li> <li>New EU import regulations.</li> <li>Inadequately and insufficiently maintained rural roads.</li> </ul>	<ul style="list-style-type: none"> <li>Agricultural insurance, productive bonus, farmer credit.</li> <li>Collaboration between MAGA, MINECO, EU, FAO, other partners to prepare the sector for the Zero Deforestation Regulation.</li> <li>"Avenues for a Good Life Program" underway.</li> </ul>

Total Investment	IRR	NPV
USD 92.9 M	19 %	USD 24.5 M

Investment Descriptions	Cost
Inclusive and resilient agro-productive development	USD 18 M
Agro-industrial development and marketing	USD 8.8 M
Enabling infrastructure for development	USD 61.5 M
Sustainable management of natural resources	USD 4.3 M

**Target population:** small and mid-size producers

**Beneficiaries:**  
17,500 direct  
91,000 indirect

**Income increase:**  
1,314 USD per capita

**Source of Financing:** Public budget / non-reimbursable cooperation (grants)

**Type of financing:** Donation with labor contribution.

# Investment Program - Economic Development of the Polochic Valley and the Adjacency Zone.

## Investment

**Inclusive and resilient agro-productive development in prioritized value chains**



**Direct beneficiaries:** 12,500  
**Indirect beneficiaries:** 62,500  
**Surface area with sustainable production:** 15,420 Ha  
**IRR:** 22%  
**NPV (USD):** 5.5 M  
**Increase in yearly per capita income (USD):** 5,641.17

## Investment

**Agro-industrial development and marketing**



**Direct beneficiaries:** 2,500  
**Indirect beneficiaries:** 12,500  
**Participation in value-addition processes:** 2,180 productores  
**IRR:** 41%  
**NPV (USD):** 12.7 M  
**Increase in yearly per capita income (USD):** 1,324.31

## Investment

**Infrastructure for production and related services**



**Direct beneficiaries:** 17,500  
**Indirect beneficiaries:** 91,000  
**Improved rural roads:** 634 Km  
**Energy access:** 88 Km of transmission and distribution lines  
**IRR:** 15%  
**NPV (USD):** 8 M  
**Increase in yearly per capita income (USD):** 787.38

## Investment

**Sustainable natural resource management and green transformation**



**Direct beneficiaries:** 12,500  
**Indirect beneficiaries:** 62,500  
**Energy and riverbank forestry:** 700 Ha  
**Harvested water:** 500,000 m<sup>3</sup>/año  
**IRR:** 37%  
**NPV (USD):** 1.8 M  
**Increase in yearly per capita income (USD):** 235.29

SUMMARY

Total Investment: US\$ 163.8 MM  
Government contribution: 36.3 MM  
Beneficiary contribution: 11 MM  
Investment gap: 116.5 MM

20%  
IRR

US\$ 37.2 MM  
Total NPV

19,315  
Direct  
beneficiaries

100,075  
Indirect  
beneficiaries

US\$ 6,030.70  
Average per capita  
income increase

-156,902  
tCO2-e  
Per year

1

Investment Note

Access to irrigation infrastructure in the Dry Corridor and Petén

Cost (USD)  
70.9 M

IRR (%)  
21%

NPV (USD)  
49.8 M

Sustainability Benefits

Beneficiaries (direct and indirect):  
10,890

Irrigated hectares: 6,905

Increase in per capita income  
10,064.37

2

Investment Note

Economic development of the Polochic Valley and Adjacency Zone

Cost (USD)  
92.9 M

IRR (%)  
19%

NPV (USD)  
24.5 M

Sustainability Benefits

Beneficiaries (direct and indirect):  
108,500

Increase in per capita income  
1,997.04

