



Food and Agriculture
Organization of the
United Nations



Hand-in-Hand
Initiative

CAMBODIA'S AGRICULTURE INVESTMENT PLAN

Hand-in-Hand Investment Forum
15-17 October 2024, Rome, Italy



Results from HiH 2023

Key events in the country

Private investment project	Num. of Company	Committed budget (million, USD)
Carbon free rice production.	1	20
Cashew processing plants.	2	10
Mango processing plant.	1	26



World cashew conference, 1-3/02/2024, Cambodia



AGRICULTURE

Japan helps Cambodia toward its goal of being top cashew exporter

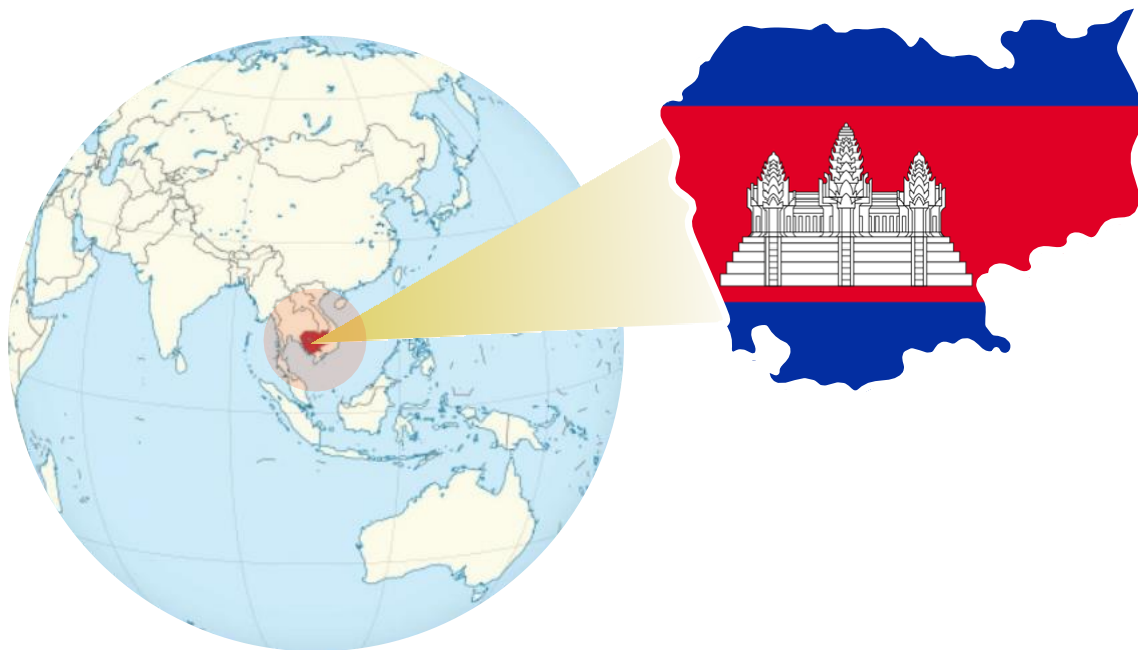
Real estate developer Mirarth completes ASEAN country's processing center



The Council for the Development of Cambodia (CDC) – the government’s highest decision-making body for large-scale investments – on April 27 announced that it had approved Cambodian Golden Fruit Trading Co Ltd’s \$26 million mango processing project, which is set to be located on a 3ha plot in Ta Ney village of Kampong Speu’s Phnom Sruoch district that is expected to generate 1,450 jobs.

<https://www.phnompenhpost.com/business/mango-processing-plant-set-kampong-speus-south>





1

Why invest in Cambodia?

2

Why invest in agriculture?

3

Business enabling environment.

4

Investment plan.

KEY INFORMATION FOR 2024:



17

Total
population
(million)



10

Labour
force
(million)



35

GDP, 2024
(billion USD)
Forecasted



2,071

GDP per capita,
(USD)
Forecasted



21

Foreign
reserves
(billion USD)



22%

Share of
agriculture
to GDP



1. Why invest in Cambodia?

- GDP growth: 7 percent on average over the last 30 years.
- World Bank lower middle-income status in 2015.
- UN LDC graduation in 2027.
- In 2020, poverty rate is 17.8% (World Bank).

Inflation rate:
< 3%

Tourist arrivals:
2.27 million

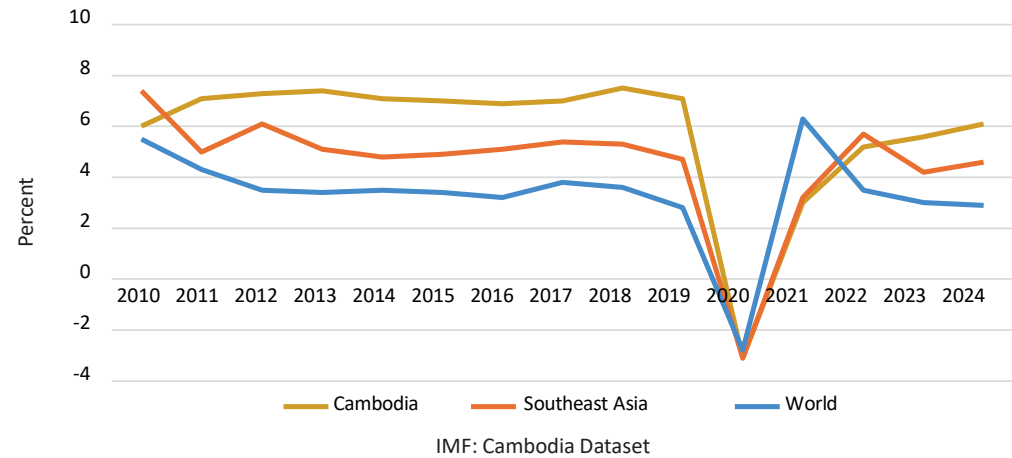
Stable exchange rate:
USD 1 = 4,042 Riel

4G coverage:
100% of the population

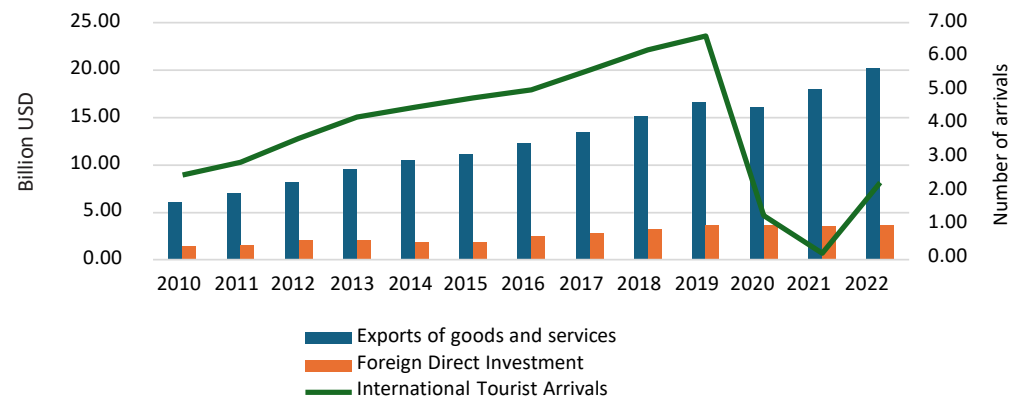
Competitive wage:
USD 204 per month

Labour force: > 60%
population < 35 years

Real GDP Growth (Annual Percent Change)



Cambodia: Export Value, FDI, and Tourist Arrivals



Source: World Bank, 2024

2. Why invest in agriculture?

1

The Royal Government of Cambodia in the 7th mandate has a strong commitment to agriculture development.

Agriculture value chain development is one of the six priorities for the Prime Minister and the Royal Government of Cambodia.

- Improving agriculture value chains.
- Establishing agro-industrial parks.
- Developing supporting infrastructure.
- Reducing electricity costs.
- Promoting the use of renewable energy.
- Enhancing public and private partnership.

2

More than 80 percent of agriculture produce has been exported as raw commodities. There are opportunities for significant value creation.

3

Investment in agrifood processing is low. With investment, Cambodia can be a food processing and exporting country to global markets.

Export of key agricultural commodities

Commodity	Export Value (MT)
Paddy rice	2,195,100
Milled rice	637,004
Fresh root	1,550,400
Cassava slice	2,068,086
Cassava starch	66,396
Raw	471,520
Processed	1,556
Fresh mango	162,429
Dried mango	18,491
Mango syrup	4,424

Source: MAFF, 2022

Top ten investors

1	China
2	Singapore
3	Malaysia
4	Vietnam
5	Thailand
6	Korea
7	India
8	USA
9	Australia
10	Senegal

Investment by sectors (USD Million), 2024

Sector	Investment (USD Million)
Industry	3,936
Infrastructure	2,924
Agriculture	120
Tourism	589

Source: Council for Development of Cambodia

5

3. Business enabling environment

1. 7 Free trade agreements

Located in the heart of Southeast Asia and with preferential free trade agreements, Cambodia has worldwide access to global markets.

RCEP will connect ~30% of world's population and output



2. Special economic zones (SEZ)

A new regime for SEZs connecting the Cambodian agrifood system to markets through land, sea and air.



China will offer a **97.5 percent** reduction and elimination of tariffs.



South Korea will offer a **95 percent** reduction and elimination of tariffs.



3. Fast, prompt and reliable service

Qualified investment projects will be reviewed and approved in 23 working days.



ក្រុមប្រឹក្សាអភិវឌ្ឍន៍កម្ពុជា
COUNCIL FOR THE DEVELOPMENT OF CAMBODIA

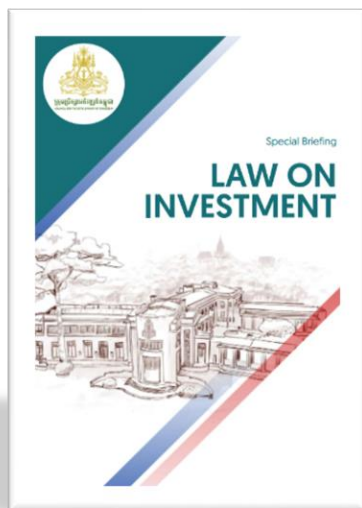


Afid | Agri-food Investment Desk
Think Agri-food, Invest in Cambodia



ប្រព័ន្ធបញ្ជាតែមួយជាតិ
NATIONAL SINGLE WINDOW

- 4. Cambodia is among the region's most favorable economies for foreign investment** with incentives specifically tailored to support agrifood business.



Ease of Doing Business 2020

DB score

53.8

DB rank

144

Key incentives for investors:

- Income tax exemption for up to 9 years.
- Export tax exemption.
- Full import duty tax exemption on construction material, equipment, etc.
- Value-added tax exemption for local inputs.
- 150 percent tax reduction for research and development, employee welfare, etc.

- 5. Supporting private sector development**



សាជីវកម្មធានាឥណទានកម្ពុជា
Credit Guarantee Corporation of Cambodia



ធនាគារ ARDB
ដើម្បីកសិករនិងអភិវឌ្ឍន៍សេដ្ឋកិច្ចសង្គម



សហគ្រិនខ្មែរ
KHMER ENTERPRISE



- 6. Logistics interim master plan**
332 projects USD 48 billion



Expressway from Phnom Penh to Preah Sihanouk province.



180km Funan Techo Canal to a deep seaport (groundbreaking in August 2024).

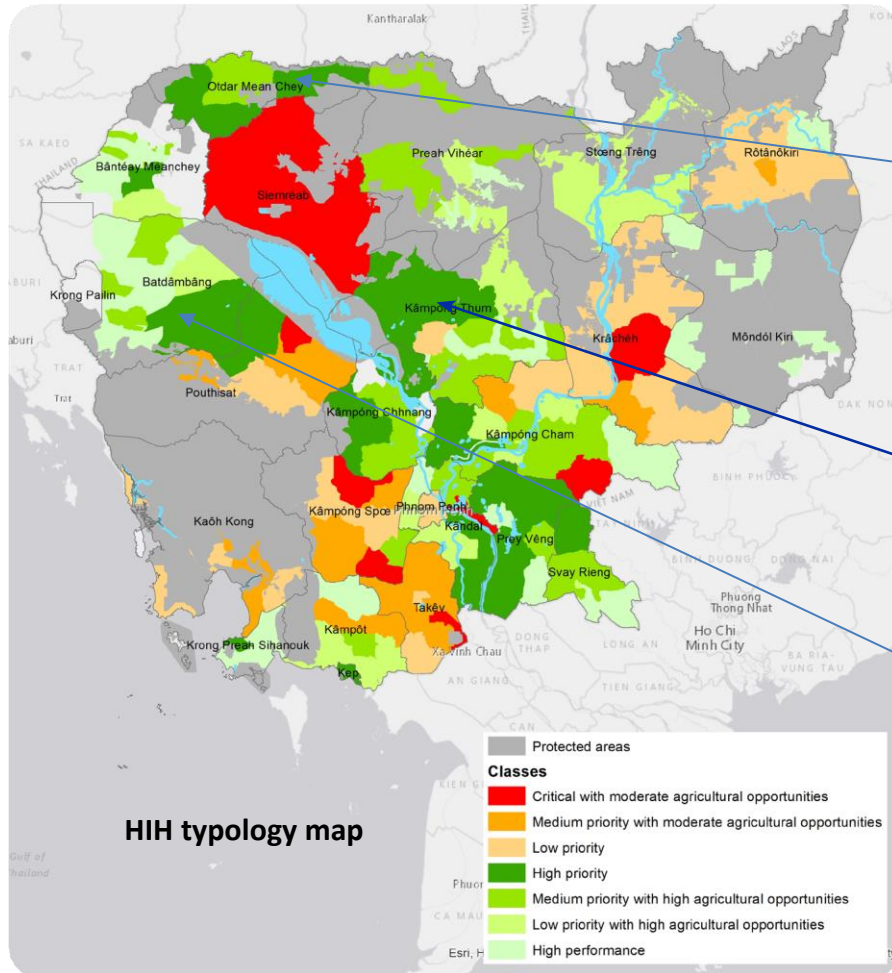


New 4F Techo International Airport (open in late 2024).



Transform to high-speed railways.

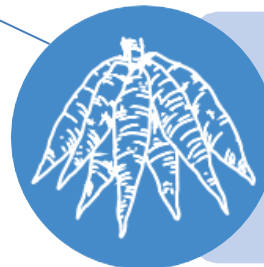
4. Key value chains for investment



Rice: Cambodia has many premium fragrant rice varieties, especially Phka Rumduol achieving the World's Best Rice Award five times. Cambodia has about 7 MMt of paddy rice surplus (fragrant and white rice) for export.



Cashew: Cambodia is the third largest cashew producer in the world. National variety (M23) provides high yield, a large seed, desirable taste, a golden colour and good nutritional values.



Cassava: Cambodia is the eighth largest cassava producer in the world. Cambodia produces 14 MMt cassava per year.





Overview of rice value chain

Current situation

- Cambodia is the ten largest rice producers in the world: 12.5 MMt per year.
- Paddy surplus: ≈ 7 MMt per year.
- Phka Rumduol variety: the World's best rice award for 2012, 2013, 2014, 2018, and 2022.
- Sen Kro Ob variety: China certified it as the best indica rice in 2023.

Existing value addition

- Significant value-added opportunity is lost with ≈ 4 MMt raw paddy being exported.
- Limited domestic processing into secondary & tertiary products.
- Limited by-products valorization such as biomass for electricity generation, rice brand oil, fertilizer from husk, etc.

Market and opportunities

- Government's goal: increase the export of milled rice by 1 MMt by 2030.
- Total value of global rice trade is worth USD 33 billion in 2023. Its demand increases by 1% (ACGR) or ~ 1.85 MMt per year.
- Cambodia has exported 650,000 ton (80% fragrant rice) to 61 countries (2023).
- Cambodia can increase more rice export to Southeast Asia (~ 8 MMt), China (~ 2.6 MMt), and United States of America (~ 1.3 MMt).





Climate smart fragrant rice production and milling

Bottleneck

- Growing different rice varieties in the same field and limited use of purified seeds.
- High interest rate loan for smallholder farmers.
- Limited access to updated agronomic practices, especially climate smart agriculture.

- Rice milling capacity in the country is much lower than rice production.
- Rice export has remained stagnant over the past five years.
- Many rice millers do not have the state of art technology to generate much value from residuals.

Investment needed

Public/private Investment to:

- Establish two agriculture cooperatives for consistent rice production and collective access to low interest rate loan for 1,920 farmers.
- Provide timely extension service to adopt climate smart agriculture for 2,000 ha of rice farm.

Private investment to:

- Build a plant to produce 10,000 MT of fragrant rice (20,000 MT of paddy) and process 5,000 MT of husk into fertilizer, charcoal etc.
- Build a facility to dry and store 20,000 mt of rice.

Risk and mitigation

Risk:

- Increase frequency of extreme conditions (drought, flash flood, El Nino, La Nina).

Mitigation:

Infrastructure (small scale irrigation, water control, land levelling) is improved.

Risk:

- Farmers sell to their produce to traders when price is high (side selling).
- High electricity cost.

Risk mitigation:

- Legality of contract farming is improved to assure its effectiveness.
- Husk is used to generate heat for drying rice and generate electricity.





Climate smart fragrant rice production and milling

Two agriculture community businesses

Investment		Premium rice
Investment outlay		USD 2.4 million
Public investment		USD 0.2 million
Private investment		USD 1.2 million
Working capital		USD 1.0 million
NPV		USD 0.1 million
IRR		16%
Farm size		2,000 ha
Direct beneficiaries		1,920 farmers
Indirect beneficiaries		5,952 people

Discount rate: 12%
Period: 10 years

HHH typology map



One rice milling factory

Investment outlay		USD 20 million
Processing capacity		10,000 MT of milled rice per year
Business Viability	NPV	USD 1.6 million
	IRR	12%
	B/C	1.24
Direct beneficiaries		73 personnel
Indirect beneficiaries		13,026 people

Discount rate: 12%
Period: 20 years





Overview of cashew value chain

Current situation

- Cambodia is the third largest cashew producers in the world: $\approx 800,000$ MT per year.
- Two to five times the average of global yield per hectare.
- Largely export raw with USD 837 million worth of raw cashew nuts export in 2023.
- Farmers start improving their production for high quality cashew.

Existing value addition

- Significant value-added opportunity is lost as less than 15% of cashew is processed in Cambodia.
- Small emerging processing initiative to process cashew into secondary and tertiary products such as cashew cheese, butter, and milk.
- Financial institutions and banks have increased loans to cashew storing and processing businesses.
- A top priority commodity by the government to foster investment in local processing.

Market and opportunities

- The total value of global cashew export is worth USD 8.3 billion (2022) and forecasted up to USD 11 billion by 2030. Its compound annual growth is 4.5%.
- Cambodia has exported cashew to Thailand, Japan, China, USA, Malaysia, South Korea and Czech Republic (USD 2 million) in 2023.
- Cambodia can export to top six cashew markets include USA, Germany, Netherland, China, Turkey, and United Kingdoms. These countries accounts for almost 50% of total global import of cashew.





Climate smart cashew production and cashew processing

Bottleneck

- Fund shortage: cashew planting requires upfront investment cost and a waiting period (4-5 years).
- Harvesting cashew seed is labor intensive and costly.

- Cashew processing capacity in the country is low.
- Cashew byproducts are left in field or not utilized.
- Traditional cashew processors do not have quality assurance. Products are sold without premium.

Investment needed

Public/Private investment to:

- Establish two agriculture cooperatives for access to low interest loan for 2,400 farmers and increase mechanization/use of effective tools for cashew harvesting.

Private investment to:

- Build a plant to process 2,500 MT of high quality cashew (10,000 MT of raw cashew) and process 5,000 mt of residuals into oil.
- Build a warehouse to dry and store 10,000 MT of cashew.
- Build a quality assurance system in the cashew processing plant.

Risk and mitigation

Risk:

- Climate change affects cashew productivity (heatwave, drought, salty dew).

Mitigation:

- Ponds and water catchment areas are built to store and irrigate cashew farms.

Risk:

- Quick leakage of cashew to neighbouring countries soon after harvesting.
- High electricity cost.

Mitigation:

- Working capital to buy and store cashew.
- Cost saving technology (solar energy) is used.





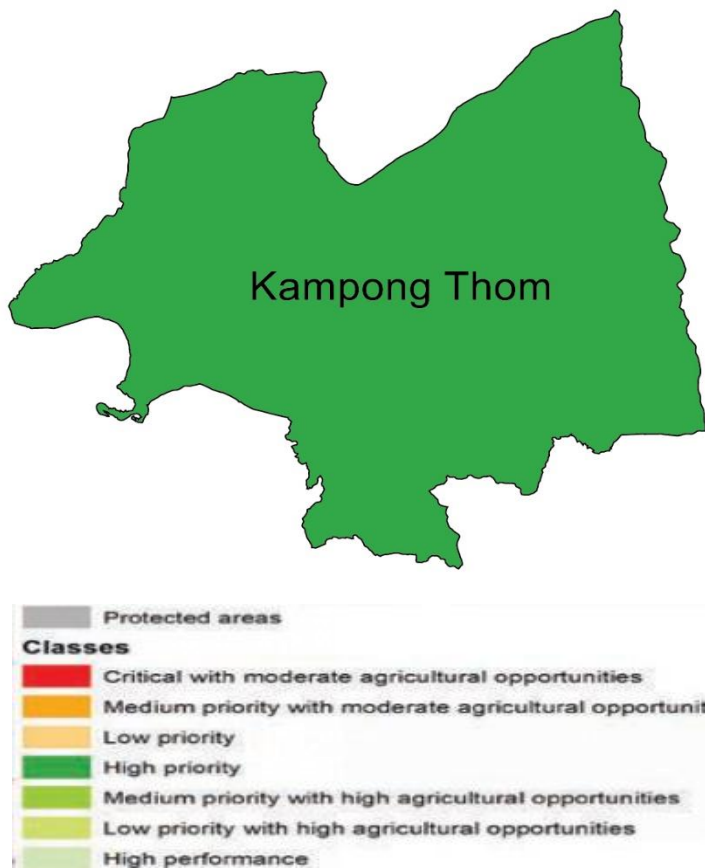
Climate smart cashew production and high quality cashew

Two agriculture community businesses

Investment	Cashew
Investment outlay	USD 5.6 million
Public investment	USD 0.2 million
Private investment	USD 2.2 million
<i>Working capital</i>	<i>USD 3.2 million</i>
	NPV USD 0.4 million
	IRR 20%
Farm size	4,000 ha
Direct beneficiaries	2,400 farmers
Indirect beneficiaries	7,440 people

Discount rate: 12%
Period: 10 years

HHH typology map



One cashew processing factory

Investment outlay	USD 17 million
Processing capacity	2,500 MT per year
	NPV USD 5 million
Business Viability	IRR 26%
	B/C 1.5
Direct beneficiaries	621 personnel
Indirect beneficiaries	8,187 people

Discount rate: 12%
Period: 20 years





Overview of cassava value chain

Current situation

- Cambodia is the eight largest cassava producers in the world: \approx 14 MMt per year.
- A preferred crop for farmers, and a major source of their income.
- Largely export as fresh roots and cassava chip with over USD 1 billion export value.
- Cassava yield is competitive with corn grown in USA (25-30 MT per hectare).

Existing value addition

- Significant value-added opportunity is lost as only about 20% of cassava is processed domestically.
- Cassava starch has been used at a remarkable growth rate for bakery, medicine and industries in the country.
- Cassava residuals are processed into animal feed and fertilizer. Its use has increased in recent years.
- Cassava starch is good input for food, beverage, bioethanol, industry, and medicines (2,000 products).

Market and opportunities

- Global cassava starch is worth USD 4.5 billion in 2023. It is forecasted to increase up to USD 6.4 billion by 2030 at 5.5 growth rate (CAGR).
- Cambodia has exported starch 57,000 MT to China, Area Nes, India, Singapore, Malaysia, Italy, Netherland, Canada, etc.
- Cambodia has opportunities to export its high quality cassava starch to China (4.3 MMt), Malaysia (0.2 MMt), Philippines (0.13 MMt), Japan (0.12 MMt), and USA (83,000 tones).
- Cambodia has FTA with China (zero tax) and SPS Protocol in place.





Sustainable cassava production and high quality starch

Bottleneck

- Mosaic and witches broom are major threats to cassava production.
 - Limited supply of clean planting materials (cassava stems).
 - Trends of yield decline in some areas due to improper agronomic practices.
-
- High quality cassava starch are produced in small quantity in the country.
 - Most cassava residuals have not been fully processed into valuable byproducts.
 - Water from cassava starch processing can pollute natural streams. It has bad smell and toxic affecting human and animal health.

Investment needed

Public/Private investment to:

- Establish two agriculture cooperatives to join effort for disease control and supply clean planting materials for (2,400 farmers).
- Train farmers and extension officers on sustainable agronomic practices (yield improvement techniques).

Private investment to:

- Build a plant to process 45,000 MT of cassava starch (~200,000 MT of fresh tubers) and produce 50,000 MT of animal feed/fertilizer per year.
- Set up a biogas/anaerobic digestion system to generate clean energy from polluted water such as heat for drying starch and electricity for starch plant.

Risk and mitigation

Risk:

- Disease affected planting materials are sold and distributed.

Mitigation:

- Farmers are trained to assess healthiness/cleanliness of planting materials and procure from reliable suppliers.

Risk:

- Farmers sell their produce to traders once the price is high (side selling).
- Cassava stores Hydrogen Cyanide Acid.

Mitigation:

- Legality of contract farming is improved to ensure its effectiveness.
- Wastewater treatment plant is established.





Sustainable cassava production and high quality starch

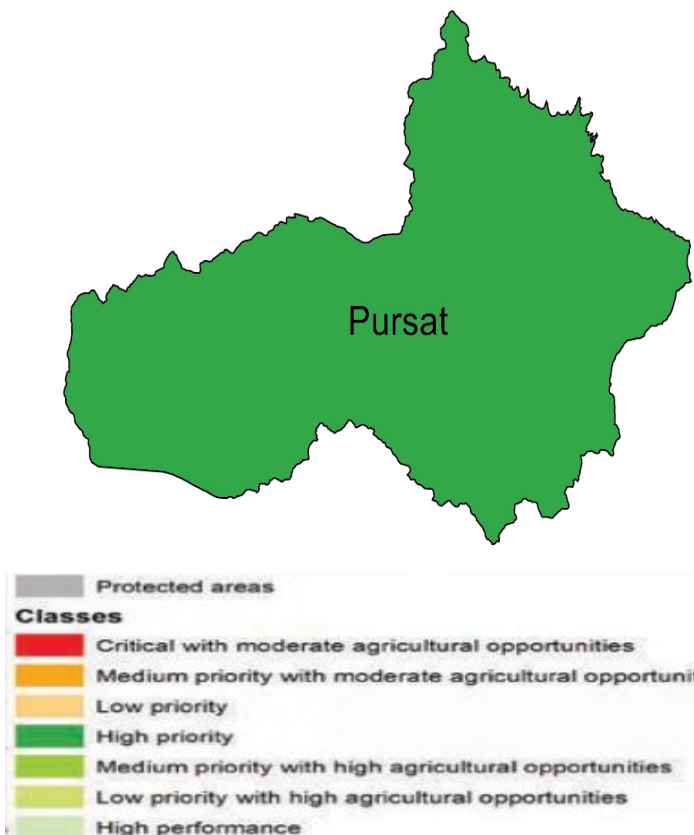
Two agriculture community businesses

Investment	Cassava
Investment outlay	USD 7.4 million
Public investment	USD 0.2 million
Private investment	USD 4.0 million
<i>Working capital</i>	<i>USD 3.2 million</i>
NPV	USD 1.4 million
IRR	29%
Farm size	4,000 ha
Direct beneficiaries	2,400 farmers
Indirect beneficiaries	7,440 people

Discount rate: 12%

Period: 10 years

HHH typology map



One cassava processing factory

Investment outlay	USD 61 million
Processing capacity	45,000 MT of starch per year
NPV	USD 14 million
Business viability	IRR 20%
B/C	1.6
Direct beneficiaries	226 personnel
Indirect beneficiaries	14,727 people

Discount rate: 12%

Period: 20 years





Hand in Hand Investment Plan



Hand-in-Hand
Initiative



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Summary

USD 113,4 million
Investment
cost

USD 1 million
Government budget
(project)

USD 112,4 million
Investment
required

NPV:
USD22.5
million

Average
IRR:
20.5%

64,412 beneficiaries
Direct: 7,640 people
Indirect: 56,772 people

USD 322
Per capita
Income (average)

-3,490
tCO₂-eq
Sequestered

Investment case

Rice Investment

Investment required:

USD 22.4 Million

NPV :

USD 1.7 Million

IRR:

14%

Total beneficiaries:

20,971 people

Per capita income:

US\$122/Person

Total Carbon Emissions

-624 tCO₂-e

Investment case

Cashew Investment

Investment required:

USD 22.6 Million

NPV :

USD 5.4 Million

IRR:

23%

Total beneficiaries:

18,648 people

Per capita income:

US\$524/Person

Total Carbon Emissions

-1,266 tCO₂-e

Investment case

Cassava Investment

Investment required:

USD 68.4 Million

NPV :

USD 15.4 Million

IRR:

24.5%

Total beneficiaries:

24,793 people

Per capita income:

US\$320/Person

Total Carbon Emissions

-1,600 tCO₂-e