



Food and Agriculture Organization
of the United Nations



Scaling-up capacity, partnerships and investment to accelerate climate smart agrifood systems transformation in Southern Africa



Hand-in-Hand
Initiative

**Hand in Hand Regional
Initiative for Southern Africa**

Investment Forum | Rome, Italy | 15-17 October 2024

SADC Economies



16 Member States

Phase 1 : Angola, Botswana, Eswatini, Lesotho Malawi, Mozambique, Namibia, South Africa , Zambia, Zimbabwe

Phase 2 : Comoros, DRC, Madagascar, Mauritius Tanzania, Seychelles,

4

Low Income Countries

UNCTAD, 2024

DRC, Malawi, Mozambique, Madagascar,

Countries

3

Small Island Developing States (SIDS)

Comoros, Mauritius , Seychelles

6

Land Locked Developing Countries (LLDCs)

UNCTAD, 2024

Botswana, Eswatini, Lesotho, Malawi, Zambia, Zimbabwe

7

Lower Middle Income

World Bank , 2024

Angola, Comoros, Eswatini, Lesotho, Tanzania, Zambia Zimbabwe

1

High Income

World Bank , 2024

Seychelles

4

Upper Middle Income

World Bank , 2024

Botswana, Mauritius, Namibia, South Africa



Hand-in-Hand Initiative

Regional Agriculture Investment Plan



Production & Productivity

Production, Productivity and Competitiveness

Market & Trade

Increased Access to Markets and Trade of Agriculture Products

Investment & Finance

Increased Investments in and Access to Finance for Agriculture

Food Security & Nutrition

Improved Food and Nutrition Security

SADC CONTEXT



Poverty

43%

World Bank, 2023 Poverty headcount ratio at \$2.15 a day



Food Insecurity

17.4 Mln

SOFI, 2023



GDP

**Contribution
Agriculture**

33%

AUDA NEPAD, 2024



GDP

\$721.3
Bln

SADC, 2018



Population

363
Mln



Arable Land Area

556 781km²

SADC, 2024



**Hand-in-Hand
Initiative**

Investment Enablers in Southern Africa

Infrastructure

5 Ports, Rail, & Road Network

Climate

Favourable Climatic conditions

Peace & Security

SADC Region enjoys Peace and Security

Financial Sector

Considerably Functional Financial Sector

Policy

Regional Agriculture investment Plan

Demographics

Increasing youth population

Challenges & Opportunities for Investments

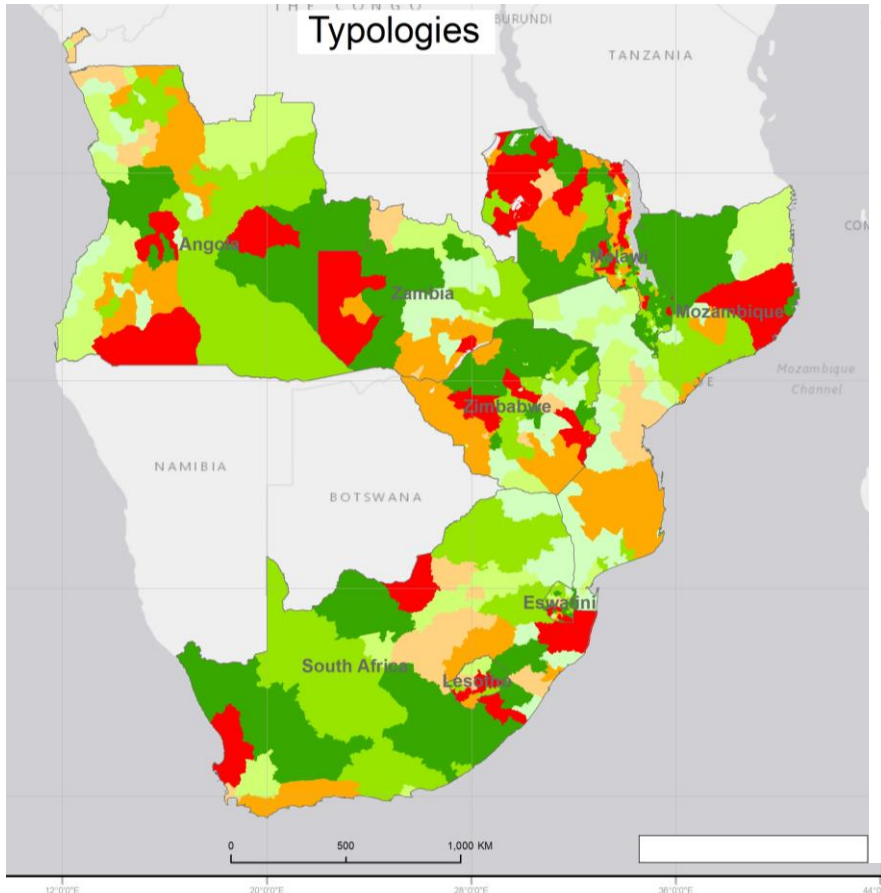
Challenges:

- **Low investment in agriculture** production and productivity enhancement infrastructure e.g. irrigation, mechanization, industrialization, digital technology etc. ~7% of cultivated area equipped for irrigation (IWMI, 2023)
- **Low levels of Intra-African trade:** similar production, inadequate trade, sub-optimal infrastructure, High tariff and non-tariff barriers

Opportunities:

- Irrigation development
- Industrialization focusing on agro-processing and value addition
- Smallholder farmer aggregation

Typologies & Delivery Axis



Source: HIH GIS team, 2024

Table 1: Typology classification

Critical with moderate agricultural 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

Phase 1 : 2024

- 1. Climate Smart Agriculture**
 - a. Irrigation “Small Reservoirs”
 - b. Solar pumps

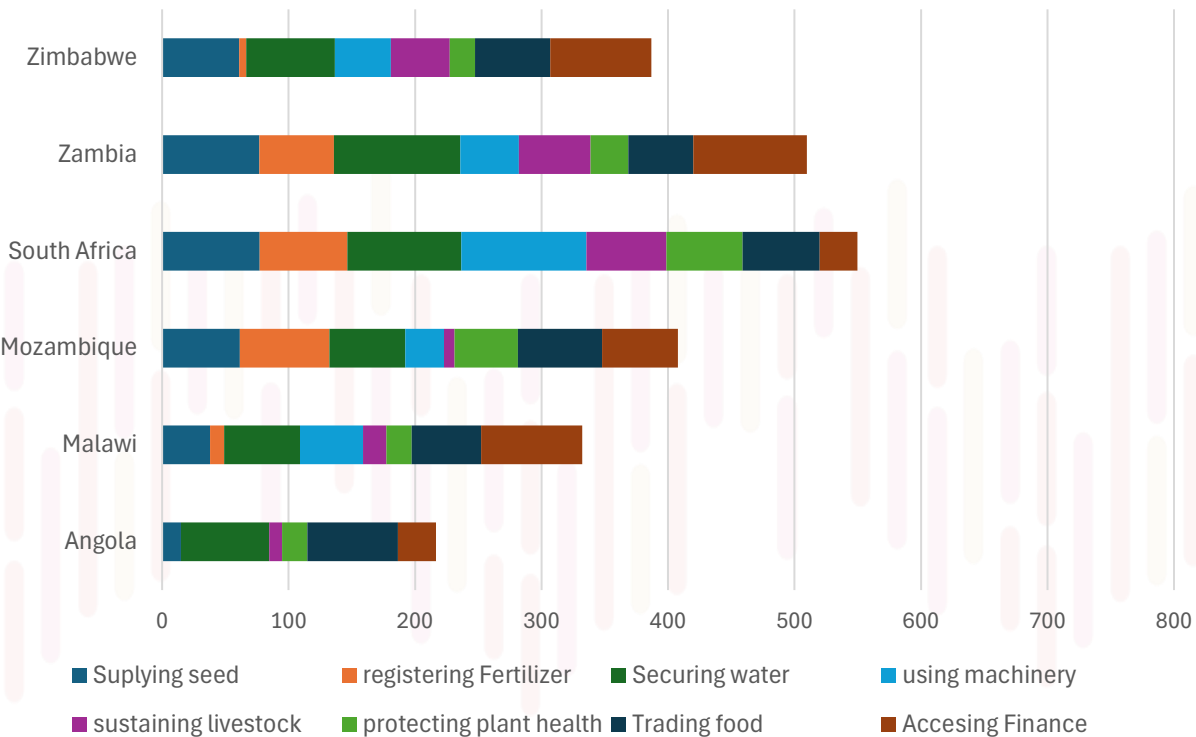
2. Market - Trade Integration

Phase 2 -2025

3. Agro-industrialization and Mechanization

The Southern Africa Enabling Environment

Enabling the Business of Agriculture

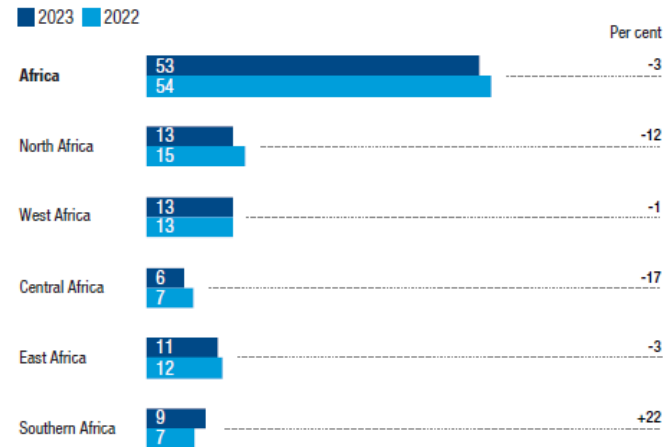


Source: World Bank, 2019



Foreign Direct Investment Flows to Africa 2022-2023 Comparison

Inflows to Africa
(Billions of dollars and percentage change)



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

	Ease of getting credit rank	Domestic credit to private sector (% of GDP)
South Africa	80	138.8%
Angola	185	14.3%
Zimbabwe	67	13.1%
Zambia	4	14.7%
Botswana	80	31.8%
Mozambique	165	22.6%
Namibia	80	62.0%
Eswatini	94	20.7%
Lesotho	94	18.8%

Source: WB Ease of doing business. Calculations: WE4F

<https://www.fao.org/hand-in-hand/en>

AfDB Country Food and Agriculture Delivery Compacts (Government Commitments)

Angola

- The National Grain, Livestock & Fisheries plan.
- Granting Land rights for private use.
- Tax incentives by zones.

Botswana

- Establishment of commercial clusters.
- The Agricultural Credit Guarantee Scheme (AGCS).
- Establishment of a Meat Industry Regulatory Authority (MIRA).

Lesotho

- National agriculture development plan.
- Title to Land by foreign companies, & local shareholding 20%.
- Land titling and improving access to (irrigated) serviced land.

Malawi

- Import duty and VAT waivers on agricultural equipment etc.
- Tax holiday up to 10 years for agro-processing etc.

Mozambique

- VAT exemption for agricultural imports.
- Corporate tax rates lowered from 32% to 10% for the agriculture sector.
- Tax incentives for new investments for the next three years.

Namibia

- Renewable energy projects in remote rural areas.
- Energy self-sufficient via renewables and export of power to the region.
- Open energy sector space to private sector since 2019.

South Africa

- Dual agricultural economy.
- ~2.7 million farmers engaged in subsistence agriculture.
- Establishment of Agri-parks.

Eswatini

- Strategic projects to drive agriculture development.
- Special Economic Zones (SEZ).
- Export credit guarantee scheme.

Zambia

- Enabling environment for private sector growth.
- Development of farm blocks focusing on crop diversification.
- Creation of agricultural production and processing zones.

Zimbabwe

- Reduced Tax for processing companies which exports - between 20 to 15%.
- Special Economic Zones (SEZ):
- Farmer Subsidy Programmes.

HiH Southern Africa a multi-partner program complementing ongoing efforts

National governments and.....



.....and many others including private sector



Investment Case 1

Small Reservoirs for Irrigation

[Climate Smart Investment]



Regional Irrigation HiH Investment Program

State of Irrigation & Water Management

01

Agriculture in the region is mainly rainfed, with only ~7% of cultivated area equipped for irrigation

02

Inequal distribution of water resources across the region (less surface water in southern countries)

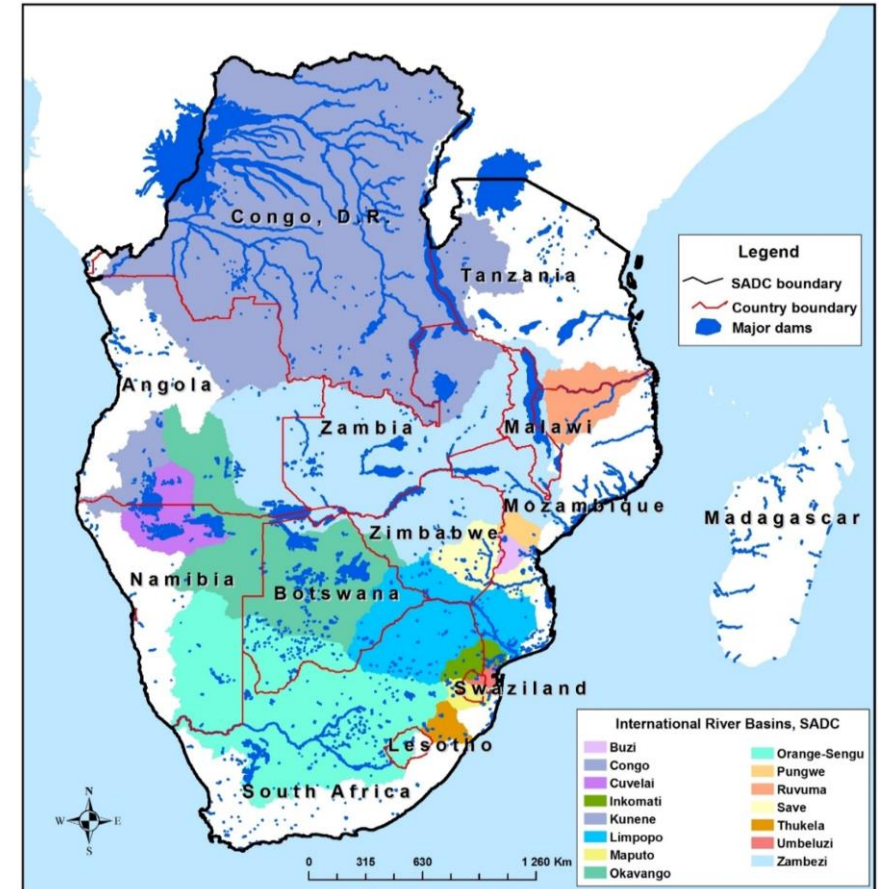
03

Low water harvesting and storage capacity – only 1% of runoff is dammed

04

Current storage capacity is dwindling through the siltation of existing reservoirs.

Transboundary river basins and dams



Source: Mabhaudhi et. Al. 2016

Regional Irrigation HiH Investment Program

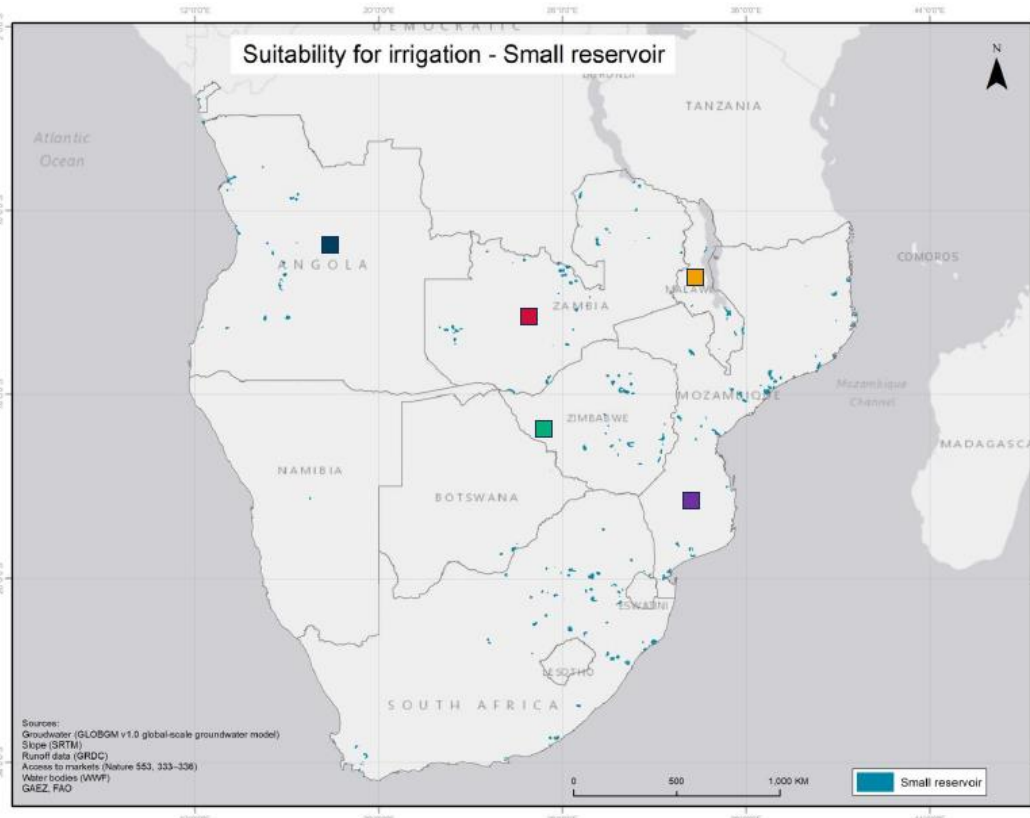
Key Bottlenecks	Key Investment Needed
<p>✓ Inadequate storage capacity for surface water to meet water demands for irrigation to increase yield and food production</p>	<p>✓ Implementation of small reservoirs irrigation on 55,000 ha suitable for irrigation in 5 countries, for maize, wheat and horticulture.</p>
<p>✓ Insufficient groundwater infrastructure resulting in failure to supply water to communities for irrigation purposes</p>	<p>✓ Provide high quality and sustainable irrigation equipment such as solar powered pumps to smallholders dependant on groundwater resources. 26,000 hectares are covered in 7 countries.</p>
<p>✓ Lacking water resources governance and management</p>	<p>✓ Integrated Water Governance at the basin level applying existing policy framework about water resources management</p> <ul style="list-style-type: none"> • Regional Strategic Action Plan IV • SADC protocol on shared water sources • SADC Regional Agricultural Policy

Irrigation Investments Prioritized :

Type 1: Small scale community-managed reservoirs for irrigation

Type 2: Small scale private investment in Solar powered irrigation pumps for high value-added crops

Risks	Mitigation measures
Limited availability, unaffordable costs, and poor reliability of technologies.	Introduce smart subsidies to encourage participation of the private sector in the supply of the suitable and sustainable technologies.
Competition for water resources use.	Promote participatory approaches for water governance and dialogue to stimulate shared use between water users.



Source: Kalaba, M., & Kirsten, J. (2012).

- Total hectares targeted: **55,020**
- Capital Investment required : **284 million USD** over five years
- NPV: **141 million USD**
- IRR (20-year): **17%**

Narrative:

- ✓ Reservoir Size: At most, 100 hectares (ha) in surface area; Storage capacity below 30 million cubic meters (Mm³); Dam wall height < 15 m.
- ✓ Sustainable and inclusive water governance management practices.
- ✓ Public sector-oriented investment.

Mozambique 6,483 Ha
Investment \$50.2 million
NPV \$26.3 million
IRR 18%
Beneficiaries 41,032

Zimbabwe 24,962 Ha
Investment \$80.3 million
NPV \$36.3 million
IRR 16%
Beneficiaries 157,984

Angola 10,869 Ha
Investment \$84.3 million
NPV \$26.2 million
IRR 13%
Beneficiaries 68,789

Malawi 5,687 Ha
Investment \$44.4 million
NPV \$13.6 million
IRR 13%
Beneficiaries 35,996

Zambia 7,017 Ha
Investment \$24.7 million
NPV \$5.8 million
IRR 11%
Beneficiaries 44,424

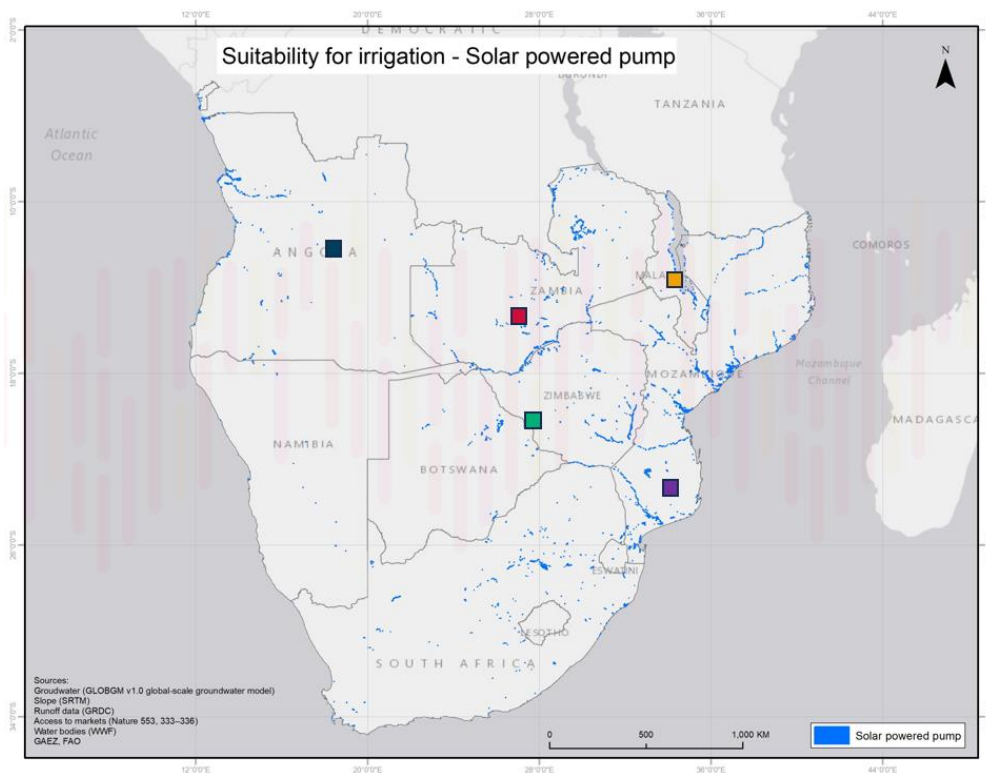
Investment Case 2

Solar Powered
Irrigation Pumps

[Climate Smart Investment]



Irrigation on Solar Powered Pumps -Shallow Aquifers- Phase 1



Source: FAO, HIH GIS team, 2024

Total hectares targeted: **26,217**

Capital Investment required :
269 million USD over five years

NPV: **188 million USD**

IRR (20-year): **24%**

- ✓ **Narrative:**
- ✓ Irrigation equipment (including solar pumps, fenced enclosure, drip irrigation kits) for small-scale agri-entrepreneurs, suitable for high value-added crops. 20-year life cycle of solar panels.
- ✓ Four-year life cycle of pumps with a progressive adoption rate by communities.
- ✓ Sustainability: Optimum pumping in line with the recharge capacity
- ✓ Private irrigation systems for smallholder farmers

Eswatini 1000 Ha
Investment **\$10.1 million**
NPV **\$9.4million**
IRR **28%**
Beneficiaries **1,111**

Angola 2,562 Ha
Investment **\$25.4 million**
NPV **\$15.7 million**
IRR **23%**
Beneficiaries **14,231**

Malawi 4,354 Ha
Investment **\$26.6 million**
NPV **\$13.6 million**
IRR **23%**
Beneficiaries **24,188**

Mozambique 5,005 Ha
Investment **\$59.6 million**
NPV **\$48.1 million**
IRR **25%**
Beneficiaries **27,803**

Zambia 10,180 Ha
Investment **\$99.9 million**
NPV **\$63.4 million**
IRR **24%**
Beneficiaries **56,558**

Zimbabwe 3,017 Ha
Investment **\$28.7 million**
NPV **\$20.7 million**
IRR **26%**
Beneficiaries **16,170**

Lesotho 100 Ha
Investment **\$1.7 million**
NPV **\$1.3 million**
IRR **22%**
Beneficiaries **111**



Investment Case 3

Market Integration
&
Trade



Hand-in-Hand Initiative

Potential:

- ✓ Increase intra-regional trade of agricultural products due to differences in comparative advantages.
- ✓ Increase integration in global value chains
- ✓ Optimize benefits from AfCFTA

Challenges:

- Limited diversification from primary commodities
- participation in regional and global value chains is inhibited by high trade costs (tariff, nontariff barriers, policy factors, custom inefficiency infrastructure, etc).
- Slow implementation of SADC objectives, lack of political coordination

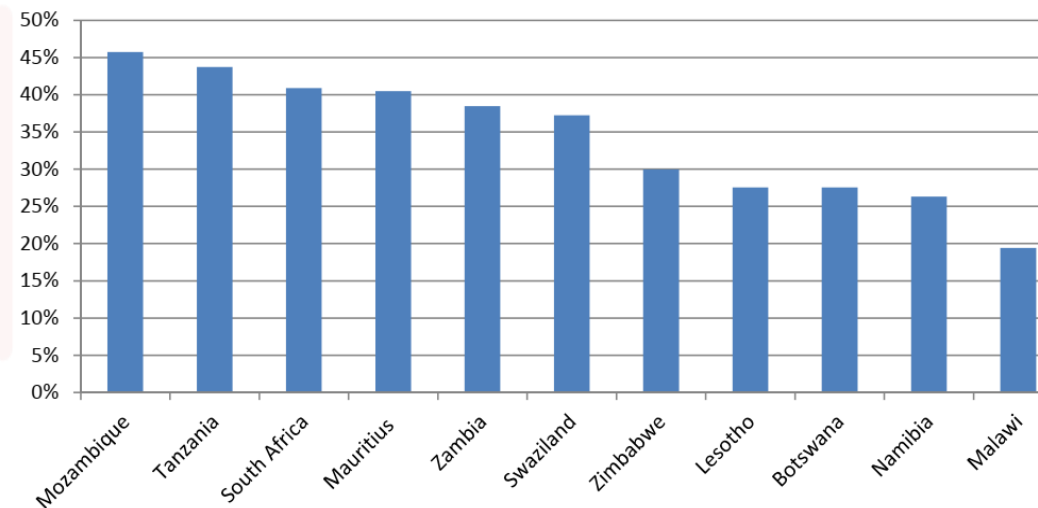
1 High import and export tariffs on agricultural products

Region/ country	Average import duty	Average export duty
Africa	19.58	9.86
SADC	13.56	12.48
Angola	6.9	7.9
Botswana	12.9	9.3
Lesotho	12.6	9.3
Malawi	15.2	14
Mozambique	12.9	10.6
Namibia	13.2	9.3
South Africa	13.9	12.8
Swaziland	13.4	9.3
Zambia	13.1	15.9
Zimbabwe	11.3	19.4

Source: IFPRI, 2017

2 High Non-tariff measures

NTM Coverage of Agricultural products

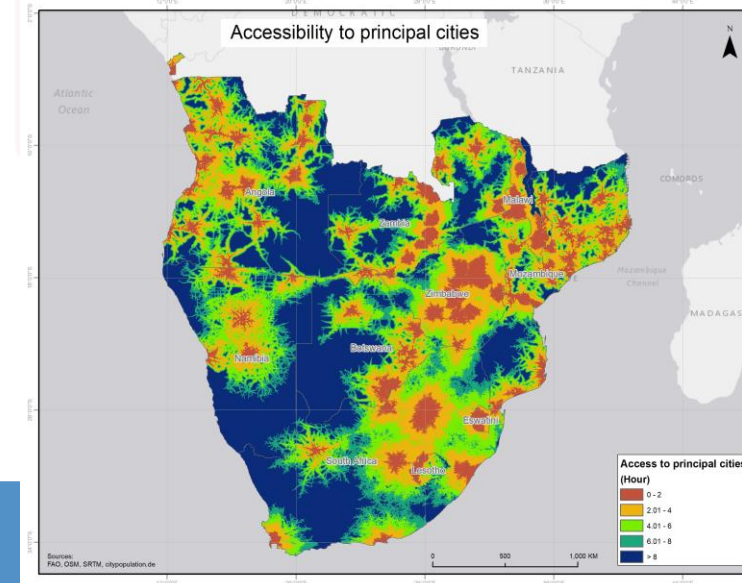


Source: Kalaba, M., & Kirsten, J. (2012).

3 Border costs and infrastructure

Time to export: Border compliance (hours)*	Time to import: Border compliance (hours)
74	59

Source: World Bank 2020

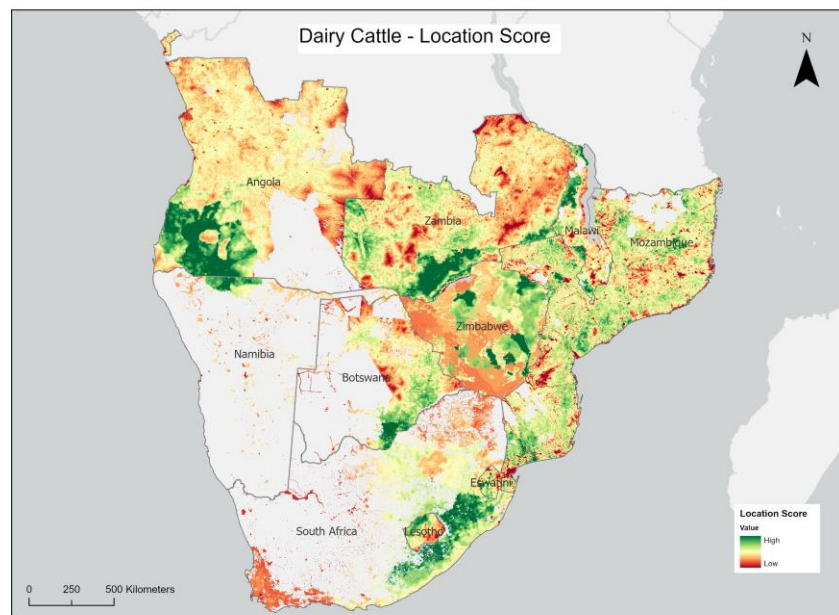


Key Bottlenecks	Key Investment Needed
High import and export tariff to agricultural products across regional countries	<ul style="list-style-type: none"> ✓ Establish a single common external tariff to become a customs union. Capitalize on ongoing political efforts to progress under the AfCFTA. ✓ Reduction of on import and export tariffs of 50% in the agricultural sector represents a decrease in tariff collection for all Southern Africa countries of ~2.2 billion USD. Phase 1 ~734 million USD
Failure to implement the political agenda to remove and lower NTBs, leading to a rate equivalent of 20% in the region	<ul style="list-style-type: none"> ✓ Prioritize regional policies over national. Elimination of unnecessary nontariff barriers, under the SADC and SACU framework ✓ Adoption of common rules of origin, harmonization of customs rules and procedures attainment of internationally acceptable standards, quality, accreditation, and metrology, harmonization of sanitary and phyto-sanitary measures ✓ Costs incurred from reducing NTM's in 80%: ~225 million USD. Phase 1 ~75 million USD
High customs inefficiency leading to additional trade costs and time spent at the border	<ul style="list-style-type: none"> ✓ Comply with SADC core mandate to create OneStop Border Posts (OSBP) and convert the region's busiest border (Beitbridge) into a one-stop facility ✓ Adoption of the Automated System for Customs Data (ASYCUDA) to reform customs clearing procedure and implement the standard nomenclature for traded goods. ✓ Ensuring Trade Facilitation Agreement can reduce time in ~5 hours (WB 2020) ✓ Reduction of ~4% in costs representing decrease in collection in Southern African counties of ~ 96 million USD. Phase 1 ~32 million USD

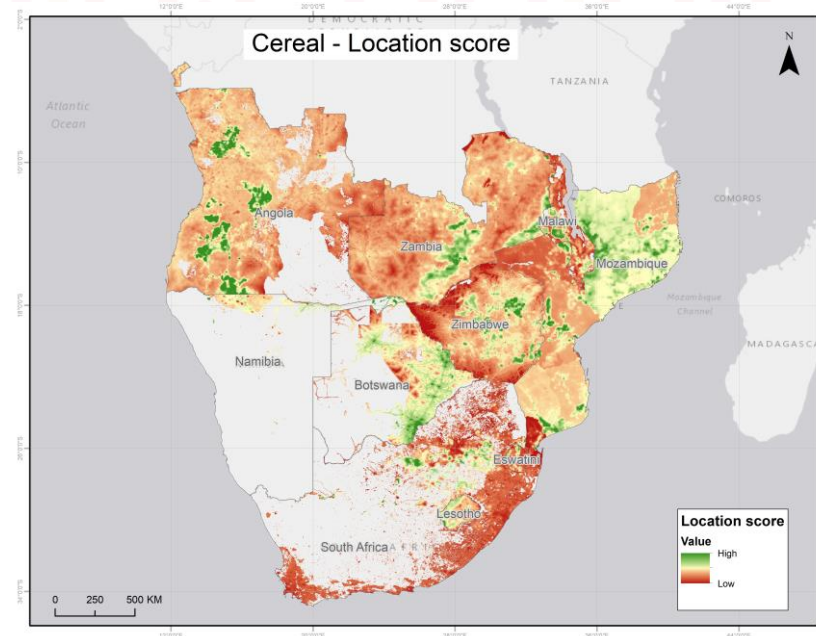
Additional trade enhancing private sector investments to create market /non-market infrastructure:

- Cold storage facilities, agro-processing units, slaughterhouses, collection centers for crops and dairy products, aquaculture
- Supporting services (e.g. energy, water infrastructure, veterinary centers, telecommunications)

Candidate locations for markets and supporting facilities



Source: FAO, HIH GIS team



Source: FAO, HIH GIS team

Integration in a 3-phase implementation over 20 years

Country	"Investments" by country for Phase 1 in million \$US	Estimated returns IRR (%)
Angola	47	TBD
Botswana	26	17
Eswatini	28	8
Lesotho	13	17
Malawi	25	30
Mozambique	64	20
Namibia	40	15
South Africa	468	24
Zambia	49	25
Zimbabwe	65	22
Total	827	

Additional impacts / benefits:

- ✓ **%50%** reduction in tariffs and **80%** reduction in non-tariffs measures can increase the region's GDP by **0.3%** (IFPRI 2022)
- ✓ Reduction of ~5 hours at border represents gains for **~205 million USD** for private sector
- ✓ **Extreme poverty reduction** in Southern Africa attributable to AfCFTA: **~4 million people** (WB, 2020)
- ✓ **Moderate poverty reduction** in Southern Africa attributable to AfCFTA: **~9 million people** (WB, 2020)
- ✓ **Employment** projection in agriculture of **29.8%** (WB, 2020)

Net Benefit Phase 1: \$ 215 million USD per year

Summary Southern Africa Investment plan

Total Investment

Irrigation: 553 Million USD
Market integration: 827 Million USD

Average IRR

Irrigation: 20%
Market integration: 24%

Irrigation Total **Beneficiaries**: 704,402
Market integration Total **Beneficiaries** 36.6 million

475,854 MT
Co2e
Sequestration

1

Intervention

Type 1: community investment
Small reservoirs

Total Investment (\$US)

284 million

IRR (%)

17

NPV (\$US)

141 million

Sustainability Benefits

Direct beneficiaries: 174,113

Indirect beneficiaries: 348,225

Income increase per capita (\$US):
120

Co2e sequestration: 322,284 MT

2

Intervention

Type 2: Private sector investment
Solar pumps

Total Investment (\$US)

269 million

IRR (%)

24

NPV (\$US)

168 million

Sustainability Benefits

Direct beneficiaries: 36,413

Indirect beneficiaries: 145,651

Income increase per capita (\$US):
411

Co2e sequestration: 153,570 MT

3

Intervention

Market integration / trade – Phase 1

Total Investment (\$US)

827 million

IRR (%)

24

NPV (\$US)

215 million

Sustainability Benefits

Direct Beneficiaries: 5.3 M

Indirect Beneficiaries: 31.3 M

Income increase per capita:
US\$33