Pakistan’s Investment Case

Investment Forum | Rome, Italy | 16-20 October 2023
Pakistan: Country Overview

Location: Asia
Border India, Iran, Afghanistan, China

Coastline
1,046 KM
EEZ 200 nm

Area
79.6 Mil ha
Rank: 33rd

Labor Force
73 million
Agriculture 38%

Population
241.5 M, Rank: 5th
15-64 Years: 60%
Rural: 62%

Household Food Expenditure
50%

GDP (PPP)
$1.2 Trillion
23rd largest economy

GDP Structure
Services: 60%
Agriculture: 22%
Industry: 18%

Food Industry Market
$114 Billion
Pakistan’s Investment Environment

**Overall Investment Regime**
- **Level playing field**: Equal treatment to local & and foreign investors
- **Liberal regime**: All economic sectors open to FDI
- **Foreign equity**: 100%
- **Profits**: Remittances of royalty, fees, profits
- **Banking facility**: Borrowing facilities from local and foreign banks
- **Foreign investment protection**: Protection by legislation
- **Special Economic and Free Zones**

**Economic Revival Plan 2023**
- Agriculture
- Mining
- Information Tech
- Energy

**Special Investment Facilitation Council 2023**
- Prime Minister Level
- One Window Solution

**Special Economic and Free Zones**
**Pakistan’s Investment Environment**

### Agri. Investment Incentives

- **Agriculture Income Tax**: Nominal
- **Low custom duties**: Food Processing (Livestock, Horticulture, Seafood, Poultry)
- **Zero customs duty**: Fruit processing for certain areas
- **Sales tax exemption**: Livestock, meat
- **Withholding tax exemption**: Certain food items
- **Concessional Agriculture credit facility**: USD 10 Billion annually
- **Land and water tax**: Nominal

### Agri. Investment Package

- **Government permission**: Not required except for specific license
- **Remittance of capital, profits, and dividends**: Allowed
- **Customs duty on import of PME**: 0%
- **Tax relief (% of PME cost)**: 25%
- **Royalty & Technical Fee**: Allowed Initial lump-sum up to $100,000 - Max Rate 5% of net sales - Initial period 5 years
Fundamentals of Agriculture

Significance
• Provide raw material to industry, Contribution to economy: 22%
• Provision of food: 95%

Endowments
• Arable land: 22 million ha, Over 80% irrigated by one of the biggest irrigation system of the World
• Climate: 12 Agro-ecological zones, 4 Seasons, 50+ Food commodities

Enabling environment
• Well spread power and communication network-transport and cellular
• Cheap and skilled labor and HR (3300 agriculture graduates, 25,000 Engineers per year)

High food consumption
• Population 241.5 million and increasing middle class

Big export potential
• 70% Agri. exports, high regional demands and export relations with big food importing countries

Established food value chains and value chain actors
• Crops, livestock and fisheries value chains,
• National and multinational companies in food business
Public Sector Investment in Agriculture

(infrastructure, research, extension, value chain etc.)

**Total Investment Size (Ten Years)**
- Crop: USD 24 Billion
- Livestock: USD 1.5 Billion
- Irrigation: USD 24 Billion

**Delivery Estimates (2023-2024)**
- Crop
- Livestock
- Irrigation
HIHI Approach in Pakistan: Complementarity

Rationale for Selection

- High Export Potential and Market Diversification
- Scope for Productivity Enhancement
- Scope for Value Addition and Quality Enhancement
- High Rate of Return

Cluster based Agriculture Development

- Desk Study, Field Work, Stakeholder Consultations and Validation
- 50+ Clusters
- 33 Clusters
- 08 Clusters
- 74 Clusters
- 19 Clusters
Agricultural Typologies and Investment Potential Identified Under HIHI
# Mango Clusters

## Situation in Pakistan

- **Production:** 1.7 million tons, World ranking 5
- **Yield:** 10.5 tons/ha (1.10 times higher than the world average)
- **Export:** 107K tons, $ 101 million, World share 4.4%
- **Export price:** $ 947/ton, (1.5 times lower than the world average)

## Investment Potential: $ 158M (Govt 10%, Private 90%)

- Research and establishment of certified nurseries: 4.4
- Capacity building: 11.5
- Marketing: 2.5
- Orchard Management: 58.4
- Processing (25 units): 81.3

## Assumptions

- Certified orchards establishment: 50%
- Yield increase from certified orchards: 50%
- Yield increase due to improved management: 15%
- Reduction in post-harvest losses: 20%

## Feasibility and Benefits

- Investment: $ 158 million, NPV: $ 170 million, IRR: 25%
- Area: 77,334 ha, Beneficiaries: Direct 38,000, Indirect 266,000 Nos
- Increase in Income: Farm $ 2100/ha, Beneficiary: $4200

## Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions
Date Clusters

Situation in Pakistan

- Production: 550K tons, World ranking 6
- Yield: 6 tons/ha (1.3 times lower than the world average)
- Export: 116K tons, $60 million, World share 4.5%
- Export Price: $520/ton (2.5 times lower than the world average)

Investment Potential: $157M (Govt 20%, Private 80%)

- Varieties and High-density plantation: 32.4
- Export Promotion: 0.1
- Better management practices: 5.8
- Harvest and post-harvest Losses: 57.8
- Solar drying: 42.1
- Improvement in Value Chain: 19.0

Assumptions

- Orchard area renovation: 20%
- Increase in yield by farm management: 20%
- Decrease in post-harvest losses: 10%
- Increase in dry dates by processing: 15%
- Increase in export quantity of dates: 25%

Feasibility and Benefits

- Investment: $157 million, NPV $41 million, IRR 25%
- Area: 80,982 ha, Beneficiaries: Direct 40,000, Indirect 280,000 Nos
- Increase in Income: Farm $300/ha, Beneficiary: $600

Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions
**Basmati Rice Clusters**

**Situation in Pakistan**
- **Production:** 9 million tons, world ranking 9
- **Yield:** 3.8 tons/ha, (1.3 times lower than the world average)
- **Export:** 3.9 million tons, $2.5 billion, world share 8.5%
- **Export price:** $527/ton (course) $900/ton (basmati) same as of the world

**Investment Potential:** $118M (Govt 10%, Private 90%)
- High-yielding varieties: 2.2
- Production management: 17.2
- Machine transplanting (50% subsidy): 43.6
- Mechanical harvesting: 35.9
- Food safety: MRL and Aflatoxin control: 16.2
- Improvement in parboiled rice making: 1.01
- Oil extraction from rice bran (3 units): 1.2

**Assumptions**
- Mechanized transplantation: 10%
- Improved variety and management practices: 7%
- Post-harvest-losses reduction: 5%
- Paddy bran to be converted to bran oil from 0 to 80%

**Feasibility and Benefits**
- Investment: $118 million, NPV $12 million, IRR 33%
- Area: 298,259 ha, Beneficiaries: Direct 150,000, Indirect 1,050,000 Nos
- Increase in Income: Farm $300/ha, Beneficiary: $600

**Funding/Financing Sources**
- PSDP + Development Partners, Private Investment + Financial Institutions
Apple Clusters

Situation in Pakistan

- Production: 77K tons, world ranking 10
- Yield: 8 tons/ha (2.4 times lower than the world average)
- Export: 528 tons, $0.2 million, world share negligible
- Export price: $438/ton (2 times lower than the world average)

Investment Potential: $118M (Govt 10%, Private 90%)

- Orchard renovation with high-density plantation (50% subsidy): 76.9
- Raising productivity by better management practices: 1.7
- Controlling harvest and post-harvest losses: 0.14
- Improvement in value chain to enhance quality: 30.0
- Apple juice units as a cottage industry (42 units): 9.3

Assumptions

- Increasing average yield: 15%
- Renovating apple orchards with high density orchards: 25%
- Reducing post-harvest losses from 30% to: 10%
- Increasing proportion of value addition: 10%

Feasibility and Benefits

- Investment: $118 million, NPV: $54 million, IRR: 26%
- Area: 67,759 ha, Beneficiaries: Direct 34,000, Indirect 238,000 Nos
- Increase in Income: Farm $350/ha, Beneficiary: $700

Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions,
## Chilly Clusters

### Situation in Pakistan

- **Production:** 105K tons, World ranking 6
- **Yield:** 2.25 tons/ha (1.2 times lower than the world average)
- **Export:** 2.7K tons, $7.5 million, world share negligible
- **Export price:** $2793/ton, same as of world average

### Investment Potential: $13M (Govt 10%, Private 90%)

<table>
<thead>
<tr>
<th>Component</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm management and varieties</td>
<td>6.3</td>
</tr>
<tr>
<td>Market linkages</td>
<td>0.3</td>
</tr>
<tr>
<td>Harvesting and post-harvest handling</td>
<td>2.0</td>
</tr>
<tr>
<td>Value chain infrastructure</td>
<td>1.0</td>
</tr>
<tr>
<td>Processing/drying (34 units)</td>
<td>3.4</td>
</tr>
</tbody>
</table>

### Assumptions

- Increase yield: 25%
- Reduce post-harvest losses: 15%
- Increase processing: 5%
- Increase export: 8%

### Feasibility and Benefits

- **Investment:** $13 million, NPV: $2.7 million, IRR: 34%
- **Area:** 15,055 ha, **Beneficiaries:** Direct 7,500 Indirect 52,000 Nos
- **Increase in Income:** Farm $900/ha, Beneficiary: $1800

### Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions
Tomato Clusters

Situation in Pakistan

- **Production:** 800K tons, world ranking 33
- **Yield:** 12 tons/ha (3.5 times less than the world average)
- **Export:** 15K tons, $ 3.7 million, world share: 0.17%
- **Export price:** $ 248/ton (5 times lower than world average)

Investment Potential: $ 11.4M (Govt 10%, Private 90%)

- High-yielding varieties and management practices: 2.1
- Market linkages for export: 0.9
- Mechanization to reduce post-harvest losses: 4.3
- Product value addition and quality improvement: 3.4
- Processing (9 units): 0.7

Assumptions of Analysis

- Increasing average yield: 20%
- Reducing post-harvest losses: 20%
- Improving quality resulting in price increase: 10%
- Increasing processing: 10%

Feasibility and Benefits

- Investment: $ 11.4 million, NPV: $ 3.0 million, IRR: 31%
- Area: 21,561 ha, Direct Beneficiaries 11,000  Indirect Beneficiaries: 77,000 Nos.
- Increase in Income: Farm $ 600/ha, Beneficiary: $1200

Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions
### Onion Clusters

#### Situation in Pakistan

- **Production:** 2.3 million tons, world ranking 6
- **Yield:** 15 tons/ha (1.3 times lower than the world average)
- **Export:** 304K tons, $124 million (3% of the world)
- **Export price:** $408/ton (Same as of world average)

#### Investment Potential: $8M (Govt 10%, Private 90%)

<table>
<thead>
<tr>
<th>Component</th>
<th>Investment Potential</th>
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</thead>
<tbody>
<tr>
<td>Research system and farm management</td>
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<tr>
<td>Export promotion</td>
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</tr>
<tr>
<td>Market linkages</td>
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<tr>
<td>Post-harvest losses</td>
<td>0.60</td>
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<tr>
<td>Processing (127 units)</td>
<td>2.06</td>
</tr>
</tbody>
</table>

#### Assumptions

- Increase average yield: 10%
- Reduce post-harvest losses: 10%
- Increase export-production ratio from 2% to 8%
- Processing Conversion of to dry onion: 5%
- Increase in export price: 10%

#### Feasibility and Benefits

- **Investment:** $8 million, **NPV:** $1.5 million, **IRR:** 30%
- **Area:** 16,366 ha, **Beneficiaries:** Direct 8,000, Indirect 56,000 Nos
- **Increase in Income:** Farm $650/ha, Beneficiary: $1300

#### Funding/Financing Sources

- PSDP + Development Partners, Private Investment + Financial Institutions
**Situation in Pakistan**

- **Production:** 2.3 million tons, world ranking: buffalo 4, cattle 12
- **Export:** 70K tons, $ 248 million, world share: 0.7%
- **Export price:** $ 3544/ton (1.5 times lower than the world average)

**Investment Potential:** $ 45M (Govt 25%, Private 75%)

- Research & Development: 9.5
- Capacity building: 11.1
- Establishment of modern cattle markets: 11.4
- Export promotion: 0.2
- Feed lot fattening (333 units): 9.4
- Small feed mills (167 units): 1.1
- Modernization of slaughterhouses (19 units): 2.6

**Assumptions**

- Reduce average calf mortality from 20% to 10%
- Increase growth rate of animals from 180 to 250 gm/day
- Increase export production ratio from 0.2% to 5%
- Increase beef value addition from 1 to 5%

**Feasibility and Benefits**

- Investment: $ 45 M, NPV: 25 million, IRR: 39%
- Animals: 2,328,395, Beneficiaries: Direct 100,000, Indirect 700,000 Nos
- Increase in Income: Farm $ 112/animal, Beneficiary: $ 257

**Funding/Financing Sources**

- PSDP + Development Partners, Private Investment + Financial Institutions
Reducing Environmental Impact

**Emissions**
- Overall carbon balance is +6,000,469 tCO2eq over 20 years, meaning that the analysed activities contribute to GHG emissions.
- Electricity consumption due to processing/building operations is a source of emissions (+1.4 million tCO2eq/20 years).
- New irrigation and building construction (in the Inputs category) contribute to emissions instead (+8.7 thousand tCO2eq and +609 thousand tCO2eq over 20 years).

**Mitigation**
- Interventions aimed at improving livestock productivity lead to a reduction in emissions (-3.9 million tCO2eq/20 years).
- Reduction in fertilizers and pesticide application (in the Inputs category) also contributes to emission reduction (-3 million tCO2eq/20 years).
- Energy audit to reduce energy leakages
- Installation of solar units on processing facilities, farm production/tube wells, etc. (ample sunshine)
HIHI-Agriculture Investment Symposium, February 28, 2023, Islamabad

• Organizers: FAO, ADB, IFC, Government of Pakistan/Board of Investment

• Organizations/Companies: 150

• Participation: 350 (Public, Private, Academia, Development Partners)

• Technology Display Booths: 43 Public and Private Companies

# Investment Potential and Economic Benefits - Summary

<table>
<thead>
<tr>
<th>Investment</th>
<th>NPV</th>
<th>IRR</th>
<th>Direct Ben.</th>
<th>Indirect Ben.</th>
<th>Income Inc</th>
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<tbody>
<tr>
<td><strong>Tomato</strong></td>
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</tr>
<tr>
<td>Investment: $11.5 M</td>
<td>NPV: $3.0 M</td>
<td>IRR: 31%</td>
<td>Direct Beneficiaries: 11,000 No</td>
<td>Indirect Beneficiaries: 77,000 No</td>
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<td><strong>Beef</strong></td>
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<tr>
<td>Investment: $45 M</td>
<td>NPV: $25 M</td>
<td>IRR: 39%</td>
<td>Direct Beneficiaries: 100,000 No</td>
<td>Indirect Beneficiaries: 700,000 No</td>
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<tr>
<td><strong>Chili</strong></td>
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<tr>
<td>Investment: $13 M</td>
<td>NPV: $2.7 M</td>
<td>IRR: 34%</td>
<td>Direct Beneficiaries: 7,500 No</td>
<td>Indirect Beneficiaries: 52,000 No</td>
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<td><strong>Dates</strong></td>
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<tr>
<td>Investment: $157 M</td>
<td>NPV: $41 M</td>
<td>IRR: 25%</td>
<td>Direct Beneficiaries: 40,000 No</td>
<td>Indirect Beneficiaries: 280,000 No</td>
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<tr>
<td><strong>Mango</strong></td>
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<tr>
<td>Investment: $158 M</td>
<td>NPV: $170 M</td>
<td>IRR: 25%</td>
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<td>Indirect Beneficiaries: 266,000 No</td>
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<td><strong>Onion</strong></td>
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<td>Direct Beneficiaries: 8,000 No</td>
<td>Indirect Beneficiaries: 56,000 No</td>
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<td><strong>Basmati Rice</strong></td>
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<td>Investment: $118 M</td>
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<td>Indirect Beneficiaries: 1,050,000 No</td>
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<tr>
<td><strong>Apple</strong></td>
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<tr>
<td>Investment: $118 M</td>
<td>NPV: $54 M</td>
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