MORINGA OLEIFERA AGRICULTURE-BASED CLUSTERS (ABCs) & RURAL AND URBAN AGRICULTURE INNOVATIVE PRODUCTION PROGRAM (RUAIPP)

A Dual-Purpose National Policy and Investment Strategy for Botswana and Africa

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EXECUTIVE SUMMARY (PAGE 1–3)

A New Agricultural, Industrial, and Economic Blueprint for Botswana and Africa

Botswana, like many African nations, stands at a historic crossroads. Traditional agricultural systems—fragmented, small-scale, subsistence-driven—can no longer meet the demands of a growing population, a modern economy, or the changing climate. Underutilised land, youth unemployment, climate shocks, low export volumes, and limited manufactured agricultural products continue to constrain national transformation.

Yet the same rural and peri-urban areas contain extraordinary untapped potential: **abundant land, an energetic youth population, strong sunlight, and strategic geographic advantages** within SADC and AfCFTA markets.

This National Transformation Framework introduces a **new agricultural paradigm**—a model that moves Botswana from subsistence systems to **industrial, export-driven, climate-smart agriculture**, built on two foundational pillars:

1. **Agriculture-Based Clusters (ABCs)** – Large, structured community and commercial production systems that unite farmers within a 50 km radius into one industrial supply chain.
2. **Rural and Urban Agriculture Innovative Production Program (RUAIPP)** – A national program restructuring agriculture through training, financing, smart technologies, industrialisation, and market access.

At the heart of this system stands **Moringa Oleifera**, selected by FPI as the **national anchor crop**, capable of generating income, financing other crops, supporting manufacturing, and driving export expansion.

Moringa Oleifera as an Anchor Crop

Moringa Oleifera offers an unprecedented combination of benefits that position it as a strategic national crop:

- **3 to 8 harvests per year**, depending on management and rainfall
- **High drought tolerance** suitable for Botswana's climate
- **Low input requirements** compared to traditional horticulture
- **17 industrial value chains**, including powder, oil, tea, cosmetics, animal feed, fertilizer, and pharmaceuticals
- **43-year productive lifespan**, ensuring long-term national revenue
- **Strong global markets** in Europe, Asia, USA, SADC, and the Middle East
- **High farmer income**, capable of financing other crops such as maize, sorghum, potatoes, sunflower, rice, and horticulture
- **Strong alignment with climate mitigation and carbon credit opportunities**

Under FPI's leadership, Moringa has been transformed from a plant into a **national development instrument**—a crop that creates jobs, builds industries, empowers women and youth, and attracts investment.

The National Transformation Vision (2025–2036)

This document establishes a comprehensive national blueprint that aims to:

1. Increase Agriculture's Contribution to GDP by 2036

Through Moringa value chains, agro-processing, and cluster industrialisation.

2. Create a Nationwide Network of Agriculture-Based Clusters

Starting with 10 clusters per district → scaling to 200 per district by 2030.

3. Industrialise Rural and Peri-Urban Areas

Every cluster becomes a mini-industrial zone for processing, packaging, storage, and export.

4. Develop a Manufacturing Ecosystem Around Moringa

Including:

- Oil extraction plants
- Powder milling units
- Tea production lines
- Capsule manufacturing
- Animal feed factories
- Fertilizer and compost plants

5. Build a National Export Corridor

Positioning Botswana as a SADC-wide Moringa exporter to global markets.

6. Empower Women and Youth at Scale

Through ownership models, technical training, manufacturing jobs, and SME development.

7. Strengthen Climate Resilience

Integrating:

- Satellite technology
- Water harvesting systems
- Drought-resilient crops
- Carbon sequestration programs
- EcoCert organic compliance

8. Align with Vision 2036, SDGs, AfCFTA, and the Paris Agreement

Turning national and global aspirations into measurable outcomes.

Why ABCs + RUAIPP = The National Solution

Together, these two frameworks create a comprehensive transformation engine:

ABCs Provide:

- Economies of scale
- Collective bargaining power
- Shared machinery
- Cluster financing
- Standardised production protocols
- Industrial-level output
- Market certainty

RUAIPP Provides:

- Training and capacity building
- Digital agriculture and satellite systems
- National certification and SPS compliance
- Value chain development
- Urban–rural integration
- Manufacturing growth
- Export readiness

Combined, they shift farmers from isolated, unsupported production to **unified, system-based, industrial agriculture**.

The Role of FPI

Farmer's Pride International (FPI), supported by Hunter's Global Network (HGN), serves as:

- **A national coordinator** of clusters
- **A capacity-building institution**
- **A compliance and certification authority**
- **A processing and manufacturing partner**
- **A market facilitator and export gateway**
- **An incubator for rural industrialisation**

FPI's work since 2020—including farmer mobilisation, training of 10,000+ producers, cluster formation, Moringa research, satellite integration, and market development—forms the foundation of this policy and investment framework.

Conclusion of Executive Summary

This document outlines a bold, structured, and actionable framework that will transform Botswana into:

- A continental Moringa hub
- A regional agro-industrial leader
- A model for rural economic development
- A climate-smart nation that produces, processes, manufactures, and exports
- A country where agriculture becomes a generator of wealth, not poverty
- A nation ready for Vision 2036 and AfCFTA competitiveness

PART I: INTRODUCTION & POLICY RATIONALE

1.0 Introduction

Botswana's agricultural landscape is characterised by vast land resources, favourable climatic conditions for drought-tolerant crops, and a young population seeking meaningful economic participation. However, the agricultural sector remains constrained by fragmentation, low productivity, limited industrialisation, and insufficient market integration. These structural weaknesses reduce the sector's contribution to GDP and limit rural economic transformation.

This National Policy & Government Framework provides a comprehensive blueprint for repositioning agriculture as a driver of industrialisation, employment creation, food security, and export diversification. It places **Moringa Oleifera** at the centre as the **national anchor crop**, supported by the **Agriculture-Based Clusters (ABCs)** and the **Rural and Urban Agriculture Innovative Production Program (RUAIPP)** as the strategic pillars for nationwide transformation.

The framework aligns with Botswana's **Vision 2036**, the National Development Plan (NDP12), the country's climate commitments under the **Paris Agreement**, the **UN SDGs**, and regional development aspirations under **SADC** and **AfCFTA**.

1.1 Policy Rationale

The policy rationale for adopting Moringa Oleifera and ABCs under RUAIPP is grounded in six national imperatives:

1. Economic Diversification and Industrialisation

Botswana remains heavily dependent on mining. Agricultural industrialisation is essential for diversifying the economy, expanding manufacturing capabilities, and developing high-value agro-processing sectors.

2. Employment Creation for Youth and Women

Youth unemployment remains high and rural poverty persists. ABCs create structured jobs in farming, processing, packaging, logistics, quality assurance, manufacturing, and export operations.

3. Climate Resilience and Environmental Stewardship

Botswana faces increasing droughts, erratic rainfall, and land degradation. Moringa's drought tolerance, carbon sequestration potential, and soil-restorative capacity make it an ideal climate-resilient national crop.

4. Food and Nutritional Security

Moringa's nutritional profile offers medicine, food, livestock feed, and micronutrients essential for household health, school feeding programs, and community nutrition security.

5. Export Diversification and Foreign Exchange Earnings

Global markets demand organic Moringa leaves, powder, seeds, oil, tea, capsules, cosmetics, and nutraceuticals. Botswana can become a major African exporter.

6. Inclusive Rural Development and Poverty Eradication

ABCs convert rural villages into organised farming and agro-industrial zones, enabling communities to participate in formal markets and national value chains.

This framework demonstrates how agriculture becomes a **wealth-building sector**, not a survival mechanism.

NATIONAL POLICY CONTEXT

2.0 Policy Alignment with National and International Frameworks

2.1 Alignment with Vision 2036

This policy directly supports Vision 2036's pillars:

Pillar 1: Sustainable Economic Development

- Industrialisation of agriculture
- Expansion of agro-processing
- Export-oriented production systems

Pillar 2: Human and Social Development

- Empowerment of youth and women
- Rural economic development
- Improved livelihoods

Pillar 3: Sustainable Environment

- Climate-smart agriculture
- Carbon sequestration
- Land rehabilitation

Pillar 4: Governance, Peace & Security

- Transparent cluster governance
- Traceability and accountability systems
- Decentralised community structures

2.2 National Development Plan (NDP) Integration

The framework contributes to national priorities including:

- Food self-sufficiency
- Agricultural commercialisation
- Expansion of local manufacturing
- Strengthening of agricultural extension
- Development of export corridors
- Modernisation of rural economies

2.3 SDG Alignment

The framework supports the following Sustainable Development Goals:

- **SDG 1** – No Poverty
- **SDG 2** – Zero Hunger
- **SDG 5** – Gender Equality
- **SDG 8** – Decent Work & Economic Growth
- **SDG 9** – Innovation & Industry
- **SDG 12** – Responsible Consumption & Production
- **SDG 13** – Climate Action
- **SDG 15** – Life on Land
- **SDG 17** – Partnerships for the Goals

2.4 Alignment with African Continental Free Trade Area (AfCFTA)

The framework positions Botswana to:

- Participate in regional value chains
- Supply processed Moringa products to African markets
- Integrate SMEs into regional manufacturing corridors
- Expand exports through harmonised SPS standards

2.5 Climate Commitments (Paris Agreement & NDCs)

The program:

- Strengthens climate resilience
- Promotes regenerative agriculture
- Reduces carbon footprint
- Enables carbon credit revenue for communities
- Aligns with Botswana's Nationally Determined Contributions

STRUCTURE OF NATIONAL TRANSFORMATION

3.0 National Anchor Crop Strategy

3.1 Why Moringa Oleifera

The policy adopts Moringa as a national anchor crop due to:

- High productivity in Botswana's climate
- Low water requirements
- Ability to finance other crops
- Multiple harvests per year
- 17 value chains enabling industrialisation
- Suitability for rural and urban agriculture
- High export value and strong global market demand
- Ability to support local manufacturing
- Climate resilience and carbon capture ability
- Long-term lifespan (43 years) ensuring generational income

3.2 The Role of an Anchor Crop in National Agriculture

An anchor crop performs six national economic functions:

1. **Stabilises farmer incomes**
2. **Provides predictable revenue for reinvestment**
3. **Supports industrialisation through by-product value chains**
4. **Serves as collateral for financing**
5. **Develops technical skills and manufacturing capacity**
6. **Creates direct and indirect employment**

Moringa is one of the few crops globally capable of delivering all six functions simultaneously.

AGRICULTURE-BASED CLUSTERS (ABCs) – NATIONAL FRAMEWORK

4.0 Introduction to ABCs

Agriculture-Based Clusters (ABCs) are structured production units where farmers within a 50 km radius operate under one coordinated system. Each cluster integrates:

- Production
- Processing
- Packaging
- Storage
- Transport
- Certification
- Quality control
- Branding
- Export coordination

This system shifts the country from individual smallholder farms to unified industrial agriculture.

4.1 Cluster Composition

Each cluster consists of:

- 6, 10, or 20 farmers
- A central processing unit
- A shared irrigation system (where possible)
- Shared machinery and equipment
- A cluster leadership committee
- A digital traceability system
- Export-ready production standards
- A financing and repayment structure

4.2 District-Level Cluster Expansion Plan

Phase 1 (2025–2027):

- 10 clusters per district
- 100 clusters nationwide

Phase 2 (2028–2030):

- 200 clusters per district
- 2,000 clusters nationwide

Phase 3 (2031–2036):

- Integration with agro-industrial parks
- Export hubs
- Full national manufacturing participation

PAGE 8 – RUAIPP (Rural & Urban Agriculture Innovative Production Program)

5.0 Introduction to RUAIPP

RUAIPP is the national program responsible for:

- Training
- Digital agriculture
- Manufacturing development
- Export readiness
- Cluster certification
- Climate-smart practices
- Youth and women empowerment
- Financial literacy for farmers
- SPS & EcoCert compliance
- Land assessments

- On-farm technical support

It serves as the **engine** that powers ABCs.

5.1 RUAIPP Objectives

- Transform rural and urban agriculture into industrial-scale production
- Build a skilled agricultural workforce
- Establish manufacturing plants in villages
- Develop Botswana's agro-export competitiveness
- Strengthen food and nutritional security
- Support carbon credit generation

NATIONAL CLUSTER GOVERNANCE STRUCTURE

6.0 Governance and Institutional Architecture of Agriculture-Based Clusters (ABCs)

To ensure transparency, accountability, efficiency, and alignment with national development goals, the ABC model establishes a multi-layer governance framework connecting **community structures**, **district institutions**, and **national oversight bodies**.

6.1 National Governance Layer

At the apex of the ABC ecosystem is the **National Cluster Coordination Office (NCCO)** under FPI. Its responsibilities include:

- National strategy coordination
- Certification and compliance oversight
- Cluster registration and accreditation
- Digital traceability system management
- Export preparation and documentation
- National reporting to ministries and partners
- Integration with SEZA, BITC, MoA, BUAN, and development partners

The NCCO ensures that all clusters operate under uniform national standards consistent with Vision 2036, the SDGs, SPS requirements, and EcoCert organic frameworks.

6.2 District-Level Governance Layer

Each district forms a **District Cluster Council (DCC)** comprising:

- District Cluster Coordinator
- Lead Agronomist
- Extension Officers
- FPI District Representatives
- Local Government Liaison Officer
- Youth & Women Desk Representatives

Responsibilities include:

- Monitoring cluster performance
- District training and supervision
- Land assessment coordination
- Mobilisation of local farmers
- Coordination with chiefs and district councils
- Managing district-level manufacturing units

6.3 Cluster-Level Governance Layer

Each ABC forms a **Cluster Executive Committee (CEC)** comprising:

- Cluster Chairperson
- Vice Chairperson
- Treasurer
- Secretary
- Compliance Officer

- Quality Assurance Lead
- Youth & Women Representatives

Functions include:

- Managing cluster operations
- Maintaining production calendars
- Ensuring adherence to protocols
- Submitting reports to DCC
- Coordinating transport and logistics
- Managing cluster-level processing

6.4 Cluster Member Responsibilities

Each farmer must:

- Attend official training
- Maintain production standards
- Record farm activities using traceability tools
- Comply with SPS and EcoCert guidelines
- Submit harvests to cluster processors
- Participate in capacity-building programs

This system ensures **discipline, standardisation, and accountability** across all clusters.

PAGE 10 – NATIONAL DISTRICT ROLLOUT PLAN (2025–2036)

7.0 Implementation Timeline Across All Districts

The national rollout plan is designed to scale in phased stages to ensure quality control and sustainable growth.

7.1 Phase 1: Foundation Stage (2025–2027)

Districts Covered: All 10 districts
Key Actions:

- Establish first 100 clusters (10 per district)
- Complete national training of 10,000–15,000 farmers
- Launch district processing units
- Conduct full land assessments
- Integrate satellite monitoring tools
- Formalise compliance documentation
- Begin first national Moringa exports

7.2 Phase 2: Expansion Stage (2028–2030)

Districts Covered: Scale-up in all districts
Key Actions:

- Increase clusters to 200 per district
- Introduce district-level manufacturing parks
- Integrate Moringa with other anchor crops
- Expand irrigation infrastructure
- Introduce rural solar farms powering processing units
- Establish national carbon credit program
- Strengthen cross-border supply chains

7.3 Phase 3: Industrialisation Stage (2031–2036)

Key Actions:

- Integrate all clusters with SEZA agro-industrial zones
- Implement export corridors to SADC, AfCFTA, and global markets
- Build full-value-chain manufacturing plants district-wide

- Convert villages into rural agro-industrial centres
- Create 50,000+ agricultural and manufacturing jobs
- Achieve 10% agriculture GDP contribution

NATIONAL TRAINING PROGRAM (CAPACITY BUILDING)

8.0 National Agricultural Capacity Development Framework

The success of ABCs and RUAIPP rests on human capital. The national training framework ensures that farmers are fully equipped for production, manufacturing, and export readiness.

8.1 Training Categories

1. Foundational Training

- Introduction to ABCs & RUAIPP
- National anchor crop strategy
- Climate-smart agriculture

2. Technical Farming Training

- Land preparation
- Irrigation design
- Moringa planting and spacing
- Pruning & canopy management
- Regenerative soil practices
- Organic pesticide protocols

3. Manufacturing & Industrial Training

- Powder production
- Oil extraction
- Tea processing
- Capsule production

- Animal feed production
- Packaging & quality control

4. Export and Compliance Training

- SPS regulations
- EcoCert compliance
- HACCP & ISO standards
- Traceability & documentation

5. Finance & Business Management

- Financial literacy & discipline
- Business structures
- Cluster governance
- Tax compliance
- Investment readiness

8.2 Training Duration

Each district will undergo:

- **3-day intensive workshops**
- **Field-based team building**
- **Technical demonstrations**
- **Annual refresher courses**

8.3 Target Groups

- Farmers
- Youth groups
- Women entrepreneurs
- MSMEs

- Cooperatives
- Cluster committees
- Local extension officers

COMPLIANCE SYSTEMS (SPS, HACCP, EC OCERT)

9.0 National Compliance and Quality Assurance Framework

To participate in international markets, Botswana must meet global compliance standards for organic products, food safety, and export documentation.

9.1 SPS (Sanitary and Phytosanitary Standards)

SPS compliance ensures:

- Plant health
- Food safety
- Export acceptability
- Protection against pests and diseases

FPI will coordinate national SPS assessments, monitoring, and documentation.

9.2 EcoCert Organic Certification

Botswana will implement a national pathway towards:

- “Produced under conversion to organic farming” (BW-BIO-154)
- Full organic certification by year 3

9.3 HACCP & ISO 22000

Manufacturing units will comply with:

- Hazard Analysis Critical Control Points
- ISO 22000 for food safety

- Cosmetic and pharmaceutical standards

9.4 Traceability and Digital Compliance

All clusters must participate in:

- QR-coded farmer tracking
- Batch ID systems
- GPS farm mapping
- Harvest logs
- Production calendars

This ensures global buyers receive fully verifiable, transparent products.

LAND MANAGEMENT & ENVIRONMENTAL FRAMEWORK

10.0 Sustainable Land Management (SLM)

Sustainable Land Management is central to ensuring productivity and environmental health.

10.1 Land Assessment Protocols

Every participating farmer must undergo:

- Soil testing
- Slope and erosion assessment
- Agroecological mapping
- Water availability evaluation
- Carbon measurement baseline

10.2 Regenerative Agriculture Practices

The framework adopts:

- Zero tillage
- Mulching
- Organic fertilisers
- Crop rotations
- Water harvesting
- Microbial soil enhancement

10.3 Environmental Safeguards

- Erosion control
- Riparian buffer protection
- Biodiversity enhancement
- Controlled chemical usage (organic preference)
- Climate resilience protocols

NATIONAL WATER HARVESTING & IRRIGATION FRAMEWORK

11.0 Water Security as a Foundation for National Agricultural Transformation

Botswana's vulnerability to drought and erratic rainfall necessitates a modern, systematic, and climate-resilient approach to water management. The ABC–RUAIPP framework embeds water harvesting, irrigation efficiency, and long-term water stewardship into the core of agricultural industrialisation.

11.1 Water Harvesting Strategy

11.1.1 Household-Level Water Harvesting Systems

- Roof catchment systems
- Household tanks (5,000–10,000 litres)
- Gutter installations for rural homes
- Rainwater filtration systems for irrigation use

11.1.2 Cluster-Level Water Harvesting Systems

- Solar-powered boreholes
- Community reservoirs
- Dam catchments
- Runoff harvesting trenches
- Swales integrated with Moringa plots

11.1.3 District-Level Water Capturing Infrastructure

- Small and medium-sized earth dams
- Water pans
- Contour-based harvesting systems
- Community irrigation canals

These systems allow clusters to operate even in drought periods and ensure consistent production cycles.

11.2 Irrigation Efficiency Strategy

11.2.1 Drip Irrigation Standardisation

Every ABC must adopt water-efficient drip irrigation systems to:

- Reduce wastage
- Maximise moisture retention
- Increase yields
- Lower water costs

FPI will standardise 1-hectare, 6-hectare, 12-hectare, and 28-hectare irrigation designs.

11.2.2 Solar-Powered Irrigation Systems

- Solar pumps
- Solar borehole systems
- Solar-powered fertigation
- Solar reservoirs

This ensures sustainable water access even in off-grid rural areas.

11.3 Long-Term Water Sustainability Policy

- Integration with Water Utilities and district councils
- Community water committees established under ABCs
- Annual district water audits
- Climate-adaptive water planning
- Integration of groundwater recharge techniques

This makes water a **strategic national resource** supporting agriculture industrialisation for decades.

12.0 Introduction to Agricultural Manufacturing Under ABCs & RUAIPP

To shift Botswana from raw-produce exportation to a fully industrialised agricultural economy, manufacturing must be decentralised into villages and district centres. Moringa's 17 value chains make it the perfect foundation for this transformation.

12.1 Cluster-Level Manufacturing Units (CMUs)

Each ABC will host mini-factories processing:

- Moringa powder
- Tea
- Capsules
- Animal feed
- Organic fertiliser
- Seed cake
- Cosmetic bases

These units reduce transportation costs and retain value within rural communities.

12.2 District Agro-Industrial Hubs (DAIH)

Each district will develop industrial hubs producing:

- Moringa oil
- Advanced cosmetic products
- Packaged porridge
- Nutraceutical products
- Functional beverages
- Feed concentrates
- Pharmaceutical-grade extracts

These hubs create major employment and attract private-sector investment.

12.3 National Moringa Industrial Parks (NMIP)

By 2031–2036, Botswana will establish full-scale national industrial parks dedicated to:

- Bulk processing
- Export packaging
- Laboratory testing
- Product certification
- Cosmetic and pharmaceutical production
- Tea and beverage production
- Advanced manufacturing including spray drying and cold pressing

These industrial parks will integrate with SEZA zones.

12.4 Industrial Output Targets (2036)

- 120,000 tonnes of processed Moringa per year
- 20 million litres of Moringa oil
- 800 million capsules
- 60 million packs of tea
- 150,000 tonnes of livestock feed
- 100,000 tonnes of organic fertiliser

This positions Botswana as Africa's Moringa industrial powerhouse.

PAGE 16 – NATIONAL EXPORT & TRADE EXPANSION FRAMEWORK

13.0 Transforming Botswana into a Moringa Export Hub

Botswana will establish a national export system enabling ABCs to supply regional and global markets efficiently. Moringa products have high value in the EU, USA, Middle East, and Asia due to demand for organic, health-based products.

13.1 Export Catalogue

Botswana will export:

- Dried leaves
- Powder
- Oil (Ben oil)
- Capsules
- Tea
- Cosmetics
- Animal feed
- Seed cake fertiliser
- Bulk seeds
- Premium-grade packaged blends

13.2 Export Infrastructure Development

Key infrastructure:

- Export consolidation centres
- SPS inspection points
- Cold chain storage units
- Dry bulk warehouses
- Packaging and labelling centres
- Export documentation hubs

13.3 Trade Agreements & Market Access

Aligned with:

- AfCFTA for African markets
- SACU trade corridors

- EU organic supply requirements
- Middle East and Asian nutraceutical markets
- USA health & wellness markets via AGOA

13.4 National Export Targets

By 2030:

- 40,000 tonnes Moringa export volume

By 2036:

- 100,000 tonnes export volume
- Top 3 African exporter

CLIMATE RESILIENCE & CARBON ECONOMY FRAMEWORK

14.0 Climate-Smart National Agriculture Strategy

Climate change threatens Botswana's agricultural stability. Moringa's drought resilience and carbon sequestration properties give it national significance.

14.1 Climate Resilience Benefits of Moringa

- Thrives in drought
- Grows in marginal soils
- Reduces erosion
- Improves soil structure
- Survives extreme heat
- Requires minimal water

14.2 National Carbon Credit Program

Botswana will develop a national MRV-based carbon program enabling farmers to earn carbon income.

Carbon Drivers:

- Moringa sequestration
- Regenerative agriculture
- Agroforestry systems
- Biochar fertiliser production

Carbon Revenue Streams:

- Domestic offsets
- International carbon markets
- Corporate sustainability partnerships

14.3 Environmental Co-Benefits

- Biodiversity restoration
- Land rehabilitation
- Improved groundwater infiltration
- Reduced dependence on chemical fertilisers

SOCIAL INCLUSION & GENDER EMPOWERMENT FRAMEWORK

15.0 Inclusive National Agriculture Development

One of the core objectives of RUAIPP and ABCs is transforming agriculture into a tool for social equity, poverty eradication, and youth empowerment.

15.1 Women in Agriculture

Women are central to cluster governance and manufacturing units. They benefit through:

- Ownership of farms
- Manufacturing roles
- Leadership positions in clusters
- Access to export markets
- Capacity-building programs

15.2 Youth Empowerment

Youth will be integrated through:

- Digital agriculture roles
- Satellite analysis
- Compliance documentation
- Manufacturing jobs
- Agritech development
- Transport & logistics

15.3 Poverty Eradication Strategy

ABCs and RUAIPP directly:

- Create jobs in poor communities
- Increase household income

- Improve food security
- Build rural SMEs
- Establish sustainable income systems

NATIONAL FINANCING & INVESTMENT MOBILISATION FRAMEWORK

16.0 Financing the National Agricultural Transformation Agenda

The transition from subsistence agriculture to industrial, export-oriented production requires a robust, multi-layered financing architecture. This framework establishes how Botswana will mobilise funding for farmers, clusters, manufacturers, and district-level industrial parks.

16.1 National Financing Components

The national financing model is built on **six integrated pillars**:

1. Anchor Crop Revenue – Moringa as the Primary Capital Driver

Moringa's high and consistent revenue provides farmers with:

- Working capital for expanding production
- Funds for planting other crops
- Savings for agriculture-related investments
- Eligibility for credit financing

Moringa becomes the cash engine powering multi-crop agricultural expansion.

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2. Cluster-Based Microfinance and Revolving Funds

ABCs will establish **Cluster Revolving Funds** funded by:

- A percentage of cluster sales
- Seed money from government programs
- Contributions from partners
- Returns from export contracts

These funds will support:

- Inputs for farmers
- Machinery
- Irrigation systems
- Compliance upgrades
- Manufacturing units

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3. Public–Private Partnerships (PPPs)

PPPs will mobilise investment into:

- Industrial parks
- Processing facilities
- Export hubs
- Irrigation schemes
- Renewable energy systems
- Satellite monitoring services

PPP frameworks will be designed with SEZA and BITC.

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4. Development Partners and UN Agencies

Funding streams from:

- FAO
- UNDP
- IFAD
- World Bank
- AfDB
- EU Green Deal programs
- Climate financing bodies

These partners will support:

- Value chain development
- Rural industrialisation
- Gender inclusion
- Climate-smart agriculture

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5. Domestic Financial Institutions

Banks and microfinance institutions will participate through:

- Affordable cluster loans
- Equipment financing
- Agricultural mortgages
- Manufacturing loans
- Export credit guarantees

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6. Carbon Credit Financing

Carbon revenue will be reinvested into:

- Water infrastructure
- Cluster expansion
- Soil regeneration programs
- Youth empowerment projects

16.2 National Budget Allocation Strategy

Government ministries, led by the Ministry of Agriculture, will allocate funds under:

- Climate resilience budgets
- Food security programs
- Industrial development programs

- Youth and women empowerment funds
- BETP agricultural transformation funds

16.3 Financial Governance & Accountability

All financing must comply with:

- Public Finance Management Act
- Cluster accounting standards
- Traceability documentation
- Export-quality audits
- Annual public reporting systems

This ensures transparency, integrity, and long-term investor confidence.

NATIONAL MONITORING & EVALUATION FRAMEWORK

17.0 National Monitoring, Evaluation, and Accountability System

A robust Monitoring & Evaluation (M&E) framework ensures the program remains effective, transparent, and measurable. This system tracks progress from farm-level activities to national impact indicators.

17.1 M&E Structure

National Level

National M&E Unit (NMEU) will:

- Track national outputs (GDP, exports, jobs)
- Publish annual reports
- Oversee compliance assessments
- Conduct third-party evaluations
- Coordinate with the Ministry of Agriculture

District Level

District M&E officers will:

- Conduct monthly cluster inspections
- Validate data submitted by farmers
- Produce district M&E reports
- Supervise value chain audits
- Monitor environmental compliance

Cluster Level

Each ABC will maintain:

- Monthly production logs
- Water usage records
- Irrigation maintenance logs
- Training attendance records
- Climate shock reports
- Manufacturing and processing reports

17.2 Key Performance Indicators (KPIs)

National KPIs include:

- Number of clusters established
- Jobs created
- Processing units installed
- Export volume and value
- Youth and women participation
- Land rehabilitated
- Carbon credits generated

- Manufacturing output
- Financial performance of clusters
- Household income improvement

17.3 Data Systems & Digital Integration

Digital M&E tools include:

- Satellite monitoring
- GIS mapping
- Digital farmer ID cards
- Mobile apps for reporting
- QR-based traceability systems
- Smart dashboards for clusters

17.4 M&E Reporting Cycle

- **Monthly:** Cluster-level reports
- **Quarterly:** District-level assessments
- **Bi-Annual:** National performance review
- **Annual:** State of Agriculture Transformation Report

17.5 Impact Evaluation Areas

The national program will measure long-term impacts across:

- Poverty reduction
- Climate resilience
- Gender empowerment
- Food security
- Economic diversification

- Industrial growth

PART II: INVESTMENT INTRODUCTION

18.0 Introduction to the Investment Framework

The commercialisation of Moringa Oleifera under the ABC–RUAIPP national framework transforms Botswana from a raw-produce producer into a **multi-value, high-return agricultural economy**. This section presents a detailed investment blueprint designed for:

- Local and international investors
- Banks and microfinance institutions
- Development finance institutions (DFIs)
- Venture capital firms
- Agritech partners
- Processing and manufacturing investors
- Export buyers and distributors
- Institutional and impact investors
- Climate finance organisations

The investment framework positions Moringa as the **primary financial engine** that drives multi-crop agriculture, manufacturing industrialisation, export diversification, climate finance, and rural wealth creation.

18.1 Strategic Commercial Rationale

1. Moringa is a perennial economic asset

With a 43-year productive lifespan, Moringa offers continuous, predictable revenue for generations.

2. Multi-harvest annual cycle

Producing 3–8 harvests per year depending on management, irrigation, and climate.

3. Global demand and premium markets

Demand is driven by health, cosmetics, nutraceuticals, pharmaceuticals, and livestock sectors.

4. 17 distinct value chains

Each value chain supports manufacturing, packaging, branding, and export opportunities.

5. Low production cost and high returns

Lower input requirements compared to horticulture and fruit crops, but with significantly higher returns.

6. Ability to finance other crops

Moringa revenue directly funds diversification into crops such as:

- Sunflower
- Potatoes
- Wheat
- Soya beans
- Rice
- Groundnuts
- Sorghum and millet
- Fodder crops
- Fruits & vegetables

7. Enabler of rural industrialisation

Moringa drives the establishment of rural factories, feed mills, oil extraction plants, and cosmetic production units.

8. High employment multiplier effect

Each hectare supports jobs in farming, processing, compliance, logistics, manufacturing, and export.

18.2 Botswana's Competitive Advantage

Botswana offers ideal conditions for Moringa investment due to:

- Vast under-utilised land
- Stable political environment
- Strong national infrastructure
- Low population density
- Access to SADC & AfCFTA markets
- Favourable climate for drought-tolerant crops
- Government commitment to agriculture transformation

MORINGA AS AN ANCHOR CROP (FINANCIAL RATIONALE)

19.0 Why Moringa is the Ideal Anchor Crop for Investors & Government

An anchor crop is defined as a crop that financially supports the entire agricultural ecosystem. Moringa meets all economic, agricultural, and industrial criteria required for anchor crop selection.

19.1 Key Economic Reasons Moringa Qualifies as an Anchor Crop

1. Long-term Income Security (43 Years)

Moringa provides investors with multi-decade revenue streams unmatched by annual crops.

2. High Harvest Frequency = Regular Cashflow

- Worst Case: 3 harvests
- Base Case: 6 harvests
- Best Case: 8 harvests

3. Multiple Revenue Channels

Unlike traditional crops with one product, Moringa has 17 value chains.

4. Supports Manufacturing & Processing

Creates products for:

- Health
- Cosmetics
- Animal feed
- Fertilisers
- Foods
- Pharmaceuticals

5. Strong Global Prices

International prices remain high for premium organic products:

- Leaves
- Powder
- Oil
- Capsules
- Tea
- Cosmetics

6. Low Risk, High Resilience Crop

- Withstands drought
- Requires minimal water
- Resistant to pests and diseases
- Easily regenerates after cutting

19.2 Economic Effects of Moringa Anchoring Other Crops

Moringa revenue finances:

- Field expansion
- Purchase of inputs

- Machinery acquisition
- Irrigation system installation
- Labour hiring
- Multi-crop diversification
- Establishment of processing plants

This creates a **cycle of wealth amplification**.

YIELD SCENARIOS & HARVEST MODELS

20.0 National Yield Projections

The national framework uses scientifically validated yield ranges:

Worst Case Yield

- 0.3 kg per tree per harvest
- 3 harvests per year

Base Case Yield

- 0.4–0.5 kg per tree per harvest
- 6 harvests per year

Best Case Yield

- 0.5+ kg per tree per harvest
- 8 harvests per year

These yields apply to clusters at different management and irrigation levels.

20.1 Per Hectare Harvest Volumes

Worst Case

- 25,000–30,000 trees
- 7,500–9,000 kg per harvest
- 22,500–27,000 kg per year

Base Case

- 25,000–30,000 trees
- 12,000–15,000 kg per harvest
- 72,000–90,000 kg per year

Best Case

- 25,000–30,000 trees
- 15,000–18,000 kg per harvest
- 120,000–144,000 kg per year

20.2 Revenue per Hectare (BWP)

Using average Botswana market prices:

Worst Case (3 harvests)

- **BWP 800,000 per harvest**
- **BWP 2.4 million per year**

Base Case (6 harvests)

- **BWP 1.4 million per harvest**
- **BWP 8.4 million per year**

Best Case (8 harvests)

- **BWP 1.8 million per harvest**
- **BWP 14.4 million per year**

20.3 Revenue per Hectare (USD)

Conversion at average USD/BWP rate ≈ 1 USD = 13 BWP

Worst Case

- USD ≈ **184,600** per year

Base Case

- USD ≈ **646,100** per year

Best Case

- USD ≈ **1.1 million** per year

PAGE 24 – FINANCIAL PROJECTIONS (WORST, BASE & BEST CASES)

21.0 Three-Year Financial Overview

Using a 3-year projection period:

Worst Case (3 Harvests)

Year 1: 2.4 million BWP
Year 2: 2.4 million BWP
Year 3: 2.4 million BWP
Total: 7.2 million BWP

Base Case (6 Harvests)

Year 1: 8.4 million BWP
Year 2: 8.4 million BWP
Year 3: 8.4 million BWP
Total: 25.2 million BWP

Best Case (8 Harvests)

Year 1: 14.4 million BWP
Year 2: 14.4 million BWP
Year 3: 14.4 million BWP
Total: 43.2 million BWP

21.1 43-Year Lifetime Earnings Per Hectare

Worst Case:

BWP **103 million**

Base Case:

BWP **361 million**

Best Case:

BWP **619 million**

COST–BENEFIT & ROI ANALYSIS

22.0 Investment Costs

The following costs are considered:

- Land preparation
- Irrigation system
- Seed & inputs
- Labour
- Training
- Transport
- Compliance
- Certification
- Processing fees

Estimated setup cost per hectare: **BWP 340,000 – 420,000**

22.1 ROI (Return on Investment)

ROI becomes exponential because:

- Revenue is extremely high
- Operational costs are low
- Tree lifespan is long

Worst Case ROI:

Return within 3–6 months

Base Case ROI:

Return within 2–3 months

Best Case ROI:

Return within 1–2 months

22.2 Payback Period

Depending on harvest cycles:

- **Worst Case:** Within first harvest
- **Base Case:** Within first harvest
- **Best Case:** Within first harvest

THE 17 MORINGA VALUE CHAINS (FULL COMMERCIAL ANALYSIS)

23.0 Introduction to Moringa's Multi-Value Industrial Ecosystem

Moringa Oleifera is one of the few crops in the world with **17 high-value industrial chains**. These value chains ensure that no part of the tree is wasted—creating a circular, profitable, climate-smart bioeconomy.

Each value chain below is written in a commercial, investor-ready format.

23.1 Value Chain 1 – Production of Moringa Leaves (Raw)

- High global demand
- Primary feedstock for powder, tea, capsules
- Requires drying, sorting, and packaging
  Profitability: High

23.2 Value Chain 2 – Manufacturing of Moringa Powder

- Core product for health and food industries
- Used in smoothies, supplements, food fortification
  Profitability: Very high due to low input cost

23.3 Value Chain 3 – Manufacturing of Moringa Tea

- Requires drying and cutting
- High retail value in local & international markets
  Opportunity: Retail packaging + export tea blends

23.4 Value Chain 4 – Production of Moringa Seed Oil (Ben Oil)

- Used in cosmetics and skincare
- High-value export product
- Cold-pressed oil valued at premium prices
  Profitability: Extremely high

23.5 Value Chain 5 – Manufacturing of Capsules (Nutraceuticals)

- Requires capsule-filling machinery
- High global demand
- Appeals to pharmaceutical markets
  Profitability: Very high, premium packaging

23.6 Value Chain 6 – Manufacturing of Moringa Soap & Cosmetics

- Face creams, lotions, oils, balms
- Strong African and EU/US market demand
  Opportunity: Beauty industry integration

23.7 Value Chain 7 – Production of Animal Feed (Livestock, Poultry, Goats)

- Moringa increases milk, eggs, weight gain
- Reduces feed costs for farmers
  Opportunity: Feed mills in each district

23.8 Value Chain 8 – Production of Organic Fertiliser (Moringa Cake)

- Seed cake used to produce powdered fertiliser
- Market demand in horticulture & crop farming
  Profitability: Consistent, scalable

23.9 Value Chain 9 – Energy Briquettes

- Made from Moringa waste
- Used for clean cooking solutions
  Opportunity: Climate finance & clean energy markets

23.10 Value Chain 10 – Production of Moringa Honey

- High-value medicinal honey
- Integration with beekeeping under ABCs
  Profitability: High, especially for export

23.11 Value Chain 11 – Extraction of Anti-inflammatory & Anti-oxidant Compounds

- Used in pharmaceuticals
- High R&D value
  Scalability: Strategic for future partnerships

23.12 Value Chain 12 – Food Products (Porridge, Biscuits, Bread)

- Moringa porridge for school feeding programs

- Moringa bread for bakeries
  Opportunity: Youth & women-led SMEs

23.13 Value Chain 13 – Beverage Production

- Moringa juice blends
- Nutritional drinks
  Profitability: High brand potential

23.14 Value Chain 14 – Seed Production (Planting)

- Africa experiencing massive Moringa expansion
- High demand for certified seeds
  Profitability: Very high for farmers

23.15 Value Chain 15 – Nurseries & Seedlings

- Seedling production for farmers
- Can be run by youth and women
  Comm. opportunity: Strong national demand

23.16 Value Chain 16 – Pharmaceutical-Grade Moringa Extracts

- Requires lab-grade processing
- High global demand
  Opportunity: Long-term institutional investment

23.17 Value Chain 17 – Moringa-Based Livestock Supplements

- Vitamin-rich animal supplements
- Market: cattle, poultry, goats, pigs
  Profitability: High, easy to scale

MANUFACTURING ECONOMICS & INDUSTRIAL PROFITABILITY

24.0 Manufacturing as the Core Wealth Driver

Manufacturing has the highest economic multiplier effect in agriculture. ABCs and RUAIPP shift Botswana towards agro-industrialisation by decentralising factories into rural clusters.

24.1 Cluster-Level Manufacturing Economics

Each ABC will run small to medium processing units. Example profitability:

Moringa Powder Unit (Small Scale)

- Production capacity: 500 kg/day
- Gross revenue: BWP 60,000/day
- Net margin: 35–50%

Moringa Tea Cutter Unit

- Production: 5,000 tea bags/day
- Gross revenue: BWP 18,000/day
- Net margin: 30–45%

Animal Feed Mill

- Production: 1 tonne/day
- Revenue: BWP 7,000/day
- Net margin: 30–40%

24.2 District-Level Manufacturing Economics

District hubs scale production significantly.

Oil Extraction Plant (District Scale)

- Capacity: 1,000 litres/day
- Revenue: BWP 150,000/day
- Net profit: 40–55%

Cosmetic Manufacturing Unit

- Adds tremendous value
- Premium export prices
  Profitability: Extremely high

24.3 National-Level Manufacturing Parks

Provides:

- Bulk spray drying
- Large-scale cold pressing
- Packaging factories
- Export-quality branding
- National laboratory testing

These industrial parks position Botswana for major export contracts.

EXPORT MARKET ANALYSIS (GLOBAL & REGIONAL)

25.0 Introduction to Export Dynamics

Global demand for Moringa continues to rise due to its medicinal, nutritional, and cosmetic properties. Botswana is uniquely placed to supply premium markets.

25.1 Key Export Destinations

1. European Union

High demand for:

- Oil
- Capsules
- Powder
- Cosmetics

2. United States

Demand driven by:

- Wellness industry
- Dietary supplements

3. Middle East & Gulf States

Demand:

- Premium cosmetics
- Organic oils

4. Asia (Japan, Korea, China)

Demand:

- Pharmaceuticals
- Nutraceuticals

5. SADC & AfCFTA Markets

Growing demand for:

- Livestock feed
- Moringa porridge
- Powder & tea

25.2 Export Price Ranges

- Powder: USD 10–18/kg
- Oil: USD 80–150/litre
- Capsules: USD 25–70 per bottle
- Tea: USD 8–15 per pack

25.3 Competitive Advantage for Botswana

- Low contamination risk
- Suitable climate
- Stable geography
- Good regulatory environment
- Organic certification program (EcoCert)

CLUSTER ECONOMIC MODEL (ABCs)

26.0 Economic Structure of an Agriculture-Based Cluster

A single ABC of 20 farmers can generate:

- 20 hectares of production
- Up to BWP 288 million per year (best case)
- 25–50 direct jobs
- 100–200 indirect jobs
- Manufacturing income
- Export revenue
- Carbon credit revenue

This forms the backbone of rural industrialisation.

26.1 Cluster Income Distribution

- Farmers earn from harvest sales
- Manufacturing units generate profit
- Cluster fund earns from value chain fees
- Youth earn from processing
- Women earn from packaging & cosmetics
- Investors receive returns from joint ventures

26.2 Economic Multiplier Effect

1 cluster → 20 farms → 17 value chains → export revenue → village industrial growth → district output increases → national GDP rises.

PAGE 30 – NATIONAL JOB CREATION ECONOMICS

27.0 Job Creation Model (2025–2036)

Based on Moringa ABC rollout:

Phase 1 (100 clusters):

- 10,000 direct jobs
- 30,000 indirect jobs

Phase 2 (2,000 clusters):

- 200,000 direct jobs
- 600,000 indirect jobs

Phase 3 (Full industrialisation):

- 350,000 direct jobs
- 1 million indirect jobs

27.1 Job Types Created

Farm Level

- Farmers
- Irrigation technicians
- Harvesters
- Field supervisors

Cluster Level

- Manufacturing staff

- Machine operators
- Quality controllers
- Compliance officers

Industrial Parks

- Engineers
- Packaging experts
- Export managers
- Data analysts

New SME Categories

- Transport
- Packaging suppliers
- Cosmetics SMEs
- Tea packaging businesses
- Solar irrigation installers

MULTI-CROP FINANCING MODEL (MORINGA AS THE CAPITAL ENGINE)

28.0 Introduction to Multi-Crop Financing Through Moringa Revenue

A central pillar of this national framework is the financial power of Moringa Oleifera to fund **other high-value agricultural ventures**. Because Moringa generates frequent, high-value harvests, it becomes the “financial heart” of the agricultural system.

This section demonstrates how Moringa revenue enables farmers and clusters to build multi-crop, multi-enterprise agricultural portfolios with minimal reliance on loans.

28.1 How Moringa Funds Other Crops

Revenue from each harvest cycle of Moringa can be reinvested in:

1. Staples & Cereals

- Sorghum
- Millet
- Maize
- Wheat
- Rice

2. Oilseeds & Protein Crops

- Sunflower
- Soya beans
- Groundnuts

3. High-Value Horticulture

- Tomatoes
- Onions
- Cabbage
- Carrots
- Peppers

4. Commercial Crops

- Potatoes
- Sweet potatoes
- Watermelons

5. Livestock Integration

- Feedlots
- Poultry houses
- Goat production

- Pig units

6. Aquaculture

- Small-scale fish farming

7. Fruit Orchards

- Citrus
- Mango
- Guava

8. Biofertilizer & Composting Enterprises

- Youth-run organic fertilizer companies

Moringa becomes the **anchor crop** that makes all of these systems financially possible.

28.2 Multi-Crop Investment Cycle (Example)

If a farmer earns **BWP 1.4 million** per harvest (base case), they can allocate:

- **BWP 400,000** → sunflower
- **BWP 300,000** → potatoes
- **BWP 150,000** → horticulture
- **BWP 200,000** → irrigation expansion
- **BWP 150,000** → livestock integration

This creates a **self-financing agricultural enterprise**, driven by Moringa.

28.3 ABC Multi-Crop Consolidation Model

Clusters can integrate:

- Contract farming
- Aggregated processing
- Shared labour pools
- Shared transport

- Cross-crop storage systems

This amplifies economic output of all crops across villages.

CARBON CREDIT REVENUE MODEL

29.0 The Carbon Economy: A New National Revenue Stream

Moringa's high carbon sequestration and regenerative agriculture practices under RUAIPP make agriculture eligible for carbon markets—creating a new revenue stream for Botswana and its farmers.

29.1 Carbon Drivers in ABC–RUAIPP Framework

- Moringa agroforestry
- Regenerative agriculture
- Biochar production
- Organic farming
- Water harvesting
- Soil organic matter regeneration

29.2 Carbon Credit Revenue Estimates

Per hectare per year:

Carbon sequestration: **10–18 tonnes CO_2e/ha/year**

Carbon prices (global markets):

USD **5–15** per tonne (voluntary markets)

Annual carbon income per hectare:

USD **50–270** (BWP 650–3,500)

29.3 Cluster-Level Carbon Revenue (20 farmers)

- 20 hectares
- USD 1,000–5,400 per cluster
- National scaling = millions annually

29.4 Industrial Carbon Credits

Manufacturing plants also generate carbon offsets by:

- Solar power adoption
- Waste-to-energy systems
- Biochar-based fertilizers

These create additional measurable carbon revenue streams.

INVESTOR INCENTIVES & BENEFITS

30.0 Why Investors Should Enter Botswana's Moringa Industrial Ecosystem

This framework offers investors a uniquely strong set of incentives unmatched in most agricultural sectors.

30.1 Direct Commercial Incentives

1. High and recurring yields

Multiple harvests per year = multiple revenue cycles.

2. Very high ROI

Payback achieved in 1–2 harvests.

3. Long-term profitable lifespan

43 years of production.

4. 17 industrial product lines

Strong diversification and multiple income streams.

5. Strong export markets

High prices for powder, oil, capsules, and cosmetics.

6. Cluster-based production stability

Investors benefit from economies of scale and guaranteed volumes.

30.2 Strategic National Incentives

1. Access to AfCFTA markets

1.3 billion consumers with tariff advantages.

2. Agriculture–industrial tax benefits

Botswana offers incentives for manufacturing and export sectors.

3. Integration with government programs

Alignment with BETP, NDP12, Vision 2036.

4. Stable political and investment environment

Botswana ranks among Africa's safest economies.

30.3 Social Impact Incentives

1. Youth employment

Investors support national job creation.

2. Gender empowerment

Women lead manufacturing and cluster governance.

3. Climate impact

Carbon sequestration and regenerative agriculture.

PAGE 34 – RISK MITIGATION & SAFEGUARDS

31.0 Risk Mitigation Framework for Investors & Government

Agriculture carries inherent risks; however, the ABC–RUAIPP model reduces and distributes these risks strategically.

31.1 Risk Mitigation Strategies

1. Climate Risk

- Drought-tolerant Moringa
- Water harvesting
- Solar irrigation
- Mulching & regenerative practices

2. Market Risk

- 17 value chains
- Export diversification
- Local SME demand
- Guaranteed cluster aggregation

3. Production Risk

- Standardized protocols
- Technical supervision
- Cluster-level machinery
- Satellite monitoring

4. Compliance Risk

- Centralized SPS & EcoCert oversight
- Automated traceability
- National audits

5. Operational Risk

- Shared machinery reduces cost
- Cluster governance
- Financial literacy programs

6. Financial Risk

- Anchor crop revenue stability
- Insurance programs
- Risk pooling through clusters

31.2 National Insurance Integration

- Crop insurance
- Fire insurance
- Manufacturing insurance
- Export insurance

INVESTMENT STRUCTURES & PARTNERSHIP MODELS

32.0 National Investment Models

Botswana will deploy multiple investment structures to attract diverse partners.

32.1 Public–Private Partnerships (PPPs)

Government and private investors jointly fund:

- Industrial parks
- Irrigation infrastructure
- District processing units
- Export hubs

32.2 Joint Ventures (JVs)

Investors and clusters co-own:

- Factories
- Processing lines
- Packaging facilities

32.3 Outgrower Schemes

Investors contract farmers to deliver:

- Leaves
- Seeds
- Oil
- Feedstock

Stable supply, predictable pricing.

32.4 Equity Partnerships

Investors acquire equity in:

- Cluster manufacturing units
- District industrial hubs
- National industrial parks

32.5 Social Impact & ESG Partnerships

Investors fund:

- Youth training
- Women-owned SMEs
- Climate resilience projects
- Carbon sequestration programs

32.6 Micro-Investment Models (Rural SMEs)

Youth and women cooperatives invest in:

- Tea packaging
- Cosmetic production
- Seedling nurseries
- Animal feed production

PAGE 36 – PUBLIC–PRIVATE PARTNERSHIP (PPP) FRAMEWORK

33.0 National PPP Architecture for Agro-Industrial Transformation

The success of Botswana's Moringa Industrial Revolution requires strong collaboration between Government, Farmer's Pride International (FPI), private investors, development partners, and local communities. The PPP Framework formalises this partnership into a unified national structure.

33.1 Government Responsibilities

Government provides:

- Regulatory support
- Land access facilitation
- Agricultural extension services
- Tax incentives for agro-processing
- Trade facilitation through BITC & SEZA
- Certification and standards alignment
- Public funding for infrastructure (roads, electricity, water)

33.2 Private Investor Responsibilities

Investors provide:

- Capital for industrial plants
- Equipment and machinery
- Working capital reserves
- Technology and innovation
- Manufacturing expertise
- Export market linkages

33.3 FPI Responsibilities

FPI acts as the national implementing and coordinating institution:

- Cluster formation & training
- RUAIPP rollout and capacity-building
- SPS, EcoCert, HACCP compliance enforcement
- Quality control and traceability oversight
- Export logistics preparation
- Digital agriculture & satellite system management

33.4 Community Responsibilities

Communities participate in:

- Land identification
- Labour mobilization
- Cluster governance
- Adherence to production standards
- Social cohesion and industrial coordination

33.5 PPP Priority Projects (2025–2036)

1. **District Processing Units**
2. **National Industrial Parks (Moringa & Agro-Value Chains)**
3. **Cluster Irrigation Systems**
4. **Solar Energy Farms**
5. **Carbon Credit Infrastructure**
6. **Export Consolidation Centers**
7. **Digital Agriculture Systems (ICT & Satellite)**

COMMERCIAL ROLE OF FARMER'S PRIDE INTERNATIONAL (FPI)

34.0 FPI as the National Anchor Institution

Farmer's Pride International (FPI) plays the central commercial and institutional role in the ABC–RUAIPP model. FPI is the coordinating engine of Botswana's agricultural industrialisation under this framework.

34.1 Core Commercial Functions of FPI

1. Cluster Management & National Coordination

FPI oversees all cluster operations nationally, ensuring uniformity, standards, and regulatory alignment.

2. Training & Capacity Building

FPI trains:

- Farmers
- Youth
- Women
- Cluster committees
- Factory workers
- Export teams

3. Quality Assurance & Compliance

FPI manages:

- SPS compliance
- EcoCert documentation
- HACCP frameworks
- Traceability

4. Manufacturing & Processing

FPI partners with investors to run:

- Oil plants
- Powder mills
- Tea factories
- Capsule lines
- Feed mills

5. Export Logistics & Market Linkages

FPI facilitates:

- Buyer contracts
- Export negotiation
- International certification
- Product positioning

6. Investment Structuring & Management

FPI:

- Designs investment models
- Coordinates PPPs
- Mobilises partners
- Ensures profitable implementation

34.2 FPI as a Commercial Incubator

FPI nurtures small rural enterprises by:

- Providing technical support
- Offering branding and packaging guidance
- Creating market linkages
- Embedding rural manufacturing units

DISTRICT-LEVEL ECONOMIC OUTPUT MODEL

35.0 District-by-District Commercial Influence of ABC–RUAIPP

Each of Botswana's districts becomes an industrial and commercial powerhouse under this framework.

Assumption:

200 clusters per district by 2030
Each cluster:

- 20 farmers
- 20 hectares
- Average revenue per cluster (best case): BWP 288 million/year

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35.1 Economic Output per District (Best Case)

Per District:

- 200 clusters × BWP 288 million
  = **BWP 57.6 billion per district per year**

Across 10 Districts:

- 10 × 57.6 billion
  = **BWP 576 billion per year**

35.2 District Industrialisation Impact

1. Direct Manufacturing Growth

Every district hosts:

- Oil extraction plants
- Powder factories
- Tea processors
- Packaging hubs
- Feed mills

2. Employment Expansion

Each district:

- 20,000–30,000 direct jobs
- 60,000–90,000 indirect jobs

3. SME Ecosystems

Creation of new SME categories:

- Transport companies
- Packaging suppliers
- Fertiliser processors
- Cosmetics producers
- Solar irrigation installers

35.3 District-Level Export Output

Each district becomes an export centre supplying:

- EU
- USA
- Middle East
- Asia

- SADC & AfCFTA

10-YEAR RETURN OUTLOOK FOR INVESTORS (2025–2036)

36.0 Decade-Projections for Investors

The 10-year outlook demonstrates strong investor confidence and exponential returns based on:

- High-yield production
- Scalability
- Manufacturing intensification
- Export expansion
- Multi-crop integration
- Climate finance revenue

36.1 Revenue Outlook for a 1-Hectare Investment

Worst Case:

- BWP 103 million over 43 years
- BWP 7.2 million over 3 years

Base Case:

- BWP 361 million over 43 years
- BWP 25.2 million over 3 years

Best Case:

- BWP 619 million over 43 years
- BWP 43.2 million over 3 years

36.2 10-Year Cluster Returns (20 Farmers)

Clusters generate:

- Worst case: BWP 144 million
- Base case: BWP 504 million
- Best case: BWP 864 million

36.3 10-Year Investor ROI Summary

Average Payback Time:

1–3 months

Internal Rate of Return (IRR):

25%–60%

Net Present Value (NPV):

Strongly positive under all scenarios

Revenue Continuity:

Every 45–90 days depending on harvest cycle

INVESTMENT CONCLUSION & NATIONAL CALL TO ACTION

37.0 Conclusion: A New Era of Agricultural Industrialisation for Botswana

This 40-page strategic document demonstrates that Botswana's future is firmly rooted in **smart agriculture, agro-industrialisation, and export-driven growth**. Moringa Oleifera provides the rare combination of:

- Strong profitability
- Climate resilience
- Industrial scalability
- Export potential
- Community wealth creation
- National economic diversification

- Generational income

The ABC–RUAIPP framework presents a unified national strategy capable of transforming Botswana into:

- A continental agro-industrial hub
- A leader in climate-smart agriculture
- A powerhouse in rural manufacturing
- A dominant exporter of Moringa products
- A source of 1 million+ jobs
- A model for Africa's Green Economy

37.1 National Call to Action

Botswana must now move decisively to implement this national framework through coordinated partnerships among:

- Government ministries
- Farmer's Pride International
- Hunter's Global Network
- Development partners
- Private investors
- Local authorities
- Traditional leadership
- Youth and women groups
- Financial institutions

The time for Botswana to industrialise agriculture is **now**.
The tools are here.
The blueprint is complete.
The anchor crop is identified.
The clusters are ready.
The nation is positioned.

Let us build Botswana's agricultural future together.
