

Maize Contract Farming and the Provision of Bundled Services

Invest ₦2.35 million to finance the provision of bundled services to smallholder maize farmers on 10 ha of land, to achieve a return of ₦3.4 million (peak season) or ₦5.6 million (off-season)

Type of Investor

This investment is suitable for feed companies, large maize processors, large poultry farmers, aggregators and commodity investors, seeking to secure and expand their supply of high quality maize.

Market Opportunity

- The national demand for maize is currently 15.5 million MT per year; this will continue to rise in line with population growth
- Production is currently at 6.9 million MT, which means there is an 8.7 million MT national supply gap, and an estimated industrial supply gap of 5.22 million MT
- This gap can be filled by greatly increasing the productivity of smallholder farmers (SHFs) through the provision of bundled services

Business Model

Overview	This investment opportunity addresses the substantial supply gap in Nigeria for high quality maize for large scale processors. It can provide both good returns and a social impact. By entering a contract farming agreement with SHFs and providing them with bundled services – including good quality seed, chemical inputs and fertilizer, and extension services – it is possible to more than triple SHFs' productivity and increase the quality of their produce to the standard required by large off-takers. The sale of this maize can then generate substantial returns for investors.
Setup and Operating Costs	<ul style="list-style-type: none"> – Land rental: ₦100,000 – Land clearing, harrowing and ridging: ₦250,000 – Improved seeds (200 kg) and Aflasafe (100 kg): ₦340,000 – Pre- and post-emergence herbicides and insecticide (40 l): ₦69,000 – 100 bags of fertilizer (NPK and urea): ₦800,000 – Extension services: ₦40,000 – Harvesting costs (harvesting, threshing, winnowing bags, bagging, sawing, loading/offloading, transport, and 3 months warehousing): ₦595,000 – Other labor costs (e.g. packaging): ₦156,000 – Total cost: ₦2,350,000
Revenue Streams	Sale of harvested maize once a year
Potential Customers	Industrial maize processors; the poultry industry; flour mills; feed mills
Potential Revenue (assumes 40 MT harvest)	<ul style="list-style-type: none"> – 40 MT sold at harvest for ₦85,000 per MT = ₦3,400,000 – 40 MT stored and sold during the off-season (after at least 3 months storage) for ₦140,000 per MT = ₦5,600,000

Potential Profit	<ul style="list-style-type: none"> – Harvest time: ₦1,050,000 – Off-season: ₦3,250,000
------------------	--

Key Risks

Risk Description	Mitigation methods
Crop yield is drastically reduced by natural disasters, especially drought	<ul style="list-style-type: none"> – Ensure drought tolerant maize varieties are used and that the maize is planted at the appropriate time to avoid dry spell period at on-set of the rains. – Install backup irrigation systems where possible and purchase insurance cover (both require additional investment)
Farmers do not plant maize, despite being provided with bundled services, or do not follow best practices even when adequately trained	<ul style="list-style-type: none"> – Only engage with pre-trained and registered farmers – Ensure provision of End2End extension services and proper monitoring and supervision of farmers

Regulatory Environment

There are currently no regulatory requirements for maize produced in its raw state. However, as regulatory requirements – set by organizations including NAFDAC and Standard Organisation of Nigeria – apply to processors’ end products, off-takers and large-scale purchasers will always ensure that high quality standards for the maize they purchase are met, especially the criteria that the produce is free from Aflatoxins

Other Barriers to Entry

- Access to start-up capital and the length of time that the capital is tied up pending return on investment
- Security concerns along the maize growing belt
- Availability of contiguous land, or land along water bodies suitable for irrigation during dry season
- Adequate knowledge of farm practices and skills

Key Contacts

- Maize Association of Nigeria (MAAN)
- Kaduna State Government
- Professor Inuwa Shehu Usman

All numbers presented are estimates only. All investments are speculative and involve the risk of loss