

Prospectus: Zambia Maize Bonds



Background

Agricultural policy in Zambia is in urgent need of reform. An unsustainable subsidy programme compels the Zambian government to:

- Buy maize produced at a rate that is significantly higher than market prices. This maize is sold to milling companies at a discount, resulting in a direct loss to the taxpayer. This is referred to as the Maize Purchase Program (“MPP”)
- Provide fertiliser to the country’s 3.5mⁱ small-scale farmers through the Farmer Input Support Program (“FISP”)

This subsidy programme costs the Government approximately US\$350mⁱⁱ per year (over 1% of Zambia’s 2012 GDP).

Political pressure leaves the government unable to change the terms of this unsustainable policy. In addition, while the MPP is meant to support farmers financially, the agency responsible for buying the grain, the Food Reserve Agency (“FRA”), has an elongated payment cycle (3 months)ⁱⁱⁱ that creates a working capital problem for small-scale farmers. With a lack of available credit, many farmers turn to the informal sector where they borrow at usurious rates.

Investment Thesis

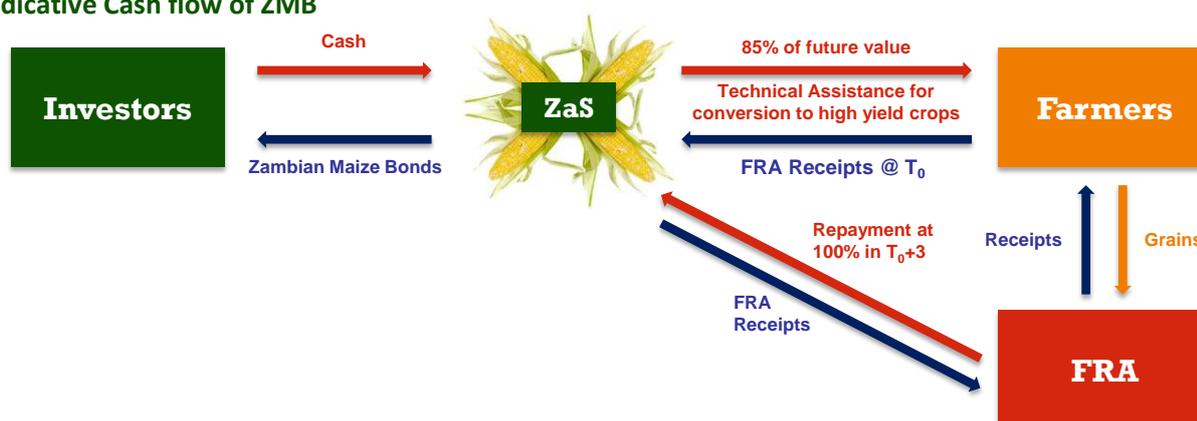
What is the product?

The team is proposing the creation of Zambian Agricultural Solutions (“ZaS”) to provide a more sustainable, market-based financing solution that empowers small-scale farmers and reduces overall government subsidies. The product which ZaS proposes to address this issue is a social impact bond in the form of a Zambia Maize Bond (“ZMB”) in the value of US\$10m, with a primary goal of providing short-term financing to small-scale farmers and a secondary goal of promoting crop diversification into higher margin crops such as soy.

ZaS “Zambia Maize Bonds” Summary Terms & Conditions	
Issuer & Title	ZaS - “Zambia Maize Bond”
Deal Size	US\$10 million
Denomination	The authorized denominations of the notes will be 50,000 KWR (approx. US\$10,000)
Maturities	Bullet principal payment due from five years from the date of issue
Interest - Base Rate	Each note will bear interest at a 5% discount to 5Y Zambian sovereign bond rates ^{iv} at issue
Pay-for-Performance	An additional 10% interest above the base paid at maturity based on achievement of agreed upon KPI’s
Social Impact Target (KPI)	Approximately 3,000 hectares of maize producing farmland converted to soy production

The funds in the ZMB will be managed by ZaS who will use the money to buy certified deposit receipts issued by the FRA from farmers at 85% of their future value. This will allow farmers to receive immediate cash payments while ZaS collects funds from the FRA three months later. Farmers accepting this program will commit to converting their fields to higher yield crops such as soy. This conversion will be facilitated by agronomists contracted by ZaS.

Indicative Cash flow of ZMB



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Before rolling out across Zambia, ZaS will pilot this program in Zambia's North Western Province where there is a high density of small-scale maize farmers. After the initial proof of concept, this instrument could be rapidly scaled up to a US\$100m solution in Zambia, based on the size of the government subsidy. The ZaS model can also be replicated in other markets where government subsidy programs misalign farmer production incentives.^v

How does the ZaS product provide a return to investors?

The ZMB will be structured as a 5-year bullet bond with a base-interest yield at a 5% discount to Zambian 5-year sovereign bonds in Kwacha. As a social impact bond, the Zambian government would commit to a pay-for-success increase of yield in the event that ZaS achieves key performance indicators.

- KPI = Successful conversion of 3,000 hectares of maize farmland to higher margin crops
- Pay-for-Performance Incentive = Additional 10% yield

Economics of Pay-for-Success Incentive	
Bond Size (USD mn)	\$10.0
Additional Pay-For-Success Yield	10.0%
Value of Success Payment	\$1.0
Required Savings to Zambian Treasury	\$2.0
Subsidy Spent per ton maize (USD)	\$341
Required maize volume substitution	5,857
Required Hectares Converted	2,929

How does the ZAS solution address social issues in Zambia?

Key Issue	Means of Addressing
Lack of working capital financing for farmers	<ul style="list-style-type: none"> • ZaS will buy certified deposit receipts issued by the FRA from farmers at 85% of their future value, providing immediate income to farmers
Unsustainable government subsidy program	<ul style="list-style-type: none"> • By committing farmers to diversify their crops, less maize will be brought to the FRA for purchase • As farmers earn higher income from higher value crops, the government will face less pressure to subsidize them
Lack skills/resources to diversify into higher earning crops	<ul style="list-style-type: none"> • ZaS will help bridge the current working capital gap, providing money farmers can invest in improving crop production • ZaS will provide agronomists to aid farmers in the conversion process

What risks are there in the investment product? How are they mitigated?

Risk	Mitigants
Determination of Social Impact for Success rate	<ul style="list-style-type: none"> • Use of clearly measurable key performance indicators including regular assessment by independent agronomists • Independent audit
Default risk from FRA	<ul style="list-style-type: none"> • Collateralization – secured by maize inventory held in warehouse • Seek guarantee programs from affected international financial agencies such as World Bank
Currency Risk	<ul style="list-style-type: none"> • Foreign investors will be exposed to the risk of Zambian Kwacha devaluation relative to international currencies. Investors will be responsible for hedging this currency risk
Consequences for government in an unsuccessful outcome	<ul style="list-style-type: none"> • Cancels program at the end of the contract term, thus does not continue to pay for unproductive programs
Consequences for ZaS in an unsuccessful outcome	<ul style="list-style-type: none"> • Loses credibility with government, reducing likelihood of securing further government contracts • Loses credibility with social investors, making it difficult to access capital for further programs
Consequences for Impact Investors in an unsuccessful outcome	<ul style="list-style-type: none"> • Receives only 5% return on initial investment

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ⁱ Based on 70% of CIA factbook estimate of the size of the agricultural workforce

ⁱⁱ <http://zambiareports.com/2012/09/06/amid-food-crisis-foreign-donors-criticize-zambias-maize-subsidy/>

ⁱⁱⁱ Based on estimates by multiple sources within the Zambian maize industry

^{iv} Currently trading at 14.79%

^v ZaS will also offer lending services to farmers who store their grains in certified warehouses, as warehouse capacity is increased. Lending will be based on a warehousing receipt system increasing the availability of short-term working capital financing to farmers.