## TERRA LIMPA

An Opportunistic Real Estate Fund committed to revitalizing land productivity by eradicating landmines and creating a new class of smallholder farmers in Angola.

## THE CHALLENGE: Landmine contamination has destroyed Angola's agricultural potential.

There are an estimated 10-20 million active landmines and explosive remnants in Angola as a result of the 27-year civil war that ended in 2002.<sup>1</sup> Prior to the war in 1975, the country had one of the most robust agricultural industries in Africa. It was self-sufficient in food crops and was a net exporter of commodities such as coffee and sugar.<sup>2</sup> While 47% of Angola's land is considered fertile (~60m hectares, or roughly the size of Texas), only 8% of the arable land is currently being cultivated.<sup>3</sup> Agricultural land is priced at \$1500/hectare on average, while comparable contaminated land is available at a 60-90% discount.

Angola now imports more than 80% of its food and its economy relies almost entirely on its oil resources, which account for 95% of all exports and 79% of fiscal revenues.<sup>4</sup> The recent global oil crisis has highlighted the need for significant economic diversification. With twothirds of the population depending on agriculture for food and income, it is imperative to make use of Angola's undervalued land.

Because the private sector has focused its efforts into Angola's oil boom since 2002, sources of both domestic and foreign investment have created a single-source economy while ignoring the agricultural potential of the majority of Angolan land. While humanitarian NGOs have decontaminated some of this agricultural land, they have done so at an inefficient pace and high costs due to manual procedures and outdated technology.<sup>5</sup> In addition, much of the decontaminated land remains at the subsistence level, providing little crop productivity or surplus. By leveraging modern demining methodologies and developing the land for agriculture, a private-public partnership will more effectively eradicate landmines and activate the economic potential of the land.

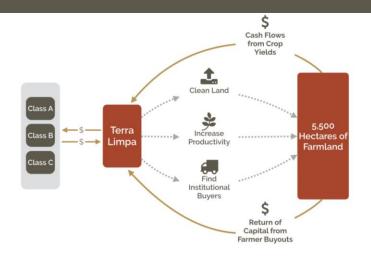
**THE SOLUTION:** Terra Limpa finances commercial smallholder farmers by managing a vertically integrated value chain that builds farmer equity in land over time.

Terra Limpa utilizes a financing model to create Angolan smallholder farmers instead of leaseholders. By having an owner-operated model, the fund creates jobs and generates income for farmers that incrementally builds their equity stake in the ownership of the land.

Over time, fund investors will exit their land ownership, but the fund's long term goal is the development and management of a regional smallholder commercial farming value chain.

The Terra Limpa fund will partner with key organizations to:

- 1. Acquire arable land perceived to be landmine contaminated at significantly below market rate.
- 2. Develop capacity for agriculture after verifying land safety.
- Provide income, and technical assistance to farmers who cultivate the land.
- 4. Gather, process, and transport crop yields from each farmer.
- Act as intermediary with institutional buyers to ensure all crops are sold to maximize margins.
- 6. Distribute residual cash flows to investors.
- 7. Deposit portion of farmer incomes into savings plans, building farmer equity.
- Transfer ownership of land from investors to farmers, providing investors with an exit and creating a new class of upwardly mobile smallholder commercial farmers.



**THE OPPORTUNITY:** Favorable government objectives and market inefficiencies create unprecedented upside potential for private agricultural investment in Angola.

- New Private Investment Law (NPIL): While Angola has a historically unpredictable currency, business landscape, and geopolitical environment, its government has made significant efforts to stimulate foreign and domestic investment. In August 2015, a new nationwide investment law was enacted to make foreign investment into the country less bureaucratic. Any investment in agricultural development will benefit from favorable subsidies, regulations, and zero tax by the Angolan government.<sup>6</sup>
- Substantial Agriculture Potential: Before 1975, Angola was selfsufficient in all major food crops except wheat. It was also the world's fourth leading exporter of coffee prior to its civil war.<sup>7</sup>
- Revoked Food Import Licenses: Angola currently imports more than 80% of its food. In 2013, Angola imported \$4 billion worth of agricultural products. However, in 2015 the government revoked import licenses for 25 agricultural products, effectively blocking imports of these products by introducing import quotas to incubate domestic production.<sup>8</sup>
- Farming Dependent Population: Approximately 90% of Angolan farmers operate at a subsistence level. Women provide 70% of all agricultural labor and 75% of the livestock farming labor force while being minority landowners.<sup>9</sup>
- Growing Food Demand: There is a 16x deficit in supply for basic staple crops in urban centers based on current domestic production,<sup>10</sup>however, the domestic consumption growth rate is >10% for the period 2014 to 2019.<sup>11</sup>
- Strategic Partnerships: The Terra Limpa team has established relationships within several institutions including; Departamento de Agricultura, Ministério da Defesa Nacional, The Halo Trust, MAG International.

FUND MODEL: Flow of cash and assets.

<sup>&</sup>lt;sup>1</sup> UN Global Issues; Demining, 2016. <sup>2</sup> Land, Territorial Development and Family Farming in Angola, FAO of the UN, 2014. <sup>3</sup> World Bank Database, 2015. <sup>4</sup> African Development Bank, 2014. <sup>5</sup> Interview with The Halo Trust, 2016. <sup>6</sup> Deloitte Angola, 2015. <sup>7</sup> Ibid, 2. <sup>8</sup> USDA Foreign Agricultural Service, 2015. <sup>9</sup> Ibid, 2. <sup>10</sup> Angolan Ministry of Agriculture, Programme Increase Directed Agro-livestock Production, 2016-2017. <sup>11</sup> Wesgro Research, 2016.

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**INVESTMENT CRITERIA:** Each potential land investment will be evaluated based on the criteria listed below to ensure missionaligned returns.

- Geographic Focus: Southwest Angola with the intention to replicate the model in other provinces.
- Crop Focus: Suitable for short term row crops and permanent crops with proven demand in domestic and/or international markets.
- Landmine Contamination: Priced at 80% below market value, cost to decontaminate <\$550/hectare.
- Significant Tax Benefits / Government Subsidies: Qualifies for 70-100% Angolan tax exemption.
- Land Specific Requirements:
  - Clear land ownership title through government procedures and recognized documentation
  - Minimum parcel size of 1100 hectares
  - <75 km distance from a municipality with >500k population size
  - Unrestricted access to infrastructure including interprovincial roads, railroads, shipping ports, and/or airports
  - Proximity to water sources, including rivers, lakes, and/or dams
  - Quality and arability of land

ANGOLAN REGIONAL FOCUS: This map illustrates populationdense, landmine contaminated areas with agricultural potential.



**IMPACT:** Terra Limpa will utilize IRIS and GIIRS methodologies to continuously measure and monitor the impact objectives listed below.

- Reach and scope (number of new smallholder farmers): Increase household income for 1,830 farmers with 15,800 direct beneficiaries.
- Financial stability (percent change in income for farmers): Provide fair and stable income to farmers by securing premium prices for Fair Trade crops and effectively managing risk factors.
- Wealth creation (number of new smallholder commercial farmers): Spur socioeconomic mobility by enhancing farmer's income earning potential.
- Gender inclusion (number of women who own land): Enable land ownership among women who are rarely landowners.
- Food security and improved health (monitor diversity of diet): Increase access to sufficient, safe, nutritious food.
- Reverse urbanization (number of farmers that relocate from urban cities): Create employment opportunities and attract internally displaced urban residents into rural communities.
- Demonstration effect (amount of capital invested): Showcase the financial viability of contaminated land and attract new entrants.
- Carried Interest: Half of fund carried interest is predicated on achieving these investment objectives.

Risk Factors & Impediments to Redevelopment		Risk	<b>Factors</b>	& In	npediments	to F	Redevelopment
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Risk	Mitigation Strategy
Agricultural risk (e.g., yield,	Crop insurance
price, weather, and catastrophe)	
Currency and foreign exchange	USD denominated contracts
Legal, regulatory, business	Partnerships with established
landscape	incumbents & govt. entities
Liabilities of landmine removal	Contingency fund
Market risk	Purchase order agreements

LAYERED FUND STRUCTURE: Terra Limpa provides for-profit investors with risk-adjusted market rates of return by incorporating Program Related Investment (PRI) as a subordinated position that absorbs first losses.

## Tranche Investment & Waterfall Return Structure

Investors	Size	Return	Term Horizon
Class A	\$10M	5.0 - 6.5% IRR	5-6 years
Class B	\$14M	8.0 - 9.5% IRR	9-11 years
Class C (PRI)	\$6M	1.0 - 3.0% IRR	12 years

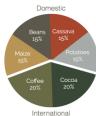
CAPITAL DRAWDOWN AND DISTRIBUTION WATERFALL: The Class C tranche improves the risk profile of the investment, lowers cost of capital, and thus directly impacts smallholder farmers whose time horizon until full ownership of their farmland is accelerated.

Any losses are first borne by Class C investors, then by Class B, and finally by Class A investors. Investment proceeds will be distributed first to Class A investors, then Class B investors, and lastly Class C investors until all have received a return of capital + required IRR.



PORTFOLIO: The basket of crops blends high demand Angolan staples with international commodities to provide consistent cash flows and diversification for investors.

Class A investor holdings are primarily short-term maturity crops with at least semi-annual harvest periods. Class B investor holdings are long term, permanent crops with delayed cash flows.



Use of Funds

Use	Dollar Amount
Working Capital	\$2m
Contingency Fund	\$2m
Land Acquisition	\$1m
Decontamination	\$3m
Inputs	\$9m
Technical Assistance	\$6m
Distribution & Warehousing	\$9m
TOTAL	\$30m

	Fund Profile
Fund Name	Terra Limpa Fund I
Investment Manager	Terra Limpa
Target Fund Size	\$30m; minimum investment of \$150k
Fund Structure	Tranched private equity fund
Target Portfolio Size	5,500 hectares
Initial Regional Focus	Angola: Huambo, Benguela, Kuanza Sul
Target Investor Pool	Impact Investors, Foundations, Governments, Development Finance Institutions, Accredited Investors
Target IRR	Blended
Fees and Incentives	2% management fee, 20% carried interest