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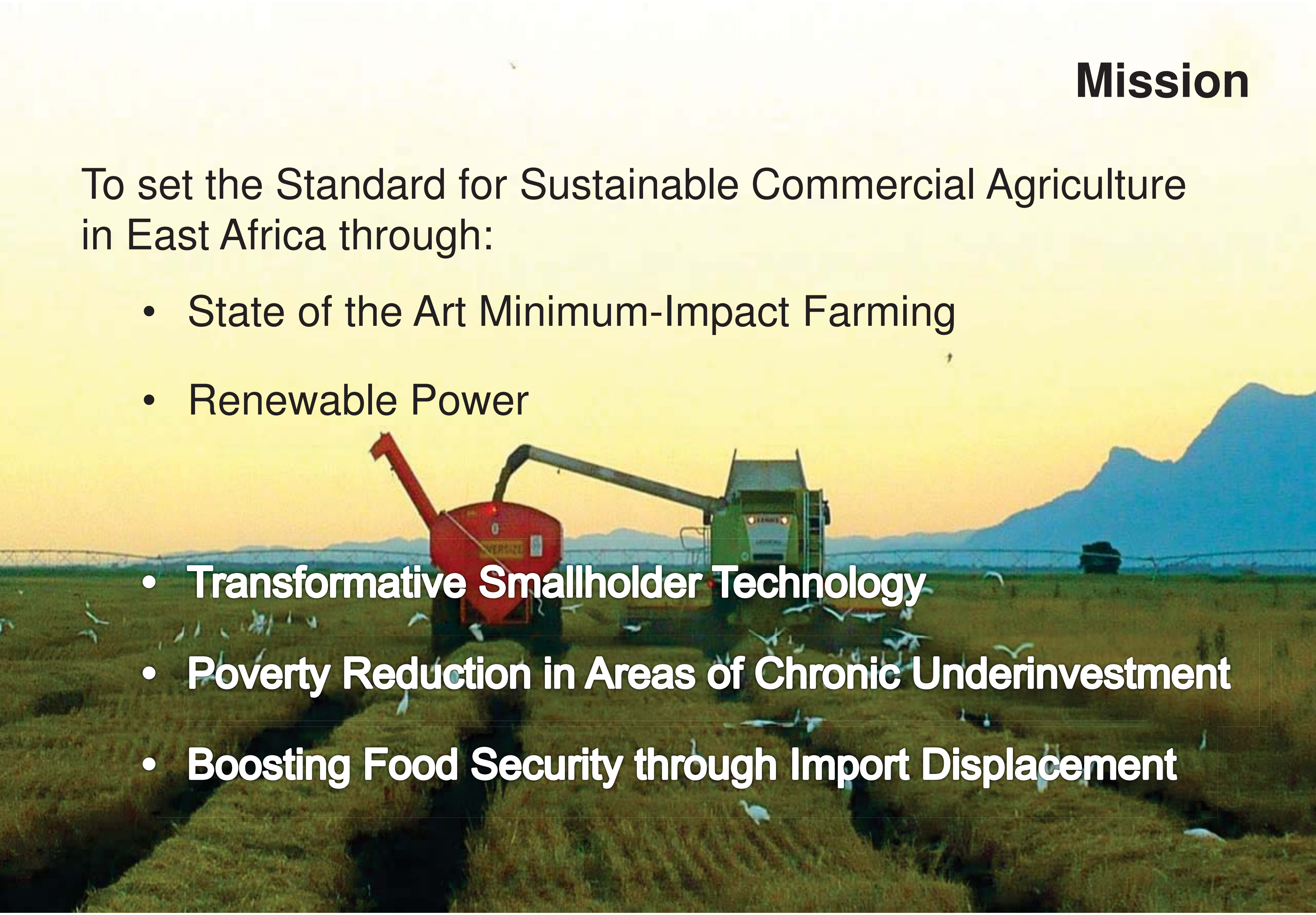
Challenges of African Agricultural Investment & Inclusive Growth

September 2015



Mission

To set the Standard for Sustainable Commercial Agriculture in East Africa through:

- State of the Art Minimum-Impact Farming
- Renewable Power
- **Transformative Smallholder Technology**
- **Poverty Reduction in Areas of Chronic Underinvestment**
- **Boosting Food Security through Import Displacement**

Farming in Africa is Hard to Finance

Greenfield agricultural investment ticks all the negative criteria that investors are scared of:

- Long Time Horizon
- Capital Intensive
- High Risk
- Modest Returns

In Africa it's even harder:

- African Political Risk
- More Capital for Self Sufficiency

Self Sufficiency

Unlike the Americas and Asia, African farm investments must be self-sufficient with in-house research for high-yielding varieties & pest and disease control and basic infrastructure not often typically owned by farms—Drying, Milling, Storage & even Power Generation.

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Patient Shareholders

In Jan 2013, Agrica's shareholders had to endure an example of African political risk that cost the company about $6 million; the government allowed the importation of 120,000 tons of Asian rice exempt from the Common External Tariff of the East African Community without following EAC protocol.

The flood of cheap rice dropped the wholesale rice price over 50% and resulted in EAC partner states banning Tanzania rice, effectively destroying the domestic and export markets, damaging the investment and the livelihoods of 500,000 smallholders with two years of depressed prices.

CAPRICORN INVESTMENTGROUP

The Capricorn Investment Group, USA, is the independent investment manager of the assets of Jeff Skoll, the first President of eBay, and the Skoll Foundation. Its objective is to grow its asset base with a long-term, global, and "principled" philosophy.

Norfund

Norfund—the Norwegian Investment Fund for Developing Countries—is owned by the Norwegian Government and serves as an instrument in Norwegian development policy to contribute to economic growth and poverty reduction.

AgDevCo

AgDevCo, UK, is a social impact investor and agribusiness developer, providing "patient capital" in the form of debt and equity into early stage agribusinesses and greenfield agriculture projects.

Commercial Farm: 5,000 Ha

KILOMBERO PLANTATIONS LIMITED

- In 2008, KPL, Agrica's Tanzania subsidiary, purchased the defunct Mngeta Farm from the government
- A joint venture between the governments of Tanzania and North Korea had semi-developed the farm
- KPL has:
  - Re-cleared 5,000 ha for rain-fed farming
  - Rehabilitated roads, drains & buildings
  - Imported a fleet of tractors, GPS-guided tractors, planters, boom sprayers and combine harvesters
  - Built a 6,200 m^2 warehouse and residential area
  - Built a 3,000-ton automated drying facility
  - Installed 2 industrial rice mills
  - Installed 500kW biomass gasifier plant

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Efficient Irrigation

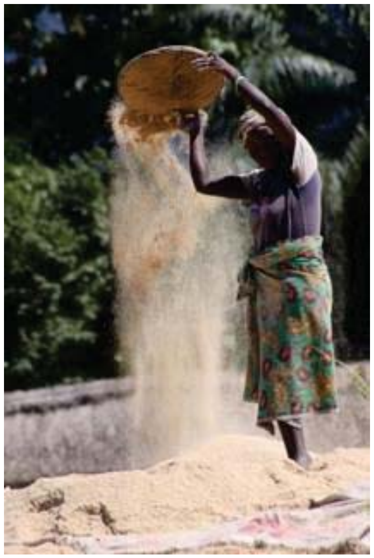
- Irrigation doubles yields
- Irrigation allows 2 crops per year vs. 1 rain-fed
- Sprinklers use 50% less water than flood
- 515 ha of center-pivot irrigation, currently under expansion to 1,445 ha then 3,070 ha
- At full capacity, the farm will produce:
  - 25,000 tons of paddy (un-milled rice)
  - 25,000 tons of maize

Smallholder System for Rice Intensification (SRI)

Extension officer reaching isolated village

- Lifting farmers in 10 villages within 65 km of the farm from subsistence to surplus:
  - In 2009, KPL introduced SRI to Tanzania
  - 1 to 1.5 ton/ha traditional rain-fed yields vs:
  - 3.75 tons/ha average rain-fed SRI yield
  - Ranged as high as 9.5 tons/ha rain-fed, a good irrigated yield
  - KPL has trained 7,403 farmer families in standard SRI
  - Since 2014, trained 3,550 farmer families in Zero Till SRI
  - Zero Till SRI eliminates annual ploughing & reduces farmers' production cost by 12%
  - Over 500 farmer families have adopted SRI techniques from their neighbours
  - Net income increase ranges from 30% to 400%, depending on the farmers' yields and whether they have adopted zero till

Smallholder Credit Challenge



- Across, Africa smallholders are trapped in poverty from the lack of credit
  - With no credit, they presell much or all of their harvest, at a fraction of its value, when they are short of cash in the farming season and need money for food, school fees or medicine
- A commercial farm cannot afford to provide credit to smallholders,
  - The farm can guarantee to buy their production
  - But a bank or microfinance institution (MFI) must provide the credit
- KPL has struggled to establish credit for the smallholders
  - In 2013, 191 farmers deliberately defaulted to one MFI
  - In 2013, a commercial bank had 100% repayment from189 farmers but left to due to unclear path to rapid scalability, given the small size of individual loans ($250)
- KPL could access no loans for smallholders in 2014/15 season
- Having helped the smallholders secure a 60% loan guarantee from a Danish funded program, KPL is working to re-establish loans in the coming season with the 1,000 top farmers—who get 5 tons/ha, some of the world's best rain-fed rice farmers

Social Responsibility

In July 2013, KPL opened a Health Centre for 275 KPL employees and residents of Mkangawalo Village (pop. 14,000) who previously had to walk over 10 km to the nearest clinic.

January thru December 2014:

- 14,080 patient-visits
  - 11,062 non-KPL patient-visits
- 817 patients admitted
  - 713 non KPL staff

Mobile Reproductive and Child Health service for 2 villages monthly:

- Vaccines & Antenatal Care, 70 cases per visit

KPL provides about $60,000/year in subsidized health services to the community.

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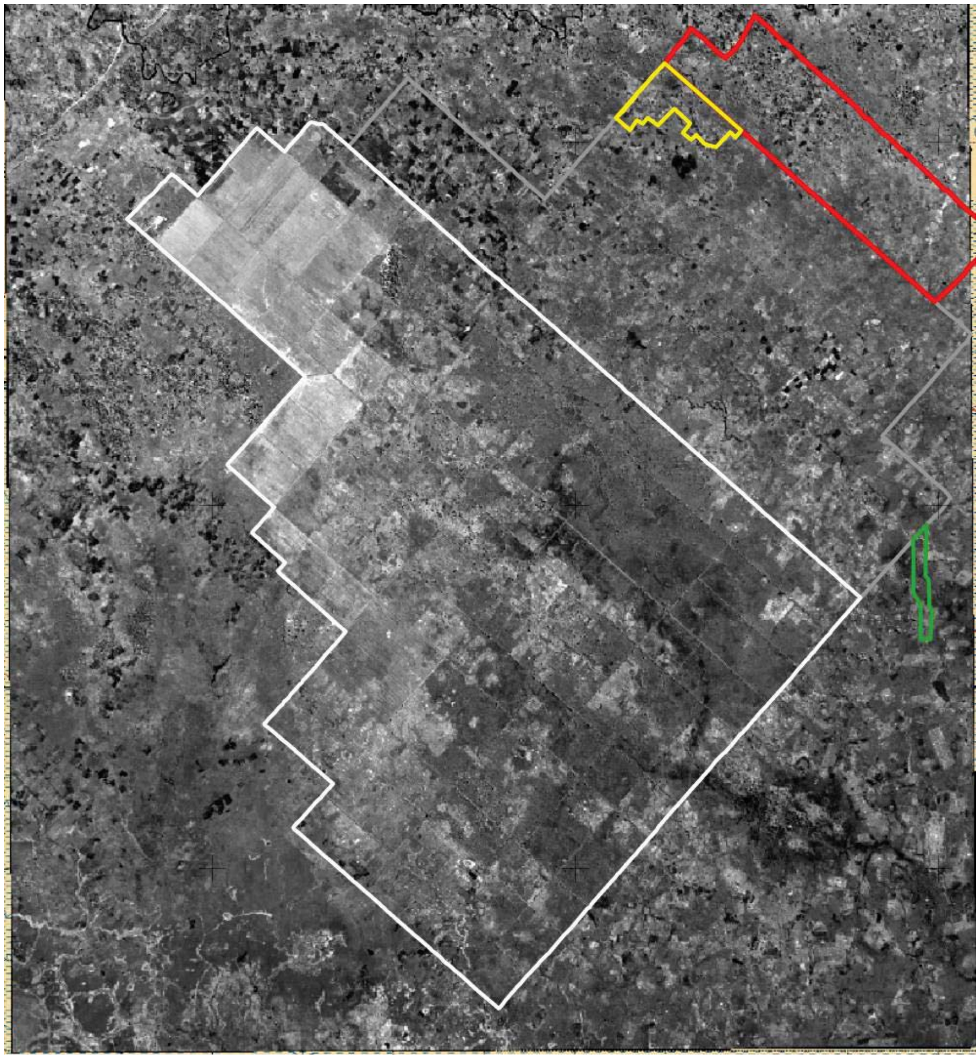
Land Purchase



Mngeta Farm, No. 411, Kilombero Valley

- In 2008, KPL purchased Farm No. 411 with a title deed dated 1994, from a government agency
- KPL spent two years carefully ensuring that no PAP (Project Affected Person) illegally occupying the farm was resettled without receiving a house and new farm, if they were resident on the farm, or a new farm if they were a non-resident farmer
- KPL engaged an external consultant who conducted, with Village Land Committee members and PAP representatives, a participatory mapping survey that recorded every area of cultivation, structure and fruit tree by GPS, and included a socio-economic questionnaire for every household
- KPL ceded 389 heavily-populated ha, the area within the red border, to a local village and built them a school
- 20 families within the yellow border were moved to the red area, where KPL built houses
- 82 families within the grey border moved to KPL-built houses within the green border outside the farm
- An additional 191 non-resident farmers were provided with 3 acres each outside the farm, purchased, cleared and ploughed by KPL
- 80% of the PAPs received a larger area than they were previously farming

Leaving PAPs Better Off than They Were Before

- The resettlement aimed to abide by World Bank guidance on resettlement, leaving the PAPs better off than they were before—regardless of the illegality of their land tenure
- A Grievance Committee, chaired by the village government with members nominated by the PAPs, helped ensure that all PAPs were treated fairly.
- The total cost for the resettlement action was about $623,000


Before: Shallow, dirty well


Typical thatched house on Farm 411


New borehole for clean water


New waterproof house

New school classrooms

New teachers' housing