

# Model Responsible Primary Ag Investment





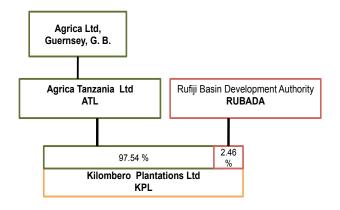
## **Mission**



- To Set the Standard for Sustainable Commercial Agriculture in East Africa through:
  - State of the Art Minimum-Impact Farming & Post-Harvest Processing
  - Transformative Smallholder Technology
  - Renewably Powered Operations
  - Poverty Reduction in Areas of Chronic Underinvestment
  - Boosting Food Security through Import Displacement

www.agrica.com









#### **Shareholders**

- KPL is a "public private partnership" 97.54% owned by Agrica Tanzania Limited (ATL) and 2.46% owned by the Rufiji Basin Development Authority
- ATL is 100% owned by Agrica Limited, Great Britain (Agrica)
- KPL is Agrica's first project. Founded in 2005 to develop sustainable agribusinesses in Africa, Agrica's investors include a number of high-net-worth individuals and 3 institutional investors:
- 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. The fund's assets total over U.S. \$4.5 billion. Since 2008, Capricorn has invested \$27.55 million in the project.
- 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. Norfund's portfolio is about US \$1.6 billion. Since 2010, Norfund has invested \$15.15 million in the project.
- 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. Currently, AgDevCo's capital stands at US \$120 million. Since mid-2014, AgDevCo has invested \$3.25 million in Agrica and committed a further \$6.75 million by mid-2015.



# **Before (2008)**

# & After (2013)













#### Rehabilitation of 5,818 ha defunct farm

- In September 2008, KPL completed purchase of the 5,818-ha defunct Mngeta Farm RUBADA. The farm had been semideveloped as a joint venture between the governments of Tanzania and North Korea and abandoned in 1992.
- Since starting operations, KPL has:
  - Re-cleared and leveled 5,000 ha
  - Resettled 120 families to IFC standards
  - Rehabilitated roads, drains & buildings
  - Imported a fleet of tractors, zero-till planters, boom sprayers and combine harvesters
  - Constructed a 6,200 m<sup>2</sup> warehouse and residential buildings
  - Constructed a 3,000-ton automated drying facility
  - Installed a 4-ton-hour industrial rice mill in 2010 and a 6-ton, the largest in Tanzania, in 2013
  - Installed 215 ha of center-pivot irrigation and constructed a river pump station
  - Trained over 6,500 farmer families in improved rice farming
- KPL has become the showcase farm for the Southern Agricultural Growth Corridor of Tanzania (SAGCOT), a World Economic Forum/World Bank/Government of Tanzania initiative











# **Self Sufficiency**

KPL is vertically integrated and moving toward self-sufficiency with its own:

- 360kW hydro-power plant, expandable to 860kW
- 500kW biomass plant to come online in Feb 2015
- 1.2MW biomass plant to come online in 2016
- Research programs for improved seed varieties
- Husk-heated Drying Facility
- Silos and Silo Bag Storage Facilities
- Two Industrial Rice Mills
- 1.5 x field equipment for redundancy









#### **Innovation: Biomass Power From Rice Husk**



- First Rice Husk Gasification Plant in Africa
- The pile of rice husk will soon be electricity
- KPL's first 500kW biomass plant online in Feb
- KPL selected "gasification" rather than conventional boilers and steam turbines
- Gasification is more efficient than steam







## **Innovation: Overhead Irrigation of Rice**

- The world is running out of fresh water
- Rice is a thirsty crop
- Rice farms in areas of USA, Brazil and Australia with depleted water resources are turning to overhead sprinkler irrigation
- Overhead center pivot irrigation, which requires 50% less water than flood, started with 215 ha in the 2011 dry season
- KPL has achieved over 7 tons/ha with sprinkler irrigation













## Innovation: Smallholder System for Rice Intensification (SRI)

- KPL is lifting farmers in 10 villages within 50 km of the farm from subsistence to surplus:
  - In 2009-10, KPL introduced SRI to Tanzania
  - Traditional Yields are about 1 ton/ha vs. SRI rain-fed yields that have ranged as high as 9.5 tons/ha rain-fed, a good irrigated yield
  - SRI farmers have averaged 3.66 tons/ha, substantially increasing family income
  - KPL's smallholder program has expanded quickly from 15 pilot farmers in 2010 to 6,527 farmer families by 2014
- Over 500 farmer families, not formally trained in the KPL Smallholder Program, have adopted SRI techniques from their neighbours
- In the 2013-14 season, KPL introduced "Zero Tillage" SRI which, through the elimination of annual ploughing and harrowing, reduces the farmers' production cost by 12%
  - KPL is training another 3,600 farmers in Zero Till next season





## **Smallholder Credit Challenge**

Crop Year	Micro Finance	Credit	Loans	Avg. Months	Final Rate of
	Institute	Trained	Disbursed	Late to Repay	Repayment
2011-12	YOSEFO	265	148	4	94%
2012-13	NMB	885	189	4	100%
2012-13	YOSEFO	0	416	10	100%
2013-14	YOSEFO	0	50	NA	NA
2014-15	NMB	243	NA	NA	NA
2015-16		1,000*			

\*\$50/farmer subsidy available from NAFAKA

- Since 2011, KPL has funded the smallholder project with \$1.2 million in grant funding from AECF, Norfund and USAID
- The loan program is still a work in progress
- To commercialize the program, KPL needs a larger number of loan farmers to make a margin on inputs and secure paddy at a price fair to both the farmer and the Company
  - YOSEFO experienced an initial 46% default rate in 2013 and was forced to seize farmers assets, perhaps creating a more credit-worthy environment
  - NMB had an excellent repayment rate in 2013 but left to due to unclear path to rapid scalability given the low number of farmers and the small size of individual loans (TZS 400,000/acre)
  - Planning to return for the 2014-15 season, NMB trained 243 farmers but pulled out in late Nov 2014 just before
    planting due to a lower number of loan farmers than anticipated, causing hardship to farmers who had signed up
- The ramp up of the loan program still requires several years to reach 2,500 to 5,000 farmers needed for commercial viability for KPL and the bank
  - KPL is in consultations with NMB and CRDB to devise a commercially sustainable loan product



## Social Responsibility: Necessary for Good Relations with Poor Neighbors



In July 2013, KPL opened a Health Centre, left, for KPL employees and residents of Mkangawalu Village (pop. 14,000) who previously had to walk over 10 km to the nearest clinic. This investment could not be afforded by a smallholder-only development model.

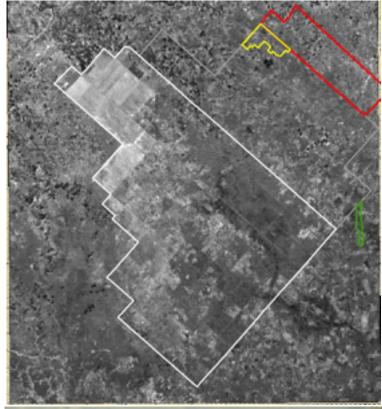
- It is in the long-term interest of KPL to have the full support of the very poor communities surrounding the farm
- The 3 villages bordering the farm have a total population of over 27,000
- When starting operations, with an annual TZ shilling 50 million (now about \$30,000) Community Development Fund, KPL began funding projects chosen by the villages, which include:
  - School Classrooms
  - Teachers' houses
  - Pumps & water systems to replace dirty shallow wells













# Transparency in Land Transactions: PAPs: Project Affected Persons

- When KPL took possession of the farm 2008, villages disputed the title deed, claiming about half the farm
- KPL ceded 389 heavily-populated ha (red border) to a local village and built them a school and wells
- 20 families within the yellow border were moved to the red area, where KPL built houses
- 80 families within the grey border moved to KPL-built houses within the green border outside the farm
- An additional 150 non-resident farmers were provided with 3 acres each outside the farm, purchased, cleared and ploughed by KPL
- All PAPs were compensated for fruit trees
- The Resettlement Action cost over \$600,000
- The Resettlement abided by IFC guidance, leaving the PAPs better off than they were before regardless of the illegality of their land tenure



#### What we did wrong

- Our partner, RUBADA, misrepresented the number of PAPs; our survey, conducted one month after taking possession, revealed 2,238 people either resident or farming in the titled area
  - KPL should have surveyed the PAPs prior to purchase of the farm
  - KPL should have consulted the three villages bordering the farm prior to purchase
- 2010 Alleged Glyphosate Over Spray incident
  - KPL learned to better inform surrounding villages of timing of aerial sprayings
  - KPL increased buffer zone from 500 meters to 1 km
- Recent riot over change in road across farm for village right of way
  - Rather simply informing village government, KPL should have held public meetings
- KPL should establish formal carbon accounting



# Challenges

