

Agrica Ltd: Tanzania

Social Responsibility & Smallholder Project

May 2011



Agrica

Background

- ◆ Kilombero Plantations Limited (KPL) purchased a 5,818 ha North Korean farm that was abandoned in 1992. Farm located in central Tanzania. Investment proceeds have been used for:
 - Re-clearing/ harrowing 4,229 ha
 - Compensating displaced persons
 - Rehabilitating roads, drains and buildings
 - Constructing a 6,200 sq meter warehouse
 - Constructing of a 6-ton/hour rice mill and 2,000 ton automated drying facility
 - Importing a fleet of tractors, zero-till planters, boom sprayers and combine harvesters
 - Establishing center pivot irrigation trials
 - Identifying and sourcing appropriate seed
- ◆ KPL completed planting its 3rd rain-fed rice crop on 4,229 ha in 2011
- ◆ Planted 2,896 hectares in 2010 and 2,795 ha in 2009



Agrica



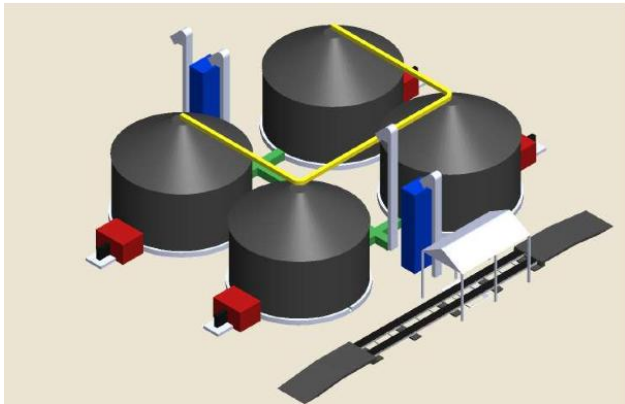
Farm Management, Staff & Fleet

- ♦ The experienced farm management team includes:
 - Graham Anderson, General Manager
 - David Lukindo, Human Resources & Community Development Manager
 - Murray Dempsey, Crop Production Manager
 - Stanley Ngugi, Rice Mill Manager & Company Engineer
- ♦ 152 full time farm staff
- ♦ 556 seasonal staff
- ♦ The fleet now Includes
 - 6 John Deere tractors
 - 2 John Deere & 3 Claas combine harvesters
 - 1 John Deere, 2 Great Plains and 1 Primary planters
 - 3 boom sprayers
 - 1 excavator
 - 1 grader
 - 1 front-end loader
- Over 30 decrepit Russian and North Korean tractors , bulldozers and excavators of various sizes.



Investors

- ♦ Norfund – the Norwegian Investment Fund for Developing Countries – is owned by the Norwegian Government and serves as an instrument in Norwegian development policy. Norfund invests in the establishment and development of profitable and sustainable enterprises in developing countries. The aim is to contribute to economic growth and poverty reduction. Norfund always invest with partners, Norwegian or foreign, focusing on renewable energy, financial institutions and agribusiness.
- ♦ Capricorn was co-founded a decade ago together with Jeff Skoll, the first President of eBay, to be the exclusive and independent investment manager of the assets of the Skoll Foundation and Jeff Skoll. Our objective is to grow our asset base with a long-term, global, and “principled” philosophy, which we see as a sustainable competitive advantage to accomplish both consistent capital growth and have a positive effect on the world. That foundational capability was selectively expanded to other like-minded private and institutional clients in 2008.
- ♦ Alan L. Boyce established Boyce Land Co 1986 to act as the General Partner in a series of US farmland limited partnerships since 1986, and owns and manages farmland in 6 US states with a concentration in Indiana and California. Alan is co-founder and an active member of the board of directors of Adecoagro S.A. (NYSE:AGRO), a food and renewable energy-producing company that owns and operates highly productive land throughout Argentina, Brazil and Uruguay.



Infrastructure – Drying & Cleaning

- ◆ A 12 ton/hour pre-cleaner, connected by conveyor belts to the 6 batch dryers, was installed in time for the 2010 harvest, allowing the paddy to be cleaned this year prior to storage
- ◆ The drying bins, equipped with furnaces, fans, and augurs that rotate along the radius of the silo lifting the grain from the bottom to the top, can dry up to 500 tons of rice.
- ◆ When not being used for drying, each silo can store up to 880 tons of paddy
- ◆ Gently drying the rice over a period of days, the grain quality will be much improved over our existing batch dryers
- ◆ A 75-ton/hr cleaner is situated at both the intake and the outlet of the drying system, improving the quality of the paddy for storage
- ◆ Civil construction of the foundations for the silos, cleaners and conveyor towers started in January
- ◆ Expected completion in time for current rice crop.
- ◆ Experienced significant logistical delays, highlights need to order equipment twelve months before it is needed to deal with “end of long dirt road” issues.
- ◆ Long shipping route for non-containerized equipment. Slow African ports. Non-transparent processes. Unmotivated port staff.

Infrastructure – Storage Technology



- ◆ In mid-September 2010, silo bags were chosen over conventional metallic silos given time constraints to construct 15,000 tons of silo storage capacity to receive the harvest in April 2011 and for an initial capex savings of about \$1.64 million
- ◆ 15,000 tons of silo bag storage has been ordered from Argentina
- ◆ 2 silo bagging machines, 2 silo bag unloading machines and 2 20-ton grain carts have been ordered from Argentina
- ◆ Both bags and machines arrived in March 2011
- ◆ An area near the farm compound is being leveled for drainage and fenced for protection of the bags
- ◆ In September, when seeking the board's approval of the decision, we explained: "Financially speaking we are weighing up the costs of the additional \$1.64 million capital required for the conventional system (c \$150,000 annually) with the annual replacement costs of the silo bags (\$55,000)"
- ◆ However, we failed to consider that this savings will be reduced after the establishment of irrigation when we are harvesting two or more crops per year
- ◆ Thus, for additional storage, we will once again consider the construction of conventional metallic silos in parallel with the implementation of large-scale irrigation





Infrastructure – Milling and Marketing

- ◆ A 6 ton/hour Vietnamese mill was installed in December 2009 in time for the 2010 harvest
- ◆ Vietnamese technology was selected for its low cost and because Vietnam is one of the world's largest rice exporters
- ◆ Vietnamese mill was only 10% of the cost of similar sized German and Japanese mills
- ◆ A team of experienced, efficient technicians came from Vietnam for six weeks to install the mill, and they enjoyed their visit
- ◆ The mill processed the 2,000 ton 2009 harvest in 6 weeks and the 4,000 ton 2010 harvest in 8 weeks with no issues
- ◆ Tanzania imports 20-30% of its rice. KPL sells all of its milled rice into the domestic market as import displacement.
- ◆ KPL is introducing Tanzania's first wholesale rice brand for distribution through the national wholesalers
- ◆ A brand will maintain higher and more stable price through the seasonal fluctuations and enable us to distribute higher volume.

Agrica

Project Affected Persons (PAPs)



- ◆ When Kilombero Plantations Limited (KPL), the joint venture between Agrica and RUBADA, the government agency which owned the farm, took possession of the farm in October 2008, local villages disputed the title deed, claiming about half the farm, outside the white border
- ◆ RUBADA had misrepresented the number of PAPs (squatters) which surveys revealed to be 2238 who were either resident or farming in the titled area
- ◆ To resolve the dispute, KPL is ceding 389 heavily-populated ha, the area within the red border, to a local village as well as building them a school and wells, leaving a gross farm area of 5,429 ha (13,458 acres)
- ◆ 20 families within the yellow border are being moved to the red area, where KPL will construct houses
- ◆ 80 families within the grey border have moved to KPL-built houses (photo below) within the green border outside the farm
- ◆ An additional 150 non-resident farmers have been provided with 3 acres each outside the farm, cleared and ploughed, for the current season
- ◆ The total cost for the Resettlement Action is estimated at \$543,000, about \$300,000 more than the \$250,000 which was held in escrow from the purchase price of the farm
- ◆ The Resettlement Action has abided by World Bank guidance on involuntary resettlement, leaving the PAPs better off than they were before regardless of the legality of their land tenure

Agrica



Community Development Fund

- ◆ KPL provides an annual Community Development Fund for the 3 villages surrounding the farm
- ◆ While representing less than 1% of the development cost of the farm annually, the fund increases the village budgets, provided by central government and village taxes, by over 10%
- ◆ Projects such as school rooms and wells are selected by villages
- ◆ 25-meter-deep pump wells providing clean water have replaced shallow open wells with unsanitary, dirty water
- ◆ Donations are made in materials and labor costs, monitored by the farm's building department
- ◆ KPL has also provided direct food donations to families whose homes and farms were destroyed by wild fires



Smallholder Program: System of Rice Intensification (SRI)

- ◆ Invented by a Jesuit priest in Madagascar and developed in India, SRI has increased smallholder yields in those countries from 2 to 8 tons/ha
- ◆ SRI uses simple planting line markers, mechanical weeders and methods that reduce inputs and labour
- ◆ From 5 to 20 Dec 2009, Dr. Venod Vemula, visiting from the International Crop Centre for Crop Research for the Semi-Arid Tropics (ICCRSAT), India, established SRI demonstration plots on Mngeta Farm and with 15 neighbouring farmer families
- ◆ Dr. Vemula instructed the smallholders in:
 - Identifying and eliminating bad seed
 - Planting on a 25 by 25 cm grid, reducing seed inputs from 20 kg to 6 kg per acre
 - Rain-fed seeds are dry planted on the grid while on irrigated farms plantlets are transplanted from a seed bed
 - Using the mechanical weeders between the rows
 - Substituting manure for mineral fertilizer



SRI in the Kilombero Valley

- ◆ In 2010, the pilot group of 15 local farmer families each grew 1 ha with SRI tools and seed provided by KPL and achieved yields ranging from 4.7 to 7t/ha
- ◆ Using the traditional method on neighboring fields with local varieties, the pilot group averaged only 2.9t/ha
- ◆ Clearly SRI has the potential to transform smallholder rice production in the Kilombero Valley
- ◆ In 2011, Norfund provided a Technical Assistance grant, 80% of budget, to expand the SRI program to 250 farmer families in the 2010/11 rice season. The project includes:
 - Demonstration farms/schools in 8 villages within 25 km of Mngeta Farm
 - SRI tools for every 5 farmer families
 - Improved Saro 5 rice variety for each farmer
 - Dedicated SRI extension officers
 - A dedicated pick-up truck and 2 dedicated quad bikes
- ◆ The SRI program has been shortlisted by the African Enterprise Challenge Fund for a larger grant to expand to 4,300 farmer families by 2016
- ◆ When smallholders are producing substantial quantities of rice of the same variety and consistent high quality, KPL will begin to mill and market the smallholder crop with our own. This will be very accretive to the milling and marketing business.

Agrica

Southern Agricultural Growth Corridor of Tanzania (SAGCOT)



- ♦ SAGCOT is an initiative of the World Economic Forum for Africa and the Government of Tanzania
- ♦ The objective of SAGCOT is to:
 - “expand and develop Tanzania’s Southern Corridor as a cohesive, modern commercial agricultural area.”
 - “generate a new force for rural development and poverty reduction.”
- ♦ Agrica/KPL was selected as a model show case farm in SAGCOT presented at the World Economic Forum in Cape Town, South Africa in May

How can SAGCOT help?



- ♦ Start with shortening the long dirt road