Agrica Limited

Sustainable African Agribusiness

Mngeta, Kilombero Valley: Feb. 2008

Hydropower Weir, Dry Season

May 2009

April 2011

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Executive Summary

Agrica was founded in September 2005 to develop sustainable agribusinesses in Africa. The East Africa region was selected to address the limited presence of commercial farms, the high prices and the large and growing demand of the internal markets—a region where the consumption of staples is rising with fast-growing populations; where in some countries 95% of current production is from inefficient smallholders with limited access to inputs or modern farming methods; and where high import tariffs are entrenched by the necessity of maintaining a rural economy and obtaining food security.

The rising global demand for food and feed presents a compelling investment opportunity, and the development of large-scale agribusinesses serving internal markets in Africa is urgently required for domestic and global food security. The negative impacts of land degradation and now changing climate only compound the gaps between supply and demand.

In Africa, the long-term self-interest of an agri-business requires a commitment to local development, in order to earn the good will of the local people by vesting them in the success of the project, as well as a commitment to the conservation of local areas of ecological value. *(See Appendix A for further information on Social Responsibility & Developmental Impact.)*

In September 2008, Agrica completed the purchase of its first farm, a 5,818 hectare property called Mngeta Farm in the Kilombero Valley in southern Tanzania. Importing modern large-scale minimum-tillage farming methods, the redevelopment of Mngeta aims to be both the lowest-cost domestic producer and environmentally sustainable. As of March 2011, the company has rehabilitated most of the infrastructure, built a 6,000m^2 warehouse and processing facility, planted its third crop over 4,150 ha, commenced irrigation trials, and launched a substantial smallholder programme.

Planting rain-fed rice over 5,000 ha (net of roads and drains), Mngeta Farm will produce 20,000 tons of paddy in the rainy season. Processing this rain-fed paddy harvest into 13,000 tons of milled rice in its own mill for the annual peak price season, the farm will generate annual sales of about $8.5 million, based on conservative yield and price assumptions. The total investment required for the rain-fed farm is $41.5 million of equity and $5 million of working capital funding. Agrica has raised $31.5 million of equity to date and has put in place a working capital facility that it expects to increase to $5 million by the end of the year.

Installing an irrigation system would substantially increase rainy season yields and enable Agrica to plant up one or two additional crops each year during the dry season. Agrica will conduct irrigation trials over the next two years and, assuming they are successful, plans to install irrigation over 4000 ha of the farm by the beginning of the 2015/16 rainy season. Irrigation is expected to boost production to 53,000 tons of paddy and close to 34,000 tons of milled rice from 2016, increasing sales to over $25 million. The proposed irrigation system will rely solely on renewable energy, eliminating expensive fuel costs; bulk water will be supplied by gravity from a 1.4-meter-diameter, 4.5km-long pipe from the company's own mini-hydro dam, and the overhead boom irrigation will be powered by biomass generators fuelled by husk from the farm's rice mill. The construction of the irrigation system will require $25 million of debt financing. A number of development banks and commercial banks have expressed interest in providing the debt for the irrigation.

Tanzania has some of the highest rice prices in the world – for decades averaging over 65% higher than the prevailing world price. The price will remain high as Tanzanians prefer varieties of aromatic rice not grown elsewhere in the world, and the price is also protected by an import tariff. Moreover, internationally, due to growing demand and supply constraints, world rice prices are expected to rise. The International Rice Research Institute estimates "that in each of the next 20 years the world will need an additional 8-10 million tons of rice more than the previous year to meet expected needs." Productivity gains have declined, and it is uncertain where this additional supply will be produced.

Agrica plans to sell most of its production within Tanzania although the company will also explore opportunities for export to neighbouring land-locked countries that might yield even more attractive margins.

Mngeta was selected because its rainfall, soil, existing infrastructure and proximity to market make it one of the best sites in Tanzania, a stable country with a growing population and few large farms. Mngeta Farm was started by a Tanzanian-North Korean government joint venture (KOTACO) in 1986. After over $25 million investment in the unfinished project, KOTACO was liquidated in 1993 at the time of widespread famine and insolvency in North Korea. The Korean infrastructure, now largely rehabilitated, includes a river weir and 320kW hydro plant, houses, workshops, roads and drainage ditches over approximately half of the farm

area. The farm area itself is laid out across the plain and the Tanzania-Zambia railway passes alongside the farm. Dar es Salaam is approximately 450km away by road.

Mngeta Farm is owned by Kilombero Plantations Limited (KPL), a joint venture between Agrica's wholly-owned subsidiary, Agrica Tanzania Limited (ATL) and the Rufiji Basin Development Authority (RUBADA), a para-statal government agency. The KPL "public-private partnership" acquired the farm from RUBADA for $2.55 million, paying 50% in cash and converting the remainder into an 8.3% shareholding in KPL. Further ATL investment will reduce RUBADA's holding to 5% or less.

The Rufiji Basin Development Authority, established by parliamentary act in 1975, is mandated to promote and regulate the generation of hydro-electricity, flood control as well as agricultural and forestry activities in the Rufiji Basin, one of the largest river basins in Africa.

Agrica has invested $30 million to date in the Mngeta Farm project, including technical and financial feasibility studies, the rehabilitation of farm infrastructure and the construction of a 6200 m^2 rice factory and warehouse, the purchase of field equipment and the launch of farming operations. The project plan is based on visits by two Australian rice farmers, an American rice farmer, site studies by a cropping specialist from the International Rice Research Institute, a Vietnamese rice post-harvest processing expert, a Dutch tropical agricultural consultancy and three separate irrigation engineers, as well as 30 months' experience operating on the farm.

The KPL management team includes extensive experience in large-scale commercial agriculture in Africa and Australia, environmental conservation and sustainability. Management experience extends down to workshops and field, where a team of seasoned department heads and field supervisors were recruited from a former CDC plantation.

In addition to irrigation infrastructure, KPL is considering further near term investment to acquire an additional 5,200 ha 20km from Mngeta for future expansion. The company is also investigating the feasibility of using a portion of the hydro and biomass power for rural electrification. *(See Appendix B for further information on the Expansion Plan.)*

Towards social responsibility, KPL has supported a number of local forest conservation efforts and established an annual community development fund for the villages surrounding the farm that have no funds for the construction of schools and deep wells for clean water. In 2010, with an Indian expert from the International Crop Research Institute for the Semi-Arid Tropics, KPL established System of Rice Intensification (SRI) demonstration plots on the farm and with neighbouring smallholders. In India and Madagascar, SRI has dramatically boosted smallholder yields, and the first SRI smallholders in the Kilombero Valley produced yields 2 to 3 times higher than the traditional farming system in the area. In 2011 KPL has expanded the SRI program to 250 smallholders. KPL is planning to scale up to 4,300 farmer families by 2016 and ultimately assist them by leveraging the company's rice milling and marketing capacity.

Summary Financials

To date KPL has cleared over 80% of the 5,000 plantable hectares at Mngeta Farm, and aims to clear the remaining area for planting in 2012. Assuming favourable results from irrigation trials over the coming two years, the large-scale irrigation system will be constructed in the dry seasons of 2013 and 2014, with the first 2000 ha coming on stream in the 2014/15 rainy season and the remaining 2000 ha one year later. During the rainy season, the entire farm will be planted with rice, with 4000 ha benefitting from supplementary irrigation. During the dry season, half of the irrigated area will be planted with rice and the other half with rotation crops. KPL will be able grow a third "inter-seasonal" crop on up to 50% of the irrigated area and for planning purposes we assume that we grow an inter-seasonal crop on 25% of the irrigated area. A nitrogen-fixing cover crop will be planted as a break crop on the un-irrigated area.

Over the next few years, KPL will continue to trial irrigated and rain-fed rice hybrids in order to identify the strains most suitable to Mngeta, will continue to even out its fields in order to maximise operating efficiency and the effectiveness of herbicides, and will fine-tune its farming practices (in particular its fertilising and weed-control regimens) in order to achieve yields of 4.0 tons/ha rain-fed by the 2012/3 season and 7.0 tons/ha irrigated by the 2015/16 season. Over the coming 2-3 years, KPL will also continue to trial a number of primarily leguminous crops in the dry season, both rain-fed and irrigated, in order to identify the optimal combination of rotation crops.

KPL plans to sell 100 tons of its rice crop unmilled each year for $350/ton farm gate and to mill the rest of the crop. Assuming a mill-out ratio of 60% white rice and 5% broken rice, and prices of $685/ton delivered to Dar es Salaam for white rice and $445/ton for broken rice, milling the rice will increase the farm gate price of the unmilled paddy rice from $350 to the equivalent of over $430/ton.

Since we are still conducting trials of potential rotation crops for the dry season, in its financial planning KPL has assumed only conservative yields and prices for a blend of potential crops based on the results of trials in the 2010 dry season. The assumed blended yield for the irrigated rotation crops is 2.45 t/ha, and the assumed blended farm gate price for the crops is $500/ton.

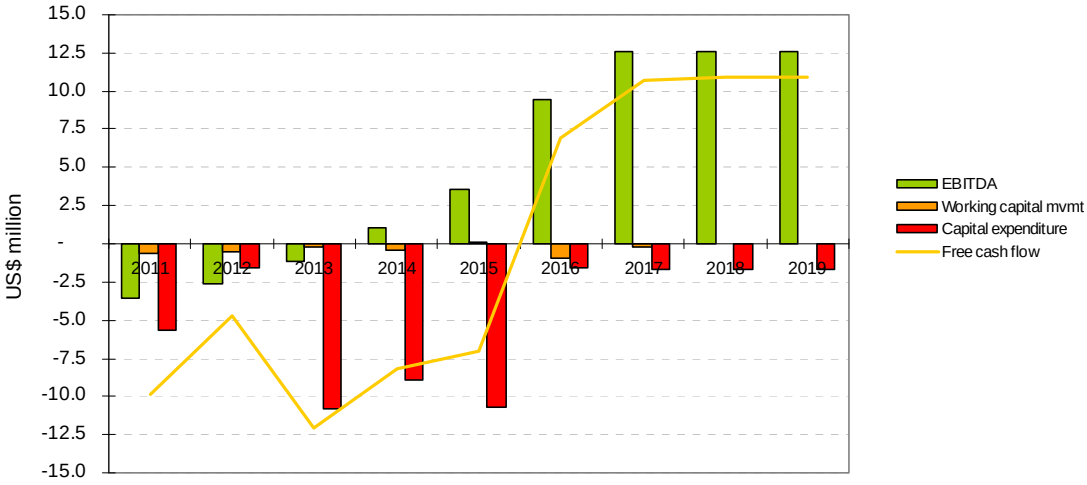
The adjacent table shows the per-hectare economics of rain-fed and irrigated rice, which drive the economics of the business, at full production. The table also demonstrates the impact of irrigation on the economics of rice production: investment in irrigation lifts the contribution per planted hectare of rice by over $1,000/yr. Overall, a hectare of rice is expected to generate revenues of almost $2,900, a gross margin of c.$1,750 and EBITDA of c.$1,250 each year.

As the table illustrates, the most important production cost drivers are fuel, fertiliser and chemical costs. The cost of transport to market, the main component of Sales costs, is also very significant.

Contribution/Ha, US$	Rainfed	Irrigated	Blended
Full production ha/yr	1,000	7,000	8,000
Yield, t/ha	4.0	7.0	6.6
Sales price, $/t paddy eq.*	433	433	433
Total revenues	**1,733**	**3,034**	**2,871**
Direct costs			
Seed	21	21	21
Fertiliser	176	176	176
Chemicals	120	120	120
Contractors	69	69	69
Fuel	103	239	222
Labour	7	32	29
Processing costs	84	147	139
Sales costs	201	351	332
Total direct costs	780	1,155	1,108
Gross margin	**954**	**1,878**	**1,763**
Overhead			
Farm expenses	202	220	220
Staff costs	313	202	202
Other SG&A	105	73	73
Total overhead	620	495	495
EBITDA margin	**334**	**1,384**	**1,268**

*Price realised per ton of paddy rice milled ("paddy equivalent")

The key components of KPL's cash flow are illustrated in the chart below.



Agrica's peak funding requirement is $71.5 million, which is reached in 2014/15 and is comprised of $47.5 million of capital expenditures, $6 million of working capital, $14 million of operating losses and an expected $4 million of funding costs. At full production, KPL will generate $25.4 million of revenue, a gross margin of $17.5 million and EBITDA of $12.6 million per year, delivering an unlevered return on investment of 16.0%.

Agrica has raised just under $31.5 million of equity funding to date and has arranged a $1.5 million working capital facility. To fully fund the business the company is seeking to raise an additional $10 million of equity and plans to increase its working capital facility to $5 million and to finance the construction of the irrigation system with $25 million of long-term debt.

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I. Business Rationale

The Kilombero Valley is a Superior Site for Rice in East Africa

In terms of rainfall and soils, Mngeta Farm is one of the best sites in East Africa for rain-fed rice. Of the potential large-scale sites in Tanzania, it is the closest to Dar Es Salaam, the largest market with a population of 2.5 million, which is 450 km away by road. The Tanzania-Zambia Railway runs through the farm. The infrastructure already in place at the farm gives it an advantage over other green-field projects.

The agro-eco zone of the Valley is also suitable for multi-cropping with irrigation versus the two existing irrigated rice farms in the Tanzania highlands that are too cold and windy for dry season cropping.

The farm is situated in the Kilombero Valley, an area of high rainfall (up to 1900 mm/yr), which has not experienced a substantial rain shortfall since meteorological record keeping began.

The stability of the climate stems from the mountain rainforests that run along both the eastern and western edges of the Valley. Towering over the farm, the Udzungwa Mountains, 3,734 sq km of well-protected cloud forest, act both as a water catchment and a rainmaker whose thermal currents trigger storm systems to precipitate. The mountains are the best insurance for a steady water supply against the uncertain adverse effects of global warming.

The Ministry of Agriculture regards the Valley as one of the most fertile areas in Tanzania. The farm's soils, predominantly clay loams, are suitable for rice, beans, pulses and oilseeds.

The North Korean/Tanzanian project was halted before building its envisioned flood irrigation system. The legacy of the project has nonetheless been of considerable value to Agrica, particularly during the initial redevelopment of the farm:

- A $5 million mini-hydro station capable of generating 320 kilowatts of electricity, ample power for initial drying and milling operations, with potential to increase to 500 kW
- Around 150km of roads and drainage ditches across 3,000 hectares of the farm
- Residential houses, carpentry and metal-working workshops, fuel tanks and assorted equipment
- Reduced land clearing costs ($350/ha vs. $1500/ha).

World Agricultural Prices, Especially Rice, Look Likely to Resist the Downturn

While agricultural commodities have fallen from the nominal record levels of mid-2008, "there is strong reason to believe," according to the *OECD-FAO Agricultural Outlook 2008-2017*, "that there are now also permanent factors underpinning prices that will work to keep them at higher average levels than the past." In an era in which governments and multi-lateral agencies are alarmed by the challenges of feeding a growing population and calling for a second Green Revolution, rice may be even more imperilled than other staples. The fall in the world rice price since the commodity price spike of 2008 has not been as dramatic as the fall of other commodities. At $538 per ton, benchmark Thai 5% broken is currently 94% higher than its 5-year mean price between 2003 through 2007 of $274. *(See Appendix C for information on global agricultural markets.)*

Tanzania's Staple Food Market is Large, Well Protected & Growing

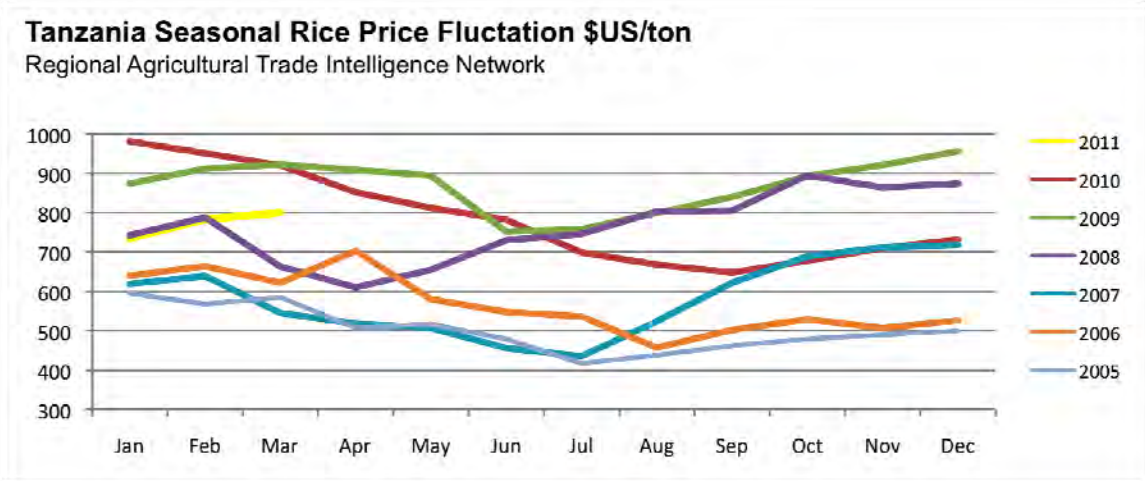
Tanzania's economic growth slowed from 7 to 5.5% in 2009 (IMF). 6.4% growth is expected in 2010 and 7.1% in 2011 (Economist Intelligence Unit). The demand for staples—rice, beans and corn—continues to grow with the population at 2.9% annually. Annual paddy (un-milled rice) production in Tanzania is currently estimated between 1.25 and 1.35 million metric tons. FAO estimates, based on government figures, however, may be highly inaccurate as reporting from Districts is haphazard and may be deliberately inflated to approach government production targets. Likewise, between 150,000 and 200,000 tons of milled rice imports (representing up to 300,000 tons of paddy) may be underestimated as rice reportedly enters the country without duty being paid. The production and import data available suggests Tanzania is not self-sufficient but that the country has a rice production deficit of some 15%.

While production, import and export data is generally unreliable, one certainty is that Tanzania has some of the highest rice prices in the world – for decades averaging some 65% higher than the prevailing world price.

For many years Tanzania imposed a 25% tariff on imported rice to protect millions of inefficient smallholders. In 2005, Tanzania and the other members of the East African Community, adopted a Common External Tariff (EACCET), raising the tax on imported rice to 75% (or $200/ton, whichever is higher); though a member, Kenya retained a 25% tariff with Pakistan to reciprocate for tea exports; nevertheless, the wholesale price of rice in Kenya is consistently higher than in Tanzania.

Raising the tariff from 25% to 75% appears to have had little impact on the already high Tanzania internal price but rather normalized an existing situation. The World and Tanzania prices began to converge only during the commodity price spike of mid-2008 when rice hit historical highs of over $1000/ton.

As the chart below shows, the wholesale rice price fluctuates widely over the course of the year. In 2010, the January price of $982, an all time high, was 51% higher than the September price of $648. Generally, the price begins to drop in March/April with the beginning of the rice harvest and peaks between November and February.



It should be noted that the Tanzania price in the charts above, as reported by the Regional Agricultural Trade Intelligence Network, is the top price in the wholesale markets, the highest grade, and it is unclear what volume is traded at that price. In the wholesale market, prices range as much as 35% across grades, based on colour, translucence, the number of whole grains and the taste, texture and fragrance of the rice when it is cooked.

The tariffs on sensitive goods—maize, rice, sugar, cement, industries in which the East African Community is striving for self-sufficiency—are lowered only temporarily in times of severe shortages through a vote by the Council of Ministers. The rice tariff has not been temporarily lowered since the adoption of the EACCET in 2005.

The EACCET policy reflects a belief that were the tariff to be eliminated, internal rice production would plummet, leaving a significant portion of the largely rural population outside the cash economy and destabilizing the countryside. Therefore the EAC will sustain the tariff, theoretically penalizing the consumer in favour of the agricultural masses, and providing down-side protection for commercial producers.

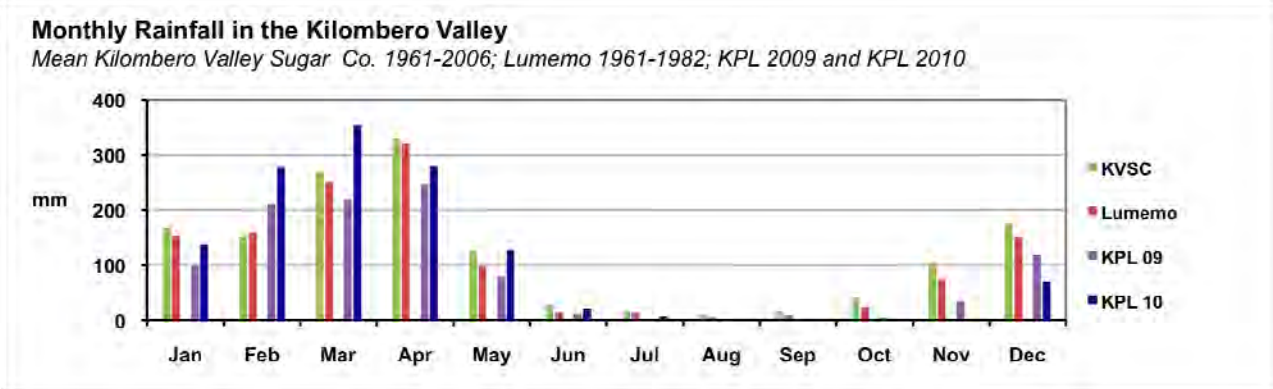
Perhaps, though, the historical independence of the Tanzania rice price, unlike other protected commodities, stems in part from the particular highly aromatic rice that Tanzanians prize and have eaten for centuries. Tanzanians prefer Supa, which is a “landrace,” a collection of highly mixed, inter-related varieties that evolved without deliberate breeding. Most of the aromatic rices in Kenya and Tanzania were probably introduced from India during 16th century, though there is also evidence that the aromatic prevalent in Tanzania today is highly related to a variety imported by IRRI in 1965. The absence in the world market of an aromatic similar in appearance, fragrance and taste appears to protect the Tanzania market. *(See Appendix C for further information on the Tanzania market.)*

II. Operating Plan

Crops

Rice

Rainfall in the Kilombero Valley, ranging each year from 1200 to 1500 mm from November through May, is advantageous for rain-fed rice.



However, achieving world-class rain-fed yields of 5 to 6 tons/ha requires:

- 10 years of on-farm seed-breeding, an immature industry in Africa, for locally-optimal varieties
- 3 years of levelling and contouring fields for best moisture retention and drainage.

Therefore, given the available cultivars in Tanzania, the KPL business plan assumes rain-fed 4 tons/ha as the full-production yield from the May 2013 rice harvest. Achieving 4 tons/ha will depend on:

- Improving soil fertility and weed control through zero-till rotations
- Improving machine planter, sprayer and harvesting efficiency through simple land levelling on undulating areas
- Improving fertilizer efficiency through more precise soil analysis than the existing 352 auger holes dug and analysed to date.

Conservatively, KPL assumes an annual progressive increase in rice yield each season from 1.75 to 2.5 to 3 to 4 tons/ha, the peak yield as advised by the International Rice Research Institute expert who visited the farm in June 2008. In May 2010, prior to the improvements above, about 5% of the cropped area produced over 4 tons/ha, with the best 35-ha block producing 4.8 tons.

The first two seasons of farming have identified the best currently available variety—Saro 5, a semi aromatic developed by North Korean and Tanzanian government rice researchers in the 1990s. Trials of varieties imported from around the world continue on the farm in search of a ready-made superior variety.

World-class irrigated yields of 10 to 12 tons/ha are theoretically possible with levelled fields, appropriate irrigation infrastructure, excellent cultivars and adept management.

After site visits in 2007 and 2008, two international irrigation engineers have advised that the North Korean plan for canals and flood irrigation is not viable. Instead more water-efficient overhead sprinkler irrigation has been proposed, based on research by the United States Department of Agriculture which has proven that 10 ton/ha yields can be achieved with sprinkler irrigation on free-draining soils like Mngeta's.

Sprinkler-irrigated rice trials commenced in January 2011. If the trials confirm that high yields are feasible with overhead irrigation, the construction of the system will commence in June 2013, and the system will come online in late 2014. Irrigation will be used in both the rainy season and the dry season, and will allow up to 2.5 crops per year.

Beans, Pulses & Oilseeds

Given the low rainfall in the dry season, irrigation is necessary for large scale cropping. Several seasons of of irrigated trials will determine which crops can be profitably produced:

- Nitrogen replenishing legumes and pulses—red beans, mung beans, pigeon peas
- Oil seeds such as sunflower, safflower
- Maize, Tanzania's largest staple crop but nutrient-depleting and with a low price relative to rice.

Only sun hemp, which is used in northern Tanzania on wheat farms as a cover crop for organic weed control, appears to be a viable rain-fed dry season crop. However, the market for sun hemp is currently very limited.

Trials of irrigated dry season crops commenced in July 2010. The first micro-plot trials produced promising results:

Crop	Growing Days	Equivalent Tons/Ha
Mung Bean	58	4.63
Sunflower	94	2.2
Red Bean (Mbeya)	72	9.2
Wheat (Growers)	85	4.2

Cost Savings through 'Zero Tillage'

Zero tillage reaps cost savings through the elimination of tractor ploughing and the gradual reduction of herbicide. One of a set of techniques the FAO describes as "conservation agriculture," Zero Till enhances and sustains farm production by conserving and improving soil, water and biological resources. A permanent or semi-permanent organic soil cover (e.g. a growing crop or dead mulch) protects the soil from sun, rain and wind and allows soil micro-organisms and fauna to take on the task of "tilling" and soil nutrient balancing - natural processes which are disturbed by mechanical tillage. Developed in the United States in the 1960s and widespread there by the 1970s, and adopted in Australia and South America in the 1980s, Zero Till agriculture has yet to be practised widely in Africa.

On undeveloped land, after clearing of trees and tall grass, the area is ploughed, harrowed and levelled. Subsequent harrowing is limited to one or two seasons, depending on field conditions. Following the first or second crop, no-tillage methods are introduced:

- The harvested crop is mowed
- A seed drill injects seed and fertilizer through the plant litter into the soil
- The field is sprayed with a pre-emergent herbicide
- Midway through the crop, a post-emergent fertilizer is sprayed.

Over time, the seedbed of the weeds diminishes with each crop. The rotation of bean varieties, leguminous plants, in the dry season also improves soil quality by fixing nitrogen.

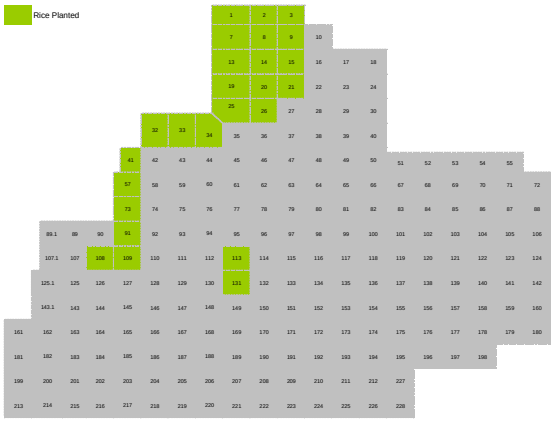
Planting Plan

KPL's Experience at Mngeta

A large-scale green-field farm in Africa, an environment with distinct infrastructural disadvantages to developed agricultural regions, faces many bureaucratic and logistical challenges including:

- Lack of good road and rail networks
- Long delays in completion of government agreements and permits
- Long lead times in importing large-scale equipment, up to 10 months
- Long lead times for importing spare parts
- Random lengthy delays in clearing equipment and spare parts through ports
- Lack of reliable contractors for farming operations and grain drying, milling and storage
- Lack of experienced large-scale farm managers
- Lack of local agricultural research stations to provide advice and support
- Limited availability of high-yielding seed varieties.

In December 2007, nearly a year before the land-purchase was completed, after a year of government delays and in order to avert more unnecessary expenditure of overheads and further postponement of development plans, KPL started the preliminary rehabilitation of the farm with the limited funding that was available prior to the purchase of the farm.



The green area on the map to the left shows the 641 ha planted by March 2008, using small local contracted tractors, the farm's antiquated equipment and local seed on areas that did not require substantial land preparation. A weighbridge was not in place so the 800-ton harvest, about 1.24 tons/ha, is approximate.

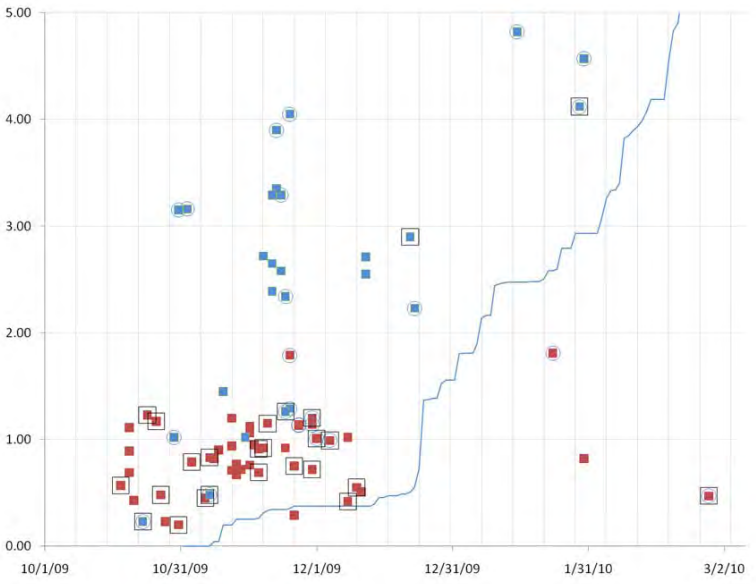
The grey area is land cleared by KOTACO in the late 1980s and early 1990s that required re-clearing of scattered trees and heavy elephant grass, as well as ploughing, harrowing and levelling to produce smooth fields with an even tilth. The majority of the blocks are approximately 25 ha gross of drains and roads. Blocks without dividing roads and drains range up to 100 ha.

In August 2008, still waiting for the land purchase to complete, re-clearing and ploughing of the farm began with contracted bulldozers and small local tractors. In early October 2008, following the land purchase completion, KPL accessed committed funds to order the bulk of the new equipment and construction materials to commence full operations. With less than 3 months until the December/January planting window, contractors were necessary for the cropping operations. Land preparation continued, producing a planting area of 2685 ha.

In December 2008, in one week, atypically heavy rains—329 mm (170 mm is the valley's December mean; 329 mm is the April rainy season peak monthly mean)—flooded the farm and delayed the start of planting by two weeks. The contractor's equipment proved adequate to plant only 2013 ha of rice by mid-March. The remaining 672 ha was planted with rice aerially as a cover crop. The contractor's boom sprayers, which suffered repeated breakdowns, led to the loss of about 35% of the planted area to weed growth. A 6,200 m^2 warehouse with batch dryers was constructed in the rainy season in time to receive the crop. The 2009 harvest yielded 1,983 tons or about 0.98 tons/ha over the 2013 ha planted.

Rice yields improved in 2010. Given the start-up set backs in 2009, the continued late arrival of new tractors, combines, sprayers, and the unavailability of sufficient quantities of Saro 5 seed, land re-clearing was slowed and the yield target was held at 1.75 ton/ha. 2927 ha yielded 3895 tons, or about 1.33 tons/ha.

While the Saro 5 blocks yielded from 2.6 to 4.8 tons/ha, the local varieties rarely yielded over 1 ton/ha. On over 35% of the planted area, the tall local varieties lodged (fell over), precluding machine harvesting and yielding below 1 ton.

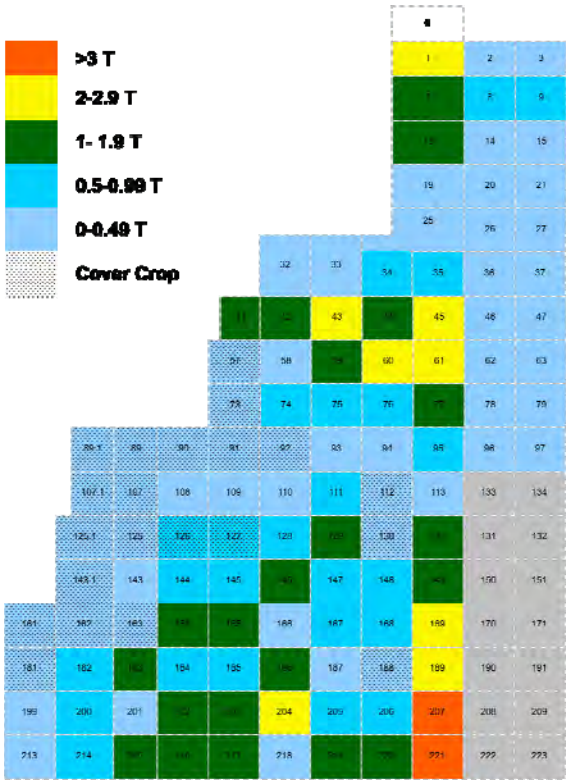


The graph on the left illustrates the yield/ton *(y axis)* by variety and planting date *(x axis)* in Season 2. The blue are Saro 5. The red points are the local Supa landraces. The squared points were harrowed vs. zero-tillage. The low yielding Saro 5 blocks were planted with large sections of Supa. The blue line is cumulative rainfall.

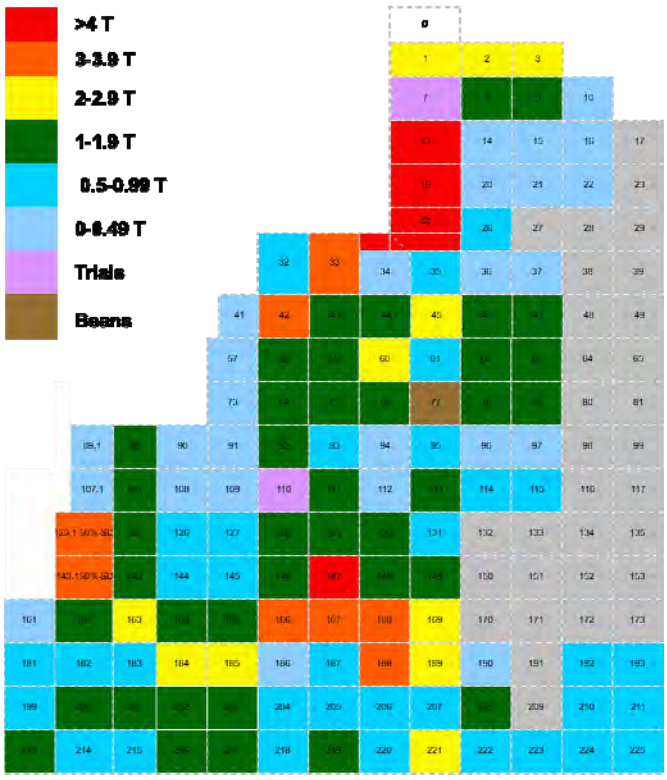
KPL's forced reliance on locally available Supa substantially limited yields in the first two full seasons. However, the second season proved that Saro 5, a semi-aromatic variety (a cross of Supa with a shorter Korean variety) that competes with Supa in the market, performs well under mechanized farming.

The maps below illustrate the yield data of the 2009 and 2010 harvests.

Season 1: 2009 Harvest
Harvested area: 2031 hectares, 0.98 ton/ha yield
Block Yields are ranked by colour



Season 2: 2010 Harvest
Harvested area: 2927 hectares; 1.33 ton/ha yield
Rain-fed Yields Improved



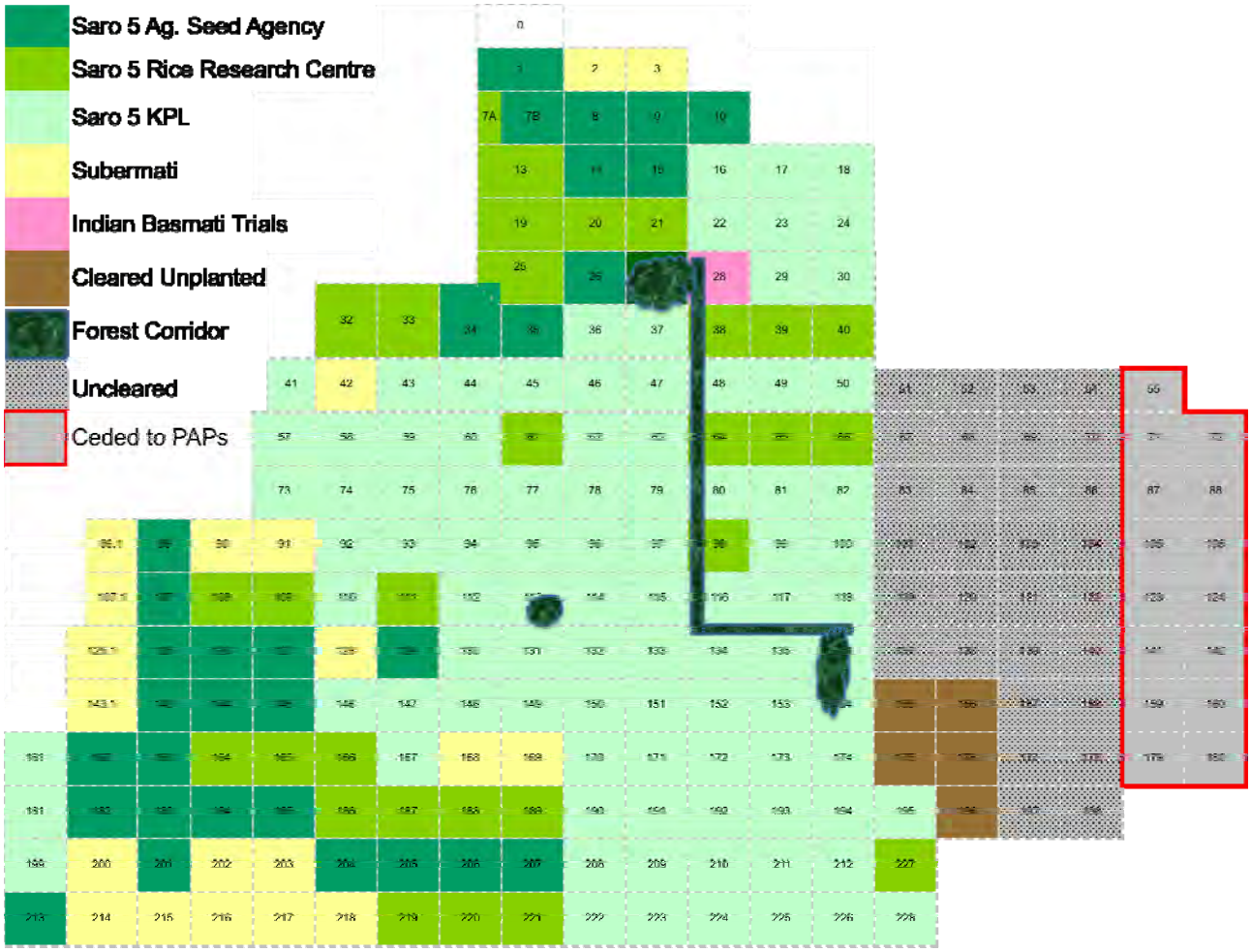
Suitable seed varieties present a challenge to achieving world-class yields and represent a significant long-term opportunity. Tanzanians prefer aromatic rice (i.e., possessing a strong taste and fragrance), which commands a price premium in the Tanzania market. Most local farmers plant Supa – the local aromatic landrace of highly mixed, inter-related varieties that originated without deliberate breeding. Supa, with tall, heavy stalks, highly prone to lodging, is not suitable for mechanized farming.

As Saro 5 is currently the only reliable high-yielding semi-aromatic variety in the Tanzania market, improved aromatic cultivars would not only increase KPL yields but also open the opportunity of producing certified seed, which sells at a premium, to other growers. Importing seeds from around the world is the logical starting point for identifying and multiplying more cultivars for the farm. However, government restrictions can preclude importation. Following a meeting with the President of Tanzania and numerous meetings with the Ministry of Agriculture, KPL received permission to import aromatic varieties from the USA, Argentina, India and China for trials in collaboration with the Ministry. Sixty-one varieties were trialled on the farm in 2010 and a number of promising cultivars were identified. Ultimately, KPL intends to employ a rice seed breeder to develop its own aromatic varieties well matched to the agro-ecological conditions of the Kilombero Valley.

For Season 3, a total of 4,150 ha have been planted, 90% with Saro 5 and 10% with Subermati, a semi-aromatic variety that has performed well on another commercial farm in Tanzania and in KPL trials last year. The yield target is 2.5 tons/ha. In addition to a 44% increase in planted area and superior seed, new improvements include:

- 3000 ha has been levelled with a land plane
- GPS guidance for planting and spraying
- Rehabilitated roads and drains
- Increased spraying capacity
- Increased ferrying capacity
- Increased combine harvester capacity.

Season 3: 2011 Rice Crop
Planted area: 4150 ha



Area & Yield Targets

The chart below summarizes the planting areas, yield targets and production volumes achieved to date and assumed in the financial plan going forward until full production in 2016:

Year (Ends Oct 31)	2009	2010	2011	2012	2013	2014	2015	2016
Rice Rainy Season Rain-fed Ha	2,031	2,927	4,110	4,750	4,750	4,750	3,000	1,000
Rice Rainy Season Irrigated Ha			40	250	250	250	2,000	4,000
Rice Dry Season Irrigated Ha			240	200	150	150	1,000	2,000
Rice Inter-Season Irrigated ha					50	75	500	1,000
Paddy Rain-fed Yield, T/ha	0.98	1.33	2.5	3.0	4.0	4.0	4.0	4.0
Paddy Irrigated Yield, T/ha			4.0	5.0	5.5	6.0	6.5	7.0
Paddy Harvest, Tons	1,983	3,895	11,395	16,500	21,475	21,850	34,750	53,000
Beans/Pulses Dry Season Irrigated Ha			10	50	100	100	1,000	2,000
Beans/Pulses Blended Yield, T/Ha			2.45	2.45	2.45	2.45	2.45	2.45
Beans/Pulses Harvest, Tons			25	123	245	245	2,450	4,900
Sunhemp Dry Season Ha		111	100	200	250	250	250	250
Sunhemp Rain-fed Yield, T/Ha		0.67	0.80	0.80	0.80	0.80	0.80	0.80
Sunhemp Harvest, Tons		74	80	160	200	200	200	200

Equipment Plan

Relatively flat topography and large blocks make Mngeta highly suitable to the efficiencies of maximum-scale mechanized farming. Bordered by ditches and roads, the blocks range from 500 m x 500 m (25 ha) to 1 km x 1 km (100 ha), allowing the easy operation of large-scale mowers, planters and combine harvesters. The

majority of the old machinery that was present on the farm when KPL took possession—36 lightweight North Korean bulldozers, 10 Russian excavators, 5 Valmet tractors, 3 combine harvesters—has been sold as scrap. From December 2007 through June 2009, Field Masters Ltd, Tanzania's only large-scale contract-operator, proved unreliable and costly. With no suitable alternative, KPL owns and operates all critical equipment.

The tables below detail the $4,282,000 spent on field equipment to date. (Note that c.$1 million of this amount has been spent since October 2010 on equipment for the 2010/11 season.)

Field Equipment in Situ	Units	Year	Cost $
Tractors			
JD 9530T 475 HP tracked tractor	1	2009	300,000
JD 8430 250 HP tractor	1	2009	190,000
JD 8430 250 HP tractor	1	2010	250,000
JD 8295T 250 HP tracked tractor	1	2011	250,000
JD 7515 140 HP tractor	2	2009	170,000
JD 7185J 185 HP tractor	1	2011	115,000
JD 5510 89 HP tractor	1	2011	free*
Belarus 100 HP tractor	1	2009	35,000
GPS Tractor Guidance	3	2011	25,000
Combines			
Claas Mega 206 Large Combine (used)	1	2009	95,000
JD 9650 Large Combine (used)	1	2009	155,000
Claas Dominator Medium Tracked Combine	1	2010	190,000
JD 1175 Medium tracked combine	1	2010	190,000
Class Lexion Large Tracked Combine	1	2011	425,000
Mac Don Rice Combine Cutter Bar (used)	1	2009	40,000
Tracks for JD9560 & Claas Mega	2	2011	115,000
Total Tractors & Combines			2,545,000

Field Equipment in Situ	Units	Year	Cost $
Auxiliary			
Primary 12m Planter & Air Cart	1	2008	365,000
JD 1590 3m Disc Drill Planter	2	2009	120,000
Connecting Bar for JD 1590	1	2011	15,000
Great Plains 8m Disc Drill Planter (used)	1	2011	80,000
Great Plains 12m Disc Drill Planter	1	2011	120,000
Cebeco 20m boom sprayer used	1	2008	40,000
Hardi 20m boom sprayer	1	2009	50,000
Hari 20m boom sprayer	1	2011	75,000
Shulte Rotary Cutter 12m	1	2009	125,000
Baldan Large Harrow	1	2008	40,000
Small Harrow	1	2009	5,000
Fertilizer Spreader 5T	1	2010	27,000
Harvesting Bins	3	08-11	90,000
Mother Bin 80 Ton	1	2011	110,000
Tipper Lorries, Bowsers & Trailers	10	08-10	265,000
Komatsu Excavator used	1	2009	120,000
Komatsu Grader used	1	2009	90,000
Total Auxiiary			1,737,000

**$30,000 value; supplied by John Deere for mistake on 9530 T PTO*

The tables below detail the additional $1,115,000 expenditure required for operating on 5,000 ha.

Field Equipment for 5000 Ha	Units	Date	Cost
#2 100 HP tractor	1	Nov-11	40,000
#2 250 HP tracked tractor	1	Nov-12	300,000
#2 Large Tracked Combine	1	Feb-15	425,000
#3 & #4 100 HP tractors	2	Apr-15	80,000
Total Tractors & Combines			845,000

Field Equipment for 5000 Ha	Units	Date	Cost
#4 Tipper Lorry	1	Apr-11	65,000
#4 Boom Sprayer	1	Dec-11	75,000
#4 Harvesting Bin	1	Feb-13	70,000
#2 Rotary Cutter, medium	1	Dec-14	100,000
Total Auxiliary			310,000

The capital expenditure on field equipment is high relative to farms in developed agricultural regions because of the necessity of redundancy. When essential planting, spraying or harvesting equipment fails, spare parts and service can be weeks, or longer, away, jeopardizing the crop unless another machine is on hand to replace it. The spare capacity can be leveraged when developing a second farm within 25 km of Mngeta.

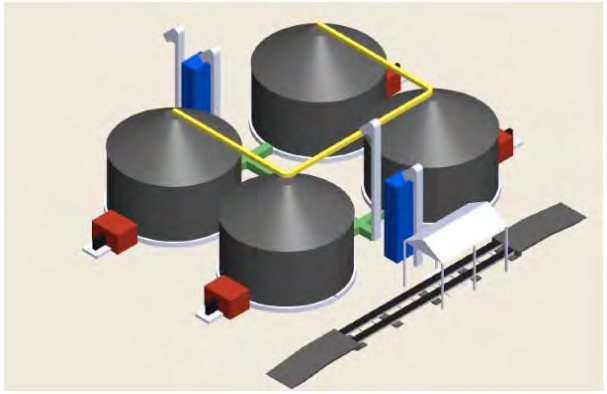
Infrastructure Plan

General Rehabilitation

When KPL took over the farm, the residential houses, offices, workshops, roads and drainage ditches were in an advanced state of disrepair. The residential houses have been repaired and upgraded. The workshops and offices have been moved 4.5 km from the residential compound in the foothills of the mountains to the top of the farm, centralizing all operations and eliminating unnecessary travel. Repair and rehabilitation of the existing 160 km of roads and 149 km of ditches is ongoing. An additional 57 km of roads and 37 km of ditches will be required to bring the whole of the farm under cultivation.

Drying & Storage

In October 2008, as KPL commenced operations 3 months before the planting season, with numerous tasks on multiple fronts—from rehabilitating the buildings and roads, to clearing land, ordering equipment and planting—simplicity was beneficial for the initial processing plan.



After reviewing alternative equipment available from Europe, the Americas and Asia, KPL sourced cost-effective and reliable rice drying equipment and expertise from Vietnam, the world's second largest exporter, which produces 35 million tons of rice per year. The Centre for Agricultural Energy and Machinery at the University of Ho Chi Minh City developed low-cost drying technology that has been widely adopted across Vietnam. At harvest time, climatic conditions in the Kilombero Valley are similar to the Mekong Delta and thus the Vietnamese technology is suitable.

Between Feb and June 2009, KPL constructed a 6,200m^2 warehouse for the initial dryers, cleaner and milling line and 6000 tons of bulk paddy storage. Flat-bed reversible air dryers were selected for their simplicity and reliability. Reliability is critical, as wet grain will spoil unless dried in 24 hours. Hot air from a rice-husk furnace is pumped through the wet grain, alternating from the top and the bottom. Each of the set of 6 flat-bed dryers can dry 10 tons in 8 to 10 hours. The flat-bed dryers can be used for other crops as well. A conveyor belt connects the dryers to a 12-ton/hour pre-cleaner.

In Jan 2011, KPL began construction of an automated drying and cleaning system. Based on USA and Argentinean technology, it will clean and dry up to 400 tons/day.

Dumped from tipper trucks on a weigh bridge, the wet paddy is conveyed through a 75-ton/hr pre-cleaner to 4 "in-bin" dryers—silos with husk furnaces and augers that slowly mix the grain. Grain is dried very slowly over a period of days, which reduces breakage and produces higher quality rice that achieves a higher price in the market. The four bins also double as storage for up to 3,200 tons at the end of the drying season.

The total price for the 400-ton/day cleaning and drying system, including civil construction, is approximately $1.4 million.

Rather than spend an additional $1.6 million of capital expenditure on conventional silos, on the advice of an Agrica director who is the president of AdecoAgro, a South American farming operator with more than 330,000 ha under cultivation, silo bags were chosen for an additional 15,000 tons of capacity. AdecoAgro stores over 60,000 tons of paddy in silo bags in Brazil and Argentina annually.

The polyethylene silo bags, used only for one crop, are loaded and unloaded with special machines. Once bags are in-loaded, the grain consumes the available oxygen, generating a carbon-dioxide environment that inhibits fungus and insect growth. The cost of replacing 15,000 tons of silo bags is about $55,000 versus an annualized cost of $150,000 for similar conventional capacity. In financial terms conventional silos therefore become competitive with silo bags once a silo is used twice a year. KPL will consider installing some conventional capacity once the irrigation system is in place and the farm is producing a substantial second crop in the dry season.

Rice Milling

Ownership of one of the few high-quality mills in Tanzania improves the bottom line and strengthens KPL's position in the market. Besides adding value to the crop and reducing dependency on middlemen, the move up the value chain will enable KPL to establish a name as a high quality milled rice producer and supply the broadest range of wholesalers.

KPL's Vietnamese mill commenced operations in January 2010. Bui Van Ngo, the manufacturer, has been producing rice mills since 1955 and their mills process the majority of Vietnam's 5-million-ton export crop. Processing experts at the International Rice Research Institute had recommended BVN mills as being as good as German technology at 10% of the price. The 6-ton-per-hour mill will process up to 15,000 tons of paddy into high quality rice in 4 months, requiring that the paddy be stored a maximum of 6 months, well within the 12-month recommended storage time for rough rice, and enabling the crop to be processed in time for sale in the 3-month peak price period. A second milling line will be ordered in 2012.

Irrigation

Irrigation is necessary to double rice yields, to make a rice crop possible in the dry season and to assure the survival and profitable yields of common dry season crops—beans, pulses, oil seeds and maize.

While Mngeta Farm was originally intended as an irrigated rice scheme, the North Koreans did not construct the envisioned irrigation system—a diversion weir, raised canals and levelled land. KPL's irrigation engineering consultants, two separate firms, have determined that the clay content is not high enough for traditional surface flooding as the soils' high permeability would preclude standing water over much of the farm.

In response to declining water resources around the world, research has been conducted in Brazil, Australia and the USA on the use of more water-efficient overhead irrigation of rice. A USDA report notes:

- Yields comparable to flood irrigated rice were obtained with sprinkler irrigation
- Rice was produced economically
- Water was saved relative to flooded production
- Highly variable soils (*similar to Mngeta Farm*) did not appear to impact yield.

Overhead irrigation trials with a 40-ha centre pivot commenced with supplementary irrigation of rainy-season rice in January 2011. KPL is planning to increase the centre-pivot irrigation to 250 ha by July 2011 for dry season rice trials and to gather data through two consecutive dry seasons prior to commencing construction on a 4,000 ha scheme. Should the results prove favourable as anticipated, KPL plans to commence construction of the irrigation system in 2013, with 2000 ha operating in 2015 and a total of 4000 ha operating from 2016. While the design will be reviewed and refined prior to construction, the conceptual plan, produced by one of the world's most experienced irrigation engineers, is powered completely through renewable energy—gravity, the farm's existing hydro plant and a proposed 1 mega-Watt biomass plant to be fuelled by rice husk. The proposed system includes:

- 1.4 meter diameter glass-reinforced plastic (GRP) pipe running from a penstock of the hydro station 4.5 km to the farm; while costing close to $4 million, the GRP pipe will result in annual diesel savings of over $550,000
- Booster pumping station
- Trunk pipe line
- Branch pipe lines
- 80 x 50-ha centre pivot boom sprinklers.

The photo below left illustrates the proposed aboveground GRP pipe, and the photo below right the 40 ha centre pivot now in operation on Mngeta farm.

In the driest months of the year, there is sufficient flow in the Mngeta River to power 3 turbines in the hydro and irrigate 4,000 ha without reducing the river to unsustainable levels. The total cost of the proposed irrigation system is outlined in the table below.

Item		Total $
Pipeline from Power Station		3,987,513
Trunk Pipe		4,492,613
Branch Pipe		3,435,760
	Total pipes	11,915,885
Pipe Fittings	15%	1,787,383
Booster Pump Station		350,000
New Turbine Power Station		400,000
Eectrical Distribution		500,000
Centre Pivots		6,800,000
		21,753,268
Contingencies	15%	3,262,990
Total Cost		**25,016,258**

For three months each year, additional power beyond the hydro-plant's capacity is required for booster pumping and the operation of centre pivots—320 kW in July, 708 kW in August and 64 kW in September. Rather than rely on a diesel generator, KPL plans to construct a 1 MW biomass plant to supply the irrigation system and the farm's crop processing needs. The excess will be sold into a rural mini-grid for the surrounding villages or into the national grid. The cost of the plant is $2.5 million, bringing the total cost of the irrigation and power systems to about $27.5 million.

Sales & Distribution

Crop Distribution in Tanzania

Rice, beans and maize—the staple crops of Tanzania—are traded through an established system of wholesale markets in cities and towns across the country. Tanzania's largest wholesale staple markets are five markets in Dar es Salaam. Each of these markets includes 10 to 15 brokers who claim to turnover between 10 and 200 tons of rice per week, selling for traders who have brought the rice from across the country, marking up the price 30 Tanzania shillings per kg (about US $20/ton). The rice is brokered on consignment with no credit guarantees and the balance paid in increments as the rice is sold within about 15 to 60 days.

Collectively the markets of Dar es Salaam move perhaps 1000 to 2000 tons of rice weekly or 50,000 to 100,000 tons a year. 100 km outside Dar es Salaam, Morogoro Town has the second largest wholesale rice market, though much of the rice there passes through the Dar es Salaam market. The Dar and Morogoro markets serve local sub-wholesalers and buyers from non-producing coastal regions, Zanzibar and occasionally island nations of the Indian Ocean who were subverting the export ban that was lifted in 2010.

Each producing region has wholesale markets but no data exist on inter-regional distribution or how much of Tanzania's approximate 800,000-ton milled rice crop leaves the regions where it is produced. The Dar es Salaam price appears to be the benchmark price as other wholesale market prices around the country generally reflect the Dar price less the cost of transportation to Dar from the particular market.

Bulk buying end-consumers include the military, which purchases 600 tons per month for its camps around Dar es Salaam, the police, prisons, academic institutions and municipal hospitals. Institutions purchase primarily through advertised tenders.

Rice Price

KPL rice sales of "White Rice" (20% broken pieces) have ranged from $712 to $389/ton, depending on the quality of the rice and the time of year sold. KPL sales of 100% broken rice have ranged from $440 to $290/ton, depending on the time of year sold. The same issues that affected the production volumes—seed variety, lodging, late arrival of equipment—also affected rice quality. The average prices are summarized in the table below:

Crop Harvested	2008	2009	2010*	2010**
Mill Out Rates				
White Rice (20% Broken)	55%	40%	29%	
Broken Rice	2%	22%	29%	
Total Rice Products	57%	62%	58%	
Average Price White Rice $	636	579	389	503
Average Price Broken Rice $	400	423	304	290
Paddy Equivalent $	358	326	199	228

**2010 crop sold in low price season, June thru October 2010*

***2010 crop sold in high season, December 2010 thru February 2011*

With Saro 5 seed, increased combine capacity and improved drying technology now in place, KPL is confident that quality, mill-out and price will improve from the current season. The mill-out and price assumptions are summarized in the table below:

Financial Year*	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Mill Out Rates							
White Rice (20% Broken)	50%	55%	60%	60%	60%	60%	60%
Broken Rice	14%	9%	4%	5%	5%	5%	5%
Total Rice Products	64%	64%	64%	65%	65%	65%	65%
Average Price White Rice $	466	566	604	649	671	685	685
Average Price Broken Rice $	303	368	393	422	436	445	445
Paddy Equivalent $	275	344	378	410	424	433	433

**While mill out rate corresponds to crop harvested in financial year, prices are indicative of the financial year.*

KPL Marketing Plan

The opportunity exists to formalize wholesale rice distribution by utilizing the wholesalers that distribute consumer goods nationally.

Kilombero Sugar Distributors (KSD) is Tanzania's largest sugar agent and distributes the entire production of Kilombero Sugar Company (KSC), about 160,000 tons annually. Both KSD and KSC are owned by the South African sugar plantation company, Illovo, and the multinational EDF Man commodities group. KSD sells KSC sugar on consignment on the following terms:

- 3% commission on gross sales
- Transport charges
- Loading and offloading charges
- Storage charges.

Two national wholesalers, Zaccaria and Mohamed Enterprises, distribute a range of basic goods—soap, batteries, matches, candles, sugar, items found in every little shop in the country—to retailers and sub-wholesalers through a national network of warehouses. Zaccaria is the largest and purchases 40% of KSD sugar annually. Mohamed Enterprises has an untrustworthy reputation.

Because there is not a reliable supply of quality rice packaged and branded locally, Zaccaria has previously imported substantial quantities of cheap rice under its own Parrot brand in 50 and 25 kg bags, the size preferred by shop owners, who weigh out the rice for customers 1 kg at a time. However, as Tanzanians prefer local aromatic varieties, Parrot rice did not sell and Zaccaria has ceased importing.

Therefore, Zaccaria is interested in a reliable branded supply of local aromatic rice for which it would pay cash rather than take on consignment. Likewise, with spare capacity in its regional warehouses and national distribution network, KSD is interested in distributing a wholesale brand of KPL rice on terms similar to its distribution of sugar.

In order to fill the gap of a reliable supply of branded local aromatic rice, KPL will launch Tanzania's first wholesale rice brand. Two brands being tested are *Mama Mchele* ("Mrs. Rice") and *Shibe*, which means being full and satisfied.

Branded 50 and 25 kg bags will be more suitable for the national and regional wholesalers to distribute to shops than the blank 100 kg bags that transport 99% of Tanzania's staple crops traded in regional agricultural markets.

The colour and quality of the bag are important, as the bags are recycled as curtains, rugs and tablecloths. The colour should stand out and appeal to the end user, the Mama of the shop owner's household. KPL is currently testing colours and logo designs.

Mama Mchele could be a counterpoint to KSC's *Bwana Sukari*, ("Mr. Sugar") and will complement KSD's distribution of sugar should KSD become KPL's agent. If distributed independently, *Mama Mchele* might benefit from the association with the high quality *Bwana Sukari*.

Given the high price KPL has been able to achieve for its 100% broken rice, over $400/ton, KPL is also considering a wholesale brand of broken rice for national distribution.

The launch of the brand relies on the production of substantial quantities consistently high-quality aromatic rice. The lodging of the 2010 Supa crop and the need to retain the farm's own Saro 5 for seed limited the quantities available for launching a brand. The brand will probably be launched from the 2011 crop.

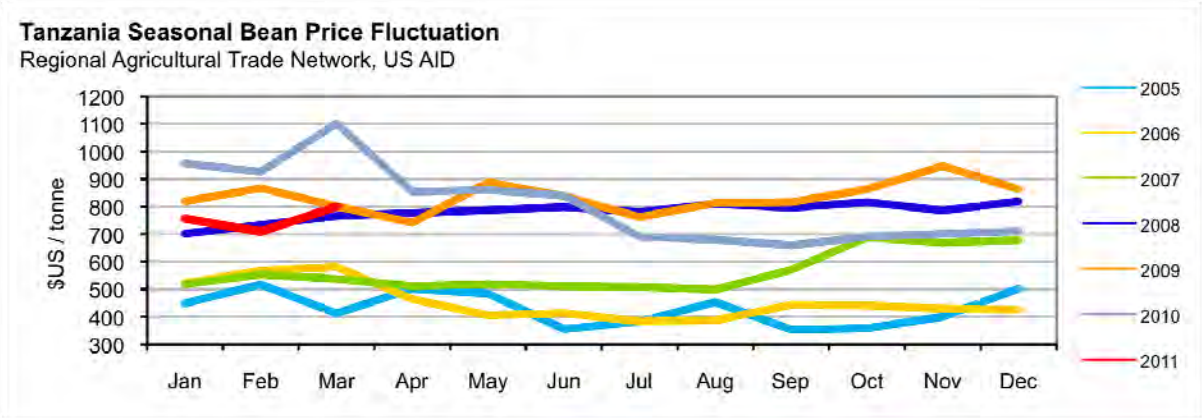
With no existing wholesale rice brand, a first-mover can establish a reliable brand of aromatic rice that becomes the wholesalers', shopkeepers' and consumers' brand of choice. The wholesale brand should maintain a higher and more stable price through the seasonal fluctuations, especially as both KSD and Zaccaria have suggested bundling rice sales with sugar.

Rotation Crops

Large scale production of rotation crops will commence after the installation of irrigation. To date, the irrigated trials have shown excellent potential for leguminous beans and pulses.

Red beans are traded in the same wholesale markets in Dar es Salaam that trade rice. The mean bean price over the past five years is $748. Pulses—mung beans, pigeon peas, yellow gram—are sold primarily for export to India and Indian populations in East Africa. Given shortages in Indian production, pulses are trading at far above recent means. (*See Appendix C for mung, pigeon pea and yellow gram prices*).

KPL assumes a conservative blended farm gate price of $500/ton for beans and pulses.



Sun hemp, a cover crop favoured by wheat farmers that requires no inputs, little moisture, fixes nitrogen and reduces weed growth, is used as a “break crop” between rice seasons. Currently, KPL is growing sun hemp seeds to order at $333/ton farm gate. When 4,000 ha of the farm is irrigated, 250 ha of sun hemp will be planted on the 1,000 un-irrigated area of the farm annually, giving the entire area a break every 4 years, reducing the infestation of rice diseases.

III. Risks

Price Risk

Rice

The East African Community's Common External Tariff (EACCET) of 75% on imported rice provides solid protection against an unlikely fall in the world rice price. In cases of acute food shortage, a vote by the Council of Ministers of the community will lower the tariff, typically to 25% for 90 days and a specific quantity. These limited imports do not appear to visibly affect market prices. Nor has the EACCET on rice been temporarily lowered in Tanzania since its adoption in 2005.

Kenya, an EAC member, has retained a 25% rice tariff with Pakistan to reciprocate for tea exports. Nevertheless, the wholesale rice price in Kenya is consistently the same or higher than the Tanzania price.

The term of the EACCET is indefinite. The Tariff is meant to protect sensitive industries in which the countries are striving for self-sufficiency or food security as well as to maintain a viable rural economy. Even if the 75% tariff were lowered to the 25% import duty levied by Tanzania prior to 2005, the internal price would not drop substantially, given the fact that the rice price in Tanzania averaged over 65% higher than the world price through the decades of the 25% duty.

At peak production, KPL will add 50,000 tons of paddy, or about 3.1%, of the 2008 market (last period of available data, undoubtedly smaller than current market) which included 1.3 million tons of Tanzania paddy production and an estimated 200,000 tons of imported milled rice (representing about 300,000 tons of paddy). Other commercial producers, rehabilitating irrigated farms, are planning an estimated total increase in production of 40,000 tons or 2.5% of 2008 production. Meanwhile annual growth in consumption is conservatively estimated at 2.9% (growth of the population), which is equivalent to about 46,000 tons of paddy. The increase in production is just enough to out-pace consumption growth but short of bridging the import gap to bring Tanzania closer to 100% rice self-sufficiency. Therefore KPL considers the risk that the EACCET will be abolished in the next 10 years negligible, especially given the greater shortfalls of rice production in Uganda and Kenya. Moreover, even were self-sufficiency to be obtained, tariffs will remain in place to protect smallholder producers from more efficient Asian farmers.

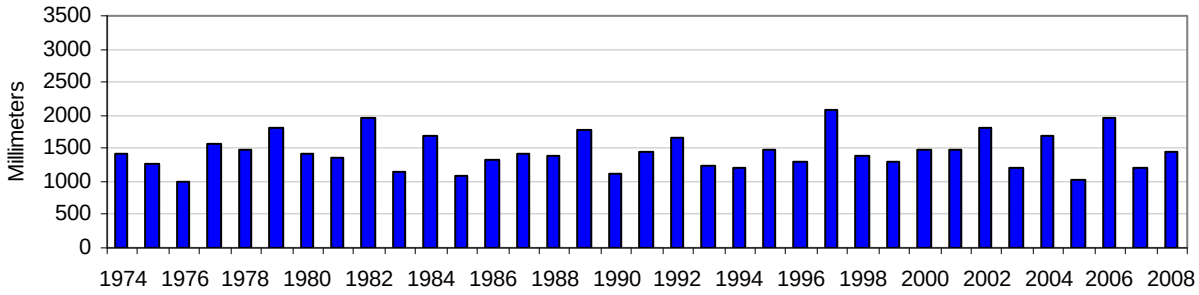
As noted earlier, the historical independence of the Tanzania rice price, unlike other protected commodities, stems in part from the particular highly aromatic rice that Tanzanians have eaten for centuries. Tanzanians prefer Supa, which is a "landrace," a collection of highly mixed, inter-related varieties that evolved without deliberate breeding. The absence in the world market of an aromatic similar in appearance, fragrance and taste structurally protects the Tanzania market.

Agricultural Risks

Drought

Major drought resulting in complete crop loss appears to be non-existent in the Kilombero Valley as shown by records of the Kilombero Valley Sugar Company, 150 km northeast of Mngeta Farm:

Kilombero Valley Sugar Company Annual Rainfall



The mean annual rainfall between 1974 and 2008 at Kilombero Sugar was 1444 mm. While drought has affected much of northern Tanzania, there have been no years of substantial rainfall deficit in the Kilombero

Valley. However, dry periods within the rainy season that can reduce crop yields remain a risk until the installation of irrigation.

Torrential Rains

Thermal currents from the high mountains can trigger large fronts to precipitate heavily, resulting in substantial rain over a short period. These torrential rains can:

- Delay planting, causing production targets to be missed
- Damage dry season crops, lowering their yields and quality
- Delay harvesting of rice and dry season crops, lowering yields and quality.

These risks can be mitigated by good drainage, all weather roads and spare planting and harvesting capacity to complete operations in a reduced time frame.

Pests & Diseases

Pests and diseases are managed through careful fertilizer regimens and seed spacing, rigorous monitoring, Integrated Pest Management, and timely application of pesticides, fungicides and foliar chemicals.

Army worms—*Spodoptera exempta* are a known to occur periodically in the Kilombero Valley and other areas of Tanzania after periods of lower-than-normal rainfall with the onset of heavy rains. Moths lay eggs on the undersides of green stems, leaving the larvae to hatch and an army of caterpillars to appear overnight. Pheromone traps can detect high concentrations of moths that indicate a coming outbreak, and chemicals in stock can be applied at the appropriate moment to contain the damage.

The African Rice Gall Midge (AfRGM) (*Orsylia oryzivora*) is the most common insect pest on rain-fed and irrigated wetland rice. Other pests include striped (*Chilo zacconius*), white (*Maliarpha* spp.), and yellow (*Schirpophgaga* spp.) borers and stalk-eyed fly (*Diopsis macrophthalma*); grain-sucking bugs (*Aspavia* sp., *Stenocoris claviformis*); case worm (*Nymphula depunctalis*); and whorl maggot (*Hydrellia* sp.). Incidence of stem borers and stalk-eyed fly is severe in all (humid and dry) zones, while that of grain-sucking bugs, case worm, whorl maggot and AfRGM is more severe in humid forest and Guinea.

The major diseases of rice in Africa include blast (*Pyricularia oryzae*), glume discoloration (fungal complex: *Sarocladium* sp. & *Curuvularia* sp.), rice yellow mottle virus (RYMV), sheath rot (*Sarocladium* sp.), leaf scald (*Rhyncosporium oryzae*), sheath blight (*Thanetophorus cucumeris*), and bacterial leaf blight (*Xanthomonas campestris* p.v. *oryzae*). Other pests such as rodents and birds attack rice in all ecosystems.

Integrated Pest Management (IPM) is a decision-support system for the selection and use of pest control strategies that minimize dependence on chemical pesticides and improve human health and environmental quality. Growing a healthy crop is the key to good IPM. Other IPM technologies for rice are (a) deployment of pest-resistant varieties, (b) field sanitation, (c) no early spraying against leaf folders and trips, (d) use of predators such as spiders and wasps to control insects, (e) an active barrier system for rat control, (f) silica application for blast control, and (g) timely and judicious use of fast-acting bio- or synthetic pesticides when pest infestation is serious, threatening the crops.

The red-billed Quelea (*Quelea quelea*), the world's most abundant bird species and a native of sub-Saharan Africa, can occur in flocks of hundreds of thousands which can potentially devastate cereal farms. The Tanzania government monitors their nesting sites and sprays during their breeding season. There have been no large-scale outbreaks of quelea quelea in the Kilombero Valley in the last twenty years.

Political Instability

The *Financial Times*, *The Economist*, Harvard University's Africa Competitiveness Report, the US State Department, the UN Trade & Development Agency, all rank Tanzania as one of the most stable and business-friendly countries in Africa. Investments in Tanzania are guaranteed against nationalization and expropriation through multi- and bi-lateral agreements. Tanzania is expected to remain stable over the long term for 3 reasons:

- Its well-entrenched democracy has for over 20 years respected presidential term limits (two 5 year terms)
- All military officers retire mandatorily at age 50
- No large dominant tribes exert hegemony over others (over 130 tribes and no conflict).

Agrica's "public-private partnership" with RUBADA, a government agency, also provides advantages in facilitating government approvals, as well as insulation from potentially obstructive elements of the local and national government, from the revenue authorities to local officials who might harass the company for their own reasons or personal gain.

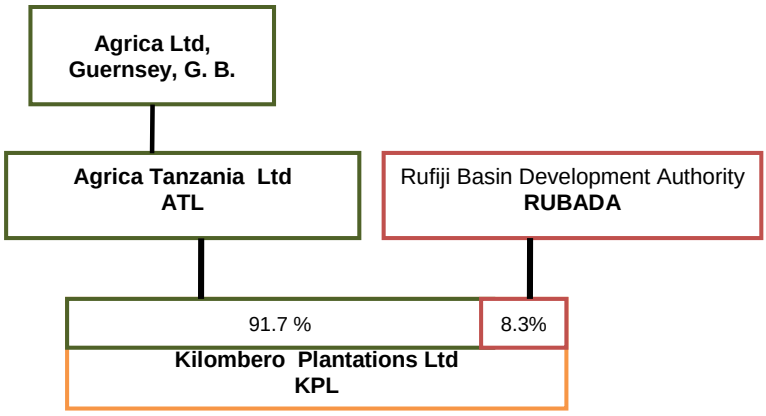
IV. Kilombero Plantations Limited

Shareholding Structure

Kilombero Plantations Ltd (KPL) is a joint venture between Agrica Tanzania Limited (ATL) and the Rufiji Basin Development Authority (RUBADA), a para-statal government agency. The KPL "public-private partnership" acquired Mngeta Farm from RUBADA for $2.55 million, paying 50% in cash and converting the remainder into an 8.3% shareholding in KPL. Further ATL investment will reduce RUBADA's holding to under 5%.

Agrica Tanzania Limited is a wholly owned subsidiary of Agrica Limited whose principal shareholders are Pacific Sequoia Holdings and Norfund. Pacific Sequoia Holdings is part of the Capricorn Investment Group, in their words, "a long-term focused global multi-asset class fund with a principled, thematic approach." Capricorn's clients are a select group of ultra-high-net-worth individuals and institutions, and its funds' assets total U.S. $4 billion. Capricorn has invested $17 million in equity in Agrica Ltd to date. Norfund, the Norwegian Investment Fund for Developing Countries, which is funded by the Norwegian state, is an investment company intended to develop and establish profitable and sustainable enterprises in poor countries. Its mandate is to promote business development and contribute to economic growth and poverty alleviation. Norfund has invested $10 million in equity in Agrica Ltd to date.

The Rufiji Basin Development Authority, established by parliamentary act in 1975, is mandated to promote and regulate the generation of hydro-electricity, flood control as well as agricultural and forestry activities in the Rufiji Basin, one of the largest river basins in Africa. The RUBADA board of directors consists of officers from the Ministry of Agriculture, Ministry of Water, Ministry of Energy, the University of Dar es Salaam and Sokoine Agricultural University.



Management Team

The KPL management team includes extensive experience in large-scale commercial agriculture in Africa and Australia, environmental conservation and sustainability. Management experience extends down to workshops and field, where a team of seasoned department heads and field supervisors have been recruited from a former CDC plantation.

Graham Anderson. General Manager, 40. Graham has been working on land selection and feasibility studies for this project since early 2005. From 1995 to 2001, Graham worked for the Commonwealth Development Corporation (CDC) in Malawi and Tanzania, first in water management and finally as a tea plantation production manager. In 2001, he started his own floriculture business in Tanzania, growing and exporting tropical cut flowers to Europe. A UK citizen who grew up in Kenya, Graham holds an MSc in Soil and Water Engineering from Cranfield University.

Murray Dempsey. Crop Production Manager, 29. A native of the large-scale farming area of New South Wales, Australia, Murray has experience over a broad range of farming disciplines. From 2004 to 2008, he held the position of Agronomist for MIA Rural Services, advising on the production of cereals, rice, maize, soybeans, grapes and tree crops, including soil and plant tissue analysis, fertilizer recommendations, pest control, budgeting and increasing yields. From 1995 to 2002, he worked as a field operator for Agreserves Australia, a commercial farm producing a variety of arable crops. Murray, who grew up on an irrigated

property, holds a Bachelor of Agriculture from the Charles Stuart University as well as 9 certificates in training courses for farm chemicals and equipment and health and safety. Murray joined KPL in September 2008.

Stanley Ngugi. Rice Mill Manager, 42. Perhaps East Africa's most experienced rice mill engineer, Stanley joined KPL in November 2009 from Dominion Farms, an American rice operation in Kenya. Previously he worked for three other rice mills in Kenya. Stanley holds a BSc. in Agricultural Engineering from Egerton University, Kenya and a certificate in rice processing from Japan.

David Lukindo. Human Resources Manager, 52. David spent his career in estate and personnel management for large tea estates in Tanzania from Unilever's Brooke Bond to CDC's EUTEACO. With his long-term experience, David is responsible for personnel, security, community outreach and advises on recruitment.

Mark Lasco. Financial Controller, 31. Mark joined KPL in December 2009 from KPMG, where he was a senior auditor. A Chartered Accountant in the UK and Tanzania with a Bachelors degree in accounting from the University of Dar es Salaam, Mark is responsible for the overall financial control of KPL and Agrica Tanzania's operations.

Consultants

Patrick Qorro. Host Country Relations, 66. Patrick was first elected to the Tanzanian Parliament aged 28, and has held many political posts since, including Minister for Agriculture and Co-operatives. He has also held many high ranking business positions, amongst others Chairman of Tanzania Breweries, Chairman of the Tanzania Cotton Board, Chairman of Tanzania Distilleries and Chairman of the National Housing Corporation. Patrick was a trustee of Tanzania National Parks for 15 years. He currently serves on the Board of Tanzania Standard Newspapers, and is Chairman of the Tanzania Forest Conservation Group and 3 other NGOs.

Robin Digby, *Irrigation Engineer*, 67. Designing and constructing irrigation schemes in Africa, Asia, the Middle East and Europe for over 42 years, Robin has unsurpassed experience in irrigation projects of all sizes and technologies. Robin visited the farm in 2006 and has reviewed the proposals of two other irrigation engineering firms that have visited Mngeta to provide advice. Robin has a BA (Hons) in Civil Engineering, Trinity College, Dublin and a M.Sc. in Civil Engineering Hydraulics, Imperial College, London.

Dr. Vethaiya "Bala" Balasubramanian. Rice Consultant, 60. Recently retired as the Senior Agronomist/Soil Scientist at the International Rice Research Institute in the Philippines and the Coordinator of the IRRI-Africa, Bala has over 35 years experience in Asia and Africa, including long-term projects in Madagascar, Cameroon, Rwanda, Ghana and Nigeria. Knowledgeable in both irrigated and rain-fed conditions, Bala's expertise extends from all aspects of rice cultivation through post-harvest processing. Bala visited the farm in June 2008 and continues to provide advice on fertilizer, varieties, pest control and trials.

Laurence Chase MSc. Plant Nutrition and Soil Consultant, 61. A tropical agriculturalist with 35 years experience of soil fertility and environmental management in developing countries, Laurence spent most of his career with CDC, investigating land suitability for agriculture and forestry investments in the Far East, India, Africa and Central America as well as introducing systematic leaf and soil sampling measures and field experiments to support fertilizer regimes for oil palm and other crops. In the early 1990s Laurence developed environmental awareness in CDC-managed agribusinesses through networking and in-house magazine articles, which resulted in new company environmental policy and procedures, including pesticide use. Laurence has coordinated extensive soil sampling and mapping across Mngeta farm.

Dr. Phan Hieu Hien. Post Harvest Processing/Storage Consultant, 61. Recently retired as a researcher and lecturer at the Centre for Agricultural Machinery and Energy, University of Agriculture, Ho Chi Minh City, Vietnam, Hien developed rice drying machinery and aerated storage facilities that are now used across Vietnam, one of the world's leading rice producers. On leave from the University from 1997 to 1999, he was project coordinator for the installation of 500 flat-bed dryers in three provinces. He holds 4 patents on crop dryers and has published extensively in international journals. Hien visited the farm in September 2008 and designed the flatbed dryer system installed at the farm.

V. Agrica Limited

Directors

Carter Coleman. Founder and Chief Executive Officer, 49. As Managing Director of Agrica Tanzania Ltd., Carter was based in Tanzania from August 2008 to May 2010, overseeing the establishment of Agrica's operations and investigating further opportunities. He lived in Tanzania between 1987 and 1996 and maintained strong links while away, primarily through the Tanzania Forest Conservation Group (TFCG), a widely respected and successful community development and reforestation organization he established in 1991. Carter helped build the TFCG into an organization that works in 130 villages in 4 mountain ranges, has planted 10 million trees, trained 10,000 villagers in agro-forestry, assisted hundreds of self-help groups in micro-enterprises and pioneered local forest management in Tanzania, returning the responsibility for the forest from the central government to village environmental committees, beginning the restoration of some 1200 square kilometres of high-biodiversity rainforest. The TFCG now has 43 staff, including 12 university graduates, and a budget of $1.2m from Scandinavian governments, UNDP/GEF and other international donors. Carter is a former journalist who reported for *Time* and the *Financial Times* in Africa, the author of two books and a magna cum laude graduate of Vanderbilt University.

John Paul Whyatt. Founder and Chief Financial Officer, 44. John Paul's background is in strategy consulting and investment banking. Formerly a Director of Dresdner Kleinwort Benson and Bear Stearns, John Paul spent 6 years in Russia advising Western multinationals on inward investment opportunities and then advising Gazprom and other major Russian oil & gas companies on raising funds from the global capital markets. After returning to the UK in 1998, John Paul led over 20 M&A, LBO and capital market transactions primarily in the telecoms and media sectors and ranging in size from £18m to over $50bn. John Paul began his career as an intern in the US Environmental Protection Agency, after graduating with a Masters in Public Administration and the political economy of international development from the University of Pennsylvania. His undergraduate degree was in Philosophy and French from Oxford University.

Nick Browne. Founder & Non-Executive Director, 49. Nick has been a director of the Company since inception and along with a colleague at Dexion Capital provided the initial seed funding for the business. Nick joined Dexion Capital, a London and Guernsey based specialist consultant and investment manager in the hedge fund sector, shortly after its formation in 2000 and was instrumental in its growth into the largest manager of exchange-traded hedge fund products globally. From 2007 he assumed a part time role within Dexion and devotes a part of his time to Agrica, assisting Carter and John Paul. Prior to joining Dexion, Nick spent 15 years in the reinsurance industry. He holds a degree from Oxford University.

Ion Yadigaroglu. Non-Executive Director, 40. Ion is responsible for direct investments at Capricorn Investment Group, one of the two principal investors in Agrica Ltd. From 2001 to 2004, Ion executed a wide range of acquisitions and investments as a Director of Business Development at Koch Industries, the largest private company in the world by revenues. From 1998 to 2001, Ion was CEO of Bivio, a company that provides services to retail investment partnerships. From 1985 to 1992, he was an analyst at Olsen & Associates, a Zurich-based foreign exchange analytics and trading company. Ion serves on the boards of directors of SeaChange Maritime, Zag.com, Agrica Limited, Automatiks, Targeted Growth and Falcon Waterfree. He holds a BSc in Physics from ETHZ in Switzerland, and a PhD in Astrophysics from Stanford University.

Alan Chang. Non-Executive Director, 34. Alan is a Principal and Managing Director, Asian Investments of the Capricorn Investment Group, overseeing their multi-asset class portfolio of investments in Asia as well as their global venture portfolio. Alan joined Capricorn in 2003 and is part of the leadership team. Prior to Capricorn, Alan was an Associate at DFJ New England, an early-stage venture capital firm. Previous to that, Alan advised technology companies on corporate finance and M&A transactions at Montgomery Securities (now Banc of America Securities). Alan received a MBA from Harvard Business School and a BSE from Duke University, graduating cum laude with a triple major in Electrical Engineering, Computer Science and Art History. Alan is a CFA charter holder and is fluent in Chinese.

Alan Boyce. Non-Executive Director, 49. Alan is president of AdecoAgro, an integrated food and renewable energy company that farms more than 330,000 hectares of highly productive land in Argentina, Brazil and Uruguay. In five years, the firm has substantially increased volume while also adopting sustainable production technology and adding value through vertical integration. Until 2007 Alan was Director of Special Situations at Soros Fund Management LLC and managed a portfolio of assets of the Quantum Funds. He also had principal operational responsibilities for the bulk of Soros's finance and agriculture investments in

Latin America. Alan served as Managing Director of Fixed Income Arbitrage with Bankers Trust for 14 years and began his career at the Federal Reserve Board in Washington, D.C. He holds an MBA from Stanford University and a BA in Economics from Pomona College, where he graduated magna cum laude.

Elin Ersdal. Non-Executive Director. Elin is head of the Industrial Partnerships department at Norfund, the Norwegian Investment Fund for Developing Countries, one of the two principle investors in Agrica Ltd.

James Cameron. Advisory Board Director, 47. James is co-founder and Vice Chairman of Climate Change Capital, a specialist merchant banking group that currently has more than €1 billion under management invested in renewable energy and carbon trading. CCC advisory clients include governments, financial institutions and clean energy companies. Responsible for strategic and sector development, James is one of the world's pre-eminent experts in developing market-based policy responses to climate change. Prior to CCC he was Counsel to Baker & McKenzie and was the founder and the head of their Climate Change Practice. James has spent much of his legal career working on climate change matters, including negotiating the UNFCCC and Kyoto Protocol. He is the Chairman of the Carbon Disclosure Project, a treasurer of REEEP and a trustee of The Climate Group.

VI. Financial Plan

Financial Model

Agrica has constructed a detailed budget and financial model based on the inputs and reports of its management and advisory teams, and its experience operating at Mngeta Farm since December 2007. The model envisages the expansion of the farm to a full 5000 plantable hectares by the end of 2011, and the installation of an overhead irrigation system over 4000 ha by the end of 2014.

The model has been developed in US dollars, as the Tanzanian economy is strongly dollarized and the prices of KPL's products and key inputs are generally either quoted in or linked to US dollar prices. To be conservative, no inflation is assumed in KPL's sale prices, which are based on market prices in the first quarter of 2009.

KPL's key production cost inputs, fuel, fertiliser and chemicals, are all driven by global as opposed to local markets. To be prudent, the base costs of these inputs are set higher than their current levels in Tanzania, but no inflation is assumed. The cost of diesel, for example, which peaked at around $1.70/ltr in 2008 then dropped below $1.20/ltr and rose to a little over $1.30/ltr in early 2011, is set at $1.40/ltr. No inflation is assumed either for other cost inputs, such as labour, which are generally denominated in Tanzanian shillings and not expected to inflate in dollar terms.

Agrica's financial year starts in November, the beginning of the rainy season in Tanzania and of the planting season for rice. The rainy season rice crop will generally be planted between December and February and harvested between April and June. The bulk of the paddy harvest is held in storage and milled in time to be sold around the seasonal peak in rice prices in the following January-February. Of the crops planted in the dry season – irrigated rice and pulses, and a break crop on un-irrigated areas – only the irrigated pulses will be harvested and sold by the end of the financial year. As a result, the bulk of KPL's sales are realised in the financial year after the crops are planted. Most of the production costs of the rice crops and all of the break crop production costs are therefore transferred into inventory at the end of each financial year and released from inventory as Cost of Goods Sold against actual sales in the following year.

The model includes a 10% contingency on all operating costs and capital expenditures.

Planting Plan

By the beginning of 2011 KPL had cleared close to 4200 of the 5000 plantable hectares at Mngeta Farm. KPL is now clearing the rest of the farm with a view to having the full 5000 plantable hectares cleared by the end of the year. In 2011, KPL will commission a detailed review of the irrigation options at Mngeta. Assuming the 2011 irrigation trials are successful, at the end of 2012 KPL will commission the geotechnical surveys and detailed design for the irrigation system with a view to tendering the construction contract in the second half of 2013 and commencing construction at the beginning of the 2014 dry season (May/June 2014). Construction of the bulk water supply system is expected to take up to two dry seasons, and the large scale irrigation system is therefore forecast to come online from the 2014/15 rainy season. Prior to this, KPL will continue irrigating 250 ha with its trial sprinkler system in order to build up the operating experience required to ensure the smooth implementation of the irrigation system at scale. To minimise the operational risks of scaling up too fast, KPL will only put 2000 ha under irrigation in 2014/15, and the full 4000 ha in 2015/16.

In the 2007/8 rainy season KPL planted 641 ha of rain-fed rice, rising to 2031 ha in 2008/9, 2927 ha in 2009/10 and targets of 4150 ha in 2010/11 and 5000 ha each rainy season thereafter. An increasing proportion of this area will benefit from supplementary irrigation as the area under irrigation is expanded to 250 ha in 2011 and finally 4000 ha by the 2015/6 rainy season.

In the 2011 and 2012 dry seasons, KPL will conduct irrigated trials of rice and promising rotation crops (mainly nitrogen-fixing pulses, but also maize and wheat). In subsequent dry seasons, KPL plans to plant half of the irrigated area with rice, and the remaining irrigated area with rotation crops. Since a number of the pulses are relatively short-maturity crops (70-90 days as opposed to 120 days for rice), it will be possible to plant a third crop each year on the area planted with these crops. For financial planning purposes we have assumed that we do will so on half of the area planted with rotation crops, or a quarter of the irrigated area.

KPL plans to plant a suitable cover crop as a break crop in the dry season on some of the area of the farm not under irrigation, in order to ensure that a rotation crop is planted on all unirrigated areas at least one year in four.

KPL's planting plan is summarised in the table below.

Year	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Plantable areas (BOY), ha								
Cleared	2,685	2,986	4,150	5,000	5,000	5,000	5,000	5,000
Irrigated	-	-	40	250	250	250	2,000	4,000
Rainy season crop, ha								
Rice, irrigated	-	-	40	250	250	250	2,000	4,000
Rice, rainfed	2,031	2,927	4,110	4,750	4,750	4,750	3,000	1,000
Total planted area	2,031	2,927	4,150	5,000	5,000	5,000	5,000	5,000
Dry season crop 1, ha								
Rice, irrigated	-	5	240	200	150	150	1,000	2,000
Beans, irrigated	-	5	10	50	100	100	1,000	2,000
Break crop, rainfed	-	111	100	200	250	250	250	250
Total planted area	-	121	350	450	500	500	2,250	4,250
Dry season crop 2, ha								
Rice, irrigated	-	-	-	-	50	75	500	1,000

Note: "Beans" is shorthand for irrigated dry season rotation crops, which will primarily be pulses

Field Production Plan

Rain-fed rice yields are expected to increase from 1.33 t/ha achieved in 2009/10 when a substantial portion of the farm was planted with the local Supa rice variety to 2.5 t/ha in 2010/11 when only Saro 5 will be planted. Thereafter yields are expected to rise steadily to 4 t/ha in 2012/13 as KPL evens out the fields, clears the seed bank of weeds from the farm, identifies optimal hybrids for Mngeta, and fine-tunes its fertilising and other agronomic practices. KPL initially expects to achieve an irrigated rice yield of 4 t/ha, but to increase this to 7 t/ha from 2015/16 (compared with benchmark irrigated rice yields of 8-10 t/ha).

The final selection of irrigated dry season rotation crops will depend on the outcomes of continuing trials over the coming seasons. For financial planning purposes we have assumed that we will plant a blend of the crops that performed successfully in our small scale irrigation trials (over a total of 10 ha) in the 2009/10 dry season, namely chick peas (12.5%), pigeon peas (12.5%), mung beans (25%), Mbeya beans (25%) and maize (25%). This combination of crops is expected to yield an average of 2.45 t/ha.

The crop we plan to plant as a rain-fed break crop in the un-irrigated areas of the farm is sun hemp, which is attractive because it is low-cost and nitrogen-fixing, and there is also a potential market for sun hemp seeds in Northern Tanzania, where it can also serve as a cover crop but cannot be grown to maturity. Based on our experience planting sun hemp in the 2010 dry season, we expect to achieve a yield of 0.8 t/ha of sun hemp seed.

KPL's field production plan is summarised in the table below.

Year	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Total planted areas, ha								
Rice, irrigated	-	5	280	450	450	475	3,500	7,000
Rice, rainfed	2,031	2,927	4,110	4,750	4,750	4,750	3,000	1,000
Beans, irrigated	-	5	10	50	100	100	1,000	2,000
Break crop, rainfed	-	111	100	200	250	250	250	250
Total	2,031	3,048	4,500	5,450	5,550	5,575	7,750	10,250
Yields, tons/ha								
Rice								
Irrigated	-	-	4.00	5.00	5.50	6.00	6.50	7.00
Rainfed	0.98	1.33	2.50	3.00	4.00	4.00	4.00	4.00
Average	0.98	1.33	2.67	3.17	4.13	4.18	5.35	6.63
Rotation crops								
Beans, irrigated	-	1.23	2.45	2.45	2.45	2.45	2.45	2.45
Break crop, rainfed	-	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Harvest, tons								
Paddy rice								
Rainy season	1,983	3,895	10,435	15,500	20,375	20,500	25,000	32,000
Dry season 1	-	-	960	1,000	825	900	6,500	14,000
Dry season 2	-	-	-	-	275	450	3,250	7,000
Total	1,983	3,895	11,395	16,500	21,475	21,850	34,750	53,000
Beans	-	6	25	123	245	245	2,450	4,900
Break crop	-	89	80	160	200	200	200	200

Rice Processing Plan

As part of an ongoing programme to trial new varieties and refresh its seed stock, KPL plans to purchase 100 tons of new rice seed each year, enough to plant 1000 ha, and will plant the remainder of the farm with its own seed (requiring 700 t/yr at full production). In addition, KPL expects to sell a small amount of each crop (100 t/yr) as (unmilled) paddy rice, mainly in order to understand the local market for paddy. The rest of the paddy harvest will be milled.

Mill-out ratios, the proportions of unbroken "head" rice and broken rice grains produced, depend heavily on the quality of paddy milled. KPL expects to achieve target mill-out ratios of 60% White Rice (containing at least 80% head rice) and 5% broken rice from 2013/14, when it expects to be producing consistently high quality rice. We achieved respectable initial mill-out ratios of 60%/22% White Rice/Brokens with the 2008/9 crop, but very poor results (29%/29%) with the 2009/10 crop, reflecting the quality problems caused by the late harvest and lodging of the crop.

The rainy season rice crop is harvested in the 3rd Quarter of the year, and the dry season crops in the 1st Quarter of the following year. As a result, almost half of a given year's rice production is not milled until the following financial year. Moreover, to maximise revenue, KPL plans to sell as much of its rice as possible around the market peaks in January-February, pushing more sales into the year following production. The table below shows KPL's expected milling volumes, mill-out ratios and rice production and sales volumes.

Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Rice processing assumptions, tons								
Paddy harvested	3,895	11,395	16,500	21,475	21,850	34,750	53,000	53,000
Paddy milled	3,425	10,875	16,030	21,079	21,185	34,050	52,300	52,300
Mill-out ratios								
White rice	29%	50%	55%	60%	60%	60%	60%	60%
Broken rice	29%	14%	9%	4%	5%	5%	5%	5%
Rice production								
White rice	980	5,438	8,817	12,647	12,711	20,430	31,380	31,380
Broken rice	990	1,523	1,443	843	1,059	1,703	2,615	2,615
Total milled rice	1,969	6,960	10,259	13,490	13,770	22,133	33,995	33,995
Rice sales volumes								
Sold in year of production,	45%	22%	28%	28%	26%	32%	37%	37%
Sales volumes								
White rice	976	1,737	6,663	9,947	12,359	15,903	25,467	31,380
Broken rice	745	878	1,583	1,283	878	1,325	2,122	2,615
Total milled rice	1,721	2,615	8,247	11,230	13,237	17,228	27,589	33,995

Sales

In contrast to its rice sales, for planning purposes KPL does not expect to retain any of its irrigated rotation crop harvest for seeds, and expects to sell all of its "bean" crop in the year it is planted. The break crop, however, will only be harvested and sold in the year after it is planted. However, since the market for sun hemp seeds is undeveloped, KPL is not budgeting to sell more than 100 t/yr of its sun hemp output.

As detailed above (see *Operating Plan - Sales & Distribution*), KPL expects the headline price for its milled rice to rise from $458/ton in 2009/10 to $685/ton in 2015/16, as it produces higher quality rice and implements its wholesale branding and distribution strategy. The blended price for the bean crop and the price of sun hemp seeds are both assumed to be constant at $500/ton and $333/ton respectively. The table below sets out the expected sales volumes, prices and revenues for the different products.

Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Sales volumes, tons								
Rice								
White rice	976	1,737	6,663	9,947	12,359	15,903	25,467	31,380
Broken rice	745	878	1,583	1,283	878	1,325	2,122	2,615
Total milled rice	1,721	2,615	8,247	11,230	13,237	17,228	27,589	33,995
Beans	-	25	123	245	245	2,450	4,900	4,900
Break crop	-	50	50	75	100	100	100	100
Sales prices, $/ton								
Rice								
White rice	458	466	566	604	649	671	685	685
Broken rice	385	303	368	392	422	436	445	445
Total milled rice	426	411	528	580	634	653	667	667
Paddy equivalent	255	251	338	371	408	425	433	433
Beans	-	-	625	556	556	556	556	556
Break crop	-	333	333	333	333	333	333	333
Revenues, $'000								
Rice	734	1,075	4,354	6,508	8,396	11,253	18,394	22,665
Beans	-	-	77	136	136	1,361	2,722	2,722
Break crop	-	17	17	25	33	33	33	33
Total	734	1,092	4,447	6,669	8,566	12,647	21,149	25,421

Operating costs

Direct cost inputs per hectare have been built up from cropping plans detailing the inputs required per field operation for each crop and from a detailed post-harvest processing budget. The cost structure and profitability of the business are driven by the cost and profitability of cultivating a hectare of rice at the farm. The adjacent table illustrates the contribution of a hectare of rain-fed and irrigated rice at full production. As the table shows, the most significant production cost inputs are fertiliser, chemicals (herbicide and pesticide) and fuel (diesel). The cost of transport to market in Dar es Salaam (modelled at $50/ton) is also a significant cost of sale. As the table indicates, at full production KPL expects to generate a gross margin of $1,760 per ha of rice planted.

The table further illustrates the impact of irrigation on the profitability of the business, driving an increased contribution of over $900/ha at the Gross Margin level, and of over $1,000/ha at the EBITDA level, once the efficiencies from allocating overhead across more than one crop per year are taken into consideration. This compares with incremental depreciation of a little over $100/ha/yr.

Contribution/Ha, US$	Rainfed	Irrigated	Blended
Full production ha/yr	1,000	7,000	8,000
Yield, t/ha	4.0	7.0	6.6
Sales price, $/t paddy eq.*	433	433	433
Total revenues	**1,733**	**3,034**	**2,871**
Direct costs			
Seed	21	21	21
Fertiliser	176	176	176
Chemicals	120	120	120
Contractors	69	69	69
Fuel	103	239	222
Labour	7	32	29
Processing costs	84	147	139
Sales costs	201	351	332
Total direct costs	780	1,155	1,108
Gross margin	**954**	**1,878**	**1,763**
Overhead			
Farm expenses	202	220	220
Staff costs	313	202	202
Other SG&A	105	73	73
Total overhead	620	495	495
EBITDA margin	**334**	**1,384**	**1,268**

*Price realised per ton of paddy rice milled ("paddy equivalent")

KPL's overheads consist mainly of "Farm expenses" (which in turn consist mainly of repair and maintenance costs for farm equipment and infrastructure) and staff costs, and will amount to $495/ha at full production, leaving an expected EBITDA margin of $1,268/ha, or 44% of sales.

Corporate overhead costs of approximately $1 million/year ($100 per hectare planted) will be incurred by ATL and Agrica Ltd until the farm is fully developed. An estimated $250,000 of these costs are directly attributable to KPL and are included in the above calculations.

Taxation

The corporate income tax rate in Tanzania is 30%, but under the Tanzanian Investment Centre's incentives for foreign investment, KPL's capital expenditures will be 100% deductible against corporate income tax. KPL is not therefore expected to pay income tax until after 2017/18.

Tanzania levies a 10% withholding tax on all interest payments and on dividend payments remitted abroad or domestically to shareholders with shareholdings of under 25%.

Capital expenditures

The development of Mngeta Farm through to peak funding in 2014/15 requires total capital expenditures of $47.5 million, including the $2.55 million purchase price of the farm.

As of 31 October 2010, KPL had made $9.9 million of these expenditures, broken down as illustrated in the table below. Note that $918,000 of the farm purchase price was allocated to land, $57,000 to farm equipment and $1.57 million to support infrastructure (principally to the mini hydro station and the buildings in place at the farm). Principal additional capital expenditures through to October 2009 were c.$1.5 million on land clearance, c.$3 million on vehicles and farm equipment and over $2 million on processing plant (principally c.$1.5m on a 620 m^2 rice mill building and warehouse and $260,000 on a rice mill).

As the table below indicates, the additional $37.5 million of capital expenditure required through to peak funding breaks down into $1.2 million for land clearance and levelling, $25.0 million for field infrastructure (principally the irrigation infrastructure), $3.7 million for vehicles and farm equipment, $4.0 million for processing plant (principally rice drying silos and additional mill lines), $3.8 million for support infrastructure (principally $2.5 million for a 1MW rice husk generator plus $0.6 million for rehabilitating and installing an additional turbine in the hydro station) and $90,000 for IT & telecom equipment. (See *Operating Plan – Equipment Plan* for details of the key equipment equipment expenditures).

Capital expenditures, US$	Nov07-Oct10	Nov10-Oct15	Total
Land	2,411,406	1,214,556	3,625,962
Field infrastructure	641,824	24,666,059	25,307,883
Vehicles & farm equipment	3,219,697	3,722,090	6,941,788
Processing plant	2,230,426	4,030,000	6,260,426
Support infrastructure	1,438,324	3,772,390	5,210,714
IT & telecom	50,159	86,548	136,706
Total	**9,991,837**	**37,491,642**	**47,483,479**

Capital expenditures by ATL and Agrica Ltd through to peak funding total $75,000.

Working capital

KPL requires $6 million of working capital to fund its annual crop production.

Since the rainy season rice crop is harvested in the 3rd Quarter of the year and the dry season rice crops will be harvested in the 1st Quarter of the financial year after they are planted, KPL requires working capital to fund most of its annual rice production costs. This requirement is reflected in the accounts and financial forecasts by the transfer of the majority of KPL's crop production costs into Arable Crop Inventory at the end of each year; these costs are then released at the end of the following year into Cost of Goods Sold against the sales generated by the sale of the relevant produce. KPL's working capital requirement peaks at the end

of its financial year, when the company will have incurred the bulk of the production costs for the rice planted in the year but will only have sold between a quarter and a third of the year's crop.

The financial model assumes 30-day payment terms for both accounts payable and accounts receivable.

Funding requirement and use of funds

As of October 2010, Agrica had raised a total of just over $31 million of equity funding and $1.5 million of debt funding in the form of a working capital loan. The business requires an additional $38.5 million of debt and equity through to peak funding in 2014/15, which Agrica expects to raise in the form of $10 million of additional equity, $3.5 million of additional working capital lending, and $25 million of long term debt.

The key components of the $71.5 million funding requirement are as follows:

- $13.7 million of EBITDA losses
- $6.0 million of working capital, including $2.3 million of arable crop inventory and 1.7 million of other inventory
- $47.5 million of capital expenditures
- $4.4 million of bank interest and financing costs.

Summary financials

The summary forecast consolidated profit & loss, balance sheet and cash flows for the Agrica group are presented below.

PROFIT & LOSS, USD	2008-9A	2009-10E	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Revenue									
Rice	155,080	769,436	1,078,165	3,992,614	6,461,397	8,366,413	11,252,606	18,393,940	22,664,962
Beans	4,226	44,932	0	61,250	122,500	122,500	1,361,111	2,722,222	2,722,222
Break crop	0	0	16,667	16,667	25,000	33,333	33,333	33,333	33,333
Other	35,543	5,335	0	0	0	0	0	0	0
Total revenue	**194,849**	**819,703**	**1,094,832**	**4,070,530**	**6,608,897**	**8,522,246**	**12,647,051**	**21,149,496**	**25,420,518**
Cost of sales									
Total crop production costs	1,204,023	1,597,722	2,203,757	2,772,116	2,809,694	2,840,464	3,156,331	4,108,351	4,108,351
Total processing costs	20,341	159,726	354,413	305,391	412,423	439,527	567,870	934,651	1,094,686
Sales costs	11,450	88,012	140,559	485,672	764,385	934,097	1,362,673	2,245,341	2,686,712
Technical support	0	7,838	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Other	0	0	0	0	0	0	0	0	0
Net transfers from arable crop inventory	(405,712)	(168,965)	(827,372)	(261,900)	17,848	(87,538)	(123,883)	(444,864)	0
Total cost of sales	**830,102**	**1,684,333**	**1,891,356**	**3,321,279**	**4,024,350**	**4,146,550**	**4,982,991**	**6,863,479**	**7,909,750**
Gross profit	**(635,253)**	**(864,630)**	**(796,524)**	**749,251**	**2,584,548**	**4,375,695**	**7,664,059**	**14,286,016**	**17,510,768**
Overheads									
Farm expenses	273,034	791,944	928,719	1,031,293	1,032,855	1,072,465	1,589,930	2,123,413	2,199,879
Staff costs	1,044,240	1,081,242	1,960,934	2,164,572	2,161,307	2,161,307	2,334,004	2,506,618	2,512,819
Sales, marketing & PR	3,885	46,561	62,500	87,500	87,500	87,500	97,537	113,331	118,901
Legal and financial	438,435	302,897	252,645	417,645	702,645	252,645	281,298	307,247	307,247
Administration	63,131	234,865	416,405	415,905	415,905	415,905	463,074	505,791	505,791
Business development	9,737	94,189	20,000	50,000	50,000	50,000	50,000	50,000	50,000
Total overheads	**1,832,462**	**2,551,699**	**3,641,203**	**4,166,915**	**4,450,212**	**4,039,822**	**4,815,844**	**5,606,400**	**5,694,637**
EBITDA	**(2,467,716)**	**(3,416,329)**	**(4,437,727)**	**(3,417,664)**	**(1,865,665)**	**335,874**	**2,848,215**	**8,679,616**	**11,816,131**
Other income/(expense)									
Interest	14,264	(31,116)	(119,372)	(60,868)	(597,108)	(1,229,452)	(1,954,401)	(2,196,769)	(2,009,673)
Depreciation	(510,939)	(649,665)	(866,138)	(948,939)	(1,403,343)	(1,768,570)	(2,282,992)	(2,384,073)	(2,492,333)
Amortisation	0	(42,420)	(43,826)	(46,026)	(46,026)	(46,026)	(46,026)	(46,026)	(46,026)
Foreign exchange gain/(loss)	(295,032)	(18,213)	0	0	0	0			
Miscellaneous									
Tax	0	0	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)
Total other income	**(791,707)**	**(741,415)**	**(1,030,986)**	**(1,057,483)**	**(2,048,128)**	**(3,045,698)**	**(4,285,070)**	**(4,628,518)**	**(4,549,682)**
Net income	**(3,259,423)**	**(4,157,743)**	**(5,468,713)**	**(4,475,147)**	**(3,913,793)**	**(2,709,825)**	**(1,436,854)**	**4,051,097**	**7,266,449**

CASH FLOWS, USD	2008-9A	2009-10E	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Operating profit	**(2,467,716)**	**(3,416,329)**	**(4,437,727)**	**(3,417,664)**	**(1,865,665)**	**335,874**	**2,848,215**	**8,679,616**	**11,816,131**
Interest income/(expense)	14,264	(31,116)	(119,372)	(60,868)	(597,108)	(1,229,452)	(1,954,401)	(2,196,769)	(2,009,673)
Less: Taxation	0	0	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)	(1,650)
Movements in working capital									
Decrease in receivables	20,973	(102,130)	(110,840)	(154,962)	(118,515)	37,968	(235,052)	(510,147)	(256,261)
Decrease in arable crop inventory	(405,712)	(168,965)	(827,372)	(261,900)	17,848	(87,538)	(123,883)	(444,864)	0
Decrease in other inventory	(725,699)	555,052	(734,508)	(74,375)	(79,588)	(323,744)	411,859	0	0
Decrease in other current assets	(395,970)	(1,653,290)	1,179,008	0	0	0	0	0	0
Increase in payables	(971,336)	(55,953)	0	0	0	0	0	0	0
Increase in other current liabilities	(45,821)	(119,173)	0	0	0	0	0	0	0
Total movements in working capital	**(2,523,564)**	**(1,544,459)**	**(493,712)**	**(491,237)**	**(180,254)**	**(373,313)**	**52,924**	**(955,010)**	**(256,261)**
Cash flow from operations	**(4,977,016)**	**(4,991,904)**	**(5,052,461)**	**(3,971,419)**	**(2,644,677)**	**(1,268,541)**	**945,088**	**5,526,187**	**9,548,547**
Capital expenditures									
Land	327,093	420,549	953,156	109,200	63,600	63,600	25,000	25,000	25,000
Field infrastructure	222,849	319,479	835,000	750,000	8,057,745	6,773,314	8,250,000	631,332	647,115
Vehicles and farm equipment	1,527,108	416,327	1,741,000	251,000	316,000	141,000	1,273,090	623,490	685,839
Processing plant	1,428,583	49,190	1,755,000	300,000	640,000	310,000	1,025,000	149,907	153,654
Support infrastructure	330,349	233,780	287,500	70,000	1,710,000	1,583,333	121,556	124,595	127,710
IT & telecom	10,068	13,232	20,148	16,600	16,600	16,600	16,600	16,600	16,600
Business development	0	0	120,000	55,000	0	0	0	0	0
Total capital expenditures	**3,846,050**	**1,452,558**	**5,711,804**	**1,551,800**	**10,803,945**	**8,887,847**	**10,711,247**	**1,570,924**	**1,655,919**
Cash flow from financing									
Bank loans	0	0	0	0	10,000,000	7,000,000	8,000,000	0	0
Capitalised interest on bank loans	0	0	0	0	433,726	940,875	1,566,222	0	0
Equity raised	8,000,009	10,000,002	0	10,000,000	0	0	0	0	0
Total cash flow from financing	**8,000,009**	**10,000,002**	**0**	**10,000,000**	**10,433,726**	**7,940,875**	**9,566,222**	**0**	**0**
Foreign exchange gain/(loss)	(295,032)	(18,213)	0	0	0	0	0	0	0
Less: unrealised FX gains/(losses)	9,447	287,669	0	0	0	0	0	0	0
Net realised foreign exchange gains/(losses)	(304,479)	(305,882)	0	0	0	0	0	0	0
Net cash flow	**(1,127,536)**	**3,249,657**	**(10,764,265)**	**4,476,781**	**(3,014,896)**	**(2,215,513)**	**(199,937)**	**3,955,263**	**7,892,628**
Closing cash	**3,234,407**	**6,484,064**	**(4,280,201)**	**196,581**	**(2,818,316)**	**(5,033,829)**	**(5,233,766)**	**(1,278,503)**	**6,614,126**

BALANCE SHEET, USD	2008-9A	2009-10E	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Assets									
Current assets									
Cash & cash equivalents	3,234,407	6,484,064	(4,280,201)	196,581	(2,818,316)	(5,033,829)	(5,233,766)	(1,278,503)	6,614,126
Accounts receivable	75,292	177,422	288,262	443,224	561,739	523,771	758,823	1,268,970	1,525,231
Inventory									
Arable crops	706,587	875,552	1,702,924	1,964,824	1,946,976	2,034,514	2,158,396	2,603,260	2,603,260
Other inventory	1,204,737	649,685	1,384,194	1,458,569	1,538,156	1,861,900	1,450,041	1,450,041	1,450,041
Total inventory	1,911,324	1,525,237	3,087,117	3,423,393	3,485,132	3,896,414	3,608,437	4,053,301	4,053,301
Other current assets	63,839	1,717,129	538,121	538,121	538,121	538,121	538,121	538,121	538,121
Total current assets	5,284,862	9,903,852	(366,700)	4,601,318	1,766,676	(75,524)	(328,385)	4,581,889	12,730,778
Fixed assets									
Land	1,996,369	2,125,571	3,078,727	3,187,927	3,251,527	3,315,127	3,340,127	3,365,127	3,390,127
Field infrastructure	323,196	587,222	1,422,222	2,172,222	10,229,967	17,003,281	25,253,281	25,884,613	26,531,728
Vehicles & farm equipment	2,770,748	2,512,808	4,253,808	4,504,808	4,820,808	4,961,808	6,234,898	6,858,388	7,544,227
Processing plant & equipment	2,278,600	1,966,267	3,721,267	4,021,267	4,661,267	4,971,267	5,996,267	6,146,174	6,299,828
Support infrastructure	1,271,445	1,211,416	1,498,916	1,568,916	3,278,916	4,862,249	4,983,806	5,108,401	5,236,111
IT & telecom	32,009	23,949	44,097	60,697	77,297	93,897	110,497	127,097	143,697
Unallocated depreciation	0	0	(866,138)	(1,815,077)	(3,218,420)	(4,986,990)	(7,269,982)	(9,654,055)	(12,146,388)
Total fixed assets	8,672,367	8,427,233	13,152,899	13,700,760	23,101,362	30,220,639	38,648,893	37,835,744	36,999,330
Intangible assets									
Project development costs	1,018,080	975,660	1,095,660	1,150,660	1,150,660	1,150,660	1,150,660	1,150,660	1,150,660
Unallocated amortisation	0	0	(43,826)	(89,853)	(135,879)	(181,906)	(227,932)	(273,958)	(319,985)
Total intangible assets	1,018,080	975,660	1,051,834	1,060,807	1,014,781	968,754	922,728	876,702	830,675
Other assets									
Directors loans	78,400	78,400	78,400	78,400	78,400	78,400	78,400	78,400	78,400
Total other assets	78,400	78,400	78,400	78,400	78,400	78,400	78,400	78,400	78,400
Total assets	**15,053,709**	**19,385,145**	**13,916,432**	**19,441,285**	**25,961,218**	**31,192,269**	**39,321,637**	**43,372,734**	**50,639,183**
Liabilities and equity									
Liabilities									
Current liabilities									
Accounts payable	482,148	426,195	426,195	426,195	426,195	426,195	426,195	426,195	426,195
Other current liabilities	225,631	106,457	106,457	106,457	106,457	106,457	106,457	106,457	106,457
Total current liabilities	707,779	532,652	532,652	532,652	532,652	532,652	532,652	532,652	532,652
Long term liabilities									
Bank loans	0	0	0	0	10,433,726	18,374,602	27,940,824	27,940,824	27,940,824
Total long term liabilities	0	0	0	0	10,433,726	18,374,602	27,940,824	27,940,824	27,940,824
Total liabilities	707,779	532,652	532,652	532,652	10,966,378	18,907,254	28,473,476	28,473,476	28,473,476
Equity									
Total share capital	21,502,709	31,502,711	31,502,711	41,502,711	41,502,711	41,502,711	41,502,711	41,502,711	41,502,711
Foreign exchange reserve	(539,138)	(2,305,722)	(2,305,722)	(2,305,722)	(2,305,722)	(2,305,722)	(2,305,722)	(2,305,722)	(2,305,722)
Total retained earnings	(6,617,641)	(10,344,495)	(15,813,209)	(20,288,356)	(24,202,149)	(26,911,973)	(28,348,828)	(24,297,730)	(17,031,281)
Total equity	14,345,930	18,852,493	13,383,780	18,908,633	14,994,840	12,285,015	10,848,161	14,899,258	22,165,707
Total liabilities and equity	**15,053,709**	**19,385,146**	**13,916,432**	**19,441,285**	**25,961,218**	**31,192,269**	**39,321,637**	**43,372,734**	**50,639,183**

Appendix A: Social Responsibility & Developmental Impact

KPL aims to be a model sustainable agribusiness in Africa. The company recognizes that helping the impoverished villages situated around the farm and preserving the ecological important areas of the Kilombero Valley are in the company's own long-term self-interest. KPL acts as a catalyst, linking donors, NGOs and local communities to improve livelihoods and land use.

Improving Smallholder Agricultural Productivity

Local people rely on their rice crop both for food and much of their annual cash income (about $700/year per farmer family.) The greatest aid the Company can provide local farmers is improved rice husbandry and affordable high-yielding rice seed suitable for local conditions. It will take years to identify and multiply suitable seed. The Company will share the rewards of the research by selecting motivated farmers to breed the seed for local farmers, sparking the creation of small businesses in the community.

KPL has already had a substantial impact on improved rice farming in the Mngeta area through the introduction of the System for Rice Intensification (SRI). Developed in Madagascar and India, where it has raised smallholders' yields from 2 to 8 tons/ha, SRI is an unconventional method that utilizes less seed and wider spacing than traditional planting, which results in larger tillers, bigger root systems and higher grain weight. Weeding is accomplished without herbicides by the use of a hand-pushed weeder through rice lines planted on a grid.

In December 2009, KPL brought an expert from the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), to establish a demonstration plots on Mngeta Farm and with 15 enthusiastic farmer families in neighbouring villages.

The pilot project produced excellent results:

- The SRI demonstration plot on the farm yielded 8 ton/ha
- The local farmers who grew 1 ha with SRI achieved yields between 4.7 and 7 ton/ha
- The same local farmers, using traditional methods on adjacent fields averaged 2.9 ton/ha

In Dec 2010, with a grant from Norfund, KPL expanded the SRI outreach to 250 farmer families in 5 villages. SRI holds promise for transforming smallholder production in the Kilombero Valley, raising annual incomes by a multiple of 3 while also reducing land pressure. KPL plans to extend the SRI outreach program to 4,300 farmer families by 2016. Once the SRI farmers are producing rice of consistent high quality, their production can be milled by KPL and marketed through the new wholesale brands.

Community Development Fund

The three villages bordering the farm have a total population of 26,564. There are no health facilities in any of the villages and many villages rely on shallow wells for water.

In 2010, KPL began to dispense a 50 million Tanzania Shilling ($40,000) annual community development fund for the construction of school classrooms and wells. 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%.

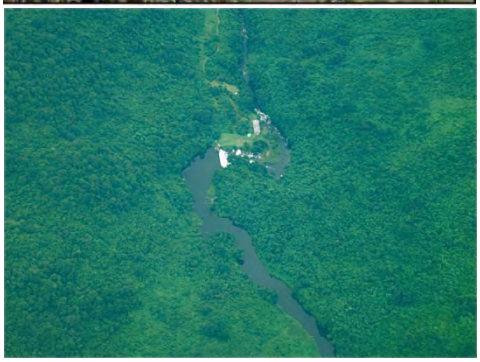
Tanzanian villages have strong traditions of communal decision-making. The villagers reach a consensus on the projects they wish to prioritize for the greater good.

The Company ensures the funds are spent wisely, supplying building materials for communal projects rather than cash donations and overseeing the construction through the farm's building department.

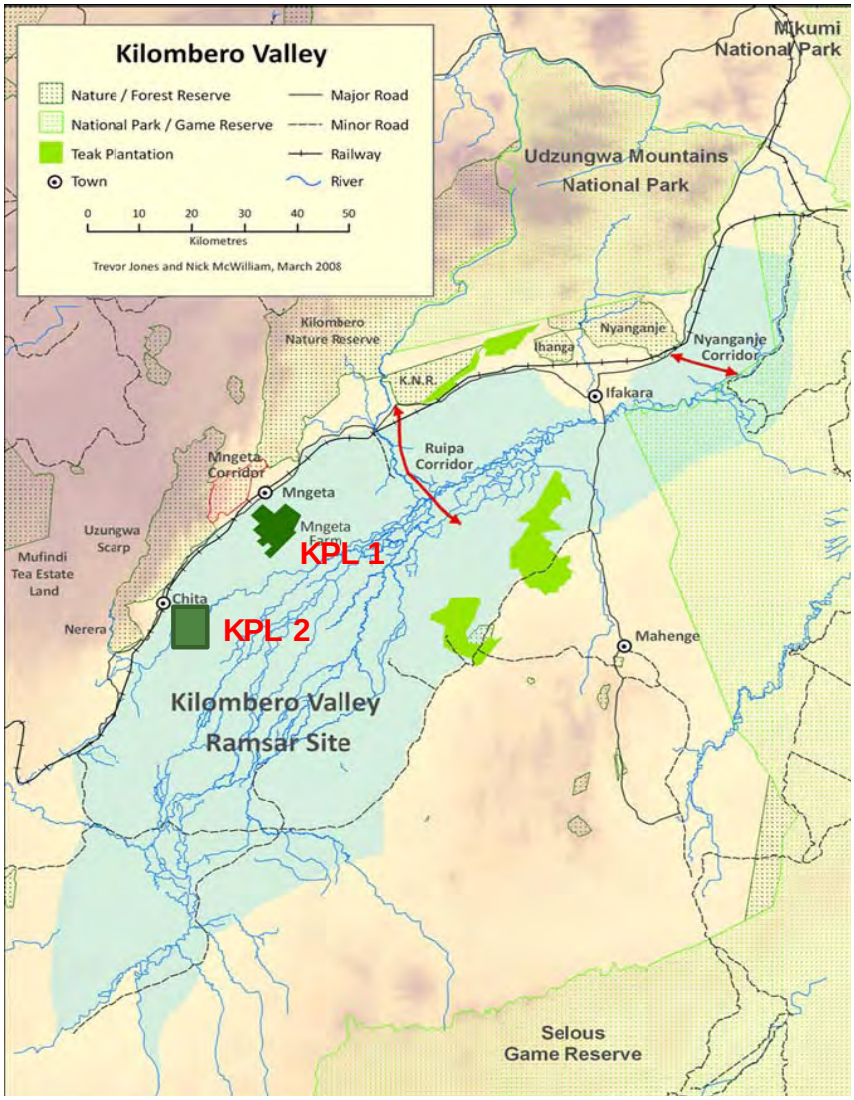
Environmental Protection

Situated at the base of a global mountain rainforest biodiversity hotspot and on the edge of a seasonal wetland of global importance, the presence of the farm in this ecologically sensitive area can be off-set by supporting conservation initiatives.

The company is supporting the establishment of the proposed Mngeta Forest Corridor to connect two forest reserves in the mountains overlooking the farm. The Mngeta Corridor, roughly the size of the farm, is a watershed vital to future irrigation and surrounds the 2-km-long lake behind our hydro-power weir. In June and July 2008, KPL provided an MSc student from Bangor University, Wales, who had four years' experience in biodiversity surveys and community conservation in Tanzania, with airfare, a stipend and logistical support to conduct an 8-weeks socio-economic survey of the 140 families living or farming in the corridor. The survey was a vital step in the creation of the corridor and a contribution to the collaborative effort by NGOs, led by Conservation International, and the government forestry department to protect the area. In October 2008, KPL sent representatives from two local Participatory Forest Management Groups to a national network of village forest conservation projects.



Appendix B: Expansion Plan



The Kilombero Valley, with its many rivers, high rainfall, good soil, railway access and proximity to Dar Es Salaam, is a superior area for farming in East Africa.

About half of the valley is also a Ramsar Site, a loosely defined 7,967 km^2 (3,076 miles^2) seasonal swamp, which was declared a United Nations Wetland of International Importance in May 2002. Six years later, the Wildlife Division began the first stages of drafting the required government Management Plan for the Ramsar site, which will include areas for commercial and smallholder agriculture.

The President and the Ministry of Agriculture wish to convert the Kilombero Valley, including much of the Ramsar Site, into the "bread basket of Tanzania."

Mngeta Farm was established 13 years before the Ramsar designation and covers about 1% of the Ramsar site. Best practice farming activities, including irrigation, will have a manageable impact on the eco-system.

The company is committed to upholding the guidance of the UN Ramsar Treaty:

"Human use of a wetland so that it may yield the greatest continuous benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations."

"Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development."

The Valley, 14,918 square km, currently has a population of about 644,000, a density of 15 people per square km and a growth rate of 3.6% (based on the 2002 national census). There is substantial undeveloped land available. The majority of the seasonal wetland is vast stretches of elephant grass with marginal unique biodiversity. But farming families from more densely populated areas in the far west of Tanzania are migrating into the Valley. A 2006 survey of the southern Kilombero Valley determined that 71% of the residents were recent immigrants.

KPL and RUBADA have been granted some 5,200 ha of undeveloped land by the local government of Chita and 3 other villages southeast of Mngeta. While other developers seek to lock up land with the promise of a project, KPL intends to compensate villages through support of a community project, such as a school or a clinic, at cost equivalent of $175 per hectare. Such tangible benefits will have a positive impact on long-term relations.

As well as considering greenfield sites, management remains alert to opportunities to acquire functioning farms where experience gained at Mngeta can be put to use to add value to the existing operations.

Appendix C: Market

World Market Overview

While agricultural commodities have fallen from the record levels of mid-2008, "there is strong reason to believe," according to the *OECD-FAO Agricultural Outlook 2008-2017*, "that there are now also permanent factors underpinning prices that will work to keep them at higher average levels than the past."

In Africa, the *Outlook* predicts, food prices should remain high due to continued high population growth (an average of 2.2 percent per year) and economic growth (an average of over 4 percent per year) that is high by historical standards while on the supply side, agricultural output is not able to match foreseen demand.

The International Rice Research Institute warns of structural shortages and long term challenges for the global rice supply to meet global demand:

> "A steady increase in rice prices from 2000 went largely unnoticed. From 2001 to 2007, rice prices nearly doubled primarily because of a drawing down of stocks to meet the deficit arising out of deceleration in yield growth...
>
> Despite higher prices, rice consumption is expected to remain strong because of substitution away from more expensive food...
>
> Despite some reassuring supply numbers for 2008-09, there are huge uncertainties regarding the source of future growth in global rice production. The annual rice yield growth rate has dropped to less than 1% in recent years, compared with 2–3% during the Green Revolution period of 1967-90…
>
> Declining investments in all areas of rice research and infrastructure development (including irrigation) have been largely responsible for such dramatic slowing in yield growth. Increasing rice production through area expansion is also unlikely in most parts of the world because of water scarcity and competition for land from non-agricultural uses such as industrialization and urbanization. World rice area has fluctuated between 145 and 155 million hectares over the past two decades, with the current level very close to the historic high. It would be prudent to assume that world rice area will remain in or even fall below this range in the next 10 to 15 years."

In an era in which many governments and multi-lateral agencies are alarmed about feeding the growing population and many are calling for a second Green Revolution, rice is a commodity whose supply may be even more imperilled than other staples. The fall in the world rice price since the commodity price spike of 2008 has not been as dramatic as the fall of other agricultural commodities. At $538 per ton, benchmark Thai 5% broken is currently 94% higher than its 5-year mean price between 2003 through 2007 of $274

Grain prices as a whole are under pressure. In October 2010, the Economist Intelligence Unit forecast nearly uninterrupted steady rises in the next five years:

2011	2012	2013	2014	2015
10.8	-4.3	1.6	6.8	4.1

Tanzania Market Overview

Tanzania has a population of over 40 million with a growth rate of 2.9% (World Bank) and a GDP of $16.18 billion at official exchange rates ($51.07 billion at purchasing power parity), according to estimates in the CIA Factbook, which also notes:

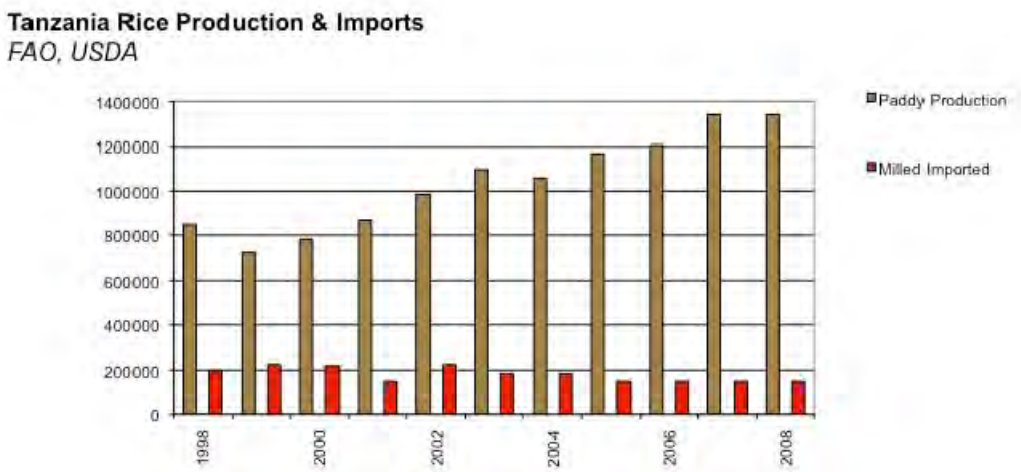
"Tanzania is one of the poorest countries in the world. The economy depends heavily on agriculture, which accounts for more than 40% of GDP, provides 85% of exports, and employs 80% of the work force. Topography and climatic conditions, however, limit cultivated crops to only 4% of the land area. Industry traditionally featured the processing of agricultural products and light consumer goods. The World Bank, the IMF, and bilateral donors have provided funds to rehabilitate Tanzania's out-of-date economic infrastructure

and to alleviate poverty. Long-term growth through 2005 featured a pickup in industrial production and a substantial increase in output of minerals led by gold. Recent banking reforms have helped increase private-sector growth and investment. Continued donor assistance and solid macroeconomic policies supported real GDP growth of nearly 7% in 2007."

The IMF reports that after an average of 7.2% GDP growth between from 2002 through 2008, growth slowed to 5.5% in 2009. 6.4% growth is expected in 2010 and 7.1% in 2011 (Economist Intelligence Unit).

Maize, rice and common beans are the staple crops produced and consumed by the vast majority of the population.

Tanzania Rice Market



Annual rice production in Tanzania is currently estimated between 1.25 and 1.35 million metric tons. FAO estimates, based on government figures, however, may be highly inaccurate as reporting from Districts is haphazard and may be deliberately inflated to approach government production targets. Likewise, between 150,000 and 200,000 tons of milled rice (representing over 300,000 tons of paddy) imports may be underestimated as rice reportedly enters the country without duty being paid. The production and import data available suggests Tanzania is not self-sufficient in rice production. A deficit of 10 to 15% or more remains.

Well over 95% percent of the annual Tanzania crop is produced by small holders, the majority without irrigation. Rice is produced primarily in five regions dispersed geographically across the country. The leading region is Morogoro, which includes the Kilombero Valley, and is the closest to Dar es Salaam, which, with a population of over 2.5 million, is the largest market.

Tanzania's largest wholesale rice, maize and bean markets are five markets in Dar es Salaam. Each of these markets includes 10 to 15 brokers who claim to turnover between 10 and 200 tons per week, selling for traders who have brought the rice from across the country, marking up the price about $20/ton Collectively the markets of Dar es Salaam move perhaps 1000 to 2000 tons weekly or 50,000 to 100,000 tons a year. 100 km outside Dar es Salaam, Morogoro Town has the second largest wholesale rice market, though much of the rice there may pass through the Dar es Salaam market. The Dar and Morogoro markets serve local sub-wholesalers and buyers from non-producing coastal regions, Zanzibar and occasionally island nations of the Indian Ocean who were subverting the export ban which was in effect until April 2010.

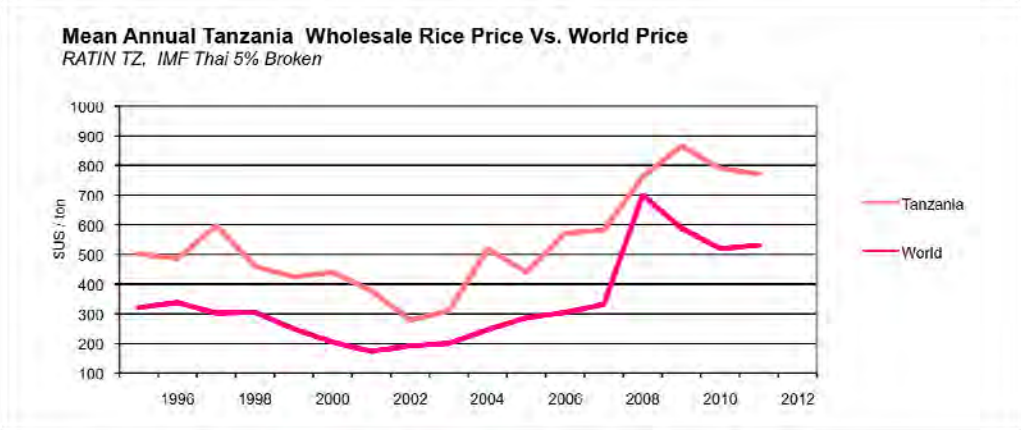
Each producing region has wholesale markets but no data exist on inter-regional distribution or how much of Tanzania's approximate 800,000-ton milled rice crop leaves the regions where it is produced. The Dar es Salaam price is a benchmark price and other wholesale market prices around the country generally reflect the Dar price less the cost of transportation to the particular market.

Bulk buying end-consumers include the military, which purchases 600 tons per month for its camps around Dar es Salaam, the police, prisons, academic institutions and municipal hospitals. Institutions purchase primarily through advertised tenders.

At least four companies in Dar es Salaam are packaging grade 1 (10% broken) rice in sizes from 2 to 10 kg and selling to local supermarkets, supplying these retailers with 30, 40, 90 and 220 tons monthly. Typically,

they buy from wholesalers, mark the price up 20%, and sell to supermarkets, which mark the price up an additional 20%.

Until April 2010 there was an export ban on rice. However, according to the Board of External Trade, in Shinyanga, the second largest producing region, located in western Tanzania, several large traders export rice to Burundi, Rwanda, and the Democratic Republic of Congo. Other traders exported illegally from Mbeya Region to Zambia. No data exists on quantities smuggled.



While production, import and export data is generally unreliable, one certainty is that Tanzania has some of the highest rice prices in the world – for decades averaging some 74% higher than the prevailing world price. For decades the Government imposed a 25% tariff on imported rice to protect millions of smallholders farming with low quality seeds and little fertilizer. In 2005, Tanzania and the other members of the East African Community, Kenya and Uganda, adopted a Common External Tariff (EACCET), raising the tax on imported rice to 75% (or $200/ton, whichever is higher), which appears to have had little impact on the already high internal price but rather normalized an existing situation. The World and Tanzania prices began to converge only during the agricultural commodity price spike of mid-2008 when rice hit historical highs of over $1000 a ton.

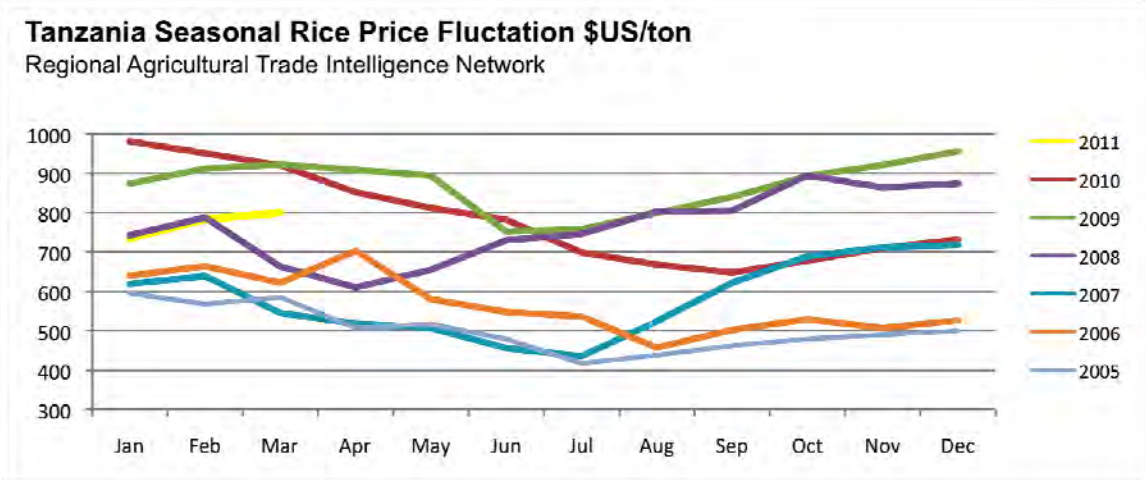
The tariffs on sensitive goods—maize, rice, sugar, cement, industries in which the East African Community is striving for self-sufficiency—are lowered only temporarily in times of severe shortages through a vote by the Council of Ministers. The rice tariff has not been temporarily lowered since the adoption of the EACCET in 2005.

The EACCET policy reflects a belief that were the tariff to be eliminated, internal rice production would plummet, leaving a significant portion of the largely rural population outside the cash economy and destabilizing the countryside. Therefore the EAC will sustain the tariff, theoretically penalizing the consumer in favour of the agricultural masses, and providing down-side protection for commercial producers.

Perhaps, though, the historical independence of the Tanzania rice price, unlike other protected commodities, stems in part from the particular highly aromatic rice that Tanzanians prize and have eaten perhaps for centuries —a “landrace,” a collection of highly mixed, inter-related varieties that originated without deliberate breeding. Most of the aromatic rices in Kenya and Tanzania were introduced from India during 16th century, though there is also evidence that the aromatic prevalent in Tanzania today is highly related to a variety imported by IRRI in 1965. The absence in the world market of an aromatic similar in appearance, fragrance and taste may protect the Tanzania market.

It should be noted that the Tanzania price in the charts above and below, as reported by the Regional Agricultural Trade Information Network, is the top price in the wholesale markets, the highest grade, and it is unclear what volume is traded at that price. In the wholesale market, prices range as much as 40% across grades, based on color, translucence, the number of whole grains and the taste, texture and fragrance of the rice when it is cooked.

The wholesale price in Tanzania varies through the year, dropping just before the annual harvest when traders, who have stockpiled rough rice at the harvest 9 months earlier, unload their stocks in the peak price period. The price usually drops for 5 months then rises again until the next harvest.



Rice Market Competition

Across Tanzania, smallholders irrigate approximately 200,000 ha of rice, primarily using small diversion weirs on seasonal rivers and harvesting rainwater, though there are a number of large-scale schemes, ranging between 1000 and 2500 ha. The best of smallholders achieve yields of 6t/ha while the other irrigated farmers average closer to 4t/ha, according to the Ministry of Agriculture. According to IRRI, the irrigated schemes suffer from poor maintenance and an infestation of red rice; inadequate input of seed, fertilizer and credit; lack of equipment, especially for postharvest operations; labour shortage because of competition from other crops; and weak research and extension support.

Until 2006, Tanzania's two irrigated commercial farms, approximately 3000 ha each, built by the Japanese and Chinese governments, had been run by an inefficient para-statal organization. Both have now been privatized. The Japanese-built Kapunga was acquired by Export Trading Limited, one of East Africa's largest agricultural commodity trading companies owned by one of the wealthiest Asian families in Tanzania. Another Asian family firm bought the Chinese-built Mbarali. Clearly they saw the opportunity to become low-cost producers in the protected Tanzania market.

Both of the large privatized farms require substantial investment after years of neglect and their rehabilitation has been underway for about three years. Kapunga has suffered water shortages that preclude keeping standing water in the rice paddies as well as an infestation of sedge weeds and red rice. They have under invested in equipment and have yet to achieve meaningful yields.

Mbarali has 1000 ha of commercial farm and 2000 ha of smallholders. The family owners have no experienced commercial rice management and have yet to conduct any soil analysis for professional fertilizer advice. They plan to open their own wholesale outlet in Dar es Salaam to market their crop. In their best 5-ha blocks, they are achieving 6 tons/ha, a respectable yield in Africa while about half the yield of irrigated farms in the USA and Australia.

In October 2009, the Government of Tanzania reported signing an agreement with South Korea's state-run Korea Rural Community Corporation to develop 100,000 ha, half of which would be earmarked for local smallholders. According to the newspaper, the initial investment of $83.7 million is for the first 10,000 ha. Crops are to include cooking oil, wine and starch. The US Embassy reports that the 50,000 ha commercial area is to produce crops for export to Korea. The venture is not unlike farms planned in Ethiopia and Sudan by the United Arab Emirates and Saudi Arabia to address the investors' home food security. Should the Korean initiative go forward in the isolated Rufiji Basin, a flood-prone area of few roads and scattered woodland, the project is years away from producing substantial quantities of rice.

Increased production from these farms will not substantially affect supply in the Tanzania market where the 1.3 million metric tons produced annually already fails to meet demand. With the population growing circa 2% a year, demand increases annually by around 37,500 tons of paddy and will continue to outstrip supply. The market will continue to be large enough to accommodate a far greater number of commercial producers

Rice Production & Self-sufficiency Outlook

Tanzania's rice market in 2008 (last year of available data) was estimated at 1.3 million tons of paddy produced plus between 150,000 and 200,000 tons of imported milled rice (representing up to 300,000 tons of paddy) or a total of 1.6 million tons of paddy. Assuming a growth rate of 2.9% (population), the rice market will be about 2.01 million tons of paddy in 2016.

In 2016, at full-irrigated production, KPL will add 53,000 tons of paddy, or 2.6% of the 2016 market—less than the annual growth of 58,290 tons. Other commercial producers, rehabilitating irrigated farms, may achieve an estimated total increase in production of 40,000 tons or 1.9% of the 2016 market.

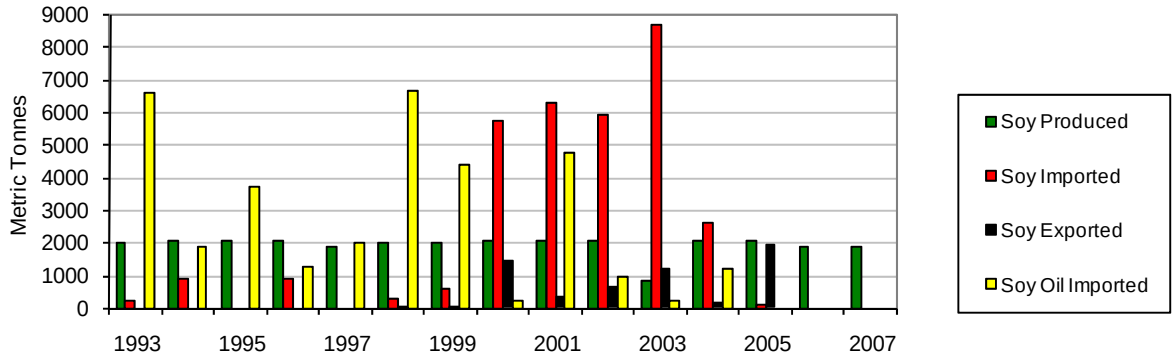
Therefore the potential new production coming on the market in 2016 is less than two years' growth but far short of bridging the import gap, i.e. not bringing Tanzania closer to 100% rice self-sufficiency. Thus KPL considers the risk that the EACCET will be abolished in the next 10 years negligible, especially given the greater shortfalls of rice production in Uganda and Kenya. Even if self-sufficiency was obtained, tariffs would remain in place to theoretically protect smallholder producers from more efficient Asian farmers. In addition, the tariff is *not* a subsidy, but an income generator for the government, and thus does *not* stand to come under attack when the government would have to impose austerity measures. Further, as previously noted, there is no obvious substitute on the world market for Tanzania aromatic rice which appears to be the main driver in the independence of the Tanzania price from the world market price.

Dry Season Crop Market

Soybeans

According to the FAO, soy bean production in Tanzania has hovered around 2000 metric tons consistently from 1990 to 2007 while imports of soy oil and beans have fluctuated between 2000 and 8000 tons.

Soya Beans Produced, Imported, Exported
FAO (Imports & Exports to 2005)

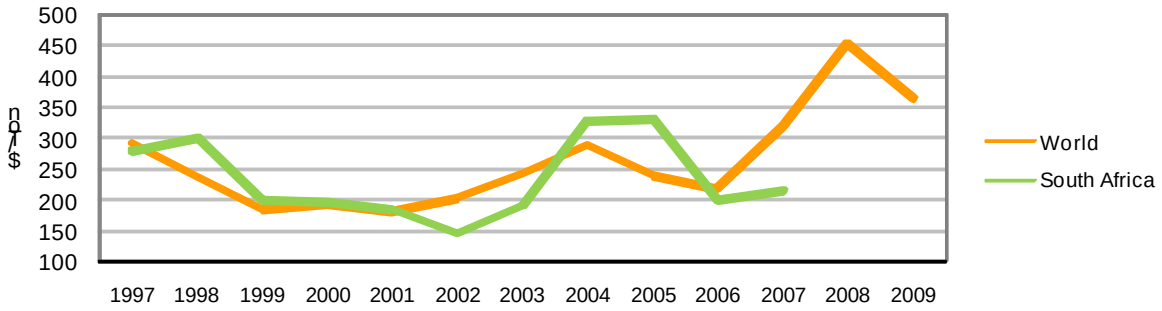


Soya is used in Tanzania for the production of food products—porridge for pregnant women, soy milk and as a supplement in energy bars—and animal feed.

Export Trading, which has factories in Zambia and Malawi which manufacture soy pellets as a meat substitute for the poor, plans to build a similar factory in Dar es Salaam which will have a capacity of 6,000 tons annually. Export Trading has approached KPL about a forward contract to supply their factory, based on the import parity price of South African soya.

As soya is a minor crop in the Tanzania market, no agency tracks soy prices. In February 2009, wholesalers in Dar es Salaam were buying soya for over $1000/ton, but the capacity of the wholesalers to absorb large quantities is unclear. The price dropped dramatically with a bumper crop in Zambia and Malawi and by July 2009 soya has been trading at about $386/ton.

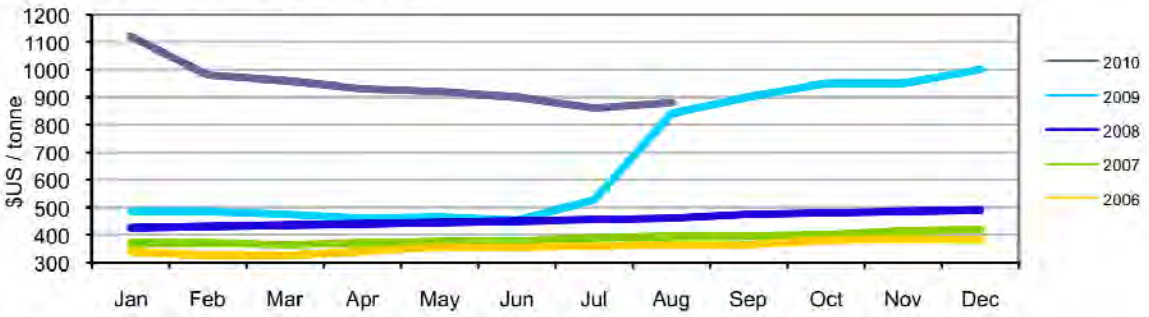
World Mean Annual Soy Price & South African Producer Price
FAO (RSA to 2006), IMF



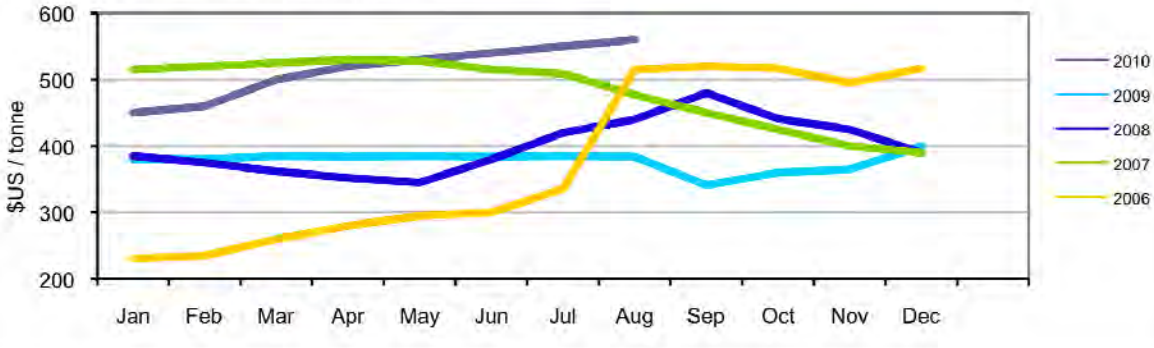
Chickpeas, Mung Beans, Pigeon Peas

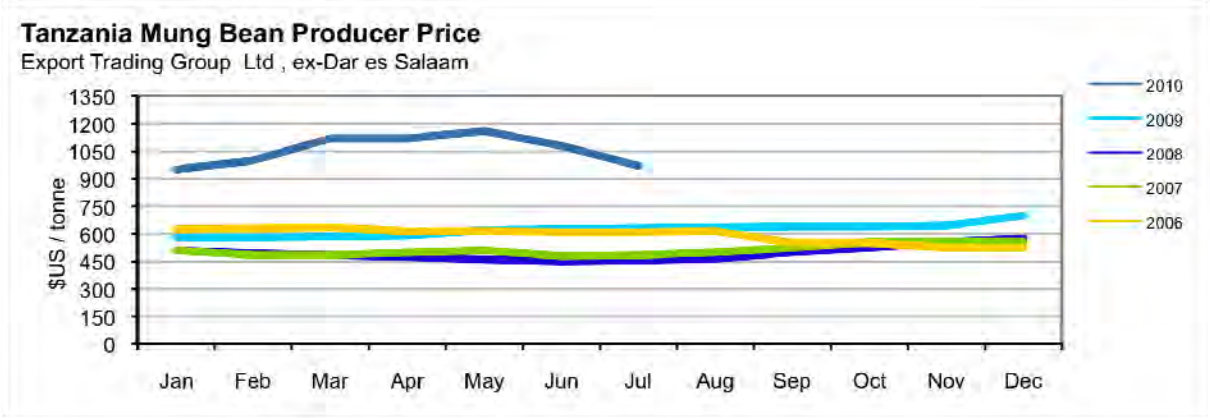
Pulses such as chickpeas, mung beans and pigeon peas have attractive niche markets for the Indian communities of East Africa and the islands of the Indian Ocean—Comoros, Madagascar, Seychelles—and India itself. KPL will conduct pulse trials and perhaps plant pulses at scale. The charts below indicate the prices paid by Export Trading for pulses since 2006.

Tanzania Pigeon Pea Producer Price
Export Trading Group Ltd , ex-Dar es Salaam



Tanzania Yellow Gram Producer Price
Export Trading Group Ltd , ex-Dar es Salaam

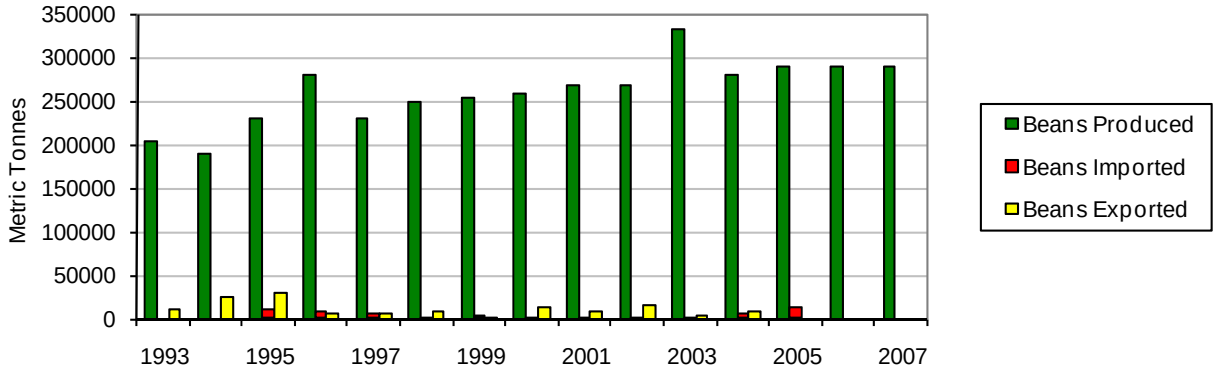




Beans

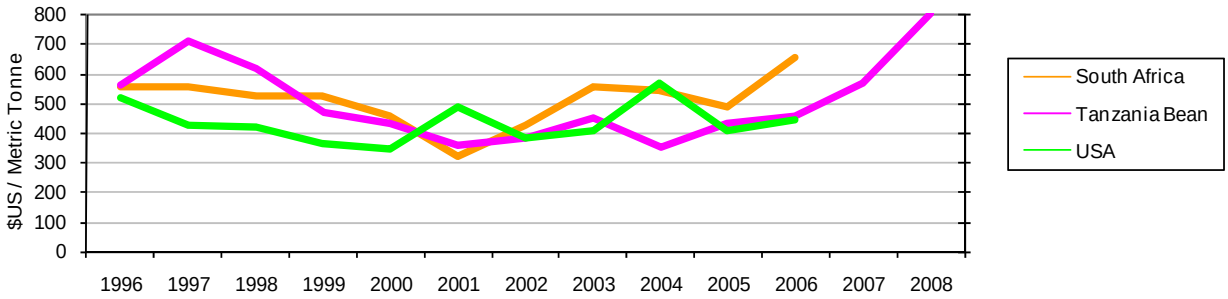
Common bean (*Phaseolus vulgaris*) is the largest single source of protein for low-income rural and urban families in Tanzania. Like rice and maize, the bean crop is produced in various areas of the country and traded through the regional markets, the largest in Dar es Salaam. Becoming the lowest-cost producer of dry beans for the local market would likely generate higher returns than growing soybeans. Common beans are a problematic crop as they are difficult to harvest mechanically but merit long-term research as an alternative to soya.

Dry Beans Produced, Imported, Exported
FAO (Imports & Exports to 2005)

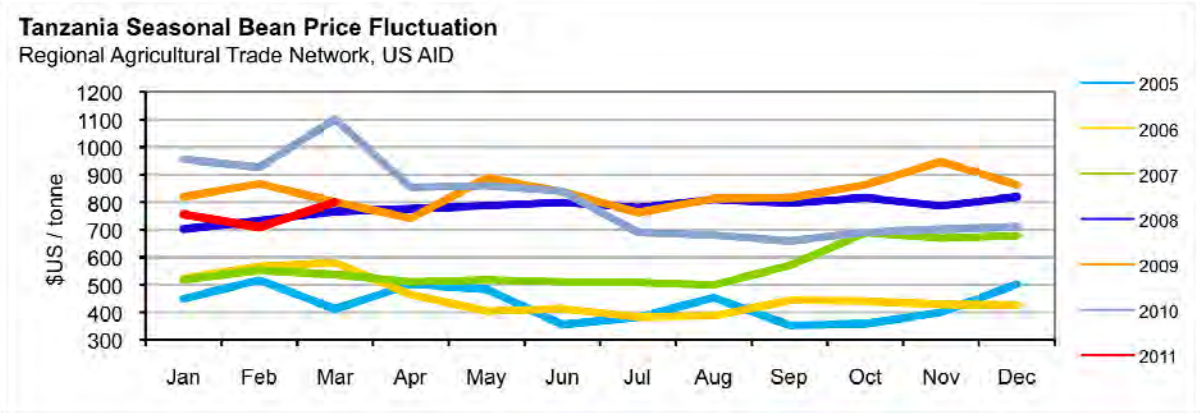


Unlike rice, bean producers are not protected by tariffs and the prices paid to producers appear to roughly align with producer prices in other regions of the world despite the fact that the absence of substantial imports implies there is no direct competition with foreign producers.

Comparative Producer Prices vs. Tanzania Mean Annual Bean Price
FAO Producer Prices South Africa & USA to 2006; RATIN TZ wholesale price to 2008



The bean price also fluctuates over the course of the year though not with the regularity of the rice price. Still, a producer with working capital could optimize the sales price by selling when prices are high.



Maize

Maize is the staple crop in East Africa. Nearly every smallholder grows it. The government maintains strategic grain reserves in warehouses around the country to sell into the markets when supplies are tight and prices are rising, and to distribute to the poorest segments of the population.