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STAPLES VALUE CHAIN NAFKA ACTIVITY

TASK ORDER NO. AID-623-I-10-00001

Assessment of NAFKA collaboration with Kilombero Rice Plantations (KPL)

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

I. Executive Summary

This consultancy was designed to assess the possibility of transitioning joint KPL/NAFAKA outgrower training activities in the areas around Kilombero Rice Plantations to the sole management of KPL. The consultant spent two weeks in December, 2013 in Tanzania conducting interviews with outgrowers, KPL staff and relevant NAFAKA personnel. The objectives of the consultancy were twofold: (a) assess the effectiveness of the KPL/NAFAKA collaboration to date and recommend design improvements for this collaboration; (b) develop a NAFAKA transition and exit strategy given the time remaining for NAFAKA under the terms of our contract with USAID.

Kilombero Plantations Limited (KPL), a private sector company operating a large scale commercial rice plantation, has been working in collaboration with NAFAKA since late-2011 training over 4,000 smallholder farmers in the areas surrounding the plantation. KPL manages 7 field agronomists, NAFAKA manages 3 field agronomists each who manage 10 demonstration plots with approximately 25 farmers working on each demonstration plot. The collaboration has introduced a new rice production technology in Tanzania called System for Rice Intensification (SRI) to smallholder farmers which when applied has increased their yields over 240% on average. To maximize yields it is essential that smallholder farmers use good seed, fertilizer and top dressing. KPL in collaboration with Yara, an international supplier of crop inputs, has provided the smallholder farmers linked to the demonstration plots with a starter package of inputs sufficient to plant a quarter of an acre. KPL is also testing zero tillage SRI which is applicable to farmers who have already prepared their land for SRI - it this is found to be an effective way of further reducing farmers costs as well as possibly increasing yields KPL want to disseminate the practice to previously trained farmers.

While the small holder farmers though their gift of inputs for a quarter of an acre can afford to continue buying inputs for a quarter of an acre for the most part the cash required to purchase inputs for on average just under 2 acres planted by most smallholder farmers is still unachievable without access to credit. To help facilitate credit for the small holder farmers KPL is willing to guarantee prior to the farmers and the financial organization a minimum paddy price for the following harvest, KPL then collects the paddy from the smallholder farmers, and pays the financial organization cash for the paddy collected.

KPL as a private sector company having made significant investments into the development of an active commercial farm from land which had been left to go back to bush has a long term plan for the area and hope to continue to integrate smallholder farmers into its own operations. NAFAKA involvement in the region is limited to the life of the project. Since KPL is already coordinating NAFAKA staff in the field work, and KPL's own agronomists are performing as well as NAFAKA's agronomists transitioning the entire management of the field work to KPL makes logistical and financial sense. Within the mechanisms available to NAFAKA the

most suitable method of handling this activity will be through an in-kind grant, with fixed deliverables against specific time lines. NAFKA will monitor the activities to ensure that they are carried out in a suitable fashion. During the period 2014-2015 KPL should be able to train approximately 3,250 new farmers in SRI technology, and approximately 1,750 already trained farmers in zero tillage SRI (if it is found to be effective in 2013 - 2014 season).

II. Specific Activities of the Consultancy

Introduction

Kilombero Plantations Limited (KPL) is the Tanzania operating subsidiary of Agrica Limited, a British farm development company that is majority owned by American shareholders, including the philanthropist Jeff Skoll, the first president of eBay. Agrica's second largest shareholder is Norfund, the Norwegian development bank.

KPL began operations in September 2008, after completing the purchase of the defunct 5,818 ha Mngeta Farm from the Rufiji Basin Development Authority, a government agency. The farm had been a joint venture between the governments of Tanzania and North Korea in the late 1980s and early 1990s. After the departure of the North Koreans in 1992, the infrastructure deteriorated and the cleared land returned to bush. Since late 2008, with an investment of \$40 million, KPL has:

- Re-cleared and leveled 5,000 ha
- Resettled 120 families to World Bank standards
- Rehabilitated roads, drains & buildings
- Imported a fleet of tractors, zero-till planters, boom sprayers and combine harvesters
- Constructed a 6,200 m² warehouse and residential buildings
- Constructed a 3,000-ton automated drying facility
- Installed a 4-ton-hour industrial rice mill in 2010 and a 6-ton, the largest currently in operation in Tanzania, in 2013
- Installed 215 ha of center-pivot irrigation and constructed a river pump station

KPL has become the showcase project in the Southern Agricultural Growth Corridor of Tanzania. It has received grants and loans from AECF to help it with its smallholder program, and has worked with Technoserve to introduce an innovative SMS platform used to track loans and loan repayment to smallholder farmers.

KPL Smallholder Program

In December 2009, KPL commenced its smallholder program introducing the System for Rice Intensification (SRI), an agronomic system invented in the 1980s by a Jesuit priest/agronomist in Madagascar which has substantially increased smallholder yields in Madagascar and India. KPL brought an SRI expert from India who trained 15 local farmer families in SRI on rain-fed plots. The 15 farmers all achieved yields at least 3 times more than the traditional yields in the area. KPL began the expansion of the program and was joined by NAFKA in 2011 and now encompasses 10 villages within the surrounding area with a total population of

approximately 25,000 households. Six of the villages surround the plantation, 4 of the villages are a further distance away (40km+ from the plantation).

Reported yields by farmers trained each year under the KPL/NAFAKA collaboration

Year	New Farmers	High Ton/ha	Low Ton/ha	Avg. Ton/ha
2010	15	7	4.7	3.8
2011	250	8	2.07	3.9
2012	1,162	7	0.1	3.3
2013	2,850	9.5	1.5	In progress
Total Farmers	4,277			

Source; KPL data

With NAFKA's support, KPL has facilitated crop finance through microfinance institutions to the smallholder farmers; they are the only rice farmers in Tanzania to receive crop production loans. In 2012/2013 over 600 farmers received loans from YOSEFO MFI (over 400) and National Microfinance Bank (NMB). The loans are essential to lift the farmers out of poverty as they enable the farmer families to purchase needed inputs and have sufficient cast to finance production activities to prevent presale their crop before harvest at a fraction of its harvest value.

In 2012 - 2013 KPL tried out zero tillage SRI plots on its own land. It appears that this planting technology offers additional benefits to farmers once the land has been ploughed properly for at least one season and is now relatively flat; in subsequent seasons it can be sprayed to kill off the undergrowth which develops after harvest and then planted up without ploughing. This system reduces costs and appears to increase yields. In 2013-2014 KPL intends to have one plot per village of zero tillage SRI. Farmers who have already been trained in SRI and have properly ploughed a quarter of an acre will be linked to these demonstration plots. At the end of the season KPL and the farmers will undertake a cost benefit analysis to see if this is a technology will either reduce costs and/or increase farmers yields and incomes.

Without NAFKA support (whether as NAFKA or under a grant) KPL intended to reduce farmer training activities in 2013-2014 due to a lack of finance to support the activities. Their intention had been to have 2 demonstration plots per village on SRI and one

demonstration plot for zero tillage SRI. This would have added 500 new farmers to the SRI technology and introduced 250 farmers already trained in SRI to another new technology. With NAFKA support it is possible for KPL to increase the number of new farmers being introduced for SRI to approximately 2,000 in 2013-2014 and 250 already trained farmers to zero tillage SRI. If zero tillage is effective KPL would like to introduce approximately 1,250 previously trained SRI farmers to zero tillage SRI and train approximately 1,250 additional new farmers in SRI.

Review prospective roles and staffing levels of KPL and NAFKA

To support the smallholder farmers in 6 villages adjacent to the KPL farm and the 4 more distant villages, KPL currently employs a grade one agronomist, 2 grade 2 agronomists and 4 grade 3 economists all based in the villages, along with and overall manager of the activity Mr. Sijabaje. NAFKA employs within the KPL area 3 field agronomists based in the villages and an agronomist supervisor who assists KPL's manager and fills in when field agronomists are on holiday, sick or absent from the field for other reasons. Additionally NAFKA employs 2 association developers. The entire NAFKA activity is overseen by a NAFKA Association Development Specialist who previously had been spending approximately 45% of his time within the KPL area.

The role of the field agronomists is to maintain approximately 10 demonstration plots in each village, enroll approximately 25 farmers per demonstration plot, and mentor these farmers as well as previously trained farmers on their own land as they adopt SRI. KPL's model involves providing a starter kit to the smallholder farmers which includes 3.5 kg of paddy seed provided by KPL, 12.5 kg of DAP and 12.5 kg of Urea which has been provided by Yara. This starter kit allows each enrolled smallholder farmer to plant a quarter of an acre of their own land in the same way demonstrated on the demonstration plot at the same time.

The farmers perform most of the labour on the demonstration plot as they do on their own land, but ploughing, harrowing and bird scaring at the demonstration plot is carried out through the agronomist who pays local labor to work on the demonstration plot. At the end of the season the farmers who worked on the demonstration plot share between themselves the paddy harvested from the demonstration plot.

The ratio of one agronomist per village, in which each village has approximately 10 demonstration plots and approximately 250 farmers being trained, as well as previous farmers being mentored, appears to be a reasonable ratio. The SRI manager's position and his assistant also seem to be reasonable especially when considering the SRI manager and assistant also manage the distribution of the startup packages to the farmers, manage the input store for smallholder farmers, and manage the loan repayment program (collection of paddy).

All 10 associations have now completed the process of becoming legal entities. The ratio of 2 association builders to 10 associations does appear to be high - however NAFKA is intending to reduce that down to one person in the upcoming year. KPL does not believe they have the mandate to train associations - they worry that if they took on association capacity building certain people

could accuse them of directing associations in ways which benefit KPL rather than the community. Therefore they do not want to take on this role and would prefer if NAFKA continues doing this. However they are more than happy to meet with the associations on a regular basis to talk about the larger rice market, and link them to developments being discussed at the TARIPA level.

The collaboration in the field between NAFKA and KPL staff appears to be excellent.

There have been some constraints; for example activities which were planned at the beginning of the annual cycle - such as cross village visits, were promised to the farmers, but were subsequently cancelled due to cost (and safety) considerations. (While locals are happy to cram in large numbers into the back of a truck to travel to a different village - USAID funded projects need to have more consideration on the safety aspects of such travel). Payments for those who labored on the demonstration plots to scare birds has been delayed - though this is now being sorted.

Review of the Outgrower program

In a recent KPL survey in Ikule 97% of smallholder farmers trained recognized that SRI methodology was an improvement compared to their previous practice and 92% of the smallholder farmers intended to carry on SRI this coming season (issues around not taking it up were poor land and flooding problems, pregnancy and lack of access to finance). However many can only continue it on a small piece of their land lacking inputs to expand the acreage (especially when paddy sale prices have been so low).

SRI technology is reported to have significant increases in yield compared to previous practice - within KPL's data in 2012 - 2013 smallholder farmers land planted using SRI technology on average harvested around 2.5mt per acre - compared to not using SRI which was around 1.1mt per acre. Some farmers who used all of the SRI technology correctly achieved yields of between 3 - 4 mt per acre. The data from the demonstration plots is informative as to how the different productive methods affect the yield

Table: Different yields using different production technology by KPL villages

VILLAGE	SRI TECHNIQUES	LINE WITHOUT FERTILIZER	BROAD CASTING	Urea Deep Placement
Mngeta	4.49	2.96	2.54	7.27
Mchombe	6	5.54	3.36	7.63
Lukolongo	4.67	3.37	4.12	9.63
Njage	7	5.7	3.8	6
Ikule	5.85	6.61	5.03	7.21
Chita	7.48	6.18	5.01	10.73

Merera	6.48	6.18	5.01	na
Udagaji	5.95	4.13	3.43	4.78
Chisano	6.42	5.72	4.1	7.68
Mknagawalo	6.01	4.9	3.8	6.7
AVERAGES YIELD (equivalent Tons/Ha)	6.04	5.13	4.02	7.51

Source; KPL data

Smallholder farmers in the area surrounding KPL on average have 1.95 acres - the cash inputs donated in the first season for 1/4 of an acre have a value of around Tsh33,500 (\$20.94). This means to manage the next acre under SRI a farmer needs an additional Tsh134,000 (\$83.75) just for the new inputs. Smallholder farmers do not have this cash in hand - and so while many of them recognize they could farm more profitably they simply cannot achieve the next step. Furthermore, they often pre sell their paddy at even lower prices prior to harvest - just to get cash advances from local often usurious financing mechanisms.

The following table reflects information gathered from a KPL survey undertaken in October 2013 when smallholder farmers who had received SRI training were asked what they wanted next;

Loans	Higher market price	Inputs	Pest mitigation	Better weeding options	Training	Infrastructure (stores)	Insurance
49%	40%	39%	4%	6%	3%	1%	1%

*Some farmers wanted multiple improvements

Clearly the next step is to give the farmers the ability to apply the new technology to all their land rather than just 1/4 of an acre. Farmers adopt what they can afford planting in lines is easy and cheap, but buying fertilizer for all of their land for all of their crops is more often than not impossible without an injection of cash flow prior to planting. Input loans are that injection of cash flow and, without this next step, farmers will fail to maximize on the lessons demonstrated to them and maximize their income potential on their land.

Association leaders current marketing plans and aspirations

While establishing legal associations in Tanzania is normally a lengthy process, all of the 10 KPL villages now have legal associations. However, they have only just become legal entities and the majority of activities to date have been around building membership, establishing the mandate of the association, and electing leaders. Some of the associations have strong leadership with a vision to

move the association forward, others are weaker and will need more capacity building and, potentially, leadership changes. Stronger associations appear to be interested in services they could provide for their members, while weaker associations appear to be interested in what they can be given.

All associations want stores of their own and it is their highest priority in terms of marketing. Their marketing plans appear to center around speculative storage.

The stronger leaders were very interested in other potential services their association could offer to members which members would pay for and we discussed;

- Screening loan applicants for MFIs for a small fee (paid for by MFI)
- Facilitating loan repayment for a small fee
- Graduated costs for using the store (members who paid for the store would get a lower storage charge than those who did not support the building costs)
- Aggregated input purchases

Unfortunately the consultant only discovered after leaving the area that some of the associations had received grants from NAFKA for equipment for their stores - it appears these stores are rented stores from the villages and it is assumed that the associations want their own stores to save on rent.

Opportunities and constraints experienced by agro-credit to providing ongoing support and expansion to larger numbers of farmers

During the 2012-2013 season two microfinance organizations were operating in the KPL supported villages area offering loans to farmers who had previously been trained in SRI: YOSEFO, which issued 448 loans; and the National Microfinance Bank (NMB), which issued 164 loans. Each loan was primarily for external inputs required for one acre (seed, fertilizer and top dressing provided by KPL), along with some other needs such as the use of weeding machines, some farm labour, etc. This additional cash is to ensure the farmers do not have to borrow or pre-sell their harvest to pay for production and harvest work. Each loan included interest repayments of approximately Tsh 400,000 (interest appears to have been around 16% per annum (when extrapolated). Loans were only issued to farmers who had undergone the SRI training.

KPL offered to financial organizations willing to provide agro-input loans to farmers in the KPL support villages a system of monetizing farmer's repayment of loans in paddy. KPL fixes the paddy price they are prepared to pay at the time of harvest, so the number of "debe's" (buckets of approximately 13.5kg each) to repay is known. The MFI provides the input loan prior to planting; NMB waits for payment at harvest, while YOSEFO requires a small repayment twice a month until harvest when the balance is paid.

The harvest repayment is in “debe's” and is expected to be made in June - July. KPL collects the paddy from a number of collection points, as the paddy is collected and the weight and quality confirmed. KPL then repays the MFI in cash.

NMB achieved 100% repayment - however they are pulling out of the area apparently due to the cost of operating in the area compared to the level of income on the loan and the cost of supporting the farmers to ensure repayment of the loan.

YOSEFO has had more problems with repayment. However in nearly all areas most farmers have repaid, although the precise repayment rate is not yet known. YOSEFO sees opportunity and is continuing to offer loans in 2013-2014. Earlier on at harvest when the prices dropped so precipitously one village was agitated by outsiders to not repay their loans on the grounds that it was wrong to make smallholder farmers suffer. YOSEFO has worked through this problem, making it clear that until all the money is repaid from this village they will not return to the village to provide additional loans. This provided the incentive for those in the village who want loans to work within village structures to get the loans repaid by others, but it is unlikely that this village will receive loans this next season.

KPL has found it hard to collect paddy cost effectively at the paddy prices offered from the 4 villages which are over 45 km in distance from the farm. Therefore these villages will not be included in the paddy repayment scheme next season. This does not however stop YOSEFO from offering loans in these villages, but the payment will not be through paddy paid for by KPL. However, for YOSEFO these villages are a difficult distance to cover and it makes more sense to concentrate nearby to their new office which is being established in the village beside KPL.

Both micro finance organizations have reported low financial literacy on the part of the farmers as a problem in servicing loans in the area cost effectively.

When KPL fixed the paddy price for the harvest in 2013 - the rice price was high, and the paddy price had been high. Therefore they fixed the harvest paddy price at Tsh 6000. However, the actual harvest paddy price was between Tsh 3500 and 4000. This effectively reduced the loan cost to the farmers in this last season by 33%. KPL has incurred a loss in offering an above-market price for paddy at harvest. This coming season KPL is offering a harvest repayment rate of Tsh3,500 / debe of paddy - however they are also offering a second payment in December where farmers who have repaid (or sold) to KPL their paddy between June-July will be paid the difference between the average market price from July through the end of November minus costs (storage, interest, management).

At the time of the consultant's visit to the area, YOSEFO was targeting 600-700 loans in the 2013-2014 season. The loan price has been increased to Tsh450,000 per acre per farmer, and it is still limited to one acre per farmer.

Constraints

Farmers complain that YOSEFO has a second product - the business loan - that offers them slightly better terms than the agro-input loan. However, what the farmers do not realize is that those who are offered the business loans can be seen to be running businesses (even farming as a business). In many ways the agro-input loan is a starter loan, available to people with no credit history, and no business records to access finance. If they are seen to be able to repay these loans effectively, then they will be able to progress to business loans. However this requires raising awareness of the progression, and the need for improved financial literacy and responsibility (i.e., no delaying repayment well beyond the harvest period).

The field agronomists are providing significant support to the loan program. They monitor the loan farmers to ensure they are following the right agronomic practices on a regular basis, remind them to make their loan repayments, then at harvest follow up to encourage loan repayments as well as coordinate deliveries to the collection points. Some farmers have delayed delivery all their paddy to repay their loans.

When the harvest prices fell to below where they have been for a number of years, the amount of cash the farmers will achieve through the sale of their surplus paddy is much less than expected and not enough to cover their cash needs. Therefore without a good understanding of the impact of a good credit history there is a tendency to not want to repay loans.

The loan only covers only one acre and most farmers have more than one acre and want a loan which covers more of their land.

Opportunities

Many of the farmers receiving loans recognize that after a number of years with careful cash management they would no longer need loans. Good farmers recognized that to expand the amount of land under SRI and to get the higher yields over all their acres they need the loan products, and they need to repay their loans each time.

Recommendation

To improve the update of loan products, and to ensure farmers understand the opportunities and risks they are entering into, they should be trained on financial management. The best time for this training would be after farmers have completed the SRI training - between July and October. Prior to being given a loan new farmers should complete a financial management training which would specifically look at how to increase the acreage under SRI through a loan program, loan repayment issues, cash management etc..

Issues around storage requirements

Saving money is often about putting the money somewhere safe where it is not so easy to get to, so you do not fritter it away. Paddy to smallholder farmers is cash - when they need cash they sell the paddy and then use the money to pay school fees, medical bills, labour, a TV, new roof etc. Farmers clearly understand market dynamics - at harvest the prices are low, before the next harvest the prices are generally high (though not in 2013). They sell what they have to at harvest to cover their cash needs, and keep

as much back as possible for sales later in the year. Placing a bag or more in a store away from their home reduces the ease of selling it to cover immediate cash needs.

At least 7 of the associations appear to be renting stores within the village. These stores are probably little more than walls and a roof, relatively secure and waterproof. The stores are managed by the association leaders who the farmers trust to look after their paddy. The store owner charges rent.

Representatives from the associations in meetings expressed the desire to own their own stores. In terms of building stores they believe their members will be willing to put in locally available inputs such as sand, stones, bricks, water and unskilled labour and they would be given land to build on. However, they do not have the funds to buy the timber, cement, metal roofing, and skilled labour. They also believe that around half the members would be willing to pay between 50 - 100 kg of paddy at harvest for a number of years to repay the store construction.

In a subsequent discussion with the local representative from YOSEFO, they would not be willing to give an association a building loan because they are young associations with no track record, and they have no assets with which to secure the loan.

Limited investigation into the possible costs of building approximately 200+ mt stores estimates costs ranging from between \$22,000 - to over \$40,000. Further work would need to be done to see what the costs would be to build stores which meet the designs approved by the Tanzanian Warehouse and Licensing Board Authority (WLBA) and whether that is really necessary in the context in which they would be used.

Reasonably well-built stores, well managed by the association can apply to financial institutions for collateral finance loans. YOSEFO indicated they would be interested in providing such loans where they could also oversee the stores.

NAFAKA has a detailed plan to develop the capacity of the associations this coming year, which includes building the association's capacity to offer services to its members. It could be possible to give grants to one or two strong associations to build stores next year - however this is not a quick or easy operation. Firstly the members need to be organized to deliver their contribution in building materials and the land needs to be handed over to build on. Only once all the building materials are arranged can building start - this has to be done around seasons - you cannot build in the middle of the rainy season and if the association is also contributing labor it has to be when the members are not working on their crops. Building should be supervised by skilled laborers to ensure it is sturdy and safe. It is unlikely that if this activity was started in August 2014 that it would be completed effectively before the end of the project.

KPL is willing to purchase paddy as a repayment of farmers input loans as well as purchasing paddy from farmers at harvest. To this effect they are in the process of building an approximately 3,000 mt store at the main farm site purely for smallholder farmer paddy. At the moment the loan program volumes, along with the additional volume KPL purchases will not fill the store.

KPL could consider adding a new service to the smallholder farmers. They would offer their storage facility for deposits by the farmer, the farmer would receive a goods received note (GRN) for the paddy deposited, a financial organization such as YOSEFO could provide a loan against the (GRN) safe in the knowledge that a trusted third party was managing the storage of the collateral. The depositors would then have the option to sell to KPL when they wanted to sell (KPL would offer a market price each day) or withdraw the paddy and sell to another buyer (after clearing the loan).

Recommendation is to look at this situation at the end of this season, and then if attractive work with KPL to develop it for the harvest in 2015.

Loan farmers are spread throughout the villages and moving paddy from place to place even in the village costs money. Farmers prefer to travel short distances to deliver their paddy to repay their loans. YOSEFO is issuing loans to 5 of the 6 villages which are relatively close to KPL (the village not receiving loans is made up of members who did not pay or were slow to pay this last season). KPL's truck takes about 3 mt, therefore the most cost efficient method of collection is to go to one village and collect 3 mt in one go. A number of collection point options were considered; while a number of villages have a main store in use - often the farmers further away do not want to travel that far. Managing at least one sub location per village was thought to be a more effective way to collect the paddy loans.

KPL and NAFKA considered using the silo bags KPL uses for storage - simply putting some of the silo bag in a location - one piece of the bag on the ground, the bags on the plastic, and then another bag over the top and keeping a guard there full time. This is a very rudimentary way of collecting paddy, low security and while possible not the preferred option.

Placing 20ft shipping containers in different locations is also possible. A used shipping container is probably around \$2,500 in Dar es Salaam, it would have to be transported to the villages along terrible roads, the land has to be slightly prepared for its reception - so it is a costly. When paddy above the recommended storage moisture levels is placed into the container the differences in day time and night time temperatures can cause condensation and problems with even temporary storage of paddy. It is not possible to move the container from location to location. As a long term storage option it will not work for the villages (too small and too many condensation problems).

Grain Pro's 10mt cocoon (see picture) were also considered. This is a heavy duty plastic storage device which can be easily zipped closed at the end of each day. Since KPL cannot be sure that all the paddy is below 13.5% moisture, the fact that it can be opened each day will allow the breezes to dissipate moisture which will prevent mold from forming during the period of storage prior to collection. Being able to quickly open and close the device allows for easy management. Once the farmers have delivered in one location it is easy to move it to the next location. Finally at the end of the collection period the cocoons can be brought back to KPL and they can provide added storage at the farm supplementing the 3,000 mt store. They too are expensive at a cost of around \$1600 each before duties in Dar but they are a much more flexible storage option than the shipping containers, and more secure than bits of plastic.



Recommendation; test 10 of these cocoons as aggregation points, train and supervise the person at each location how to set up the cocoon, and how to use it on a daily basis (while also training them on record keeping, and how to measure “debe's” delivered and transference of these “debe's” to 50 kg bags).

Benefits and drawbacks of transitioning the NAFKA involvement into a grant to KPL to absorb NAFKA staff under its own management umbrella

Providing KPL a grant to manage the entire program within the KPL villages rather than splitting the activities between KPL and NAFKA will build KPL's reputation in the area as a service provider. It will cement KPL's relationship as a benefactor to the local farmers rather than just a private business only looking after itself. It will increase the efficiency of implementing the program since the financial aspects (such as paying for bird scaring on demonstration plots) can be handled directly from the farm rather than through USAID procurement rules.

Since NAFKA will still be financing the operation, it will still be able to count the impact towards its own deliverables.

KPL agronomists train smallholder farmers as effectively as NAFKA agronomists. Therefore there is no technical reason why KPL should not carry out all of the training. KPL is already overseeing the entire operation with NAFKA coordinating through Mr Sijibaje.

KPL pays its agronomists significantly less than NAFKA pays its agronomists partly due to employing different grade levels, partly because it is not a project. KPL is willing to offer all of NAFKA's staff jobs - however it will offer the field positions at the current level it pays its own field staff. It is more than likely that these NAFKA field staff will not accept these reduced salary levels but

NAFAKA is in the process of expanding the area it covers and these agronomists can be easily relocated to new areas. Recruitment of new people to replace the old agronomists is fairly easy; in a recent application KPL received a number of suitable candidates. However it will be important to ensure that there is a transition period when the old agronomists introduce the new ones to the farmer groups, the loan farmers, etc.

It has been argued that private sector companies should not be paid money to train farmers, and they should do it themselves. Private sector companies have to run at a profit to be sustainable into the future. Companies working with staple foods, maize, rice, beans, are working in a highly competitive environment, the margins they make on a day to day trading are small, and are aggregated by volume to acceptable levels. Speculation is risky as demonstrated in the last season when the government intervention in the market caused prices to drop and placed companies and smallholder farmers speculating in increased prices into making losses on their positions. There is not sufficient margin within these businesses to take on the expensive process of paying people to be in the field training farmers. Furthermore since the farmer can sell to anyone at harvest, it is often the trader who passes the farmers house at the right time who buys the crop with the farmer preferring cash when he needs it to waiting until the organization who trained him passes by to buy his crop. KPL is offering the farmers a number of valuable services, to include guaranteed paddy prices for their loan repayments and authentic inputs at wholesale prices. These services will expand over time. Supporting KPL to offer training services now helps build the trust relationship between the farmers and KPL which will allow additional services in the future to be developed such as paddy storage and collateral finance.

Based on its own financing, KPL had intended to reach out to only 750 farmers in 2013/2014, with financial support from NAFKA they can reach approximately 2500 farmers in 2013/14 and a further 2,500 in 2014/15.

If farmers within the KPL area require additional training (agronomy, financial management etc.) in the future KPL will be in the position to apply to relevant organizations for funding, whereas NAFKA will close and its support will finish at the end of the project. KPL taking on a grant from a USAID funding project will increase its qualifications in handling donor funds which may make it acceptable for direct funding from USAID or other organizations in the future.

One potential risk is NAFKA does not collect data in the same way as KPL does. Therefore it will still be necessary for NAFKA to send in M&E monitors to ensure the same data is collected in the KPL area matches the rest of NAFKA data and can be included in the PMP.

KPL is a private company and as mentioned has to run at a profit to remain sustainable. There is a risk that KPL like any private sector company may go bankrupt, or decide to withdraw from the farm. The recent government intervention into the market followed immediately by a drop in the market price when normally the market prices are peaking has detrimentally impacted the harvest price which 6 months later has yet to significantly increase. This has negatively impacted on KPL's P/L. However KPL is restructuring its loans, and is in the process of receiving a long term investment loan from AgDevCo supported by the United

Kingdom. If for some disastrous reason KPL did stop operating while working with a grant from NAFKA, it would be possible for NAFKA to step back in and work with the agronomists to ensure the farmers continued to receive the training promised. NAFKA's costs would be higher than KPL's but the project would not have expended on something which was not delivered.

Recommendation for agronomic activities in areas surrounding the KPL plantations 2013-2015

NAFKA should develop an in-kind grant, transitioning the activities NAFKA currently carries out in production to KPL from March 2014 until November 2015. This grant should be based on certain deliverables; numbers of demonstration plots established and farmers enrolled to demonstration plots, on-going productivity training reports, KPL's willingness to offer guaranteed reasonable harvest paddy prices to underwrite loans. Access to finance is essential to increase farmer resilience and income, and larger numbers of farmers able to take loans is essential to warrant a financial organization locating itself in the area to issue loans. To ensure this works the more progressive of the trained smallholder farmers should be trained in financial management before a loan cycle. In 2013-2014 KPL should introduce SRI technology to approximately 2,000 new farmers and zero tillage SRI to 250 previously trained SRI farmers. The 10 zero tillage SRI demonstration plots should be carefully monitored and the costs of planting zero tillage SRI compared to SRI demonstration plots along with comparing the yield results. If zero tillage demonstrates significant potential income improvement then in 2014-2015 KPL should increase the number of zero tillage demonstration plots (5 per village)-demonstrating to approximately 1,250 previously trained farmers the new benefits, while continuing to introducing a smaller number (approximately 1,250) new farmers to SRI technology. If zero tillage SRI is not as effective as anticipated the grant should be restructured to only training farmers on SRI.

NAFKA should continue working with one association trainer supporting the capacity building of 10 village associations specifically to build the association's ability to offer valuable and income generating services to its members. These services should center around storage, credit worthiness and input activities.

NAFKA should continue to perform its own M&E in the area to ensure data collected on yields and income can be included in its overall results.

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