

Study of sugarcane outgrowing at Kilombero

Stakeholder's feedback report

May 2015

This document is a summary of a study conducted by researchers in 2013 and 2014 on sugarcane outgrowing and livelihoods in the area around Kilombero Sugar Company, Tanzania. It aims to give feedback to interviewees and other interested residents and stakeholders, and creates an opportunity to share information, give voice to participants' grievances, and present our observations and recommendations.

About the research

The research was led by Mr Emmanuel Sulle of the University of the Western Cape, South Africa, assisted by Ms Rebecca Smalley, an independent researcher from the UK. The aims of the research were to: (1) find out how Kilombero Sugar Company and the outgrower scheme operate; (2) assess the impact on the local area; and (3) assess how business

has been affected by privatisation in 1998 and other factors. We held more than 50 interviews in November and December 2013 with residents of Msolwa Ujamaa, Sanje and Signali villages. Msolwa Ujamaa and Sanje were chosen because they had large numbers of outgrowers and their own associations, and had not been visited recently by researchers. Signali was chosen as an example of a village outside the sugarcane area. We also held 33 interviews throughout 2013 and 2014 with stakeholders such as sugarcane associations, the company, the Sugar Board of Tanzania and government officials. A detailed research report has been published separately and is available at http://www.plaas.org.za/plaas-publication/FAC_WP106_Tanzania_sugar. Also a policy brief on this can be accessed at:

<http://www.plaas.org.za/plaas-publication/Tanzania-Ksugar-FAC>

History

Villages in this part of the Kilombero Valley grew and changed during the twentieth century as settlers arrived through *ujamaa* and to work for the sugar company, the TAZARA railway and other local businesses. Traditionally, residents in this area grew millet, paddy, maize, bananas and vegetables. At Signali, people fished in the Kilombero River. Today, Kilombero Sugar Company is the biggest sugar producer in Tanzania.



Figure 1. Map showing location of Kilombero Sugar Company and key regions of economic migration into the study area

1920s

- Indians introduce sugarcane to Tanzania

1960

- Kilombero Sugar Company formed, financed by overseas banks and development agencies. It starts with 1,700 acres of land and a factory in K1.
- Settlement scheme established at Sonjo, Ichonde and Kichangani, where farmers produce sugarcane in an outgrowing arrangement.
- Small groups of farmers also supply sugarcane

1967

- Kilombero Sugar Company nationalised with Arush Declaration, as government wants Tanzania to achieve sugar self-sufficiency.

1970s

- *Ujamaa* village farms grow sugarcane.

1974

- Kilombero Sugar Company starts work on a second estate and factory in K2, north of Kidatu. The World Bank and Dutch and Danish governments fund the new phase.

1976

- K2 starts crushing cane.

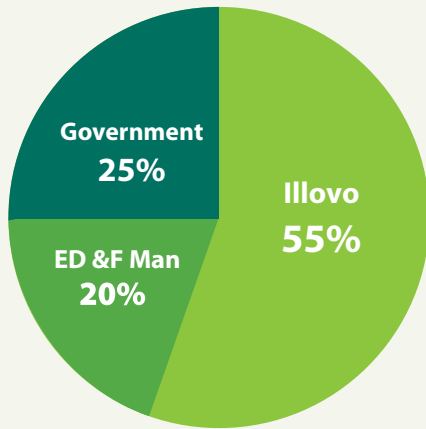
1998

- Government privatises Kilombero Sugar Company and new owners increase sugarcane yields, restore factory capacity, improve infrastructure, and improve outgrowers payment system.

2001

- Kilombero Sugar Company builds bridge over Great Ruaha River.

Ownership of Kilombero Sugar Company in 1998 after privatisation



Two projects to enhance Tanzanian sugar production

- In a programme called “Big Results Now”, the government hopes to increase Tanzanian sugarcane production. It has promised to establish new sugarcane estates with private investors.
- The Southern Agricultural Growth Corridor (SAGCOT) project, includes plans for private investors to build a sugarcane estate and outgrower scheme at Ruipa, near Ifakara.

Currently, other companies are not allowed to build a sugarcane factory within 40km of Kilombero Sugar Company at Kidatu.

Main findings

Expansion

The number of outgrowers and sugarcane fields increased greatly after privatisation in 1998. Residents in the K1 and K2 areas were encouraged to grow sugarcane by the company, local and national government and their fellow villagers.

The factories are closed from March to May for maintenance and because it is not possible to harvest cane during the long rainy season.

In the 2013/14 season, the K2 factory was disrupted by problems with power supply and maintenance, which affected the amount of outgrower cane that could be crushed.

Kilombero Sugar Company

8,500 outgrowers

Supply **43%** of the sugarcane crushed at K1 and K2 factories

K1 can crush 120 tonnes per hour

K2 can crush 150 tonnes per hour

Benefits of expansion

The expansion of the outgrower scheme since 1988 has allowed many more households to benefit from the proceeds of sugarcane.

The growth of the sugarcane operation has also stimulated business in townships like Ruaha and Kidatu. One man said, "Look how busy the people of Ruaha are – it's because of Illovo!"

Farmers have used sugarcane payments to build better houses, fund other crops and educate their children. When we asked outgrowers how they spend their sugarcane income, the most common answer was secondary school fees for their children.

Spending priorities for outgrowers using their sugarcane payments

- 1 School fees
- 2 Home improvements or building a new house
- 3 Farming costs
- 4 Food and other basic household needs
- 5 Buying or renting land
- 6 Loan payments
- 7 Helping extended family members

Problems with expansion

We spoke to several residents who would like to join the outgrower scheme but could not afford to buy or rent a sugarcane plot. One woman told us she knew of the current problems with sugarcane but it would be worth the risk: "Inakatisha tamaa, ila ni kama karata, kuna kupata au kukosa."

One problem caused by expansion is that land has become more scarce and expensive. Sugarcane replaced food crops on many fields. It has become difficult for youth, poor people and newcomers to acquire land. People are building houses in the hills because there is no more room in the village centres. One acre of farmland in Msolwa Ujamaa or Sanje costs around TZS 50,000 to TZS 200,000 per year to rent and TZS 700,000 to TZS 1,500,000 to buy. Land is cheaper to rent farther down the valley. In Signali, renting one acre for paddy costs around TZS 30,000 to TZS 100,000 per season. Officials in Signali said that they are beginning to experience land issues there, too.

Because land in the sugarcane area has become scarce and because it can be difficult to cultivate other crops near sugarcane, many residents have bought or rented farms far away near villages such as Signali or Lungongole to cultivate maize or paddy. This can be a good way for families to increase their income. But when children are left alone at home for long periods when their parents are at the faraway *shamba*, the children (especially teenage girls) are vulnerable and might play truant from school. This problem affects poor farmers who have less money for tractors or workers and must spend weeks planting, weeding and harvesting.

Outgrowers' concerns

According to our research, the situation for Kilombero outgrowers has become worse in recent years. The biggest concern among outgrowers is the low sucrose content of their cane.

Sucrose levels

Whereas farmers are expected by the company to achieve 10% sucrose in order to get a good price, the people we interviewed said they have been recording only 7.5% on average. The sucrose level could be affected by:

- smut disease
- whitescale pest
- delays between burning and crushing the cane
- cane being harvested during the short rainy season
- cane being harvested too soon after planting, before it is mature.

"Outgrowers seem to lack access to advice or extension officers."

The 10 most common concerns among outgrowers and associations

1	Low sucrose levels in sugarcane
2	Systems for weighing, sucrose measurement and payment calculation are not open or fair, and outgrowers are not represented
3	Difficulty acquiring land, and connected problems of a lack of food crops and farming far from home
4	Fertiliser and herbicide ("dawa") is ineffective, expensive or delivered too late
5	Delayed sugarcane payments
6	Low capacity or reliability of factories
7	Rainy weather conditions affecting soils and roads
8	The government has allowed too many sugar imports
9	Corruption or disorganisation in the sugarcane harvesting system
10	Too many (and unclear) deductions

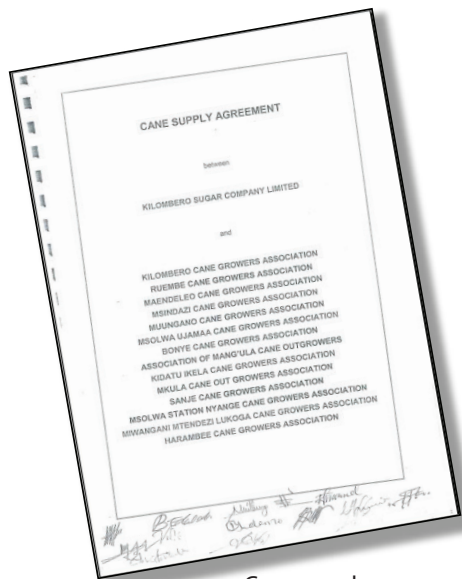
However, outgrowers also believe that the sucrose measurement system is affected by bribery and inaccuracy. There is a serious lack of trust and openness in sucrose measurement but also in weighing cane deliveries and in calculating farmers' payments. None of the outgrowers that we interviewed had seen the Cane Supply Agreement that their associations sign with the company. Also, the Cane Supply Agreement is written in English and difficult to understand in places. SACGA has produced a Swahili translation, but the other associations said they had requested a translation and were still waiting. In addition, outgrowers' pay slips are not very clear. Unsurprisingly, several farmers are unsure of contractual and operational detail.

One outgrower said, "We are not very sure of how the cane payment works, because no one is representing us in the operations of the company, for example at the weighbridge, measuring sucrose or calculating the rendement."

Some farmers asked us for information about outgrowing in other countries.

Harvesting

Harvesting is another issue of concern. Some people's sugarcane is being harvested very late in the season. Other people's sugarcane is not being harvested at all. The company estimates that in the 2012/13 season, 65,000 tonnes of outgrowers' cane could not be crushed. Farmers said that associations and contractors do not follow harvesting schedules, so harvesting is no longer systematic or fair. There seems to be a lack of central oversight of the harvesting process and a lack of control over the amount of cane that outgrowers are producing.



Cane supply agreement

One reason is that heavy rain and flooding make it difficult for contractors to access farms. The roads are not all suitable for vehicles, especially if the farms were converted from small paddy plots. This problem increased when the company extended the season until March. According to the Cane Supply Agreement, contractors' trucks must be passed as road-worthy before the start of each season. But some trucks that we observed seemed old and do

struggle on hills. The main road to Ifakara, managed by the Ministry of Works, is in poor condition in places. In future, the UK, USA and EU governments have signed an agreement to pay for 56 km of the road to be paved between Kidatu and Kiberege and between Signali and Kibaoni.

The second reason why harvesting is disorganised is that contractors are sometimes forced to go to farms where cane fires have broken out. If the fire spreads to the farm of a member of a different association, this creates additional problems. Some fires are accidental, but in other cases big farmers are making deals with group leaders or association leaders to deliberately start fires on small farms that would spread to their own. The owners of contracting firms often also own large sugarcane farms, and it is necessary to have at least 50 acres to be elected as an association leader. This creates an opportunity for elites to control the harvesting process and push for the interests of the larger outgrowers.

Different sizes of outgrowers with different needs and challenges

We observed three groups of outgrowers: large estate owners; medium-size outgrowers with 5 to 20 acres of sugarcane; and small outgrowers with less than 3 acres of sugarcane. The smallest outgrowers often have the least money and are the most vulnerable to harvesting delays. They are being squeezed by large farmers, bribery and favouritism in the system, declining profits from sugarcane, and the fact that the number of outgrowers has been allowed to grow beyond the company's crushing capacity. The KSCL outgrower scheme is good in that it is open to everyone, but the smallest and poorest farmers are not well protected within the current system. Previously, outgrowers have acted to improve their situation by publicly demonstrating and establishing new associations to represent their interests. The largest association, KCGA, still delivers 45% of all sugarcane produced by outgrowers, but the number of associations has grown to 15. Unfortunately, the associations do not always cooperate over issues such as road improvements. Also they put pressure on the company to give them a high sugarcane quota, and this could be adding to the problem of surplus cane not being harvested or crushed.

Block farming could perhaps provide some protection to small outgrowers. But the block farming system is a work in progress. Problems of bureaucracy, corruption and poor returns for members have been reported.

Sugar imports

In addition to harvesting delays, outgrowers have faced payment delays. Around August 2013, Kilombero Sugar Company began delaying the payments due to outgrowers for their cane deliveries. Payments to contractors were stopped and contractors could not pay cane-cutters their full wages. The company explained that it had cashflow problems because the government had imported too much cheap sugar into Tanzania. This meant that the company could not compete in the market and sell enough sugar. Illegal sugar smuggling and weak control over imports is an old problem. In 2013,

Comparison of three outgrower associations

	KCGA	MUCGA	SACGA
Year established	1991	2008	2012
DRD (sugarcane delivery quota)	800 tonnes per day	233 tonnes per day	63 tonnes per day
Number of members	2,500	856	342
Joining fee	TZS 3,000	TZS 12,000	None
Transport (up to 10km)	TZS 6,380/tonne	TZS 6,200/tonne	TZS 6,300/tonne
Transport (11–21km)	TZS 8,250/tonne	TZS 8,000/tonne	/
Cane-cutting	TZS 6,380/tonne	TZS 6,200/tonne	TZS 6,300/tonne
Loading	TZS 3,800/tonne	TZS 3,330/tonne	TZS 3,600/tonne
Membership fee	TZS 300/tonne	TZS 500/tonne	TZS 500/tonne
Social services	TZS 200/tonne	TZS 500/tonne	TZS 300/tonne
TASGA fee	TZS 100/tonne	/	/
Secondary school contribution	TZS 300/tonne	/	/
Office costs	/	/	TZS 200/tonne
Machinery fund	/	TZS 500/tonne	
Machinery available for harvesting services	2 trucks, 1 grader and 2 loaders	1 loader	None

Sugarcane payments

Kilombero Sugar Company uses a complicated calculation to decide how much per tonne it pays each outgrower for sugarcane. At the start of the season, the company agrees a provisional price for sugarcane. This price is based on a level of sucrose that farmers could be expected to achieve in an average season. The level is called the “rendement” and for the past few seasons it has been 10%. When a farmer delivers his or her sugarcane, it is measured for sucrose. This measurement is used to adjust the price up or down, to decide how much the farmer will be paid per tonne the following month. If the sucrose level is higher than 10%, the price will be increased. If the sucrose level is lower than 10%, it will be decreased. This is called the farmer’s “relative rendement”. When the company pays the farmer for his or her delivery, it keeps back 10% until the end of the season. At the end of the season, the company calculates how much sugar and molasses it has sold in the market. If it was more than expected, the company increases the provisional sugarcane price. If it sold less than expected, the company decreases the price. It then pays the farmer the remaining 10% of their payment, which it adjusts if the price has gone up or down.

the company reduced the sugarcane price from TZS 69,000 per tonne to TZS 62,889 per tonne. It said its sugar sales had been hit by an influx of cheap sugar. For the 2013/14 season, the price fell to TZS 58,000 per tonne. A company official told us, "We are in a distress situation because of sugar imports." Another company official said that they would like to increase the crushing capacity of the K1 and K2 factories, but cannot afford to in the current market.

Several respondents complained that deductions have increased recently. Yes, according to our research, since

the 2008/09 season the cost of the main deductions has increased. But we found that the sugarcane price paid to outgrowers has also increased until recently, so deductions and price have risen in step. The only deduction that has increased more than all the others, out of step with the sugarcane price, is the cost for cane-cutting. We compared the deductions costs for KCGA, MUCGA and SACGA and found them quite similar. But, if sucrose levels and the sugarcane price have been declining, farmers might be earning less in total and spending more of the payment on deductions.

Other sources of income

Typical sources of income



Selling food, milk and farm produce



Having a small shop



Selling homebrew



Casual labour

Unusual sources of income



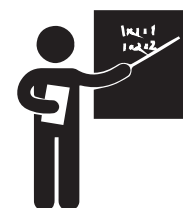
Working at a hospital



Working as a cook



Working for the village office



Teacher

Life in the area

Land and livelihoods

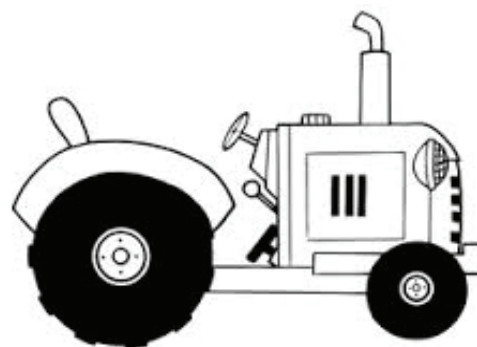
All of the villagers we interviewed are, or have been in the past, involved in agriculture as cane association members, farmers who work the land or farm-owners who employ labourers. The market for renting land has become very important in the area.

Many outgrowers have used inherited land or land allocated to them by their village governments for sugarcane, and then purchased or rented additional land for paddy or maize. On average, outgrowers in Msolwa Ujamaa and Sanje owned or rented 15.5 acres in total for sugarcane, paddy and maize. Three people told us they could not afford to become an outgrower, since they only had on average, 1.8 acres for paddy or maize fields. Signali residents could not grow sugarcane and five people we spoke to had an average of 10 acres for paddy and maize. This suggests that perhaps sugarcane outgrowers have more land and tend to be better off than farmers who do not grow sugarcane.

We met only two people in Msolwa Ujamaa and Sanje who work for the company. Villagers said the company offers mostly low-paid, temporary jobs such as weeding

or cane-cutting and that most workers come from outside the area.

Most farmers hire workers for their farms and sell at least some of the maize or rice that they produce, as and when they need cash. Poor farmers often hire workers because they lack time or good health to do all the work themselves.



Tractors are used by farmers in the sugarcane areas especially for uprooting and replanting cane at the end of its cycle. But generally, tractors do not seem to be particularly accessible or affordable. There is perhaps

greater use by smallholders of tractors and oxen in the paddy-producing areas. In Signali, tractors are readily available for private hire for around TZS 40,000 to TZS 60,000 per acre with a driver.

Financial problems

Because of the problems discussed in this report, outgrowers are struggling with payment delays or payments that are lower than the outgrowers were expecting. Some are making a financial loss from sugarcane. Farmers respond by taking out loans to meet the shortfall, raising money another way or cutting back on expenses.

“We are failing to take care of our families,” one outgrower said
(“Sisi tunashindwa kutunza familia zetu”).

Some outgrowers are considering withdrawing from sugarcane. Others may be forced to withdraw because of debt.

A woman in Msolwa Ujamaa told us,

“We do everything in our field at the cost of TZS 1 million per acre. This can lead to an income of TZS 1,500,000. This is poor revenue. We are feeling tired, and maybe we will leave cane.”

But the decision to leave sugarcane and grow paddy or maize instead is not easy. Outgrowers depend on their sugarcane payments and hope that things will improve. It can be expensive to uproot cane, replant the land and apply *“dawa”*. If farmers change to another crop, they fear it will be damaged by insects and birds from the sugarcane. Also, maize and paddy need more labour than sugarcane and are more vulnerable to flooding and drought. During the time of our research, the price that farmers received for one sack of rice fell from TZS 100,000 to TZS 40,000 to TZS 50,000. In Signali, where sugarcane is not grown, the low rice price was having a negative effect on household income. Residents in Signali said they were selling more sacks of rice to cover the cost of paddy farming, and keeping less rice at home for food. Farmers were reducing expenditure by not cultivating all of their land, using less paid labour or cutting back on purchases. Poor paddy farmers miss out on cash payments from sugarcane and because they have to sell some of their food crops for cash, their households may be vulnerable to food insecurity.

Accessing loans is difficult for people in this area. Because of the payment delays and the falling profits from sugarcane, some outgrowers are renting out their sugarcane fields because they needed money urgently. We believe that if the present financial challenges continue, more people may be forced to sell or rent their farmland to others in the sugarcane area and in places such as Signali.

Conclusion and recommendations

After privatisation in 1998, the company made changes to improve sugarcane production and processing infrastructure and the payment system for outgrowers. It gave a bigger role to associations and local contractors, and raised money from donors for training. Through expansion, more farmers in the sugarcane area have become outgrowers and benefited from sugarcane payments. However, we believe that the expansion was not planned carefully enough and the company has failed to ensure that its factories can harvest and crush all the sugarcane produced by outgrowers. There is a lack of oversight over harvesting practices and haulage. Not enough guidance is being provided to help outgrowers raise sucrose levels and to oversee crop management. Allegations of bribery and favouritism within the system have increased. We believe the Tanzanian government could do more to support outgrowers and control the importation of foreign sugar. While the government has encouraged an increase in sugarcane production, it failed to plan properly for the inevitable pressure on land that would result from expansion of the area under sugarcane and the influx of workers and business people. Lastly, we observed that paddy farming is a vital activity for residents in the area, including outgrowers. Poor farmers and residents in big paddy-producing locations such as Signali have suffered from the fall in the market price for rice.

The main problems identified in our research

1	A lack of oversight and control in the planting, harvesting and delivery of cane.
2	Uncontrolled expansion of the outgrower area, with the associated problem of small, difficult to access fields.
3	A lack of support for small outgrowers.
4	Not enough extension services for sugarcane outgrowers but also paddy and maize farmers.
5	Distrust over weighing and measurement of cane.
6	Land scarcity and low incomes encouraging far-away farms and children being left home alone.
7	Bribery and favouritism in the outgrower system, at the expense of small and poor farmers.
8	Unsatisfactory access to inputs and to credit.
9	Poor governance of national sugar imports.
10	Farmers feeling unable to shift out of cane because of the expense of paddy farming and low rice price, and risks from birds, insects and cane fires.

During the research, we heard many suggestions for improvements. We drew on those ideas and our own analysis to make recommendations for change.

1. The Tanzanian parliament and district and village councils should do more to monitor the performance of civil servants, from national level to village level. This will help to ensure that the country's laws for the sugar industry are enforced.
2. The provision of extension services and training to outgrowers should be increased. The company, the government and donors should work together to improve farmers' knowledge about smut disease and sucrose.
3. Associations, the company and other industry members should work together to create better systems for weighing outgrowers' deliveries, measuring sucrose content and calculating payments. The company could carry out research into sucrose levels across the operation and publish the results, to regain outgrowers' trust in the system and identify possible reasons for low results.
4. The Cane Supply Agreement and outgrowers' pay slips should be made easier to understand. The Cane Supply Agreement should be translated into Swahili and distributed among outgrowers. The company should make it clear if outgrowers are receiving profits from sugar, molasses, bagasse and ethanol. Associations should explain to outgrowers the legal consequences from factory disruptions and payment delays.
5. Associations, contractors and the company should be more accountable to outgrowers. New penalties and incentives might be needed to ensure that the sugar business operates fairly, efficiently and openly. For example:
 - a. Associations should increase their capacity to carry out the scheduling process and their overall responsibility for delivering the cane of their members. Associations should employ qualified managers to run the operational parts of their mandates.
 - b. Consider ways to make association leaderships more representative of their members, including female outgrowers and small-scale outgrowers.
 - c. Outgrowers, the company and other industry members should discuss ways to stop harvesting schedules being disrupted by cane fires and bribery.
 - d. The company should enforce the rules in the Cane Supply Agreement regarding the condition of haulage trucks.
 - e. Consider incentives or penalties to avoid delays in delivery and crushing of cane.
 - f. Donors such as the EU should closely monitor
6. The government and donors should provide sufficient public and private investment under strict and transparent management for construction and maintenance of roads, water irrigation canals and water drainage systems.
7. The company, donors and industry members need to improve the planning, management and monitoring of outgrower production. There is a need for discussions involving outgrowers and other local residents about the future of sugarcane outgrowing in the area. Possible areas of work:
 - a. Investigate reported problems with block farms. Research whether block farms in future could be a way to support small-scale outgrowers and protect their participation within schemes.
 - b. Hold discussions on long-term solutions to the problem of over-production at Kilombero. Options may include decreasing associations' quotas and introducing incentives, assurances and penalties to increase the efficiency and capacity of milling factories. Carry out initiatives to raise local awareness of the production risks of sugarcane outgrowing and plan for zones for both cane and food crops in the supply areas. Provide multi-stakeholder planning and support for small-scale farmers who wish to exit sugarcane and transition to another crop, and consider measures to bolster small-scale rice and other food-crop production and marketing more generally, including beyond the outgrower zones.
8. The government and members of the Tanzanian sugar industry should improve the process for issuing sugar import licences and permits. They should introduce measures to help sugar companies manage disruptions to cash flow caused by importation. They should also introduce measures to avoid costs being passed on to outgrowers and other vulnerable groups such as cane-cutters.
9. To help achieve the above, it might be useful to organise a forum for outgrowers, associations, the company and industry officials to get together and discuss challenges and opportunities. It would be useful to invite representatives of outgrower associations from other countries in Africa to discuss how their schemes operate and what challenges they have faced.
10. Beyond sugarcane, there needs to be more support for maize and paddy farming in the area, such as better roads and storage. Donors and farmer groups such as Mviwata should work with land officials and representatives of SAGCOT to identify the most pressing needs in the area and the changes that would make the biggest difference to livelihoods in the area.

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Organizational Structures for Sugarcane Outgrowers in
Tanzania: Final Report.*

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