



Opportunities and Challenges in Tanzania's Sugar Industry: Lessons for SAGCOT and the New Alliance

Executive summary

Sugarcane outgrower schemes are central to several policy and donor strategies for driving agricultural growth and reducing poverty, including the Southern Agricultural Growth Corridor project in Tanzania (SAGCOT). But field research into the outgrower component of Kilombero Sugar Company, Tanzania's largest and best regarded sugar producer, demonstrates a pressing need for change. Sugarcane production in Kilombero has had benefits for farming households as well as the local and national economy. However, unsustainable expansion and governance issues in the outgrower scheme have created new risks. There are pressures on food security as a result of a decline in land for food crops, and on incomes, particularly when outgrowers' cane remains unharvested and farmers' payments are delayed. These problems have been aggravated by the importation of foreign sugar into the country. For this industry to provide its maximum benefits

to the economy and to the household, a policy, legal and institutional framework is needed that provides greater efficiency, accountability and transparency, as well as greater security for all participating stakeholders. There are lessons for the sugar industry, as well as donors and investors of ongoing and future agribusiness developments in Tanzania.

The strategic context

Kilombero Sugar Company is often mentioned as a success story in Tanzania's sugar sector. Its model combining estate with small-scale outgrower production is set to be replicated, as increasing sugarcane production using outgrowers is a core component of the Southern Agricultural Growth Corridor project (SAGCOT), a public – private partnership focused on Tanzania's south-central region. Large-scale sugar investments are also planned under Tanzania's Big Results Now strategy. Under both initiatives, new greenfield developments

Box 1. Links to the G8's 'New Alliance'

Developing SAGCOT is the focus of the strategy for Tanzania within the New Alliance for Food Security and Nutrition. The New Alliance is an initiative crafted by the G8 to reduce hunger and poverty in 10 African countries by increasing private sector investment in agriculture and scaling up innovation. Under Tanzania's New Alliance framework, at least 19 companies have made investment commitments, mostly in the SAGCOT region; G8 members, such as the UK, have committed funds and matching grants; and the Tanzanian government has committed to 12 policy actions. Most of the policy actions relate to seeds, but the government also agreed to demarcate and certify village land in Kilombero District and the wider SAGCOT region to facilitate land acquisition and investment.[#]

in sugar, as well as rice and other crops, are envisaged for Kilombero District, where Kilombero Sugar Company already operates.

Given that the government is proceeding with new sugar investments supported by foreign donors (see Box 1), it is crucial that lessons are learned from Kilombero so that objectives of food security, poverty alleviation, inclusive private sector development and national sugar self-sufficiency can be met. Presenting the results of fieldwork and building on findings and recommendations of other studiesⁱ, this policy brief suggests priority actions to address a number of identified problems.



Horizontal expansion is limited by the presence of the Udzungwa mountain range.

Tanzania's sugar industry

Tanzania has only four companies which commercially produce sugarcane: Kilombero Sugar Company (KSCL) and Mtibwa Sugar Estates in Morogoro region, Tanganyika Planting Company (TPC) in Kilimanjaro region and Kagera Sugar in Kagera region. All the companies were privatised between 1998 and 2001. The government retained 25 percent stakes in two of them: KSCL, whose majority owner is the South African company Illovo Sugar (itself a subsidiary of Associated British Foods); and TPC, now majority owned by the Mauritian sugar group Alteo. Mtibwa Sugar Estates was acquired by the Tanzanian company Super Group, which also owns Kagera Sugar.

Since privatisation the industry has made significant gains in terms of capital investments, area under cane and revenue generated for the Treasury. Total production by the four companies climbed from a pre-privatisation level of 112,903t of sugar in 1995/96 to reach a peak of 304,135t in 2010/11.^{III}

Despite these strides, Tanzania still has an estimated annual sugar deficit of 220,000-300,000t. The factories do not operate at full capacity, but even if production were increased through efficiency gains and agronomic improvements, the four companies would be unlikely to meet domestic demand.^{iv}To address the deficit, the government waives or reduces tax on some imported sugar each year, has encouraged the millers to increase production and is attracting further investors into the sector.

As per the Tanzania Sugar Industry Act of 2001, the sugar industry is regulated by the Sugar Board of Tanzania (SBT), under the Ministry of Agriculture, Food Security and Cooperatives. SBT activities are overseen by a board of directors representing the Tanzania Sugar Producers' Association (TSPA), the Tanzania Sugarcane Growers Association (TASGA), the consumer sector, the government and industry. Following growing tension between large and small growers' associations, a new body – the Council of Cane Growers Association – has been formed.

Kilombero Sugar Company

KSCL runs two irrigated estates totalling 8,022ha and two factories at its base at Kidatu in Kilombero District. The largest of Tanzania's millers, it produced 116,495t of sugar in 2013/14, down from 126,737t in 2012/13 and well below its annual target agreed with the government of 200,000t.^v It generates its own electricity from bagasse and an ethanol distillery is being built.

While KSCL has made some efforts to expand vertically, potential for horizontal estate expansion is limited. It has therefore strongly encouraged outgrower production. The number of outgrowers increased from about 2,000 in 1998 to 8,000 in 2013. With about 15,000ha under cane, outgrowers supply 43 percent of the cane crushed by the two mills.

KSCL outgrowers must join a cane growers' association and register with the TSB. Rather than outgrowers having individual contracts, a Cane Supply Agreement (CSA) is signed between the company and the farmers' associations, of which there are 15. Farmers face starting costs such as seedcane and inputs, and some villagers do not have the necessary capital or land to participate, but it is a relatively inclusive scheme. Donors and funding agencies such as the EU and the World Bank have financed roads, capacity-building and other initiatives.



Outgrowers' cane is cut by largely seasonal, migrant workers recruited by contractors. The South African firm Unitrans supplies cane-cutters for KSCL's estates.

The deal for outgrowers

Under the CSA for the 2013–2016 period, KSCL pays outgrowers for the weight and sucrose content of their delivered cane, minus the costs of harvesting, transport, processing, marketing and distribution. The price per tonne paid to farmers is estimated at the start of each season and adjusted if necessary at season's end in light of actual sale prices achieved for sugar and molasses. Outgrowers are paid a 57 percent cut of these sale profits through a division of proceeds system. For the 2013/14 season, the provisional price for farmers' cane, before adjustment for sucrose level and actual sales, was TZS 58,000/tonne (US\$35.6/tonne).

Association members cannot grow sugarcane for any buyer other than KSCL. The outgrowers own or rent their cane fields mostly under customary tenure, with few holding title deeds. Recently the SBT, in collaboration with Mkurabita, has begun formalising land farmed by outgrowers by issuing certificates of customary rights of occupancy as part of a programme to formalise people's property assets to enable them to access loans which also supports Tanzania's land certification objectives under the New Alliance.

Research findings: positive gains, but growing challenges

Fieldwork was undertaken among outgrowers and other residents of three villages in Kilombero District in 2013 and 2014. The research project also included a document review and interviews with industry representatives and other key stakeholders.

The most significant trend observed is the dramatic expansion of the outgrower scheme

since KSCL was privatised in 1998. Expansion has allowed many more farming households to benefit from the proceeds of sugarcane. Farmers have used sugarcane payments to build better houses, finance other crops and educate their children. Well-off outgrowers have reinvested in businesses and there have been benefits at village level from collective farms and infrastructural improvements. The growth of subcontractors, ancillary businesses and outgrowers hiring farm workers has created positive economic linkages.

However, the situation for outgrowers has deteriorated in recent years. Incomes from sugarcane have declined owing to a drop in the producer price, low sucrose levels and some sugarcane remaining unharvested, leading in many cases to financial losses and indebtedness. Grievances with the current system are contributing to a splintering of the outgrowers' representative associations.

Sucrose and governance issues

The decline in sucrose content of cane is the major complaint among outgrowers. Farmers are regularly recording levels below the benchmark of ten percent. This negatively affects their payments, as the producer price is adjusted for sucrose, and so deductions take a proportionally larger slice of farmers' incomes. Cane quality is being affected by 'smut' disease, white scale pest, harvesting taking place during the short rainy season and delays in cane being crushed after burning. Outgrowers also allege inaccuracy and bribery in measurement of sucrose at the factories. There is a serious lack of trust and transparency in the system; not only for sucrose measurement, but also in weighing cane deliveries and in calculating farmers' payments.



Figure 1: State of sugar imports and exports in Tanzania

Source: Massimba et al. 2013^{ix}

Not enough guidance is being provided to help outgrowers raise sucrose levels and to oversee harvesting and crop management. Under the CSA, the company has no obligation to provide extension services. Some extension staff are employed by the company, the government and associations, but the coverage is insufficient. A 2012 study of outgrowers revealed a lack of training and access to extension officers.^{vi} Thus, the premise that private investors will provide technology and extension services (e.g. through SAGCOT)^{vii} does not necessary hold true. Public services may be better provided by the state.^{viii}

Another widespread problem is outgrowers' cane not being harvested in time, or failing to be harvested at all. A major reason is that outgrower production has overshot the capacity of KSCL's factories. Harvesting schedules and haulage are disrupted by rains and cane fires, and the smallest outgrowers find themselves low down the pecking order. Farmers whose cane is not harvested during the season as expected experience a shortfall in income, which has consequences for the household and encourages indebtedness. Blockfarms have been introduced to offer a more collective and systematic system for small outgrowers, but there have been leadership problems and poor returns for participants.

Further issues in the governance of the outgrower scheme include a proliferation of outgrower associations, which could be contributing to a lack of organisation of harvesting. Associations lobby for large delivery quotas, which encourages over-production of cane, and there are signs of a lack of cooperation among them over, for example, road improvements.

Excessive importation of duty-free sugar

Owing to Tanzania's sugar deficit, some importers are permitted to bring sugar into the country without paying the full duty. Exemptions are awarded after the Ministry of Agriculture, Food Security and Cooperatives, in collaboration with the SBT, has established the shortfall in domestic sugar production. Studies suggest a lack of control over the amount of foreign sugar

Box 2. Stakeholder initiatives

In early 2010, SBT commissioned Research on Poverty Alleviation (REPOA) to undertake a diagnostic study of the organizational structure of sugarcane outgrowers in Tanzania and make proposals for improvements. Among REPOA's recommendations was the establishment of effective and robust area-based trusts. These trusts would perform the functions of the currently considered weak associations, from cultivation to transport, in more coherent geographical areas. Trust members would have business and agronomic knowledge. REPOA's suggested reforms have not been implemented.

KSCL has been sourcing donor funding to finance outgrower infrastructure and capacity-building of associations. In collaboration with the Dutch NGO Solidaridad, it has recently contracted the outgrower development consultants RMI to provide industry support and capacity-building. Solidaridad also aims to redraft the Cane Supply Agreement into more accessible language and translate it into Swahili.

that is being licensed for import and the timing of its distribution within Tanzania, resulting in over-supply when the domestic crushing season begins. Further alleged problems are that cheap sugar imported for industrial use has been entering the domestic consumption market, and that traders are creating artificial scarcity by hoarding supplies or illegally exporting sugar. The problem of disproportionate importation was severe in 2011/12, as indicated in Figure 1.

The importation of sugar causes frustration among the domestic millers and association leaders, and badly hurts smallholder cane growers. During 2013, KSCL delayed payments to outgrowers because, it said, imports had affected its sugar sales in Tanzania and therefore its cash flow. Downward pressure on domestic sugar prices from cheap imports has also led the company to reduce the price paid to outgrowers for their cane.

Land and livelihood issues

Outgrower expansion and in-migration have contributed to land scarcity in the Kilombero area. Villagers complained that it is difficult to acquire farmland and that the predominance of sugarcane creates obstacles to cultivating food crops. Households have responded by acquiring farmland in other villages outside the sugarcane zone. This creates opportunities for farm labourers and individuals hiring out tractors in those distant villages, but it also presents challenges for families travelling to and from the farms. In some families, household members are spending substantial time at the distant farms to do manual farm work, and many schoolchildren are being left home alone, unsupervised. Problems such as truancy and teenage pregnancy are reported.

There have been concurrent challenges in the rice market. Many outgrowers cultivate paddy in addition to sugarcane for household consumption and for sale. And for those villagers who are unable to participate in outgrowing, paddy farming can be a major livelihood. Villagers reported a rise in the cost of paddy farming (especially inputs) and a dramatic fall in the market price of rice, related to a lack of government support over marketing and exports at the national level. During 2013, the price that farmers in the local area received for one sack of rice fell from TZS 100,000 (US\$61) in 2012 to TZS 40,000-50,000 (US\$25-30). The poor returns from alternative crops means that outgrowers can feel trapped, as one woman



Private contractors' trucks deliver outgrowers' sugarcane for crushing at KSCL's two mills.

commented: 'We continue [with sugarcane] — there's no way out. We just hope that one day things will improve.'

In recent years, SBT and the company have started to seek solutions to emerging outgrower problems (see Box 2).

What needs to be done in the sugar industry?

There are many ways of improving the current situation. Responding to the urgent need for reforms, this briefing offers priority actions for the Kilombero area (applicable to the sugar industry at large), as well as possible implications for future developments under SAGCOT and Big Results Now.

1. Improve the oversight functions of parliament and district and village councils in order to increase accountability from national to village level and throughout the supply chain and to ensure that the country's laws pertaining to the sugar industry are enforced and other programmes implemented. Parliamentarians are responsible for checking the performance of the government at both national and local levels, while councilors can play a significant role in monitoring the performance of district officials such as agricultural extension officers.

- Increase the provision of extension services and training to outgrowers, ensuring that all registered outgrowers can be reached. Smut disease should be one of the topics covered. In Kilombero, the current piecemeal provision of extension services by the company, the government and individual associations should be streamlined and strengthened.
- 3. Establish transparent and participatory systems for weighing outgrowers' deliveries, measuring sucrose content and calculating payments. Clarify risk-sharing

and liability regarding payment delays, force majeure events, factory disruptions and the failure to harvest growers' cane. Implement the proposal to simplify cane supply agreements (CSAs) and translate them into Swahili, the national language. State clearly all the sugar products from which the outgrowers are entitled payments (e.g. sugar, molasses, bagasse, ethanol, etc). CSAs should be distributed to all outgrowers and the clarity of outgrowers' pay slips should also be improved. This may be done through discussions and negotiations between millers, TASGA/Cane Growers Council and independent legal advisers acting on behalf of outgrowers.

- 4. Enhance accountability, responsibility and transparency of the SBT, the millers and outgrowers' leadership. Parties that fail to fulfil their responsibilities should be penalised according to existing laws and agreements; new penalties or incentives may be introduced to ensure fairness and sustainability of the sugar business. In Kilombero, enforce provisions in the CSA regarding the condition of haulage trucks and discuss possible measures to prevent harvesting schedules being disrupted by cane fires and alleged bribery. Increase the capacity of associations 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. Ensure that the donor community, particularly the EU, does thorough monitoring of funded projects (road improvements and block farms) as part of its accompanying measures for former Sugar Protocol countries.
- 5. Provide sufficient public and private investment under strict and transparent management. Core investments could include construction and maintenance of roads, water irrigation canals and water drainage systems. The donor support for the development of infrastructure is critical, but its sustainability is unclear given the dwindling donor contribution on national budget. The current arrangement for KSCL outgrowers to pay two sets of deductions for infrastructure, one to cover roads in their association's locality and the other to contribute to all supporting roads, is fueling conflicts and mistrust among them. It is thus ideal for this to remain mainly the function of the state through cane growers' taxes and other state resources.
- 6. Improve the planning, management and monitoring of outgrower production. Conduct research into the viability of block farms as a means of supporting smallscale outgrowers and protecting their participation within schemes. In addition, multi-stakeholder consultations should take place on long-term solutions to the problem of over-production at Kilombero and prevent it occurring elsewhere. 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 multistakeholder planning and support for smallscale 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.

7. Put in place an effective, participatory and transparent framework for issuing sugar import licences and permits with or without tax remissions, to be adhered to by all stakeholders in the industry. Any firm or individual that imports above the agreed quota, whether legally or illegally, must be prosecuted and the excess sugar should be deported to avoid market distortion. Establish a more thorough auditing mechanism to determine domestic supply needs and available stocks before import permits are issued. Make public any deviations from audit findings and improve the coordination and timeliness of distribution. Given the likely continuation of the national sugar deficit, introduce measures to manage millers' cash flow problems related to importation and prevent costs being passed on to outgrowers and other vulnerable members of the supply chain such as cane-cutters.

What should be done under SAGCOT and Big Results Now?

Lessons can be drawn from the research for investors, planners and other stakeholders of future sugarcane outgrower schemes and other large-scale agribusiness developments under SAGCOT and Big Results Now. The key recommendations are:

 Emulate and improve on successful elements of the KSCL outgrower scheme. These include: the division of sugar proceeds payment structure; relatively low barriers to entry for poor and women farmers; a fluid land rental market; and the entrepreneurial spirit among the residents.

- 2. Ensure that outgrower contracts give small producers adequate protection from *force majeure* events, cane fires and other shocks and that these contracts are translated into a locally understood language (Swahili).
- 3. Create thorough and participatory land-use plans which identify and protect land for staple food crop cultivation, grazing and other activities in addition to sugarcane production. To protect resource access and local food production, put limits in place if necessary in terms of acreage under cane or absolute numbers of outgrowers.
- Ensure that an adequate road network will be in place to ensure all-season access to farmers' fields, factories and market destinations.
- 5. Reconsider the proportion of funding allocated under SAGCOT and Big Results Now for supporting large-scale commercial agribusinesses and nucleus-outgrower schemes. In the KSCL case, it is clear that support for paddy farming is needed alongside specific measures for sugarcane outgrowers. Given that the very smallest and poorest farmers are often unable to participate in outgrower schemes, and that outgrower schemes are in any case limited in the numbers of farmers that they can include, it may be more effective to allocate more effort and funding into broader sectoral development of rural economies through provision of storage, marketing and price support, affordable credit and so on.
- Carefully consider the share of responsibilities and risks among firms, associations or cooperatives, subcontractors and farmers. Through theory-based planning and stakeholder engagement, ensure that capacity is in place for the provision of

services and that the business model will not engender corruption or perverse incentives.

 In public-private partnerships, make explicit the roles for the state, firms and donors, particularly in regard to provision of extension services, credit and inputs, provision and maintenance of infrastructure, and farmer representation.

Without understanding and acknowledging capacity constraints, the interplay between actors and the political-economic context, the potential of initiatives such as the expansion of Tanzania's sugar industry to reach food security and poverty reduction goals is limited. It is crucial that plans are grounded in existing experience.

We kindly thank Ruth Hall and Ian Scoones for their constructive comments on the earlier version of this policy brief.

End Notes

Studies include:

Sugeco (2014) Enhancing the Sugar Industry Regulatory Framework of Tanzania. Policy brief, Dar es Salaam, Tanzania: BEST-AC / www.best-ac.org/wp-content/ uploads/Sugeco-Policy-Brief.pdf;

REPOA (2012) Transformation of the Organizational Structures for Sugarcane Outgrowers in Tanzania: Final Report, Dar es Salaam, Tanzania: Policy Research for Development;

Rabobank (2013) *Tanzania Sugar*. Rabobank Industry Note #386, Utrecht, The Netherlands: Rabobank International/ www.nmbtz.com/indexphp?option=com_joomdoc& task=doc_details&gid=55

ⁱⁱ G8 (2012) G8 Cooperation Framework to Support the "New Alliance for Food Security and Nutrition" in Tanzania / www.

gov.uk/government/publications/the-new-alliancefor-food-security-and-nutrition-tanzania-cooperationframework;

Cooksey, B. (2013) What Differences has CAADP Made to Tanzanian Agriculture? FAC Working Paper 074, Brighton, UK: Future Agricultures Consortium / www.futureagricultures.org/publications/research-and-analysis/ working-papers/doc_download/1815-what-differencehas-caadp-made-to-tanzanian-agriculture; DFID (2014) Annual Review: Southern Agricultural Growth Corridor in Tanzania (SAGCOT). Annual review (2) 202844, London, UK: Department for International Development/

devtracker.dfid.gov.uk/projects/GB-1-202844/documents

- ^{III} Nkonya, N. and Barreiro-Hurle, J. (2012) Analysis of Incentives and Disincentives for Sugar in the United Republic of Tanzania. Technical Notes Series, MAFAP, Rome, Italy: Food and Agriculture Organization; SBT Production data, www.sbt.go.tz/index.php/ production-data
- Rabobank (2013); SAGCOT (2012) SAGCOT Investment Partnership Program: Opportunities for Investors in the Sugar Sector, Dar es Salaam, Tanzania: SAGCOT Centre Limited
- SBT Imports and Exports data, http://www.sbt.go.tz/index. php/datas
- ^{vi} Siyao, P.O. (2012) 'Barriers in Accessing Agricultural Information in Tanzania with a Gender Perspective: The Case Study of Small-Scale Sugar Cane Growers in Kilombero District', The Electronic Journal of Information Systems in Developing Countries, 51(6):1-19
- vii SAGCOT (2012)
- López, R. (2004) Effect of the Structure of Rural Public Expenditures on Agricultural Growth and Rural Poverty in Latin America, Washington, DC: The World Bank
- ^{ix} Massimba J., Malaki, C.& Waized, B. 2013.Consultancy Services for Collecting Policy Based Evidence for Enhancing Sugar Industry Regulatory Framework of Tanzania. Morogoro: SUGECO.

Acknowledgements:

This Policy Brief was written by **Emmanuel Sulle, Rebecca Smalley** and **Lameck Malale** for the **Future Agricultures Consortium** and **the Institute for Poverty, Land and Agrarian Studies (PLAAS)**. The series editors are **Paul Cox** and **Beatrice Ouma.** Further information about this series of Policy Briefs at: **www.future-agricultures.org**

The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T +44 (0) 1273 915670 **E** info@future-agricultures.org

Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.



The views expressed do not necessarily reflect the UK Government's official policies.