

Original Research Article



## Developing the Sugar Valley: Missing Linkages Between Farming and Industrial Capacity of Sugar Processing in Kilombero, Tanzania

Journal of Asian and African Studies I-16

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DOI: 10.1177/00219096231186389
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#### **Abstract**

Despite the initiatives that have been taken by the government and different stakeholders, the availability of sugar is uncertain in Tanzania for years. It is on that basis that this article uses a historical approach to analyse the mismatch between sugarcane farming and industrial processing capacity in the Kilombero valley. The shortage of sugar indicates the missing link between sugarcane farming and industrial processing capacity that is coupled with business interest of sugar dealers. We indicate that the sugar industry has been webbed in divided interests of promoting farmers on one hand and maintaining business profits on the other.

## **Keywords**

Sugar valley, Kilombero valley, sugarcane farming, rural transformation, industrial development

## Introduction

Kilombero valley is one of the strategic areas for sugarcane growing and sugar production in Tanzania and East Africa in general. It was first identified as a potential area for sugarcane farming during the colonial period though little was done to develop its full potential. Large-scale sugarcane farming started in the 1930s and continued throughout the colonial and post-colonial periods. In the 1950s, colonial officials increased interest to establish a sugar industry in the valley, set to operate as a joint venture between local African and Western capital, but this was not realised. In this period, massive exploration over the area started to determine the potentiality of the area for large-scale sugarcane farming. As a result, 6000 acres of land positioned along the Ruaha River that was suitable for sugar cane growing was surveyed. It was ascertained that the land would produce approximately 20,000–30,000 tonnes of sugarcane per year upon full cultivation. Surprisingly, while agricultural productivity was earmarked for large expansion, less was done to develop industrial capacity to exploit all the sugarcane to be produced. Such prospects did not go with the

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passing of the colonial period as they transcended into independence experiences where agricultural development did not go with promotion of industrial processing.

Soon after independence, Kilombero valley continued to attract government attention in sugarcane farming although other commercial crops, such as rice and cotton, were also cultivated. Concentration on sugarcane growing aimed at improving the supply of sugar in Tanzania that was seen to be unreliable for a long time from the colonial period (Coulson, 1982; Monson, 2009; Rutman, 1968). In this article, we examine the missing linkage between sugarcane farming and the resulting industrial processing into sugar. We outline that, the efforts have overtime been much on encouraging sugarcane farming without serious investment in industrial processing. In the end, produced sugarcane remains unmatched with industrial capacity and the problem of shortage of sugar persists over the years despite investment in farming. As one of the major sugar projects in the country, Kilombero sugar initiative provides a good connection between sugarcane farming and its industrial processing. After this introduction, the article unfolds into five other sections. The following section provides the contexts and methods for this study before moving into another section that examines efforts to develop the sugar valley. The third section examines how public-private partnership remained an illusive effort as little was done to solve the challenges involved in sugarcane growing and sugar production. Before the conclusion, the last section outlines the state of sugarcane and sugar production in Tanzania.

## Contextualising the sugar valley

Kilombero valley is located in the Ulanga and Kilombero districts, Morogoro region in the eastern part of Tanzania. Its size is about 11,600 square kilometres of land (Kato, 2007). A low-lying valley makes up a bigger part of the Ulanga and Kilombero districts in the South and South West and borders Kilosa district in the North East. Important to the valley is the floor of the Kilombero River that drains the area with multiple sources from within Morogoro region and others originating from the Southern highlands of Tanzania. Kilombero River system links the Great Ruaha in the North East to form the largest river basin in Tanzania running into the Rufiji River Basin before draining into the Indian Ocean. Presence of numerous tributaries and fertile soil makes the valley more promising for both commercial and non-commercial agriculture. On 27 March 1931, one of the British colonial reports described the valley as an area suitable for diverse agricultural development, including sugarcane growing, rice and cotton to mention just a few of them.<sup>3</sup> Notably significant, the entire colonial period, both the German and British witnessed increasing attention to exploit the potential of the valley starting from the 1900s.

Availability of streams, reliable rainfall and good soils sustain an array of crops that have persisted in the valley despite minor changes in weather conditions. Such environmental conditions make it possible to grow sugarcane without irrigation in a wide area of the valley and as a result, it reduces the cost of agricultural productivity and increases the quantity of sugarcane produced.<sup>4</sup> Conditions like these, invited local communities as out-growers to feed into the two factories named as Kilombero 1 and 2 (K1 and K2). K1 and K2 factories are the major sources of sugar used in Tanzania as they have been contributing 45% of the total sugar used in Tanzania for the past six decades.

If more attention on investment in industrial processing were made in the valley, the troubling realities of sugar availability would be gone long ago. In the work of Ralph Jatzold (1968) – a former colonial agricultural engineer, pointed that 'the most important product of the Kilombero valley both in quantity and value is sugar, the production of which is concentrated' (p. 48). This statement and other expert surveys of the colonial period, made the push behind government commitment to support developing the 'sugar valley' in the colonial and post-colonial periods.

Deliberately done, interventions in the valley aimed at improving rural livelihood on one side and promoting food security on the other. At the same time, interventions in sugar production intended to capture the increasing demand for sugar in Tanzania.

## Methodology and approach

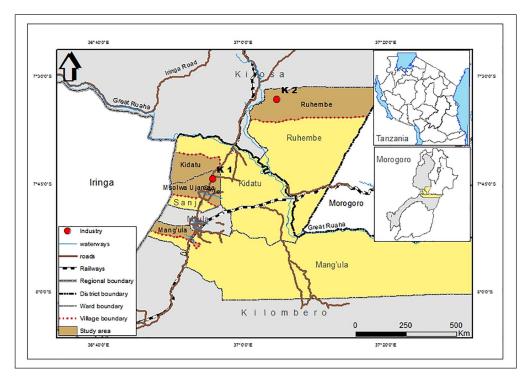
This study is qualitative that employs historical approaches. Historical methods, such as documentary review, were used. In this review, planning and development documents were used to underline the changing narratives of the missing link between agriculture and industrial capacity. The research was conducted at the Tanzania National Archives in Dar es Salaam, Dodoma and the University of Dar es Salaam library. In this research, previously unused documents, such as secretariat files and policy documents, were analysed to provide an understanding on why there have been recurring sugar shortage over the years despite the heavy investment efforts in the valley.

Apart from the archival documents, which mainly represent government perspectives, we also employed oral interviews to inform the experiences of local people in the area of study. Fieldwork was conducted in Msolwa *Ujamaa* and Kidatu villages. Msolwa *Ujamaa* and Kidatu villages were chosen in this study to enable us grasp a wider scope of the colonial and post-colonial history of sugarcane growing in the Kilombero valley. The villages share similar experiences of the ups and downs related to sugarcane growing in terms of production and marketing although they are located near Kilombero 1 Sugar Factory. The local people recollected their lifelong experiences in the valley and using it for different economic activities. Using local narratives, it is easy to learn how people shape development discourses in the valley despite the changing scenes of government initiatives and priorities in agricultural production. Interviews included ordinary farmers, village leaders and retired government officials who witnessed government interventions in the valley. In addition, both formal and informal conversations were used to catch up their experiences on sugarcane growing. All sources were triangulated and corroborated to understand the dynamics of sugarcane farming in the valley in relation to industrial processing capacity (Figure 1).

## Developing the sugar valley: continuities and change

Earlier efforts to develop the sugar valley started in the 1920s, the time when cultivation was on a small scale rather than a commercial scale that was developed later in the colonial period as will be detailed later. Given the geographical characteristics of the area, scholars consider the valley as a potential agricultural valley for commercial and food crops. Such potentialities justified government intervention as a necessary course of action in colonial and post-colonial periods (Baum, 1968; Coulson, 1977; Institute for Poverty, Land and Agrarian Studies, 2015; Smalley et al., 2014). On its early years, colonial officials, Arabs and Indians controlled sugarcane farming because they saw the opportunity earlier and had the means to do so.

In 1928, Mr Telford – an agricultural expert of the Sudan Plantations Syndicate reported that 250,000 acres of fertile soil were available in the valley to support different agricultural undertakings, including sugarcane growing (East Africa Royal Commission, n.d.). In March 1929, colonial officials admitted that 'parts of the Kilombero valley are well suited to the production of sugar, partly as a rotation crop with rice'. As time went on, sugarcane growing was given more priority at the expense of rice that was not given significance especially in areas attractive for sugarcane farming. For example, the richness of the valley in terms of fertility and financial capacity convinced Arabs and Indians to launch the first large-scale sugarcane growing in 1930 and produced jaggery for the local market as there was no sugar factory at the time (Blache, 2019; Bombo, 2013; Dancer and Sulle, 2015; Jatzold, 1968; Martiniello, 2015; Mbilinyi and Semakafu, 1995).



**Figure 1.** Map showing the study area. *Source*: Produced from fieldwork, September 2022.

Establishment of serious sugarcane growing from the 1930s was not an accidental thing; it resulted from plans and future imaginations about the territory. The Chief Secretary of Tanganyika, for example, as the main administrative official in the colony remarked in December 1932 that 'we have become interested in the establishment of a sugar factory in Tanganyika territory as we understand there are at present no such factories working there'. This was quiet true because at that time only Tanganyika Planting Company (TPC) existed and was located in the Northern Province with little produce per annum. Plans to set up the Kilombero Sugar Company Limited (KSCL) targeted to solve the shortage of sugar that at the time was produced from TPC only. In the 1930s, sugar was also in short supply and mostly was imported to the colony from Kenya, Uganda, Belgium and other foreign countries. Importing sugar made the government more concerned with developing internal capacity and assisting producers to meet the countrywide demand. Contrary to Colonial Tanganyika, Uganda that was a peasant colonial economy per se had a large number of local sugar producers from the 1930s and had assured market from the East Africa territories.

The colonial financial institutions offered loans to only a few Indians and Arabs to produce sugarcane while local communities remained as mere observers or produced sugarcane for chewing. The East African Royal Commission Report (1953–1955) set the insights of the local communities shadowing the supremacy of foreigners in sugarcane growing in the territory. The report points: 'tea, sisal and sugar have until recently been regarded as European and Asian plantation crops because they are technically associated with expensive capital' (East Africa Royal Commission, n.d.: 320). From the outset in the 1930s, there was no worries for market as the colonial government remarked in 1937 that; 'we believe that the colonial sugar industry should be

fostered as far as possible because the colonies are the natural and most dependable markets'. These scenarios made colonial government to incur cost in surveying the area ready for establishing sugarcane farming and sugar industry.

In a letter dated 17 May 1951 from Benson – Chief General Manager, to the Chief Secretary of Tanganyika – among other things – set clearly that 'government decided to postpone the survey of Malagarasi swamp and to raise to priority the survey of the Kilombero valley'. In addition, a team of experts surveyed the land and drew a plan for the establishment of a sugar mill in Kilombero in August 1958 to become an addition to the already existing TPC sugar mill. Throughout the colonial period, the factory did not start as it waited until 1962 when KSCL was established and began milling the seasons' sugarcane produce (Jackson, 2021). In its initial days, KSCL operated as a joint venture of private enterprises bringing together partners, such as the International Finance Corporation, the Common Wealth Development Corporation, the Netherlands Overseas Government Fund of Holland and Standard Bank of East Africa. This arrangement went through to the 1968 when KSCL was nationalised and became under supervision of the National Agricultural and Food Cooperation (NAFCO).

Soon after independence in 1961, sugarcane growing in the valley was not promising because no more strong investments were envisaged to the project. It was operated on a small scale dominated by foreign investment that could not deliver to the fullest. Low performance of the sector meant a slow realisation of government's rural sector development and the ambitious industrial strategy of the first Five Year Development Plan. It was clear that, apart from agrarian development, the government embarked and expected a rapid transition into a strong post-colonial industrial base as an import substitution strategy on essential goods (Msami and Wangwe, 2016; Skarstein and Wangwe, 1986). In terms of sugar production, sugarcane farming was increasing while industrial processing capacity remained low.

Unmatching industrial processing with sugarcane growing prompted the post-colonial government to take a different trail to improve the sectors and at the same time increase the availability of sugar. The first step taken was to make sugarcane growing an all-inclusive enterprise where both private investors and local communities were allowed to be part of the move in the 1970s (Dancer and Sulle, 2015; Kaduma, 2019). This was made possible by collectivising scattered settlements, organising farming communities and assuring them with the market for their cane (Martiniello, 2015; Sulle, 2017). Developing such farming communities was an integral part of developing the sugar valley and expectations were that upon maturity, this was a solution to shortfalls of sugar in Tanzania.

Establishment of the KSCL in 1962 was the official mark that determined the push to improve the valley and allow the production of sugar that began in September 1962. 11 We can attribute this to the starting point of an effort to an industrial strategy geared at promoting sugar farming and processing. It being the second of its kind, the history that followed is illustrative. In September 1962, KSCL started the production of sugar using sugarcane planted by the company itself as there were no out-growers at the time and its processing capacity was still small. 12 There was already enough mature sugarcane to support sugar production activities. The philosophy behind the launching of KSCL revolved around harmonising agricultural production and industrial processing as integral processes of rural modernisation. It was clear by the time that promoting agriculture without an industrial base would not be useful to the rural people and the economy in general. In this spirit, the sugarcane factory would service company grown and out-growers sugarcane.

President Nyerere made it emphatically in 1965 that 'without industrial development, Tanzania would remain a poor, dependent territory and unable to afford a good standard of living for its people'. Coming from the president, the statement informed policy interventions on the rural sector and made the linkage between industry and agriculture an area of concentration. Policies like

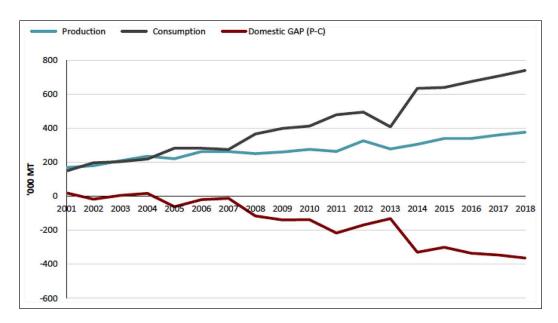
rural collectivisation advanced through the implementation of the famous *Ujamaa* approach made government intervention in productive investment a justified move (Kato, 2007; Smalley et al., 2014). It was through the *Ujamaa* framework that the KSCL was nationalised in the pretext of the provisions stipulated after the Arusha Declaration in 1967. Not to state the obvious, the nationalisation of the factory in 1968 was the starting point for its decline. Although on one hand, the government managed to commercialise sugarcane growing, on the other hand, its operations experienced difficulties and uncertainties in the sugarcane market.

Nationalisation of KSCL increased sugarcane growing because of two major factors. In the first instance, it let collectivisation that in turn provided guidelines on what type of crops had to be grown in each village according to what the environment dictated. Some villages concentrated on rice, others sugarcane while others grew cotton. Government emphasis on farming was immense and sometimes force was applied to make people produce. The government assumed the role of a father to make sure that local communities living in scattered settlements could be reorganised into planned villages not only for the sake of sugarcane growing but also to improve their welfare through provision of social services. Second, the factory was a reliable market for sugarcane produced in the villages and that from the company itself. Sustained availability of it as a reliable market source depended on how it managed to absorb whatever was grown so as to encourage more farming. Unfortunately, over the years, the factory failed to realise this role by failing to buy all sugarcane from farmers due to low processing capacity.

When KSCL bought from out-growers, it assisted them with suitable cane varieties, road maintenance, as well as advice on good farming techniques that advantaged farmers. Looking at this closely, one may notice a noble intention and an optimistic view of the relations between growers and the factory. For this to be sustained longer, both ends were required to maintain the supply—demand roles depending on the capacity of the factory to use all supplied sugarcane and paying growers in time. Gradually, smallholders increased sugarcane farming with anticipation of a stable market that, however, changed between 1970 and 1980. Under this period, KSCL was unable to buy all outgrown sugarcane as what was produced exceeded the processing capacity and therefore a lot of sugarcane remained in the farms with great disappointments to farmers. The mismatch between farm production and industrial processing started to surface leading to inability to produce enough required sugar contrary to initial expectations of developing the sugar valley.

Unsolved for the past several decades, this problem continues to be a pressing reality over and over again. In this regard, sugar availability has been and continues to be a problem that tops agricultural modernisation agenda and political rhetoric on the seasonal unavailability of sugar in Tanzania. Government commitment has made it public that by 2025, the country will be self-sufficient in domestic sugar supply. Two years before the deadline, an average of Ths.572 billion will be spent to expand KSCL's production capacity to more than double upon completion. The modernisation package intends to build an additional facility to absorb as much sugarcane as possible and to produce at least 271,000 tonnes per year far more from the 126,000 tonnes produced right now. Successful 'implementation' of this project will enhance the farm—industry linkage that has been a mismatch for the past several years.

State participation in sugar production in the 1970s and early 1980s was characterised by ups and downs in terms of production and marketing. In the 1980s, apart from liberal forces, outgrowers started to lose hope of continuing with sugarcane growing. The reason behind this was the uncertainty of industrial capacity that culminated into sugarcane remaining in the farms. This situation brought the need to have a public–private partnership (PPP) to restore out-growers confidence and improve the capacity of KSCL (Sulle, 2021). Despite all these efforts, Tanzania still depends on sugar imports to meet domestic and industrial demands. Combined together, the sugar



**Figure 2.** Sugar supply, demand and gap in Tanzania. Source: OECD-FAO Database, https://stats.oecd.org/index.aspx?queryid=71240 as cited in the work of Andreoni et al (2020).

produced from all plants in Tanzania does not provide enough sugar to the market as indicated in the chart below (Figure 2).

## Public-private partnership: an illusory bondage?

With the fashion of the 1980s, liberalisation enforced radical economic changes in African and other countries of the Global South where the government hand on the economy was discouraged (Oya, 2007; Scoones et al., 2005). Like in other sectors, sugarcane growing experienced a wind of change from a centrally planned enterprise into a market led undertaking or hybrid of it. From this time, donors and the international financial institutions exerted pressure for the adoption of neo-liberal reforms through the infamous structural adjustment programmes (SAPs). This was grounded on market reforms, elimination of subsidies in the agricultural sector and promotion of private participation in economic interventions (Gallagher, 2018; Heidhues and Obare, 2011). Eventually, in 1986, the Tanzanian government under President Ali Hassan Mwinyi agreed with the structural requirements of the International Monetary Fund (IMF) that became the base for a new approach to development (Rugumamu, 1997). This opened up doors for the private sector to operate in different economic sectors, including sugarcane growing.

Before the private sector came in, most public parastatals, including KSCL, were not making profit and the inclusion of private enterprises was considered a lasting and not only a palliative solution to the challenges. Private investment was expected to come in terms of capital, technical knowhow and sustainability strategies that would rescue formerly public investment from total collapse (Mkapa, 2019). Some years later after privatisation, the third president, Benjamin Mkapa states what propelled the need for inclusion of the private sector. He does this knowing he is

remembered for privatising many public enterprises that, however, ended up in oblivion. Mkapa (2019) recalls his actions on privatisation as an inescapable option when he says;

Our economy was not working appropriately. Furthermore, it was portrayed as socialist but was not delivering socialist benefits. There were many potentially viable nationally owned business enterprises though they were mishandled and had run into heavy debt. Hence, drastic action had to be taken because it was difficult to point any parastatal that was making money . . . (pp. 138–139)

Transformation from a centrally planned economy into liberal economy necessitated restructuring of the role of government and the private sector. The government retained regulatory roles while production, marketing and processing were assigned to the private sector – in other words, it ended socialist economic orthodox with new expectations on performance (Kaiser, 1996; Lofchie, 2014; Pallotti, 2008; United Republic of Tanzania (URT), 1997). In 1998, as a result, the government transferred the KSCL into private hands in form of a PPP. Privatisation of KSCL intended to serve two main objectives: first, it was a means to rescue the company from total collapse; and second, it was meant to restore the confidence among out-growers who were, in fact, disappointed as a result of uncertainties of sugarcane market together with lower prices of their produces (Winghton, 2022).

As a public–private business had shareholders like the Illovo group with 55%, Tanzania government 25% and ED&F Man – a London-based agricultural commodities merchandise had 20% but still KSCL registered minimal accomplishment (Kamuzora A.K.N, 2011; Chachage, 2010; Connors, 2015; Institute for Poverty, Land and Agrarian Studies, 2015; Isager et al., 2018). Partnership capital coming from three sides meant to restore the processing capacity and confidence of out-growers who by 1990s lived in disguised hopes and expectations. Many had opened up sugarcane farms just to realise they were in the losing end as the only factory could buy less than what was produced and at a low price. In this regard, PPP started to be implemented at a time when out-growers were already disillusioned with sugarcane growing. Also, the physical infrastructures in the cane farms were not good enough to transport cane from the farms to the factory (Smalley et al., 2014).

PPP aimed to make the company more competitive, efficient and reliable. Different initiatives were employed by the Illovo group to stimulate sugarcane growing in the valley. They used seminars and motivations to encourage local communities to cultivate more sugarcane as out-growers. Illovo group also started to pay reasonable prices to out-growers produce contrary to the period when the company was under the government. During PPP, sugarcane sector witnessed fundamental changes in terms of production as well as price. For instance, the Sugar Board of Tanzania (SBT) admitted that before privatisation, KSCL produced an estimate of 390,201 tonnes of sugarcane and 29,517 tonnes of sugar.<sup>22</sup> In addition, some out-growers admitted that the price of their produces increased to almost Tshs. 100,000/= per tonne from less than Tshs. 10,000 per tonne.<sup>23</sup> This was a major price increase if only it was reliable to all sugarcane produced. Thus from 1998 onwards, the production trends increased both from the company estate as well as from out-grower farms. The increase of production trends from the 2000s was attributed to the improvement of the company's operation in terms of technology, out-growers active participation and intensive investment including the use of irrigation facilities especially in company-owned farms.

Given the current circumstances of sugar availability, it remains relevant to ask whether PPP was a solution to the sugar shortage in Tanzania or just another illusory attempt to development discourses in the country. Despite the partnership, still Tanzania has continued to experience frequent sugar shortage recurring year after the other. Nevertheless, no one doubts the fact that the coming of PPP enabled local communities in the sugar valley to perceive sugarcane growing as

their priority cash crop at the expense of other crops. However, as time went on, their expectations of sugarcane growing started to decline following sugarcane remaining in the farms. Out-growers and KSCL find themselves in confrontations because of sugarcane remaining in the farms due to the low processing capacity of KSCL. A problem that was to be solved by the 1998 privatisation has continued to occur today after more than 20 years of operations.

This situation begs questions on the efficacy and relevance of the PPP approach. Out-growers in Msolwa *Ujamaa* and Kidatu villages understood the extent to which their efforts had been undermined as sugarcane remained in the farms. As a result, reasonably expected, out-growers resorted into resistance in the form of sabotage. For example, they intentionally caused 'fire accidents' in their cane farms as the only weapon to influence the company to buy all produced sugarcane. Various cases were reported. From 2018 to 2019, almost 6800 tonnes were affected; while in the following season, almost 32,220 tonnes were also affected by what they called fire accidents.<sup>24</sup> They took this form of response as a means of showing their grievances upon sugarcane remaining in the farms although they did not get any direct benefits by doing so. It was used as a way to show dissatisfaction regardless of what happened after.

Later on, the government and KSCL intervened, and warned out-growers to stop this behaviour. One measure taken by the KSCL to solve fire accidents was to refuse receiving the burnt cane, or, receiving it at a penalty on any cane considered to be affected by intentional 'fire accidents' (URT, 2010). Government intervention did not solve out-growers grievances as their sugarcane continued to remain on the farms for a prolonged period. KSCL capacity continues to be limited and government interventions to stimulate production continue to be taken with little success. In a general note, little seems to come from the PPP arrangements as compared to the pre-1998 experiences. Local producers are disappointed that they produce large quantities of sugarcane that exceed the processing capacity of KSCL, and at the same time, the government allows importation of sugar from abroad. The company was privatised to obey the international wave of economic change but was not structured in a way that improved out-growers performance and the supply of sugar in Tanzania as a whole.

## Unwanted realities on the production of sugar in Tanzania

The state of sugar availability in Tanzania depends on different actors, including the government, local communities and investors. Collective responsibilities from these actors determine reliable sugar stock in the country. Sugarcane growers should do that sufficiently, the government to provide conducive environment for the sugar sector to survive while investors in sugar industries should do that to the extent of accommodating all produced sugarcane. If it happens that one actor fails to perform their role efficiently there is no way the country will get rid of sugar shortage. Population growth, increase in purchasing power and change in consumers' preference towards sugar-containing products are some of the factors that increase demand for sugar in Tanzania. The government embraced the private sector in sugarcane growing and processing with a hope to increase domestic supply of sugar. This assumption has not materialised as the country continues to import sugar from abroad to meet both domestic and industrial needs. Table 1 shows that from 2011 up to 2021 Tanzania imported varying amount of sugar for both domestic and industrial purposes. The table shows the disappointing reality when one considers the sugarcane remaining untapped in the farms in each harvesting season.

The government should now rethink on the politics embedded in the sugar industry to mark an end of sugar shortage. Persisting mismatch between the two sectors makes the country to experience unnecessary and frequent shortage of sugar. For example, the former Minister for Agriculture, Adolf Mkenda, when he was in Manyara Region on 2 March 2021, he articulated clearly that

Year	Imported industrial sugar	Imported domestic sugar	
	in metric tonnes	in metric tonnes	
2011/2012	96,492	183,000	
2012/2013	121,582	41,858	
2013/2014	143,281.50	41,956	
2014/2015	120,730.60	86,942.05	
2015/2016	104,792.61	133,488	
2016/2017	110,951.70	144,000	
2017/2018	149,383	135,610	
2018/2019	127,552.81	37,419	
2019/2020	186,839	60,429	
2020/2021	168,014.90	46,507	

Table 1. Importation trends of sugar from 2011 to 2021.

Source: Tanzania Sugar Board, Correspondence, 2022.

Kilombero Sugar Company expects to throw away more than 350,000 tonnes because the company does not have the capacity to take all the sugarcane produced by out-growers and process it into sugar. Daimu Mpakati – member of the parliamentary Public Investment Committee (PIC) on 21 January 2020 disclosed that 'cane farmers have demonstrated that they have capacity to produce 850,000 tonnes of cane but at the moment the factory (KSCL) can only crush 600,000 tonnes per annum'. Likewise, the Director General of Tanzania Engineering and Manufacturing Organisation (TEMDO), Professor Frederick Kahimba on 30 August 2021 pointed out that 'out-growers loses Tshs. 19 billion because more than 200,000 tonnes of their sugarcane remaining in the farms unprocessed'. This is where the question of mismatch between sugarcane growing and industrial capacity to process it comes in. Expansion of processing plants will advantage sugarcane growers on one hand and on the other, increase the amount of sugar produced annually from Kilombero. It might not be a bad thing if a conceited initiative is taken to seal the recurrent sugar unavailability in Tanzania and discourage importation to improve the wellbeing of smaller out-growers.

Table 2 shows the production trend of sugarcane before and after the adoption of PPP. The production from 1991 to 1997 was not that much convincing because of disappointments among outgrowers that can be traced from the 1980s when out-growers lost hope for growing more due to uncertainties of market. Also, climatic factors, especially maximum rainfall, eventually affected the growth of sugarcane. From 1998 onwards, the production trends started to increase both from estate farms and out-grower farms because there were new hopes for market. Processing capacity also increased to a certain level compared to the pre-1998 period. Despite the increase in the processing capacity in the last 15 years, still it has been a water drop in the ocean. Farm production has continued to out shine industrial processing capacity. In the end, sugarcane farming has remained unpredictable to out-growers who are not assured with reliable market each year.

Regardless of the increased production trends as shown in Table 2, still the country is facing sugar shortage. The current demand of domestic sugar is 490,000 metric tonnes while of industrial sugar is 165,000 metric tonnes.<sup>29</sup> In this situation, Tanzania needs to improve the production capacity of sugar mills because raw materials (sugarcane) are sufficiently available in the field. The government has started to take serious initiatives to boost the production capacity of sugar mills by adopting the Indian and Chinese models of using mini-sugarcane processing plants. The Minister of Industry and Trade, Kitila Mkumbo on 24 August 2021 in Dar es Salaam declared 'if we want to bridge the sugar deficit gap, we need small-scale processors to complement large-scale ones'.<sup>30</sup>

Table 2. Sugarcane production trends of Kilombero Sugar Company from 1991 to 2020 (tonnes).

Year	Estate	Out-growers	Total
1991/1992	460,262.00	97,234.00	557,496.00
1992/1993	426,736.00	133,154.00	559,890.00
1993/1994	488,764.00	158,042.00	646,806.00
1994/1995	416,418.00	178,500.00	594,918.00
1995/1996	366,059.00	155,003.00	521,062.00
1996/1997	316,696.00	135,700.00	452,396.00
1997/1998	294,436.00	95,765.00	390,201.00
1998/1999	311,610.00	133,500.00	445,110.00
1999/2000	395,228.00	109,400.00	504,628.00
2000/2001	418,664.00	125,130.00	543,794.00
2001/2002	429,851.00	192,979.00	622,830.00
2002/2003	584,708.00	246,529.00	831,237.00
2003/2004	665,206.00	429,632.00	1,094,838.00
2004/2005	622,037.00	588,051.00	1,210,088.00
2005/2006	524,789.00	696,253.00	1,221,042.00
2006/2007	507,774.00	481,147.00	988,921.00
2007/2008	614,062.00	568,169.00	1,182,231.00
2008/2009	608,016.00	473,456.00	1,081,472.00
2009/2010	676,327.56	413,640.44	1,089,968.00
2010/2011	708,756.03	491,674.97	1,200,431.00
2011/2012	597,635.94	561,464.06	1,159,100.00
2012/2013	733,253.60	544,932.40	1,278,186.00
2013/2014	677,023.00	518,722.00	1,195,745.00
2014/2015	794,447.00	562,103.00	1,356,550.00
2015/2016	766,173.00	472,970.40	1,239,143.40
2016/2017	696,381.00	468,098.00	1,164,479.00
2017/2018	716,617.00	486,113.00	1,202,730.00
2018/2019	660,598.00	624,749.00	1,285,347.00
2019/2020	575,873.28	544,873.28	1,120,059.00

Source: Sugar Board of Tanzania, Correspondence, 2020.

Also, the Director General of Tanzania Engineering and Manufacturing Design Organisation (TEMDO), Professor Frederick Kahimba emphasised on the idea of using the mini-plant model. He pointed out that 'we are expecting to complete manufacturing of the sugarcane processing mini-plant by June 2022 before starting operations in July 2022'. Bad enough, nothing has been done as we are now in 2023.

Currently, Tanzania has one mini-sugar processing plant called Manyara Sugar Company (MSC) formed in 2005. In the 2021/2022 growing season, it contributed 8,146.425 tonnes of sugar, which is about 2.1% of total sugar produced in the year.<sup>32</sup> Mini-sugar plant model is not new in the history of sugarcane production in Tanzania. Mtibwa Sugar Estate used this model to boost the country's sugar production in the 1990s, but it contributed less to the effort.<sup>33</sup> In addition to that, during 1993/1994, the Sugar Development Corporation (SUDECO) assisted the Institute of Production Innovation (IPI) of the University of Dar es Salaam to complete the construction of five small-scale sugar factories located in Muhoro and Kibaha (coast region), Kilosa and Mikumi (Morogoro) and Songea (Ruvuma), but all did not solve the problem of sugar shortage in Tanzania.

Failures of these previous attempts are nice pointers to anticipated repeated effort. Past experience should provide lessons in implementation of the current arrangements so as to avoid planning and implementing failures before project kick-offs. Nevertheless, the politics embedded in the sugar industry in Tanzania exacerbates through business interests promoted through the liberal market systems. Sugar business personnel would prefer importing sugar than producing it within for the sake of maximum profit.

Since the liberalisation of the sugar market started there has been a cry from local sugar companies on unfair trade competition between local and imported sugar in the market.<sup>34</sup> Importation of sugar from abroad though discouraging local producers still involves a lot of politics. The late President of Tanzania John Pombe Magufuli had instructed the Prime Minister Mr Kassim Majaliwa at the time to ensure the proper provision of sugar import permits, which was deliberately complicated and restrictive.<sup>35</sup> The intention was to promote local farm and industrial produce to meet the demand. This caused concerns from sugar stakeholders who saw the restriction as an anti-business drive. With government changeover, this has also changed to allow importation of sugar with minimal restrictions. Policymakers underlie the struggles and politics of liberal systems and structures. The sugar market in Tanzania is a contested business foregrounded on profit than improving linkages between rural sector and the processing sides.

In June 2021, the Minister for agriculture said that sugar 'import permits will be given to the Sugar Board of Tanzania (SBT) and sugar mills if they found a sugar deficit in Tanzania'.36 Intentionally made, the minister thought that the approach would advantage local farmers but the reverse remained true. Permits issued continued to import sugar without the improvement of industrial processing capacity that would be a lasting solution. Sugar barons always would want to undermine the efforts of local producers directly or indirectly in their favour. The continuation of sugar imports makes the sugar industry susceptible to corrupt practices and resilient to policy changes. It is one of the profitable undertakings, sometimes, sugar barons tend to use their financial muscles to soften the process and get permits to import sugar. The Minister for Agriculture, warned traders who disturbed SBT over sugar import permits to stop doing so, but no public notice was given as a follow up to the call and steps taken to those who misbehaved.<sup>37</sup> Failure to take serious measures especially to improve internal capacity, solving the challenge of sugar shortage in Tanzania will remain a nightmare. Importation of sugar is linked with corruption and fraud involving a few dishonest persons at the expense of the majority of Tanzanians<sup>37</sup>. The business is like narcotics as it involves a lot of money and is dominated by a sophisticated network of some unscrupulous traders.

Five months later after the minister made an assuring statement to restrict importation of sugar, President Samia Suluhu Hassan with her Ugandan counterpart, President Yoweri Kaguta Museveni decreed that sugar imports to Tanzania would continue. President Samia Suluhu assured her counterpart that Tanzania was ready to import sugar from Uganda as an assured market. The two statements made only in an interval of 5 months makes the question of sugar industry in dilemma, as there is no clear-cut approach to solve the puzzle. To fix the puzzle two fundamental questions pops-up. First, can local sugar supply be improved by importing sugar? Second, is it worthwhile to import sugar while tonnes of home-grown sugarcane in the sugar valley of Kilombero remain in the farms unharnessed? Such questions alerts parties concerned to open up into the politics of agrarian development and encourage the necessary linkages between industry and agriculture.

#### Conclusion

This article has shown that the missing link between agrarian and industrial production is the major factor in the recurrent sugar shortage in Tanzania. Developing the sugar valley in Kilombero

without improving industrial processing capacity has proved to be inefficient to fit the puzzle of the sugar question in Tanzania. Much has been done over time to develop the valley and both estate and out-grower produces have increased between 1998 and the present. However, the processing capacity of both K1 and K2 is unmatched with what is produced from the farms that also make annual supply of sugar insufficient. The availability of sugar becomes complicated in Tanzania when importation business comes in. It disadvantages farmers with lack of reliable and lucrative market for their cane but also complicates the availability of sugar making it expensive especially to low income earners.

## **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

## **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship and/or publication of this article: The German Research Foundation (DFG) funded this research through the Collaborative Research Centre based at the Universities of Bonn and Cologne under the project 'Future Rural Africa' (Project ID: TRR-228; Grant number: 328966760).

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#### **Notes**

- A Kilombero Sugar Company Limited, Tanzania National Archives, hereafter TNA 469/CIC/6/36/020
  Part
- 2. Proposed development of Rufiji, TNA 11746/1
- 3. Kilombero Development Syndicate, TNA 26056
- 4. Kilombero Sugar Company Limited, TNA 469/CIC 6/36/020
- 5. Development of Kilombero valley, TNA 13304 Vol.II
- 6. Sugar Industry, TNA 13311 Vol.I
- Importation of sugar TNA 18652. At this time Uganda already produced sugar from 1924 while Kenya started in 1929 and they both exported sugar to Tanganyika.
- 8. Sugar Industry, TNA 13311 Vol.II
- 9. Sugar Industry, TNA 13311 Vol.IV
- Proposed development of Rufiji and Kilombero in Conjunction with Overseas Food Corporation, TNA 11746/1. Similar emphasis on developing the sugar valley came in several other correspondences such as: Development of Kilombero area, TNA 13304; Proposed development of Rufiji and Kilombero Areas, TNA 11746
- 11. TNA/469/CIC.6/36/020, Part A
- 12. Distribution of sugar, TNA 469/CIC6/36/025 Part B and TNA 469/CIC.6/36/020, Part A
- 13. 'Industrial growth vital for nation, says Nyerere', The Nationalist, 30 November 1965.
- 14. Eastern province annual report 1960, TNA 967/821/6
- 15. 'Record crop at Kilombero', The Nationalist, 2nd January 1970
- 16. Hamza Kondo, 'Juhudi za Msolwa kuelekea Ujamaa' *Uhuru*, 17 Februari 1982
- 17. See Kalumbia (2021).
- 18. See Shija (2021).
- 19. Benjamin Mkapa is considered as the leader of privatisation and transformative economy in Tanzania.
- Also see: 'Kilombero kuzalisha sukari tani 10,000', Nipashe, 3 April 1998; interview with Taitas Mngonjeki, Msolwa Ujamaa, 31 October 2020.

- 21. 'Farmers demand higher sugarcane prices' Daily News, 2 February 1990
- 22. SBT Correspondence, 2020.
- 23. SBT Correspondence, 2020; interviews with Marx Mwananegule, Kidatu, 3 November 2020; Lukresia Sixbert, Kidatu, 2 November 2020; Ligoho Juma, Msolwa Ujamaa, 30 October 2020; Sebastian Geofrey, Msolwa Ujamaa, 30 October 2020; Audax Kidoti, Msolwa Ujamaa, 30 October 2020; Rashid Athumani, Msolwa Ujamaa, 29 October 2020
- 24. Msolwa Cane Growers Cooperative Society Limited, Correspondence, 2020.
- SBT Correspondence 2020 and Gloria Tesha, 'Serikali yatangaza mikakati nchi kujitosheleza kwa sukari' Habari Leo, 24 Agosti 2021
- 26. See Bahemu (2022).
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- 28. Gloria Tesha, 'Serikali yatangaza mikakati nchi kujitosheleza kwa sukari' Habari Leo, 24 Agosti 2021
- 29. Sugar Board of Tanzania, Correspondence, 2022
- 30. Sugar Board of Tanzania, Correspondence, 2022
- 31. 'Kitila na mkakati wa kuinua viwanda, kukabili uhaba wa sukari nchini', Mwananchi, 24 Agosti 2021
- 32. Sugar Board of Tanzania, Correspondence, 2022
- 33. 'Mtibwa to build mini-sugar plants', Daily News, 7 February 1990.
- 34. URT, Industry review of sugar
- 35. 'Why sugar Barons threaten efforts to build local capacity', The Citizen, 30 November 2021
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- 37. 'Why sugar barons threaten efforts to build local capacity", The Citizen, 30 November 2021

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