Evaluation of Policy-Related Challenges Limiting Compliance of Sugar Agencies in the Western Kenya Sugar Zone with COMESA Standards for Revival of Sugarcane Farming

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ABSTRACT

This study investigated policy-related challenges limiting sugar agencies in particular sugar mills, Sugar Research Institute, and Sugar directorate in the Western Kenya Sugar Belt from compliance with the Common Market for Eastern and South Africa (COMESA) Standards for revival of sugar cane farming in Kenya. The study was based on cross-sectional survey design and purposive sampling technique which enabled the engagement of senior officials of the sugar mills, senior researchers, and regulators from respective agencies as Key Informants. Key informant guides were used to collect data which was then analyzed descriptively using measures of central tendency and inferentially using t-test. The study established that at a 95% confidence level, there were policy-related challenges that were limiting the compliance of sugar agencies with the COMESA Standards for revival of sugarcane farming in Kenya. For sugar millers the key challenges ranged from the issue of logistics of strategic planning, the issue of sharing income from co-production and cogeneration practices, and then the aspect of conflicts over the issue of the proposed privatization of public mills. For the Sugar Research Institute, the challenges range from financial limitations, limited autonomy, and poor linkage with farmers, lack of policy for seed bulking and supply, limited human capital up to the challenge of logistics of strategic planning. For the Sugar directorate they ranged from weak strategy for policy implementation, the issue of logistics of strategic planning, and then the challenge of gaps in policy framework. in conclusion the study established that compliance of sugar agencies in the Western Kenya Sugar Belt with the COMESA Standards for revival of sugarcane farming was being limited by policy-related challenges and recommended for due policy review.

Keywords: Challenge, COMESA Standards, Compliance, Revival of Sugar Cane Farming

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I. INTRODUCTION

In Kenya commercial sugarcane farming started in 1922 with the emergence of Miwani as a private mill (Mwanje, 2017). It is largely undertaken in fourteen administrative counties in the Western Kenya Sugar zone and on a smaller scale in the former Rift Valley and Coast Provinces (Kenya Sugar Board, 2013). Although it had developed and grown into a vibrant and lucrative enterprise in sugar cane farming in Kenya, it is now facing imminent collapse due to policy-related challenges among other issues (Government of Kenya, 2019). This is evident in reducing level of sugarcane production, large-scale re-allocation of land from sugar cane farming to alternative enterprises , continuous exodus of farmers from sugarcane to alternative crops , fast increase in production cost and in debts Onyango *et al.*, 2018; COMESA, 2012).

According to the Kenya National Assembly (2015) although the Kenya government has always satisfied the national sugar demand by blending production and importation the sugar subsector has been skewed towards domestic production. Before 2000 importation catered for about 26% of the national demand as domestic production catered for 74% (Government of Kenya, 2019). However, in the last two decades, a fast shift occurred in favor of importation and to the disadvantage of domestic producers (Kenya National Assembly (2015). Today (2023) domestic production only caters to 48% of the demand due to a decline in sugarcane farming (Kombo & Ndiema, 2023). In most sugar zones across the country inclusive of the Western Kenya Sugar Belt sugarcane farming and even productivity is declining further and further (Hoffmann et al., 2013).

Additionally, the subsector is becoming more and more chaotic as reflected in court cases, numerous disputes especially over the issue of cane poaching, conflicts, conflicts of interests, and complaints of skyrocketing production costs across the value chain (Kombo & Ndiema, 2023). This is in addition to the issue of market opportunities for locally produced sugar getting more and more limited due to pressure from relatively cheap sugar sourced legally and illegally from COMESA Member States and other countries (Government of Kenya, 2019, Ton et al., 2015).

In response to the crisis, the Kenya government has undertaken numerous policy reviews inclusive of economic integration into the Common Markets for Eastern and Southern Africa (COMESA) market (Kombo & Ndiema, 2023). Pursuant to membership and the crisis facing the sugar subsector, the COMESA market developed and enacted specific standards referred to as the COMESA Standards as expert opinions for a revival of sugar cane farming in Kenya as spelled out in COMESA Directive No.1 of 2007. However, despite these interventions, Kenya's sugar subsector still occupies a risky position on the success-failure spectrum partially due to the failure of sugar agencies to comply with the standards among other challenges (COMESA, 2012).

In brief, as a member of the COMESA protocol Kenya has not yet improved significantly in the matter of reviving sugar cane farming despite invoking the COMESA safeguard measures that have been extended severally by the COMESA Council of Ministers and further despite the prescribed COMESA Standards for revival of sugar cane farming (Kombo & Ndiema, 2023). Given this situation, both the government and the public are questioning and debating the capacity of the prescribed COMESA Standards to enable the revival of sugarcane farming to the once vibrant and lucrative status. On the contrary, the leadership of the COMESA protocol blames the failure of the government of Kenya for what they consider to be issues of policy challenges (Government of Kenya, 2019).

This state of blame and counter-blame ignites policy and academic interest in the subject of the revival of sugarcane farming in the Republic of Kenya. Given these, this study sought to interrogate the policy-related challenges that have a limiting influence on the compliance of the sugar agencies in Kenya to the COMESA Standards or the revival of sugar cane farming.

The study focused on the Western Kenya Sugar belt because as a region it is dotted with a mixture of public and private mills namely Miwani, Muhoroni, Chemalil, Mumias, South Nyanza Sugar Company, West Kenya Sugar Company, Nzoia Sugar Company, Kibos Sugar and Allied Industries, and Butali and Kabras Sugar mills. Further to this, most of these mills are only surviving marginally and are therefore suitable candidates for studies pertaining to policy related to the challenges and revival of sugarcane farming enterprises.

The study used Nzoia and West Kenya Sugar Companies as the baselines of the study because they are the leading sugar producers in public and private domains with a lengthy history of engagement that are also threatened with collapse due to the challenges of reviving sugar cane farming. The study further covered the Sugar Research Institute which is the research component and the Sugar directorate which is the subsector regulator.

II. METHODOLOGY

In social studies, cross-sectional survey design enables coverage of large study areas and inclusion of the different sections of the target population (Kothari & Garg, 2014). On the basis of this expert opinion, this study was based on a cross-sectional survey design. Following the identification of sugar mills, Sugar directorate, and sugar research institute as the key sugar agencies in the study area through factor analysis, the study was further based on cluster and purposive sampling techniques. In each cluster employees in senior positions were purposively engaged as key informants. Pursuant to this design and further in the perspective of the Western Kenya Sugar zone, the study covered 14 managers of sugar mills, 15 subsector regulators under the Sugar directorate, and 11 researchers under the sugar research institute, questionnaires, interviews, and key informants' guides were used for data collection. The data was analyzed using version 26 of the Statistical Package for Social Sciences. The quantitative results were presented in tables while narrative and verbatim quotations were used to present the qualitative findings.

III. RESULTS & DISCUSSIONS

3.1 Challenges Limiting Sugar Millers in the Western Kenya Sugar Belt from Compliance with COMESA Standards

In this study, each agency was treated as a sub-theme, and for sugar mills the findings from 5-point likert scale where VS= Very Small, S= Small, NS =Not Sure, B= Big, VB=Very Big are presented in this section. These findings were analyzed descriptively by use of Means (M), Standard deviations (STD) and Standard Errors (SE).

Table 1
Challenge of Logistics of Strategic Planning

Challenge	Level of Influence: Managers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Logistics of strategic planning	9.52%	4.7%	19.04%	33.3%	38%	3.81	1.328	0.332

According to the findings, for millers, the biggest challenge was the issue of logistics of strategic planning. The constraining strength of this challenge as in Table 1 was reflected in a mean score of μ=3.81 which is far above the sample mean or baseline of 3.00 and hence an indicator of a big challenge. This challenge originated from the fact that at the onset of the safeguard measures each miller had a strategic plan under implementation with specific themes and targets in line with the Public Finance Management Act of 2012. Contrary to this, the COMESA Council of Ministers came up with the COMESA Standards and demanded immediate compliance. This caused a mixture of confusion and resistance from millers. This is because each miller was expected to adjust its strategic plan. Millers found this to be a challenge due to the financial implications given that the COMESA market was not funding any of its recommendations. Additionally, the millers and the associated farmers had covered their land parcels with alternative varieties of sugarcane as per the existing strategic plans.

Further assessment of the findings revealed that about 38% of the managers felt that the issue of logistics of strategic planning was a very big challenge while about 33.3% felt that it was a moderately big challenge to millers' compliance with the COMESA Standards for revival of sugarcane farming. These findings were attributed to managers who were members of the top management teams of the mills. This is because it is this specific team that carries out strategic planning and makes adjustments as demanded by emerging situations inclusive of the COMESA recommendations reflected in the standards. Apart from this, this team is also responsible for the execution of the plans hence the pressure and this specific view. Additionally, the study established that about 19.04% of the managers were not sure if the issues of logistics of strategic planning are a challenge to millers or not. This finding was attributed to managers who did not participate in strategic planning because participants are expected to be informed. Furthermore, the findings were attributed to West Kenya Sugar Company because for and in West Kenya Sugar Company, as a private mill, strategic planning was a preserve of the business owners while managers were only supervising service provision.

Further assessment revealed that about 4.7% of the managers felt the issue of logistics of strategic planning was a moderately small challenge to millers' compliance with the COMESA Standards for the revival of sugarcane farming while 9.52% held the view that it was a very small challenge. These findings were attributed to managers who were not accessible to the right information specifically agricultural and planning information because their line of duty did not include agricultural services and or strategic planning.

Table 2

Challenge of Sharing of the Potential Income from Co-production and Co-generation

Challenge	Level of Influence: Managers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Sharing income from co-production and co-generation	14.28%	9.52%	19.04%	42.85%	14.28%	3.44	1.315	0.329

The strength of this challenge as in Table 2 was reflected in a means score of 3.44 which was moderately above the baseline value of 3.00 and hence an indicator of a moderately big challenge. This challenge was attributed to the fact that the COMESA Standards like the one seeking for a shift from basing sugarcane payments on tonnage to sucrose indexing are only feasible in a situation of multiple production and co-production. Therefore, the shift would imply that apart from payment for sucrose, millers should also be ready to pay for all other components or products of sugarcane yet Kenyan millers were lacking the necessary capacity. This finding is in line with Waswa *et al* (2012) according to whom financial income is the reason why people engage in cash crop production.

Further assessment of the findings revealed that about 14.28% of the managers felt that the issue of sharing the potential income from co-production and co-generation was a very big challenge while 42.85% felt that the issue was a moderately big challenge to millers' compliance. These findings were attributed to managers who had tried to engage farmers over compliance with the standard without success. This is because the farmers were demanding to be paid for alternative products from sugarcane inclusive of bagasse yet the millers had no financial preparedness for the demand.

Further assessment revealed that about 19.4% of the managers were not sure if the issue of sharing the potential income from co-production and co-generation was a challenge to millers with respect to compliance with the standard or not. These findings were attributed to managers whose profession and line of duty did not include factory and agriculture affairs. This is because the managers of these specific affairs were responsible for responding to farmers' demands.

Further to this, about 19.52% of the managers felt that the issue of sharing the potential income from co-production and co-generation was a moderately small challenge while 14.28 % felt that it was a very small challenge to millers' compliance with the COMESA Standards for revival of sugarcane farming. These findings were attributed to managers who felt that with proper planning and empowerment, the millers could effectively comply with the standards and effectively pay farmers for alternative products.

Table 3

Challenge of Conflicts over the Issue of Proposed Privatization of Public Mills

Challenge	Level of Influence: Managers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
logistics of the proposed privatization process	23.8%	19.04%	23.8%	23.8%	9.52%	3.19	1.515	.379

According to the study, another challenge to millers' compliance was the issue of conflicts over the proposed privatization of public mills as reflected in Table 3. This was attributed to the fact that in Kenya, stakeholders in the sugar industry had several conflicts due to a diversity of policy issues (Government of Kenya, 2019, Wanyande, 2001). The strength of this attribute was reflected in a mean score of (μ) 3.19 which is slightly above the sample mean (μ) or baseline of 3.00 and hence an indicator of a small challenge. This challenge was attributed to public experience with Mumias Sugar Company which was once the biggest miller in the country but collapsed immediately after privatization. Further to this, the workers in public mills were opposed to the privatization program since it did not adequately provide a way forward for them, and all these were compounded by several court matters that were yet to be heard and determined.

According to this, public mills like Nzoia Sugar Company as the candidates for the proposed privatization took a wait-and-see stand failing to comply with the standards in time. Further assessment revealed that about 9.52% of the managers held the view that the conflicts over the issue of the proposed privatization of public mills was a very big challenge while 23.8% felt that it was a moderately big challenge to millers' compliance with the COMESA Standards for revival of sugarcane farming. These findings were attributed to the managers of Nzoia Sugar Company. This is because as a public mill, Nzoia Sugar Company was a candidate for privatization and therefore experiencing the associated challenges.

Further to this, about 23.8% of the managers were not sure if the conflicts over the issue of the proposed privatization of public mills were a challenge to millers concerning compliance with the standards or not. This finding could be attributed to newly employed managers who had not witnessed the politics and confusion that emerged due to the privatization proposal. However, about 19.04 % of the managers held the view that the issue of the proposed privatization of public mills was a moderately small challenge while 23.8 % felt that it was a very small challenge to millers' compliance with the COMESA standards. These findings were attributed to the managers of West Kenya Sugar Company because being a private mill West Kenya Sugar Company was not exposed to the challenges of privatization.

3.2 Challenges Limiting Sugar Research Institute from Compliance with COMESA Standards

The findings of the study for Sugar Research Institute are in this section.

Table 4

Challenge of Limited Finance

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Financial limitations	0%	0%	0%	50%	50%	4.5	0.535	0.189

For Sugar Research Institute the biggest challenge was the issue of financial limitation. According to the Government of Kenya (2019), this challenge was attributed to the policy reform that repealed the Sugar Development Levy which was the financial source for sugar research. The strength of this challenge was reflected in a mean score of μ=4.5 which is far above the sample mean or baseline of 3.00 hence an indicator of a very big challenge. This finding was attributed to the abolition of the Sugar Development Levy and to excessive dependence on the national treasury which was also financially challenged. The financial challenge of Sugar Research Institute was reflected in the fact that save for the headquarters at Kisumu the other research stations were dormant. The situation is worsened by a lack of alternative funding or sponsorship except for the scanty intervention of the European Union under the EU Sugar Reform Programme (Government of Kenya, 2019). Further to this, the issue of financial limitation leads to the inadequacy of human capital. This is a concern since the few employees cannot deliver the services required for compliance within the timeframe stipulated by the COMESA Council of Ministers. This was compounded by the fact that income generated by researchers through consultancy was limited and yet the COMESA market was not funding any compliance interventions. The findings of the study revealed that all the researchers (100%) attested to the idea that the issue of limited finance was a big challenge to Sugar Research Institute and this indeed confirmed financial limitation as a critical challenge. About 50% of the researchers felt that the issue of limited finance was a very big challenge. This specific finding was attributed to researchers who were members of the top management team and hence fully informed. Further to this, another 50% of the researchers felt that the issue of limited finance was a moderately big challenge and this was attributed to researchers who were generating some income from consultancy services.

The study also established that the researchers were congruent over the issue of financial limitation as a challenge to the revival of sugar cane farming. This view was justified by a low score of standard deviation far below the baseline (ð=0.535<ð=1.00).

Table 5
Challenge of Limited Autonomy

Challenge	Level of Influence: Millers' perspective							
	VS (1)	**S (2)**	**N (3)**	**B (4)**	**VB (5)**	**mean (µ)**	**STD (α)**	**SE**
Limited Autonomy	33%	0%	0%	56%	11%	4.22	1.302	0.434

The study established that the next high-ranking challenge to the Sugar Research Institute in terms of compliance with the COMESA Standards was the issue of limited autonomy. The strength of this challenge was reflected in a mean score of (µ) 4.22 which is far above the sample mean (µ) or baseline of 3.00 which indicates that it was a big challenge as shown in Table 5. This is due to several policy reforms particularly the ones that repealed the Sugar Act of 2001 and more critically the enactment of the Crops Act No.16 of 2013 which amalgamated sugarcane farming services under the Agriculture and Food Authority. This challenge was further attributed to the Agriculture and Livestock Research Organization – Sugar Research Institute amalgamation undertaken in accordance with the Kenya Agriculture and Livestock Research Organization (KALRO) Act of 2013 as contained in the fourth schedule of the Kenya Constitution (2010). The concern is that amalgamation disoriented the focus of sugar research services through incorporation into a general pool of research plans (Government of Kenya, 2019). This is besides the centralization of research funding which further led to a significant reduction in the funding of sugar research. Apart from this, it created undue or extra levels of bureaucracy in the administrative and management matters of the sugar research process that led to delays in decision-making. Further to this, the process also interfered with the implementation of strategic plans inclusive of compliance with COMESA Standards .

According to the study about 11% of the researchers felt that the issue of limited autonomy was a very big challenge while 56% felt that it was a moderately big challenge to compliance with COMESA Standards revival of sugarcane farming. These findings were attributed to researchers who were limited from the provision of essential services by hurdles originating from the process of amalgamation of the sugar research services under the Kenya Agricultural and Livestock Research Organization. The study established that no researcher (0%) was not sure of the issue of limited autonomy as a challenge and further that none of the researchers (0%) held the view that the issue of limited autonomy was a moderately small challenge to researchers' compliance with COMESA Standards for revival of sugarcane farming, about 33% of the researchers felt that the issue of limited autonomy was a very small challenge. This finding was attributed to newly recruited researchers who were yet to experience and fully understand the challenges of working in an amalgamated service framework.

Table 6

Challenge of Lack of Seed Cane Policy

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Lack of seed policy	0%	22%	22%	33%	22%	3.7	1.26	0.52

The study also established that the issue of lack of a seed cane policy is another challenge to compliance of the Sugar Research Institute with COMESA Standards specifically with respect to the standard that sought for adoption of the recommended sugarcane varieties. The strength of this challenge was reflected in a mean score of 3.7 which is far above the baseline value of (μ) 3.00 and thus an indicator of a big challenge. This finding is in line with Kenya National Assembly (2014) according to which Kenya's sugar subsector suffers from policy gaps. The finding was attributed to the fact that due to a lack of guiding policy Sugar Research Institute is limited in terms of capacity to multiply and distribute the recommended seed cane variance.

Further assessment revealed that up to 55 % of the researchers held the view that the issue of lack of a seed cane policy was a big challenge to compliance with the COMESA Standards for the revival of sugarcane farming, among these, 22 % felt that the issue was a very big challenge while 33 % felt that it was a moderately big challenge. These findings were attributed to the researchers who were within the top management team of the Sugar Research Institute. This is because it is the top management team that engages in strategic planning and policy matters of their organizations.

However, about 22 % of the researchers were not sure if the issue of lack of a seed cane policy was a challenge to compliance of the Sugar Research Institute with the COMESA Standards for the revival of Sugar Cane farming or not. This finding was attributed to researchers who were not directly involved in matters of compliance with the standards. However, on the contrary, about 22 % of the researchers held the view that the issue of lack of seed policy was a small challenge to compliance. This finding was attributed to researchers who believe that seed policy is silently provided for under and within the mandate of Sugar Research Institute as a research organization and therefore the critical concern is the lack of capacity to multiply and supply the seed.

Table 7

Challenge of Limited Technology Dissemination Capacity

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Limited Technology Dissemination Capacity	0%	22%	22%	44%	11%	3.67	1.658	0.553

The study also established that the issue of limited capacity to disseminate technology is another challenge to the Compliance of the Sugar Research Institute with COMESA Standards for the revival of sugar cane farming. This was reflected in a mean score of (μ) 3.67 as shown in Table 7 which is far above the sample mean or baseline of 3.00 and thus an indicator of a big challenge. The issue of limited technology dissemination capacity as a challenge is well reflected in the fact that the Sugar Research Institute has achieved higher compliance with the standard for a generation of new varieties but very low compliance with the one for adoption of the varieties. This challenge is majorly attributed to limited human capital which is further attributed to financial challenges and to the extra bureaucracy in the procedure of staff recruitment that was introduced by amalgamating Kenya Agriculture and Livestock Research Organization and Sugar Research Institute. The issue of limited capacity to disseminate technology as a challenge to researchers' compliance with the COMESA Standards is also reflected in poor linkage with the sugar millers and yet the millers are the technology consumers.

The study further established that up to 55% of the researchers held the view that the issue of limited capacity to generate and disseminate technology was a big challenge to researchers' compliance with the COMESA recommendations. Among these, 11% felt that the issue was a very big challenge while 44% felt that it was a moderately big challenge to researchers' compliance with the COMESA Standards for the Revival of Sugar cane farming. These findings were attributed to researchers who participated in the generation of new varieties that had not been adopted due to limited dissemination. Further assessment revealed that about 22% of the researchers were not sure if the issue of limited capacity to disseminate technology was a challenge to researchers' compliance with the COMESA Standards for the revival of sugarcane farming or not. This finding was attributed to researchers whose duties do not include technology dissemination. On the contrary, approximately 22% of the researchers held the view that the issue of limited capacity to disseminate technology was a moderately small challenge but none (0%) of them felt that it was a very small challenge. This was attributed to researchers who believed that the Sugar Research Institute was yet to generate the correct and adequate technologies as per the demands of the COMESA standards. This meant that to them the critical issue was technology generation and not yet dissemination.

Table 8

Challenge of Logistics of Strategic Planning

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Logistics of strategic planning	11%	11%	33%	22%	11%	3.33	1.204	0.301

According to the study, the next high-ranking challenge to the Sugar Research Institute was the issue of logistics of strategic planning. The constraining strength of the issues of logistics of strategic planning was reflected in a mean score of 3.33 which was moderately above the sample mean (μ) or baseline of 3.00 and hence indicative of a moderately big challenge as shown in Table 8. This challenge originated from conflict in the time horizons of the researchers and that of the COMESA Council of Ministers. This is because as a research institution, Sugar Research Institute had its strategic plan by the time the COMESA Council of Ministers invoked the safeguard measures and the COMESA standards. However, the COMESA Council of Ministers demanded timely action without due consideration of this state of affairs. This generated an immediate need for strategic re-planning of the ongoing research activities and interventions. The re-planning process came along with new financial demands and hurdles (Obange et al., 2021). This challenge is informed by the fact that agricultural value chains consist of inter-linkages between and within actors involved in the production, processing, and distribution of inputs, and outputs as well as coordination and governance of the chain (Godfrey *et al*, 2015). However, in the matter of compliance with COMESA standards, researchers under the Sugar Research Institute were not provided with due opportunity.

According to the study, about 11% of the researchers felt that the issue of logistics of strategic planning was a very big challenge to compliance with the COMESA Standards for the revival of sugar cane farming while 22% felt that it had a moderately big challenge to researchers' compliance with the standards. These findings were attributed to researchers who were members of the top management team of Sugar Research Institute. This is because they are the ones who were directly experiencing the challenges of strategic re-planning and the associated financial pressure. Further to this, the study established that about 33% of the researchers were not sure if the issue of logistics of strategic planning was a challenge to researchers' compliance with the standards or not. This finding was attributed to researchers who were not members of the top management team and further to those who were not associated with ensuring compliance with the COMESA standards.

On the contrary, about 11% of the researchers felt that the issue of logistics of strategic planning was a moderately small challenge as a similar proportion held the view that it was a very small challenge. These findings were attributed to employees of Sugar Research Institute who were providers of support services and not the core research service.

3.3 Challenges Limiting Sugar Agencies in the Western Kenya Sugar Belt from Compliance with COMESA Standards

For the Sugar directorate, the findings for the policy-related challenges that limit compliance with COMESA Standards were presented in this section.

Table 9

Challenge of Weak Strategy for Policy Implementation

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Weak policy and plan implementation strategy	6.25%	12.5%	25%	31.25%	25%	3.77	1.312	0 .335

For the sugar regulators under the Sugar directorate, the study established that the biggest challenge limiting compliance with the COMESA Standards for the revival of sugar cane farming was the issue of Weak strategy for policy implementation particularly at the national level. The strength of this challenge was reflected in a mean score of (µ) 3.77 which is far above the sample or baseline mean score of 3.00 indicating a big challenge. This is contrary to Wanyende (2001) according to whom the value of any policy depends on its implementation.

According to the findings, about 25% of the regulators felt that the issue of weak policy and plan implementation strategy at the national level was a very big challenge to regulate while 31.25% felt it was a moderately big challenge. These findings were attributed to the fact that national planning is the most critical step for compliance with the standards of any economic bloc.

Further to this, the findings were attributed to regulators who were members of Kenya's COMESA Adhoc committee because these were the individuals who had relevant information. This challenge is further attributed to the delay in transposition of the safeguard measures and the COMESA Standards which happened because members of the Kenya National Assembly were preoccupied with campaigns for general elections whose schedule coincided with the timing of the COMESA safeguard measures.

Further assessment of the findings revealed that about 25% of the regulators were not sure if the issue of weak strategy policy for plan implementation at the national level was a challenge to the Sugar directorate with regard to compliance with the COMESA Standards for the revival of sugar cane farming or not. This finding was attributable to regulators who had not had an opportunity to serve on the COMESA adhoc committee. On the contrary, about 12.5% of the regulators held the view that this Issue comprised a moderately small challenge while about 6.25% felt a very small challenge. These findings were attributed to regulators who were of the serving government.

The study further revealed that the regulators were moderately congruent in their views on limiting the influence of this specific challenge. This was reflected in a moderately high level of standard deviation above the baseline (ð=1.312>ð=1.00).

Table 10

Challenge of Political Interference

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (µ)	STD (α)	SE
Political interference	0%	18.5%	18.5%	43.75%	18.5%	3.63	1.412	0 .235

According to the study, the next challenge to regulators' compliance with COMESA Standards for the revival of sugar cane farming was the issue of political interference. The strength of this challenge was reflected in a mean score of (µ) 3.63 which is far above the sample or baseline mean score of 3.00 and thus an indicator of a big challenge. This finding is in line with Waswa *et al* (2012) to whom in Kenya sugarcane farming has always been a politically contentious issue. According to Focus Group Discussions and key informants, the challenge of political interference is clearly articulated in the matter of the standard that concerns the proposal for the privatization of public mills. This is because the proposal of privatization attracted political reactions that were suppressive to the struggle for compliance. Further to this, according to Focus Group Discussions politics emerged out of the fact that the sugarcane farmers were perceiving the presidency as favoring alternative cash crops particularly tea and coffee at the expense of sugarcane.

Further assessment revealed that about 18.5% of the regulators felt that the issue of political interference was a very big challenge to regulators' compliance with the COMESA Standards for the revival of sugar cane farming. This finding was attributed to regulators who were members of the top management team of the Sugar directorate because these are the officers who plan and execute compliance activities and were well informed. Further to this, about 43.75% of the regulators held the view that the issue of political interference was a moderately big challenge to the regulators' compliance with COMESA Standards and this finding was attributed to regulators who were members of the COMESA Adhoc Committee.

However, about 18.5% of the regulators were not sure if the issue of political interference was a challenge to the Sugar directorate with respect to compliance with the COMESA Standards for the revival of sugar cane farming. In the alternative, they were not informed of how politics impacts the struggle to comply with the COMESA standards. This finding was attributed to regulators who were perceived as engaging in sycophancy with the political class. Additionally, about 18.5% of the regulators held the view that political interference was a moderately small challenge to regulation compliance with standards while (0%) felt that it was a very small challenge. These findings were also attributed to those regulations who were sycophants of the serving government or political appointees. The study also established a high level of divergence in the regulators' opinions. This was reflected in a high score of standard deviation far above the baseline (ð=1.412>ð=1.00) as shown in Table 11.

Table 11
Challenge of Logistics of Strategic Planning

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Logistics of strategic planning	6.25%	6.25%	18.5%	50%	18.5%	3.50	1.225	0.635

The study further established that the issue of logistics of strategic planning was also a challenge to regulators' compliance with COMESA Standards for the revival of sugar cane farming. The strength of this challenge was reflected in a mean score of (μ) 3.50 which is well above the sample mean (μ) or baseline of 3.00 which implied that it was a moderately big challenge. This finding was attributed to the fact that effective regulation depends on effective inter-linkages between and within actors in the sugar value chain. This challenge was attributed to the fact that by the time the COMESA Standards were being enacted, the Sugar directorate had an ongoing strategic plan. The situation demanded for immediate review of the strategic plan and yet unlike the safeguard measures which were designed for periods of twelve months the ongoing plans were designed based on a time horizon of five years.

The findings revealed that about 18.5% of the regulators felt that the issue of logistics of strategic planning was a very big challenge to regulators' compliance with the COMESA Standards for the revival of sugarcane farming while 50% held the view that it was a moderately big challenge. These findings were attributed to regulators who were members of the planning committee of the Sugar directorate. This is because they were the ones who faced the challenge of strategic re-planning and execution of the new plan.

However, 18.5% of the regulators were not sure if the issue of the logistics of strategic planning was a challenge to regulators' compliance with the COMESA Standards for the revival of sugarcane farming or not. Furthermore, about 6.25% of the regulators held the view that the issue of logistics of strategic planning was a moderately small challenge while another 6.25% felt that it was a very small challenge to regulators' compliance with COMESA Standards for the revival of sugar cane farming. These findings were attributed to regulators with a belief that the Sugar directorate had the necessary capacity to comply with the standards. The study also established that the regulators were moderately congruent in their views as reflected in standard error (ð=1.225>1.00).

Table 12
Challenge of Gaps in the Policy of Sugar Subsector

Challenge	Level of Influence: Millers' perspective							
	VS (1)	S (2)	N (3)	B (4)	VB (5)	mean (μ)	STD (α)	SE
Gaps in the policy framework	18.5%	18.5%	50%	6.25%	6.25%	3.33	0.983	0.415

The study further established that the issue of gaps in the policy of the sugar subsector is also a challenge to regulators' compliance with the COMESA Standards for the revival of sugarcane farming. The strength of this challenge was reflected in a mean score of (μ) 3.33 which was moderately above the sample or baseline mean score of (μ) 3.00 which indicates that it was a moderately big challenge. This finding was attributed to a lack of seed cane policy. This is because a majority of the COMESA Standards were focused on the generation of seed cane of the new varieties to enable adoption. This view is in line with the Kenya National Assembly (2014) according to which Kenya's sugar subsector suffers from gaps in the policy framework.

Additionally, about 6.25% of the regulators felt that the issue of gaps in the policy framework of the sugar subsector was a very big challenge to regulators' compliance with the COMESA Standards for the revival of sugarcane farming. This finding was attributed to regulators who were serving in the legal section of the Sugar directorate an issue that helped them to understand the challenge of gaps in policy framework. Further to this another 6.25% of the regulators held the view that the issue of gaps in the policy framework sugar subsector was a moderately big challenge to the regulators' compliance with COMESA Standards for the revival of sugar farming in Kenya. This finding was attributed to regulators whose duty involved enabling and facilitating new sugarcane varieties a service that was highly constrained by lack of seed cane policy.

The study further established that about one-half of the regulators, 50% were not sure if the issue of gaps in the policy framework of the sugar subsector was a challenge to regulators' compliance with the COMESA Standards for the revival of sugar cane farming or not. This finding was attributed to newly recruited regulators who were yet to experience the challenges attributable to gaps in the policy framework. Additionally, the study established that about 18.5% of the regulators held the view that the issue of policy gaps in the sugar subsector was a moderately small challenge as another 18.5 % held the view that it was a very small challenge to compliance with the COMESA Standards for revival of sugar cane farming in the study area. These findings were attributed to regulators who believed that the legal framework of the Sugar directorate was good enough to enable due compliance with the COMESA standards. Further to this, the study established that regulators were strongly congruent in their opinions over this aspect of the study. This was reflected in low divergence in their views as manifested in a low score of standard deviation that is only slightly below the baseline (ð=0.983<ð=1.00).

IV. CONCLUSIONS & RECOMMENDATIONS

4.1 Conclusions

In the context of the Western Kenya Sugar belt sugar agencies were limited by policy-related challenges from full compliance with the COMESA Standards for the revival of sugarcane farming. For the Sugar Research Institute, the key challenges ranged from financial limitation, limited autonomy and poor linkage with farmers, lack of policy for seed bulking and supply, and limited human capital up to the challenge of logistics of strategic planning due to the amalgamation of Kenya Agriculture and Livestock Research Organization and Sugar Research Institute. The challenges for the Sugar directorate ranged from the issue of weak strategy for policy implementation, the challenge of logistics of strategic planning, and then the challenge of gaps in policy framework. For sugar millers the challenges ranged from the issue of logistics of strategic planning, the challenge of sharing the income from co-production and cogeneration practices, and then the challenge of conflicts over the proposed privatization of public mills.

4.2 Recommendations

On the basis of this study, it is recommended that the Kenya National Assembly or parliament and senate should review existing policies towards full compliance of sugar agencies with COMESA Standards for the revival of sugar cane farming in Kenya.

REFERENCES

COMESA Secretariat. (2013). *Key issues in Regional Integration, Vol. 2*. Lusuka: COMESA.

COMESA. (2012). *Draft Report of the Kenya Sugar Subsector Safeguard Assessment Mission. Lusaka, Mimeograph Costs.* World Bank.

Government of Kenya. (2019). *Agricultural Transformation and Growth Strategy (2019-2029).* Nairobi: Government Printer.

Hoffmann, V., Mutiga, S., Harvey, J., Milgroom, M., & Nelson, R. (2013). *A Market for lemons: Maize in Kenya*. College Park, MD. University of Maryland.

Kenya National Assembly. (2014). *Report of the Departmental Committee on Agriculture, livestock, and cooperatives on the crisis facing the sugar industry in Kenya*. Nairobi Kenya.

Kenya National Assembly. (2015). *A parliamentary report of the Departmental Committee on Agriculture, livestock and Co-Operatives on the Crisis Facing the Sugar Industry in Kenya*. Kenya National Assembly, Eleventh Parliament (3rd session-2015), Nairobi, Kenya.

Kenya Sugar Board. (2013). Export processing zones authority available at www.epzkenya.com

Kombo, J. B., & Ndiema, A.C. (2023) A review of the state of sugarcane crisis in Kenya. *International Journal of Agricultural Policy and Research, 11*(5), 27-34. https//doi.org/10.15739/IJAPR.22.013

Kombo, J. B., Ndiema, A. C., & Wakhungu, J.W. (2023). Influence of policy design issues on the provision of services for the revival of sugar cane farming in the Western Kenya Sugar Belt. *International Journal of Agricultural Policy and Research, 10*(5), 110-119. https//doi.org/10.15739/IJAPR.22.013.

Kothari, C.R., & Garg, G. (2014). *Research Methodology; Methods and Techniques (3rd Ed.)* New Delhi, New Age International (P) Limited Publishers.

Mwanje, M O (2017). *Challenges of strategy implementation in selected sugar companies in Kenya* (Doctorial Presentation, Jomo Kenyatta University of Agriculture and Technology, Kenya).

Obange, N., Onyango, G.M., & Siringi E. M. (2021). Determinants of Sugar Markets Performance under Imperfect Market Conditions: Empirical Evidence from Kenya. *African Research Review, 5*(1), 1-16.

Onyango, K., Njagi, T., Kirimi, I., & Baliero, S. (2018). *Policy options for revitalizing the ailing sugar industry in Kenya. Tegemeo institute of agriculture policy and development*. Policy brief No 30. Egerton University. https://www.tegemeo.org/images/_tegemeo_institute/downloads/publications/policy_briefs/policy_brief30.pdf

Ton, G., Klerkx, L., de Grip, K., & Rau, M.-L. (2015). Grants to smallholder farmers, revisiting the key assumptions in the impacts pathways. *Food Policy*, *51*, 9-23.

Ungaya C, G., Were, E. & Byaruhanga, J (2015). How Inadequate Structural and Trade Policy Reforms in the Kenya Sugar Industry Have Threatened Its Survival in the Common Market of East and Southern African Region (COMESA). *International Journal of Innovative Research and Development*, *4*(4), 418-423.

Wanyande, P. (2001). Management politics in Kenya's sugar industry towards an effective framework. *African Journal of Political Science*, *6*(1), 123-140.

Waswa, F., Gweyi, M. N., Onyango, O.J., & Mcharo, M. (2012). Contract Sugarcane farming and farmers' incomes in the Lake Basin. *Kenya Journal Applied Biosciences*, *52*, 3685-3695.