

International Journal of Social and Development Concerns

ISSN 2524-1478 (Online)

Vol. 10 | Social and development concerns in Africa (c) Vol. 10 Article 3/10 | October 2019 Copyright © 2019 The International Journal of Social and Development Concerns (JJSDC) All Rights Reserved (An International Publisher for Academic and Scientific Resources)

PARTICIPATORY LEARNING AND ACTION FOR ENHANCED SUGARCANE FARMING PERFORMANCE IN KAKAMEGA COUNTY, KENYA

Authors: ¹Mark Collins Barasa, ²Urbanus M. Ndolo, ³Michael T. Okuku ¹²³ The Catholic University of Eastern Africa, P.O BOX 62157 00200, Nairobi, Kenya. Website: www.cuea.edu

Corresponding author: markomccj@gmail.com

Chief Editor	Abstract: The study aimed at establishing the significance of participatory learning and actio (PLA) on the performance of sugarcane farming project in Kakamega County, Kenya. The stud adopted a Mixed Research Design, and was guided by Kanter's theory of empowerment and th
Web: <u>www.ijsdc.org</u> Email: <u>info@ijsdc.org</u>	General systems theory. Target population comprised of Sugarcane farmers, Company worker, and business people. Research findings indicate that farmers in Kakamega County are no empowered to participate in the sugarcane farming project. This is demonstrated in severa
Editing Oversight Impericals Consultants International Limited	aspects as follows: First, there is no capital/finance provided to farmers to enhance the farming as only 21(21.0%) of farmers receive this help, sugarcane farmers are not provide with farm inputs for effective sugarcane cultivation as only 23(23.0%) of farmers receive th aid, and fourth, there are no motivational incentives given to farmers as encouragement for them to continue cultivating sugarcane as only 9(9.0%) of farmers receive incentives. On 34(29.8%) of sugarcane farmers and workers take part in farm training aimed at improvin sugarcane performance and the rest, 80(70.1%) do not. Secondly, the sugarcane compan provides workshops on enhanced sugarcane farming to only 16(14.0%) of the residents whit 98(85.9%) of the rest are never given this exercise. Again, 103(90.3%) of the sugarcane farmer and workers have never been taken for refresher courses aimed at improving their skills is sugarcane farming as only 11(9.6%) are provided with this opportunity. Farmers and worker are not engaged in agricultural research programs: only 14(12.2%) are given this exercise whit the rest, 100(87.7%) are not. There is low level of learning, interaction and communication among sugarcane farmers in the county as 63% of farmers do not learn farming skills throug interaction, 24% sometimes learn, and only 13% fully interact, communicate and learn fro each other. Majority of sugarcane farmers (43%) do not consult or learn from other farmer simply because they have no interest to do so. For these reasons 89% of sugarcane farmers hav pulled out of sugarcane farming, meaning that Mumias Sugar Company has lost 89% of its ra materials. The study was satisfied that sugar industry in Kakamega County is collapsing main because farmers are less empowered to participate in the project and because there are no bas farming skills provided to farmers to enable them take part in the sugarcane project. To reviv this project, empowerment of sugarcane farmers and interactive learning are recommended.
	Key terms: Participation, Empowerment, Training, Interaction, Learning

1.1.Study background

The level of sugar production has generally dropped in many countries. The Global Agricultural Information Network report (2018) shows that there was a 3% drop in the global sugar production in the marketing year 2017/2018. Production in the European Union was forecast to fall 1.4 million tons to 19.5 million on a return to average yields compared with previous years' record. In Africa, there was a decrease of the same product by over 7%, where by Egypt, South Africa and Sudan were seen to have had the lowest drop in production. East Africa's sugar production in the same marketing year decreased by at least 5.0%. Kenya is currently facing a structural sugar deficit whereby consumption stands at 800,000 metric tons per year, but production remains below 500,000 tons (GAIN 2018).

This trend is set to continue since cane farmers in Kakamega County are pulling out of sugarcane farming. Sugarcane farming project in Kakamega County has deteriorated in terms of performance, whereby operations are mainly affected by the drop in supply of raw materials from farmers. Starting as early as 2016 the company produced a total of 120,002 tonnes of sugar lower than the targeted 136,700 tonnes (GAIN 2016).

Worldwide, relations between stakeholders has become a top concern for many projects and companies so much so that the performance of any project directly relates to the participation of stakeholders (Kumar 2009). Masindet (2014) thinks that maintaining mutually beneficial relationships between stakeholders can improve value creation in project and companies. This mutual relationship is chiefly to take a bottom-up approach, known in project planning and management as participatory learning and action (PLA). This study was set to explore the impact of PLA on the ongoing process of improving performance of sugarcane farming in Kakamega County.

1.2.Statement of the problem

Sugarcane farming in Kakamega County is deteriorating in performance. Farmers have uprooted sugarcane in most parts of the county. This has negatively affected social and economic development of the county. This project's under-performing has led Kenya to lose one of its sources of foreign exchange due to reduced exportation of sugar. The fact that this project is still under-performing despite several attempts to revive it confirms the need for further research on strategies of putting back the project to its expected performance. One such strategy is participatory learning and action (PLA). This study was a further attempt to enhance sugarcane farming performance in Kakamega County through PLA.

1.3.Study objectives

The study generally aimed at establishing the significance of participatory learning and action on performance of sugarcane farming in Kakamega County, Kenya. The specific objectives were:

- i) To establish significance of empowering farmers on sugarcane farming performance.
- ii) To find out impact of interactive learning on the performance of sugarcane farming.

1.4.Justification of the study

The fact that sugarcane project in Kakamega County has not yet regained its performance despite several attempts to revive it is an indication that there is need for further research to establish effective strategies of boosting this project. One such strategy is to fully empower farmers to run the project through PLA technique. This study helps to respond to this need.

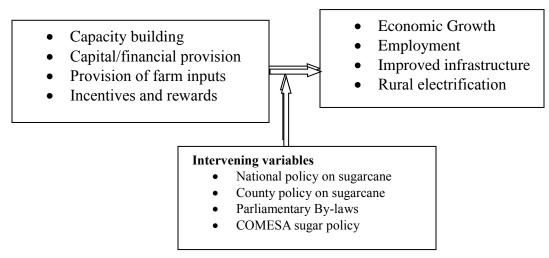
1.5.Conceptual Framework

Figure 1 below indicates the independent, dependent and intervening variables that formed the conceptual framework of this study. An independent variable influences another variable by causing an effect on it. (Fawcett, 2006). In this study sugarcane performance is the dependent variable because it is influenced by PLA activities. PLA is the independent variable because it causes effects on sugarcane farming performance. National government's policy is the main intervening variable, because it alters the impact of PLA on sugarcane farming.

Dependent variable (Sugarcane performance)

Figure 1: Conceptual framework

Independent Variable (PLA)



Source: Researcher's own conceptualization, 2019

The above framework gave a graphical outline of independent, dependent and moderating variables to the feasibility of PLA on sugarcane project in Kakamega County. The framework highlighted elements of PLA and the areas which required participatory learning and action.

1.6.Review of empirical studies

In 2018, the global agricultural information network indicated that the global sugarcane farming had dropped by 3% mainly due to limited financial aids to small-scale farmers as a way of empowering them (GAIN, 2017). For instance the report associated this to Brazil's drop in sugar production, which was estimated to be down 8.3 million tons to 30.1 million due to insufficient capital by small-scale farmers to sustain sugarcane farming. Exports were projected to drop similarly to 19.6 million tons, lowering Brazil's market share of exports to 34 percent (down from a 5-year average of 45%) (Ibid). In Africa this drop was registered at 2.1 % with countries such as Sudan failing to finance farmers. In east Africa, Kenya and Uganda reduced in sugarcane production due to inability of farmers to buy farm inputs like fertilizers and agricultural chemicals. The report cited lack of farmers and stakeholders financial empowerment as part of the cause for

this failure.

Earlier on in Kenya, Kingoina (2011) had found out how the sugar company is an obstacle to sugarcane farming project by evaluating the level of performance of employees in sugar production. This gave way to the assessment of employee empowerment in the running of Mumias Sugar Company. But this was restricted to employees and not the farmers. His study would have been more helpful if it went further to assess the level of empowerment among farmers in the running of the company. It needed to go a step further to mention ways in which the same company can empower the farmers to manage and run it. In so doing the study should have demonstrated the possibility of stable stakeholder involvement and empowerment at Mumias Sugar Company as being contributing to the revival and uplifting of sugarcane farming in Kakamega County.

According to the Analysis of Smallholder Sugarcane Farmers' Livelihood (SCFL 2015) most of the farming projects which succeeds in giving high production across the globe, do so mostly because of a continuous learning and interaction among farmers. For instance in 2017 Brazil, India and Egypt registered high agricultural outputs due to this aspect. East Africa, particularly Kenya, is evaluated as still lagging behind in terms of interactive participation among agricultural stakeholders. The report attributed the poor performance of sugarcane projects and other industries in Africa to lack of interaction and learning of farmers and stakeholders from each other. In east Africa Sugarcane farmers remain constrained by poor crop husbandry practices, late harvesting, and delayed payment for cane delivered to the mills. (Ibid). Chindia (2008) examined Public relations and communication as strategies for competitive human relations in effective industrial process. He took a case study of Mumias Sugar Company, with major focus on how public relations and effective communication can be aids to enhancing the successful process of industrialization. He treated these two as strategies for competitive human relations and project performance.

He established a special dichotomy between public relations and communication on one hand, and industrialisation on the other. In the process he evaluated how these two had succeeded or failed to uplift the growth of Mumias Sugar Company. Chindia established that the successful growth of Mumias Sugar Company resulted from competitive human relations aided by public relations. On the other hand however he cautioned that part of the challenges that the sugar company was facing were slightly emanating from poor relations among stakeholders.

The difficulty with Chindia's research is that, first, it did not clarify the phrase 'stakeholder relations' in the context of sugarcane farming project in Kakamega County, and secondly it failed short of demonstrating the various aspects of this relationship. Whereas the former is a contextual gap in knowledge, the latter is a practical gap in recommendation(s). Perhaps Chindia ought to have gone a step further to find out the relation between farmers and the sugar company, and how the two have worked together as stakeholders to boost service delivery.

1.7. Theoretical framework

A theory is a comprehensive explanation about some aspects of how society works (Okafor 2005). It directs people's thinking by offering explanations and predictions concerning the future contingencies (Ibid). This study was guided by Kanter's theory of empowerment.

1.7.1. Kanter's theory of empowerment

Kanter believes that an organization is structurally composed of two powers; formal and informal. Formal power requires a primary focus on independent decision making while informal comes from building relationships and alliances with peers and colleagues (Ngowi, 2002). To create sustainable sugarcane farming, this second form of power in Kanter's theory may be used as yard stick. This can guide planners to strategize on building relationships aimed at improving performance of sugarcane project. For empowerment to take place, Kanter recommends access to information, access to resources, education and formal training among members of the project. Support includes capital and financial support to members to take part in the project. This aspect can be used to examine how far the local and national governments have created stability in sugarcane farming by availing capital/finance to farmers. Kanter's theory offers a context in which to bench-mark certain aspects of empowerment such as training, methods and skills of sugarcane farming, and how to use this for enhancing sugarcane farming performance. A major weakness in this theory is that it can increase arrogance among the empowered people, leading them to potential power abuse through rudeness. This study used this to check the structures of power among sugarcane farmers and company management.

1.8.Study findings

1.8.1. The response rate of participants

The study interviewed 110 respondents using standard self-administered questionnaires to sugarcane farmers and business men of Mumias Sub-county at their households and 100 Questionnaires were returned. This translates to 91% feedback. The researcher also issued 15 questionnaires to company institutional workers. Out of these 14 were returned translating to 93%. Generally the return rate was good, as can be attested by the aforementioned percentages.

1.8.2. Respondents' age brackets

The table below highlights respondents' age-brackets:

Age bracket	Frequency	Percentage
25 – 29 years	53	46.4
30 - 34	35	30.7
35 - 39	12	10.5
40 and Above	14	12.2
Total	114	99.8

Table 1: Respondents' age brackets

Source: research findings, 2019

The findings above indicate that the major population of Kakamega County 53(46.4%) is aged between 25-29 years. This is followed by those aged between 30-34 years forming 35(30.7%) of the total population. The statistics further indicate that there is an almost equal ratio between the

population bracket of 30-34, and that of 40 and above whose percentages of the total population are 12(10.5%) and 14(12.2%) respectively. This shows that Kakamega County has versatile labour force and residents are mature enough to participate actively in Sugarcane farming.

1.8.3. Respondents level of education.

The table below shows the level of academic qualification of respondents.

	Farme	rs	Company Workers		
Education level	Frequency	Percent	Frequency	Percent	
No education	11	11	0	0	
Primary	9	9	0	0	
Secondary	42	42	2	14.2	
Diploma	29	29	2	14.2	
Degree & PGS	9	9	10	71.4	
Total	100	100	14	99.8	

Table 2: Respondents' level of academic qualification

Source: research findings, 2019

From the data above, 9(9.0%) of the farming population had attained either a first degree or a postgraduate degree. 29(29.0%) of the same population had attained diploma, 42(42.0%) had completed secondary education. 9(9.0%) had not gone beyond primary education while 11(11.0). On the other hand 2(14.2%) of the company workers had attained diploma, 2(14.2%) had attained secondary education while 10(71.4%) had attained university degree. This assures the study that respondents were well educated to understand and give information pertaining to the participatory learning and action on enhanced sugarcane farming project Kakamega County.

1.9.Empowerment aspects and how far they have been extended to sugarcane farming

In a focus group discussion with farmers, one participant recalled that:

Participant 1: "From the time of its initiation in 1972, the work of farmers has remained to supply the company (factory) with raw materials (sugarcane). The rest of the activities of planning, decision-making, administration, marketing and bench-marking are done only by company officials. I have been around since the initiation of this project 47 years ago, and I have never been trained on sugarcane skills, nor have I been involved in planning, monitoring and evaluation of the performance of this project."

The table below highlights more findings on empowerment aspects among sugarcane farmers:

Aspect of empowerment	Frequency		Percentage			
	Yes	No	Total	Yes	No	Total
Capacity building	11	89	100	11.0	89.0	100
Financial/capital assistance	21	79	100	21.0	79.0	100
Provision of firm inputs	23	77	100	23.0	77.0	100
Incentives and rewards	9	91	100	9.0	91.0	100

Table <u>3</u>: Secific aspects of empowerment and the extent to which farmers are empowered

Source: research findings, 2019.

In table above, data indicates that capacity building among sugarcane farmers by the sugarcane management is lowly done as only 11(11.0%) of the farmers have been engaged in it, and as the rest, 89(89.0%) do not. Again only 21(21.0%) of the farmers receive financial assistance and other capital support from the sugarcane company while 79(79.0%) of the rest are not supported financially. At the same time, 77(77.0%) of the sugarcane farmers are currently not provided with farm inputs (eg fertilizers, farm chemicals and seed cane) and only 23(23.0%) of the rest are provided with. In terms of incentives and rewards, only 9(9.0%) of the sugarcane farmers receive while 91(91.0%) do not receive any. In a way the above findings concur with Kingoina (2011) who found out various ways in which the sugar company can be an obstacle to sugarcane farming project by evaluating the level of empowerment among employees. His study has now been completed by these findings which arise from a further assessment of empowerment among farmers in the running of the company.

In line with Kanter's theory of empowerment, shared power means distributing the power to decide over crucial matters of the project, the power to interact with all stakeholders of the project, the power to monitor and evaluate the project and the power to communicate to each other over the situation of the project. Judging from Kanter's theoretical stipulation then, these aspects of empowerment have not been extended in sugarcane farming in Kakamega County. It is to this lack of empowerment that this study attributes the the 89% withdrawal of farmers from sugarcane farming in Kakamega County. To empower farmers to run the sugar project is to increase sugar produce by 89%, hence save the county from importing 89% of sugar.Respondents suggested ways in which they wanted to be empowered. They included: supervision and general running of the administration of the company. This responses in a way also complemented Kingoina's 2011 study, which had not gone a step further to find ways in which the sugar management can empower farmers to manage and run it.

1.10. Farmers' interaction and learning for better sugarcane farming performance

The second objective of this study was to establish the impact of framers' interaction and learning on the performance of sugarcane farming project. Respondents were asked to indicate whether or not they were involved in specific aspects of participative learning. The findings were analysed and recorded below:

Aspect of learning	Frequency			Percentage		
	Yes	No	Total	Yes	No	Total
Trainings	34	80	114	29.8	70.1	100
Workshops	16	98	114	14.0	85.9	100
Refresher courses	11	103	114	9.6	90.3	100
Research programs	14	100	114	12.2	87.7	100

Table 4: Provision of specific aspects of participatory learning

Source: research findings, 2019

The findings above demonstrate that only 34(29.8%) of sugarcane farmers and workers take part in farm trainings aimed at improving sugarcane performance and the rest, 80(70.1%) do not. Secondly, the sugarcane company provides workshops on enhanced sugarcane farming to only 16(14.0%) of the residents while 98(85.9%) of the rest are never given this exercise. Again, 103(90.3%) of the sugarcane farmers and workers have never been taken for refresher courses aimed at improving their skills in sugarcane farming as only 11(9.6%) have done so. Farmers and workers are not engaged in agricultural researches for enhanced sugarcane farming: only 14(12.2%) are given this exercise while the rest, 100(87.7%) are not. In order to rate the general level of learning among sugarcane farmers, respondents were asked a general question as to whether they put efforts to learn some skills from one another. The graph below outlines the findings.

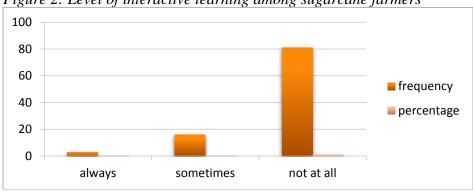


Figure 2: Level of interactive learning among sugarcane farmers

Source: research findings, 2019

As the findings indicate, 63(63.0%) of the sugarcane farmers do not find it necessary to learn farming skills through interaction with each other, 24(24.0%) of the remainder sometimes consult each other to learn some sugarcane farming skills from each other while only 13(13.0%) of sugarcane farmers fully put in measures to interact and learn from each other. These findings corresponds to Chindia's 2008 findings in which, after establishing a special dichotomy between public relations and communication, he cautioned that part of the challenges that the sugar company in Kakamega County was facing were slightly emanating from poor relations among stakeholders.

1.10.1. Reasons why farmers do not interact to learn from one another

Respondents were further asked to state reasons why farmers do not interact and engage in a participatory learning process. The responses were analysed and recorded in the table below:

Reason	Frequency	Percentage
Competition among farmers	13	13.0
Suspicion among farmers	10	10.0
Pride among farmers	24	24.0
Inferiority complex	10	10.0
Lack of interest to learn	43	43.0
Total	100	100

Table 5: reasons why farmers do not interact & learn from each other

Source: research findings, 2019

In the findings above, majority of sugarcane farmers 43(43.0%) do not consult or learn from other farmers simply because they have no interest to do so while 24(24.0%) of the remaining group refuse to learn from others out of arrogance. This study considers this arrogance as symptomatic of something much more hidden, much more basic and more influential among sugarcane farmers in Kakamega County – pride. Expounding on these findings, one key informant stated that:

Informant 1: "Personally I do not believe that there is any useful farming skill that I can acquire from my colleagues. We are always here with them, and so whatever they know about sugarcane farming and sugarcane management is not anything that I do not already have. What we need here is some new specialists to speak to us through seminars and workshops about skills of effective sugarcane farming and how to manage it."

In line with Kanter's theory of empowerment, this study recalls that sometimes a project falls because members are negatively proud. Other projects fall because of internal competition by members. Read in the context of this study, these findings confirm pride and arrogance as weaknesses of empowering (sharing power with) members in a structured project or organization. In this study it is realized that sugarcane farmers in Kakamega County have each been minding only his or her sugarcane farm. There has not been a collective process of running the project so much so that each sugarcane farmer was detached from the rest. 13(13.0%) of farmers look at sugarcane project from a selfish perspective and so refuse to consult and be consulted just because they think they will be competed out. A good project does not stand on selfish competition from either stakeholders or beneficiaries. Should this happen, each member will think only of what he or she can get from the project. And since this takes away the collective benefit from the program, such projects fail to lead to community development.

Individuation of a particular economic project, non-liberal capitalism among members, a thoroughly materialistic worldview based on the principle of the survival of the fittest, is a dangerous project culture that can quickly block project success, because such a culture carries a dangerous wisdom that risks removing the component of community development from projects. It is the harmful power of egoism and while in a sense egoism naturally rules the person, it does lead him/her to ruin the project.

Farmers in Kakamega County ought to beware of this "project egoism" in order to reach beyond the limits of their own fragmented project ideology and restore unity. Destroying this selfishness will offer a creative but interactive distance between individual sugarcane farmers by transcending the limiting walls that are observably established within the sugarcane project.

Inferiority complex makes 10(10.0%) of farmers to avoid interacting, sharing knowledge and be consulted because they do not believe that they have any useful information on sugarcane

farming skills.

Respondents were further asked to indicate in terms of preference, some of the useful skills they wish to learn in order to improve quality production in sugarcane farming project. The findings were analysed and recorded in the figure below:

Skill	Preference	Percentage (%)
Fire control skills	49	49.0
Paste and disease control skills	31	31.0
Organic manure production	14	14.0
Mixed farming skills	6	6.0
Total	100	100

Table 6: skills preferred to be learnt by sugarcane farmers.

Source: research findings, 2019

The findings in the table above demonstrate an urgent need for the sugar company to provide farmers with skills on how to combat fire out-breaks in the sugarcane farms. This is supported by 49(49.0%) of respondents. They recalled that during dry seasons huge infernos break into sugarcane farms and lead to huge losses because in many occasions the fires destroy even premature sugarcane. When such happens, they said, the premature sugarcane is cut down and not taken to the factory for processing. This way, farmers incur losses. They also reported that these fires usually spread very fast from one farm to another and therefore it is difficult for them to combat it.

A suggestion by 31(31.0%) of the respondents was that the sugar company ought to train sugarcane farmers on how to deal with diseases that often attack sugarcane leading to poor yield. In a focus group discussion, one participant pointed out some sugarcane diseases that have currently spread around sugarcane planting regions, which are destroying sugarcane in farms. They are: Sugarcane head smart disease, Sugarcane black rot disease, Sugarcane brown rust disease and Sugarcane *ratoon* leaf disease. 14(14.0%) of respondents suggested that sugarcane farmers can be trained on how to produce organic manure using sugarcane leaves that remain behind after harvesting. They said that so far sugarcane leaves have been used only for mulching farms but they think that the sugar company can now train them on how to supplement chemical fertilizers with organic manure from these leaves. This study is in support of this suggestion particularly because organic manure is environment-friendly.

Another group of respondents, 6(6.0%), advocated for training skills in mixed farming. They suggested this, recalling that sugarcane takes long time (minimum of 18 months) to be harvested, and therefore it keeps farmers waiting for log time in order to get profit. They thought that some short time crops can be planted alongside sugarcane in order to provide food and other needs while waiting for sugarcane to mature.

1.10.2. Present level of Farmers' Participation in Sugarcane Farming

Out of the population interviewed (excluding company workers), 89(89.0%) have directly pulled out of sugarcane cultivation and only 11(11.0%) are still cultivating sugarcane. Thus in the whole

county of Kakamega, only 11(11.0%) of the total population is still cultivating sugarcane. This is a very big drop considering that the land and climatic conditions have not changed so much so as to compel such a sharp drop. To talk of 89% drop in sugarcane farming is to say not only that (89%) of the previous farmers abandoned sugarcane farming, but also that Mumias Sugar Company lost 89% of its raw materials (sugarcane).

1.10.3. Why farmers are withdrawing from sugarcane cultivation

Respondents were further asked to state the reasons why farmers were pulling out of sugarcane farming. Their responses were analyzed and recorded in the table below.

Responses	Frequency	Percent
Poor cane transportation	25	21.9
Delayed payments	59	51.7 20.1
Cheating in cane tonnage Alternative farming	23 7	6.1
Total	114	99.8

Table 7: Why farmers are withdrawing from sugarcane farming

Source: Research findings, 2019

The findings presented in the table above indicate that the biggest cause of farmers withdrawal from sugarcane farming is delayed payments - 51(51.7%). 23(20.1%) of respondents believe that there is a high level of manipulation of cane tonnage at the factory weighbridge so much so that farmers do not get genuine payments for the sugarcane that is harvested. Another group of respondents 25(21.9%) attributed the withdrawal to poor mode of cane transportation. They said that the trailers used to transport sugarcane to the factory are wasteful because they drop much sugarcane on the road and this becomes a lose on the side of the farmers. 7(6.1%) of respondents thought that farmers have quitted sugarcane farming, mainly because they have alternative forms of farming.

1.11. Summary, conclusion and recommendations

It was found out that farmers are not empowered to participate in the sugarcane farming project. This low level of empowerment is demonstrated in four main aspects: First, there is poor capacity building done among sugarcane farmers, indicated by 11(11.0%), secondly, there are no capital and financial provision to farmers to enhance their farming as only 21(21.0%) of farmers receive this aspect. Third, sugarcane farmers are not provided with farm inputs for effective sugarcane cultivation as only 23(23.0%) of farmers receive this aid. Fourth, there are no motivational incentives given to farmers as encouragement for them to continue cultivating sugarcane as only 9(9.0%) of farmers receive incentives. With these findings the study concludes that sugarcane farming is poorly performing in Kakamega County due to lack of empowerment among farmers.

The study also established that there is a relatively low level of interaction, learning, and communication among sugarcane farmers in Kakamega County as only 13(13.0%) of farmers interact and learn. A large amount of mutual interaction and learning is lacking among sugarcane farmers. This is shown in four main aspects: First, 80(70.1%) of sugarcane farmers do not take part in farm trainings aimed at improving sugarcane performance. Second, the sugarcane company does

not provide workshops on enhanced sugarcane farming since only 16(14.0%) of farmers receive this exercise. Third, most farmers, 103(90.3%) have never been taken for refresher courses aimed at improving their skills in sugarcane farming. Fourth, most farmers and workers, 100(87.7%), are not given adequate chances to take part in research programs aimed at improving sugarcane farming performance.

The study further established that majority of sugarcane farmers 43(43.0%) do not consult or learn from other farmers simply because they have no interest to do so. 24(24.0%) of the remaining group refuse to learn from others out of arrogance while 13(13.0%) of the remainder look at sugarcane project from a selfish perspective and so refuse to consult and be consulted just because they think they will be competed out. Inferiority complex makes 10(10.0%) of farmers to avoid interacting, sharing knowledge and be consulted because they do not believe that they have any useful information on sugarcane farming skills. Based on the findings above, this study recommends capacity building among farmers, capital/financial assistance to farmers, provision of farm inputs and capital to farmers, and availing incentives and other motivation gestures to farmers to boost their participation in sugarcane farming project. The study also recommends that farmers be provided with agricultural trainings, workshops on sugarcane farming.

References

- Adam, E. E. (2001). "Alternative quality improvement practices and organization performance", *Journal of Operations Management*, Vol. 12, pp. 27-44.
- Anyango, J. (2012). Challenges of implementing diversification strategy at Mumias Sugar Company, Kenya. Nairobi: University of Nairobi
- Chindia, Alex (2008). Public relations and communication as strategies for competitive human relations in effective industrial process: a case of Mumias Sugar Company Kenya. Nairobi: Moi University.
- Dindi, A Everlyne (2013). The Managerial Factors Influencing Sugarcane Production by Farmers of Mayoni Division, Mumias Sugar Company in Kenya. Nairobi: Kenyatta University
- Government of Kenya (2007). Kenya Vision 2030: A Globally Competitive and Prosperous Kenya, Nairobi: Government Press.
- Goldratt, E. M., & Cox, J. (2000). The Goal: An Ongoing Improvement Process, (2nded) Aldershot: Gower.
- Gray, L. R. (2003). *Educational Research, Competences for Analysis and Application*. Ohio: Charles. E. Merril.
- Gubta, Das Debrata. Sugarcane development: Technological Interface between Tradition and Modernity (2010). Trinagar Delhi: Daya publishing house
- Jakait, (2012).Strategies adopted by Mumias Company Ltd to gain competitive advantage. Nairobi: Jomo Kenyatta University
- Kingoina (2011). Influence of Performance appraisal on employee performance: A case of Mumias Sugar Company Limited. Nairobi: University of Nairobi.
- Kumar, U., Kumara, V., de Grosboisb, D. & Choisnea, F. (2009). Continuous improvement of performance measurement by TQM PRACTICES PRACTICES adopters Total Quality Management, Vol. 20 No. 6, pp. 603-16.
- Kweyu, William (2013). Factors Influencing Withdrawal of Farmers from Sugarcane Farming, A Case of Mumias District, Kakamega County, Kenya. Nairobi: university of Nairobi.
- Mugenda, O. M & Mugenda, A. G. (1999). Research methodology, Nairobi. Nairobi Press.

- Ngechu, M. (2004).Understanding the research process and methods. An introduction to research methods. Acts Press, Nairobi.
- Omayo, (2012).Perceived factors influencing employee promotion in Mumias Sugar Company Limited. Nairobi: Kenyatta University

Mumias Sugar Company annual report, 2012

Mumias Sugar Company annual Parliamentary report, 2015

- Nairobi University Website: http://www.uonbi.researches on Mumias Sugar Company and sugarcane farming in Kakamega County
- Kenyatta university Website: http://www.kenyatta.university research on sugarcane farming in Kakamega County.
- GAIN website: http://www.globalagriculturalnetwork.search