

The Procurement, Management and Utilization of Labour Before and After the Introduction of the Sugar in Kakamega

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Abstract - This article examines labour as a pillar to both the subsistence sector and commercial sugarcane production in Kakamega County. It considers the mobilization, management and control of labour prior to and after the advent of the sugar economy in Kakamega County. In view of this analysis, the article categorizes labour relations in the two periods as household and non-household labour respectively. Methodologically, primary sources; researcher surveys, sugar company documents, oral interviews and farmers' records were of utility to this study. The study established that more labour was dedicated to sugar cane production to the neglect of the subsistence sector. The study firmly recommends the need to rethink the allocation of the labour resource to the two sectors if subsistence and economic sustainability is to be realized in the county.

Keywords: Procurement, Management, Utilization, Labour and Sugar

Historical Overview of Labour Organization and Relations in Kakamega

Traditionally, the household was the central pillar of agrarian production. Therefore, the household could not afford to treat subsistence production as a secondary consideration prior to sugarcane farming. This implies that the household attended to their basic subsistence needs first and to exchangeable commodities afterwards, indicating the absence of conflict between commercial production and subsistence agriculture, although priority was accorded to the latter. To achieve subsistence food security before the early 1970s, more efforts in terms of labour resources were directed towards food production [1]. The households harnessed the family labour resource in its agrarian ventures before the early 1970s, seldom, if ever, did they hire additional labour [2]. This explains why Kakamega County never developed a rural proletariat dependent entirely on wages prior to the introduction of sugarcane farming in the area.

Although the agrarian system of Kakamega was subsistence oriented, there existed markets within the county that were centres of exchange [3]. Among them were the famous Nambacha, Mumias, Butere, Malava, Lubao, Shianda, Bukura and Malaha markets

among others. Available on the markets were millet, sorghum, simsim, ground nuts, maize in addition to animals and other food crops [4]. This indicates that prior to the introduction of sugarcane farming in Kakamega County; the agrarian system was commercialized in a subsistence sense, specifically founded on the surplus produced from the household labour resource, which guaranteed the area food sustainability.

The early 1970s in Kakamega witnessed the entry of a new cash crop (sugarcane) in the household's agrarian system [5]. This marked the genesis of a dual economy (subsistence and cash) characterized by the competition for the agrarian resources of labour, land, time and capital. Therefore, the household labour was to be apportioned to both the subsistence ethos and sugarcane production. This article seeks to examine the extent to which the labour resource has been appropriated to both sugarcane and food production. Equally, it details how the labour resource was sourced and allocated/appropriated prior to and after the advent of sugarcane farming in Kakamega.

Forms of Labour in Kakamega Prior to 1970

Land in Kakamega County is agriculturally viable; however, the availability of land without labour can't

sufficiently guarantee a successful agrarian productive cycle [6]. Since the agrarian peasant economy of Kakamega was a mixed economy distinguished by commercial sugarcane farming, subsistence production and animal husbandry [7], the labour resource was to be appropriated solicitously for this economy to thrive. This required the people of Kakamega to innovatively and adaptively appropriate the available labour through various forms. Labour in the period before 1970 was either household or non-household. The forms of non-household labour ranged from contracts through casual labour.

The economy of Kakamega in the epoch prior 1970 was mostly subsistence oriented supplemented by craftsmanship and animal husbandry [3]. The form of labour harnessed during this time was predominantly household oriented. This was justified by the fact that the households consumed what they directly produced from their farms through their efforts. Oral information indicates that the entire household before the advent of sugarcane was intrinsically motivated to work on their farms, since they knew this constituted their food [8]. Therefore, the household was both a unit of production as well as consumption. Traditionally, a household comprised of a conjugal unit of a man, his wife and children or a complex unit of a joint-family built around a father and sons, or a set of brothers. Therefore, households were traditionally weaved around kinship, descent and marriage, which informed labour organizations, relations and appropriation prior to the introduction of the sugar economy.

Households were polygamous holding on their extended ties for the purposes of access to land [9] and for the appropriation of labour for there were more household members to work on the household farm. Since agriculture during this time was subsistence, the households were self sustaining in terms of food production courtesy of the abundant availability of labour. This illustrates why the inhabitants of Kakamega were food sufficient prior to the advent of sugarcane farming in the early 1970s. The whole household unit came together under the directions of the household head to cultivate household land and the produce went into the household granary [10].

The significant determinant elements of mobilization of household labour are family size and composition. Oral evidence indicated that a household with many wives could not go hungry as each wife worked on the portion allocated her to produce simsim, millet, sorghum, ground nuts and a variety of

vegetables among others [11]. In addition, the wives and their children worked on the main family farm to produce millet, sweet potatoes, sorghum and maize [12]. This explains the rampant of polygamy in Kakamega prior to sugarcane farming and indicates the consolidated efforts towards subsistence production on the household land were the source of food abundance for the period before 1970.

Children in addition to the wives were an essential source of labour in the epoch before the onset of sugarcane production in Kakamega. Since households were polygamous, women 'competed' to have children as whoever had more children was allocated a bigger land portion to work on. Therefore, children were a forceful labour force that worked on their mother's allocated land portion [13]. The labour of the children thereby guaranteed their mother food sufficiency through surplus production on their land which enabled the mother to feed them without much difficulty, a reason why the subsistence sector was perceived to be a feminine domain. However, the gender composition of the children was of concern to the mothers, oral evidence illustrated that a woman with more sons was respected both in the family and the society for the sons could cultivate household land in a short time. According to Jones Liaka, women competed to have more sons than daughters which explain why patriarchy was upheld among the inhabitants of Kakamega.

Given that households comprised of the extended family: a married couple, their children and the old folk, the dependency ratio was of concern to the households. Moreover, the producer-consumer relationship between the most productive agricultural active, less active and the non-active members was of crucial concern. In addition, incidences of death, illness and absence for those in white collar jobs had a great bearing on labour mobilization, organization and appropriation [14] before the 1970s. Furthermore, upon marriage, sons left to set up their own farming households, while daughters moved to those of their husbands to constitute new energized labour units [15]. This minimized the household labour source. With such a scenario, the household was inherently labour unstable and occasionally required external labour sourcing. This periodical additional labour was season critical even when they amounted only to no more than a few days of freshly mobilized and appropriated labour [16]. This was when the timing and rapid completion of certain agrarian task were crucial ingredients to the household's subsistence production sufficiency.

Non-Household Labour in Kakamega before the Advent of the Sugar Economy

The externally mobilized and appropriated labour is categorized as non-household labour which included work parties, 'squatters' and festive labour groups. The non-household labour was organized by the head of the household or his assistant, along their natal households. This shows how the people of Kakamega were innovative when procuring non-household labour for subsistence production before the onset of the sugar economy in the region. To reciprocate the procured non-household labour, the labourers parted with food for their families after work [17], (the economy of affection). These not only intensify food production efforts, but also consolidated household food base from the payment in kind ('*okhusuma*'), which explains why the households in Kakamega were food sufficient before the introduction of sugarcane farming in the early 1970s.

Apparently, the household was unable to meet all its labour demands from within its ranks [18]. The oral evidence revealed that the households re-organized themselves and formed work parties. Work parties were household arrangements which were based on reciprocal exchange of labour among households either founded on lineage or good neighbourhood [19]. Oral evidence indicated that families allowed their members before the early 1970s to work for their neighbours and relatives. As established this was during the peak season of planting, weeding as well as harvesting especially of the main staple crop, maize. The oral evidence further indicated that those families that were assisted equally came to their aid when need arose. Therefore, subsistence farming before the advent of the sugar economy was reinforced by the economy of affection. This not only cultivated good relationships rapport within the villages, but also increased the subsistence output of the family farms due to the appropriation of work party labour. This justifies why the period under discussion was characterized by food self sufficiency and therefore a food secure Kakamega people.

Besides labour parties, 'squatter' labour was also utilized in Kakamega County prior to the introduction of sugarcane farming. Unlike the colonial squatter ship founded by settlers and the cash crop farming relations [20], the indigenous squatters in Kakamega labour was founded on '*olwikho*' (kinship) and subsistence stability. Since kinship ties were eminently strong in the period under discussion, vulnerable households in terms of food insufficiency

sent some of their members to live with their comparatively food sufficient relatives. Jones Liaka an informant of the study confirmed staying with relatives almost equal in number to her own children; however, she noted that those relatives collectively with her own children provide adequate labour to her household farm. In an economic sense, these relatives could be viewed as 'squatters' since they provided necessary and essential labour to the hosts farm. In addition, Liaka indicated that after labouring on the farm, the 'boys' were responsible for animal husbandry, while the 'girls' collected firewood, fetched water and visited the grinding mill (household chores). This indicates how the labour from 'squatter' relatives not only provided subsistence household production, but also diversified the subsistence source base prior to the 1970s. Resultantly, the period was characterized by subsistence sufficiency and stability and was food secure compared to the period after the 1970s.

Equally, the people of Kakamega in the period under discussion utilized festive labour groups or beer party labour [21]. These were labour co-operations organized on an ad-hoc basis for quick and timely completion of certain demanding and critical agrarian tasks. Food and drink/beer (traditional brew) characterized these labour arrangements [10]. These labour arrangements as established were mostly utilized by comparatively 'wealthy' households, which hosted village youth for a few days to aid in the completion of the timely agricultural tasks of weeding and harvesting especially of the people's main staple maize. Oral evidence revealed how youth of those days enjoyed weeding and harvesting maize for the comparatively wealth homes for there was plenty of feasting (eating and drinking). Therefore, social corporate responsibility in this period enhanced adequate food production before sugarcane farming became deep rooted in the area making the region food secure.

Labour Divisions in Kakamega before the Onset of Sugarcane Production

The economy of Kakamega in the period was a complex matrix of diffuse activities; internal labour differentiation and division were cross cutting in terms of gender and age [22]. In the period under study, the Kakamega economy was premised on subsistence production, animal husbandry, craftsmanship and traditional medicine [23]. This created a complex interaction between the people and their environment. Therefore, the need to specify who did what,

conscious of the gender demographic imbalances in the area, where fifty-two percent of the population were female and forty-eight percent were male [24].

With women constituting fifty-two percent, they performed more agricultural tasks [25]. Further, their biological functions competed for a share of their time. Moreover, given that the people of Kakamega were a patriarchal society, men delegated most of their agricultural duties to women. Oral evidence revealed that the man who is the household head only made sure that the land had been ploughed and the rest of the tasks were left to the woman plus their children.” Since women took care of the family in terms of subsistence needs and children, it was their principal responsibility to work in the fields. With the rampant polygamy in this period, it is evident that men married more women to be assured of labour on their farms which guaranteed household food abundance. In addition to agricultural duties, women engaged in pottery, basketry and traditional medicine. The first two were exchangeable for subsistence products on the many markets within Kakamega [26]. The services of the herbalists were reciprocated with a basketful of food, *endubi*. Saina Nasaka, a known herbalist, a mid wife and weaver of baskets noted that this was an alternative source of food for her family. Therefore, women’s efforts and labour were behind food sufficiency in the period before sugar cane farming.

Notwithstanding the gender division of labour, the period before the 1970s was characterized by age divisions in the labour sector [27]. Oral evidence affirmed that during festive group labour and beer parties, there were only people of a certain average age, which indicates the existence of labour divisions on the basis of age sets and age groups. The researcher established that the groups were formed immediately after initiation and it provided labour to its members in a rotational manner. Young boys looked after animals while ones worked on the maize and sweet potato plantations. This indicates how the various age groups and gender diversity were appropriated to mainstream food production for the households in Kakamega, and affirms why households were food secure prior to sugarcane farming as age diversity was utilized in the labour sector.

Forms of Labour Organization in Kakamega since the introduction Sugarcane production

Labour in the period preceding 1970 was subsistence oriented and was extensively appropriated in household form. On the contrary, the period after 1970 was dominated by commercial sugarcane

production and labour was mostly non-household oriented. However, traces of household forms of labour are evident in this period. Therefore, the introduction of the sugar economy in Kakamega did not only cause competition for land between the subsistence sector and sugarcane production, but equally transformed the labour relations within the region. The introductions of sugarcane production ushered in new forms of labour in the region, among them are contract labour, migrant labour and casual/wage labour. Moreover, the sugar economy catalyzed monetary returns for labour which contravened the economy of affection in the pre-sugar economy period [28].

Sugarcane farming was introduced in Kakamega in the early 1970s by Mumias Sugar Company out growers program [29]. Out grower sugarcane farmers signed contracts with Mumias Sugar Company that bound them to produce sugarcane for the company. According to the contract, the company was to provide inputs while the farmer was to provide land and labour for the sugarcane plantation [30]. Until 2010, Mumias Sugar Company had contracted over forty thousand farmers across the county and their cumulative land amounted to over twenty thousand hectares [24].

The forty thousand contracted farmers were transformed from subsistence farmers and their labour and that of their households were therefore, re-directed towards sugarcane production. This then deprived the subsistence sector of the labour essential and sufficient for it to thrive. Therefore, the introduction of sugarcane in the region caused the subsistence labour reservoir to shrink. This resulted in food inadequacy in the area culminating in food insufficiency after the introduction of sugarcane production in Kakamega. According to Mr. Barasa, a Mumias Sugar Company official the company was out to ensure that its immediate vicinity acquired a nuclear like status in terms of sugarcane production. This engineered the company to contract more out growers in Kakamega and in his opinion, the company reciprocated by employing the people from the area as casual labourers in the company. This then illustrates that the company was determined to suppress subsistence production in Kakamega by ensuring that it deprived the sector of essential labour. This illuminates why Kakamega was susceptible to food shortages hence, hard hit by hunger and starvation after the onset of sugarcane production in the area.

Besides the farmers, Mumias Sugar Company contracted varied categories of workers who offered

services to the farmers on the company's behalf. The contracts include land preparation services, seed cane and fertilizer supply, transport and harvesting services. The company, however, did not pay for these services; it passed on the charges to the farmer as is evident in table.

Table 1: Deductions on farmers' pay slip to pay the contracted services

| Services provided MSC | Charges in Ksh |
|---------------------------|----------------|
| Ploughing | 2,872 |
| 1 st harrowing | 1,627 |
| 2nd harrowing | 1,197 |
| Furrowing | 1,010 |
| Seed cane supply | 10,032 |
| Fertilizer supply | 8,977 |
| Harvesting | 10,247 |
| Total | 35,962 |

Source: MSC farmers payment records=2, F/N=77.

Of these services passed on to farmers, only seed cane and fertilizer burdened the farmer in the subsistence economy prior to sugarcane production, since land preparation and harvesting which constitute fifty-three percent of charges in table were shouldered by relatives and neighbours as evident in the labour analysis before the advent of sugarcane production consolidated in the economy of affection. This not only reduced the burden on the individual farmers, but also gave the neighbours a chance to benefit from the economy of affection. With the introduction of sugarcane production, the economy of affection was slowly phased out and replaced with monetary payment as seen in the cash economy from the above table. With the exorbitant charges that went to the various contractors who were entirely not locals of the county, the farmer's financial gains from the sugarcane declined as the farmers' neighbours were denied a chance for subsistence gains. This made the period between 1970 and 2010 to be characterized by food insufficiency as the labour gains went outside the Kakamega. Therefore, sugar cane production caused food insufficiency in Kakamega as either the money acquired by the contractors went without the county thereby limiting its circulation within the county hence the absence of the money needed to purchase food for the households in the area making the subsistence sector negatively affected by sugarcane production.

Sugarcane harvesting on its part drew labour from within the county. The sugarcane harvesting section Mumias Sugar Harvesters were local youth contracted by Mumias Sugar Company to harvest sugarcane on

the company's behalf. However, the company's terms and conditions left the harvester a poor man prone to hunger and his household was food insufficient if not food insecure as shown by the scenario painted by the table 2.

Table 2: Mumias Sugar Company harvesting rates

| Year | 1990 | 1992 | 1994 | 1998 | 2003 | 2008 | 2010 |
|--------|-------|------|------|------|------|------|------|
| Ksh/ T | 43.35 | 53 | 84 | 129 | 179 | 200 | 235 |

Source: Mumias Sugar Company farmers' payment record.

Notwithstanding the low rates of payments to contracted sugarcane harvesters and which did not guarantee them food security [31], the harvesters as physically observed by the researcher lacked the proper attire for their work. For instance they missed helmets, gloves, gumboots and overalls in addition to protective glasses [26]. Moreover they were exposed to the dangers of weather conditions like rain which affected their health. Besides lack of these important equipments, the company did not provide them with a medical cover, and so they used the subsistence resources for the medication which left them prone to food insecurity. Although table 2 paints a scenario of a chronological increase in the rates of payment to the harvester, the amounts they were paid were insufficient to meet household needs. For instance, in the year 2010, a two kilograms tin of maize cost 120 Kenyan shillings while it cost 10 Kenyan shillings to ground the two kilograms tin of maize into four [26]. This therefore, means that the harvester was left with 70 shillings to cater for the other household needs inclusive of schooling, medication and the general welfare of the household. Given then that food was not a priority for the men who were the sugarcane harvesters it was obvious that income earned escaped the subsistence functions of the household which left the household prone to hunger and starvation.

Like contract labour, 'migrant' labour evolved in Kakamega with the entry of sugarcane production. This was in the form of Mumias Sugar Company harvesters who often left their homes early in the morning and arrived back late in the evenings [26]. As observed, the contract labour was characterized by low wages and poor working conditions which were part of the harvesters' lives. Given that they had also allocated most of their land to sugarcane cultivation, the returns from sugarcane harvesting failed to sustain their households as per the table above. This then indicates that although sugarcane farming enabled the people of Kakamega to earn cash income from

labouring in the harvesting section, the financial returns failed to serve as a supplement to the subsistence sector. The harvesters were always away and so little if any labour was committed to the households' subsistence sector. This resulted in household food insecurity that was caused by the harvesters' absence to work on household subsistence sector. Prior to the introduction of sugarcane farming in the area, the sugarcane harvesters had principally devoted their time and labour to subsistence production that gave their households sufficient food. But with the advent of the sugar economy, the people devoted the household land and labour to sugarcane production both of which threaten their subsistence sufficiency.

Casual/wage labour added to the forms of labour with the coming of sugarcane farming in Kakamega. This mostly characterized the private sugarcane production sector, as well as weeding the contracted sugarcane. Leading private sugarcane farmers, acknowledged hiring youth from time to time when need arose to work on their sugarcane plantations. However, they noted that wage labour is highly utilized during weeding sugarcane and harvesting of private sugarcane [32]. Youth formed groups that hired out their labour to sugarcane farmers; however, the leaders of the youth groups indicated that the returns were inadequate to sustain their family subsistence needs. The researcher found out that each person was paid 120 shillings per day and yet a two kilograms tin of maize costs 120 shillings in the year 2010. With this scenario Oniang'o rightly observed that sugarcane was a cause of hardship to its workers [31]. With regard to harvesting, the harvesters acknowledged being paid per tractor harvested, only after the sugarcane had been transported to the sugar company. The harvesters were paid 1200 shillings per tractor, it was further established that they worked in groups of fours which translates to 300 shillings per person per transported tractor.

Equally, casual labour was utilized during pulling and loading of privately harvested sugarcane. Pulling as observed was the manual transporting of the harvested sugarcane from low/river side to higher and passable grounds for the transporting tractors, while loading is the manual mounting of the harvested sugarcane on the tractors (*okhuakikha*). Omar Lumamo who worked as a casual labourer noted,

“I had no option, because, my family relied/ depended on my labour. In a day I earn 100 shilling for pulling or 150 shillings for loading. Initially I was a maize farmer and a livestock

keeper, but today I only cultivate sugarcane and hire out my labour to the surrounding sugarcane plantation. [33]”

Therefore, Lumamo acknowledges that the introduction of sugarcane production made his family abandon food production for sugarcane cropping which consequently transferred labour to the sugarcane sector. This confirms that sugarcane farming had immensely contributed to food inadequacy in Kakamega.

Labour Mechanization and Co-operation in the Sugar Sector of Kakamega

Commercial sugarcane production in Kakamega proletarianized the household labour, household members formed groups to hire themselves out to established sugarcane farmers. Indeed this was an adaptive way of responding to the commercial sugar economy in the area. However, the households' subsistence sector was ruined as it was deprived of the household labour that made it thrive before the advent of sugarcane production [34]. This culminated in food inadequacy in the households which was only attributed to sugarcane farming in the area, thereby the advocacy for a balance between sugarcane production and the subsistence economy.

Further labour mechanization especially by companies, undermined the labour devoted to subsistence production. Physical observations revealed a full-fledged mechanization of labour in the sugar economy in Kakamega, as tractors did the land preparations [35]. Weeding was plough oriented and loading especially for contracted sugarcane by Mumias Sugar Company was by grabbers [36]. Mumias Sugar Company, for instance, had thirty-seven contracted services for ploughing and nineteen for furrowing and harrowing [37], this made land preparation easy and quick. However, observations revealed tractors plough land under subsistence cultivation. Although this reduced the time spent on land preparation, it stifled the subsistence base, causing food inadequacy in the area. Private farmers on their part hired tractors and ox-plough as they were keen to maximize gains from sugarcane production which peripheralised food production.

Division of Labour in the Sugarcane Economy of Kakamega

In Kakamega, sugarcane farming was perceived to be a male domain as most undertakings in sugarcane production were done by men [26]. This was contrary

to the pre-sugarcane era, which illustrated women doing most of the work in the subsistence sector. In sugarcane production, the household head decided the portion of land to be put under sugarcane production, he further decided whether the sugarcane production venture would be private or contract [38]. Land preparation is entirely a male domain as both the track drivers and the leaders of the oxen teams are men, moreover, sugarcane harvesting, pulling and loading is done by men in addition to transportation as established from surveys and observations. However, planting and weeding involved women and children as they formed groups for weeding sugarcane. Both men and women were seen on the farm engaged in planting the sugarcane. Since women were predominantly active in the subsistence sector the male domination of the sugar economy meant that food production was sidelined, leading to food scarcity in Kakamega.

Besides gender, age was a factor that determined division of labour in the period under study. The groups working in the sugarcane plantations were mostly based on age set and age group systems, and given that the youth worked in the sugarcane plantations the food production sector was left labour inadequate leading to food insufficiency.

The Labour Reservoir for Sugarcane Production in Kakamega

Surveys and observation indicated that more land was allocated to sugarcane than to subsistence production in Kakamega, which required a ready source and steady supply of labour for sugarcane production. As already shown, sugarcane production is labour intensive from the time of land preparation through loading especially for privately produced sugarcane. The factors responsible for the steady supply of labour to the sugarcane plantations in Kakamega are examined. To begin with sugarcane plantations occupied at least seventy percent of the household land leaving thirty percent for the homestead, animal husbandry and the subsistence economy. As observed, this created 'squatters' as homesteads were surrounded by sugarcane plantations, which essentially meant that the household had only a house to retire to after the day's long tedious work in the surrounding sugarcane plantations. The allocation of more land to sugarcane, therefore, minimized the labour devoted towards subsistence production and transformed the household into a labour reserve for the sugar economy. This means that the household had to work in the surrounding sugarcane plantations in order to earn a

living. To attain this, household members formed labour parties or age set groups to sell their labour out to established sugarcane farmers. This saw the households' labour directed towards its subsistence economy diminish, making the household vulnerable to food scarcity.

Low educational levels both within the households and across Kakamega contributed towards labour harnessing for the sugarcane plantations. In most households majority of the members had attained their primary school education, this is explained by the fact that until 2003, education especially in public primary schools was cheaper compared to secondary and tertiary levels. It was established that primary schools had more numbers since the children were still young. Therefore, they couldn't labour in the sugarcane plantations. Equally, from 2003 through 2010, the government's free primary education policy saw more children go to school. Parents, Yusuf acknowledged sending their children to school because of the pressure from the local administrators, particularly the chief. With regard to secondary schooling, the transition from primary to secondary school indicated a declining trend. This situation can first be attributed to the fact secondary school age coincided with boys' circumcision age, and therefore, the formation of age sets. The age sets are then exploited by established sugarcane farmers in terms of providing labour on the sugarcane plantations, making the number of those who proceeded to secondary school to decline. Second, despite the government efforts to subsidize secondary school education, Kakamega has witnessed a high secondary school dropout rate.

Table 3: school dropout statistics in a select school in Kakamega

| Year | No. of F1s | No. of F4s | No. of dropouts |
|-------------|-------------------|-------------------|------------------------|
| 2003 | 30 | 16 | 14 |
| 2004 | 53 | 17 | 36 |
| 2005 | 69 | 20 | 49 |
| 2006 | 74 | 24 | 50 |
| 2007 | 80 | 42 | 38 |
| 2008 | 88 | 53 | 35 |
| 2009 | 110 | 66 | 44 |
| 2010 | 1211 | 74 | 47 |

Source: Lutaso secondary school enrolment records

The trend of the form four graduates is on the increase as per table above. However, the number of graduates is always less than those who were admitted to graduate in the coming four years. Therefore, along the way, some students dropped out school as observed were absorbed to provide labour in the

sugarcane plantations in the area. This was because they cannot secure any formal employment with their elementary acquired education. Although these are the statistics for Lutaso secondary school, they hint to the scenario of what happens in secondary schools across Kakamega.

In addition, early marriages and parents' negative attitudes are responsible for the increasing rate of school dropouts in Kakamega. Oral evidence illustrated that students go to secondary school to mature, in order to marry or get married. Upon marriage, the new family will have no formal source of livelihood and they are therefore forced to work as labourers in the sugarcane plantations to earn a living. The new family ventures into sugarcane labour because the sugarcane was planted on the land they would have otherwise reserved for their own food production. In essence, the presence of sugarcane caused food scarcity as not only land but also labour is redirected towards sugarcane production.

Globally education is acknowledged for improving the quality of labour as an asset[39]. On the contrary the high rate of illiteracy as seen provided casual and waged labour on sugarcane plantations in Kakamega. Since the high levels of illiteracy across the Kakamega caused formal unemployment among the youth whose only readily available option was in the sugarcane production cycle.

Kakamega being a host to three sugar companies; Mumias, West Kenya and Butali the companies employed many of the illiterate youth as casual labourers. Although they gave them a chance to earn some cash income, it deprived the location of the crucial labour force in the subsistence economy, which explains why the Kakamega was food insecure with the introduction of sugarcane production. The rash by the youth to secure wage employment from the companies made them to convert their farms into sugarcane production zones. This was because, they were to be away and so they couldn't attend to subsistence production if they had to engage in food production.

CONCLUSION

The study assessed labour as a key component for agrarian production in Kakamega and how it has been utilized in the periods before and after the introduction of the sugar production. The study broadly categorized labour into two forms; household labour which comprised of family members and non-household labour which was made up of people from without the household. The household labour was

social oriented and founded on the economy of affection which favoured subsistence production prior to sugarcane production. On the contrary, non-household labour, characterized by waged labour, casual labour and contract labour was cash oriented and was in line with the commercial sugar economy that the people of Kakamega were pursuing. The introduction of sugarcane production in Kakamega, therefore, proletarianized labour and redirected it towards the sugar economy away from the subsistence economy. This had adverse impacts on the food security situation in Kakamega.

Furthermore, the paper examined labour division in the agrarian cycle of Kakamega. Gender and age were the basis of labour division both prior to and after the onset of sugarcane production. In the period prior to sugarcane farming women provided most of the agricultural labour which favoured the subsistence sector, this indicates why Kakamega was food secure in this period. In the sugar economy, most of the labour was provided by men and given that during this period most of the land was under sugarcane, women had a limited chance of investing their labour. This explains why the period was food insecure since the women subsistence labour had no space in the commercial sugar economy. Finally, the study examined mechanization and supply of labour to sugarcane production in Kakamega. Although both subsistence and the sugar economy had mechanized their labour, sugar companies, more so Mumias Sugar Company, had continuously marginalized and subordinated food production efforts with the use of tractors which would not be equated to ox-plough in the subsistence sector. Three factors are responsible for labour supply to the sugar economy; the limited land for subsistence production, low education levels across Kakamega and high rates of unemployment among the youth across the region ensured a steady labour supply to the sugarcane plantations within the area. The study finally recommends a balance in the allocation of the labour resource to both the subsistence sector and the sugar economy if food sustainability is to be attained in Kakamega.

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