

EFFECT OF RELOCATION OCCASIONED BY SUGARCANE FARMING ON FOOD PRODUCTION IN KENYA, MIGORI COUNTY

Lennard William Bundeh
bundeh@rongovarsity.ac.ke
Rongo University, Kenya

Abstract: *A popular view on the impacts of relocation on agriculture is that rural movements lead to a decline in agricultural cultivation and food production. Despite the relocation occasioned by sugarcane farming, there is still low production and importation of sugar cane. The objective of the study was therefore to establish the effects of relocation occasioned by sugarcane farming on food production. The study was carried out in Dede Division located in Awendo Sub-County which is one of the Sub-Counties in Migori County. The study adopted descriptive research design. Random sampling technique was used to select the respondents who included small scale farmers. The key informants included chiefs, assistant chiefs, and Sub County Agricultural Officers, KESREF officials at Opapo sugar research station and Sony sugar company head of agriculture. Primary data was collected using questionnaires. Statistics on the size of the land under sugarcane was obtained from the Agriculture Department of Sony Sugar Company. The study revealed that the main cause of relocation in the study area was expansion of Sony nuclear farms as 81.3% of the households were relocated by the factory. Food production per household before the relocation stood at 23.3% of total produce for Maize, Beans had 16% but after relocation, Maize production reduced to 10.6% and Beans to 8.5%. It therefore emerged that land relocation had a negative effect on food production ($r=-.657, p<.05$). The study therefore concluded that; relocation resulted in low food production in the Division. This study therefore recommends that the Government should also put measures in place for the relocated population to be adequately empowered to improve their coping capacity.*

Keywords: *Relocation, Sugar Farming, Food Production*

1. Effects of relocation occasioned by Sugarcane farming on food production

Banks Over the last 30 years, human settlement has taken a complex pattern manifested by encroachment on water catchment areas and forests, relocation and rising occupation of the Arid and Semi-Arid Lands (ASALs). The displacements and other forms of movements such as relocation has led to unplanned informal settlements (slums) in the major urban centers and compounded waste management problems. The drift to the marginal areas has led to degradation of the fragile ASAL ecosystems, increased human-wildlife conflicts as well as land use conflicts between agriculturalists and pastoralists, with the latter two partly attributable to the prolonged absence of a national land use policy which would usher in the land reforms envisioned by Vision 2030 and the Constitution of Kenya 2010 (Kenya, Republic of, 2010).

Rural movements raise both hopes and concerns depending on causes. Income of those relocated sent home in the form of remittances can increase food production, help diversify livelihoods and incomes, and reduce vulnerability associated with poverty. However, human relocation also reallocates household labour associated with productive and reproductive activities in the areas of origin, reduces labour for food production and increases the work burden of men and women, depending on who is left behind (Taylor & Mora 2006). By enlarging the labour force and the pool of consumers, those relocated can boost economic growth in receiving areas, even if urban locations may experience considerable strain on food reserves from the influx of population. Ensuring that displacements or relocation do not harm domestic development is a constant challenge for the areas of origin (Jokisch, 2002). The studies above have demonstrated that relocation can reduce labour force hence increase work burden on those left behind leading to low food production. However, some studies have contrary opinion and argue that income of those relocated can increase food production and help diversify livelihoods and vulnerability. This study however, provide mixed results therefore this study sought to reveal other angles to these phenomena which had not been brought out clearly by the other studies done elsewhere for instance, the effect of such movements to the food reserves and the general food production.

An important component of FAO's work involved determining the potential of displacement and relocation to spur rural development in receiving areas. For that, FAO promotes policies and programmes to enhance living conditions in rural settings, reduce the magnitude of distress of those relocated, and improve the conditions under which internal movements takes place. In doing so, FAO takes into account how such movements relates to rural-urban linkages, changes in rural livelihood strategies and the determinants of these changes, as well as how such movements affects access to productive assets including land. Social assets are also considered, which, in such context, include not only social relations between producers and traders but also other networks. Special attention is also devoted to promote gender equality and access of rural migrant workers to decent rural employment (FAO, 2008).

In Kenya, one other recent study on the effects of sugarcane farming on smallholders in North Bunyala, Kakamega, Egesa (1994) noted that there has been a general decline in food production in the area. The fear of deteriorating food situation in the sugar belt can be linked to the whole issue of the sugar crisis in the country which has, in many instances, led to serious income losses to the sugarcane farmers. In the case of Babukusu of Western Kenya, Nasimiyu (1985) has argued that changes in land tenure system and agricultural innovation led not only to economic ranking of traditional crops and greater work load for the women but also to women's marginalization in controlling the factors of production. Most people in Koru, Kopere and Koguta village were among those who founded and settled as the displaced persons during the establishment of the Muhoroni sugar factory. The settlers were allocated very small farms ranging between 1.5 and 2.5 acres. However, most of them had not been issued with land title deeds, and they were referred as squatters. Most of them cannot practice very intensive farming due to small settlement schemes.

The studies above correlate on how relocation can reduce labour force (Jokisch, 2002), Egesa (2004) posits, how there is decline in food production in the area due to sugarcane farming, Nasimiyu (1985) has argued that changes in land tenure system and agricultural innovation led not only to economic ranking of traditional crops and greater work load for the women and displacement leading to the squatters. Unfortunately all these studies did not reveal how relocation occasioned by sugarcane farming affects food production.

ILO has been dealing with labour and relocation since 1919, and it has pioneered the development of international instruments for the governance of both and protection of migrant workers and relocated people since the 1930s. ILO is now incorporating displacements, relocation and migration concerns into the Decent

Work Country Programs (DWCPs) and national development programmes. ILO helps countries to build capacity to benefit from such movements and protect the rights of displaced workers based on its recently developed multilateral framework on distress movements (ILO, 2006).

One of the key areas of recent literature on the impacts of displacement and relocation on rural livelihoods has focused on the differences between relocated households and inhabitant households in agricultural production in rural origin areas. A popular view on the impacts of relocation on agriculture is that rural movements lead to a decline in agricultural cultivation and food production. Rural households with relocated population were found to have lower agricultural productivity than those without people relocated (Rozelle *et al.*, 1999; Schmook & Radel, 2008). Nevertheless, an opposite view contends that remittances generated from those displaced but have settled elsewhere increase rural household incomes and enable rural households to make agricultural improvements and eventually cope up. Abundant empirical evidence from different regions has shown that the potential negative influences of lost household labour on agricultural production cannot be compensated by increased access to capital and enhanced agricultural investment (Taylor *et al.*, 2003; de Haas, 2006; McCarthy *et al.*, 2006). In addition, a “middle-path” finding from South-Central Ecuador showed that small holder agriculture was constantly threatened by internal relocations, nor were remittances invested in agricultural production and other improvements suffice to compensate. This argument is supported by a recent survey-based study in the southern Ecuadorian Andes, which suggests that relocated households differ from non-displaced households in terms of food production and sending remittances as per the area cultivated in subsistence crop produce. Taken together, these findings illustrate that internal displacements and relocation are complicated and has diverse effects on agricultural production practices (Jokisch, 2002).

A number of studies have examined the influence of internal movements on rural household agricultural technology use and they give opposing perspectives. The pessimistic view argues that labour scarcity resulting from internal movements such as relocation leads to the decay and abandonment of traditional labour-intensive agricultural technologies by the relocated households and prevents adoption of innovative agricultural technologies which may boost food production (Mazambani,1990, Black,1993), By contrast,(Oberai & Bilsborrow, 1984) argue that relocation leads to technological improvement in rural areas through investment of remittances in more modern technologies and the stimulating effects of the new ideas and knowledge brought back by those relocated upon their return. Other studies also found that some relocated households were more likely than non-relocated households to use new farming technologies to improve agricultural productivity (Simelane, 1995; Mendola, 2008). What may actually hold true is that seasonal low production of food by farm households engaged in cash crop farming like sugarcane could be due to migration of male labour (Nyangweso, 2011).

A study carried out in Kilombero sugarcane growing area perhaps sums up the fear of the farming households on the impact of their loss of land which is their only source of food production as a result of relocation (Simelane, 1995). The expansion of sugarcane farming by Kilombero Sugarcane Company Limited (KSCL), including that which involves out growers schemes, is not a simple task. Any plan that involves the eviction or relocation of the local community is subject to all sorts of contestation over land ownership at the local and national levels. For instance, after securing KSCL in 1998, Illovo Sugar Company wanted to get full control of all estate land as indicated on the documents it received from the Sugar Board of Tanzania (SBT). However, since the previous management of the company did not cultivate all land, the nearby communities occupied uncultivated land, and it became difficult to remove all of them because the central government was reluctant to compensate them. As a result the company asked for extra land for the estate and the factory, and the SBT

offered its previously surveyed land in Ruipa which is several kilometers away from the current KSCL location. District officials supported this proposal, but the communities who occupied the land since it was earmarked for sugarcane development back in the 1970s refused to leave uncompensated fully citing loss of their food farmlands. A long lasting dispute ensued which has not been resolved to date (Sulle, 2016).

There is a general consensus that when those relocated remit something back, it reduces rural poverty and contributes to the improvement of household living standards but it does not improve food production (Taylor & Mora, 2006; Airola, 2007; Schmook & Radel, 2008; Wouterse & Taylor, 2008). In terms of consumption patterns, several household survey-based studies showed that relocated households with remittances tended to spend more than non-relocated households on food and productive activities (Zarate-Hoyos, 2004; Adams, 2006; Taylor & Mora, 2006; Airola, 2007). This perhaps confirms that such households are unable to produce food of their own. A subset of the research on the impacts of relocation on household income and consumption has also assessed the differences between relocated and non-relocated households in asset accumulation (Adams, 1998; Entwisle & Tong, 2005; Ford *et al.*, 2007; Garip, 2007). Overall, these studies suggest the effects of internal movement on household assets differ across origin regions (Hua, 2010) the above studies have provided vital information of effects of relocation on household living standards. These studies have also taken into consideration that those relocated have left some of their relatives behind to whom remittances are made hence they concentrate on comparison of income, food production and consumption level of those relocated and the non-relocated. These studies, however, failed to address issues which are core to the very survival of all human races, food production. This study, therefore, sought to conduct an in-depth assessment of effects of relocation of population specifically assessment of their capacity to produce food from their farms.

There is always need to empirically understand how wealth is redistributed among farming communities when there is a disturbance to the social equilibrium by way of land acquisition for large scale farming or location of factories (Nmadu *et al.*, 2008). It is also worth noting that most farmers in the affected areas have been relocated without adequate compensation, land has been leased well below value, those relocated end up encroaching on parklands and the new ventures have created fewer jobs (MacFarquhar, 2010). The foregoing literature reviews strongly suggest that the individual households' welfare is least taken into consideration when relocation orders are issued. Chu *et al.* (2015) during a study of large scale land acquisitions in Zambia also noted that in the name of development, affected communities are often resettled, with little attention given to the impacts on their livelihoods and future well being. It is with these in mind that this researcher sought to establish how the relocation of farmers in Dede Division influenced their food production activities.

Most of the literature reviewed involves countries having extensive tracts of land; hence mostly the farms are large multinationals some which involve mechanization. In Kenya, most studies done are on economic impact of sugarcane. Data on the impact of the increased involvement of the small holder sugarcane farmers in the country specifically Southern Nyanza sugarcane zone, where the study area is, has been lacking. This study sought to establish the effects of movements resulting from relocation of population to pave way for the nuclear farms, whether they are able or not to produce similar quantities of food as was the case before relocation.

2. Methodology

The study was carried out in Dede Division located in Awendo Sub-County which is one of the Sub-Counties in Migori County. The study adopted descriptive research design. According to the Kenya national bureau of statistics (2009), Dede Division had a total population of 45,152 having 9,503 households from which Krejcie & Morgan's (1970) table was used to determine the sample size of 333 households. Random sampling

technique was used to select the respondents who included small scale farmers. The key informants included chiefs, assistant chiefs, and Sub County Agricultural Officers, KESREF officials at Opapo sugar research station and Sony sugar company head of agriculture. Primary data was collected using household questionnaires to 370 respondents from Dede Division. Statistics on the size of the land under sugarcane was obtained from the Agriculture Department of Sony Sugar Company. Secondary data was collected from KESREF offices at Opapo, Sub County Agricultural Officers at Rongo and Awendo and Sony Sugar Company at Awendo. Data was analyzed using descriptive statistics focusing on frequency distributions and percentages. Cross tabulation were used to explore the relationship between key variables in the research questions of this study and the significance of the relationship suggested by the cross tabulation tables were confirmed by use of the chi-square statistics.

3. Findings And Discussion

The third objective of this study was to establish the effects of relocation occasioned by sugarcane farming on food production in Dede Division, Migori County. To achieve this objective, the respondents were asked to state the causes of movement in the study area, food production levels before and after relocation and how the relocation has impacted on food availability. The data collected from the field was cross tabulated and the analyzed results presented. To find out the main cause of movement in the study area, the researcher sought to find out the causes of movement in the study area. The results were analyzed and presented in Table 1.

Table 1: Causes of movement in the study area

Cause of movement	Frequency	Percentage
Has leased all his land	03	2.4
Has sold his land	05	4.1
Relocated by Sony Sugar company	100	81.3
Other reasons	15	12.2
Totals	123	100

Source: Field data, 2014

Those households who relocated because they had leased all their land were 2.4%, those who had sold their land were 4.1% and the majority 81.3% moved as a result of relocation by Sony sugar company, 12.2% households also moved due to reasons other than those covered by this research. The internal movements that has occurred within the study area is attributable to a variety of factors such as leasing and selling of land, the major cause is relocation by Sony Sugar at the inception of the project. Though the total number of households who were relocated by Sony looks small, it is not negligible since those who moved were part of a larger family since Luos in most parts of Nyanza live in large families known as clans. When a household within the clan moves away, the whole clan is affected in one way or the other due to close family affiliations (Obonyo et al., 2016).

Large scale acquisition of land for commercial agriculture and mining are leading to loss of land and are undermining the livelihoods of affected rural communities. These land based investments have been characterized by a lack of consultation with and participation by affected communities. Cases of unjust displacement, where households are forced off their land without their consent and without compensation, have been widely reported. There are however instances where communities have resisted relocation (Chu et al., 2015). In Awendo Sub County, some communities were relocated, and most of the households interviewed affirmed that it is due to the expansion of the nuclear sugar farm in the area that they were relocated.

Most of those who were relocated settled within the Division, few moved elsewhere, most of those who moved elsewhere were those who moved due to reasons other than relocation by Sony Sugar. Their capacity to produce food has reduced. Interviews with individual African sugarcane growers in 2013-14 among small scale farmers in Nkomazi, South Africa suggests that over the past 50 years the industry has transformed livelihoods, first by peoples' displacement and resettlement and reducing them to small scale agriculture. The evictions and resettlement of people into trust lands from 1954 created conditions typical of Bantustans in South Africa: overcrowded villages with limited grazing and unproductive land. For many households the remnants of subsistence agriculture were destroyed or reduced to little more than the maintenance of a kitchen garden (James & Woodhouse, 2016). The scenario depicted above is almost similar to a case in Zambia where during the construction of the Kariba Dam in the 1950s relocation of nearly 57,000 people, mainly Tonga speaking people occurred. Sixty years later, these communities continue to struggle for food production and livelihoods. Yet in recent years investments in the mining, tourism and agricultural sectors and also increasingly industrial developments have led to relocation of communities. These developments, accompanied by increasing population and urbanization have resulted in mounting pressure on and competition in demand for land. Poor people in rural, urban and peri-urban areas are most susceptible to displacement due to having unrecognized land rights (Cliggett, 2005).

In order to get a clear picture of the effects of relocation on the food produced in the study area, the researcher compared food production levels before and after the relocation of people by Sony Sugar Company in the Dede Division. The respondents were asked to state the food crops which were grown before and after relocation and the yields. The analyzed results are presented in Table 2.

Table 2: Food production levels before and after relocation in tons per acre

Crop	No of tons before relocation	%	No of tons after relocation	%
Maize	1.98	23.3	.90	10.6
Beans	1.35	16	.72	8.5
Cassava	.99	11.7	.54	6.4
Millet	.81	9.6	.36	4.3
Potatoes	.54	6.4	.27	3.2
Totals	5.67	67	2.79	33

Source: Field data, 2014

Before relocation, the households sampled produced 1.98 tons of maize per acre on their farms which was 23.3% of the total tonnage of food crops produced in the farm in one season, 1.35 tons of beans (16%), .99 tons of cassava (11.7%), .81 tons of millets (9.6%) and .54 tons (6.4%) of sweet potatoes was also produced. However, after being relocated, their produce nosedived to .90 tons of maize which now represents (10.6%) of the total tonnage produced, .72 tons of beans (8.5%), .54 tons of cassava (6.4%), .36 tons of millets (4.3%) and sweet potatoes reduced to .27 tons (3.2%) per acre per harvest season.

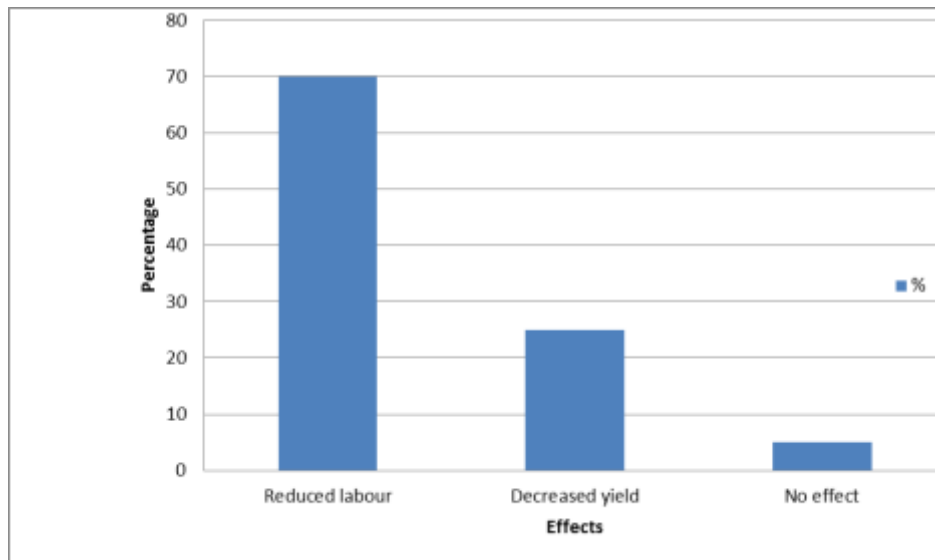
The study revealed that there is a connection between the quantity of crop produced before and after the relocation. As confirmed by Alcamo et al. (2003) the result indicated the level of decrease in quantity of crop production, which is a result of the number of hours farmers now spend on their farms and also the inadequate labour supply that is less than what was there before the relocation. All these suggests that majority of the farmers in the area no longer harvest what they did as before the relocation. The average yield is low when compared to the world average of 4.3 tons per acre (FAO, 2009). Studies carried out in non sugarcane growing

areas revealed similar results. Though reasons for relocation were totally different, the end results are similar, especially reduced food production.

In a food survey carried out in BarkinLadi Local Government area of Plateau State in Nigeria where people had relocated due to deadly gun attacks by militant Boko Haram gunmen, the findings revealed that there is a change in the quantity of food produced as the number of farmers that harvested over 10 bags before the relocation was 98% but this dropped to 30.5% after relocation occasioned by gun attacks (Ayuba, 2016). Though Ayuba (2016) cites a completely different cause of the movement, the end result is quite clear, reduction in food crop production and it is here that similarities are identified, however, circumstances under which the relocation in BarkinLadi occurred and the prevailing circumstances in Dede Division are quite different since the case in Dede Division is occasioned by sugar cane farming. Similar observations were also made by an assessment sponsored by the World Bank which estimated that every year since 1990; roughly 10 million people worldwide have been relocated involuntarily by infrastructural development projects (Alcamo et al., 2003). In India alone during the last 50 years, an estimated 25 million have been relocated due to development projects. In this same period in China, development projects caused more than 40 million people including 13.6 million to be relocated in the 1990's (Otunnu, 2010).

During the key informant interviews, Sony sugar officials stated that all those individuals whose land was incorporated into the nuclear farms were compensated in order to vacate. 100 people were affected. That the households were compensated is not in doubt, it is the adequacy of the compensation that is debatable as the amount of money given could not buy an equal amount of land as the one they had vacated. There are several similarities even in other countries for example when the effects of acquisition of farmlands on the socio-economic structure and income distribution among farmers in Edu Local Government area of Kwara State, Nigeria was studied, the results indicated that the farmers' average age was 43 years. It was also noted that the amount of compensation paid to the farmers was far less than what the farmers expected and this contributed to rising income inequality among them (Nmadu et al., 2008). There is also the other bit of lack of guidance on investment opportunities for the evictees. Coupled with the current scenario where people lease out their land parcels to private investors to develop sugarcane farms and since the land parcels are small they are forced to relocate to nearby towns and cut off their links with their relatives (Immink & Alarcon, 1991).

To find out how relocation of population resulting from sugarcane farming has impacted on farm food availability, the respondents were asked whether it has reduced farm labour employment or decreased the farm yields from the household farms. The results were analyzed and presented in Figure 1 next page.



Source: Field data 2014

Figure 1: The effects of relocation on farm food production

Of all the households who were relocated, 70% of them experienced reduced labour in their farms while 25% of them reported reduced yields in their farms and only 5% indicated that there was no effect at all. In addition to these findings, further analysis on the relationship between relocation of people and food production was presented as shown in Table 3. Scores on relocation were correlated with those on food production based on the views from the resident respondents.

Table 3: Correlation between relocation and food production

		Relocation	Food Production
Relocation	Pearson Correlation	1	-.657**
	Sig. (2-tailed)		.000
	N	370	370
Food Production	Pearson Correlation	-.657**	1
	Sig. (2-tailed)	.000	
	N	370	370

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 presents the findings on the relationship between relocation of population and food production. From the findings, Pearson Product moment correlation indicated a moderate negative significant correlation between relocation of population and food production ($r = -.657$, $p = .000$). This implies that food production is associated with relocation of people such that the more the people are relocated due to sugar cane farming, the less the food is produced.

Simple linear regression model was thus carried out in order to establish the effect of relocation on food production. This was carried out since the two variables were negatively correlated and therefore to the core of the objective, a conclusion could be reached after regressing food production on relocation of population to

finding how relocation contributed to food production using standardized coefficients. The summary findings on the percentage change in food production due to relocation are presented in table 4 as shown.

Table 4: Summary model on effect of relocation on food production

Model	R	Adjusted R Square	Std. Error of Estimate	Change in R Square	F Change	df1	df2	Sig. Change	F
1	.657 ^a	.432	.430	.79556	.432	275.279	1	362	.000

a. Predictors: (Constant), relocation

Table 4 presents the findings on the overall variance in food production accounted for by relocation of population. First, the findings shows that there is a correlation between relocation and food production (R=.657), a value which when squared, yielded an R square value of 0.432. This means that land relocation accounted for 43.2% change in food production (R square=.432, p=.000). These findings further implies that out of the 100% expected change in food production due to various variables relevant, if these variables are not included in the model, relocation accounted for 43.2%. The remaining percentage could be accounted for by other variables not specified in the model. Furthermore, the model indicates that the results are significant, (F(1,362)=275.279, p=.000). The F value is large implying that it was not by chance but rather as a result of fitting the model. This also implies that the relationship between relocation and food production was not equal to zero, but the choice of the variable qualified significant results. It can thus be deduced that relocation accounted for a significant percentage change in food production.

Results on the effect or contribution of relocation on food production are also presented as shown in table 5 that follows.

Table 5: Model coefficient effect of relocation on food production

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	B			Beta		
1	(Constant)	.971	.134		7.225	.000
	mean consumer attitude	-.624	.038	-.657	-16.592	.000

a. Dependent Variable: relocation

The model in table 5 shows that population relocation uniquely contributed to food production ($\beta=.657$, $p=.000$) using standardized coefficients. This implies that relocation is negatively associated with food production and contributes to low food production. The findings are also significant as indicated by $t(379)=16.592$ at a p value less than 0.05, which is $p=.000$. This further implies that the results are not by chance but purely as a result of fitting the model. Examining the unstandardized coefficients, the findings brought out clearly shows that in the event that relocation of people was not included in the model, there was a constant of 0.971 that shows that there would still be some change or reduction in food production.

The above analysis is echoed by observations made during in-depth interviews where an assistant chief from North Sakwa location opined that;

Though not many households have been affected by relocation, a number of the ones that have been affected have moved into nearby towns and taken up trading and artisanship, those opting for the countryside purchase smaller unproductive parcels and experience reduced employment in the farms which has led to low food production. Those left to work in cash crop farms are few and unable to manage meaningful food production. In most cases the age group that is prone to relocation is the younger generation. The old generation rarely sells out their land.

The relocation of people particularly the youth moving away from their ancestral land to settle elsewhere, may affect the households negatively especially their economic coping capacities as observed by Omwoyo & Kisovi (2009) that during their adult life a man should be able to contribute positively to the environment and food production of their area by seeking ways of diversifying their incomes within their areas of settlement. This view is stressed by Ngugi et al., (2013) when he states that the area in which a person is born or lives can determine the level of access to opportunities like education and employment because income and education can influence settlement patterns, food production and also livelihood diversification which can be an effective coping strategy for relocated people. The study area has had a number of its inhabitants settling in nearby towns and markets hence face challenges common in such areas. It has also been postulated that the household's vulnerability to low food production and dietary inadequacy may be increased, particularly when household food outsourcing does not change much even in response to swelling of population in towns regardless of whether there is higher household income (Nyamboga et al., 2014).

4. Summary Of Findings

To establish the effects of relocation occasioned by sugarcane farming on food production in Dede Division, Migori County, data collected during the research showed that out of the 123 people who had moved away from their original lands, 81.3% were relocated by Sony Sugar Company. Before they were relocated, the respondents used to produce 1.98 tons of maize which accounts for 23.3% of the total produce, 1.35 tons of beans (16%), cassava.99 tons (11.7%), millet.81 tons (9.6%) and .54 tons of sweet potatoes (6.4%) on their farms. However, after relocation, their farming fortunes have dwindled and currently they can only manage to produce .90 tons of maize which now represents 10.6% of the total food produce, .72 tons of beans (8.5%),cassava .54 tons representing 6.4%, millets.36 tons (4.3%) and .27 tons of sweet potatoes (3.2%) on their farms. Most households perceived relocation in a negative way. They argued that relocation reduced farm employment in the household establishment. They also viewed relocation negatively since it led to low food production in the area (Figure 3). This showed that as more household members are relocated, the ability and desire to grow food crops reduce considerably. Therefore population relocation resulting from sugarcane farming was found mainly to be detrimental to the household food production within the area under study.

5. Conclusions

Relocation in the area was occasioned by the arrival of Sony Sugar factory and the inevitable expansion of the nuclear sugarcane farms, in most instances, the relocations led to reduction of farm employment and reduced farm yields, especially when part of a household in a large clan were relocated leaving behind fewer members. Apart from settling in clusters, due to the smaller alternative parcels, some have settled in the small markets resulting into their expansion. The study therefore further concluded that apart from development of towns, the relocation of household members has led to a reduction in their capacity to produce their own food from their farms.

6. Recommendations

Both the National Government and the County Governments to institute measures to ensure that small and medium enterprises are encouraged by setting aside land in small towns and markets to enable establishment of Jua Kali sheds for village artisans. The Markets may promote small traders like hawkers to enable those relocated and without adequate land for farming make a living.

7. Suggestion For Further Studies

Development induced relocations by Sony sugar factory led to more settlement of people in nearby towns. There is need for a socio-economic study on urbanization resulting from displacement by sugar farms.

8. References

- Adams, R. (2006). *Remittances, poverty and investment in Guatemala*. In Ozden, C. and Schiff, M. (eds.) *International migration, Remittances, and the Brain Drain*. Washington C: World Bank, Pp. 53-80.
- Black, R. (1993). *Migration, return, and agricultural development in the Serra Do Alvao, Northern Portugal*. *Lisbon: Economic development and cultural change*, 41(3), pp.563-585.
- Entwisle, B., & Tong, Y. (2005). *The impact of migration and remittances on households in rural Thailand*. In: *Proceedings of the annual meeting of population association of America, Philadelphia, March, 31- April 2*.
- Jokisch, B., & Pribisky, J. (2002). *The panic to leave: Geographic Dimensions of Recent Ecuadorian Emigration*. *International Migration*, 40(3), pp. 75 – 101.
- MacFarquhar, N. (2010, December, 21st). *African farmers displaced as investors move in*. *The New York Times*. <http://www.nytimes.com>
- Mazambani, D. (1990). *Labour migration impacts on communal land Agriculture, Case studies from Monicaland Province, Zimbabwe*. Thesis (PhD), Clark University, Massachusetts.
- Nyangweso, G.O. (2011). *An Investigation of the Effects of Land Subdivisions on Sugarcane Production: A Case of Land Holdings within Sony Sugar Company Zone, Kenya*. A research Project submitted to the Graduate School in Partial Fulfillment for the Requirements of The Masters Degree in Business Administration of Kisii University College. Egerton University.
- Oberai, A.S., & Bilsborrow, E. (1984). *Theoretical perspectives on migration: Migrations surveys in low income Countries: Guidelines for survey and questionnaire design*. Croom Helm, London and Dydney, pp.14-30.
- Rozelle, S., & Huang, J. (1999). *Supply, Demand and trade of Agricultural Commodities in China marketing opportunities; World Trade Competition*. United States Department of Agriculture. *Agricultural outlook forum*.
- Simelane, H.S. (1995). *Labour migration and rural transformation in post-colonial Swaziland*. *Journal of contemporary African studies* 13(2), pp. 207-226.
- Sulle, E. (2017). *Social Differentiation and the Politics of Land: Sugarcane Outgrowing in Kilombero, Tanzania*. *A Journal of Southern African Studies*. <http://dx.doi.org/10.1080/03057070.2016.1215171>

Taylor, J., Rozelle, S., & De Brauw, A. (2003). Migration and Incomes in source communities: a new economics of migrations perspective from China. Economic Development and cultural change 52(1), pp. 75-101.

Taylor, J., & Mora, J. (2006). Does migration shape expenditures in rural households? World Bank Policy research working paper 3842.