

Commercialization of Green Maize: Motivations and Consequences in Nandi South, Nandi County Kenya

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Abstract- Maize growing and its use as human food and animal fodder have become popular globally. In most parts of continental Africa and Kenya in particular green maize commercialization and consumption is a common delicacy among the urbanite population as well as those in rural areas. The remains are used for livestock feeds and firewood for some households. This paper strives to unearth the factors which influence the commercialization of green maize in Nandi South in Nandi county parts of Kenya. In attempt to arrive at a logical answer to the problem the study was led by the following objectives: an examination of the factors influencing the commercialization of green maize, and to find out the consequences of commercialization of green maize. The authors adopted a qualitative methodology using questionnaires, observation and interviews as data collection instruments. A descriptive statistical analysis was used. The scope of the study is Nandi south of Nandi County. The factors influencing the commercialization of green maize are; Government Policies which are at its best on paper but its implementation is wanting. The consequences are immense on part of the farmers as; Exploitation, and Anti-social behavior Family Disputes which result in Food Crisis in the entire country. The authors conclude that the government should implement its policies on food to ensure that it is self-sufficient.

Index Terms- commercialization, green maize, government policy

I. BACKGROUND OF THE STUDY

Most historians believe maize was domesticated in the Tehuacan Valley of Mexico. Recent research modified this view somewhat; scholars now indicate the adjacent Balsas River Valley of south-central Mexico as the center of maize domestication. The Olmec and Mayans cultivated maize in numerous varieties throughout Mesoamerica, cooked, ground or processed through nixtamalization. Beginning about 2500 BC, the crop spread through much of the Americas. The region developed a trade network based on surplus and varieties of maize crops (Bruce and Hugh, 1990).

After European contact with America in the late 15th and early 16th centuries, explorers and traders carried back maize to Europe and introduced it to other countries. Maize spread to the rest of the world because of its ability to grow in diverse climates. The Sugar-rich varieties called sweet corn are usually grown for human consumption as kernels, while field corn varieties are used for animal feed. The various corn-based human food uses (including grinding into cornmeal or *masa*, pressing into corn oil,

and fermentation and distillation into alcoholic beverages like bourbon whiskey) and as chemical feedstock (Head, 2016).

Matsuoka *et al.* (2000), has demonstrated that, rather than the multiple independent domestications model; all maize arose from a single domestication in southern Mexico about 9,000 years ago. The study also demonstrated that the oldest surviving maize types are those of the Mexican highlands. Later, maize spread from this region over the Americas along two major paths. This is consistent with a model based on the archaeological record suggesting that maize diversified in the highlands of Mexico before spreading to the lowlands. Before they were domesticated, maize plants only grew up to 25 millimetres (1 in) long corn cobs, and only one per plant. Many centuries of artificial selection by the indigenous people of the Americas resulted in the development of maize plants capable of growing several cobs per plant that were usually several centimetres/inches long each (Matsuoka *et al.*, 2000).

In Asia, this crop has rapidly become a staple food; this is in addition to the many uses in both the dairy and industrial sector. It has also been used as an alternative source of energy in countries like the United States of America, who consider hydro energy as a more expensive source.

Maize is central to Mexican food. Virtually every dish in Mexican cuisine uses maize. In the form of grain or cornmeal, maize is the main ingredient of *tortillas*, *tamales*, *pozole*, *atole* and all the dishes based on them, like *tacos*, *quesadillas*, *chilaquiles*, *enchiladas*, *tostadas* and many more. In Mexico even a fungus of maize, known as *huitlacoche* is considered a delicacy.

Introduced into Africa by the Portuguese in the 16th century, maize has become Africa's most important staple food crop. Maize meal is made into a thick porridge in many cultures: from the *polenta* of Italy, the *angu* of Brazil, the *mămăligă* of Romania, to cornmeal mush in the US (and hominygrits in the South) or the food called *mealie pap* in South Africa and *sadza*, *nshima* and *ugali* in other parts of Africa. Maize meal is also used as a replacement for wheat flour, to make cornbread and other baked products. Masa (cornmeal treated with limewater) is the main ingredient for tortillas, atole and many other dishes of Central American food.

In Kenya, the maize crop is a notable staple food for most of its population. The maize cereals attained are harvested and put to different uses, such as posho flour for making *ugali*. Currently, green maize is becoming popular with the urbanite populations who use the maize to make *githeri* local meal of mixed beans and maize.

In many households in Kenya, dried maize cobs serve as alternative source of energy used for cooking. The maize stoppers are used to make silage for the dairy sector. McCann (2000)

pointed out that, by 1920s, maize cereals had become a dominant cereal crop to both African & European farmers in Kenya.

In the near past, there has been an increase in commercialization of green maize. Many farmers sell their crop to traders who transport them in large quantities to various urban centers Kenya. Others have been selling their green maize to dairy farmers as fodder. These practices may have an effect on the availability of dried corn for *ugali* and hence may impact on food security of the Nation. Ngethe and Owino, (1990: 34) asserts that, "Policies on food security and self-sufficiency spans all the major policies of increasing agricultural productivity, such as marketing and pricing, research and extension, infrastructure, credit and major input policies". Evidence suggests that the commercialization of green maize affects food security and exacerbates household poverty.

This study therefore sought to establish the factors that make farmers to commercialize green maize and its consequences in Kenya and in Nandi South in particular.

1.1 Statement of the Problem

Since the late 1980's, green maize has become a new cash crop for many farmers who are now diversifying their crop production due to the new market prices. According to the Ministry of Planning's report of 1989, there is shortage of maize due to the inability of farmers to produce enough maize to satisfy the supply and demand of the growing need of urban population. According to Adebowale (2004), the demand for maize exceeds the supply. Besides being staple food for most households in Kenya it is also used manufacturing livestock feeds, industrial baking and brewing industries.

Maize production is however dominated by the small scale farmers who use traditional methods which do not meet the demand of the society. They use simple, low input technology, resulting in low land and labour productivity, (F.A.O, 1999). This problem is compounded by the absence of tolerant local maize varieties to rust diseases, (Iken et al, 2004). Pests and diseases are important natural factors that limit the production of maize in several cases; pests can account for 100% loss of the green maize in certain case (Sight *et al.*, 1997). Despite the challenges facing the production of green maize, farmers in Nandi South have embraced this type of agriculture. This raises questions why farmers engage in commercialization of green maize? And What are consequences of green maize commercialization? These questions have played a role to this industry.

1.2 Significance of the Study

The study is importance because it contributes to knowledge to farmers who par take the commercialization of green maize, the reasons as to why farmers engage in this business and the consequences arising out of this enterprise. The government may use the findings and recommendation in policy making to achieve food security.

1.3 Justification

The purpose of the study was to establish the real causes of green maize commercialization and its long term effects on the country's food security. The rationale behind this study is to provide a functioning system, where information is properly shared. The data attained during the study will be useful and

relevant to Kenya in enhancing food security policies. The study highlights the increasing concern on the consequences of commercialization of green maize. Furthermore, the results are helpful to the Ministry of Agriculture and other policy makers in understanding the reasons behind farmers' decision to sell green maize rather than wait for it to dry. The study further adds information to the existing literature on food security and the green maize commercialization. Food insecurity in Nandi South District of Nandi County, the bordering counties and Kenya in general, has been on the rise and conversely a threat to all aspects of National Food Security. On the other hand, green maize harvesting and commercialization offers an alternative to the farmer; though short lived. The information from the study will subsequently be valuable to other scholars and researchers, as point of reference.

1.4 Limitations of the Study

The researcher was constrained by vastness of the area covered and its terrain. To overcome this vastness and its terrain the researcher used several means trucks transporting maize, motorbikes, bicycles, tractors and walking. There was also suspicion and negative attitude by both the farmers and the middle men towards the research fearing the study may affect their businesses. To overcome this, the researcher had to participate in some of the activities including harvesting and loading with them to cultivate trust.

From the study it was not possible to get a clear picture and the true value paid in the entire transaction. There are incidences of business men colluding with the brokers by reducing measurement of standardized maize fields to meet their interests. There are no clear policies linking to the commercialization of green maize. The intended profit was not realized hence losses incurred.

1.5 Research methodology

The study adopted a descriptive research design. According to Kothari (1990), descriptive research studies are concerned with the description of characteristics of an individual or a group of people. Similarly, Schinler and Coopers (2004) posit that descriptive research studies are concerned with the characteristics of the said individual or group. In this study, a description of issues related to the commercialization of green maize is described. Mugenda (2003), notes that descriptive design is unique as it involves and offers an in-depth study of a social unit. From descriptive survey, the research design in the study was able to offer information with more emphasis on variables related to the green maize business in the design. The aim of the study was to assess the factors influencing the green maize commercialization. Secondly, it investigated the impact and consequences of green maize harvesting and commercialization.

1.6 Scope of the study

The study was carried out in Kobujoi, Kibwareng, Kaptumo and Kaboi in locations of Nandi South district in Nandi County. The area of study has a population of about 33,000, as per the 2009 census (KNBS, 2010). The District has a high altitude and is characterized by favorable rainfall and temperature which are suitable for crop farming and Livestock keeping. Nandi County lies 3 degrees longitude and 37.5 Latitude. The county covers an approximate 3525km² with different topographical features. The

Equator line passes at the extreme south of the county. To the west is the famous Nandi Escarpment. The central part of the county is the *Kingwal* swamp known for the rare Statunga animals. Commercialization of the green Maize thrives in the district. Maize covers an area of about 1273.2sqkm. Another 1000 sq km is under Tea, Maize, Beans, Vegetables and grassland.

II. 2.1 FACTORS INFLUENCING COMMERCIALIZATION OF GREEN MAIZE

The main factor influencing farmers to engage in commercialization of green maize in Nandi County in particular and Kenya in general is government policy which is mostly on paper but its implementation is wanting.

2.1.1 Government Policy

The study showed that majority of the respondents agreed with the government subsidy on fertilizer, this was a relief to the farmer. This pointed out the commitment by the government in encouraging the farmer towards building a food secure country. The green maize sale therefore would pose a threat to the community. In the end, production would be high and create an enabling environment for the government to assist the farmer in purchasing harvested cereals by N.C.P.B.

Table 1: Response to government ban of green maize sale

Responses	Male	%	Female	%
Strongly agree	51	59	51	69
Agree	16	18	-	-
Not sure	11	13	12	16
Disagree	-	-	9	12
Strongly disagree	9	10	2	3
Total	87	100	74	100

The study showed that 69% among female farmers preferred the ban. However, 12 % of them disagreed with the statement. But the study found another 16 % who were not sure whether a ban would affect food security or not. The study indicated that profit realized has been attributed to increase in green maize sale. This goes in hand with one of the objectives of the study which was intended to establish the root cause of commercialization of green

maize among the farmers. The male respondents of about 10% strongly disagreed with the ban as a remedy. The basis of this argument was in line with the market preferences since the sale of C.G.M in the year 2007, which were only 9 farmers per location whereas this year the number increased to 13 farmers.

According to respondents, it is assumed that those entrusted with responsibility of ensuring food sufficiency have turned to food importation choosing to ignore food production policy, which is against the farmer’s wishes. Some Kenyan maize farmers, for more than 10 years, have been wading in abject poverty. Mr. Ruto, then Minister for Agriculture, under the Kibaki government, was given autonomy to exercise his ministerial powers and policy, to deliver subsidized fertilizer. This was a relief to the farmers. The farmers’ happiness within this area was short lived. The reason is that the government failed to buy dry maize from them. However by allowing the importation of maize by millers and businessmen, government officials ensured that the farmers did not enjoy increased earnings from their crop.

The failure to buy dry maize from farmers gave a huge impetus for to the commercialization of green maize in the next season. Furthermore farmers were no longer happy with the price given by NCPB. The pride of the Kenyan farmer was slowly killed. And the result is the price of a two kg of maize cereals selling for Ksh. 160. It is therefore a fact that green maize sale can no longer stop the sky rocketing price of dry maize. This was only viewed as a policy matter and is best handled by the government policy, (Ministry of Agriculture 2012).

The Nandi south farmers were in yet another awkward situation from the report of the unpredictable weather conditions in 2013. They were there to see yet another crop failure. Secondly, the expenses incurred during the whole process (cultivating, seed and fertilizer costs, planting, weeding and harvesting, shelling and transporting the cereals to the N.C.P.B) could not be recouped in the coming year. However, they claimed that the commercialization of green maize had direct benefits to the farmer, unlike the dry maize. Most of the respondents were of the opinion that the government should have come out clearly on policy issues so as to safe guard them against the scrupulous businessmen. On that note, they claimed that farmers were comfortably diversifying their crop production. This harvest cum sale, has promoted the dairy sector through animal feed preparation (silage). In this research study, it became evident that most farmers a strongly appealed to the government to help them promote the maize production, through constant supply of subsidized fertilizer.

The policy on banning of the green maize nationally and at the county government level is not clear. While the national government role in subsidizing on fertilizer has helped in increasing maize production, the strategic grain store facility is not helping the farmer in marketing maize.

Table 2. Farmer’s expectation on government role

Response	Male		Female		Total	
	Frequency	%	frequency	%	Frequency	%
Very high	-	-	-	-	-	-
High	17	19	8	11	25	16

Average	11	13	16	22	27	17
Low	12	14	34	45	46	28
Very low	47	54	16	22	63	39
Total	87	100	74	100	161	100

Source: Field Data; 2013

In table 2, a response rate of 16 % believed that the government has participated in checking the C.G.M, 17% seem to believe that it is working. But a sizeable number of 28% had low opinion of government involvement, while majority, 39% of respondents believed the government was not involved their participation. They further argued that the negativity by these officials weaken the state policies in advocating the diversity.

Table 3: The opinion on government role in commercialization of green maize

Response	Male		Female		General total	
	Frequency	%	Frequency	%	Frequency	%
Strongly agree	18	21	16	22	34	21
Agree	19	22	10	14	29	18
Not sure	7	8	16	22	23	14
Disagree	11	13	10	14	21	13
Strongly disagree	32	37	22	30	54	34
Total	87	100	74	100	161	100

Source: Field Data; 2013

From table 3, 21% of the respondents strongly agree that the government had done some commendable job in safe guarding the country’s food security. The first role of the government was more on clear food policy statement by the government policy makers. Another 18% still agreed on the government seriousness on ensuing food security, while 14% were not sure whether or not the government has done any recommendable job on food security. Based on the analyzed table 3, the respondents who strongly disagree, 34% are the ones who are in control of farming activities. The respondents felt that farming is like experimentation; and that the government has not been serious with farming in general. They went further ahead in justifying their statement by highlighting the several failed crops like pyrethrum, cotton, rice, sugar etc. They linked this to most districts lagging behind in almost all departments that deal with farmers’ plight. To the respondents farmers have remained poor despite the long years they have farmed.

From the discussion above, farmers blamed the state. They added that, people were dying, for not having food whereas other parts of the country have surplus food. In allowing the principles of liberalized market, the government is taking the right path but it should have a say in safeguarding food security. Over the years, the CGM business has grown and this can be noted in the number of Lorries ferrying green maize to major towns.

Majority of farmers are no longer interested in farming and are considering opting out to do other businesses. The study

therefore agrees with the hypothesis, that farmers are embracing CGM as a substitute to selling dry maize. Hence, the respondents, as indicated below and within the bracket of 1-5 years of farming experience, are more adventurous and are probably the newly married men and women who are attracted, or forced by their new status. The study shows that the same group found farming, are business persons who take risks. Secondly, among some of the respondents are the middlemen/women acting as a go-between, between the external buyer and the farmer.

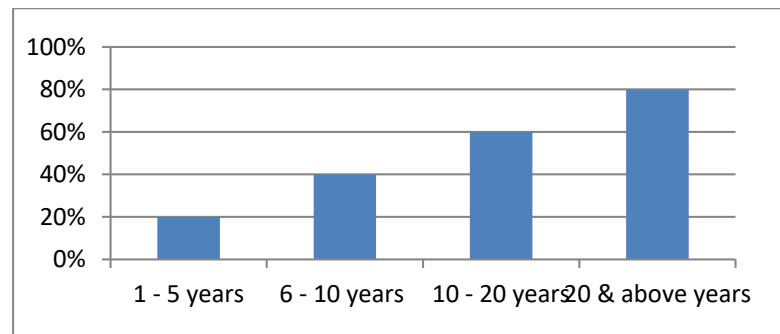


Figure 1: Period of farming

Source: Field data; 2013

The study, as illustrated in figure 1, shows that there were 135(72%) farmers who have farmed for more than 20 years and showed their stability in the same. The study showed that the new comers are only about 12 (6%) which means that farming is becoming less attractive. The study shows that within the family context one gender, did not participate in the business.

In figure 1 above, an ascending trend is seen where, the highest point stands for those who are 6-10 years in business. The possibility of continuity reaches its entire end at the 20th year, as the study suggests. This is in addition to the 41 (22%). The purpose of this is to show the government’s involvement over the years and its position on farming.

Government Position on Food Security

The respondents created a scenario where they put a share of blame to the government on the food insecurity, whether deliberate or not. Farmers argued amongst themselves on the best practice. Questions such as, why there is laxity and the N.C.B.P not buying dry maize cereals (90kg) now (50 kg) from the year 2014 are asked. This became a blame game and eventually demoralizing the farmers. One farmer observed that, “I had 40 bags of 90kg which was enough for my three children in high school. When the N.C.P.B failed to buy the cereals, all the farmers were at the mercy of the businessmen. I end up losing 7 bags at the end of the transaction. This forced me even to sell what was to have remained, as my food security. I am now one of those looking for food assistance.” Who is to blame? It is the government. This forced me to remove my strategic reserve so as to enable my three children to go to their schools”.



Figure 2 : A man selling dry maize.
Source: Field data; 2013



Figure 3: A ready farm for sale
Source: Field data; 2013

The plate 4.3 shows a ten acre maize field with which the owner sold for Kshs. 60,000 per acre. Hence for ten acres, he was paid ksh.600, 000. This has attracted more farmers to sell their crops. Plate 4.2 shows the dry maize cereals sold in the neighborhood at ksh.150 per two kilo tin. This is yet another hot business. The effects of green maize commercialization is felt by the buyer and the profits are enjoyed by green maize seller. “The N.C.B.P depot is hardly 200 meters from the market at Lessos.” This was the lamentation of a farmer. ‘There are many who have passed the same misery I underwent.’ Some of the children, whose parents had not had enough maize, saw their children sent home. Secondly, there were reports of poor seed dispersion and fertilizer distribution. Importation of fertilizer was as if it was not meant for farmers since it arrived three weeks after the planting season.

Table 5: Evaluation of Government’s role in commercialization of green maize

Response	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
Strongly agree	-	-	3	3.1	3	1.6
Agree	2	2.3	5	5.2	7	3.7
Not sure	-	-	-	-	-	-
Disagree	11	12.0	18	18.8	29	15.4
Strongly disagree	79	85.7	70	72.9	149	79.3
Total	92	100	96	100	188	100

Source: Field data 2013

In table 5, 85.7% of farmers strongly disagreed with the government on its role in promoting investment in agriculture. Some of the respondents did exonerate the blame from the government. They said that the expected Ministries and Ministers charged with the responsibility have failed in their respective duties.

Those who believed that the government had not done much are 15.4%, while 3.3% and 1.1% respectively, strongly believed that the government had done a commendable job. They gave tangible examples, including the revival of New K.C.C (Kenya Cooperative Creameries’), fertilizer subsidy, the funding of irrigation fields throughout the country for instance the Bura, Mwea Tabere, Berkera and so on. From the enormous challenges ranging from hunger in the entire region and especially the northern part, the Government revived the stalled irrigation farms in the area. Food insecurity is eating deeper into the country’s economy and it is now clear why they are contemplating the measures they would take on the green maize sell. The study shows that, on some occasions, the government only felt the need to ban the sale of green maize as a remedy for the food shortage.



Figure 4: A clip from the nation papers
Source: Daily Nation: 2013

Figure 6 shows an irrigation project sponsored by the Catholic Church in Lodwar, the study saw green maize I areas like Transmara, Meru, Narok, Tanzania and Uganda The relevance of this plate to the study is to compare irrigation development in Lodwar and many other parts of the country on food security. If the scheme succeeded in Lodwar, then why not in Nandi County, in dry months? In conclusion, on expected service delivery, the Government is expected to owe up responsibility in ensuring food stability to all Kenyans.

III. 3.1 CONSEQUENCES OF COMMERCIALIZATION OF SALE OF GREEN MAIZE

3.1.1 Exploitation

The respondents were able to report some cases linked to commercialization of green maize this comes to being as a result of moral decay in the society. They indicated that will impact to the farmer, the society and the entire nation in the long run. They pointed out the measures used in the process during harvesting as disproportional to the standardized acreage. The businessmen however had their own ways of measurements and thus try to justify this by blaming seed dispersion; space from plant to plant, as not uniformly spaced. This creates an avenue towards exploiting the farmer. Farmer loses 2 points in acre agreed to commercialize the green maize.

3.1.2 Anti-social behavior

The study noted that fake money in circulation was on the rise in the green maize business. The respondents reported a case a farmer in Nandi central, Nandi County Arwos who lost his money amounting to Kshs. 102,000 because he was paid in fake currency. The farmer discovered this when depositing his money at a bank.

This would have landed the farmer into the Kenyan jails were it not for his and astute farmer.

C.G.M. has bred a new brand of green maize thieves. Respondent noted that there were rising cases of green maize harvesting theft. In one specific case, the (Daily Nation newspaper), reported that thieves were caught at Segemiat in Uasin Gishu County having sold stolen green maize amounting Kshs. 50,000. The maize field belonged to a woman farmer in the stated area of Segemiat.

3.1.3 Family Disputes

According to respondents the family disputes were on the rise. A lot of money is in circulation and majority of men who sell their maize end up going to urban centers to have fun with call girls. They end up returning minus the year's earnings. Such incidences, to some extent, are related to other cash crops which have become a source of family joy and sorrow. This is similar to what occurs in tea bonuses in Kericho, Kiambu and Nandi districts, wheat in Narok and Uasin- Gishu counties.

This same cash flow has led to a number of school drop outs. The reason raised by respondents, did justify this statement. The money earned was available for a long time; budgeted for school fees the following year, yet with numerous problems accompanying the farmer, they opted to squander the money. Secondly, many school going children drop out to get employed during the harvesting seasons. Commercialization of green maize is a national activity and needs a lot of government intervention and commitment to address this issue. This shall help the farmer be able to send his children to school.

Anti green maize commercialization proponents claim that the sale poses a threat to food security in the country. They stated that thousands of acres of ready maize crops are being sold to the businessmen daily, in different places. Though viewed as profit

driven, are controlled by the effects of a liberalized market. In the long run, the farmers are suffering from food shortage (Ministry of Agriculture 2012).

Green maize sale denies the state /county revenue which would have been sold to the National Cereals and Produce Board. Many people too would be employed and the entire society would have benefitted. However, this is changing and attributed to functional county governments which levy tax to lorries ferrying maize. This being a farm business and no specified government regulations give leeway to scrupulous businessmen and middlemen to exploit the farmer and deny the government its revenue.

This further denies the state its future food security and planning. Though supplied with subsidized fertilizer the farmer loses to enjoy the benefit of the government. It came to public domain that the country is blessed with abundant maize fields, but at the end, does not reflect the cereals received at the National Depots. This becomes a challenge to the government. However, this is the reason why each year, the country imports maize from countries like South Africa, Malawi and even United States of America. Malawi became successful and has become a model country that needs to be bench marked and to be applauded and emulated on her styles to attain maize production stability. The end result is having a serious policy framework (Ministry of Agriculture, 2012).

3.1.4 Food Crisis

The county is said to be in food deficit when many factors do occur. Some of the factors are like draught, pests and diseases. However the commercialization in its magnitude contributes to food crisis. But incase of the said factors not occurring. Farmers are there selling their produce. The profit realized at times have become a source of joy to others while sorrow to others. It was noted that the transporters in the business occasionally have hectic time in the hands of corrupt officers who, when not bribed, would delay them. Hence arrive late to deliver their goods.

Table 7: Respondents response on food shortage

Respon se	Male		Female		Total	
	Frequen cy	%	Frequen cy	%	Frequen cy	%
Strongl y agree	30	34	45	61	75	46
Agree	37	43	5	7	42	25
Not sure	9	10	9	12	18	10
Disagre e	3	3	15	20	18	10
Strongl y disagre e	8	10	—	—	18	10
Total	87	100	74	100	161	100

Source: Field data; 2013

Commercialization of green maize as seen in the table shows that 51% of the entire population believed that there is acute food shortage in the county. According to the table 4.6, it would be prudent to implement a serious food security measure. Another 24 % still agree CGM has encouraged food shortage and hence led to food insecurity. However, some still believe that CGM is only blamed for the shortage. That should not be the case. The farmer has an obligation to plan for what is enough for the year.



**Figure 5: A pick up at market Centre
Source: Field data 2013**

The figure 8 above shows a driver and his conductor contemplating on their next move after they got a puncture? By the look of things, there is a sign of desperation from the driver whose arms are on waist and conductor in a cap. Their possible customer is this old man seeking to buy one and asking for an addition for free. This delay in the end, blows back its challenges to the farmer by reducing the price value of green maize.

IV. 4. RECOMMENDATION

The government of Kenya should implement the policies it has more so on the subject matter. The Government should be able to feed it population in order to realize social economic development. As a matter of fact, farming is becoming expensive and that in the future, farmers are altogether contemplating to do away with maize farming not unless the government steps in, in farm input subsidy.

V. 5. CONCLUSION

Despite the many challenges and the government efforts, there is need to improve the welfare of the farmer to ensure food security. One of the responsibilities of a government is to be able to feed her people and thus need to ensure food security. Food security means securing enough food for all her citizens all year round. The existing policies are adequate but they lack strict implementation.

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