EFFECT OF DEVOLVED FUNCTION OF AGRICULTURE ON FOOD PRODUCTION OF KAKAMEGA COUNTY, KENYA

1Obed Tsuma, 2Dr. Patrick Kibati, 3John K. Tanui and 4Philip E. Ragama
1School of Business and Economics, Kabarak University, Kenya, pallah2015@gmail.com
2 School of Business and Economics, Kabarak University, Kenya, pkibati@kabarak.ac.ke
3 School of Business and Economics, Kabarak University, Kenya, jktanui@kabarak.ac.ke
4School of Business and Economics, Kabarak University, Kenya, PRagama@kabarak.ac.ke

ABSTRACT
The primary driver for devolution is the anticipated efficiency in service delivery. It is generally assumed that decentralizing functions to the lowest feasible level of decision-making and implementation of optimized information flow reduces transaction costs. Hence, a decision to devolve is often based on the failure of central government to deliver. Beside anxiety with efficiency in service delivery, devolution can also resolves over-centralized, mis-governances. Efficiency in devolved units emanates from greater consensus in decisions since citizens actively participate in the decision-making process. The study sought to assess the effects of devolved function of agriculture on food production of Kakamega County. The study was guided by the Principal-Agent Theory. The results of the study will benefit other counties by enabling them to know their level of utilization of the existing resources and provide insights into the constraints facing them. It will also be of benefit to policy makers at county level in formulating policies. The National Government and other institutions can draw much from the research when making decisions on resource allocation and it can also inform policy formulation. It has also added to the existing pool of knowledge by boosting empirical review. The study adopted a descriptive survey research design and utilized both primary and secondary data. While primary data was collected using questionnaires, secondary data was obtained from published documents. Qualitative and quantitative data collected from this study was analyzed using the Statistical Package for the Social Sciences (SPSS) version 21.0. The target population of study was 192 officers in twelve Sub Counties within Kakamega County. Descriptive data analyses including frequency distribution and chi-square test of agreement were used. The results showed that the devolved function of Agriculture had a positive effect on performance of Kakamega County Governments. Further study in all the 14 devolved functions is recommended. It is recommended that sugarcane being an agricultural activity should be devolved and be managed by the County Governments. The study recommend that allocation to Counties should be increased from the present 15% of the previous Audited accounts to 30% of the current year budget of Government.

Key Words: County governments, Sub Counties, Devolved Function, Food Production

1. INTRODUCTION

Background to the Study
Many African governments are now increasingly more willing to delegate work to regional authorities. Some are prepared to go further and assign financial and human resources to their
regions, also letting them decide how to carry out the work. Three forms of decentralization have been most prominent in Africa; namely, de-concentration, devolution and federalism (Mwenda 2010). The most preferred type of decentralization is de-concentration, which involves the transfer of responsibilities to staff working in the regions – rather than transferring decision-making, finance and management to local units with some degree of autonomy. Decentralization provides a simple solution to excessive concentration of power in the presidency, the ruling party or the central government (Mwenda 2010).

Decentralization has been recognized as an important theme of governance in both developed and developing societies of the world (Dasgupta & Beard, 2007). Decentralization of the provision of social services such as education, health, water, and sanitation leads to improved service delivery (Ekpo, 2008). It is now widely regarded as an instrument for improving service delivery to the public. Fenton (1996) observes that with the quality of management, greater organizational autonomy leads to more effective and efficient management, the alignment of responsibility, authority and accountability, and a greater concern for people. He concludes that organizational self-management transforms the patterns of authority positively and improves the process of communication, planning, decision-making, problem-solving, resource allocation, staff relationships, supervision, evaluation, feedback and system-wide accountability.

In Africa devolution is practiced in South Africa, Uganda, Ethiopia, Tanzania, Nigeria, Ghana and Kenya. In Uganda devolution is practiced through kingdoms while in Tanzania devolution is through Jimbos (Omari, Kaburi & Sewe, 2012). In Kenya devolution is implemented through 47 Counties headed by Governors. The renewed interest in decentralization is attributed to the belief that it offers an avenue for enhancing accountability and ensuring efficiency in public service delivery (Moorkhejee & Ghatak 2014; Ekpo, 2008) since central governments have been blamed for hindering the efficient delivery of public services (Wangari, 2014). Further, it is believed that decentralization can mitigate rural-urban disparities through provision of employment and basis social amenities at the local level. While decentralization has remained popular since the late 1970s and early 1980s, it has undergone a shift in emphasis from Deconcentration in the 1980s to devolution in the 1990s.

**Objective of the Study**
The objective of the study was to find out the effect of devolved function of agriculture on food production of Kakamega County, Kenya.

**Research Question**
Has the devolved function of agriculture improved food production in Kakamega County in Kenya?
2. LITERATURE REVIEW

Theoretical Literature Review
Principal-Agent Theory

This theory was proposed by Jensen and Meckling (1976). The Principal-Agent theory is one of the dominant theoretical perspectives for analyzing and describing public governance reforms. The theory proposes a ‘principal’ with specific objectives and ‘agents’ who are required to implement activities to achieve those objectives. The core of the principal-agent theory is the ‘agency relationship’, which depends on power positions and information flows between principals and agents. The question, then, is how principals can manage the interests of agents so that they are in line with the goals they (principals) wish to achieve (Masanyiwa, 2014).

The theory is of the view that principals must solve two basic tasks in choosing and controlling their agents: first, they have to select the best agents and create inducements for them to behave as desired. Second, they have to monitor the behavior of their agents to ensure that they are performing as agreed (Ayee, 2005). A problem arises when the parties’ goals conflict or when it is difficult or expensive for the principal to verify what the agent is actually doing. In this case, information asymmetry introduces an issue of adverse selection and a moral hazard problem (Simiyu, 2014). The problem of agency is particularly salient on the demand-side of public service delivery, which arises from the fact that clients, politicians, and frontline providers have divergent interests compounded by the fact that multiple principal-agent problems result in the delivery chain (Kamara, Ofori-Owusu, & Sesay, 2012).

Importantly, Hiskey (2010) views decentralization, especially when it takes the form of devolution, as “an alteration of principal-agent relationships, where principals theoretically gain more leverage over agents directly responsible for service provision”. Analyzing decentralization reforms using the principal-agent perspective help to explain the trade-offs between different actors and the changes that decentralization may bring with them given the new responsibilities of the actors involved (Hiskey, 2010). Mewes (2011) links the agency theory to top-down and bottom-up models. In the first, local governments are agents, exercising responsibilities on behalf of the central government (principal). In the bottom-up model, the ultimate principals are the citizens or service users, while politicians as representatives in decision-making organs are agents. In turn, local government administrators responsible for executing service delivery functions are agents of local political leaders and service users. Kayode, Adagba, and Anyio, (2013) further posit that in a democratic polity, the ultimate principals are the citizens who are consumers of specific services provided by the government. In the Principal–Agent theory, they are principal in the sense that politicians as agents seek their mandate from and act as the representatives of the public.

Critics however argue that the Agency-Theory model is one-sided because it negatively characterizes an agent’s behavior as self-seeking, and ignores agent loyalty, pride, and professionalism in aligning with the principal’s goals (Davis, Donaldson, & Schoorman, 1997; Kayode et al, 2013). Another criticism of the agency theory is that it omits opportunistic
behavior by principals. This is especially so in public services where politicians and bureaucrats stand to gain personally from colluding with private agents (Kamara et al., 2012). Further, Masanyiwa (2014) citing Batley (2004) criticized the agency-theory model for focusing on the vertical relationship between the centre and periphery in a ‘one-dimensional’ way, which makes it difficult to analyze multiple principals and agents, especially if they are at different administrative levels. In this study, the Agency-Theory is relevant to devolved system of government because it provides a good basis for understanding the relationship in which the principal delegates work to the agent, who performs the task. County Government acts as the agents of citizens (principal) and must act in good faith to fulfill the principles of the Principal. Agricultural is a devolved function of county Government and citizens expect performance from it in terms of food production.

Empirical Review
The agricultural sector in Kenya is large and complex, with a multitude of public, palatal, nongovernmental and private actors. Because of its importance for the country’s economic development, the policy and institutional framework governing the agricultural sector plays a vital role for the development of the whole economy. Gitau, Gburek and Bishop (2008), in concordance with other similar studies (Alila & Atieno, 2006; Ronge, Wanjala, Njeru, & Ojwang, 2005), identify three general periods in the recent agricultural policy history of Kenya that is post-independence, liberalization, and stakeholder participatory approach periods. During the post-independence period (1963-1980s), policy objectives were influenced by self-determination and economic growth. The government impulse to agricultural production was mainly through the increase in productive land by promoting access to land for many smallholders (Ronge et al., 2005). This period was characterized by a conservative fiscal and monetary policies supported by a fixed exchange rate system.

The agricultural policy was implemented by direct government intervention. The government set farm-gate and consumer prices for all basic agricultural commodities such as maize, maize meal, sugarcane, sugar, wheat grains, wheat flour, bread, milk and milk products. Government control over the sector was intensified by the creation of several production and marketing parietals and boards, and by the promotion of farmer cooperatives. High public investment in productive infrastructure, such as large irrigation schemes and rural roads, was also common during this period. The main policy objective during this period was to achieve food self-sufficiency in the country. However, despite the growth achieved in the sector, the period was characterized by poor governance in palatals, indebtedness and poor services to farmers, as well as monopolized market structures that led to price inefficiencies (Gitau et al., 2008).

The liberalization period starting in the mid-1980s was characterized by the implementation of the Structural Adjustment Programmes (SAPs) and “free market” policies, under the external influence of the International Monetary Fund and the World Bank (Gitau et al., 2008, Ronge et al., 2005). The actions enforced included the privatization and deregulation of the sector, reduction in trade barriers, exchange rate adjustments, and an increase in decentralization. This
period resulted in the collapse of some government institutions created during the post-independence era, as they did not prove efficient in the liberalized market. In addition, the private sector did not have the capacity, or the incentives, to take on the role that the government abandoned (Gitau et al., 2008 ibid). Liberalization suddenly exposed the un-capitalized farmers to market forces without support institutions, leading to poor performance of the sector.

The general policy agenda during the mid-1980s showed a clear bias against the agricultural sector in favour of the industrial and financial sectors. In 1996 and 1997 the government prepared and implemented the paper on *Industrial Transformation to the Year 2020* and the eighth National Development Plan (1997-2001), both of which aimed at transforming the country from an economy with agriculture as its backbone to a Newly Industrialized Country. The other sectors were supposed to play a complementary role towards this objective (Gitau et al., 2008). By 2000, prices of almost all commodities were liberalized, with some specific government interventions, mainly through international trade protection. Food production can be accelerated by availability of farm inputs as was observed during Green revolution in Asia was mediated by the facilitation of modern inputs such as improved seeds, fertilizers and pesticides to farmers. With the introduction and adoption of these improved inputs, the farmers were able to substantially increase their crop production levels by several folds. These increased yields provided food security and stability which in turn sparked off an array of social and economic transformation (Bezabih, Hadera, & Nigatu, 2010). Despite the a number of studies done in assessing the effects on service delivery, there is a dearth of studies on the effect of decentralization basing on Agricultural functional devolution variables in Kakamega County.

![Devolved function of Agriculture](image1)

![Dependent Variable](image2)

![Intervening Variable](image3)

**Independent Variable**

**Dependent Variable**

**Improved production of food.**
- Maize production
- Sugar production
- Quality of subsided maize seeds and fertilizer distribution
- Poultry farming
- Egg production

**Intervening Variable**

- National Government politics
- Local politics
- Timely-disbursement of funds from National Government

**Figure 2.1: Conceptual Framework**

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Operationalization of Conceptual Framework

Operationalization is the process of firmly defining variables into measurable factors. In this study, the independent variable was devolved Agricultural function. Kakamega County depends primarily on agriculture and most farmers grow sugarcane as the main cash crop. Most of the food crops are grown on a small scale annually. The main crops are sugarcane, maize, bean, cassava, finger millet and sorghum. Maize forms the staple food for the county. Maize and sugarcane are generally grown on large scale while bean, millet and sorghum are grown on small scale; the main cash crops grown are maize, tea and sugarcane. The study examined the performance in; Fish farming, Poultry farming, Maize farming, subsidized maize seed and fertilizer, Sugar cane farming, and farm mechanization. The indicators of devolution agriculture function include improved access to input, production, support to major Crops and fish.

Operational of Variables
Table 2.1: Operational of Variables

<table>
<thead>
<tr>
<th>SN.</th>
<th>Objective</th>
<th>Independent Variable</th>
<th>Indicator(s)</th>
<th>Measurement scale</th>
<th>Data Collection Methods</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To assess the effect of agriculture on food production in Kakamega County</td>
<td>Agriculture function</td>
<td>Fish farming, Fish pond done Maize production, Sugar cane production, quantity of Subsidied maize seed and fertilizer Distributed, Poultry farming, Eggs production, mechanization</td>
<td>Nominal</td>
<td>Primary and secondary data</td>
<td>Descriptive</td>
</tr>
</tbody>
</table>

3. RESEARCH METHODOLOGY

Research Design
This study was conducted through a case study research design and adopted an exploratory descriptive survey design. Descriptive research design seeks to obtain information that describes existing phenomenon by asking individuals about their perceptions, attitudes and values (Mugenda, 2003). According to Shuttleworth (2008), descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it.
Exploatory descriptive research design is the systematic collection of data in standardized form from an identifiable population or representative.

Descriptive approach would, thus, ensure that comprehensive findings and depth information obtained on the subject matter. This study was concerned with reviewing Kakamega County in depth in order to gain insight of performance of devolved Agriculture function of county governments in Kenya. Such issues are best investigated through a case study design. The case study Research design generally entails intensive, descriptive and holistic analysis of a single entity: In this case Kakamega County was the County under study.

**Target Population**
The targeted population was twelve Sub Counties of Kakamega County namely; Butere, Mumias East, Mumias West, Matungu, Khwisero, Shinyalu, Lurambi, Ikolomani, Lugari, Likuyani, Malava and Navakholo. Also targeted are Cabinet Secretaries (CSs) in four function areas, Kenya National Bureau of statistics (KNBS), Kenya Agricultural Research and Livestock (KARLO), Veterinary services, and KEMSA in Kakamega.

**Population of the Study**
This study was conducted in Kakamega County. Researcher population of study was; County executive officers (CEO), Sub Counties Administrators, Ward Administrators, Members of County Assembly, Chiefs and religious leaders.

**Table 3.1: Population of the Study**

<table>
<thead>
<tr>
<th>Sn.</th>
<th>Offices</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>County Executive Office for Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Kenya National Bureau of Statistics</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>County Fishery offices</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Vet Headquarters in Kakamega</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>KARLO</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>
Table 3.2: Representatives from Sub-County

<table>
<thead>
<tr>
<th>Sn.</th>
<th>Name of the Sub County</th>
<th>Sub County Administrators</th>
<th>Wards Administrators</th>
<th>MCAs</th>
<th>Religion leaders</th>
<th>Chiefs</th>
<th>Retired civil servants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Butere</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Mumias East</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Mumias West</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Matungu</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Khwisero</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Shinyalu</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Lurambi</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Ikolomani</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>Lugari</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Likuyani</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>11</td>
<td>Malava</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>12</td>
<td>Navakholo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td><strong>12</strong></td>
<td><strong>24</strong></td>
<td><strong>36</strong></td>
<td><strong>36</strong></td>
<td><strong>36</strong></td>
<td><strong>36</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

Sampling Procedure and Sample Size

**Sampling Procedure**
This study employed Census which is a study of every unit, everyone or everything, in a population. It is known as a complete enumeration which means the entire sub Counties in Kakamega County were included, while on individual respondents the researcher used purposive sampling because technique is the most effective when one needs to study a certain cultural domain with knowledgeable experts within. Purposive sampling was also used with both qualitative and quantitative research techniques. The inherent bias of the method contributes to its efficiency, and the method stays strong even when tested against random probability sampling. Choosing the purposive sample is fundamental to the quality of data gathered; thus, reliability and competence of the informant must be ensured.

**Sample Size**
Polit and Beck (2003), defines a sample as a proportion of population to be researched, while Kothari (2004) defines a sample as the selected respondent representing the population. The study sample comprised of all 12 sub Counties of Kakamega County. This meant that a census was employed in order to include all 12 sub Counties.
Research Instruments
Researcher used a questionnaire and interviews as the tools for data collection. Kothari (2004) terms the questionnaire as the most appropriate instrument due to its ability to collect a large amount of information in a reasonably quick span of time and economical manner. It guarantees confidentiality of the source of information through anonymity while ensuring standardization. It is for the above reason that Researcher used the questionnaire as an appropriate instrument for this study. The questionnaire was structured having closed ended questions. This was to ensure that data that collected was both quantitative and qualitative. Researcher preferred to questionnaires because it allowed for a greater geographical coverage of respondents within a short time and flexible enough to give the respondents adequate time to respond to the items, they are cheap to administer given that the only costs are those associated with printing and designing the questionnaires.

Validity of the Instrument
The validity is the accuracy and meaningfulness of inferences, which is based on research results (Mugenda, 2003). It is the degree to which results obtained from the analysis of data actually represent the variables of the study. Dowling (2004) refers to validity in research as how accurately a study answers the study question or the strength of the study conclusions. It helps the researcher to confirm that the questionnaire items give the desired outcomes. Validity in this study ensured that all the 12 Kakamega sub Counties officers, 4 cabinet secretaries from the Governor’s office, 7 public servants and 15 citizens from each Sub County was the respondents to the questionnaires the research proposal was applicable and dependable and a representative of the county population. The Secondary data from County Publications was current and thus valid for the study.

Reliability of the Instrument
The term reliability refers to the extent to which a research instrument consistently measures characteristics of an interest over time. A research instrument is reliable if it has two aspects: stability and equivalence (Kombo & Tromp, 2006). If an instrument accurately assesses what it must to and gives consistent results after repeated measurements of the same object, then it is reliable. This study used internal consistency reliability, which is measured by Cronbach alpha: a test of internal consistency that is frequently used to calculate the correlation values among the answers on an assessment tool. A threshold of 0.7 and above for Cronbach alpha value is recommended for a reliable research instrument. According to Kombo and Trump (2006) a data instrument that returns reliability of 0.7 and above is deemed to have higher internal consistency.

Data Analysis and Presentation
Data analysis refers to the process of collecting, modeling and transforming data in order to highlight useful information, suggesting conclusions and supporting decision-making Sharma (2005). It involves examining what has been collected in a study or experiment and making decision and inferences. Data analysis aimed at reporting the information that was collected from respondents of this study. Findings is presented, analyzed and discussed in conjunction with the
objectives of the study. Both quantitative and qualitative approaches were used for data analysis. After the data collection, the questionnaires were edited for accuracy, consistency and completeness.

Quantitative and qualitative data from the questionnaire was coded and entered into the computer for computation of descriptive statistics. Open-ended questions generated quantitative data which was categorized according with the objectives of research and was reported in narrative form along with quantitative presentation. The qualitative data was used to reinforce the quantitative data obtained. In (Kothari, 2004), observed that together with simple graphics analysis, descriptive statistics form the basis of virtually every quantitative analysis to data (Kothari, 2004). The qualitative data will be used to reinforce the quantitative data obtained. The data analysis employed descriptive statistics frequency distribution and chi-square for lack of agreement; and inferential analysis; mean, standard deviation; t-test, correlation and regression analyses using statistical package SPSS was used. This technique gives simple summaries about the sample data and presents quantitative descriptions in a manageable form (Orodho, 2004).

4. DATA ANALYSIS PRESENTATION AND DISCUSSION

Introduction
This chapter presented the results and findings of the primary data collected from the respondents of Kakamega County. This chapter also presents the findings based on research question outlined which is to find out the effects of agriculture function on food production of Kakamega County. The results are analyzed in form of graphs, charts and tables. The research used a structured closed ended questionnaire. The chapter is prepared into sub-sections analysis of the findings based on the objective of the study.

Response Rate
The sample of the study was 186 respondents. All 186 questionnaires were issued and 168 questionnaires were responded to representing 90.3% response rate. This is shown in Table 4.1 below.

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted</td>
<td>186</td>
<td>100%</td>
</tr>
<tr>
<td>Actual number of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent</td>
<td>168</td>
<td>90.3%</td>
</tr>
<tr>
<td>Variances</td>
<td>18</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Descriptive on Effects of Devolved Agricultural Function on Food Production
In this section, the study sought to establish the effect of devolution on Agricultural function in the County. The study sought to know from respondents whether Agriculture function had improved since county government came into place. These were analyzed and findings are presented in the Table 4.2 below.
Table 4.2: EFFECTS OF DEVOlUTION ON PERFORMANCE AGRICULTURAL FUNCTION

<table>
<thead>
<tr>
<th>Questions</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>$\chi^2$</th>
<th>P &gt; CHISQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers in your area received subsidized fertilizer</td>
<td>4.76</td>
<td>2.98</td>
<td>39.29</td>
<td>52.98</td>
<td>126.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Production has improved as a result of county intervention</td>
<td>11.31</td>
<td>11.31</td>
<td>66.07</td>
<td>11.31</td>
<td>151.1</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Farmers in your area received subsidized seeds from County</td>
<td>7.14</td>
<td>27.38</td>
<td>51.79</td>
<td>13.69</td>
<td>78.6</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>There is improved production of fish due to construction of fish</td>
<td>11.9</td>
<td>41.67</td>
<td>39.29</td>
<td>7.14</td>
<td>65.3</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>The dairy programme in your area is supported by County</td>
<td>14.88</td>
<td>34.52</td>
<td>39.88</td>
<td>10.71</td>
<td>41.6</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>County government assisted in hiring farm mechanization services to the farmers</td>
<td>6.55</td>
<td>19.05</td>
<td>39.88</td>
<td>34.52</td>
<td>48.2</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Source: Researcher, 2018

Key: SD= Strongly Disagree. D= Disagree. A = Agree. SA= Strongly Agree CHISQ= Chi-square tests. P> CHISQ = Probability test

Agricultural functions responses are presented on Table 4.2. Response on receiving subsidized fertilizer, 53% and 39% of respondents strongly agree and agreed respectively that the County Government provided subsidized fertilizer. 4.8% strongly disagree and 3% disagreed ($\chi^2 = 126.4, P \leq 0.001$). Response on improvement of production due to county intervention, 66. % and 11% of respondents agree and strongly agree respectively that production has improved as a result of county government intervention. 11% disagreed and 11% strongly disagreed ($\chi^2 = 151.1, P \leq 0.001$). Response on farmers receiving subsidized maize seeds from the County Government, 52% and 14% of responses agree and strongly agree respectively that farmers in the county received subsidized maize seeds, 7% and 27 % strongly disagreed and disagreed respectively ($\chi^2 = 78.6, P \leq 0.001$).

Response on improvement of fish production due to constructed fish ponds, 42% and 12% disagree and strongly disagree that there is improvement in fish production due to fish ponds constructed by County Government, 39 % agree and7% strongly agree ($\chi^2 = 65.3, P \leq 0.001$). Response on diary programme supported by county, 40% and 11% agree and strongly agree that there is a diary programme supported by County 15 % strongly disagree and 34% disagree ($\chi^2 = 41.6, P \leq 0.001$). Response on county government assisted in hiring farm mechanization services to the farmers, 40% and 35% agree and strongly agree respectively that County
government assisted in hiring farm mechanization services to the farmers 7% strongly disagree and 19% disagreed ($\chi^2 = 48.2, P \leq 0.001$).

There were six questions areas which were investigated in the study and were found to have a greater effect on food production in Kakamega County. These were subsidized fertilizer from the County Government, improved production, and Subsidized Maize seeds from the County Government, improvement in production of fish, Dairy programme and farm mechanization services. The above findings indicates that farm inputs from County Government such as; subsidized fertilizers, subsidized maize seeds, dairy programme and farm mechanization services to the farmers and positive effect on food production in Kakamega County. It was only in fish production that the respondents were indifferent. Sugar yield have been declining as the results shown and this may be due to the fact that Central Government have not devolved the sugar sector although it is under Agriculture. Increase in Maize yield can be attributed to subsidized maize seeds and fertilizer from the County Government. There has been an increase in revenue from the sector which shows that the sector is active in the county.

These findings are in agreement Green revolution in Asia that was intervened by the facilitation of modern inputs such as improved seeds, fertilizers and pesticides to farmers. With the introduction and implementation of these improved inputs, the farmers were able to substantially increase their crop production levels by several folds. These increased yields provided food security and stability which in turn sparked off an array of social and economic transformation (Bezabih et al, 2010). Also the findings are in agreement with the post-independence period (1963-1980s), policy objectives were influenced by self-determination and economic growth. The government impulse to agricultural production was mainly through the increase in productive land by promoting access to land for many smallholders (Ronge et al., 2005).

This period was characterized by a conservative fiscal and monetary policies supported by a fixed exchange rate system. The agricultural policy was implemented by direct government intervention. The government set farm-gate and consumer prices for all basic agricultural commodities such as maize, maize meal, sugarcane, sugar, wheat grains, wheat flour, bread, milk and milk products. Government control over the sector was intensified by the creation of several production and marketing parietals and boards, and by the promotion of farmer cooperatives. High public investment in productive infrastructure, such as large irrigation schemes and rural roads, was also common during this period. The main policy objective during this period was to achieve food self-sufficiency in the country (Gitau et al, 2008).

**Report from Secondary Data on the Effect of Devolution**

Data was collected from secondary sources that could support the effect of devolution on commodities in agriculture, health, transport and public services and administration. The report is presented below.
Sugarcane Production in Kakamega County

Figure 4.1 below shows that there was a decline in sugar production in the county as from 3.4 million MT in 2015 to 1.6 million MT at the end of 2017 representing a drop of 53% drop. This was due to several management issues, etc. and addition the sugar industry is still under the central government although the feeling on the ground is that the county should be in charge.

![Sugar Cane Yield in Kakamega County](source: Sugar Directorate)

Maize production in Kakamega County

The graph below shows that maize yield has been increasing since over years at 3.3 metric Tonnes in 2017 from 1.7 MT in 2013 there has been an increase of 43%. The can be due to substized maize seed and fertilizer from County Government.

![Maize Yield Production (M tons)](source: Kakamega County)
Fish Yields in Kakamega County
Table 4.3 below shows that there is an increase in number of fish ponds in the county and at the same time increase in fish yield (production) which is 17% incremental in number of fish ponds and 75% of fish yield over the years. Generally fish that is consumed in Kakamega county come from rivers, ponds and lakes Victoria and Turkana. The secondary data did not segregate fish yield from the above sources.

Table 4.3: Fish Yields

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Fish ponds available</td>
<td>6,900</td>
<td>8,342</td>
<td>8,346</td>
<td>8,352</td>
<td>8,400</td>
<td>8,364</td>
<td>8,378</td>
</tr>
<tr>
<td>Fish Yield</td>
<td>700</td>
<td>1,024</td>
<td>1,256</td>
<td>1,301</td>
<td>1,345</td>
<td>1,667</td>
<td>2,822</td>
</tr>
</tbody>
</table>

Source: Kakamega County

**Income from Cess, Hired Agriculture Services**
The graph below shows that income from farm hired services, cess and bus park has been increasing from 68.3millions in 2013 to 234.54million in 2017 representing 69% increment as a result more economicic activities being conducted in the county as well as proper financial management from the county government.

![INCOME FROM : CESS, HIRED SERVICES & BUS PARK](https://supremejournals.com)

**Figure 4.3: Income from Cess, Hired Agriculture Services.**
Source: Kakamega County
Subsidies Maize and Fertilizer Input Delivered To Farmers

From 2011, Kenya government started the program of subsidizing the farm inputs (fertilizer and seed). This program has been enhanced under the county governments. We were able to get figures from year 2015 to 2017 that indicated increase particularly in maize sector. We did not get data from livestock productions as well as fisheries. Table 4.4 below shows that subsidized fertilizer and maize seed to the farmers has been increasing yearly. It is one thing to receive subsidized goods but it is very hard to verify whether farmers actually applied the subsidized services to their farms.

<table>
<thead>
<tr>
<th>Year/Details</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of subsidized fertilizer delivered (25kg/bag)</td>
<td>153,907</td>
<td>203,735</td>
<td>187,198</td>
</tr>
<tr>
<td>Amount of Subsidized maize seed delivered (2kg/ pkt)</td>
<td>13,331</td>
<td>188,300</td>
<td>211,701</td>
</tr>
</tbody>
</table>

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter contains a summary of the findings of the study, discussion, conclusion, recommendation of the study and areas that require further study.

Summary

Generally, the purpose of this study was to find out the effect of the devolved system of governance on the performance of Kakamega County in functional area of agriculture. The study found out that, devolved system of governance had positive effect on the performance of Kakamega County on food production and it’s only in Sugarcane sector that had negative effects.

There were positive effects on devolved agriculture function in Kakamega County. On subsidized fertilizer, 92% of respondents agreed that the County Government provided subsidized fertilizer ($\chi^2 = 126.4, P \leq 0.001$). Responses on improvement of production due to county intervention; 77% of respondents agreed that production has improved as a result of county government intervention ($\chi^2 = 151.1, P \leq 0.001$). 66% of Respondents agreed that farmers receiving subsidized maize seeds from the County Government ($\chi^2 = 78.6, P \leq 0.001$).

Research found that there was improvement of fish production due to constructed fish ponds with 54% of respondents agreeing that there was improvement in fish production due to fish ponds constructed by County Government ($\chi^2 = 65.3, P \leq 0.001$). On diary programme supported by county, 51% of respondents agreed that there was a diary programme supported by

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County. ($\chi^2 = 41.6, P \leq 0.001$). Response on county government assisted in hiring farm mechanization services to the farmers, 75% agreed that County government assisted in hiring farm mechanization services to the farmers ($\chi^2 = 48.2, P \leq 0.001$). Food production has improved due to County Government intervention in inputs subsidized to the farmers.

**Conclusion**

The study revealed Agriculture function has affected the performance of Kakamega County through its subsidized farm in-put to farmers. Sugar sector is declining and this may be due to the fact that central Government has not devolved it. The research observed that fish production was low at 48% of the expected results.

**Recommendations**

The County Government of Kakamega should invest more on improving production of fish by constructing more of fish ponds. Sugarcane sector should be fully devolved and be under County management for positive effects to be seen. There was positive effects on Agricultural function and this meant that if more funds are devolved we will have food security in the country. The study recommend that allocation to Counties should be increased from the present 15% of the previous Audited accounts to 30% of the current year budget of Government.

**Area of Further study**

Further study is recommended to all the 14 devolved function areas under the County Governments and also the study should be done in more than one county.

**REFERENCES**


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