

Effects of Develved Fundsto Enhance Food Security by The Ministry of Agriculture in Kenya

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Abstract: The study analysed the effects of devolved fundsin enhancing food security by the ministry of agriculture in Kenya.Descriptive research design was adopted with a population of 300 personnel (100 managerial staff and 200 field staff). Sampling was done through the Yamane's formula achieving a sample size of 171 (50 managerial staff and 121 field staff). A closed- ended questionnaire was used to collect information yielding a 93.6% response rate (40 managerial staff and 121 field staff). SPSS version 23 was used to process and analyse the data. Descriptive statistics were presented in the form of frequencies and percentages and inferentially using a linear regression model where food security (dependent variable) and devolved funds (independent variable).Devolved funds (X_1) showed a coefficient of 1.139. The regression model generated R2 value of negative 26.588implies that for every increase in devolved funds for agriculture activities, the yield is expected to increase by 1.139 tons. The P value was significant at 0% level (sig. F=0.001), confirming that the model is fit. The study variable had a positive relationship. Hence, with devolution, farmers have room to create a favorable environment to address the institutional obstacles to food production and have access to financial capacity to engage in food production.

Key words: Food security, devolved funds

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I. Introduction

Food security is said to exist when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (POSTnote, Dec. 2006; Ministry of Foreign Affairs of Finland, 2013). Food security is created through the interplay of several policy sectors, such as trade, agricultural, energy, security, and environmental policies as well as labour, health, social and economic policies, and policies related to the management of natural resources (Ministry of Foreign Affairs of Finland, 2013). Improved food security is important for global reduction of hunger and poverty, and for economic development. Meeting the heavy demand for agricultural investment capital and providing sustainable financial services for rural areas and agriculture has proven to be extremely difficult, due to the nature of the sector and the public and private capital that exists (GPMI, 2015). This is in spite the fact that agriculture and its various associated value addition agribusinesses and services are expected to play an important role in accomplishing the 17 new global Sustainable Development Goals (SDGs) that are aimed to end hunger, poverty and reduce inequality in the world by 2030.

In view of the dangers posed by food insecurity world over, governments have been for over three decades been under pressure to increase agricultural yields and improve overall farmer productivity in the context of a more socially, economically and environmentally sustainable agriculture (Lean, et.al., 1990). It is on this background that the UN Millennium Project Task Force on Hunger in 2005 recommended a concerted action to halve hunger by 2015 by among many things increasing political action, carrying out policy reforms, improving nutrition for the chronically hungry and vulnerable, increasing agricultural productivity of food-insecure farmers, and reducing vulnerability of the acutely hungry with productive safety nets. It observed that many agencies and states have successfully used social and food safety nets like regular transfers of cash and providing fertilizers or seeds to farmers to broaden food access (Ministry of Foreign Affairs of Finland, 2013).

FAO (2004) in its document titled 'The State of Food Insecurity in The World 2004,observes that hunger, poverty and disease are interlinked, and each contributes to the occurrence of the other two. It adds that hunger reduces natural defenses against most diseases, and is the main risk factor for illness worldwide and hungry people can neither produce nor buy enough food to eat to overcome the dangers associated with diseases. Thus, hunger is a major constraint to the immediate and long term economic, social and political development of a country, implying that food security is a prerequisite for economic development.

The report affirms that hunger losses in labour productivity due to hunger is responsible for 6-10% reduction in per capita gross domestic product (GDP), adding that pre-birth undernourishment is associated with poor cognitive development among young children, resulting in lower productivity and lifetime earnings potential. According to POSTnote (Dec. 2006), research has established three areas that determine food insecurity, namely: the immediate causes of hunger, underlying determinants of conditions in a community and the impact of shocks.

Further, in nearly all African countries - where agriculture typically accounts for between 20 to 40% of GDP (Staatz, Dembele&Mabiso, 2007) - food security is escalated by the unique financing challenges that confront women farmers arising from their household roles which restrict their control over assets and constrain their available time for productive activities (World Bank, 2015). In Nigeria, even with mandatory (preferential sector) lending with guarantee of exposure and subsidized fund schemes, most banks prefer not to lend for farming, citing its lower productivity and higher risk relative to the non-agricultural sector. Farmers thus have to rely mostly on government loans which are not sufficient for agricultural investment, thus creating a finance supply deficit relative to demand. Bank credit to agriculture as a proportion of total bank credit in Nigeria has never exceeded 17 per cent since 1970 in a sector that contributes over 35 per cent of GDP. (Christopher, et. al., 2010).

In Kenya, the production of food does not match the food demand of the increasing population. With a population estimated at 43,013,341 comprising 42.8% of those under 14 years of age and 54.6% between 15-64 years in 2012, figures indicate that the country's population is growing at more than 2.6% and is expected to reach 81.4 million by 2050 (WHO, 2011). The apparent disparity between the rate of food production and demand for food in Kenya has led to deficiency, hence posing a threat to national food security. As a result, the Kenya government has over the years touted various agriculture policy reforms out of the understanding that farmers and the rural sector cannot progress without the credit and financial services they have been starved of (Argwings-Kodhek, 2004).

1.1 Statement of the problem

Despite the countries numerous attempts at finding a lasting solution to the food security crisis, Kenyan government statistics indicate that over 10 million people suffer from chronic food insecurity and poor nutrition, and in recent years about two million people have depended on relief assistance to access food. Past studies have focused on food security solely with little regard to the effects of the governments' strategies which greatly influence the running of a country. These studies, therefore, imply a region that does not have a central governing body. Informed by this knowledge gap, this study will seek to investigate the government strategies that the national and county governments are employing through the ministry of agriculture to enhance food security in Kenya. Specifically, the study explored the effects of devolved on food security in Kenya.

1.2 Research objective

To evaluate the effect of devolved funds on food security in Kenya.

1.3 Research hypothesis

H₀₁: There is no significant effect of devolved funds and food security in Kenya.

II. Literature review

In *The State of Food Insecurity 2001*: Food security is described as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2002).

There are several countries in the world that are run through devolved units with success levels differing from one country to the other. For example, in the United Kingdom, devolution of power did not involve the community, which changed the emphasis on governance and reduced the local authority access to funds (Willett & Giovannini, 2014). Other most notable successful experiences with devolution are the US and India with about 200 and 60 years of experience respectively. In the case of Africa, after gaining independence, many countries embraced the one-party system in what they referred to as —democracy by consensus. However, this system of government would be contested later due to oppression from very powerful government. Further, after independence, African leaders started realizing that they had difference in ideologies. These factors, among many others led to the struggle for multi-party democracy in many countries (Haughton, Counsell & Vigar, 2008).

Bamidele (2015) examines the impact of fiscal decentralization on public service delivery in Nigeria. The study argues that despite fiscal decentralization, Nigeria has not realized its expectations of enhanced service delivery. State governments have failed to deliver effective, qualitative and affordable public services to her citizens owing to corruption and mismanagement of public financial resources. Bamidele assertions are

essential for this study because one of the reasons for devolved power structure is to enhance service delivery.

This points us on the path that Nigeria followed, and on that which Nigeria did not follow, in attaining enhanced service delivery as the goal of devolution.

Kwena (2013) found that there was very low community participation and limited awareness in development projects. The study also found that in order for the government to achieve maximum community participation in development projects, devolved units should create room for community participation and also create a favourable environment to address among other things, the institutional obstacles and the capacity gaps within the community. The devolved funds are targeted to different activities in the communities. Devolved funds are regulated to some extent that may either be restrictive or ecumenical to the targeted users. This parameter seeks to evaluate the nature of such devolved funds for the target population to allow them develop themselves while earning a living to enable them acquire food in the end.

The relationship between the independent and the dependent variable are as illustrated in figure 1.1:

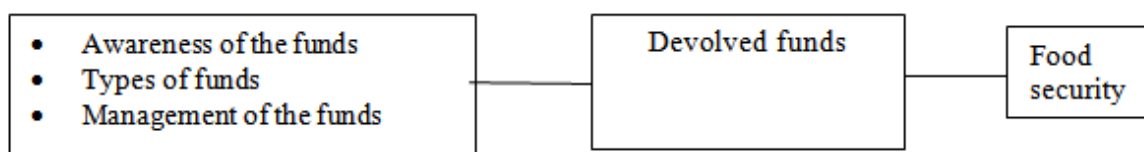


Figure 1.1: Operationalization of variables

III. Methodology

The study adopted quantitative methodology and thus applied descriptive survey research design. The target population comprise 100 managerial staff and 200 Field Staff totaling to 300 respondents from which 171 respondents were determined using Yamane’s Formula. This sampling procedure enabled the researcher to obtain a sample size of 50 managerial staff and 121 Field Staff.

Questionnaires were used to collect quantitative data from the respondents. Piloting of was conducted amongst 17 respondents from the State Department of Fisheries to establish validity and reliability of the instruments. Validity was established through expert judgment whereas reliability was established using test retest technique. Reliability coefficient (r) between the two sets of scores was conducted using Cronbach Alpha Method which yielded, $r = 0.7$, thus indicating higher internal consistency.

Data analysis began by identifying common themes from the respondents’ description of their experiences. Quantitative data were analyzed descriptively using frequencies and percentages and inferentially using linear regression of the form $Y = \beta_0 + \beta_1 X_1 + \epsilon$ to assess the relationship between devolved funds and food security with the help of Statistical Package for Social Sciences (SPSS Version 23).

Note:

Y–dependent variable (food security)

β_0 - is the constant term

β_1 .is the coefficient of the independent variable X_1

X_1 – independent variable (devolved funds)

ϵ -error term which is normally distributed with a mean and variance of zero.

IV. Findings and Discussions

The study targeted 171 respondents from a population of 300 employees with 160 questionnaires filled and returned a 93.6% response rate which was satisfactory to make appropriate conclusions for the study.

1.4 Respondents’ demographics

The respondents comprised of managerial staff and Field staff distributed as shown in Table 4.1. These data show that there was gender disparity at all levels of the study and that the issues of food security are of great concern to male and female stakeholders and the extent to which strategies developed by the government enhance food security.

Table 4.1: Gender Distribution

	Male	Percent age	Female	Percentage
Managerial Staff	30	75%	10	25%
Field Staff	72	60%	48	40%
Total	102	63.8%	58	36.2%

Majority, 70.0% of the managerial staff had Bachelors’ Degrees whereas 30.0% had postgraduate qualifications. Majority, 65.0% of the Field Staff had Degrees whereas slightly more than a third, 35.0% had postgraduate qualifications.

Table 4.2: Respondents’ level of education

Educational Qualifications	Managerial staff		Field Staff	
	F	%	f	%
Degree	28	70.0	78	65.0
Postgraduate	12	30.0	42	35.0
Total	40	100	120	100

1.5 Descriptive statistics

Table 4.3:Devolved funds on Food security

Test Items	RESP.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
		%	%	%	%	%
Devolution has brought about equity in development opportunities and fair distribution of resources.	MS	78.0	11.0	2.5	5.5	3.0
	FS	82.2	9.4	3.3	2.4	2.7
With devolution, resources and public facilities have moved closer to the people at the grassroots	MS	69.5	25.5	1.5	2.0	1.5
	FS	70.5	18.4	1.9	4.3	4.9
The funds advanced by the National Government are pegged to a specific activity in the counties	MS	74.5	19.5	1.5	3.2	1.3
	FS	75.2	13.1	2.4	6.1	3.2
The farmers and the general public are aware of the various funds availed by the counties	MS	75.5	10.5	3.0	7.0	4.0
	FS	75.5	10.5	3.5	4.5	6.0
Projects after devolution have increased level of community participation in development	MS	68.5	23.5	2.5	3.0	2.5
	FS	70.5	18.4	1.9	4.3	4.9
The terms and conditions of access to the devolved funds are favorable to the target beneficiaries	MS	71.5	17.5	3.5	3.5	4.0
	FS	70.5	11.5	3.5	6.5	8.0
The management of the devolved funds rarely engage in fair practices	MS	65.5	21.5	2.5	5.5	5.0
	FS	72.5	12.5	3.5	4.5	7.0

Key: RESP-Respondents; MS-Managerial staff; FS-Field Staff

A fair majority 89%MS and 91.6%FS agreed with the view that devolution has brought about equity in development opportunities and fair distribution of resources. However, only a paltry 2.5% of the managerial staff as well as 3.3% of Field Staff were undecided, while 8.5% of managerial staff as did 5.1% of the Field Staff disagreed.

The study showed that a fair majority 95%MS and 88.9%FS agreed with the view that, with devolution, resources and public facilities have moved closer to the people at the grassroots. However, 1.5% of Managerial staff and 1.9% of the Field Staff were undecided whereas 3.5% of the Managerial Staff as did 9.2% of the Field Staff disagreed. These findings lend credence to the assertions of Simiyu and Mweru (2014) that among the most important arguments on devolution and decentralization is that it enhances economic efficiency by optimizing information flow, bring public services closer to the people and reduce development cost; implying that with devolution, farmers and other members of community have room to create a favorable environment to address among other things, the institutional obstacles to food production and the capacity gaps within the community.

The study also revealed that majority (94%MS) and (88.3%FS) agreed with the view that the funds advanced by the National Government are pegged to a specific activity in the counties However, 1.5% of Managerial staff and 2.4% of the Field Staff were undecided, while 4.5% of Managerial staff and 9.3% of the Field Staff disagreed corroborating the findings of a study by Mutie (2014) which established that majority of the devolved funds are matching/conditional grants and as such subnational governments can do much more to allocate funds to key priority areas within their jurisdictions.

In the same vein, majority 86% managerial staff and 86% of Field staff strongly agreedthat the farmers and the general public are aware of the various funds availed by the counties while11% of the Managerial staff disagreed as did 10.5% of the Field Staff. However, only a paltry 3.0% of the Managerial staff as well as 3.5% of Field Staff were undecided.

The study bare that a fair majority 92% and 88.9% managerial and field staff respectively agreed with the view that projects after devolution have increased level of community participation in development. However, 2.5% of Managerial staff and 1.9% of the Field Staff were undecided, 5.5% of Managerial staff and 9.2% of the Field Staff disagreed. These findings are inconsistent with the findings of a study conducted in Kilgoris Constituency in which Kwena (2013) established that there was very low community participation and limited awareness in development projects. This points to the fact that, in order for the government to achieve

maximum participation of farmers in farming activities, devolved units should create room for farmers' involvement.

The study also exposed that 3.5% of Managerial staff and 3.5% of the Field Staff were undecided, 7.5% of Managerial staff and 14.5% of the Field Staff disagreed. However, a majority 89% and 82% managerial and field staff were in agreement with the view that the terms and conditions of access to the devolved funds are favorable to the target beneficiaries. This is in line with the findings of Kwena (2013) that the devolved funds are targeted to different activities in the communities. Devolved funds are regulated to some extent that may either be restrictive or ecumenical to the targeted users. According to Kwena (2013), this parameter seeks to evaluate the nature of such devolved funds for the target population to allow them develop themselves while earning a living to enable them acquire food in the end.

The study outed that a minority 21.5% of the Managerial staff as did 12.5% of the Field Staff disagreed with a further 2.5% of Managerial staff and 3.5% of the Field Staff been undecided. However, 87% and 85% managerial and field staff were in agreement with the view that the management of the devolved funds rarely engage in fair practices. These findings further corroborate the assertions of Willett and Giovannini (2014) that devolution has been contested due to oppression from very powerful government. This implies that devolution of functions such as agriculture still remains a challenge since management of devolved funds is not prudent which has, in turn, compromised food security.

1.6 Inferential Statistics

Hypothesis H_{01} : The study found that there is significant relationship between devolution of funds for agriculture activities and yields in tons produced by farmers which implies improved food security. The computed p-value was 0.001 which was less than the alpha figure. The linear equation assumed the format:

$Y = \beta_0 + \beta_1 X_1 + \epsilon$ while the hypothesis stated as follows

H_{01} : Devolution of funds has no significant effect on food security in Kenya.

Table 4.4: Amount of devolved funds and 5-years Reported Yields

Amount of Devolved Funds in Billion Kshs	Yields in tons from Farmers
37.1	17.890
45.9	23.342
56.7	38.003
69.6	50.765
78.8	65.075

Table 4.4 indicates that whenever national government allocates and devolves more funds for agriculture activities, yields from farmers increase. In other words, for food security to be enhanced, more funds for agriculture activities should be devolved to match the functions. The results in Table 4.4 were subjected to Linear Regression Model was generated as shown in Table 4.5:

Table 4.5: Linear regression model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-26.588	4.279	-	-6.214	0.008
	Devolved funds	1.139	0.072	0.994	15.856	0.001

These results from the linear regression equation indicates that the coefficient for devolved funds for agriculture activities is 1.139 implying that for every increase in devolved funds for agriculture activities, the yield is expected to increase by 1.139 tons. These findings are in agreement with the findings of Mutie (2014) who established that majority of the devolved funds are matching/conditional grants and as such subnational governments can do much more to allocate funds to key priority areas within their jurisdictions. Hence, with devolution, farmers have room to create a favourable environment to address the institutional obstacles to food production and have access to financial capacity to engage in food production.

V. Conclusion of the study

The study established that devolution of funds for agricultural activities has improved food security since it has brought about equity in development opportunities and fair distribution of resources. With devolution, resources and public facilities have moved closer to the people at the grassroots lending credence to the fact that devolution enhances economic efficiency by optimizing information flow, bring public services closer to the people and reduce development cost. However, this has not translated into improved food security

and this is attributed to the fact devolved funds for agriculture are not enough and money do follow functions. From the study findings, many farmers and the general public are aware of the various funds availed by the counties and devolution has increased level of community participation in development. Hence, to realize maximum participation in farming activities, devolved units should create room for farmers' involvement.

VI. Recommendations of the study

The study suggests that the national government should devolve agriculture functions and funds to undertake such functions and then accord farmers an opportunity to actively participate in making decisions concerning the most viable methods and approaches of food production.

VII. Further research

The study recommends the following areas for further research:

- i) The extent to which agricultural extension services influence food security
- ii) The influence of farmers' training and capacity on food security.

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