



## **Adequacy of the Commission on Revenue Allocation Parameters for Equitable Revenue Sharing with Counties in Kenya**

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### **ABSTRACT**

Revenue allocation formulae are in use in over 24 federal states in the world today. In Kenya the Commission on Revenue Allocation (CRA) modelled its first generation revenue allocation formula as per the Kenya Constitution 2010. However this formula has been criticised by Kenyans, politicians and professional groups. This paper specifically focused on the adequacy of the CRA parameters used in the revenue allocation formula in Kenya. The study adopted a cross sectional survey research design. A survey was considered most appropriate in establishing characteristics and relationships between key variables and in facilitating collection of relevant information whose results can be generalised to a defined larger population. The population of this study consisted of the 47 counties established by the Kenya constitution 2010. A sample size of nine (9) counties representing 19.15% of the total population was used. The study used cluster random sampling technique to provide a fair representation of the county governments. The data was analysed using Descriptive statistics, Principle Component Analysis, Analysis of variance and Communality Analysis. This study established the adequacy of each of the parameters used by the CRA in their formula.

**Key Words:** Population, Basic Equal Share, Poverty Index, Land Area, Fiscal Responsibility, Devolution, Constitution.

### **INTRODUCTION**

Revenue allocation refers to the redistribution of fiscal capacity between the various levels of government, or the disposition of fiscal responsibilities between tiers of government (Adeleke, 2011). In federal systems of government, revenue allocation involves two schemes. The first is the vertical sharing between the federal or inclusive government and the other tiers of governments. The subject of these sharing schemes is the federally collected revenues. This is because the revenues generated within the jurisdictional areas of the units – states and local governments – are not subject to the national sharing formula (Afolabi, 1999). In the annals of federal countries' revenue sharing arrangements, the sources of the federally collected revenue that form the subject of the sharing formula have remained largely unchanged. These sources which are not amenable to other units include import duties, mining rents, excise units, export duties and royalties (Ovwasa, 1995).

The problem of revenue allocation has focused on not who should raise the taxes, but on how to share the proceeds, that is, the actual revenue collected by the federal government (Graham, 1964). Another principle of revenue transfer which is horizontal revenue sharing arises out of the variations in revenue generation capacities of the component units. Where the revenue raising capacities are low, heavier tax burden is imposed relative to higher revenue raising capacities area. This transfer is called "equalization transfer". This transfer is necessary because higher taxation will scare away businesses and the economy

of the unit will become more depressed. To avoid this, the higher the federal level of government has to transfer to the lower unit, the better, to enable it make up for the differences between its internally generated revenue and those required for maintaining the minimum standard of services (Ojo, 2009)

Poor governance is increasingly being cited as one of the most significant factor contributing to poor economic performance in most developing countries. The World Bank has repeatedly argued that poor economic performance in most developing countries, particularly in Sub-Saharan Africa (SSA), is attributed to poor governance (World Bank, 2004). The issue of “good governance” was further amplified by the 2009 World Bank report on SSA when the crisis in the region was termed as a “crisis of governance” (World Bank, 2010). The finances of local governments depend heavily on intergovernmental transfers, especially from state governments. These intergovernmental transfers are, however, just one element in a complex system of intergovernmental fiscal and regulatory linkages. Local finances depend on the entire national fiscal system, because of the changing roles of Federal, state, and local governments in the provision of social assistance to low-income households (Wildasin, 2009).

This study was guided by the need of the devolved Government of Kenya to come up with parameters that are adequate in providing for an equitable revenue allocation formula for allocating funds to the newly created 47 Counties. Optimism about the positive economic effects of devolution was a strong factor in the devolution debates in the agitation for the Constitutional change in Kenya. The Constitution of Kenya provides for a two-tiered system of government in which the sovereign power of the people is exercised at the national and county levels. The Constitution specifies that both tiers of government are entitled to equitable share of revenue raised nationally (GOK, 2010). This sets the stage for allocation of funds to run these two tier Governments. The Commission on Revenue Allocation (CRA) has been charged with the responsibility of ensuring equitable revenue allocation to the Central Government and the local Governments. The CRA which is established by Article 215 of the constitution has its functions spelled out by Article 216 as including the generating of recommendations for the vertical and horizontal sharing of the revenue raised nationally (GOK, 2010). The recommendations provide a framework for the equitable shares for both levels of government and for each county. Given the diverse developmental conditions in the country, it will be critical, and in adherence to the need to build a more equal society the funding mechanisms and instruments should not only ensure a predictable and sustained flow of funds to counties, they should also ensure that county governments are equitably funded. The CRA has since constructed two revenue allocation formulae, none of which has been accepted by Kenyans with a general consensus. The first revenue allocation formula, which has since been shelved, is shown in Table 1.

**Table 1: The First CRA Formula**

<b>Parameter</b>	<b>Weight</b>
Population	60
Basic Equal Share	20
Poverty Index	12
Land Area	6
Fiscal responsibility	2
<b>TOTAL</b>	<b>100</b>

Source: CRA

This formula was widely criticized by Kenyans of all walks of life. After incorporating feedback from the public, the commission modeled a new formula as shown in Table 2.

**Table 2: The Second CRA Formula**

<b>Parameter</b>	<b>Weights (%)</b>
Population	45
Basic Equal Share	25
Poverty Index	20
Land Area	8
Fiscal responsibility	2
<b>TOTAL</b>	<b>100</b>

This formula was approved by parliament on 27<sup>th</sup> November, 2012.

Therefore, there is need for research and deeper interrogation of various parameters and their weights in order to determine their adequacy in the revenue allocation formula.

### **RESEARCH METHODOLOGY**

The study relied on a cross sectional survey research design. The population of this study consisted of the 47 counties established by the Kenya constitution 2010. A sample size of nine (9) counties representing 19.15% of the total population was used. A total of 228 officers of the county governments responded (from the 9 sampled counties) out of the targeted total of 260 respondents. This represented 87.69% response rate. The study used cluster random sampling technique to provide a fair representation of the county governments. Data was analyzed using Descriptive statistics, Principle Component Analysis, Analysis of Variance (ANOVA) and Communality Analysis. The study mainly used questionnaires and interview methods for primary data and in some instances document analysis was used as source of secondary data.

### **LITERATURE REVIEW**

This study is anchored on the fiscal federalism theory originally developed by Musgrave (1995) and Oates (1972). The “theory of fiscal federalism” concerns the division of public-sector function and finances in a logical way among multiple layers of government (king 1984). Applying the fiscal federalism theory in the equitable revenue allocation model for the devolved government of Kenya will ensure the division of public-sector function and finances in a logical way among two layers of government, that is, the national government and the 47 county governments.

Much of the literature of fiscal federalism consists of relatively unrelated treatments of such issue as the “decentralization theorem” (Oates 1991), discussion of inter- governmental spillovers and inter-governmental grants (King, 1984), fiscal mobility and migration (Wildasin, 1991), and vertical fiscal imbalance and dependence (Boix, 2003). These treatments may not necessarily apply to the model of devolution in Kenya because of the entrenchment of the constitutional guide on revenue allocation in Kenya.

Allocation by formula is one of the decision rules used in federal and devolved States by budgeters to allocate scarce resources in the public sector (Mwenda, 2010a). Mikesell (2006) described an allocation formula as a quantitative mathematical equation used to distribute grant funds to eligible recipients. Wildavsky suggested that allocation formulas for public-sector program expenditures evolved out of recurrent budget processes (Wildavsky, 2004). Usually, an allocation formula is specified in legislation, but sometimes it is provided by regulation. In Africa, revenue allocation formulas have followed a distinctive pattern where the federal government is in a superior position and sub-national levels in the inferior position (Aigbokhan, 1999). This means that the central government engages in functional expenditure obligations than both the state and local government does.

As mentioned above CRA chose to use an expenditure needs approach to selecting parameters. An expenditure needs formula adjusts funding to reflect the fact that it costs more in some counties to deliver services than it does in others. It does not take into account differences in revenue-raising capacity (GOK,

2012). There are different approaches to measuring the expenditure needs of counties. These include the equal per person, historical spending of counties, top-down per client norms; bottom-up costing of a standard basket of goods and services, and the weighted index of expenditure needs (Spencer, 2012). The CRA chose to use the “weighted index of expenditure needs” approach as applied in many other federal states. They identified five parameters for sharing out revenue among the counties. These are: Population; Poverty index; Land area; Basic Equal Share; and Fiscal responsibility (GOK, 2012).

ICPAK (2012) proposed realignments on the CRA weights of the parameters that, in their opinion would yield a more equitable basis for revenue allocation. These were as follows: Population 40%; Equal share 20%; Poverty 20%; Land and Infrastructure Needs 20%; and Fiscal discipline 0%. It is critical to note that though population defines the service needs of a region, it also denotes the possibilities of high concentration of the basic infrastructure necessary for service delivery. Decentralizing and equalizing development across the country can be achieved by capacity to deliver services to the under-developed and rural areas. The gaps in operating systems and processes of counties vary and should be addressed by committing enough financial resources. Poverty marks the epitome of inequality. According to ICPAK (2012), the CRA formula appears to relegate poverty as a fringe causality of inequity. A sensible government will adopt policies that institutionalize pro-poor programmes aimed at getting the rich to supplement the course for the poor. Land size and terrain have a direct relationship with the cost of providing the public goods. We argue that there are aspects of inequality which are currently not measurable with some degree of objectively but are appendages to land mass. The aspects are however critical and must be addressed through revenue allocation. Allocation on the basis fiscal discipline is more of a condition rather than an absolute criterion. As a condition, it should be prudent to come to an understanding on the basis for assessment before the implementation.

**Population;** Allocation to the population parameter is based on two factors, (1) Cost of service which is dependent on population size and (2) promotion of equitable society on per capita basis. These however do not take into account the role that population plays in widening the tax base. It is thus important that the CRA takes into account the impact of county population in as far as widening the tax base is concerned.

**Poverty Index:** Poverty marks the epitome of inequality. The CRA formula appears to relegate poverty as a fringe causality of inequity (ICPAK, 2012). A sensible government will adopt policies that institutionalize pro-poor programmes aimed at getting the rich to supplement the course for the poor. However it has a negative connotation and has been contested politically. It still remains an important parameter used to address unique challenges such as drought, disease and famine faced by poor counties.

**Land Area;** Land size and terrain have a direct relationship with the cost of providing the public goods. We argue that there are aspects of inequality which are currently not measurable with some degree of objectively but are appendages to land mass. The aspects are however critical and must be addressed through revenue allocation. The size of land in a county does not necessarily translate to ownership of land by the inhabitants.

**Basic Equal Share;** Decentralizing and equalizing development across the country can be achieved by capacity to deliver services to the under-developed and rural areas. The gaps in operating systems and processes of counties vary and should be addressed by committing enough financial resources. The weight should equally be applied to put in place systems and processes to address shortfall in skills necessary for the counties to effectively deliver on their mandate.

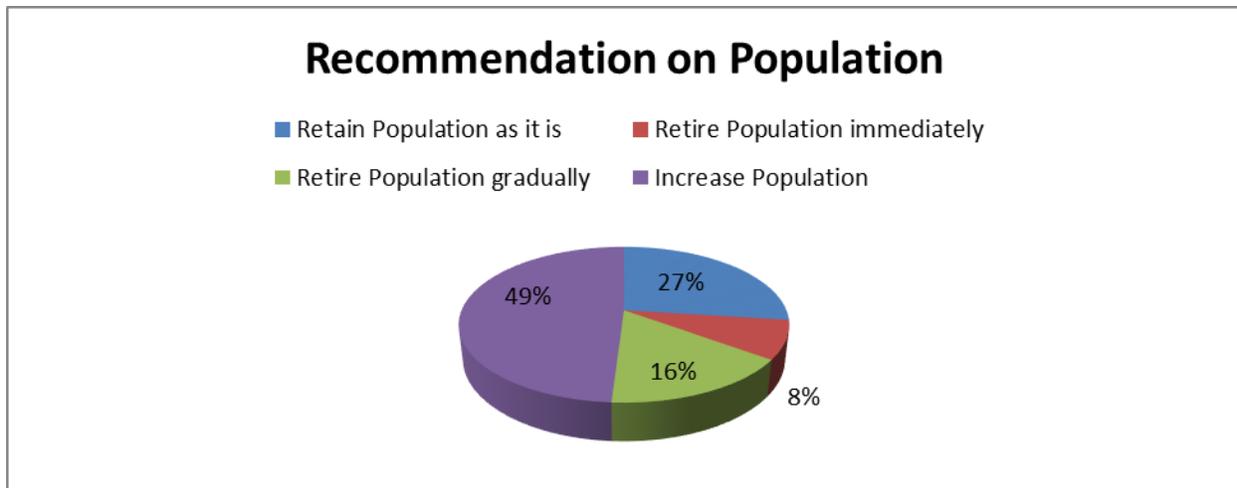
**Fiscal Responsibility;** The use of fiscal responsibility as a parameter is meant to enhance preparation, submission in time and approval of balanced budgets on time by the County Assemblies in conformity with the legal framework. This parameter recognizes effort and ability to collect own revenue, encourage timely submission of financial reports to the four institutions: Auditor General, National Treasury, OCOB and the CRA; which will then be published and publicized. This parameter would ensure that there is timely submission of annual financial statements to the Auditor General by 30th September each year and copied to the relevant institutions as stipulated in the PFM Act.

## RESULTS AND INTERPRETATIONS

The study analysed the various parameters used in the CRA revenue allocation formula. Some of their recommendations which are discussed in details in this section include: Increasing the weight on the parameter on population; considering historical injustices and environmental factors; including the level of infrastructural development; addressing population dynamics as well as demographic variations; abolishing the Land area parameter since service delivery is to the people and not land; considering industrialization level of counties and disease burden as parameters given that health is a devolved function; addressing the credibility of the census of 2009 data; enhancing the fiscal responsibility Parameter; addressing the credibility issues on the data on poverty levels; addressing the capacity of counties to generate own revenue; providing incentives to counties that make the highest contribution to GDP; addressing the peculiarities of the counties; abolishing negative parameters like poverty index and high population as they encourage counties either to remain poor or populous and; Considering a parameter on the quality of life as represented by Human Development Index (HDI).

**Population Parameter;** Some respondents noted that Counties with high population already have a high concentration of the basic infrastructure necessary for service delivery and therefore should not continue getting undue advantage over the others. A high population is therefore considered as a source of revenue. For example the first generation formula awarded: Nairobi County which had 3.1 million people- Kshs. 7.7 billion, Nakuru County which had 1.6 million people - Kshs. 1 billion, Kiambu County which had 1.6 million people - Kshs. 869 million (GoK, 2012). On the other hand Counties with high population also enjoy low cost of service delivery due to economies of scale. For example the cost of meeting the medical needs of 10,000 people concentrated in one square kilometer is much lower than that of meeting the medical needs of 10,000 people spread over 500 square kilometers. Most respondents argued that the population parameter does not reveal the purchasing power of the people as the poverty index reveals. Some respondents observed that the census data of the year 2009 has failed the test of data integrity and therefore should not be relied upon.

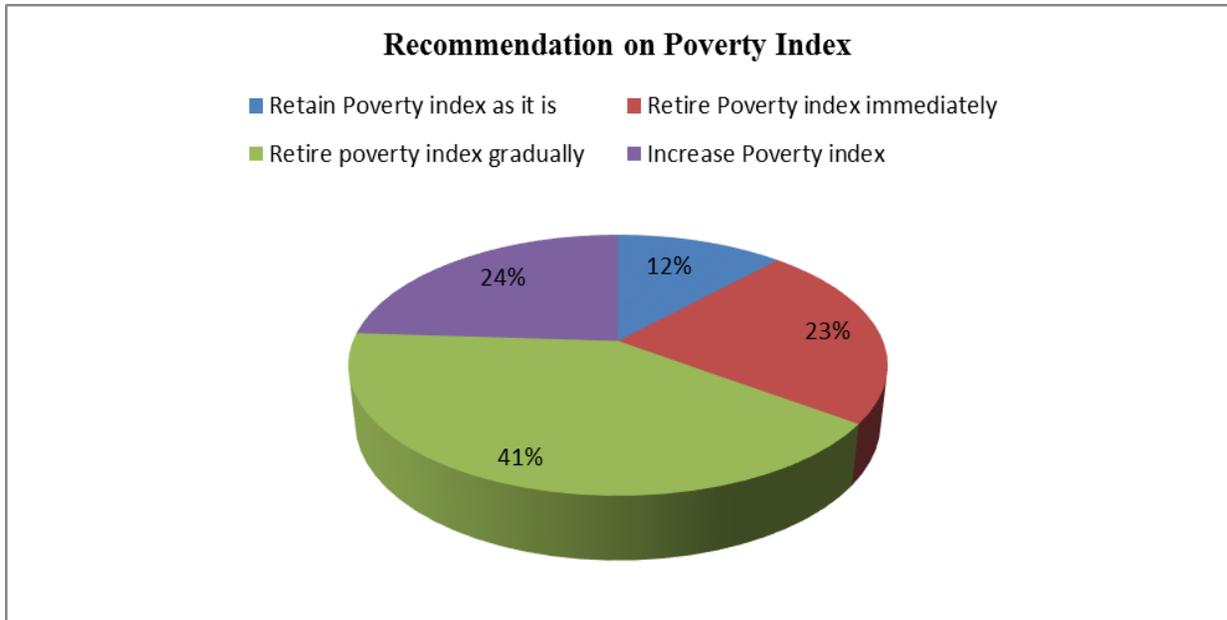
It was also observed that densely populated counties have more sources of revenues such as property taxes. However, population density is inversely related to the ideals of service delivery and therefore cannot be used. Some respondents noted that urbanization should be considered because it provides for per unit cost of service delivery, this will serve the objective of redistribution of services, however, the Urban Areas and City Act is still being prepared in Kenya. It was also noted that Counties capacity to generate revenue should be considered under urbanization. At the moment there is no data available on Counties contribution to the GDP and therefore this may apply in future. Other parameters which were proposed by the respondents but are closely related to population and urbanization include industrialization, dependency ratio, and level of economic activity. Generally population should be given less weight than it has currently. When asked to indicate whether the population parameter should be retained as it is; retired immediately; retired gradually or increased, 49% of the respondents proposed that we increase the weight of the population parameter, 27% proposed that we retain the weight of the population parameter as it is, 16% of the respondents were of the view that the weight of the population parameters should be reduced gradually while only 8% of the respondents were of the view that we do away with the population parameter altogether. This is shown in Figure 1.



**Figure 1: Recommendation on Population**

**Poverty Index;** Poverty is an important measure of Human development that should be considered in the sharing of the *National Cake*. Poverty is therefore a key parameter that can be used to address inequality and welfare of the citizens. Poverty level is a key measure of peoples’ standard of living and can therefore be used to address economic empowerment of poor counties in Kenya. The CRA has chosen to use Poverty Index as a parameter that measures the level of poverty in a county. However it has a negative connotation and has been contested politically. It still remains an important parameter used to address unique challenges such as drought, disease and famine faced by poor counties. There are other measures of poverty, for example the income approach, poverty head count, poverty gap, human development index, poverty severity, some of which are difficult to interpret, that could still be considered.

This study sought to (1) determine the need that poverty index is meant to address (2) assess the strength of the parameter in meeting the service delivery objective and redistribution objective and (3) establish how the parameter can be revised to accommodate the concerns of the various stakeholders. From our findings, poverty index addresses economic empowerment, inequality and welfare of the citizens. The parameter is also strong in providing for the redistribution objective. Respondents were asked to give their opinion whether the weight of poverty index as a parameter should be; retained as it is; removed completely; reduced gradually or increased. 41% of the respondents were of the opinion that the weight of poverty index should be reduced gradually, 24% suggested that we increase the weight of poverty index in the formula, 23% of the respondents were of the view that poverty index should be eliminated from the formula immediately while 12% of the respondents were of the view that the weight of the poverty index should be retained in the formula as it is. This is illustrated in Figure 2.



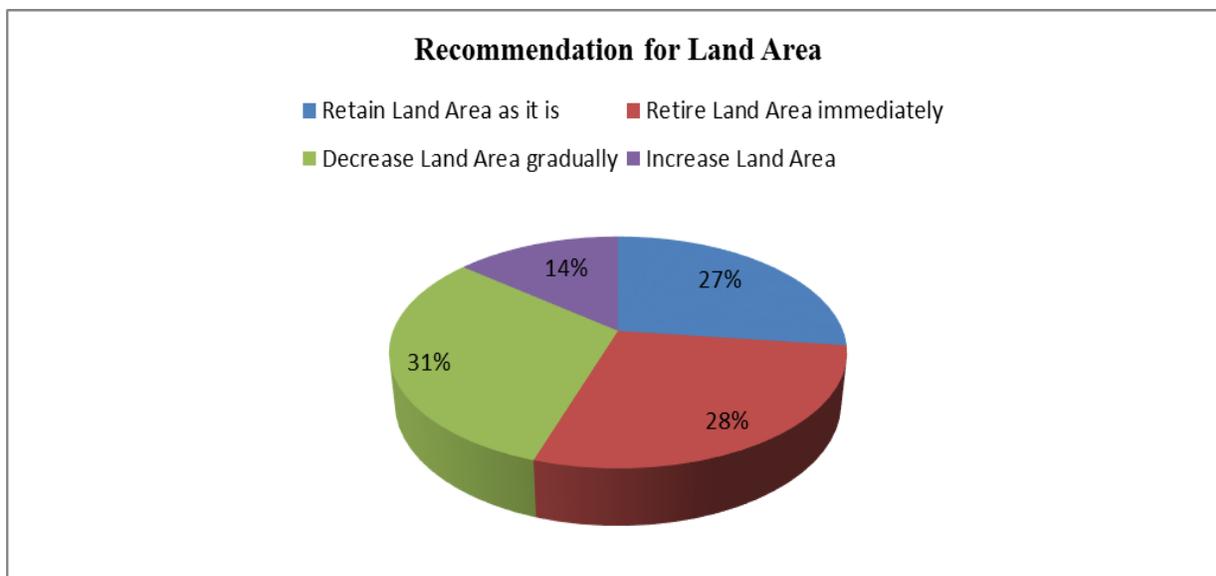
**Figure 2: Recommendation on Poverty Index**

Most of the respondents were of the view that more data is needed for a more accurate measure of poverty instead of using the income approach, e.g. the Human Development Index (HDI) and County Development Index (CDI). However these indices currently do not have sufficient data in Kenya and therefore may not be tenable in the near future. substitute it with a multifaceted parameter, parameter to be linked to fiscal responsibility.

**Land Area;** In this study land area was used from the data provided by the Kenya National Bureau of statistics. Specifically the 2009 census was considered. The land area coverage by a county was used because it is the data which is readily available besides the cost of service delivery depends on the size of a county. The land size and terrain have a direct relationship with the cost of providing public goods. It happens that in Kenya, the large counties in terms of size are also the poorest in terms of wealth. It should be noted however that the provision of services should be on people as opposed to land and that some counties have large chunks of land that are national parks, game reserves, privately owned ranches and plantations. Also it should be noted that some counties are small in size but characterized with very bad terrain.

According to Cardew (1996) other forms of land density need to be considered in revenue sharing rather than the raw land mass. For example residential density could be a good measure because it provides the ratio of the number of dwellings to the area of land they occupy including all the land areas included in gross residential density, plus regional uses such as education (schools, universities and colleges), open space (regional parks, environmental protection reserves), larger scale commercial uses (employment, shopping centres) and transport (railways, arterial roads). In our case such data is not available per county and therefore may not be applicable.

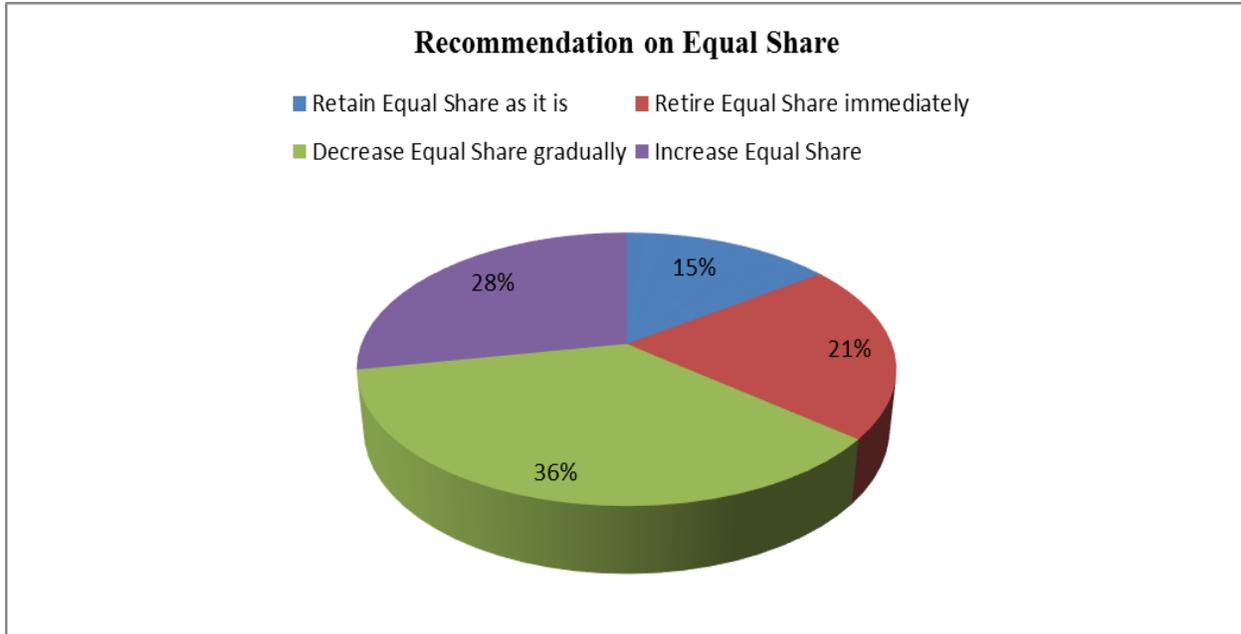
The respondents were asked whether the weight of land area should be retained as it is; done away with; decreased gradually or increased. 31% of the respondents were of the opinion that the weight of land should be reduced, 28% recommended that land should be eliminated from the formula, 27% wanted the weight of land to be retained as it is while 14% of the respondents were of the view that the weight of land area should be increased in the formula. This is shown in Figure 3.



**Figure 3: Recommendation on Land Area**

**Basic Equal Share;** Basic Equal Share as a parameter has an important equalizing effect in that all counties are treated equally regardless of size or population. According to the CRA this component has been included because all counties have some basic expenses that need to be met irrespective of their size. These services include salaries and others expenses for County Executives and County Assemblies and are critical for effective governance and administration at county level. In addition, Article 176 of the Constitution requires county governments to further decentralize their functions and provision of services. All the counties are facing different inherited costs especially on personnel. These are costs which were inherited from their respective local governments which were largely riddled with corruption, political patronage and nepotism. This parameter gives advantage to those counties that inherited infrastructure over those that had to start from a scratch given that they are all allocated an equal amount.

The respondents were asked whether the weight of the basic equal share should be retained as it is; done away with; decreased gradually or increased. 15% of the respondents wanted the basic equal share to be retained as it is; 21% of the respondents suggested that the parameter be eliminated from the formula immediately; 28% of the respondents were of the opinion that basic equal share should be increased to cushion counties that have inherited huge recurrent from the national government and 36% of the respondents recommended that the parameter be revised downwards in order to free more funds for sharing among counties on a more substantive basis. This is shown in Figure 4.



**Figure 4: Recommendation on Equal Share**

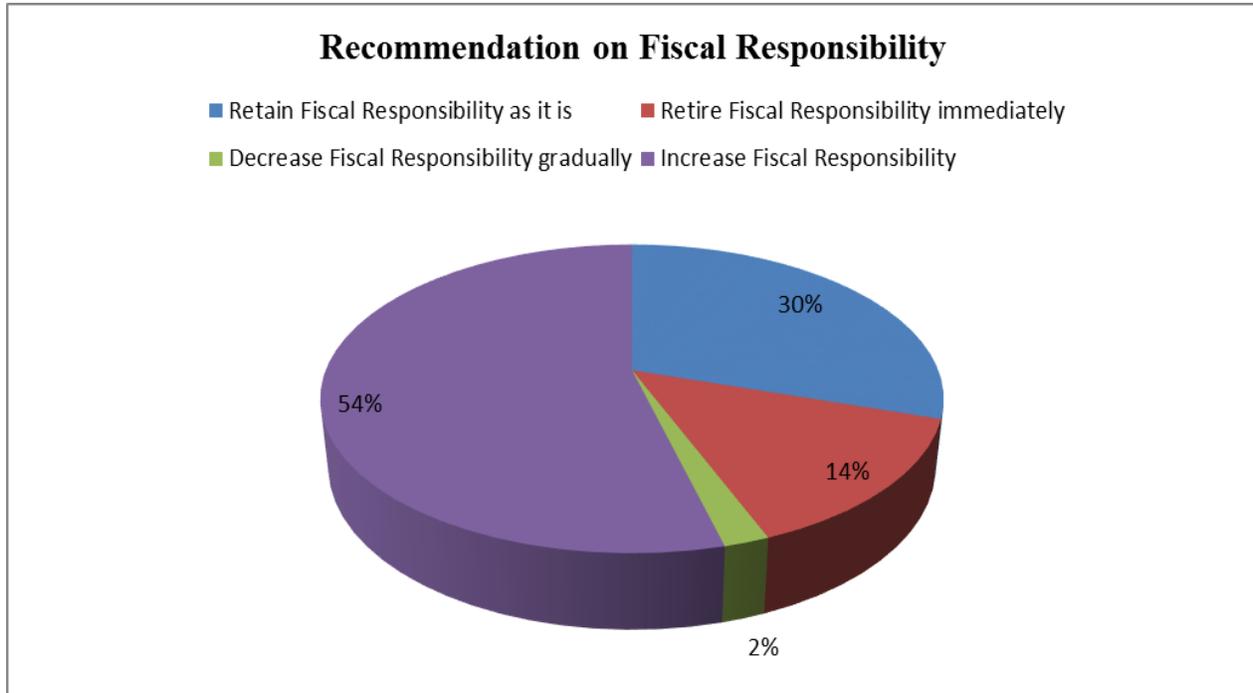
**Fiscal Responsibility;** The Fiscal Responsibility parameter should mainly concern itself with Fiscal gap and Absorption Capacity. The parameter addresses service delivery objective with a direct impact in re-distribution in the long-run. Fiscal responsibility parameter is a critical parameter in the formula and would address the following needs.

Article 201 of the Constitution sets the following principles to guide all aspects of public finance. In the Republic there shall be openness and accountability, including public participation in financial matters; (a.) the public finance system shall promote an equitable society, and in particular; the burden of taxation shall be shared fairly; revenue raised nationally shall be shared equitably among national and county governments; and expenditure shall promote the equitable development of the country, including by making special provision for marginalized groups and areas. (2.) The burdens and benefits of the use of resources and public borrowing shall be shared equitably between present and future generations; (3.) Public money shall be used in a prudent and responsible way; and (4.) financial management shall be responsible, and fiscal reporting shall be clear.

It is only the Fiscal Responsibility parameter in the formula that would encourage compliance to the above constitutional requirement. Further, the Public Finance Management Act, 2012 sets out fiscal responsibility principles to both levels of government. Section 15(2) of the PFMA sets out the following *FR principles to the national government*; (i) Over the medium term a minimum of thirty percent of the national and county governments budget shall be allocated to the development expenditure; (ii) The national government's expenditure on wages and benefits for its public officers shall not exceed a percentage of the national government revenue as prescribed by regulations; (iii) Over the medium term, the national government's borrowings shall be used only for the purpose of financing development expenditure and not for recurrent expenditure; (iv) Public debt and obligations shall be maintained at a sustainable level as approved by Parliament for the national government and the county assembly for county government; (v) Fiscal risks shall be managed prudently; and (vi) A reasonable degree of predictability with respect to the level of tax rates and tax bases shall be maintained, taking into account any tax reforms that may be made in the future.

In this study, respondents were asked whether the weight of the basic equal share should be retained as it is; done away with; decreased gradually or increased. Only 2% of the respondents were of the opinion

that the weight of fiscal Responsibility should be reduced, 14% recommended that fiscal Responsibility should be eliminated from the formula, 30% wanted the weight of fiscal Responsibility to be retained as it is while 54% of the respondents were of the view that the weight of fiscal Responsibility area should be increased in the formula. The details are shown in Figure 5.



**Figure 5: Recommendation on Land Area**

**Weighted Mean Statistics for Adequacy of CRA Parameters in Revenue Allocation**

The mean and standard deviations of the findings are indicated in Table 3. The mean range used in the study is 0 to 5 inclusive. The mean obtained for the findings are between 2 and 3. The scale 2 is valid extent and 3 moderate. We can conclude the findings are valid since the means of the data obtained are within acceptable range. The standard deviation is used to measure how concentrated the data are around the mean. The more concentrated the data, the smaller the standard deviation. A small standard deviation means that the values in a statistical data set are close to the mean of the data set. Table 3 findings show all the standard deviations are close to 1 for all the data findings. This implies all the data sets are concentrated around the mean scores hence valid for interpretations.

**Table 3: Mean and Standard Deviation for CRA Parameters**

	Mean	Std. Deviation
Population is adequate as one of the parameters in revenue allocation	3.10	1.241
Poverty Index is adequate as one of the parameters in revenue allocation	3.25	1.236
Equal Share is adequate as one of the parameters in revenue allocation	2.82	1.296
Fiscal Responsibility is adequate as one of the parameters in revenue allocation	3.10	1.110
Land Area is adequate as one of the parameters in revenue allocation	2.75	1.254

**Coefficients of the CRA Parameters**

Table 4 shows a positive beta coefficient of 25.1%, which further confirms that the CRA Parameters, have a positive influence on the formula in Kenya.

**Table 4: Coefficients of CRA Parameter**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	18.884	.349		5.398	.000
Strategy Formulation and Execution	.265	.075	.251	3.556	.000

Using the summary presented in Table 4, a linear regression model of the form,  $Y = \alpha + \beta X_i$  can be fitted as follows:

$$Y = 18.884 + 0.265X_1 + \mu$$

**Pearson Correlation Coefficient**

There is a 25.1% positive correlation between the CRA Parameters and the revenue share per county in Kenya. The Pearson correlation coefficient is shown in Table 5.

**Table 5: Pearson Coefficients for the CRA Parameters**

		Revenue Allocation Per County	The CRA Parameters
Revenue Allocation per County	Pearson Correlation	1	.251
	Sig. (2-tailed)		.000
	N	228	228
The CRA Parameters	Pearson Correlation	.251	1
	Sig. (2-tailed)	.000	
	N	228	228

Table 5 demonstrates that the CRA Parameters is statistically significant since its p-value is less than .05 ( $p$ -value =.000).

**Regression Analysis for the CRA Parameters**

The coefficients obtained indicate that the correlation coefficient (R) between the independent variable (CRA Parameters) and the revenue allocation per county in Kenya was .251 which is a positive correlation relationship. Table 6 shows a coefficient of determination ( $R^2$ ) of .063, which means that this variable alone can explain up to 6.3% of the variations in the dependent variable, revenue allocated per county in Kenya.

**Table 6: Model Fitness for the CRA parameters**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.251 <sup>a</sup>	.063	.092	1.246

### ANOVA for the CRA Parameters used in the Revenue Allocation Model

An ANOVA test for the CRA parameters revealed that the variable has a P- value equal to .000, demonstrating that the model is statistically significant in explaining the change in the dependent variable. This is because the P-value is less than .05 at the 95% level of confidence.

**Table 7: ANOVA for the CRA Parameters**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	43.335	5	8.667	5.584	.000 <sup>a</sup>
	Residual	344.595	222	1.552		
	Total	387.930	227			

According to the empirical results presented in Table 7, the Null Hypothesis ( $H_{03}$ ) is rejected and a conclusion reached that, at 5% level of significance that the CRA parameters play a significant role in the revenue allocation model adopted by the CRA in revenue sharing amongst the 47 county governments in Kenya.

### CONCLUSIONS AND RECOMMENDATIONS

The CRA parameters form the basis for any future adjustments, the parameters were well thought out, however they need to be adjusted to make the revenue allocation more equitable. Any adjustment or change in formula must therefore be benchmarked on the CRA parameters. In case the parameters were to remain as they are we have recommended an adjustment to their weights as per our proposition one.

In light of the results and summary discussed above, this study therefore concludes that we should consider: (1) Decreasing the weight on the parameter on poverty Index; (2) incorporating historical injustices and environmental factors; (3) including the level of infrastructural development; (4) addressing population dynamics as well as demographic variations; (5) abolishing the Land area parameter since service delivery is to the people and not land; (6) considering level of economic development in the counties and disease burden as parameters given that health is a devolved function; (7) addressing the credibility of the census of 2009 data; (8) enhancing the fiscal responsibility Parameter; (9) addressing the credibility issues on the data on poverty levels; (10) addressing the capacity of counties to generate own revenue; (11) providing incentives to counties that make the highest contribution to GDP; (12) addressing the peculiarities of the counties; (13) abolishing negative parameters like poverty index and high population as they encourage counties either to remain poor or populous and; (14) Considering a parameter on the quality of life.

It may not be realistic to address all these issues at once, this study has therefore reviewed the parameters in line with the views of our respondents and the secondary data analysed. This forms the basis for our recommendation in section 5.4

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