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Bagaka, Obuya

Northern Illinois University

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**Fiscal Decentralization in Kenya:  
The Constituency Development Fund and the Growth of  
Government**

**Obuya Bagaka.**

**Department of Political Science  
Division of Public Administration**

*Northern Illinois University*

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## **Abstract**

*This paper explores the financial implications of fiscal decentralization policies on the central government's operating budget in Kenya. The paper evaluates how devolved funds under the constituency development fund (CDF) have been utilized to start healthcare capital projects (clinics) at the local level. The study finds that fiscal decentralization has promoted allocative efficiency and equity but at a cost of exporting tax burdens (operations and maintenance) to the central government emanating from capital projects implemented at the local level. The exported tax burdens have policy implications and call for reforms of the CDF program to reflect a benefit-expenditure structure.*

## **Introduction**

Like other developing countries, Kenya has been haunted by the issue of equity in resource redistribution. Since independence in 1963, the Kenyan government has formulated an array of decentralization programs, among them the District Development Grant Program (1966), the Special Rural Development Program (1969/1970), District Development Planning (1971), the District Focus for Rural Development (1983 -84) and the Rural Trade and Production Center (198-89). Though ingenious, these programs suffered the same fate – a lack of funding and excessive bureaucratic capture by the central government (Ogutu, 1989; Khadiagala & Mitullah, 2004).

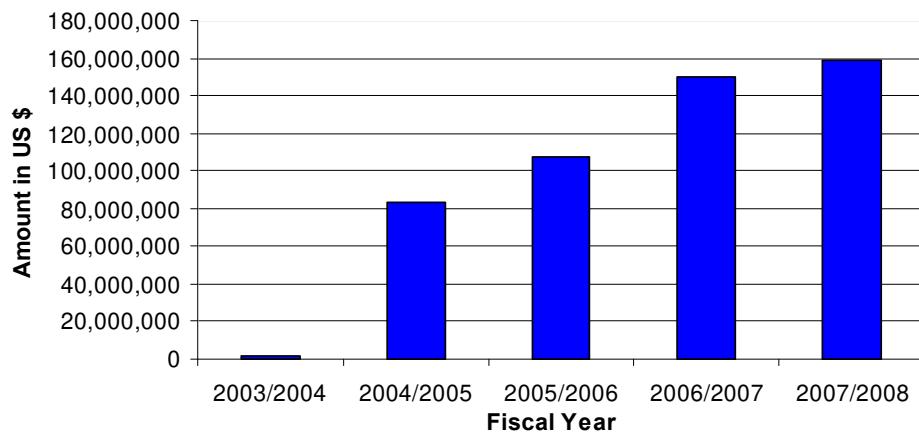
It is from this background that in 2003 the Constituency Development Fund (CDF) was created. The CDF is a program that was established in 2003 through an act of parliament with the aim of ironing out regional imbalances brought about by patronage politics by providing funds to parliamentary jurisdictions (constituencies) to fight poverty. The program was designed to fight poverty through the implementation of development projects at the local level and particularly

those that provide basic needs such as education, healthcare, water, agricultural services, security and electricity.

The CDF program comprises of an annual budgetary allocation equivalent to 2.5% of the total national revenue, though the Kenya parliament recently passed a motion to increase the fund to 7.5% of the total national revenue. Allocations to the 210 parliamentary jurisdictions are clearly spelled out in the CDF Act, where 75% of the fund is allocated equally among all 210 constituencies. The remaining 25% is allocated based on constituency poverty levels, population size and the size of the constituency. A maximum 10% of each constituency's annual allocation is used for education bursary schemes, 3% for administration and 5% for rainy day fund for each constituency. Since its inception, the CDF kitty has grown from a paltry Ksh. 126,000,000 (U.S. \$1,938,461) for 2003/04 fiscal year to Ksh. 10,304,805,060 (U.S. \$158,535,462) for 2007/08 fiscal year. Figure 1 below shows the trend of yearly allocations for the CDF program for fiscal years 2003/2004 to 2007/2008.

**Figure 1**

**Constituency Development Fund Allocations for  
Fiscal Years 2003/04 - 2007/08**



**Source:** Government of Kenya (GOK) website: <http://www.cdf.go.ke>  
Accessed on 3/4/2008.

While this yearly allocations may not appear to be much, its impact both physically and socially at the community level has been phenomenal. For instance, through the CDF funds, many schools have been built and equipped. This has aided the government's policy of providing free primary school education. In the health sector, many hospitals, dispensaries, maternity wings within existing health facilities and clinics have been built in record time. This has helped decongest larger district level hospitals. Additionally, the CDF has helped crime-prone areas to construct police posts which the central government has been quick to bring into operation to reaffirm its commitment to public safety. Given the mosaic of expenditure decisions on a myriad of local projects and because of the relaxed rules on how and where expenditure is to be incurred, the CDF can be construed as a delegated form of fiscal decentralization because the program allows local people to make their own expenditure decisions that reflect their tastes and preferences and maximizes their welfare.

A look at the implementation of CDF in recent years reveals a mismatch between the local nature of capital expenditure decisions and financing for the operations and maintenance of such projects with local benefits. For example, in recent years the central government has been forced to step in to bring into operation local healthcare capital projects such as clinics constructed through the CDF. Because the central government holds a policy monopoly on healthcare policy, it is evident that when it steps in to bring such projects into operation, those who benefit from those operational projects do not incur the recurrent costs of operating and maintaining their capital projects

Such mismatch however, are no accidents given the politics and discretion of capital spending. Politically, the symbolism attached to ribbon-cutting ceremonies that mark the opening of new projects such as hospitals, schools, roads, police stations, water boreholes and irrigation

systems enable politicians to showcase their accomplishments at the local level. Given the discretionary nature of capital spending<sup>1</sup> and the intrinsic value attached to such political symbolism, more often, new projects are undertaken while the existing ones are either left to deteriorate or are inadequately funded (Tanzi & Davoodi, 1998). Additionally, when local politicians are voted out and new ones elected, the new leaders may take advantage of Section 21 (3) of the CDF act<sup>2</sup> to avoid bending the CDF rules and sideline funding for new capital projects or funding for maintenance of projects initiated by their opponents for two reasons. *First*, they may use their power to make a political statement by starting new projects to showcase their abilities. And *second*, newly elected leaders may want to use their power to initiate projects that reward their supporters while ignoring projects started by their opponents which they might associate with their opponents' political downfall.

The mismatch between projects' benefits at the constituency level and the true operating cost of such projects creates three problems. *First*, since the central government bears the cost of operating some CDF-funded projects like clinics its overall operating cost is likely to grow. *Second*, given that the central government's general fund is predominantly derived from the general taxation of its population, CDF's healthcare projects that transfer their recurrent costs to the central government are likely to consume and diminish the central government's general fund. Lastly, at the constituency level, the fiscal effects of one or two police posts or clinics or schools may not be fathomed, though collectively, at the national level, such financial effects

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<sup>1</sup> Capital spending is highly discretionary both in terms of its composition and its basic decisions. Often, local politicians decide the amount to be spent on each capital project, the choice of specific projects and their geographical location including the design of each project. See, Tanzi V. & Hamid, D. (1998). *Roads to Nowhere: How Corruption in Public Investment Hurts Growth*. International Monetary Fund.

<sup>2</sup> Part IV Section 21 (1) states that *Projects shall be community based in order to ensure that the prospective benefits are available to a wide cross-section of the inhabitants of a particular area.* To ensure fiscal sustainability of the local projects, Section 21 (3) states that *All projects shall be development projects and may include costs related to studies, planning and design of the projects but shall not include recurrent costs of the projects* (GOK, CDF Act, 2003).

may be costly. This creates fiscal illusions among citizens at the constituency level that local projects cost less when in reality they do not.

Collectively therefore, it appears that most CDF-initiated projects contribute towards the growth of the central government's operating budget<sup>3</sup> in Kenya. Though signs of the program's expansion<sup>4</sup> are ripe, given its popularity among the Kenyan electorate in terms of helping the poor access basic needs, little research has been done to evaluate and estimate the financial effects of CDF-funded healthcare projects on the central government's recurrent budget. This paper seeks to fill that void.

## Literature Review

This study relies on the fiscal federalism and decentralization literature to understand how CDF equitably redistributes resources to all the 210 constituencies and how CDF healthcare expenditures accomplish the allocative efficiency goal. Fiscal federalism provides insights on the role of grants/transfers and their attendant problems. The decentralization literature suggests that devolved spending powers encourage local people to fund projects that fit their tastes and preferences. The decentralization literature further suggests that citizens often suffer from fiscal illusions<sup>5</sup> when they engage in public policy decisions which blind them from seeing the collective financial costs of their expenditure decisions on the central government's general fund. Fiscal illusions refer to the inability of local decision makers to grasp the collective financial costs of their independent expenditure decisions on the overall financial standing of the central government (Brennan & Buchanan, 1980).

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<sup>3</sup> The growth government's operating budget in this study involves expenses incurred by the central government as a result of CDF projects measured as the number of employees, salaries, and costs for equipments to run CDF projects. Estimating the recurrent cost needed to operate and maintain capital projects is not only important for national budgetary decision making, but it also promotes sound macroeconomic management.

<sup>4</sup> See, *Daily Nation*, January 24<sup>th</sup>, 2008. There is consensus among Kenyan lawmakers that the CDF kitty should be increased from 2.5% - 10% of the total government revenue.

Fiscal illusion is an adaptation of the concept of the Tragedy of the Commons as first postulated by Hardin (1968). In his original piece, Hardin imagined a pasture open to all herdsmen, who, motivated by self interest, try to keep as many cattle as possible. To maximize individual utility on the shared commons, a rational herdsman will seek to add another animal to his herd. Since the resources of the commons are limited, adding together the component of partial utilities of all rational herdsmen, leads to tragedy for all. To evade such a tragedy, Hardin recommended the adoption of either coercive laws to limit exploitation of the shared commons or the creation of tax devices that communicate the cost of maintaining the shared commons. These recommendations have been adopted in the fiscal decentralization literature to connote the benefit-taxation principle (Bahl, 1999).

In the Kenyan perspective, the tragedy of the commons may be evident given the CDF's current operational structure which blurs the total cost of development projects as a result of the independent local decisions that put pressure on the center's general fund. The problem of the commons arises when some government programs that concentrate benefits to certain areas are financed from the general fund mainly through transfers (Stein, 1998) and whose collective outcome is fiscal deficits.

The theory of fiscal federalism conceives the organization of the public sector in a more or less federal way so that different levels of government provide public services and have some scope for *de facto* decision-making authority irrespective of the formal constitution within a nation state (Oates, 1972; 1999). From a normative perspective, fiscal federalism identifies three roles for the public sector: macroeconomic stabilization, income redistribution and resource allocation in the presence of market failure (Oates 1999; Burkhead & Miner 1971). The macroeconomic stabilization and income redistribution functions are assigned to the central

government while resource allocation function is assigned to sub-national governments (World Bank Report 1999/2000).

The main benefit associated with a federal fiscal structure is economic efficiency, which rests on two assumptions. First, it assumes that a group of individuals who reside in a community or region possess tastes and preference patterns that are homogenous and that these tastes and preferences differ from those of individuals who live in other communities or regions. And second, it assumes that individuals within a region have a better knowledge of the costs and benefits of public services of their region (Burkhead & Miner 1971). Thus, resources devoted for public purposes should be left to the local people to enhance their preferences for public expenditure that optimizes costs (Boadway & Wildasin, 1984).

Since local regions within a jurisdiction may not be equally endowed with resources, intergovernmental grants and transfers are important instruments for allocating resources within a federal structure (Gramlich, 1988). For economic efficiency, fiscal federalism literature suggests that local jurisdictions use transfers that communicate to its households the cost of consuming different levels of public goods (Oates, 1999).

A federal fiscal structure, however, is not without problems. Once created, it produces a new category of interest groups that are geographically located and lobby for greater transfers to enable them to provide more vote generating expenditures to their constituents at no additional direct tax cost (Grossman 1989). Additionally, a federal fiscal structure financed by transfers from the central government, encourages local jurisdictions to ignore the tax collection burdens of financing their expenditures while at the same time increasing public expenditure obligations (Jouffaian and Marlow, 1990). The use and adequacy of transfers however, hinges on the goals that the national government seeks to advance. If the national goal is to improve the

populations ~~welfare~~, then whether transfers export tax burdens to the national government is less important. If, however, the goal of the transfers is to free local jurisdictions from the center ~~w~~ dictates and make them sustainable, then transfers that lack a benefit-taxation principle might be detrimental.

A possible remedy for the above problems seems to be the need for clarity in defining a jurisdiction ~~w~~ fiscal responsibilities and the fiscal instruments needed to support the delivery of the needed public services (Oates, 1999).

The literature on decentralization on the other hand, points out that decentralization involves the establishment of an arena of decision making that lies outside the influence of the central government in which the central government delegates some of its power to local or regional administrators which carry out certain functions on their own (Kalaycioglu, 2000). In his view, Smith (1985) sees decentralization as the delegation of power to lower levels in a territorial hierarchy whether the hierarchy is one of governments within a state or offices within a large-scale organization. Further, Smith notes that decentralization can occur in all geographical areas such as neighborhoods, field personnel in the area of central departments or within a large organization. From a fiscal perspective, decentralization refers to a set of policies designed to increase the revenues or fiscal autonomy of sub-national governments (Falleti, 2005). Tanzi (2000) notes that fiscal decentralization exists when sub-national governments have powers given to them by the constitution or by legislative laws, to raise some taxes and/or carry out spending activities within clearly established legal criteria.

According to Rondinelli and Nellis (1986), decentralization can take three forms: deconcentration, delegation, and devolution. Under deconcentration, the central government shifts some tasks to the local administrative units without allowing local discretion. Under

delegation, local jurisdictions have a certain degree of discretion in the provision of public services, but they still follow the central government's directions and requests. Under devolution, local jurisdictions are independent decision makers that respond to their residents' preferences and needs in the provision of public services (Kwon, 2003). Though none of these three designs works better than the other in terms of satisfying people's needs, scholars agree that different decentralization designs produce different outcomes depending on the existing political and economic institutions in a country (Kumar, 2006). Thus, the success of any fiscal decentralization design can be argued to be context dependent and an acceptable criteria for judging success of any fiscal decentralization design, is on how well it serves the presumed national policy objectives.

In most developing countries, fiscal decentralization is promoted as a panacea for the ills of centralized structures and its potential benefits. For one, fiscal decentralization is associated with improvement in performance of the public sector through allocative efficiency (Oates, 1972; Ebel & Yilmaz, 2002). Second, decentralization is associated with improved performance on measures of basic needs such as health and education in developing countries (Lindaman & Thurmaier, 2002). Third, fiscal decentralization is associated with equity. When resources are allocated based on an agreed upon formula, all local jurisdictions are guaranteed a minimum level of per capita expenditures for essential services (World Bank Report, 1999/2000). Lastly, decentralization brings public services closer to the people unlike centrally planned services located in capital cities. Close proximity, it is argued, enhances accountability, autonomy and participation (Turner & Hume, 1997).

Fiscal decentralization however, poses a number of problems. First, especially in developing countries, it can be captured by local elites to advance their selfish interests (Boone,

2003). Second, it is difficult to assign taxes/transfers to match local spending needs due to administrative considerations and access to and sharing of information (Tanzi, 2001). Third, decentralization distorts macroeconomic stabilization policies especially when local jurisdictions engage in expansionary policies while the national government pursues contractionary policies (World Bank Report, 1999/2000; Ebel & Yilmaz, 2002). Lastly, fiscal decentralization may result in higher government expenditures due to loss of economies of scale for some services, increased public employment due to demands for more public services, and thus additional administrative costs for coordination, and auditing (Tanzi, 2001; Turner & Hume, 1997; Oates, 1985). From a budgetary perspective, fiscal decentralization may be relatively expensive.

Apart from its policy problems, fiscal decentralization also poses some technical problems. First, fiscal decentralization is rarely designed to improve the fiscal discipline or reduce the size of government (Stein, 1998). Second, poorly designed decentralization structures based on transfers from the central government and where expenditure responsibilities are inadequately defined weaken the center's budgetary constraints due to coordination problems (Rodden, 2003).

In designing a decentralized fiscal structure, policymakers try to answer the question: "Who pays for what and how?" (Kalaycioglu, 2000, p. 7). For decentralization to work adequately, those who initiate local capital projects must be accountable to those who pay for local projects and those who benefit from those projects.

Scholars suggest that different fiscal decentralization designs affect the size of government with mixed results. On the one hand, those who define "size of government" as a ratio of total government receipts to the gross domestic product (GDP), have found positive correlations (Brennan & Buchanan, 1980; Grossman, 1989; Jouffaian & Marlow, 1990; Rodden

2003). These scholars note that fiscal structures that relies on own revenues as opposed to those that rely on transfers, negatively correlate with growth of the public sector. On the other hand, however, Oates ~~studies~~ (1985; 1999) failed to establish such correlations, though from a budgetary perspective he noted that fiscal decentralization does increase the central government ~~to~~ overall expenditures. In the Latin American study on fiscal decentralization and size of government, Stein (1997) established a positive correlation. From an African perspective, little research has been undertaken to examine how various decentralization schemes have affected the size of the public sector. This paper attempts to fill that void.

Fiscal decentralization in Kenya through CDF in this project is conceived as a delegated form of decentralization because constituencies enjoy some form of discretion in expenditure decision making although they have to follow central government ~~to~~ directions and requests. For instance, constituencies use CDF funds to build clinics but expect the central government to bring such clinic into operation by employing new nurses, supplying drugs and incurring regular maintenance costs. The costs of running two or three clinics in one constituency may not appear to be much but collectively such costs across the entire country may be monstrous for the Ministry of Health (MOH). Thus, a failure to grasp the ~~true~~ cost of running such projects creates fiscal illusions on recipients of such services to view public services as ~~free~~. ~~The~~ Fiscal illusions as a result of independent constituency-level decisions are likely to exhaust the common pool resources and thus, aggravate the problem of the commons. These issues call for attention to address the budgetary implications of fiscal decentralization.

### **Research Problem**

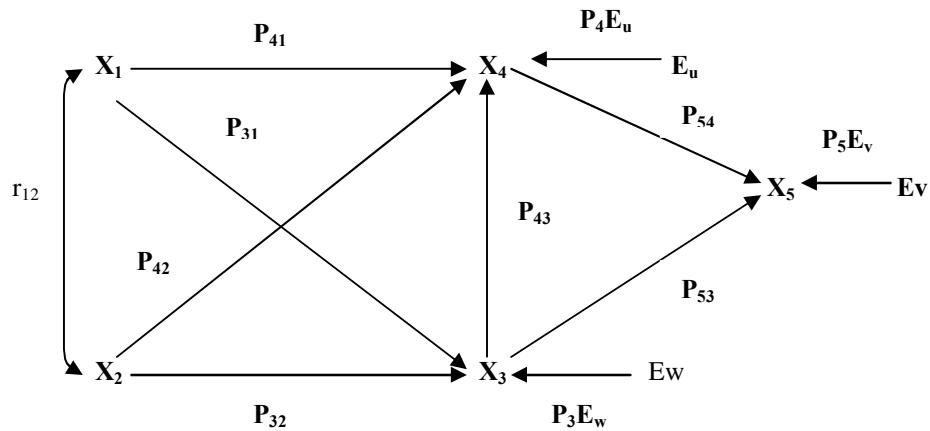
The central problem in this study is: How has fiscal decentralization through CDF affected the central government ~~to~~ operating budget? Addressing this problem is vital in

understanding the long-term financial implications of decentralization policies on the central government's operating budget. Sound public management skills require estimates for recurrent expenditures of capital investment projects be presented along with capital spending proposals. For budget decision making, it is paramount to estimate the operations and maintenance expenditures needed to run a capital project at a level consistent with its expected use and to maintain its capacity during its expected lifetime (Hood, Husband & Yu, 2002).

Measures of the center's operating budget will be limited to input measures, i.e., direct costs of new employees (clinical nurses) as a result of CDF projects, their salaries and the attendant pension and fringe benefits. The indirect costs for operating CDF projects include: drug kits and maternity kits, other expenses incurred in operating a new clinic such as electricity, water, telephone and other periodic maintenance needed to maintain the clinics. Figure 2 below sketches the agenda for this study.

**Figure 2**

**A Recursive Fiscal Decentralization Causal Model for the Growth of Government**



## Variables Identification

- $X_1$  = District population size  
 $X_2$  = Poverty → Number of poor people per district  
 $X_3$  = Health expenditures for capital projects  
 $X_4$  = Total annual CDF allocations  
 $X_5$  = Growth of government  
 $r_{12}$  = An unanalyzed correlation between  $X_1$  &  $X_2$

## Path Equations

$$X_3 = P_{31}X_1 + P_{32}X_2 + P_3E_w \quad [1]$$

$$X_4 = P_{41}X_1 + P_{42}X_2 + P_{43}X_3 + P_4E_u \quad [2]$$

$$X_5 = P_{53}X_3 + P_{54}X_4 + P_5E_v \quad [3]$$

From the structural equation above, the dependent variable in this project is the growth of the central government's operating budget ( $X_5$ ). The exogenous variables include: district population sizes and poverty - measured by the total number of poor people per district. The endogenous variables include: total healthcare expenditures ( $X_3$ ) for the same period and total annual CDF allocation for fiscal years 2004/05 → 2006/07 ( $X_4$ ).

## Hypotheses

To answer the above research question(s), this study will test the following five hypotheses:

**$H_{1a}$ :** Based on constituency/district characteristics, CDF allocations formula promotes equity in resource distribution.

**$H_{1b}$ :** Health expenditure decisions correlate with local population and poverty rates and this determines need for healthcare services.

**H<sub>2</sub>**: CDF-initiated projects are positively related to increases in the personnel (direct) and indirect costs of the central government & recurrent budget.

Hypothesis **H<sub>1a</sub>** and **H<sub>1b</sub>**, in this project borrows from the WB Report that notes decentralization promotes equity and from Lindaman and Thurmaier & findings that fiscal decentralization is positively related to better performance on measures of basic needs such as healthcare and education (Lindaman & Thurmaier, 2002).

In **H<sub>2</sub>**: I hypothesize that an increase of the number of CDF-funded healthcare clinics will be accompanied by an increase in both direct labor and indirect costs on the central government & operating budget in the Ministry of Health (MOH).

### **Method, Data and Research Design**

This study employs a nested analysis approach to probe the three hypotheses identified above. A nested analysis approach (NAA) is a mixed strategy of research which combines the statistical analysis of a large sample of cases with an in-depth investigation of one or more cases contained within the larger sample (Leiberman, 2005). Under NAA, statistical analyses serve as guide posts from which primary causal inferences are derived and which ultimately lead to quantitative estimates for the robustness of a theoretical model. Equipped with a robust theoretical model, the research proceeds to conduct an in-depth inquiry through interviews or observations as a way of tracing causal chains within cases across time (*ibid*, 435).

The aim of an in-depth inquiry of one or more cases in this design is to ~~Chicken~~ and contextualize concepts that are well suited for descriptions and to make inferences about simple causation on a smaller scale to which a large sample analysis (LSA) is poorly suited (Coppedge, 1999). A nested analysis therefore complements the advantage of generalizability of a LSA with the contextually based evidence drawn from an in-depth inquiry of a few cases. The main

advantage of the LSA with robust statistical inferences, is that it narrows the menu for executing an in-depth analysis of a few cases and takes advantage of the context based evidence from in-depth inquiry to enrich the findings of a theoretical causal model that it actually works as specified (Lieberman, 2005; 440).

In this study, all the 210 parliamentary jurisdictions referred herein as constituencies and categorized into their respective districts (68 in total excluding Nairobi) form the unit of analysis from which the LSA model as shown in figure 2 above. From the healthcare sector, a total of seven dispensaries from six constituencies in three districts (Gucha, Kisumu & Migori) were selected for in-depth analysis. With a sample of 210 constituencies categorized into 68 districts assembled for LSA, statistical analyses were conducted first to test the allocative efficiency hypothesis i.e. whether expenditure decisions at the local level correlate with local preferences. Second, a path analysis of the theoretical recursive fiscal decentralization causal model was analyzed as shown in figure 2 above to probe how the collective financial effects of devolved funds and the attendant health capital projects in relation to local preferences affect the central government recurrent budget.

Through a LSA, a recursive causal model in figure 2 above is helpful in decomposing correlations between any two variables into simple and compound paths and thus enables us to measure the direct and indirect effects one variable has on another (Asher, 1983). Unlike ordinary linear regression, causal or path analysis allows a researcher to move beyond the direct effects of independent variables on the dependent variable as provided by basic regression outputs. It allows us to estimate the magnitude of causal linkages between variables and such estimates provide us with information about an underlying causal process (McClendon, 2002).

In view of a NAA, the robustness of the above causal model enables this study to search for explanations about how fiscal decentralization in Kenya through the CDF based on district characteristics has contributed to the growth of government. For these reasons, loosely structured interviews and a focus group were conducted to examine the costs related to running health facilities from month to month or day to day with the intention of increasing our inferential confidence about the financial implications of CDF projects on the center & operating budget.

To account for the need for healthcare services, I collected and used data on the distribution of nurses per district. Since the government employs only nurses in the new dispensaries, their salaries and fringe benefits were used. The direct labor cost (DC) was estimated by multiplying the average salary ( $S$ ) of a newly hired nurse by total number of nurses expected to be employed and deployed to all completed and gazetted CDF dispensaries. Fringe benefits for nurses employed in Kenya include; risk allowance, medical allowance, uniform allowance and house allowance. The indirect costs (IC) for running most CDF dispensaries include: telephone, transport, a drug kit (supplied quarterly), and water fees. Using SPSS, I ran correlations matrices to determine whether *first*, CDF allocations are based on the stated official formula based on population sizes and the district poverty levels ( $H_{Ia}$ ). And *second*, whether healthcare expenditures correlate with local need ( $H_{Ib}$ ). Having established correlations, I proceeded to test my theoretical model. Table 1 below provides an annual cost estimate of running a CDF healthcare facility (dispensary). The estimate was constructed from field interviews and from a MOH preliminary estimate.

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**Table 1**  
**An Annual Item Budget Estimate for Operating One CDF**  
**Dispensary**

<b>Item</b>	<b>Quantity</b>	<b>Amount (Ksh)</b>	<b>Amount US(\$)<sup>a</sup></b>
Nurse Salaries	2 Nurses	430,000.00	6,142.86
Medicine - Drug Kit	@ 3x	1,200,000.00	17,142.86
Operations & Maintenance		170,000.00	2,428.57
<b>Utilities</b>			
Transport		9,000.00	128.57
Phone		6,000.00	85.71
Water		3,000.00	42.86
<b>Total</b>		<b>1,818,000.00</b>	<b>25,971.43</b>

Source: MOH, 2008; & Field interviews conducted in July, 2008.

a. Calculation of amount in US \$ based on an exchange rate of \$1 = Ksh.70

Growth of government (GG) is the sum of DC and IC associated with new health projects calculated by multiplying the (S) of the expected number of nurses in each gazetted dispensary by the total number of completed and gazette dispensaries in each district. The IC was calculated by multiplying the expected annual cost of running one CDF-build dispensary (telephone, transport and drug kits) by the total number of gazetted dispensaries per district. Both the DC and the IC for each district were then summed up to create the dependent variable GG.

### Data and Case Selection

Data for this study was obtained from both primary and secondary sources. For the latter from which the LSA was conducted, data was obtained from the CDF official website [www.cdf.go.ke/](http://www.cdf.go.ke/). Other sources include: the Ministry of Health (MOH), Ministry of Finance (MOF) for financial data, and the Central Bureau of Statistics (the defunct Kenya Bureau of Statistics) for district level variables. From primary sources, one *ad hoc*<sup>5</sup> focus group and a total

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<sup>5</sup> I refer the focus groups as ad hoc, because it was unplanned and was conducted with mothers who were waiting to be seen with their children by the duty nurse in one of my interview sites. As I waited to interview my informant, I

of eighteen (18) in-depth loosely structured interviews were conducted in a total of eight constituencies in six districts. Of the eighteen interviews conducted, two interviews were with senior informants at the CDF & national Management Board (NMB) and two with senior informants in the MOF. The main goal in these in-depth interviews was to learn how a local CDF-constructed dispensary/clinic was run on a day-to-day or month-to-month basis. Particular emphasis was placed on financial matters related to the cost of drugs, transport, telephone, water and electric expenses and any other financial help provided to local dispensaries from the central government.

All the interviews were recorded through note taking or jottings made at the time of the interviews, and then typed transcripts were created from such notes soon afterwards, more often than same day. All the interviews were conducted in English with a few intrudes of Swahili which I translated. On average, the interviews lasted for approximately 20-30 minutes.

This study conceives the CDF as a fiscal decentralization case whose aim is to test the theoretical hypotheses advanced in the literature that decentralization policies promote allocative efficiency. As a case study, the CDF provides an opportunity to probe the budgetary ramifications of a delegated form of fiscal decentralization. Gerring (2004) defines a case study as an intensive study of a single unit with the aim of generalizing across a larger set of units. He notes that a case study relies on ~~the~~ some sort of covariational evidence utilized in non-case study research<sup>142</sup>.

The use of careful case studies to compliment findings from quantitative variables can be a useful design that bridges shortfalls of a general theory as hypothesized by quantitative variables. Case studies in particular, can isolate aspects of a theory that are not explained by the

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<sup>142</sup>decided to engage the waiting young and old mothers on their attitudes and perception towards their CDF healthcare facility.

general factors. In line with NAA, Coppedge (2005) argues that a case study allow researchers to select cases whose job is to explain aspects of interest that are not well explained by the general factors. Case studies are also important in bridging the gap that exists between qualitative and quantitative methods through what is commonly called process tracing. As a method, process tracing helps researchers look closely at the decision process by which various initial conditions are translated into outcomes (Tarrow, 2005). In the same breathe Gerring (2004) notes that a case study allows one to peer into the box of causality to the intermediate causes lying between some cause and its purported effect i.e. they allow one to see X and Y interact. From a fiscal decentralization perspective, Rodden (2003) argues that careful case studies are helpful in clarifying causal mechanism that link fiscal structures and government spending.

Although researchers commonly select cases for analysis because of pragmatic reasons such as access, cost, expertise and time or for methodological reasons because a case is considered typical, diverse, extreme deviant or most similar, under NAA, cases are purposively selected so as to trace the inferential process in a theoretical model and to examine how the case fits in the theoretically specified population (Seawright & Gerring, 2008). Although purposive sampling is dogged with generalization problems (Schutt, 2001), this problem is solved by the LSA and thus makes random sampling obsolete (Lieberman, 2005).

A purposive sampling strategy was employed to select informants and constituencies based on both pragmatic reasons (access, safety and time) and methodological reasons (healthcare projects were the most typical and most similar projects undertaken by almost all the 210 constituencies). In addition, selection of cases in all the seven constituencies was based on district characteristics such as population (urban/rural) and poverty indices. Table 2 below shows the selection criteria based on district characteristics.

Selection of informants for interviews was based on pragmatic reasons i.e. accessibility and safety. Besides, informants had to be people with knowledge on how the CDF-funded clinics are run. In this respect, only nurses-in-charge or their immediate assistants were interviewed.<sup>6</sup> Through their stories and experiences, I was able to learn how much it costs to run a local clinic, what major expenses were routinely incurred, what kind of help they received from the central government, cost-sharing between the government and the local community, frequency of drug supply from the central government and the citizens' perceptions of the local health facilities.

**Table 2**  
**Constituency Selection Based on District Characteristics**

District	District Poverty Index	Constituency	Rural/Urban
Gucha	67.2	Bomachoge	Rural
Kisumu	49	Kisumu West	Urban
		Kisumu East	Urban
Nyando	48.3	Nyakachi	Rural
		Nyando	Rural
Migori	43.1	Migori	Urban
		Rongo	Rural

*Source:* Central Bureau of Statistics, Based on Kenya Integrated Household Budget Survey (KIHBS) - 2005/06.

## Counting

I manually counted and constructed a list all CDF healthcare initiated projects in all the 210 constituencies in sixty eight (68) districts. Of the 210 constituencies, twenty four (24) constituencies were excluded from a manual count for two reasons. One, because the constituencies either did not file a final report detailing the various projects undertaken in the constituencies or the constituencies are/were yet to file and upload their reports on the CDF<sup>7</sup>

<sup>6</sup> Given the remoteness of the location of most of these facilities, my efforts to contact informants prior to my planned visit were futile. To overcome this difficulty, I scheduled morning impromptu visits with the help of a local native that also served as a driver.

official website. Second, some constituencies were omitted because of poor record keeping i.e. their records did not indicate whether projects were on-going or complete.<sup>7</sup> Since a number of health related projects included construction of new clinics or renovations of existing ones, I categorized and counted only projects that had been started by the CDF funds. Existing health clinics that had been renovated with the CDF funds were deliberately left out because I presumed they were already operational and did not therefore alter current government operating cost. I then divided CDF-funded clinics into two categories; *On-going* and *Completed* projects.

Healthcare projects in different constituencies were identified by different phrases with some being called dispensaries, some maternity wings and others went by the label health centers. The counting exercise yielded a total of 1381 health projects that the MOH lumped together as dispensaries of which 975 were identified as *on-going* and 406 were categorized as *completed* as of the end of 2006/07 fiscal year.

For analysis, all constituencies were grouped into their respective districts and then into their provinces. The rationale for grouping constituencies into their respective districts was because constituencies do not have central data banks for collecting and storing relevant data other than CDF-related activities but district headquarters do. With my categorized list at hand, I manually matched my list of CDF-healthcare facilities with the official list obtained from the Ministry of Health (MOH) for all CDF health facilities that had been gazetted as of September, 2007.<sup>8</sup> As of this date, a total of 1039 facilities had been gazetted most of which matched with my manually constructed list. Although my manual list indicated that a total of 406 projects had been completed, the official list showed a significantly higher number. A closer scrutiny revealed

<sup>7</sup> For the excluded constituencies, their records mostly indicated the amount spent for healthcare projects without being specific on the nature or progress of the projects i.e. whether the projects were renovations or new constructions.

<sup>8</sup> Gazettement of facilities in Kenya implies that the government has taken over the ownership and running of the institution. It therefore requires the government to incur both the recurrent and capital costs of the gazetted facility.

that some of the projects that I had categorized as on-going had actually been completed prior to being gazetted. This discrepancy could be associated with poor record keeping at the constituency level that did not update changes.

### **Analyzing Financial Data**

Although the CDF was started in 2003/04 fiscal year, I concentrated my analysis on healthcare expenditure for three fiscal years i.e. 2004/05; 2005/06 & 2006/07. Fiscal year 2003/04 was skipped from the analysis for two reasons. First, in 2003/04 all the 210 constituencies were allocated an equal amount of Kshs. 6 million and this first allocation did not consider regional disparities, thus no variation. Second, the 2003/04 fiscal year in this research serves as a time lag in which it is presumed that most local projects were either started or conceived.

All the yearly allocations for each constituency in each district were summed up to obtain total allocations for each district for the three fiscal years. For the district level population sizes, I used both the 1999 population and the population growth projections for 2007. The rationale for using both data sets was because the last population census was carried in 1999 and the next census is scheduled for 2009. Additionally, the use of the 1999 population census was based on the rationale that when the CDF was created in 2003, policymakers relied on the disparities in district development as reported by the census data. It was presumed that the creation of CDF was meant to address those regional disparities as revealed in the 1999 population census. Since population growth has not been static, I decided to use the districts projected population sizes for 2007 to examine whether any discrepancies exist. Importantly, the use of 2007 population projection was chosen because the Kenya Bureau of Statistics (KBS) used the same projections as mandated by the Kenyan parliament to calculate incidences of poverty at the constituency

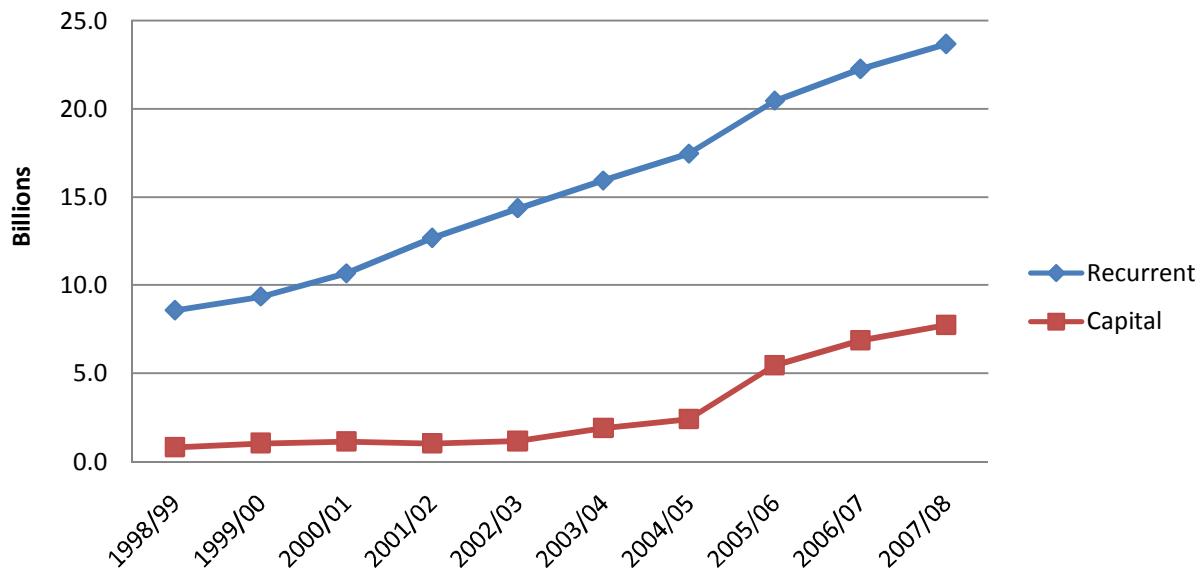
level to ensure that the yearly allocations formula took cognizance of poverty levels at the local level (GOK 2005).

## **Empirical Findings**

Has the constituency development fund led to the growth of the central government's operating budget? Based on the district characteristics of population sizes and poverty indices, does the CDF allocation formula address equity concerns as envisioned in the CDF Act? The literature on fiscal federalism and decentralization often evoke claims of equity and allocative efficiency for devolved or transferred resources under a decentralized system of government. In regard to the former (equity), the literature suggests that when resources under a decentralized system are allocated to various local jurisdictions based on an agreed upon formula, all local units are at least guaranteed a minimum level of per capita expenditures. How does the CDF measure to these theoretical claims? Below I offer my preliminary research findings.

Since this study focuses on the health-care projects initiated through the CDF funds, the best place to assess any real or imagined budgetary increases would be the trend of annual budgetary allocations for the Ministry of Health (MOH). Since the CDF was started in 2003, a graphical analysis of MOH recurrent and capital/development budgetary allocations five years prior and five years after the start of the program should give us reason to believe that the CDF has had some financial effects. Figures 3 and 4 below show the net approved recurrent and development budget allocations trend for the MOH for fiscal years 1998/1999 to 2007/2008 respectively.

**Figure 3**  
**MoH's Net Approved Recurrent & Capital Expenditure**  
**Budget for Fiscal Years 1998/99 - 2007/08 (Ksh.)**

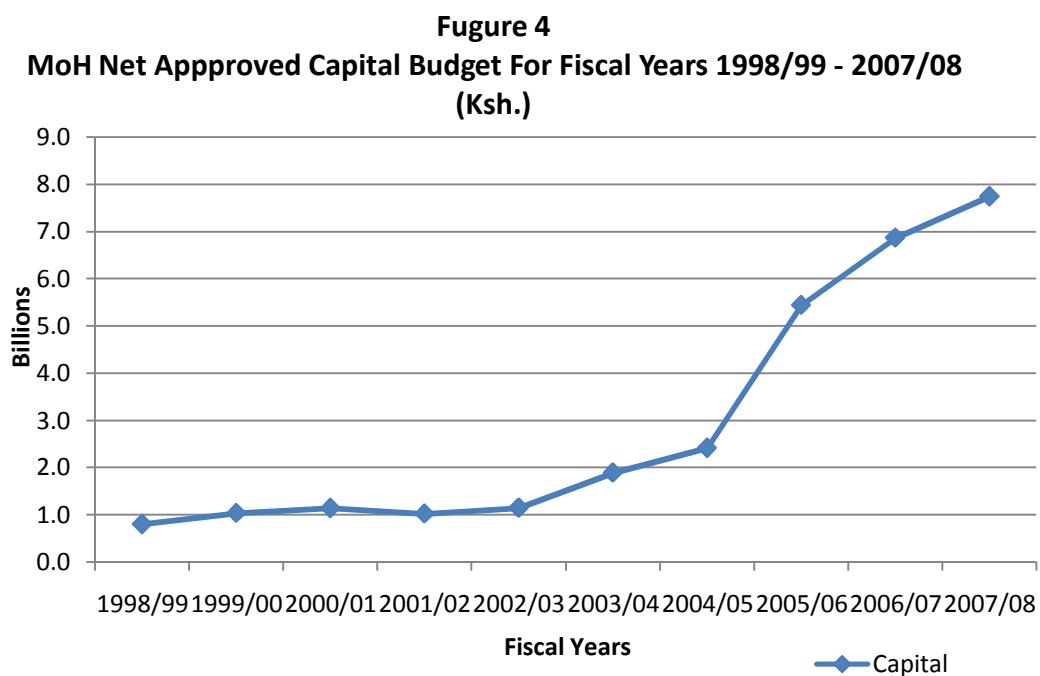


Source: GOK: Annual Budget Estimates for Recurrent & Development Expenditures for Fiscal Years 1997/98-2007/08.

In figure 3 above, it can be observed that the recurrent budget expenditure trend seems to follow a constant upward trajectory. This constant rise suggests that the CDF program has not affected the MOH's recurrent budget for the past five years. This finding is not surprising given that in 1992 the government of Kenya adopted a hiring freeze in the civil service including in the health and education sectors as a cost cutting measure that aimed at reducing the central government's total wage bill (GOK, 1992). Although the government has shown interest in reviewing this hiring freeze policy in critical sectors such as healthcare and education, the MOH is currently guided by that policy which has set a ceiling on the total number of nurses that the ministry can hire at 17,000 nationally as stipulated in the 1992 civil service reform (interview with MOH informant on 27<sup>th</sup> June, 2008). It is in this respect that the recurrent budget as shown in figure 3 above has not had dramatic financial effects in relation to the CDF health projects. The

lack of dramatic financial change however, should be examined with caution because in the last financial year 2007/2008, the MOH through its agency ~~the~~ Kenya Medical Supplies Agency (KEMSA) ~~owed~~ eighteen (18) pharmaceutical vendors over \$22.8 million for drugs and medical supplies delivered to a number of health facilities in the country.<sup>9</sup>

The MOH ~~the~~ development budget as seen in Figure 4 below however, shows a constant trend of allocations for fiscal years 1997/98 - 2003/2004 but this trend starts to change upwardly for fiscal years 2004/05 ~~to~~ 2007/08. As alluded to elsewhere in this study, fiscal year 2003/04 is considered a time lag for projects implementation since the CDF program was started in the middle of 2003. Table 4 below more clearly depicts the development budget expenditure trend for the past ten years.



Source: GOK: Annual Budget Estimates for Recurrent & Development Expenditures for Fiscal Years 1997/98-2007/08.

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<sup>9</sup> See, ~~the~~ KEMSA Owes Drug Suppliers Shs. 1.6 Billion *The East African Standard*, 09/15/2008. Conversion of Kenya Shilling assumed an exchange rate of \$1 = Ksh. 70.

It is evident from figure 4 above that from fiscal year 2004/05 onwards, the capital budget of the MOH has been appreciating at a higher rate than it was the case prior to the creation of CDF. In fiscal year 2004/05 for instance, one and half years after the creation of CDF, the MOH capital budget appreciated by over US\$ 43.2 million which represents about 125% (per cent) budget increase from the previous year. In the succeeding fiscal years 2005/06 and 2006/07, the MOH capital budget continued to increase at a rate of about 26.2% (US\$20.36 million) and 12.7% (US\$12.48million) respectively (GOK, Budget Estimates 2005/06-2007/08). These budgetary increases are a contrast to the three years prior to the creation of the CDF. For fiscal year 1999/00, for instance, the MOH capital budget appreciated by 10% (US\$1.48 million) only to be slashed by 10.3% (US\$1.68 million) in 2000/01 financial year. Although the Ministry capital budget appreciated by 12.2% (US\$1.79 million) in 2001/02 fiscal year, such an increase only brought capital funding to its previous funding level in the preceding fiscal year.

While the main focus of this study is the financial implication of CDF projects on the central government operating budget, in the Kenyan case capital budgets and capital improvement plans are not clearly distinguished from operating costs. Although it is difficult to clearly differentiate capital from operating expenses, often capital expenditures refer to ~~to~~ fixed assets of considerable value (Rubin, 1997: p.173). Such a definition implies that a capital item is an item that has a lifespan/usage of a year or more and costs more than a predetermined minimum amount. The key in capital items categorization is a predetermined minimum amount and this often depends on the size of the budget, size of jurisdiction and the preference of the governing body (Ibid; Vogt, 2004). In this regard, expenditures such as buildings or vehicle

refurbishings may constitute a capital expenditure for smaller jurisdictions but may be considered operating costs for big sized-budgets and jurisdictions.

In Kenya and in line with figure 4 above, categorization of capital and operating expenditures is predetermined by codes enumerated in the Government Finance Statistics (GFS) manual which lumps together all kinds of maintenance as operating costs ( GOK-MOF 2001). For example, regular maintenance of computers or software installations and maintenance of roads, ports and jetties fall under the same category of expenses (ibid). Since regular maintenance of capital projects fall under operating costs in the Kenyan context, it can be inferred from figure 4 above that CDF healthcare projects have financial implications on the MOH's operating budget. From a MOH's estimates, such financial implications of CDF healthcare projects can be discerned from table 3 below.

**Table 3**  
**An Annual Operating Cost Estimate for a New Dispensary**

	<b>Item</b>	<b>Cost (Ksh)</b>
1	Start up Equipment	500,000
2	2 Nurses Personal Emoluments (PE)	430,000
4	Drug Kits <del>not</del> Supplied Quarterly	1,200,000
5	Operational & Maintenance	170,000
6	<b>Total</b>	<b>2,300,000</b>

*Source:* MOH's Unofficial Budget Estimate (2008) Developed by MOH's Finance Officers. Estimates also corroborated with field interviews.

As table 3 above shows, and as many items in the MOH's budget reveal, categorization of capital items is based on predetermined codes in the GFS manual. This categorization therefore reveals that it is possible for capital items within the MOH's budget to increase the total operating budget without necessarily increasing PE as a result of hiring additional employees. The graphical analysis as shown in figure 4 above and through deductive reasoning seem to

suggest that CDF healthcare capital projects have a positive effect on the central government's operating budget.

### Hypothesis Testing

Using the two exogenous variables: district population size ( $X_1$ ) and district poverty levels ( $X_2$ ), hypothesis ( $H_{Ia}$ ) tests the veracity of the CDF allocations ( $X_4$ ) formula. Simply put, are allocations based on district characteristics? CDF allocations are expected to be positively correlated to district/constituency characteristics. Also, expenditure decisions on health care projects are expected to be positively influenced by district population characteristics ( $H_{Ib}$ ) i.e. size and poverty. Table 4 below shows the correlations of distinct variables and CDF allocations for fiscal years 2004/05 to 2006/07 per district.

**Table 4**  
**Correlations between CDF Allocations and District Variables**

Allocations	Population	Poverty <sup>a</sup>
Total 2004/05 to 2006/07	.899**	.766**
Fiscal Year 2004/05	.900**	.765**
Fiscal Year 2005/06	.899**	.766**
Fiscal Year 2006/07	.899**	.766**

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

a - Poverty operationalized as the total number of poor people per district

The strong and positive associations as shown in table 4 above suggest that annual CDF allocations are correlated with constituency characteristics such as population sizes and poverty levels as measured at the district level. These correlations further suggests that densely populated districts/constituencies with high poverty indices receive more funds than districts that are less

populated and have fewer people living under poverty. This strong associations further suggest that based on the allocation formula, the CDF appears to address the question of equity based on district population sizes and the number of poor people per district. The Central Bureau of Statistics (CBS) developed the following formula to allocate the CDF as equitably as possible to each of the 210 constituencies in Kenya.

$$CDF\text{Fund Allocated} = [(0.75x \text{ (CDF)} ] + (0.25x\text{CDF}) \times \text{Weighted contribution Poverty}$$

**Where:** CDFFund is the Constituency Development Fund allocated to each constituency. CDF is the total net CDF allocation (after netting out 3% administrative budget and 5% constituency emergency budget) and the weighted poverty contribution of each constituency to the national poverty.

With regard to the operationalization of poverty, the enactment of the CDF act in 2004 mandated the Central Bureau of Statistics (CBS) to develop and use poverty estimates for constituencies to allocate the program funds. Using quantitative measures of poverty, the CBS constructed a function of consumption expenditures relative to a poverty line. The monetary indicators of well-being were developed by measuring poverty based on detailed information regarding household consumption expenditures on food and a comprehensive range of non-food items such as schooling, health, transport and rent (GOK, 2005).

In Kenya, the poverty threshold or poverty line below which people are classified as poor based on the total monthly consumption expenditures per person is estimated at Kshs. 1,846 (\$26) in rural areas and Kshs. 4,425 (\$63) at the urban areas. This poverty line is determined based on the expenditure required to purchase a food basket that allows minimum nutritional requirements to be met (set at 2250 calories per adult equivalent per day) in addition to meeting basic non-food needs. In Kenya this poverty line is estimated to be about Kshs. 1,239 (\$17) and

Kshs.2,648 (\$38) for rural and urban areas respectively (Ibid). Based on the 1999 Kenya Population and Housing Census, it was established that the share of urban poor to rural poor was about 19% and 81% respectively.

Do district poverty levels and total population sizes influence CDF healthcare expenditure decisions? Based on findings of prior studies on decentralization this study tests the hypothesis that [ $H_{1b}$ ] health expenditure decisions correlate with local population size and poverty rates and this determines the need for healthcare services. Table 5 below shows the correlations between health expenditures and district level variables.

**Table 5**

**Correlations (r) between Health Expenditures & District Variables**

<b>Health Expenditures</b>	<b>Population</b>	<b>Poverty</b>	<b>Nurses</b>
Total 2004/05-06/07	.63**	.63**	.38**
Fiscal Year 2004/05	.54**	.50**	.32**
Fiscal Year 2005/06	.50**	.57**	.26**
Fiscal Year 2006/07	.56**	.50**	.40**

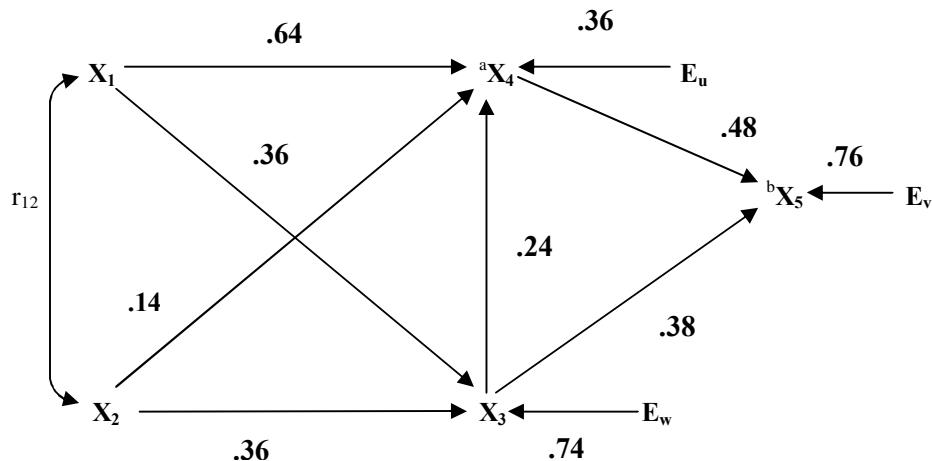
\*\*. Correlation is significant at the 0.01 level (2-tailed).

As indicated in table 5 above, there appears to be a somewhat strong correlation between the amount spent on CDF health projects and the district population size and poverty levels. This suggests that densely populated districts with relatively high numbers of poor people are likely to spend their CDF allocations on health projects. The need for healthcare services can be operationalized in a number of ways. For instance, high rates of infant mortality or lower life expectancy rates are often used to measure the wellness/health of a community. Additionally, availability and accessibility of healthcare service providers may be used to determine or

measure a community's healthcare needs. In this regard, absence of healthcare providers such as nurses may signify need for the services of such professionals. This research utilized data on nurse distribution per district to gauge healthcare needs at the local level. Although table 5 above shows that the association between health expenditures and the distribution on nurses per district is significant, it is however weak. This weak relationship suggests that CDF health expenditures do not correlate strongly with the available number of nurses per district. It further suggests that few nurses are currently available at the district level and thus an increase of health care capital projects will positively affect the distribution of nurses per district. This finding is in line with the notion of allocative efficiency and the basic needs literature under a decentralized system. It is therefore expected that as the number of CDF healthcare projects increase, so will the number of nurses employed to run those clinics to meet the local healthcare need.

To test hypotheses  $H_{2(a)}$ : *CDF-initiated projects are positively related to increases in the personnel (direct) costs of the central government's recurrent budget* and  $H_{2(b)}$ : *CDF-initiated projects are correlated with the increases in non-personnel (indirect) costs of the central government's outlays*, I estimated a recursive (one-way direction of causality) of the fiscal decentralization model as identified in figure 5 below.

**Figure 5**  
**Fiscal Decentralization Causal Model with Path Coefficients Indicating How Both the Exogenous and Endogenous Variables Might Affect Government Growth**



The main advantage of path analysis is that it enables a researcher to measure/estimate the direct and indirect effects that one variable has on another. The path coefficients in figure 6 above are the *Betas* (standardized coefficients) obtained through ordinary regression technique. To obtain the coefficients, I regressed  $X_5$  on  $X_4$  &  $X_3$ . I repeated the same procedure by regressing  $X_4$  on  $X_1$ ,  $X_2$ , and  $X_3$  and finally I regressed  $X_3$  on both  $X_1$  and  $X_2$ . All the coefficients are statistically significant. As shown, the error terms;  $E_u$ ,  $E_v$ , and  $E_w$  in the causal model are uncorrelated with the explanatory variables in the equation.

From figure 5 above, it can be seen that district population size ( $X_1$ ) and levels of poverty ( $X_2$ ) directly affect healthcare expenditure decisions ( $X_3$ ) and the amount of CDF allocated to each district ( $X_4$ ). District population sizes and the number of poor people per district appear to indirectly contribute to the growth of government through healthcare capital projects and through the CDF program. The healthcare capital projects however, appear to have direct effect on the

growth of government has hypothesized in  $H_{2a}$  and  $H_{2b}$ . Additionally, the existence of the program itself  $X_4$  appears to directly contribute towards the growth of government.

It should be noted that the independent variable  $^aX_4$  and the dependent variable  $^bX_5$  in figure 6 above have been superscripted because they have been transformed from linear to quadratic functions. The transformations<sup>10</sup> were undertaken so as to obtain the functions that best fit the data. This means that the relationship between CDF allocations and growth of government is curvilinear. Thus, an increase of CDF allocations does not necessarily increase the size of government. The quadratic functions improved the variance explained from about ( $R^2$ ) 23% to about ( $R^2$ ) 42%. That is, both the healthcare expenditures on capital projects and the yearly CDF allocation explain about 42% of growth in the central government & operating budget in the MOH. Table 6 below shows the results of the direct and indirect effects of both the exogenous and endogenous on the growth of government.

**Table 6**  
**The Direct, Indirect and Total Effects of Exogenous and Endogenous Variables on the Growth of Government**

<i>Variable</i>	<i>Direct Effects</i>	<i>Indirect Effects</i>	<i>Total Effects</i>
District population size ( $X_1$ )	—	.49	.49
Poverty & No. of poor people per district ( $X_2$ )	—	.25	.25
Health capital expenditures ( $X_3$ )	.38	.12	.50
Total CDF Allocations ( $X_4$ )	.48	—	.48

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<sup>10</sup> The transformations were hierarchically performed starting from the simplest linear function and then proceeded step by step to add variables representing each successive higher power of X, and testing at each step whether the power of X added at that step significantly improved the fit. For more information on function transformation see McClendon, (2002) *Multiple Regression and Causal Analysis*.

As indicated in table 6 above and as hypothesized in this study, healthcare capital expenditures seem to have the greatest total (direct and indirect) contribution (.50) on the growth of government. The district/constituencies ~~to~~ populations size has the highest total indirect effect (.49) on the central government ~~to~~ operating budget through the amount of CDF allocated and through healthcare capital expenditures. The annual CDF allocations however, have the greatest direct effects (.48) on the growth of government. This is no surprise because the central government in the last two years has hired constituency fund managers deployed to each of the 210 constituencies to monitor expenditure decisions (Interview with CDF- NMB Informant, 7/10/2008). Poverty at the district level as determined by the total number of poor people per district appears to have an indirect effect (.25) on the growth of government through its impact as a factor on the CDF allocation formula. Levels of poverty seem to have an influence on the healthcare projects undertaken and this subsequently leads to the growth of government.

Logically, these findings suggest that a jurisdiction ~~to~~ population can grow without having a direct effect on the central government ~~to~~ budgetary outlays. However, population growth may put pressure on existing services such as healthcare facilities and create new service demands to cater for the additional population. To ameliorate such pressures for more services, the central government may be forced to respond by creating programs such the CDF. The creation of such programs appear to have direct effects on the central government ~~to~~ operating budget in terms of new employees that have to be hired to run such a program and provide the required services.

## **Discussion**

Prior literature suggests that fiscal decentralization and federalism promotes allocative efficiency and the attainment of basic needs at the local levels. At the same time, several scholars speculate that a delegated form of decentralization or a decentralization design that relies on

transfers from the central government tends to increase the size of the central government. As Oates (1999) suggests, decentralization designs that are funded by the central government with poor coordination mechanisms tend to loosen budgetary constraints thus increasing the total outlays incurred by the central government. This paper has tried to account for how such ~~loosening~~<sup>the</sup> of budgetary constraints in Kenya's fiscal decentralization model have been exemplified by the CDF. It finds that health capital expenditures initiated at the local level tend to contribute to that growth of government. This growth is particularly influenced by the number of new employees hired by the central government in its quest to bring local capital projects into operation. Because the constituencies do not have their own independent sources of revenue to pay for the recurrent costs, any effort by the central government to make local health projects operational amount to a tax export for the general population.

As reviewed above, all the hypotheses in the fiscal decentralization and the growth of government model are consistent with the previous studies on fiscal federalism and decentralization. Importantly, this study finds that the CDF program promotes equity and allocative efficiency. The fiscal decentralization model also finds that health capital expenditures initiated at the local level tend to contribute towards the growth of government. This growth is particularly influenced by the number of new employees hired by the central government in its quest to bring local capital projects into operation. The growth is also caused by the quarterly medical supplies that the central government commits itself upon gazetting CDF clinics. Because constituencies do not have their own independent sources of revenue to pay for the recurrent costs, any effort by the central government to make local healthcare projects operational amounts to a tax export to the general population.

Export of tax burdens to the general population risks depleting common pool resources available to the central government for the provision of other services. While the government has been active in bringing into operation over six hundred (600) completed healthcare facilities, it has recently acknowledged pressure on the common pool resources especially in the MOH's budget for its inability to bring into operation another four hundred (400) or so clinics due to lack of resources. As quipped by the MOH's Chief Nursing Officer (CNO), "Implementation of health projects must incorporate health officials to avoid misappropriation of funds ...it does not make sense to put up buildings that will not serve the people."<sup>11</sup> Based on an earlier annual item budget estimate for operating one CDF-funded clinic<sup>12</sup> bringing four hundred (400) clinics into operation will cost the central government an extra Ksh. 720 billion (US\$. 10.3 million). With the MOH's net approved annual operating budget for fiscal year 2007/08 amounting to Ksh. 23,671,442,070 (US\$. 338,163,458) incurring an extra US\$ 10.3 million from the MOH's budget encourages resource distortions. As the CNO infers, the current implementation of CDF projects is poorly and loosely coordinated with central ministries and such loose coordination mechanisms have budgetary implications such as loss of resource control. Besides, implementation of over a thousand healthcare facilities within a span of four years in over two hundred locations strips off the advantages of economies of scale and undercuts planning efforts.

Since health benefits from CDF clinics are concentrated in specific local areas, there is need for the government to amend the current CDF act so that a portion of the annual CDF allocations to the constituencies is set aside to finance the operations and maintenance of local

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<sup>11</sup> See, "400 CDF-funded Hospitals Lie Idle Countrywide," *East African Standard*, 10/19/2008.

<sup>12</sup> See, page 28, Table 3 for an estimate for operating a CDF-funded clinic. The start-up equipment cost (US\$. 7,000) has been factored out because from my manual count and analysis of constituency data, evidence suggested that most constituencies do incur that cost from their own annual allocations. My interview with a senior informant in the CDF national management board (NMB) concurred in what he referred to as "bending rules and cutting corners" to dodge CDF rules by approving multiple projects within one grand project. That is, approving more than one project e.g. buying equipments as separate projects within a completed clinic which by itself constitute a project. The CDF act prohibits constituencies from using funds to incur recurrent costs.

projects. This would imply that fewer, operational and manageable clinics will be constructed and costs for running such clinics will be factored into the local level expenditure decisions to evoke a benefit-expenditure principle equivalent to a tax-benefit principle in a devolved system. In the long run, a benefit-expenditure principle from CDF annual allocations will enable the Kenyan central government to avoid the tragedy of the commons.

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