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Contribution Of Monitoring And Evaluation To Sustainability Of Public Private Partnership Projects In Kenya: The Case Of Food Fortification

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Abstract: ***Globally, governments are increasingly being faced with budgetary constraints due to the ever growing needs and diminishing traditional sources of bridging the budgetary deficit such as grants and donor support. As a result, Public Private Partnership (PPP) model has taken root as the best possible alternative where governments expect to raise finances and tap on the efficiencies associated with private sector. However, their success and sustainability depends on a number of factors that should be addressed at the onset of the project failure to which the projects may fail. This study sought to find out the effect of monitoring and evaluation on sustainability of PPP projects in Kenya using the case of food fortification. In particular, the study sought to find out the effect of participation in developing Monitoring & Evaluation (M&E) framework, effect of its extent of implementation and the effect of analysis and utilization of M & E data on sustainability of the PPP projects in Kenya. Descriptive study design was applied where structured questionnaires were used to collect data. The target population of the study was two government departments and food industry involved in milling and edible oil and fats refineries. The data was analyzed using 20th version of SPSS. The finding showed majority of the respondents (48.8 %) indicated that their organizations were not involved in development of M & E framework. The results indicated a strong correlation between participation in M & E development and sustainability. The study found that 50 % of the respondents indicated that M & E framework was never implemented during project life. The study established that 54.7 % did not use the results of analysis of M & E data to make corrective action. Based on the findings, it was concluded that sustainability of PPP projects in Kenya can be greatly improved if M & E is strengthened. The study recommends participation in development of M & E framework be increased, improve its implementation and data to be timely analyzed and used as a basis for making decision on the projects.***

Keywords: Public Private Partnership projects, Monitoring and evaluation and Sustainability

I. INTRODUCTION

A. BACKGROUND

PUBLIC PRIVATE PARTNERSHIPS

Governments are increasingly being faced with financial constraints as a result of competing interests in the various sectors due to the ever growing economic, political and social needs (Curristine, Lonti & Joumard (2007). In addition, traditional government sources of bridging budgetary gaps such as grants and donor support are also diminishing. This has led to governments exploring the possibility of mutual cooperation with the private sector for both capital investment and management efficiencies in an arrangement usually termed as Public Private Partnership (IISD 2012). Public Private Partnerships (PPP) are initiatives that establish a contract between a public agency and a private entity (for-profit or not-for-profit) for the provision of services, facilities, products and/ or equipments (World Bank 2013). In Kenya,

PPP as defined in the Public Private Partnership's Act of the Laws of Kenya (2013) implies that such partnership only applies to infrastructural related projects meaning those projects implemented under PPP concept and which are not infrastructural in nature are loosely governed in law. Despite this gap, the government of Kenya is increasingly adopting PPP model as its key driver to the realization of the objectives outlines in her vision 2030. This is demonstrated by establishment of various policies which emphasizes on PPP such as Food and Nutrition Security Policy (GoK 2011), the basis of which food fortification project was initiated by the government.

FOOD FORTIFICATION IN KENYA

Food fortification refers to the practice of deliberately increasing the content of vitamins and/or minerals in food so as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health (WHO/FAO 2006). The success of food fortification mainly relies on the cooperation between the private sector (food processors) of centrally produced foods and governments. Food fortification has a long history in Kenya which started with mandatory salt iodization in 1978 and later in 2012 a mandatory legislation was published to bring on board wheat flour, maize flour and edible oils and fats (GoK 2015). The government of Kenya expects that an effectively monitored and evaluated public private partnership model will deliver and scale up an efficacious and safe food fortification program (GoK 2011). To date over 200 brands of wheat flour, maize flour, edible oils and fats and table salt have been successfully fortified in accordance with the national law and standards Kenya Bureau of Standards (KEBS) database – http://10.10.1.241/qa_data/fortificationlist.php).

PROJECT SUSTAINABILITY

Successful implementation of PPPs projects depends on positive interaction of several factors such as involvement of stakeholders, appropriate legal framework, economic case and equitable sharing of risks as well as proper project management. However, these factors apply differently in different circumstances and thus the need to identify the appropriate factors necessary for the success of a project (World Bank 2015, Silvius & Schipper 2014). Preventive health projects, such as food fortification, are resource consuming with little return to investments and thus tend to be less attractive to private sector as opposed to curative health projects (WHO/FAO 2006). Their success and sustainability therefore largely depend on the efficiency in utilization of resources and government's ability to create and sustain demand for the products or services, elimination of barriers, provision of subsidies, effective dispute resolution management as well as proper monitoring and evaluation framework (DFID 2012). Review of PPPs have shown that their success and sustainability are affected by failure to fully analyzing the specific costs, benefits, risks as well as poor monitoring and evaluation system and hence fail to achieve and/or sustain the intended public or even private benefits (Farlam 2005, World Bank 2013, IISD 2012,)

B. STATEMENT OF THE PROBLEM

The realization of the Second Medium Term Plan (MTP) objectives of Kenya's Vision 2030 are hinged on projects expected to be implemented through the Public Private Partnership (PPP) models including those of preventive health and nutrition (GoK 2013). This is informed by advantages associated with PPPs which the public sector can exploit such as ability to raise additional finance in an environment of budgetary restrictions, making the best use of private sector operational efficiencies to reduce cost and increase quality of service or goods to the public and the ability to speed up projects development (Hovy 2015). The success of PPP projects depends largely on the ability of the project to sustain by itself, the intended benefits to the public entity, private players and the general population (ADB 2007, IISD 2012). One way of ensuring proper implementation and success of PPP projects is developing and implementing an effective monitoring and evaluation system. Despite the important role of M & E in projects success, studies have shown that this aspect has remained controversial in PPP with both parties differing on the elements to be monitored and the procedure for monitoring and evaluation. (Levinson et. al 2006) This study therefore sought to find out the effect of monitoring and evaluation on sustainability of public private partnership in Kenya.

C. SPECIFIC RESEARCH OBJECTIVES

The study sought to find out the effect of monitoring and evaluation on sustainability of public private partnership projects in Kenya.

The specific objectives of the study were

- ✓ To establish the effect stakeholders participation in development of M & E framework on sustainability of public private partnership projects in Kenya
- ✓ To find out the effect of the extent of implementation of M & E framework on sustainability of public private partnership projects in Kenya
- ✓ To establish the effect of analysis and use of M & E results on sustainability of public private partnership projects

D. RESEARCH AND HYPOTHESIS

To achieve this objectives the study was guided by the following hypothesis

H_a: Stakeholders' participation in development of M & E framework has no effect on sustainability of public private partnership projects in Kenya

H_o: Stakeholders' participation in development of M & E framework has an effect on sustainability of public private partnership projects in Kenya

H_a: The extent of Implementation of M & E framework has no effect on sustainability of public private partnership projects in Kenya

H_o: The extent of Implementation of M & E framework has an effect on sustainability of public private partnership projects in Kenya

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H_a: The analysis and use of M & E data has no effect on sustainability of public private partnership projects in Kenya

H_o: The analysis and use of M & E data has an effect on sustainability of public private partnership projects in Kenya.

II. LITERATURE REVIEW

According to PMBOK (2013) monitoring is the processes requiring tracking, reviewing, and orchestrating the progress and performance of the project; identifying any areas in which changes to the plan are required; and initiating the corresponding changes. Evaluation on the other refers to the systematic and objective assessment of an ongoing or completed project, programme or policy (UNDP 2009). These two events are interrelated in that more often than not project evaluation relies on the monitoring result to make conclusions. In a PPP arrangement, the public entity should take lead in the development of a mechanism that will ensure performance monitoring and evaluation is put in place to ensure that the project is implemented to the agreed standards (HKEU 2008). According to Levinson et al (2006) measuring the successful implementation of a Public–Private Partnership has been a controversial issue. In a study on the impact of World Bank funded PPP project globally, World Bank (2013), faulted the current monitoring system for PPP projects and recommended the system should not only better capture the end-user aspects of PPPs, but should also monitor PPP performance beyond the early years of operational maturity if it were to guarantee sustainability.

Most public projects usually ignore the element of monitoring and evaluation resulting to failure of projects or cost overruns making the project unsustainable (Oino, Towett, Kirui & Luvega (2015). In some instances, projects either lack the monitoring and evaluation plan or where it exists, its implementation is not effective and thus the overall management of the project is negatively affected (Adam & Sabil 2015). According to OECD (2012), monitoring and evaluation is a vital element to the implementation of PPP projects if the public sector was to achieve the intended value for money as well as sustainability. This recommendation is consistent with the finding of (Collivignarelli, Sorlin and Rondi 2015) on donor funded projects where failure to monitor and evaluated resulted to collapse of a number of donor funded projects after project closure.

III. RESEARCH METHODOLOGY

A. RESEARCH DESIGN

According to Gorard (2013), research design may be defined as the framework or structure that has been created to seek or obtain answers to research questions. This study adopted descriptive survey using both qualitative and quantitative approaches. Descriptive survey describes the state of affairs as it exists at present to determine its characteristics, and then infer that the population has the same characteristics (Kothari 2004). This design was chosen mainly because it is cost and time effective and providing a sound insight of the problem.

B. TARGET AND STUDY POPULATION

Target population refers to the group of individuals to whom research results will apply (Burns & Grove 2003). The study target population was 2 government departments (Public Health Department and Kenya Bureau of Standards), 2 Government development partners and 33 food industries drawn from edible oils and flour milling. The study population was a census of 105 participants from the target population.

C. DATA COLLECTION METHODS AND PROCEDURE

A structured questionnaire for the study was developed, validated and its reliability tested before administration. An introductory letter and approval to collect data were sought and granted by the University and Kenya bureau of Standards respectively. Two research assistants were contracted and trained to assist in the administration of the questionnaires. The researcher used drop and collect method as well as electronic mails to administer the questionnaires. The questionnaires were validated by being reviewed by senior research expert while reliability was done by split half technique to determine the coefficient (Spearman-Brown coefficient) using 20th version of SPSS computer packages achieving a satisfactory score of 0.8.

D. DATA ANALYSIS

This includes the analysis of data to summarize the essential features and relationships of data in order to generalise from the analysis with a view of determining patterns of behaviour and particular outcomes. Descriptive data analysis mainly frequency distribution tables and percentages were used to summarize the data while linear regression analysis was used to test the study hypothesis as well as to show the correlation between the independent and dependent variables. Multivariate linear regression was used to determine the effect of the combined elements of M & E variables on sustainability of PPP projects in Kenya.

IV. FINDINGS AND DISCUSSION

A. RESPONSE RATE

The study targeted a population (N) of 105, out of which 9 respondents were entered in the pilot study and thus were not eligible for the study. A total of 96 questionnaires were circulated to the respondents out of which 84 were successfully filled and returned constituting an overall response rate of 87.5 %.

B. DEMOGRAPHIC RESULTS

Male respondents were 56.0 % while the female respondents were 44.0 % of the study population. This indicates that both genders were equitably involved and thus

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the findings of the study did not suffer from gender bias. The participating organizations were drawn from both the public and private sector as demonstrated by figure 1. The lead public organizations in food fortification, Kenya Bureau of Standards (KEBS) and Public Health department comprised of 70 % of the population while the private sector, represented by flour millers and edible oil industry as well as the NGO comprised of 30 %

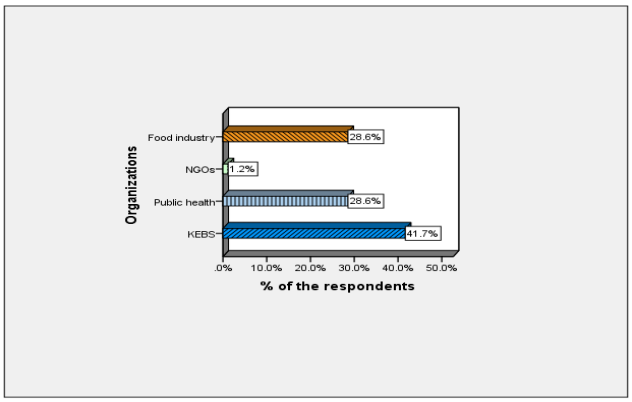

Figure 1: Organization affiliation of the respondents

The study sought to establish the period the respondents had served in their respective organizations. The findings as indicated in table 1, showed that 27.4 % of the respondents had served for over 11 years, 48.8 % for a period of 6 to 10 years, 19% had served for between 1 to 5 years and the remaining 4.8 % had served for a period less than 1 year. This findings demonstrate that majority of the respondents (95.2 %) were in their organizations during the designing, planning, implementation and closure of the project and thus were able to provide reliable information given that the project was implemented between 2011 and 2015 (GoK 2015).

	Frequency	Percent	Cumulative Percent
0 -1 year	4	4.8	4.8
1 - 5 years	16	19.0	23.8
6 - 10 years	41	48.8	72.6
11 years and above	23	27.4	100.0
Total	**84**	**100.0**	

Table 1: Duration of service by respondents

C. EFFECT OF PARTICIPATION IN DEVELOPMENT OF M & E ON SUSTAINABILITY OF PPP PROJECTS IN KENYA

The study as indicated in Figure 2, established that 70.3 % of the respondents considered monitoring and evaluation as critical factor in ensuring sustainability of PPP projects in Kenya. However, the level of involvement of partners in the development of M & E framework is low as demonstrated by Figure 3 which shows that 48.8 % of the respondents indicated that their organizations was not involved in the development of M & E framework. Only less than half (42.8 %) participated. This findings demonstrates that in the development of M & E framework the stakeholders' view were not considered and thus lacked ownership contrary to requirements of developing relevant and effective framework (IFRC 2011).

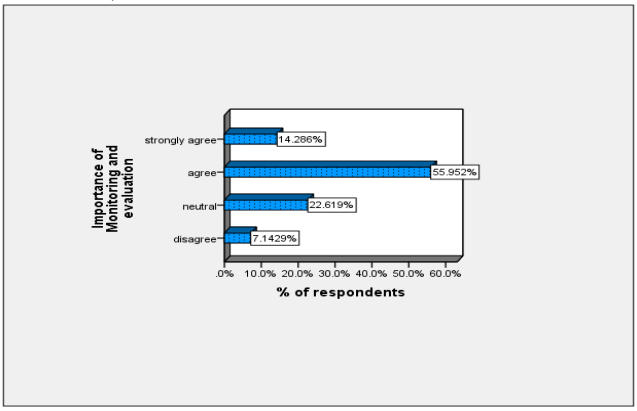

Figure 2: Importance of M & E on sustainability of PPP projects in Kenya

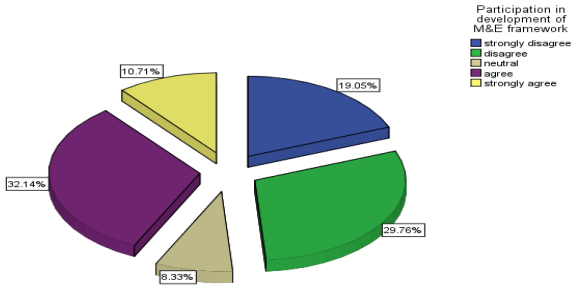

Figure 3: Participation development of M & E framework

Table 2 shows that there is correlation (R=0.613) between stakeholders participation in development of M & E framework and sustainability of public private partnership projects in Kenya. Further, the findings indicate that participation in development of M & E framework contributes 36.8 % of variability on sustainability as an M & E attribute. Table 3 confirms that participation in development of M & E frame work has an effect on sustainability of PPP project in Kenya ($t=7.023$, $p<0.001$). Further, the table indicates that holding all other factors constant, a one unit increase on the level of participation will contribute to an increase of 0.749 on sustainability of PPP projects.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613[a]	.376	.368	.723

a. Predictors: (Constant), Contribution of Participation

Table 2: Model summary: development of M & E framework

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.026	.422		.062	.951
	Contribution of Participation	.749	.107	.613	7.023	.000

a. Dependent Variable: Food Fortification Sustainability

Table 3: Participation in development of M & E framework coefficient

D. EFFECT OF EXTENT OF IMPLEMENTATION OF M & E FRAMEWORK ON SUSTAINABILITY OF PPP PROJECTS IN KENYA

Figure 4 show that 50 % of the respondents indicated that the M & E framework was never implemented during the project life with 38.1 % indicating that it was fully implementation. This finding concurs with Oino, Towett, Kirui & Luvega (2015) study on the dilemma of sustainability of community based projects where they found that most projects ignored the element of monitoring and evaluation resulting to their failure or cost overruns making the projects unsustainable. Similarly the finding supports Adam and Sabil (2015) where in their review of donor funded projects found that in some instances, projects either lacked monitoring and evaluation plan or where it existed; its implementation is not effective. According to World Bank (2013), monitoring and evaluation should be a continuous process in PPP projects and should not stop immediately the contract are signed as was the case for most PPP project if they were to be successful and sustainable.

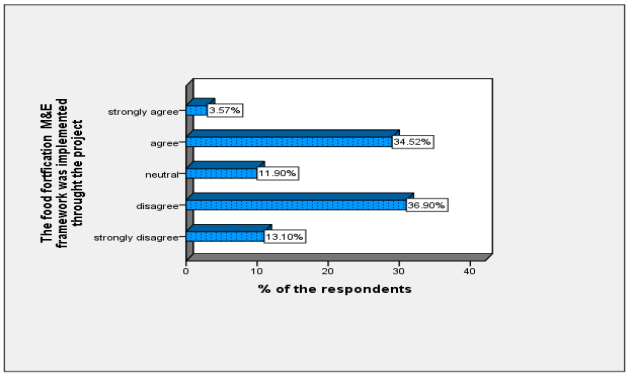

Figure 4: M & E Implementation

Table 4 shows that there is correlation (R=0.277) between extent of implementation of M & E framework and sustainability of public private partnership projects in Kenya. The finding further indicates that the extent of implementation of M & E framework contributes 6.6 % of variability on sustainability as an M & E attribute. Table 4.5 confirms that the extent of implementation of M & E frame work has an effect on sustainability of PPP project in Kenya (t=2.613, p<0.011). Further, the table indicates that holding all other factors constant, a one unit increase on the extent of implementation will contribute to an increase of 0.406 on sustainability of PPP projects in Kenya.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.277[a]	.077	.066	.879

a. Predictors: (Constant), Contribution of Implementation

Table 4: Model summary of implementation of M & E framework

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.315	.629		2.091	.040
	Contribution of Implementation	.406	.155	.277	2.613	.011

a. Dependent Variable: Food Fortification Sustainability

Table 5: Extent of implementation of M & E framework coefficient

E. EFFECT OF ANALYSIS AND USE OF M & E RESULTS ON SUSTAINABILITY OF PPP PROJECTS IN KENYA

The results as demonstrated in figure 5 showed that 54.7 % of the respondents indicated that the results of analysis were not the primary basis of making decision or improvements during the project implementation. Only 31 % of the respondents used the M & E results to make corrective actions in the project. This was mainly due to delay in the feedback of the results of M & E data analysis. According to UNDP (2009) M & E data analysis and use provides an opportunity to the project to identify among others progress towards outcome, factors for or impending success, individual partner performance and lessons for improvement. Lack of data analysis and use therefore denied the project an independent review of its progress.

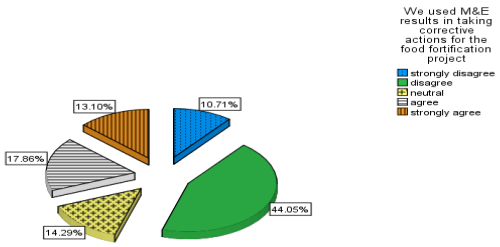

Figure 5: Use of M & E data

Table 6 shows that there is correlation (R=0.408) between analysis and use of M & E data and sustainability of public private partnership projects in Kenya. The finding further indicates that the analysis and use of M & E data contributes 15.6 % of variability on sustainability as an M & E attribute. Table 7 confirms that the analysis and use of M & E data has an effect on sustainability of PPP project in Kenya (t=4.043, p<0.001). Further, the table findings indicate that holding all other factors constant, a one unit increase on the analysis and use of M & E data will contribute to an increase of 0.477 on sustainability of PPP projects in Kenya.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408[a]	.166	.156	.836

a. Predictors: (Constant), Contribution of Analysis

Table 6: Model summary for effect of analysis and use of M & E data

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	1.134	.456		2.486	.015
	Contribution of Analysis	.477	.118	.408	4.043	.000

a. Dependent Variable: Food Fortification Sustainability

Table 7: Analysis and use of M & E data coefficients

E. COMBINED EFFECT OF THE PREDICTORS

The results of Table 8 indicate that the effect of combined predictors of the study contributes 44.4 % of variability on sustainability of PPP projects in Kenya. The t – test results in Table 9 for participation in development of M & E framework, its implementation and the analysis and use of M & E data: t = 6.136, p<001; t = 1.436, p<0.155 and t = 3.126, p<0.002 respectively confirms that each of the variable in the multivariate regression analysis has an effect on sustainability of PPP projects in Kenya. The resultant equation for the relationship between sustainability of PPP projects in Kenya denoted by Y and the M & E variables denoted by X thus will be:

$$Y = -1.449 + 0.643\mathbf{X_1} + 0.178\mathbf{X_2} + 0.310\mathbf{X_3}$$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.681[a]	.464	.444	.678

a. Predictors: (Constant), Contribution of Analysis, Contribution of Implementation, Contribution of Participation

Table 8: Model summary for combined variables

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.449	.612		-2.365	.020
	Participation in M & E devt	.643	.104	.526	6.163	.000
	Implementation of M & E	.178	.124	.121	1.436	.155
	Analysis & use of M & E data	.310	.099	.265	3.126	.002

a. Dependent Variable: Food Fortification Sustainability

Table 9: Coefficients of effect combined variables

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this study, it is evident that monitoring and evaluation and in particular participation of stakeholders' in development of M & E framework, its implementation and timely analysis and use of M & E data affects sustainability of PPP project in Kenya. The study also guided to conclude that there is a weak monitoring and evaluation system for PPP projects which could contribute to poor sustainability of the projects

It is therefore recommended that for the PPP project to be sustainable the lead public sector agency should ensure that

- ✓ There is improved participation by relevant stakeholders' in the development of M & E framework to increase ownership of the system and ensure their interests are incorporated;
- ✓ Full implementation of the framework as per the monitoring and evaluation plan and
- ✓ Timely analysis and feedback of M & E data to all partners.

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