PROJECT MANAGEMENT IN NIGERIA: A CRITICAL STUDY OF SOME PROJECTS IN

ABIA STATE

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Abstract

Projects are initiated and executed for the good of the people. It is always expedient that projects are initiated and designed in response to public needs and values. Stated inter-alia, the essence of this work was to evaluate success rates of projects executed in the state based of the initial goal set. In doing this, roles, strategies and techniques for monitoring and evaluation were reviewed. Also, in line with the changing nature of human interface and development, new paradigms were evolved to ensure sustainability in project monitoring and evolution. For the statistics principal Component Analysis (PCAJ was used since the study dealt with multiple variables working as externalities helping to serve as measuring yardsticks. For the test of hypothesis it was discovered^ that the low performance and abandonment of the public water project in the area was due to human and material inadequacies. Finally, suggestions were made on the way forward.

Introduction

The term project is derived from Latin word projicare meaning a proposal or plan. To Hornr-(2000), the term project is defined as to plan, contrive, devise or design something. In a UN publication titled. Manual of Economic Development Projects (n.d) as cited in Alozie (2008), project is defined as the compilation of data, which will enable an appraisal to be made of the economic advantages and disadvantages attendant upon the allocation of country's resources to the production of specific goods and services. Also, projects are linked in the process of successive approximation-involved in the technique of programming and an important element in the flexibility and continues services of the programme. (Olewe, 1995).

According to Geol (1981), a project is the specification and accomplishment within a given period of related set of activities that will result in a measurable change in any system capacity t; improve the status of the community directly or indirectly. By implication, a project is an organize; undertaking, a special unit of work or research.

A project may be small or big, large-scale or small-scale, its nature and scope may be limited or comprehensive. It may be set-up with completely indigenous resources or with the help of individual philanthropy, institutional or co-operate assistance. In the state, projects are by individuals, communities, government and co-porate bodies. Projects are set up to achieve specified goals and purposes. It envisages from other project co-operation and coordination to reach goals and targets (Nkemdim, 2007 and Iroegbu, 2006).

Project Techniques

The administration and management of projects requires different techniques. Some of these techniques include work study, motion study, time and work measurement. In this order, two techniques according to Digha (2008) come to mind they are PERT and CPM

PET, which is programme Evaluation and Review Techniques was created as a means to plan and accelerate development of Polaris Ballistic Missile (PBM) for Us defense in the late 1950's in order to accelerate the realization of the Polaris Missile, PERT became the planning and scheduling technique developed to answer the following questions:

i) what research had to be done to accomplish this, and how should it be planned?
ii) How long would the research take?
iii) What stages of development and testing would be necessary for the projects completion?
iv) How fast could the country do this?

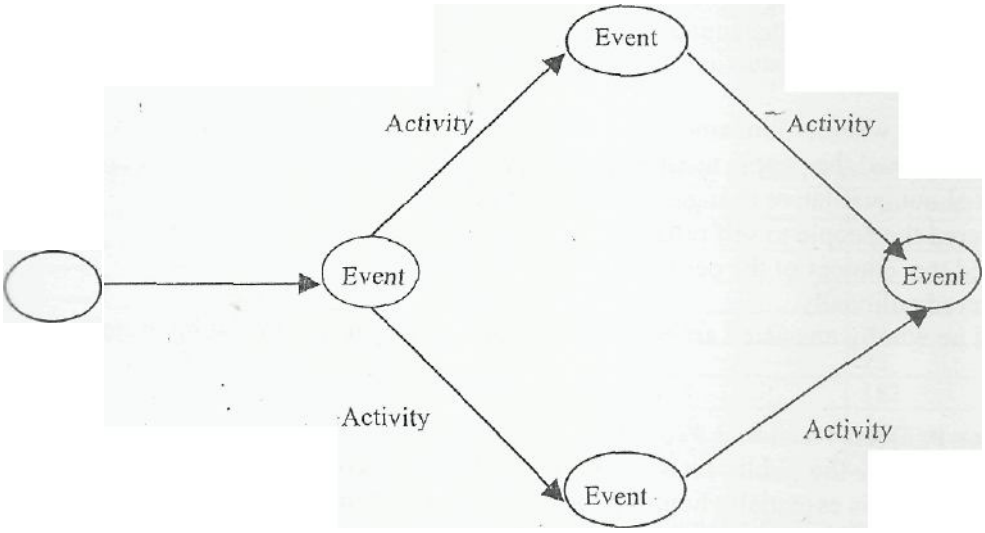
Fundamental to PERT is the concept of an event or the reaching of a certain stage of completion of a project. Also basic is the expected time required to complete activities teaching up to that event. CPM. Which is, critical path method emphasized the relationship between applying more or other resources to shorten the duration of given jobs in a project and the increase cost of these

additional resources. In essence, CPM, according to Alozie (2008), requires that:

i) the amount of time needed to complete various facet of projects are assumed tyo be known with certainty.

ii) The relation between the amount of resources employed and the time needed to complete the project is also assumed known iii) It deals with time cost trade-offs. An example of a CPM network is shown in figure 1 below

Figure 1
An example of a CPM

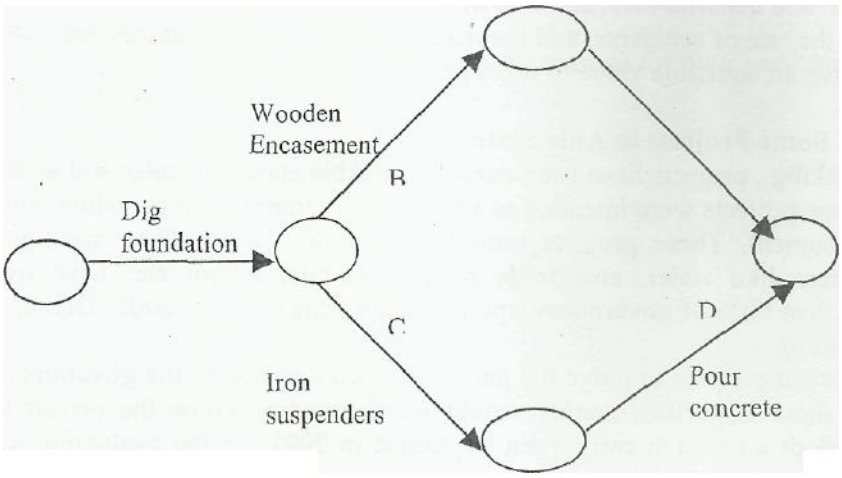


There are according to Iroegbu (2006), two basic elements in the network plan, they include

i) The Activity:- This represents the time consuming part of a project, denoted by arrows. '

ii) The Event: it is also called the mode. It is either the beginning or the end of a job-denoted by circles, rectangles or triangles. Olewe (1995) used this technique to develop an activity and event network for a construction company. See figure 11 below.

Figure 11
Example of an Activity /**Event** Network for a Construction Company



However, the concept of critical path is only necessary to be mentioned, as it defines the longest time and cost all the activities and events will consume for the project to be executed. However, at this juncture, we can affirm that our concern is no more on project execution, rather on evaluation, especially on some existing projects in the state

Essentially, projects are provided with the interest of creating socio-economic development, especially, for the intended users.

Thus, every project is expected to possess multiplier efforts that will encourage the development of the affected area.

We may also pause to define the word development as multidimensional process involving a change in structure, attitude and institution as well as the acceleration of economic growth, the reduction of inequality and eradication of obsolete poverty (Todaro, 1979). In this sense, development has economic component, an equity or social justice component, and a social-economic transformational component all on self sustaining basic (Mabogunje, 1980) it is also the fundamental transformation of a nations mode of production so as to bring about qualitative change in the living conditions of the people.

The questions to ask is whether fundamentally, the projects executed in Abia State.

i) Has truly transformed the people mode of production
ii) Has brought about qualitative changes in their living conditions
iii) Has empowered the people to self reliance
iv) Has increased the choices of the people
v) Has empowered politically.

These questions will be wholly answered are we y-ray the multiplier effects of existing projects in Abia State

Public Requirements for Projects Need **and Provisions**

It is very easy to identify the public requirement for projects. According to Koinyan (1983) cited in Alozie (2008) the public is essentially hopping for an improvement in ther well being, enacted by the presence of these projects. Similarly public requirements for projects, according to Alozie are as follows.

i) ability to provide physical development.
ii) Create employment opportunities,
iii) Ensure capacity building.
iv) Ensure economic empowerment.
v) Enhance literacy levels
vi) Improve life expectancy ration which is low (50-55) years.
vii) Improve standard of living
viii) Decrease the rates of mortality, especially among the children and women.
ix) Improve immunity systems and nutrition rates of the people.
x) Improve and material care, and care of the aged.
xi) Reduce the rate of accidents, and the rising number of deaths associated with accidents.
xii) To receive an equitable value of taxes paid.

A Critical Study of Some Projects in Abia State

General speaking , projects have been executed in Abia state, severally and at different times. Some of those of these projects were intended as a rural development strategy, while others were sited in the urban development. These projects provide for public goods. They are logically service oriented. Infrastructure like water, electricity, roads hospitals, school etc. have over the years constituted not less than 60% of government sponsored projects (Alozie, 2008, Digha, 2008; Wogu, 2007 and Iroegbu, 2006).

It will not be our concern to judge the purpose driven decision of the government in selecting which projects are more important, neither would we demand to know the privatization criteria. However, we will adopt a research carried out by Alozie in 2001, on the evaluation of government water projects in Isialangwa North L. G. A.

According, a more apt evaluation criteria, Kayode (1989) is hereby used as basis for assessing the success rate of any project. They are:

i) the designed goal of establishing the project
ii) the desired benefits
iii) ' the level of project implementation

iv) the contribution of the project to the given goals

Methodology

Data for this work was adopted from five-hundred questionnaire (5000) distributed .in the chosen communities, while 453 questionnaire were retrieved. Alozie (2001) used the Principal Component Analysis (PCA) to subject the result from the field work. What has been studied and tested were the reasons-responsible for the poor performance of water scheme in Isiala-Ngwa North local government area. Table 1 below shows the performance rating of the water scheme and the respondents responses.

Table 1

The Respondent's Responses and Performance Rating of the Water scheme

S/No	Borehole Locations	Average	Poor	Very poor	Total
1.	Amapu Ntigha	27	30	39	96
2.	Mbawsi	7	31	46	84
3	Amaputa	18	30	42	90
4.	Amaoji	10	52	33	95
5.	Okpuala Ngwa	21	45	22	88
	Total	83	188	182	453
	Meant total	16.6	37.6	36.4	90.6
	Mean %	18.32	41.50	4JU8	100

Source: Alozie, 2001

From table I above, over 70% of the respondents rated the performance of the water projects as below average. In the light of the above Alozie (2001) discovered that:

i) Reliance on alternative source other than the public water schemes has increased the cost of fetching water in the area, ii) Time and distances covered to fetch water from the alternative sources have decreased
time spent on farming activities.

iii) Although there is reduction in the incidence of water related diseases, it I however, not as a result of the existence of an efficient water system to supply safe and portable water rather due to presence of impure health facilities.

iv) Finally, that public water projects in the area have not contributed meaningfully to the development of the communities since cost of producing water has increased, thereby reducing the quantity of water available for various used and the income available to the people for investment.

Table 2 below shows the respondents responses on the reasons for poor performance of the water schemes. See table II below.

Table II

The Respondents Responses **on the Reasons for Poor Performance of the Waters Schemes in the Area**

E/N	Borehole local ions	Lack community particip.il ion	Obsolete equipment	Diwingling go vi. funding	Lack of spare pans	Poor management	Valid al iza lion	Rising cost or energy supply	Embezzlement I	Total
1.	Amapu Niigha	25	20	25	21	1	-	\3	2	96
2	Mbavvsi	29	18	22	11	1	2	1	^ _ _	84
3	Amaputa	19	1 1	40	J4	2	1	2	1	90
4	Arnaoji	27	19	18	26	2	I	1	1	95
5	Okpuala Ngwa	19	16	24	23	1	1	1	I	88
	Total	119	84	125	99	7	5	8	6	453
	Meant	23.8	16.8	25	19.8	1.4	1	1.6	1.2	90.6
	Mean %	26.22	18.54	27.59	21.88	1.55	1.10	1.77	1.33	JOO

Source: Alozie, 200!.

From the above data the low performance and abandonment of the public water projects in the area is due to human and material inadequacies. To analyse this assumption and because of the related nature of the premise, the principal Component Analysis (PCA) was used. At the level at which PCA operates, problems of multi- corrolinatry hidden externalities are eliminated and statistical conclusions are reached without overlooking even the minutest of details. In

order to verify the reasons behind the low performance and abandonment of some of the public water projects in the area, data on table II above were employed. In all, the eight (8) variables were selected as reasons for poor performance of the water schemes in the area. They include:

1. lack of community participation (LCOMPAT)
2. lack of spare parts (LASPPAT)
3. Dwindling Government Funding (DWGTFND)
4. obsolete Equipment (OBSEQUIP)
5. Poor Management (POORJV1GT)
6. Vandalization (VANDAL)
7. Rising Cost of Energy Supply (RISENGY)
8. Embezzlement of funds (EMBEZZLMT)

The above variables incorporate human and material problems and values assigned to each variable were summed up from number of times they occurred in the areas (see table 1 above). These variable were harmonized and transformed into a matrix of inter- relations between the variable to know the strength of their inter correlation. The correlation matrix indicated that some of the variables have high correlation with, each other, To remove this strong bias and probable effect on the expected results, we transformed the 8-predictor variables into orthogonal (uncorrelated) values by Principal Component Analysis (PCA).

Using programme, Nie-Hull, Jeskins, Steinbremer & Bent (1975) cited in Alozie (2008), Principle component analysis reduced the eight variables to orthogonal (uncorrelated) factors that account for why public water projects in the area failed and were abandoned. However, to improve interpretations of the result and achieve clarity of purpose the varimax rotation was utilized to maximize variance and to place the Eigen value (Ev) in a unique position such that each

Table *III* Correlation **Matrix**

factor can be interpreted by its weight-see table 111 and IV below.

REASONS	DWGTFND	EMBELMT	LASAPPAT	LOCOMPAT	OBSEQUIP	POOR MGT	RISEINGY	VANDAL
D1NGTFND	1.00							
EMBELMT	-0.25_____	1.00						
L ASAP PAT	-0.46	0.71						
LOCOMPAT	-0-68	0.63	-0.10	LOO				
OBSEQUIP	0.88	0.19	0.42	0.74	1.00			
POORMGT	0.35	-0.41	0.15	-0.15	-0.46	1.00		
RISENGY	0.42	-0.38	-0.45	-0.17	0.47	0.102	1.00	
VANDAL	-0.13	-0.79	-056	0.307	-0.20	0.000	-0.79	1.00

Table IV
Rotated **Solving for the** Eigen-Value

Variables	Factor-}	Factor-2	Factor-3
DNGTFND	-0.92176	.21714	-31009
	-0922	0..217	-0.310
EMBELMT	.36860	.86520^	.33790
	0.369	0.865	0.338
	30259	-94500	-00257
LASPPAT	0.303	-0.945	-0,003
LCOMPAT	.76103	.29682	.19046
	0.791	0.297	0.190
j D B S E Q U I P _ _ _ _	.97558	-14713	-13967
	0.979	-0.147	-0.140
POORMGT	-53821	-41120	.36122
	538	-0.411	0.361
RISENGY	-11519	-0,02249	-95611
Vandal	-0.115	-0.022	0.956
	0.006	0.603	0.79600 •
EIGENVALUE	2.96	2.33	1.94
% OF VARIANCE	37	29.1	24.3
CUMULAT1VE%	37	66.1	90.4

Source: Alozie, 2001
Note: PCA Extracted, 3 Factors

The eigen value for the rotated values above was derived by summing up the squares of each loading for the variable within the factors. Percentage of variance is the eigen value in respect of the N. value, which in this case is 8.

In addition, variables that have at least 0.7 loading was selected. This was necessary to eliminate the possibility of selecting the variable twice, (see table v below).

Table V

Variable with Highest Loading in the Factors		
Factors	VARIABLES	Loading
Factor -1	DWGTFND	0.92
	L COMPAT	0.79
	OBSEQUIP	0.98
Factor -II	EMBELZMT ;	0.87
	LASPPAT	0.95
Factor - lit	RISENGY	0.96
1 VANDAL		0.79

Source: Alozie, 2001

These 3 factors together accounts for 90.4% of the loadings. To enable easier interpretation, the variables with a minimum of 0.7 loading within each factor was assigned family names. They are as follows:

Factor 1

Family Name: Lack of community participation and Ineffective Post Execution Monitoring. It includes:

a. dwindling Government funding (DWGIFND)
b. Lack of Community participation(LCOMPAT)
c. Obsolete Equipment(OBSEQUIP)

Factor 1

Family Name: Misappropriation of funds and lack of spare plants. It includes:

a. Embezelment (EMBEZZLMT).
b. Lack of spare participation (LASPPAT).

Factor **III**

Family Name: Increasing overhead cost and security. It includes:

a. Rising Cost of Energy Supply (RISENG Y)
b. Vandalization (VANDAL)

The three family, names can be classified as human and material inadequacies, hence the assumption derived earlier on.

Test of Hypothesis

The following hypotheses tested the study:

Ho: that the low performance and abandonment of the public water project in the area is not due to human and material inadequacies.

HI That the low performance and abandonment of the public water projects in the area is due to human and material adequacies.

Decision

We now conclude from the analysis that the factor responsible for the low performance and abandonment of the public water projects in the area ids generally human and inadequate materials for work-since they account for 90. 40%. The remaining 9.6% unexplained variations are outside the scope of this work. We therefore accept the alternative hypothesis (HI) which says that the low performance and abandonment of the public water project in the area is due to human and materials inadequacies

Suggestions on the Way Forward

The following suggestions were made as per the way forward.
They are:

(1) Evoking Community participation Approach;-

This method adopts the down-top development strategy instead of the top-down approach which has been the usual practice.

This Eana (1985 cited in Alozie (2008) called, development from below', community participation is the involvement of the community and post-execution. Community participation can be achieved through three appraised (PRAL) and Participatory Rural Approach (PRAH) examples where this ideology, worked

(i) Onuoha (1990) cited in Alozie (2008) recorded that the UNICEF trained workers managed public water schemes in the area very efficiently, (ii) Shell petroleum Development company (SPDC) in 2001 designed , implemented and managed Project management Committees (PMC) in the Niger Delta through the following scheme.

a) Revolving loans
b) Village Banking Scheme
c) Credit Guarantee Scheme

(iii) SPC training capacity building for women

(iv) Participatory project planning:- it includes joint need and project review, articulation of project contents and resource requirements, sharing of responsibilities, -developing project work plan, and facilitation for committee formations and registration. Some 3, 121 . women in 22 communities have participated,

(v) Project and personnel management training.

(vi) Participatory funding: participatory funding instill genuine sense of ownership. (UNDP, 1990 cited in Iroegbu 2001). It eliminates the spirit of Nobody's property. The people become maximally involved and propose several initiatives of safe guarding it this method worked in Kenya (Dowkin, 1980).

(vii) Development of a Resource Bank: The essence is to enable proper selection of projects for localities that will have sustainable existence. At the moment, there was a petroleum Trust Fund (PTF) sponsored geological study of the state. This was intended to record and x~ray

the nature of surface and underground water in the state.

(viii) Projects for a Rechargeable Units: This is a complete departure from the existing norm, it , amounts to the decentralization of existing projects and restricting it to communities. This method was aptly recommended by Alozie (2001) as a measure of solving water problem . in Isiala Ngwa North LGA, at the moment, this method is being applied in the sitting of boreholes by ail levels of government, but we quickly add that the project should be made to work. This method helps to reduce the cost and technical complexities of operating such schemes, especially in the case of water projects, sited in the text.

(ix) Proper Legislation and Control: In this regard, the mining at Ohia in Umuahia South LGA, along Port Harcourt Enugu Express road is an environmental misnomer, (x) Sitting of project, should not be based on welfare or political under parings. A critical example is the moribund modern ceramics industry-Umuahia, Glass industry Aba and Textile mill-industry-Aba etc.

(xi) Availability of statistics to aid project planning and implementation. For instance to provide for water in an area, it will be necessary to ascertain the Average Daily Demand (ADD) of water of the people per day, then multiply to give a whole year. And subsequent years to come. By this, projections on water demand by that area can be - known for as much as the project would last.

(xii) To adopt the felt need approach as a major paradigm shift on project selection and execution.

Conclusion

What we have done was to have a critical study of some projects in Abia state as it affects project management in Nigeria. In this study an assessment of project execution and impacts on a given community was made and at the end of the study we were able to establish the reason for failure. This we noted would encourage proper planning and execution of projects so as to achieve the desire objective of corresponding development inputs.

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