

**The Relationship Between Beneficiaries Participation in
Project Formulation and Project Success. A study of Donor
Funded School Water Tanks Project in Kitui District. //**

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**A Research Project Submitted in Partial Fulfilment of the
Requirements for the Degree of Master of Business and
Administration, Faculty of Commerce, University of Nairobi**

2005

DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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This project has been presented for Examination with my approval as university supervisor.

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DEDICATION

It is my great desire to dedicate this research project to-My parents, mother Syokau and my late father Mutulili, my wife Benedetta Gichuru ,my children, brothers and sisters

ACKNOWLEDGEMENTS

My sincere gratitude is to all friends, relatives, lecturers and fellow students for their special indirect or direct support towards the completion of this MBA course and research project.

I wish to thank in a special way, Mr. Stephen Nyamwange, my supervisor for his guidance and advice in the course of my research work. More so for coming to my aid in time of need and desperation.

I'am indebted to my wife and my children. They had a lot of patience and understanding during my study period.

I can not forget to thank in a special way all head teachers for the primary schools studied district documentation and information office and Education office in Kitui district.

Lastly all glory and thanks to the Almighty God.

ABSTRACT

In recent years, community participation has gained importance in community projects. Kenya successive development plans since independence in 1963 to the present, emphasis the centrality of popular participation in the development endeavour. The principle of community participation emphasis that, any development agency should not simply impose its authority upon the people in a given region, but should give them a voice in the management of the projects those affect them. Participation entails empowerment; that is, everybody's right to have a say in decisions concerning their own live. Participation is an instrument in the promotion of ideological or normative development goals such as social justice, equity and democracy.

The thematic objective of this management research was on beneficiaries' participation with regards to school water tank projects in Kitui district. The researcher sought to establish the extent of participation and extent of project success and hence, to establish the relationship between the extent of participation and the extent of project success.

Several variables that comprise the project life cycle were assessed. For the purposes of this study, specific variables were initiation, consultation, and construction and post implementation/sustainability. Findings from the research led to conclusions, that beneficiaries' participation contributes to large extent to the success of projects. Hence beneficiaries participation in projects management enhances community right and duty to participate in solving their own problems, with greater responsibilities in assessing their needs, mobilizing local resources, suggesting new solutions, and sustaining of projects.

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List of Abbreviations

BOQ	Bill of Quantities.
CSD	Child Survival and Development.
DANIDA	Danish International Development Agency
DCO	District Children Officer
DFS	District Forms Strategy .
DPHO	District Public Health Officer
DSDO	District Social Development officer
DWE	District Water Engineer
ECD	Early Child Development
GOK	Government of Kenya
ILO	International Labour Organization.
KIDP	Kitui Integrated Development Programme
MOE	Ministry of Education
MOH	Ministry of Health
NGO	Non governmental Organization
PRA	Project Review Appraisal.
UNICEF	United Nations Children Funds
VIP	“Very Important Person”

CHAPTER ONE

1.0 Introduction

Community participation as a tool is a very popular paradigm in empowering the people to not only be beneficiaries, but also agents of development in their projects. This is the way forward to successful and self-sustainable projects. The emerging project management thought is to involve the local community, so that they are the architects of their own projects. The current trends in many organizations, governments, non-governmental organizations and other agencies, show that there is increasing adoption of project management techniques and tools, for more effective designing, planning and controlling of projects (Mikkelsen, 1995).

In his "A Participatory Action Research in Kenya" Muia notes that, much has been said and written in different forums about the need of people's participation in development. The District focus Strategy for Rural development Paper is the latest in the Kenya Government efforts to committedly capture peoples participation in development (Development Plan, 1984).

Kenya's sessional paper No. 10 of 1965 underscores the importance of participation by all Kenyans in the development processes. The sessional paper sees participation in terms of a mutual responsibility by its members on the struggle for prosperity. The District Focus Strategy Paper in Kenya attempts not only, to decentralize the bureaucracy, but also to build a system where a participative (bottom-up) situation in

development planning obtains and the phenomenon of popular participation is at play in development. The type of participation to guarantee success is not necessarily where a project gets a lot outside influence, but where the beneficiaries participate actively.

According to Njuguna (2000) the very successful projects are to be found in self-help project that did not receive assistance from NGO and charitable individual except the Government. This is because the success of projects is really dependent on the commitment of the participants of a project. The reason is that community based projects should be self-sustaining and cannot be done by the agencies but through full participation of the beneficiary. Several factors like supervision, operation, maintenance and training are crucial to project sustainability. Where a project was found to be performing poorly, the cause was grossly leaning on the failure of supervision, operation, maintenance, and training.

1.1 Background to the Study Area

Kitui District is one of 13 Districts of Eastern Province in Kenya. It is located in the southern part of Kenya. It borders Machakos and Makueni District is to the west; Mwingi District is to the north, Tana River District in the east and Taita Taveta District to the south. The district is located between longitudes 37° 45' and 39° 0' East and latitude 0° 3.7' and 30° 0' South. The district covers an area approximately 20, 4022 km² including 690.3 km² occupied by the uninhabited Tsavo National park. The district has 10 divisions namely Central, Chuluni, Matinyani, Mwitika, Mutitu, Ikutha, Yatta, Mutunguni, Mutomo and Mutha. The divisions are further divided into 57 locations and 187 sub-

locations. There are 4 parliamentary constituencies in the District. These are Kitui Central, Kitui West, Mutitu and Kitui South.

The altitude of the district ranges between 400m and 1800m above Sea level. The central part of the district is characterized by hilly ridges separated by wide, low areas and has slightly lower elevation of between 600m and 1800m above sea level. To the eastern side of the district, the main relief feature is the Yatta plateau, which stretches from the North and the South between rivers Athi and Tana. The plateau is almost plain with wide shallow spaced valleys. The highest areas in the district are Kitui central, Mutito hills and Yatta plateau. Due to their high altitudes, they receive more rainfall than other parts in the district and are the most productive areas.

The climatic conditions of the district is arid and semi- arid with very erratic and unreliable rainfall. Most of the areas are generally hot and dry leading to high rates of evaporation. This combined with unreliable rainfall limits intensive and meaningful land use and related development activities.

The annual rainfall ranges between 500 - 1050mm with a 40% reliability. The long rains come in April/May and short rains in November/December. The short rains are more reliable while long rains are usually unreliable. The periods falling between June to September and January to March are usually dry. The topography of the landscape influences the amount of rainfall received.

The high land areas of Mutonguni Hills in Kitui Central and Mutitu in the Eastern part of the district receive 500 - 760mm of rainfall per year. The Endeau hills receive 500 - 1050mm per year while the drier eastern and the southern areas receive less than 500mm.

The district experiences high temperatures through out the year, which range from 16° C to 34° C. The hot months are between January and February and June and September. The minimum mean annual temperatures are 28°c in the western part of the district and 22° c in the eastern parts. Maximum mean annual temperatures, on the other hand are 28°c in the western parts and 32°c in the eastern parts.

Due to high temperatures, limited rainfall received, low altitude and lack of vegetation, surface water resources are very scarce. The major sources of surface water are seasonal rivers that form during rainy season and dry up immediately after the rains. River Athi is the only perennial river in the district and flows along the border with Machakos district. The district has no lake, but has several dams and wells that play a significant role in providing water.

Most of the dams dry up during the dry season because of the high evaporation rates of between, between 1800 – 2000 mm per year. Spring water is generally found in the hilly areas of the district namely Mutitu hills, Endeau hills and Mutha hills. The springs vary in their flow regimes and some dry up during extended drought periods. Underground water sources supplement the scarce surface water sources through drilling boreholes.

1. 1. 1 The Schools Water Tanks Projects

The United Nations Children Funds (UNICEF) initiated school water tanks projects under the programme of Child Survival and Development (CSD) from 1988. These projects were to be implemented in conjunction with the Government of Kenya (GOK) and the Kitui Integrated Development Programme (KIDP). This was based on GOK and UNICEF community based programme plan of operation (1994-1998). There was a lot of emphasis of community participation approach and the District Focus Strategy (DFS), in the draft programme plan of operation for various sectors and integrated community based programmes.

The initial general objectives of CSD were firstly, to raise the awareness of parents and community about better health. This entailed improvement of health structures of primary school children. The teachers and pupils were to be equipped with skills and knowledge to fight diseases and malnutrition. The community was to be educated about first aid and other fields. Involve the community in general health care practices.

Secondly, encourage school enrolment especially for girls, by reshaping school pupils and correcting their behaviours, providing learning materials. Improve enrolment rate especially in arid and semi –arid lands. Lastly, it was the objective of CSD to enhance participation of children in income generating activities and protection of natural resources and afforestation programmes, to ensure food security.

To attain the stated general objectives of CSD the following was necessary for children in primary schools, importance of education, water for life, cleanliness and growing up. Diseases and how to prevent them, easier food production methods, income generating activities and good behaviours. Lastly, other issues related to children are drug abuse, common accidents, their prevention and first aid, handicapped person and physical education for good health. The rationale of Early Child Development (ECD) programme was to improve lives of children in Kitui district in totality.

According to survey done by the KIDP in the district, there were several problems related to water. These were undeveloped, inadequate supply of water especially during the dry season of July – October and water related diseases. The communities were walking for long distances in search of water for human and livestock consumption. Lastly, there was lack of water structures and extension services to enlighten the community in various water-related activities.

The CSD Programme targeted 730 water tanks to be built in schools within the districts, depending on school enrolment and catchments area. Generally, the chosen approach of implementation involving combination of various types of water points was sound from a supply point of view. In an environment with significant variability of rainfall, this mixture was to provide some safeguard against all water points being dry at the same time. The overall geographical coverage was also satisfactory, and the type of structures constructed within each division corresponds largely to what is considered most appropriate.

As compared to the types and number of structures anticipated in the project original objectives, the project has made a distinct change in priority. Much more emphasis has been put on school water tanks and earth dams than anticipated. This meant that the general level of implementation of other types of structures is significantly lower than in the original objectives. However, it should be noted that the targets in the objectives were very high, and probably too ambitious to fully comply with the participatory approach. The targets in original objectives compared to the corresponding targets in the Appraisal Report in terms of yearly-implemented water supply are 67 percent higher.

The construction of the roof catchment water tanks for schools continued during 1990 – 2000 period. Water tanks and pit latrines were built for primary schools. Various agencies have played a role in the programme such as UNICEF, the U.S. Peace Corps, and government departments. By the year 2000, 469 schools in 26 locations were supplied with an average of two water tanks and two pit latrines each, and the programme was to be extended to other public institutions.

The work was standardized in the way that all water tanks were identical, irrespective of the actual demand (number of pupils at the school). This is probably because it was felt by KIDP that it was more important to reach all schools in the District rather than to fulfill the demands of every school. 20-30 teams of constructors undertook the work on an independent contracting basis. A consultant originally trained the contractors during the early stage of the programme, GOK/UNICEF.

Social Mobilization

The major strategy in the implementation of water and sanitation programme was through community mobilization and education. Public meeting (Barazas) were organized to create awareness to the community, advice them, discuss issues and come up with suggestions as pertaining to water and sanitation. For the success and sustainability of the project, the community was to be involved at all levels namely: initiation, consultation, construction and implementation.

Between October 1990 and January 1991, the focus was mobilization for popular participation in twenty schools in every location of the respective divisions. Each school was to receive a unit (or more depending on catchment area) and each consisted of roof catchments system and two V.I.P latrines. Each roof catchments system was to include two tanks of 46m³ tanks each and guttering of 50m. To ensure commitment, the philosophy of cost sharing was prominently evident i.e. the community was expected to provide basic materials in the implementation of the project including sand, ballast, water, unskilled labour (10 people to assist the artisans daily) and feeding the artisans.

The KIDP was to provide all required purchases and materials necessary, skilled labour and bill of quantities (BOQ). Tank design and specification and provision of tractor, trailer and driver. Other undertaking of agency was training of implementation personnel and community.

The specific objectives of the school water tanks were to direct the communities' effort from drawing unsafe water, improve health, quality of life and reduce poverty in the district. To reduce the number of disease vector through improvement of environment by increasing the people's awareness of disease related to water and sanitation. Other objectives were to reduce the distances walked in search of water, encourage school enrolment and completion rates and improve the water drawing methods.

The office of the President, NGO, CSD, women groups, communities (Parents teachers association) and government departments did the monitoring and evaluation. Evaluation of the things done was continuously performed and according to KIDP Annual progress report 1995/96, the survey findings were as follows, the average number of tanks and latrines per school was two, there was no water rationing in most schools, although teachers couldn't establish the water required for school and many of the water tanks had leakage and other problems, and none of these facilities had been repaired. Maintenance was a priority issue and there was need to sensitize the beneficiaries of what is expected of them. Lastly the schools had no basic tool repair kits and the leftover materials couldn't be accounted for or traced at the end of financial year due to lack of proper records

This was a clear indication that school management committee had not been prepared for the future management and maintenance of these facilities thus should be done right at the inception of the project. The divisional programme coordinators were not involved and the water tank project seemed to operate indecently.

Plan of operations, July 1991, emphasized that for community participation, the community priority needs were to be used as the entry-point for social mobilization and other programme interventions. In the long run community participation methods aim at empowering people to be self-reliant and take responsibilities for their own development, i.e. to identify and prioritize their own problems and plan and implement sustainable solutions, including mobilizing internal and external resources.

1.2 Statement Of The Problem

The water tanks programme was well received by the community and KIDP considered this as one of the most successful of all projects done in the district. However, it is very difficult to compare the overall benefits of this kind of activity with the possible benefits of spending the resources on other water development activities.

As noted on the introduction and the background of the school water tanks, there is a general agreement that many school water tanks in recent years have performed well below the expectations. Most of the water tanks have either stalled in one stage or though completed, they do not meet the intended objectives, (GOK/UNICEF). The survey findings of KIDP indicated that many of the water tanks had leakage and other problems; none of these facilities has been repaired.

The school had no basic tools repair kits and left over materials couldn't be accounted for or traced at the end of financial year due to lack of proper records.

This study thus will seek to determine the extent of community participation adopted and how it influences project success in the donor-funded school water tanks project in Kitui District. Community participation is not simply a yes or no variable that is either present or absent, rather participation occurs in varying degrees, WASF [1987]. This implies that the nature and extent of community participation encouraged by project varies depending with the project being undertaken.

1.3 Research Objectives

The study objectives are to: -

- 1) Establish the extent of community participation in the schools water tanks projects in Kitui District.
- 2) Establish the relationship between community participation and project success.

1.4 Importance of the Study

This study will help to generate knowledge regarding the best level of participation of beneficiaries that can lead to project success and sustainability. It will also indicate the inter relationship between the involved participants, that is the donors and the beneficiaries and their complimentary roles.

This will form a basis of further research on utilization of project management techniques, with higher appreciation of the role of community participation on projects. The findings will be useful to agencies, which includes the government departments, donor institutions (UNICEF, DANIDA, etc), developing partners and Policy-making

Bodies in decision related development projects. It will be useful other agents of development of projects in developing countries.

These organizations can use these findings to determine the extent at which the beneficiaries are to participate in the projects to be undertaken. The findings will also assist to determine the best relationship between the donor communities and the beneficiaries, which can ensure sustainability of the projects. The findings will assist the project managers to make wise decisions on when and how it is best to involve the beneficiaries. Participation of beneficiaries is of crucial importance to project success. The project managers can thus use this project findings to determine the extent of beneficiaries, participation in project formulation, implementation and sustainability To the community, this will create awareness on whether they are involved or not, in decisions when projects are being undertaken and to what extent their participation is significant.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Community Participation Practices

The process of project development over a specific period of time may be seen as starting with planning and enduring with the implementation of the plan(s) so produced. Miller (1979) explains that, participation implies a greater scale in terms of group size it can be identified as a process. "To release, people from being the subject and make them agents of modernization and change Participation entails some degree of interaction with higher order priorities and outside (usually extra-local authorities)"

Miller summaries these characteristics or component, which are usually attributed to participation.

These are: -

- 1) Participation in decision making meant as dynamic process of discussion dissent and collective consent from the outset of a plan, programme, project or any other intervention foreseen.
- 2) Participation in the implementation of actions decided upon means to include action involvement in terms of for example; self-help labour, provision of local building materials and supervision of construction.
- 3) Participation in the sharing benefits to be delivered from the action and the cost to undertake the actions meant to be equitable (not necessarily on equal or exclusive) sharing of both benefits and burdens.

Mikkelsen implies that participation is so widely and loosely used, like many other catch words in the development jargon, that meaning of the concept has become a blurred one. Narayan Deepa (1995) in defining participation explains; "Definition of participation abound" All of them include some of the notion of contributing influencing, sharing or redistributing power of control, resources, benefits, knowledge and skills to be gained through beneficiary involvement in decision making.

"Participation" and "participatory" are words, which are used frequently in development. They have many meanings, various studies, project document and manual have interpreted participation in different ways. Mikkelsen has gathered several such opinions on participation from different sources.

- (a) Participation is considered as the voluntary contribution by people in projects but without taking their part in decision-making.
- (b) Participation means, the sensitization of people to increase their receptivity and ability to correspond in development projects
- (c) Participation is an active process meaning, that group or person in question takes initiative and asserts its autonomy to do so.
- (d) Participation is the fastening of a dialogue between the local people and the project preparation, implementation monitoring and evaluation staff in order to obtain information in the local context and on social impacts.
- (e) Participation is the voluntary involvement of people in self-determined change
- (f) Participation is involvement in people development of the on selves, their lives, and their environment.

1984, the international labour organization (ILO) published a survey of different participatory approaches found in rural development activities and offered a sampling of definition and statement used to describe the concept of participation, they are illustrative of a wide range of interpretations as above implied.

2.2 The Theoretical Justification Underlying the Concept of Popular Participation

People's participation in planning at the community level is one of those many catch phrases that have found their way into the vocabulary of development planning and increasingly dominating it in many development circles, the notion is talked about as though it were a phenomenon of universal applicability- one that doesn't have its own human and institutional constraints. For the purpose of this study, community participation is viewed as a functional administrative unit which may be a school community, single village, and as large as a division. The unit is functionally administrative to extent that within it are human beings (people) who are supposed to interact in an attempt to achieve the specific goals of that particular social unit. That goal is the formulation of a "Social development plan" Oyugi (1972)

The synthesis of the above discussion is that there are institutional constraints, which to a great extent impair the realization of this aspiration of popular community development. The notion of community participation in planning seems to be accepted as a genuine planning orientation by many academia and governments the world over. The principle of community democracy emphasis that the central government should not simply

impose its authority upon the people in a region but should give them a voice in the management of the government programmes that affect them.

The people in any given locality should be allowed to determine for themselves, on their own initiative, what are the things that they feel the need most. The argument very populist in its orientation is that the community knows what they want. The project by this 'school' is seen as something, which must be sparked by the flames of the peoples', felt needs. Anything imposed from outside no matter how technically sounds, is seen as failure bound, innovations are seen as passing great social cultural threat to the folk way of life. To affect them, the people to be affected by them must be involved in their identification (formulation). The people must be made to see the projects as 'ours' and the way to do so is to involve them in all stages of project life cycle. That is the general line of justification of community participation on projects.

Bergdal (1993) quoting from a UNICEF publication devoted exclusively to the topic of community participation, offers community participation justification points.

These are: -

- 1) Services can be offered at a lower cost.
- 2) More can be accomplished.
- 3) Participation leads to a sense of responsibility for the projects.
- 4) Participation guarantees that a felt hand is involved.
- 5) Participation ensures that things are done in the right way.

- 6) It frees the population from dependence on professional.
- 7) It uses indigenous knowledge and expertise.
- 8) It can be a catalyst for further development efforts.
- 9) Participation has an intrinsic value for participation.
- 10) Conscientisation can occur concerning the structural causes of poverty.

White (1978) developed a scale of degree of participation in the various phases of an environmental semi nation project, and the number of people who can do that will vary from situation to situation.

- (a) Consultation with community representative or leaders, to ensure that programme introduced by the outside agency is adapted to the need of the community.
- (b) Consultation with other members of the community or specifically the poor to ensure that the programme meets the requirements.
- (c) Self-help projects in which a specific group of beneficiaries contribute labour or perhaps also materials specifically in construction work, to reduce cost.
- (d) There is a large input from the external agency.
- (e) The training of one or a few community members to perform specialized tasks.
- (f) Mass action: collective work aimed directly to environmental for general benefits.
- (g) Collective commitment is change personal behavior and collective social pressure for realization of such changes.
- (h) Self-reliance is sense of autonomous generation, within the community, of ideas and improvements for the implementation of these improvements.

- (i) Self-reliance in the sense of using local materials and man power, collecting funds internally, in order to purchase goods and services from outside, including increasing local capacities with this kind of self-reliance as a goal.
- (j) Self-reliance in the sense of using only the efforts of community members themselves and not appealing to outsiders for help.

These points (measures) will be adapted by the study, to gauge the extent of community participation in school water tanks projects in Kitui district.

2.3 The Scope of Community Participation.

Samuel Paul (1987), distinguished the levels/scope of participation in project. The four levels cited coexist in a project, whereby the first two categories present ways to exercise influence, the other two other ways to exercise control These levels are: Information sharing, Consultation, Decision making, Initiation action.

Information sharing

This entire level project, designers and managers may share information with clients to facilitate collective or individual interaction. The information flow is the way, from agencies to communities. Although it reflects a low level of integrity information, sharing can positively affect project outcomes by enlarging clients understanding of specific issues. Information sharing may also be one way in the other direction, in the form of baseline or feasibility studies where information (but not necessarily opinion) is gathered from beneficiaries. Many such studies top local knowledge but also don't consult the local clients.

Consultations

When project designers and managers not only know their clients but also seek their opinion in key issues, a two-way flow of information develops. This two way flow presents some opportunities for clients to give feedback to project designers or managers who can use the information about preferences, desires, tastes to develop designs and politics that achieve a better fit between agency programmes and community demand. This may include methods that tap indigenous knowledge and organization forms such as socio-economic survey beneficiary assessments and willingness to pay services.

Decision Making

Information sharing and consultation generally don't increase local capacity or empower local people and institutions, although they can lead to programmes that a more effective client involvement in decision making, however, either exclusively or jointly where the external agency is a much more intense level of participation, which offer promotes capacity building.

- 1) Decision-making may be about
- 2) Policy objectives
- 3) Project design
- 4) Implementation
- 5) Maintenance and
- 6) Different factors may be involved at different stages of the project

Thus the decision to participate in a project may be made by a community and the choice of technology may be made jointly after the cost benefits analysis of the various

technological options have been explained by the agency and understood by the community.

Initiation action

Initiating on action with parameters defined by agencies presents a high level of participation. Self-initiated actions are a clear sign of empowerment. Once clients are empowered they are more likely to be protective to take initiative and to display confidence for understanding other actions to solve problems beyond these defined by the project. This level of participation is qualitatively different from that achieved when clients merely carry out assigned tasks. Institutional options for rural water supply depend on whether the water is treated as a public, private or common property good and on the resultant degree of excludability.

2.4 Types / Categories of Participatory Approaches.

Mikkelsen (1995) gives a narration on the subject of participation to the effect that two major alternatives uses of participation center around participation as an end in itself or as a means of development logically the two interpretations are not placed at either end of a continuous. They represent “transitional participation and instrumental participation” and may appear in different combinations in a gone project. Participation as an end, participation entails empowerments that is, everybody’s right to have a say in decision concerning their own lives, thus, interpreted participation is an instrument in the promotion of ideological or innovative development goals such as social, justice, equity and democracy.

Alternatively, participation is interpreted, as a means of efficiency in project management that is participation is a tool to implement development policies. It implies a management strategy through which the state attempts to mobilize local resources. In reality, the two rationales for participation are often present at the same time. The conceptual diversity indicates that “participation” may amount to little more than a catchword devoid of real content. Genuine participation initiated and managed by people themselves is a goal in the democratic process. However, few societies rely on voluntary approaches to activate people for major development activities concession and positive motivation are very different approaches, yet in literature both concepts are in literature both concepts are used to designate participatory methods.

Category 1

Passive participation, training and information between project staff people at village and visits. Different technical packages are advertised for the people to adopt: “we know better than you, what is good for you” approach. This is one-way teacher- student communication between staff and locals.

Category 2

Active participation sessions: - Training and Visits. This is a dialogue and two-way communication, which gives the local, people an opportunity to interact with extension officers and educators.

Category 3

Participation by subscription: - contract type, which task paid approach “if they (people) do this, the project will do that”. The local people as individuals or small groups are

given the choice to subscribe to a chain of events with the responsibility for each subsequent action resting alternatively with the local people or the project. The model allows a switch from classic project to local committed is responsible for the organization and execution of the work. An advantage modification can be made as experience grows to better each of the desired objectives.

Category 4

Participation on local requests:- Demand approach Project Review Appraisal (PRA) and action research approach. The project activities focuses more on responding to needs expressed by the local people rather than offering them solutions conceived by outsiders. The activities are not typical project. There are no timetables for physical interventions, no specific budgets tied to fixed period. No project implementation.

CHAPTER THREE

3.0 Research Methodology

This chapter presents the research design, that was used in order to meet the objectives of the study as set out in chapter one including the design in the population sample and sampling design, data collection instruments and data analysis technique.

3.1 Population

The study was conducted in 469 schools in Kitui district, where most of the water tanks projects are evenly distributed within administrative divisions of the district. This entailed a survey. A survey was chosen in view of leading to adequate data collection from a sample of the water tanks. Data was collected for the period of 1990 – 2000, for this is the time when most of the projects were implemented and thus they have been in use for a long time

In conducting the survey, no assumptions were made relating to the state of the water tanks projects nor data available in the offices of KIDP, district documentation and information office, or government departments.

3.2 Sample and Sampling Design.

The sample used was purposive. This was based on factors like geographical distances, accessibility of schools, availability of members of school management committee, and timing. Where the researcher didn't find any member of school Committee, he proceeded to next school. From a set of 469 schools as documented at the District Education offices

in Kitui District, 100 questionnaires were self administered to 100 school depending on the factors already stated. Hence, it was possible to ascertain whether there were post implementation sustainability and whether the original objectives of the water tanks have been attained.

3.3 Data Collection Techniques.

The study used primary data, collected using a questionnaire. The questionnaires were self-administered but the researcher was available to clarify any unclear questions. Drop-and-pick later method was used in distribution of the questionnaires. The respondents were members of school management committees, and were required to tick from a scale given, the most appropriate response to respective questions.

3.4 Data Analysis

The data analysis was done using the SPSS, MS Windows Package. The data analysis was done in two parts, which consists of descriptive statistics, (Frequency distribution) and Inferential statistics (Correlation).

For the purpose of this study, decision variables are grouped into three levels of participation in projects.

- (i) Initial level, which includes deciding community representation and stating the objectives of the water tanks projects.
- (ii) Consultation level, which includes designing the water tanks specifications, locality of tanks technical facilities, scheduling the water tanks construction in

times of start and completion time, and choosing water treatment works/
mechanism.

- (ii) Implementation/construction level, which includes choosing the mode of labour contribution deciding the kind of labour to be used and contributing materials for construction.

CHAPTER 4

4.0 Data Analysis & Findings

4.1 Frequency Distribution

Frequency distribution table was obtained from all the variables of the data. The frequencies and percentages of the school water tank projects showing the degree of beneficiaries, participation as summarized in table 1.

4.1.1 Participation Process

4.1.1.1 Initiation Stages

Community Representation

On deciding the community representation in the water tanks project 47% of the respondents indicated above fairly large extent rating while, 34% of them indicated below fairly low extent rating. The mean and median of this variable was 2.7 and 3 respectively. This implies that the community actively participated in deciding whom to represent in the project.

Stating the Objectives of the Water Tanks

In generation of ideas the variables included stating the objectives of the water tanks. The objectives of the water tanks were derived from the beneficiaries water related problems, which were highlighted by a survey done by DANIDA on child survival Development in 1988.

On stating the objectives of the water tanks, 25% of the responses indicated the extent of participation was of a large extent, while 16% indicated to a low extent rating. 27% of the beneficiaries felt the extent of their participation was fairly. This was probably due to the fact that although, the community were aware of water related problems, it was possible for them to perceive the related solutions in relation to water tanks, which were to be built, within the school compound rather than in their villages. Generally, in the initiation stage the beneficiaries actively participation in generation of ideas. This concurs with GOK/UNICEF Review report of 1991.

4.1.1.2 Consultation

Water Tanks Specification

On variable of designing water tanks specifications, out of 100 respondents only 9% indicated to a large extent rating, while 22% indicated to a low extent rating. This may be, explained by the fact that, the implementing agency was to provide the technical details of the water tanks including tanks specifications and this made the beneficiaries to perceive their participation in the water tanks specification to be of low extent.

Table1. DESCRIPTIVE GROUP STATISTICS

Variable	Extent of participation								
	<i>Degree and values</i>								
	Percentage (%)					Mean	Median	SD	var
	1	2	3	4	5				
2.1 Community Representation	17	30	19	14	20	2.7	3	0.78	0.51
2.2 Stating Objectives	25	23	27	9	16	3.0	3	0.49	0.24
2.3 Locality	42	25	22	6	5	2.7	3	0.89	0.79
2.4 Designing Water Tanks	9	13	36	17	22	3.1	3	0.98	0.96
2.5 Scheduling	9	22	30	19	20	2.5	3	0.65	0.43
2.6 Water Treatment	13	24	16	19	28	2.8	3	0.71	0.50
2.7 Technical facilities	8	30	28	11	23	3.2	3	0.74	0.55
2.8 Mode of Labour	31	17	34	6	11	3.2	3	0.02	0.0004
2.9 Kind of Labour	13	23	27	13	25	3.2	3	0.39	0.15
3.0 Material Contribution	13	23	20	16	27	2.9	3	0.29	0.084

Source: Primary Data

Technical Facilities

The respondents perceived their extent of participation on deciding the technical facilities like gutters, pipes number of tanks to be built to be of lower extent. The responses indicated that, their participation was 8% to the large extent and 23% to the lower extent. 30% of the responses were rated to a fairly large extent. The mean was 3.2 and median was 3. The reason is the same as that of water tanks specifications.

Starting and Completion Time

The respondents perception on the starting and completion time of the water tanks, was highest on fairly extent on rating, with 36%. Out of 100 responses 9% indicated to a large extent while 20% indicated to a low extent. The mean rating was 2.5 with a median of 3. The standard deviation and variance were 0.65 and 0.43 respectively. The low extent of the beneficiaries' participation was due to the facts that, the implementing agency (DANIDA) was the one dictating the schedule. This was in terms of provision of materials and purchases, (not locally available) skilled labour, Bill of quantities, Tank design and specifications, tractor, trailer and driver and training of implementation personnel and beneficiaries.

Locality of the Water Tanks

On choosing the site of the water tanks, 42% of the respondents indicated their participation was to a large extent, while 5% indicated to a low extent. The mean was 2.7 and median was 3. The cases diminish where the beneficiaries were involved from a large extent to a low extent. The explanation would be that, the beneficiaries were aware of the

school building plan and the number of classrooms. The beneficiaries' participation on choosing the treatment works was to low extent only 13% of them indicated their participation was to a large extent and 28% to a low extent. The majority indicated that their participation was fair, with mean of 2.8 and median of 3.

Treatment Works

The treatment works was placed on the hands of school management to liase with water and public health departments. 13% of the respondents rated their participation to large extent and 28% to a lower extent. The low extent of participation of the beneficiaries was may be to the facts, that the rainwater was main source and hence the level of water contamination was low. The major role of the beneficiaries was to clean the water tanks and gutters before rain season.

4.1.1.3 Implementation

Resources evaluation variable comprises of mode of labour contribution, kind of labour to be used and contribution of materials for construction.

Mode of Labour

The mode of labour was actual local or hired. The beneficiaries' response was that 31% indicated to the large extent in participation while 11% indicated to a low extent. Here the option of the beneficiaries was limited to only the available labour within their locality. Where it was not available, then it was hired. But, all the same the participation was to a large extent.

On deciding the kind of labour to be used, which was either skilled or unskilled 27% of the responses indicated to a fairly extent, and 13% indicated to a large extent while 25% indicated to a lower extent.

This was may to the fact that, the implementing agency, knew what was to be sourced locally and what to be contracted outside. Further, independent contractors were identified. On initial stages, hence the low response to low extent of participation

Kind of Labour

When asked to what extent were the beneficiaries participation in deciding the kind of labour to be used, only 13% indicated to a large extent, while 25% indicated to a low extent, 46% of the respondents perceived their participation to be at a fairly large extent. This may be to the reason that the implementing agency was to provide the technical labour force and the local to provide unskilled labour.

Contribution of Materials

On contribution of materials to the project out of 100 responses, 56% of them indicated that the participation was above fairly to large extent, while 13% responded to a large extent and 27% to a low extent. The mean was 2.9 and median 3 respectively. This could have been due to strategy of cost sharing, where the beneficiaries were to provide local basic materials like sand, ballast, water and hard cores.

The construction of the school water tanks was done by DANIDA through KIDP as a local agency. The work was standardized in the way that all the water tanks were identical irrespective of the actual demand (number of pupils in the school). The idea was to reach all schools in the district rather than to fulfill the demand of every school. Further gutters and pipes, were to be provided by the implementing agent, and hence the extent of beneficiary's participation was purely to be made merely aware.

4.1.2 Project Success and Sustainability

The variables of the project success and sustainability were derived from the stated project objectives in the initiation stages. As earlier discussed in the participation process the project objectives were based on problems raised by the community relating to water borne diseases and water scarcity Table 2, shows the degree of success of the water tanks project in relation to the following variables.

Water Supply

Out of 100 respondents, when asked to what extent did the project provide adequate water supply to the intended school. 60% of the response indicated to a fairly extent to a large extent. 28% indicated to a large extent, while only 19% indicated to a lower extend. The lower extent, may be is due to non- provision of water tanks problem like leakage, non-existence of gutters.

Quality Water Supply

Adequate water supply was not throughout the year. The quality of water supply was highest on rain period October to February. Out of 100 responses, 56% of responses indicated fair extent to a large extent with 27% indicating to a lower extent.

Treated Water

Provision of treated water was to a low extent, with 70% of response indicating fair low to low extent. Only 9% responded to a large extent and 20% to low extent. The water treat works/ mechanism was not give a priority by the implementing agency and the beneficiaries, and for this reasons, it may help to understand the low indication of low extent in provision of treated water. Generally although the responses indicated high level of success in terms of supply of water, It should be noted that this is not through out the year. There are other sources of water supply to school and beneficiaries didn't make this distinct difference. Most of the water tanks are dry during the dry months of June to October.

Water tank completion within the stated budget.

Completion of the water tanks within the budget rated to fair successful to large extent successful (66%). Where the water tanks were not completed as budgeted, this was may be due to delay on provision of local materials, by the local communities among others.

Table 2. DESCRIPTIVE GROUP STATISTICS

Variable	Degree of success and sustainability.									
	Degree and values									
	Percentage (%)									
	1	2	3	4	5	Mean	Median	SD	var	
3.1 water supply	28	17	25	11	19	3.3	4	0.83	0.69	
3.2 quality water supply	13	19	23	19	27	3.9	3	0.83	0.69	
3.3 Treated water supply	9	6	13	25	45	3.1	4	0.29	0.084	
3.4 water tank completion	17	25	25	13	20	3.1	3	0.36	0.13	
3.5 water delivery	19	13	33	11	25	3.3	4	0.71	0.50	
3.6 completion rate	14	13	39	17	17	3.2	3	0.01	0.0001	
3.7 technical specification	19	11	28	23	19	3.0	3	0.09	0.0081	
3.8 Operation & Maintenance	20	14	30	16	20	3.2	4	0.91	0.83	
3.9 school enrolment	13	9	44	20	14	3.2	3	0.94	0.88	
4.0 water borne diseases	17	14	30	16	23	2.9	3	0.93	0.84	
	YES			NO						
4.1 Training	44			56				NO	0.91	0.82
4.2 Repair	36			64				NO	0.54	0.29
4.3 Water rationing	42			58				NO	0.53	0.28

Source: Primary Data.

Efficient water delivery

Efficiency in water delivery comprises of the absence of water tank leakage, breakdown of taps, the respondents indicated that, 65% of the water tanks were successful in efficiency in water delivery.

Completion of water Tanks

The rate of completion of the water tanks was in terms of scheduling starting time and completion time, 39% of the responses indicated not too low neither too high rating. 14% felt that, in terms of completion rate it was at to the large extent rating. While 17% indicated to a low extent

Technical Specification

This comprises of the capacity of the tank, roofing of the tank and guttering. 58% of the water tanks were perceived successful by the beneficiaries. With only 19% indicating non-successful. This was attributed to tank leakages, taps, breakage, and gutter disjointness. The leakages of the tanks was not due to technical reasons, but poor workmanship like wrong cement - sand ratio's, watering on the tank while under construction and lack of maintenance.

Operation and Maintenance.

Once the implementing agent completed the construction of the tanks, the operation and maintenance were left to the school committee. 20% of the water tanks were perceived as unsuccessful and 20% as successful. Operation and maintenance where to be handled by

each school and where the school management committee didn't put in place measures to sustain the projects like simple replacement of taps, repairs, leakage repairs and re-silting. On all the school these was no body responsible for repairs.

Reduction of water borne diseases

The initial objectives of child survival and development programme were to enhance children education and completion rates, through reduction of water borne diseases. 61% of the water tanks are successful in meeting these objectives while 23% are viewed non-successful.

Training.

When the beneficiaries were asked to state whether there was any training on maintenance of the water tank 56% indicated no, and 44% indicated Yes. This may be to the fact that all (save for a few) of the school management Committee members are new to them school and were not parents when the tanks were being built. The 44% responses may be of these members who were committee members or parents at that period.

Provision of repair toolkits.

64% of the water tanks studied where provided with repair tool kits while 36% indicated none. Since the work of the water tanks way standardized, those indicating no may have misplaced the toolkit or aren't aware of its existence.

Water rationing

The issue of water rationing is not properly addressed. 58% of the responses indicated No, while 42% indicated Yes. May be, those who were trained in the initiation of the project have left the school and there has been no further training of water ratios.

4.2 Descriptive Statistics

4.2.1 Relationship Between the Extent Participation and Project Success

The pearson's correlation statistics was used to test the relationship between the extent of participation and success. Table 3 shows relationship between the extent of participation and success of the projects.

The correlation coefficient for this relationship was found to be 0.082. this infers a positive relationship between beneficiaries participation and success of the school water tanks. This relationship was found to be significant with a level of 0.025. Therefore it can be concluded that, there is a relationship between beneficiaries participation in the project and success of a project. Other variables stated relation to the project success was as follows.

Table 3. Correlation between Degree of participation and Degree of success.

	Initiation	Consultation	Construction	Post Implementation
Initiation				
Corr. Coeff.				
Sig. (2 Tailed)	1.000	0.825	0.915	0.780
N	0.025	0.025	0.025	0.025
	100	100	100	100
Consultation				
Corr.Coeff.	0.825	1.000	0.805	0.785
Sig. (2 Tailed)	0.025	0.025	0.025	0.025
N	100	100	100	100
Construction				
Corr.Coeff.	0.915	0.805	1.000	0.800
Sig. (2 Tailed)	0.025	0.025	0.025	0.025
N	100	100	100	100
Post Implementation				
Corr.Coeff.	0.780	0.785	0.800	1.000
Sig. (2 Tailed)	0.025	0.025	0.025	0.025
N	100	100	100	100

**Pearson's correlation coefficient

(Coefficient / (D.F.) / 2-tailed Significance) ' ' is printed if a coefficient cannot be computed.

Reliability

(1) RELIABILITY
/VARIABLES= (1 2 3 4 5)
(2) R E L I A B I L I T Y A N A L Y S I S - S C A L E
E (A L L)

Reliability Coefficients

N of Cases = 100 N of Items = 5

Alpha = 0.924

(3) RELIABILITY
/VARIABLES= (1 2).
/SCALE (Initiation Consultation)=q1 q2
/SCALE (Construction Post Implementation)=q3 q4.
/SCALE (Initiation Post Implementation)=q5 q6
/SCALE (Consultation Construction)=q7 q8.

R E L I A B I L I T Y A N A L Y S I S - S C A L E
(Q 1 _ Q 2)

Reliability Coefficients

N of Cases = 100 N of Items = 2

Alpha = 0.8237

(3) R E L I A B I L I T Y A N A L Y S I S - S C A L E
(Q 3 _ Q 4)

Reliability Coefficients

N of Cases =100 N of Items =2

Alpha =0.9190

(4) R E L I A B I L I T Y A N A L Y S I S - S C A L E
(Q 5 _ Q 6)

Reliability Coefficients

N of Cases = 100 N of Items = 2

Alpha = 0.9037

(3) R E L I A B I L I T Y A N A L Y S I S - S C A L E
(Q 7 _ Q 8)

Reliability Coefficients

N of Cases =100

N of Items =2

Alpha =0.8900

Initiation Stage

This entails stating the water tanks objectives. The relationship between initiation stage and success of the water tanks is strong positive relation with a strong value of 1.00. This is because the beneficiaries knew their water related problems and hence their extent of participation was to large extent, translating to project success.

Consultation Stage

At consultation stage a positive relationship of 82.5% was established between the extent of participation and project success, this is at an α at 0.05 using a two tail test. At this stage, decisions related to scheduling of the project and locality of the water tanks were made. Thus, it implies that there was involvement of the beneficiaries in the whole project, resulting to project success.

Construction Stage

At construction stage, a strong positive relationship of 91.5% was established. This stage consist of factors related to labour and material contribution. The community was involved in provision of local materials (which are readily available), and unskilled labour. Those who did not want to provide materials, they worked on general areas, which did not require specific skills. Thus implying a high relationship between construction and project success.

Post Implementation Stage

The post implementation stage had a strong relationship of 78% to the project success. It is a significant relationship, and is vital for long term sustainability of the project in terms of operation and maintenance. The role played by the community is very important for the success of the project.

CHAPTER 5

5.0 Summary and conclusions of the Study

The study sought to achieve two objectives as stated in the introduction chapter. Literature available has indicated that community participation generally improves the project success. In chapter four, the correlation results have showed clearly that there is a relationship between community participation and project success.

Different degrees of participation were found to exist depending on the variables studied. The mean for participation in all the variables ranged from 2.7 to 3.2, and the medium was rated 3, implying majority of the community interviewed perceived their extent of participation to be moderately above fair. The few responses, which indicated to lower extent rate of participation, may be those who were not parents at the time of implementation and hence their participation is justified minimal.

The success of the water tank project is shown by different variables. Their mean rating was from 2.9 to 3.9, this is a strong degree of success as perceived by the beneficiaries. Their respective media was 3. This implies that, the majority of the community rated the water tanks projects as success. On specific variables, the majority of responses (60%) perceived the project lowly successful in provision of treated water or 45% of the community felt that this objective was met to a low extent. On the reality, this is true, for the water tanks relied on rain seasons for the availability of water, when the water is used up, they wait for the next season, and hence their low rating in supply of treated water.

On school pupils enrolment and completion rates variable, 68% of the responses indicated above fair extent as far as this objective was met.

The other objective was to determine the relationship between degree of participation and water tank success. There exists a strong relationship between participation and project success. Together with project success, where participants rated their participation high, the extent of success was also high. Other factors studied were training on maintenance, availability of repair toolkits and water rationing were more than half of the responses indicated that, training and maintenance aspects were not adequately taken care of. Therefore it implies that issues of operations were not taken seriously as should be for long-term sustainability.

Where several school water tanks were not operational as perceived by the community, the explanation might be, that after commissioning of the projects, the daily operations and maintenance was left to the school management committees. Hence, the failure was due to inadequate training on supervision and maintenance. It should be noted that, although there was some training on operational maintenance on initial stages of the project this did not continue over some time. Generally there seemed to be a need for a government department to manage the water tanks project in collaboration with the communities.

5.1 Recommendations

Findings of this study have shown that participation of community enhances the level of success of community projects. Thus, their total involvement on aspects of initiation, consultation, construction and post-implementation are vital to the project success. However, it is noted that the post-implementation aspects are not given a lot of attention. The initiation and completion of community project is of significant important, however, when post-implementation issues are not addressed, then the project will cease to delivery the expected services/products. Where the project was found to be performing poorly the cause of mainly due to operation and maintenance aspects. The majority of the community was not ready to undertake any repair, due to ignorance rather than funds. Few teachers were aware of water rationing meaning much of water went to wastage for lack of supervision of the pupils. Most of the water gutters are not maintained; hence the schools do not have adequate water when it rains.

On conclusion, operation and maintenance failure contributed merely to lack of adequate water or worse the abandonment of the project. Some teachers/parents should have been trained to undertake manor repairs and maintenance. Teachers and pupils should also be sensitized to rationing of the water. School management committee executed the school water tank project management. It is observed that were there is good leadership then the water tanks are operational and the reverse holds true.

The type/extent of participation by on its own, will not guarantee success of projects, rather than, where the community itself participates actively and owns it as they own

rather majority of community project are prone to political, social-cultural and economic dynamics of a given community.

5.2 Limitation of the Study

The study was conducted through the school management committee or Teachers Parents Association. The assumption was that, there were representative of the whole school community. However, some members were not parents when the project started and implemented hence could not give the factual details. Majority of the teachers were either employed or transferred from other schools/division in recent years. In some areas Majority of the school committee members were illiterate.

The researcher felt that, members in the field either did not give the facts of the water tanks or were not conversant with the questions posed to them. Others seemed not to care much about the responses they indicated. Also, some members seemed to withdraw some facts, for they did not understand the orientation and the purpose of the study.

Time and financial resources were major constrains that dictated the nature of the sample used. With more finances and time, a survey of all the water tanks could have been appropriate. Other factors included geographical topology, accessibility of the schools and availability of the school committee members.

5.3 Suggestion for Further Research

This was a replicative study on community participation in community projects which was done by Njuguna on self help water project in Kiambu. Njuguna findings were that community participation contribute to a large extent to the success of projects however where projects were found to be performing poorly, the cause was due to factors related to project sustainability, supervision, operation and maintenance. This was also true to the study of school water tanks projects in Kitui district. Therefore, more studies need to be done on pertinent aspects of community participation in projects. Such factors may be post project implementation, project sustainability, supervision, operation, maintenance and capacity building.

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Appendix 2

QUESTIONNAIRE

You are kindly requested to fill in the following questionnaire as correctly as possible

1: Introduction

Name of the school -----

2. Level of participation

Please indicate the level of community participation, in reference to involvement in the following activities of the school water tank project. (use the key for part 2 and part 3)

- Key
1. To a large extent
 2. To a fairly large extent
 3. Neither large nor low
 4. To a fairly low extent
 5. To a low extent

To what extent was community involved

- | | | |
|-----|---|---------------------|
| 2.1 | Stating the objective of the water tanks | (1) (2) (3) (4) (5) |
| 2.2 | Deciding the community representation in
the water tank project | (1) (2) (3) (4) (5) |
| 2.3 | Choosing the site of the water tanks | (1) (2) (3) (4) (5) |
| 2.4 | Designing the water tanks specifications | (1) (2) (3) (4) (5) |
| 2.5 | Scheduling the water tanks constructions in times
of start and completion time | (1) (2) (3) (4) (5) |
| 2.6 | Deciding on the technical facilities e.g gutters,
pipes, tanks to be built | (1) (2) (3) (4) (5) |
| 2.7 | Choosing the water treatment works /mechanism | (1) (2) (3) (4) (5) |
| 2.8 | Choosing the mode of labour for contribution
e.g hired/local | (1) (2) (3) (4) (5) |
| 2.9 | Deciding the kind of labour to be used | (1) (2) (3) (4) (5) |

- 3.0 In contributing material for construction (1) (2) (3) (4) (5)
3. Degree of success/sustainability

To what degree/extent were your original objectives as a school community met (Tick appropriately using Key in part 2) In reference to the following areas.

- 3.1 Supply of water (1) (2) (3) (4) (5)
- 3.2 Supply of quality water (1) (2) (3) (4) (5)
- 3.3 Supply of treated water (1) (2) (3) (4) (5)
- 3.4 Completion of the water tanks within stated budget (1) (2) (3) (4) (5)
- 3.5 Efficiency on water delivery (1) (2) (3) (4) (5)
- 3.6 Rate of completion of the water tanks (1) (2) (3) (4) (5)
- 3.7 Construction of water tanks within the technical specifications (1) (2) (3) (4) (5)
- 3.8 Operation and maintenance of the water tanks after construction (1) (2) (3) (4) (5)
- 3.9 School enrolment and completion rate (1) (2) (3) (4) (5)
- 4.0 Reduction of water borne diseases (1) (2) (3) (4) (5)
- 4.1 Were any community member trained on maintenance? Yes/No
- 4.2 Were there any repair toolkits provided? Yes/No
- 4.3 Were there any training conducted on water rationing? Yes/No

Thank you for your cooperation and your time.

APPENDIX 3

SCHOOLS WITH WATER TANKS

1.KASAALA	45.MANG'ELU	89.KIVIKI
2.KALULUINI	46.KALIMENZA	90.KITAKANI
3.KATHUNGI	47.ATHI	91.KUNIKILA
4.K/KIMWELI	48.NZALANI	92.UKUNI
5.KATHUNGU	49.KASUNGUNI	93.KASIVUNI
6.ITHANGATHI	50.KAKUMUTI	94.KUTHA
7.NAMOLE	51.MUKELENZUNI	95.KATHIVO
8.NZUKINI	52.KAKUUNI	96.KIKANGA
9.KANGULI	53.KANYANGI	97.MUTYAUU
10.KIVUTI	54.MALUMA	98.MALATANI
11.KYENG'E	55.KILAWA	99.K/MWAMBI
12.MITHONGO	56.MWAANI	100.TIVA
13.KISYOKA	57.MIKUYUNI	101.MESILYA
14.KAVETA	58.KATAA	102.MASIUALINI
15.MUKUNDA	59.UTOO	103.MANYENYONI
16.KYAWANGU	60.ULONZO	104.UWA
17.IVOVOA	61.MANDONGOI	105.KITOONI
18.IIANI	62.KYANDULA	106.ISAA
19.ZOMBE	63.WII	107.YANZATI
20.MBUSYANI	64.NGAAKAYAKWA	108.ITHIMANI
21.NGAWUNI	65.NTHONGONI	109.KIVANI
22.SOOMA	66.NDILI	110.KANZIKO
23.CENTRAL	67.MANZI ITUMO	111.KASUE
24.MUUSINI	68.WINGOLOLI	112.MUAMBA
25.KATHITHU	69.MWALA	113.KALINDITI
26.NZINIA	70.MOI	114.KYAMUTIMBA
27.NDIUNI	71.IMUATIME	115.MUVUKO
28.MUSLIM	72.MISYINI	116.KYANGOTO
29.KANGOSE	73.NZEVE	117.KISEVENI
30.K/SONGE	74.UAI	118.KYATUNE
31.KALUASI	75.NZUNGUNI	119.KATHIANI
32.MUTANDA	76.KAMWIU	120.II LENGI
33.MASIMBA	77.NGUNINI	121.K/MUMO
34.IKANGA	78.MUTHUNGUE	122.KYAMBITI
35.KIVULI	79.MASEKI	123.KYONDONI
36.KISAYANI	80.NDUNGUNI	124.KANGUNGI
37.KALIMA	81.KATIKONI	125.KIUKUNI
38.KYAITHANI	82.K/IKOLANIA	126.KILIMU
39.MIAMBANI	83.UTWIINI	127.UNYAA
40.KAVUTA	84.KILIKU	128.NZAMBIA
41.MWANGALA	85.SYUASINI	129.MUTONYAITHO
42.K/NYINGI	86.KANG'AU	130.KISAUNI
43.MAKELE	87.MWANGYA	131.NTHILANI
44.KIVIU	88.VOTE	132.KALING'A

133.KOMBA	179.KYAANGO	225.KAATENA
134.NDATANI	180.MANDU	226.KENZE
135.SYOMAKANDA	181.KANGALA	227.KALIAKAKYA
136.MBUINDUNE	182.NGWATE	228.UNG'AATU
137KISOU	183.MANGINA	229.YUUMBU
138KATHUMA	184.KISAYANI	230.IMALE
139.K/MUSYIMI	185.MIWONGONI	231.VUTU
140.KATYETHOKA	186.K/MUKASA	232.K/UKUNGU
141KIATINE	187.MUSENGO	233.KAVOKO
142KONZA	188.MATUA	234.KASYALA
143.MUTONGUNI	189NGIINI	235.KILUMA
144.KAMULU	190.KYANDUI	236.KANZAUWU
145.KITOO	191.KANYONGONYO	237.ENZOU
146.KYAMBUSYA	192.KANG'ALU	238.MWITIKA
147.MUKUANIMA	193KYENI	239.KALIVINI
148.YALATANI	194KITUNDUMO	240.ILAANI
149.NGOMG'U	195.ITIHIANI	241.MUTENDEA
150.KANGII	196.ITUMBA	242.KYAANI
151.KAKUMI	197.KIONGWE	243.MOSA
152.KITHUMULA	198.YONGO	244.NGAAKANI
153.IKUTHI	199'TWAMBUI	245.KASOYANI
154.KAVONGE	200.MUTOKO	246.NDALANI
155.MATINYANID.F.B	201ITHOOKWE	247.KAVOO
156.KANZUA	202.IKUYUNI	248.KATULU
157.K/KAME	203KINAKONI	249.MALALANI
158.NDILILI	204.MALUNGU	250.KIANGE
159.WAIVUMBU	205.KAMANDIO	251.KASYELIA
160MUTINI	206.FANGANYIKA	252.ITULANI
161.KAVASYA	207.MBEETWANI	253.KAMALE
162.IMIW'A	208KITHAMANGII	254.NGOMONI
163.KISEKINI	209.MUTHALE	255.KANYAA
164.ISAANGWA	210.KATUTU	256.YOLOMUNI
165.MUVITHA	211.KATUMBI	257.KISASI
166.IVUKU	212.KALISA	258.MATULANI
167.KALALA	213.TULIA	259.KYAINYA
168.NYUANI	214.SYOMUNYU	260.MAVAI
169.NDULUNI	215.SYOKITHUMBI	261.KALULUINI
170.MIKUYUNI	216.KATHEKA	262.NDALANI
171.KALALANI	217.MITHIHKWANI	263.MASOKA
172.KAVUMBI	218.NGAMYONE	264KABATI
173MATIKONI	219.KAUWI	265.KITAMWIKI
174.MIKUYUMIKYA	220.KITUTI	266.KIAMANI
175.K/NDONGA	221.KITUNDUNI	267KALINDILO
176.WINDUNDU	222.MULUNDI	268.KIKUU
177.KITUNDA	223.KAMANYI	269NGUUNI
178.NGESU	224.NGENGEKANI	270. SYOMBUKU

271.MWANIANGA	318.K/KUNUVWA	364KITUMBI
272.KIBWEA	319.KAKINDA	365.KATHADNE
273.KYUASINI	320.ITHUMULA	366MAKUTANO
274.KILIVI	321.NDUUNI	367.MBITINI
275.MUKAMEN	322.KYUNDUANI	368.K/KYEE
276KWAKILUI	323.SEMEA	369.MATINYANI AIC
277.MATHULINI	324.KAUMU	370.KYAMBIWA
278.NZANGATHI	325.K/MULUNGU	371.MULANGO
279.KAVALO	326.NDUUKYE	372. KAKAME
280.KATHOME	327.EKANI	373.KAVISI
281.KILEVI	328.KYAMUTHIWA	374.K/MBOO
282VOO	329.KIATI	375.NDIINI
283NGUNGI	330.INYUU	376. KILIKO
284.KIKUMI	331.YAKALIA	377.UVAANI
285.KAVAANI	332.K/VONZA	378.K/KUTU
287.MOGUNI	333.ITUKI	379.SYOMBANDU
288.WINDUMA	334.MUTHA	380.MBAKONI
289.MUTUNE BOYS	335.KAMAEMBE	381. KALAWA
290.KITUNGA	336.KALUNGU	382. K/MUTEI
291.KAVINGO	337.KILINYAA	383. MAKAYAA
292.NDUUNDUNE	338.NGOVU	384. MWINZENGI
293.MUAMBANI	339.MUANI	385. MUTITO
294.KYANGENI	340.SEEKEA	386. KYULULU
295.KIVUUNI	341.KQAMUTI	387. MUKUKU
296.KAKIEANI	342.KAUMBI	388. KYOANI
297.KALIMBEVU	343.KATHUA	389. USANG'A
298.WANZUA	344.KIVYUNI	390. KAUMA
299.KATHIANI	345.KAWALA	391. MUTHUE
300.NDUNGA	346.YOONYE	392. USENYO
301.MASAANI	347.EMIVIA	393. MAAMANI
302.NDUUMONI	348.KANGWENI	394. KAKWALA
303.KALIKUVU	349.NGILUNI	395. MATU
304.YATA	350.NDETANI	396. KATILINI
305.MWIWE	351.KASNG'U	397. NGENGI
306ISOVYA	352.KAVISUNI	398. IVUKUVUKU
307KANDAE	353KYUKUNI	399. NGANGANI
308.SYUNGUNI	354.KYALILINI	400. KAVALULA
309.K/MAINGI	355.MUTULU	401. NZAINI
310.KATULANI	356.NZOOKONI	402. NGUMBWA
311.KAVETE	357.THUA	403. NG'OLENI
312KYOSINI	358.MUSUKINI	404. UTAWALA
313.KITHUMULA	359.KITUVWI	405. NGELANI
314.KIIMANI	360KANGNDI	406. MUSIKIO
315.MANG'ETHENI	361.KIVILI	407. IKYATINE
316.MAKOLONGO	362.KIILUMYA	408. KENGO
317.KOI	363.MULUTI	409. KAWEA

410.IKISAYA
411.WINGOO
412.MWANYANI
413.KWEMENGI
414.USIANI
415.MAVINDINI
416.KILUNGU
417.YAATHI
418.KALATINE
419MULUTU
420.K/NGINDU
421.KALAMBANI
422.THOME
423.KATHEMBONI
424.KAIVISI
425KIMUU
426.SYAMATANI
427.KIANGU
428.KIANGA
429TUVILA
430.KAKULUNGU
431.MASANI
432.KYAIMU
433.KANDUTI
434KISIKINI
435.KAAYO
436.KATIA
437.ITTHAKO
438.KITHUIANI
439.K/TUNDA
440.KAMUUNGU
441.KAKUENI
442.YAMANZA
443.KIVUTINI
444.KYANGUNGA
445.KYATULU
446.K/MUTONGA
447.KALULU
448.KISIIO
449.KANGUNGI
450MAANGANI
451.NZOANI
452.KIANGINI
453.MUTULA
454.KATUMBU
455.KYAMATU
456.MUTUKYA
457.KILONZO
458.ILIKA
459.MALILI
460.KALULINI
461.MUSEVE
462.KILANGA
463.YIUKU
464.NDOVOINI
465.MAKOSI
466.KITIVO
467.YULAMBU
468.KATANGASUA
469. VINDA

**SOURCE: DISTRICT EDUCATION OFFICE-
KITUI**