

## **An Investigation of Information Needs of School Children in Kibera Informal Settlements in Nairobi County, Kenya**

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**Abstract:** The purpose of this paper was to investigate information needs of school children in Kibera informal settlement, Nairobi, Kenya in order to ascertain the extent to which their information needs were met. Children are supposed to have access to adequate and relevant information to enable them match up their interests and abilities with their aspirations. Information needs are influenced by one's environment which in turn affects his/her search behaviour. The specific objectives of the study were to: determine the information needs of school children in Kibera informal settlement; identify their sources of information; determine the state of library and information service provision to children in the slum; and investigate the challenges faced by school children in regard to meeting their information needs. A case study research design was employed in this paper and it adopted Constructivist philosophical world view. The study employed purposive, stratified and simple random sampling strategies to determine the study population and the sample size. Data were collected qualitatively by means of interviews and focus group discussions. The findings show that slum children's information needs are varied and that they use a variety of information sources but rely mainly on teachers, parents, media and their peers for information. In addition, most schools do not have libraries and the few existing information materials are stored in classrooms and staff rooms. Moreover, most teacher-librarians are not professionally trained to render user services and to teach children information search and retrieval skills.

**Keywords:** Information needs, Information services, Informal settlements, Slum children, School children.

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### **INTRODUCTION**

For library and information services to become more effective and meet the needs of users, it is vital to identify information needs of its users and understand how and where they seek information. Likewise, children are supposed to attain adequate and relevant information to enable them match up their interests and abilities with their aspirations[1]. However, the inadequacy of relevant information resources in school libraries contributes to low levels of learners' performance [2].

According to the United Nations Children's Fund (UNICEF) report, children living in urban slums are among the most disadvantaged and vulnerable in the world [3]. As the world becomes increasingly urban with over half of its population living in urban areas, including more than a billion children, the urban experience is one of poverty and exclusion for many. As experiences of childhood become increasingly urban, so are the experiences of extreme deprivation and a continuous fight for survival for children living in urban slums [4]. UNICEF report urges governments to put children at the heart of urban planning and to extend and improve services for all. Therefore, children needs

and priorities must be incorporated into efforts to improve housing, infrastructure, safety and governance. Further, the report emphasizes that the work of local government and urban planning must be carried out with explicit recognition of the rights of children and young people[5].

The Country Strategic Plan for Kenya 2012-2016 that commenced in 2012 focuses on people centred approaches as the foundation of programming and on government obligation in pro poor social and economic service delivery. The strategy seeks to uphold the right to free and compulsory basic education for all children in Kenya. The programme focuses on increasing access and completion of free and compulsory primary education for 42,000 most vulnerable children. These are children living in abject poverty in urban slums and informal settlements. The programme will achieve the following results: child protection mechanisms established and functional in targeted schools; strengthened County and sub county education structures for quality service delivery; improved governance; and management of schools by the community, school management committees and head teachers [6].

Informal settlements are described as illegal and spontaneous shantytowns lacking decent services and infrastructure [7]. Slum households experience, among others, the following five deprivations:

- Access to adequate and affordable water that is accessible excessive physical effort and time.
- Access to improved sanitation with proper excreta disposal system, either in the form of a private toilet or public toilet shared with a reasonable number of people.
- Proof of evidence for security of tenure that can be used as evidence of land ownership status or for protection from forced evictions.
- Durability of housing that is permanent and adequate structure in anon-hazardous location, protecting its inhabitants from the extremes of climatic conditions such as rain, heat, cold or humidity.
- Sufficient living area devoid of congestion[8].

Families cannot adequately support their children if they live in precarious circumstances and/ or under threat of eviction. Provision of basic services in slums is extremely scant or non-existent [9].

Africa has buckled rapidly into a continent of slums; 166 million out of a total of 231 million urban residents in sub-Saharan Africa are classified as slum dwellers [10].

The growth of slums in Nairobi resulted from a variety of factors, historical and contemporary in nature [11]. Nairobi's 200 slums are among the densest, insecure and unsanitary in all of Africa. Kibera, in Nairobi Kenya, has the unfortunate distinction of being the worst of the worse. It is regularly described as the worst slum on the planet [12].

Lack of reliable data on population and growth parameters on Kibera slums has led to disagreements on the size of the slums as one of the largest in the continent. However, no one disputes the fact that it is the largest slum in Kenya [13].

Most slums dwellers have three main concerns: access, cost and quality [14]. In addition, the residents lack enough schools, educational centres and there is deficiency of good infrastructure [15].

Kibera informal settlement has gained iconic status which has been partly fuelled by exaggerated figures on its population, which, until the 2009 Kenya census (The census put it at around 200,000) was estimated to be around one million. The distortion of facts has been attributed to exaggeration by Western Non-Governmental Organizations (NGOs) in order to obtain

funding from governments and charity organizations [16].

In August 2010, Kenya adopted a new constitution which restructured the role of local authorities and put in place a decentralized system of governance that devolved power and resources to the county level. The new constitution is seen as an essential step towards enhancing people's participation in governance and disbursing resources more equitably across the country. The County of Nairobi has its very first governor (Dr. Evans Kidero) elected directly by the people. The Governor is determined to clean up Nairobi and make it a more liveable city [17].

The Kenyan constitution and the current county governments seem to adequately propose measures which if properly implemented may reduce the proliferation of slums [18].

It is therefore imperative that to solve the problems of informal settlements dwellers, there is need to address their socio-economic situations through provision of relevant, adequate, timely and accurate information that can address their needs.

An information need arises when an individual senses a problematic situation or information gap, in which his or her internal knowledge and beliefs, and model of the environment fail to suggest a path towards the satisfaction of his or her goals [19].

To understand what children's information needs and usage behaviour entail it is important understand the information needs they have at various stages of childhood development [20].

Jean Piaget distinguished between various developmental stages in childhood, namely, the pre-operational, concrete operational and formal operational stages, and identified the various cognitive needs of the child [21]. The information needs of children change as they grow. Apart from basic information needs, there are personal or individual needs that arise as a result of the situation in which the child finds himself/herself [22]. The needs also partly vary with the gender of the child.

It is important to note that most children who live in informal settlements are school-going and they are still at learning stage. The learning can be either formal or informal or both. Consequently, the learner's information needs vary with the type of learning they undergo. For example, school going learners' information needs arise from school assignment as well as the requirement for individual reading matter and media that should be provided in schools [23]. The usage behaviour of children is closely related to their information needs [24].

Therefore, for service rendering to be successful, the information should be readily available, relevant, complete, and should be available in diversified media sources to meet the needs of users [25]. In addition, such a collection should be developed, organized and evaluated carefully. It must also be able to be accessed effectively and efficiently by both the library staff and library users [26].

Children service rendering can be effective where relevant information resources are available. Moreover, the librarian should work in collaboration with teachers and be sensitive of different reading preferences when selecting books [27]. When the facilities are adequate, the services rendered in the library will also be satisfactory [28].

Information systems in the Kenya are so much under-utilized owing to various factors such as the prevalence of information services which have been designed without a proper analysis of the needs of users, high levels of illiteracy and language barriers [29].

A school library therefore is part and parcel of the school set up and should be in a position to support the objectives of the parent school. It must provide the information and ideas that are fundamental to functioning successfully in today's information and knowledge based society. The Ministry of Education in Kenya which is responsible for public schools however does not seem to enforce the existence of school libraries as a mandatory requirement during the establishment or management of a school. Hence, school libraries are almost non-existent in public primary schools in Kenya. Moreover, there has been very little documented on the status of school libraries in Kenya [30].

Children have a variety of information needs which change as they grow up/ mature. User studies in Africa are generally few. Evidently, there are relatively a small number of studies done on the information behaviour of the citizens of developing countries [31]. The situation is much worse for children and youth in developing countries [32]. This study is therefore not only an attempt to bridge this gap but to also answer such questions as what are the information needs of children in Kibera slum? How do the children living in slums satisfy these needs? And what are the sources of their Information?

Although the new Nairobi County government elected in March 2013 is committed to offering better services and implementation of the new constitution, the situation of service delivery to the urban poor is not about to change drastically in the short-term. The question is 'how can information service provision be

improved in order to meet the information needs of school children in the slums?' This paper attempts to address these issues in an effort to enable the Ministry of education, teacher librarians, head teachers and other stakeholders to plan an effective and efficient information service that would be geared to meeting school children's information needs.

From the foregoing, the purpose of this paper was to determine the information needs of school children in informal settlements and to identify the types of library information services available at their disposal. It is hoped that this paper makes recommendations on the provision of library information services to slum children to meet their information needs.

The objectives of this paper are:

- To determine the information needs of school children in Kibera informal settlement.
- To identify their sources of information.
- To determine the state of library and information service provision to children in the informal settlement.
- To determine the challenges faced by school children in regard to meeting their information needs and make recommendations for improvement.

An in-depth understanding of the information needs of school children in informal settlements could assist stakeholders of information service provision in designing effective information systems that could meet school children's information needs.

## **EXPERIMENTAL SECTION/MATERIAL AND METHODS**

A case study research design was employed in this study and it adopted Constructivist philosophical world view. The study employed purposive, stratified and simple random sampling strategies to determine the study population and the sample size.

The population under study thus, comprised all pupils in upper classes in the public primary schools in Kibera informal settlement, Nairobi County. The choice of pupils in upper classes was deliberate because the researcher felt that this was the level at which precise information needs would be articulated and that this category is likely to have more information needs than the lower classes due to various tasks that require a diversity of information sources and services.

The choice of public primary schools, as opposed to private schools, was because public primary schools shared a similar management structure and receive some form of government support. In addition, most children in public primary school come from

diversified socio-economic background that adds impetus to diversity of opinion. The population of study thus was the 4 public primary schools in Kibera informal settlement i.e. Kibera, Toi, Olympic and Ayany Primary schools.

The key informants were also selected purposively. These are the teachers in charge of libraries/librarians, the headmasters (All the 4 head teachers in the public primary schools) and the class teachers for the five categories from each school.

Stratified sampling method, a probability type of sampling, was used to ensure that different groups of target population are adequately represented in the sample so as to increase the level of accuracy in estimating parameters.

Within each stratum, selection of sample elements was done randomly, not first available. The pupils attending class 4,5,6,7 and 8 qualified for the study hence they were stratified according to the 5 classes. Further stratification was used to ensure an equal representative sample (pupils) of males and females in each class. The overall male to female ratio in this study was 1:1.

Simple random sampling (probability sampling) was used to select a sample from each stratum (class and gender).

The total number of pupils in the upper primary in the schools in the slums was 3328 and a total of 120 pupils from all the(4) four public schools were interviewed, implying that 30 pupils from each school participated in the study drawn from class four to class eight. The number of participants (pupils) for the focused group discussions per each respective class were 6 that is, 3 boys and 3 girls as shown in table 1.

**Table 1: Sample used in the study**

| Unit/ Category               | Population | Sample |
|------------------------------|------------|--------|
| Head teachers                | 4          | 4      |
| Class teachers               | 25         | 25     |
| Persons in charge of library | 4          | 4      |
| Pupils                       | 3328       | 120    |
| Total participants           | 3361       | 153    |

Data for this paper were collected using semi-structured interviews and focus group discussions. A focus group interview of 6 pupils was formed to represent each class. The class teachers, teachers in charge of libraries and/or librarian in all the selected schools and the Headmaster were required to participate in semi structured interviews.

## RESULTS AND DISCUSSIONS

### Information Needs of Children in Kibera Informal Settlement

Knowledge of information needs of school children living in the informal settlements is important in designing suitable means of information system and services. It is in this regard that the study identified information needs of children who live in Kibera informal settlement as being important in determining the library information services that should be provided to them. It is regrettable that no user needs assessment has been conducted in the four public schools in the Kibera informal settlement for the children.

The pupils cited the need for improvement of their knowledge on social integration, morals values, pollution, disaster management and procedures, first aid, social interactions, conflict resolution, sex education, safety related information, gender sensitization, mentorship, positive role modelling, talent identification through extracurricular activities, and creative arts. The children also mentioned need for information which impart knowledge on problem solving skills, moral teachings, and care for others and the environment, dangers of drug abuse, academic performance improvement, child rights and finally life skills which was said to be necessary in slums where children face a lot of social and economic challenges.

On use and reliability of library information services, the pupils stated that they use the information obtained from the Library for reference, knowledge, leisure, homework, and to supplement school notes. In addition, majority of class six, seven and eight pupils indicated that they use the information obtained from libraries to help improve their English composition writing and to improve on their language skills and vocabulary. Although the pupils appreciate value of relevant information, majority of the pupils stated that the available information sources did not meet their information needs satisfactorily. For instance, only Ayany Primary school had non-book media. All the pupils agreed that they preferred information in diversified formats. It is therefore safe to deduce from the findings that slum-children's information needs are varied and the information sources available at their disposal do not meet their needs.

### The Source of Information

Concerning the source of information, the head teachers in the four schools admitted that the schools purchased library resources through government support although it was insufficient. The other source is donations from other well-wishers.

When pupils were asked to state their main source of information, they cited that they rely mainly on their teachers, parents, peers, print and electronic

media, and visual and audio visual sources for information.

**Types of Library Information Services Available in The Informal Settlement**

The study found out that even though a school library is an essential facility in the school, the Ministry of Education does not enforce it as a mandatory requirement during the establishment of a school. Such lack of an official directive for schools to have school libraries implies that every school is left to determine for itself and chart their own course. The study findings further reveal that most schools in Kibera informal settlement did not have well-equipped libraries. For example, three schools (Toi, Olympic and Kibera primary schools) had no structured library system. In the school (Ayany) that had a library, there was all round dissatisfaction with the quality of services provided such as shortage of books, limited space and time to use library services. The findings are shown in Table 2 below.

**Table 2: Availability of libraries in primary schools**

| Number of schools with Classroom library | Number of schools with a library | Number of schools without a library/class library |
|--|----------------------------------|---|
| 3  | 1                                | 0   |

From these findings, it can be noted that the availability of the school libraries in the informal settlement was inadequate/unsatisfactory and consequently constrained the pupil’s access and use of information. The head teachers agreed that the timetable provided a lesson once a week for pupils to use the library resources.

The main reasons why teachers sent pupils to libraries are revision, to gain familiarity with information sources and to gain knowledge in the use of reference sources. Pupils also visit libraries to watch videos, borrow books, to collect information for school projects, for note making, to read newspapers and to listen to radio educational programs. Libraries also provide information, which sensitizes the public on HIV/AIDS and environmental conservation. Libraries provide different information to children in different age groups. This important aspect needs consideration when designing information availability for different age groups.

In his Cognitive Development Theory’s Piaget cites the importance of recognizing various stages in child development. During the concrete operational stage (7-11 years) and formal operational stage (11 years and above) when children are exposed to formal education, their cognitive, affective and emotional development takes shape, hence the need of access to appropriate information [33].

The study established that availability of required information in libraries varied from school to school. While some pupils admitted that they always found the information they needed during their library lessons; some refuted this recommending introduction of computers with internet access, audio and visual lessons as well as construction of fully stocked library. The focus on users is in line with Sense Making Theory which lays emphasis on the shift from an early focus on information sources and users. Sense making can elicit information from participants to discover what they are doing with the information and what suggestions they can give [34]

Since the Ministry of Education has no clear guideline on the establishment of school libraries, such lack of an official directive for schools to have school libraries implies that every school is left to determine for itself and chart their own course. The Kibera primary school head teacher stated that:-

*“The establishment and management of school libraries were mainly as a result parents and well-wishers”.*

On the contributions of other information services in the informal settlement, the study notes that four community libraries existed in the slums, among them SIDAREC and Global Alliance for Africa library, Amani and Kibera community libraries. Despite the existence of Community libraries, majority of the pupils in upper primary of the public schools denied any knowledge of the existence of these community libraries which are in the neighbourhoods. This could depict poor sensitization of the library services to the slum children.

The study recorded varying responses from the respondents on availability of support in the provision of information to users. While some head teachers indicated that there was no support received from various stakeholders such as KNLS, community libraries, and other information service providers, others indicated that there was support from KNLS through organized book reading days where reading competition is conducted for the children in all classes. According to majority of the head teachers, Global Alliance donated books to the slum children without charges; created an area for the children to do homework; and also assisted the children in reading as well as offering non-book facilities such as charts and maps for the children.

The Ayany and Olympic head teachers stated that SIDAREC provided a conducive-studying environment, which is miserably lacking in many areas within the country. The inadequate or lack of these facilities in the slums denies the community members especially school going children and young people reference and other reading materials, which enhance their knowledge levels. Most of the children from the

slums come from poor families and hence lack funds to purchase textbooks, which are essential for their studies. Thus the available libraries serve as a reference point for many learners in terms of accessing reference material. The head teachers however mentioned that SIDAREC library lacks local contents that can appeal to locals. This means the library services are underutilized.

Amani community library lends books to schools in the area and offers computer literacy and training in collaboration with Kenya National Library Services (KNLS). In addition, Amani lends books to the children during the holidays. The head teachers at Toi and Ayany Primary schools noted that there were organized mobile services, library visits, training and book reading day by Kenya National Library Services (KNLS) where reading competition was conducted for the children in all classes. However, this collaboration was reported to be unsatisfactory by all the respondents.

These findings indicate impediments in the move towards meeting pupil's information needs among slum children due to inadequate collaboration between the Kenya National Library Services (KNLS), other community libraries as well as the school libraries.

The head teachers agreed that the Nairobi County Government through its County City Education Unit has developed guidelines for the operation of schools in Nairobi's informal settlements and facilitates the registration of these facilities. Supported by UN-Habitat through the Safer Cities Programme and UNDP, the County Council has been engaged in the Safer Nairobi Initiative for a number of years. The programme has acted as the impetus for a number of council activities including the installation of street lighting; city beautification; provision for informal trading; the upgrading of playing fields in support of youth activities; and safer neighbourhood campaigns. According to the majority of the respondents some of these aspects of the safety initiative have also been integrated in the informal settlements.

The head teachers further unanimously agreed that both local and international donors participate in the provision of reading materials to children in the slums. For example, Raila Education Centre in Kibera.

### **Government Policies Supporting Education and Library Information Services in the Slums**

The study further sought to find out if the government supported library information service activities. The head teachers indicated that the government gave financial support, which however, has been in decline. This was an indication that the government was reducing its support for the library services.

On whether there existed government policies supporting education and library information services in the slums, the head teachers reported that the government, through the Ministry of Education has formulated educational policies e.g. Free Primary Education policy. The Ministry supports: employment of teachers for public schools, distribution of learning resources, and the implementation of education policies.

All children are supposed to access all rights as stipulated in various government documents, children's Act and in the Constitution (chapter four (4): right to information). However, the study found out that the free primary education policy (FPE) had not been fully implemented in the slum and that slums had often been marginalized.

Further the head teachers indicated that there are no policies that specifically mention information provision to children in slums. Without clear guidelines or policy on the establishment of library and information services infrastructure as well as the employment of trained librarians to manage school libraries, the government effort to avail information to school children faces a huge challenge.

### **Challenges Faced in Provision of Information Services to Children in Kibera Informal Settlement**

The study established various challenges encountered in the provision of information services to children in Kibera Informal Settlement. These included lack of electronic media, inadequate books and magazines, book theft., improper shelving of books, inadequate time, overcrowding due insufficient space, lack of reading and literacy skills, inefficient information providers, lack of networked computers, inability of pupils to pay for lost books as well as, existence of old books with obsolete information.

In those schools which had computers (e.g. Ayany) there were problems such as inadequate number of computer , faulty computers, lack of internet connectivity and/ or lack of adequately trained personnel to offer technical help to students. Pupils also lamented lack of adequate space for learning.

Pupils also cited social challenges such lack of concentration because of constant/ frequent noise pollution due to loud music by neighbours and drunkards, insecurity (harassment and insults from strangers, violence etc.), poor road conditions as well as frequent power failures as major hindrances to meeting their information needs.

The Government of Kenya has experienced challenges in fulfilling its mandate especially in regard to universal accessibility and use of information. The Government experienced a shortage of funds to run the existing libraries effectively. Lack of libraries in many

parts of the country and poverty hampered provision of information services to children in slum areas. The Government has failed to provide equal education opportunities to all owing to financial related challenges. Further, there were no clear policies regarding provision of information in slum areas.

These findings indicate there are impediments in the move towards meeting the information needs of children in informal settlements due to inadequate collaboration between the Kenya National Library Services (KNLS), other community libraries, and the school libraries.

#### **Improvement on Availability of Information**

Several plans have been put in place to improve availability of information by slum children. The head teachers in the public schools, which had no structured libraries, indicated attainment of fully stocked, spacious roomed libraries as part of the expansion programme meant to address the cited challenges. Those which had a structured stocked library also indicated that there were plans to expand the facilities and introduce audio-visual and electronic resources.

#### **CONCLUSION**

This paper has established that children in Kibera informal settlement have various information needs. However, it is apparent that the information services that were provided for the pupils did not sufficiently meet their needs.

The pupils stated that they were not satisfied with the current state of provision of the information services. This was due to, among other factors, shortage of relevant and enough books, inadequate space and time limitation for the pupils to use the library services. The study therefore concludes that pupils in the said informal settlement had the same information needs to meet as any other pupils in public schools and that these needs must be met to better their lives.

In addition, the study found out that even though a school library is an essential facility in the school, the Ministry of Education does not enforce it as a mandatory requirement during the establishment or registration of a school. Such lack of an official directive for schools to have school libraries implies that every school is left to determine for itself and chart their own course. All the identified barriers will have to be addressed first before the information needs of these pupils in slums could be met.

The paper noted there was need for Community libraries to play a more pro-active role in enhancing and upgrading information services in the slums. Libraries require purpose-built facilities and can

only be established after extensive consultation with all stakeholders.

Library and information services are provided for public good. However, not all schools in the slum had fully equipped libraries and therefore without public libraries, majority of slum children are denied the right to information which is a social right of all citizens as per the Kenyan Constitution. Libraries help children from different economic background to be able to interact freely when navigating through the information resources.

In view of the above, this paper recommends: periodic conduct of user needs studies to determine information needs of school children in the slum areas; establishment of libraries and information services in slum; upgrading of existing libraries; staffing of school libraries with trained personnel and development of a policy to address information related issues for all schoolchildren.

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