

# The Impact of HIV/AIDS on Micro-enterprise Development in Kenya: A Study of Obunga Slum in Kisumu

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**Abstract**—The performances of small and medium enterprises have stagnated in the last two decades. This has mainly been due to the emergence of HIV / Aids. The disease has had a detrimental effect on the general economy of the country leading to morbidity and mortality of the Kenyan workforce in their primary age. The present study sought to establish the economic impact of HIV / Aids on the micro-enterprise development in Obunga slum – Kisumu, in terms of production loss, increasing labor related cost and to establish possible strategies to address the impact of HIV / Aids on micro-enterprises. The study was necessitated by the observation that most micro-enterprises in the slum are facing severe economic and social crisis due to the impact of HIV / Aids, they get depleted and close down within a short time due to death of skilled and experience workforce. The study was carried out between June 2008 and June 2009 in Obunga slum. Data was subjected to computer aided statistical analysis that included descriptive statistic, chi-squared and ANOVA techniques. Chi-squared analysis on the micro-enterprise owners opinion on the impact of HIV / Aids on depletion of micro-enterprise compared to other diseases indicated high levels of the negative effects of the disease at significance levels of  $P < 0.01$ . Analysis of variance on the impact of HIV / Aids on the performance and productivity of micro-enterprises also indicated a negative effect on the general performance of micro-enterprise at significance levels of  $P < 0.01$ . Therefore reducing the negative impacts of HIV/Aids on micro-enterprise development, there is need to improve the socio-economic environment, mobilize donors and stake holders in training and funding, and review the current strategies for addressing the disease. Further conclusive research should also be conducted on a bigger scale.

**Keywords**—Entrepreneurship, HIV-AIDS, Micro-enterprise, Poverty.

## I. INTRODUCTION

THE world continues to be gripped by one of the most prolonged and devastating disease. HIV/Aids provides the most dramatic and disturbing examples of the capacity of a previously unknown pathogen to rapidly spread throughout the world, and cause social and economic upheaval on a scale that threatens to destabilize a large geographical area. HIV/Aids is having a disastrous impact on the economic

development of countries and erodes the ability of the governments to provide and maintain essential services, reducing labor supply and productivity and putting a break on economic growth [16] Part of the reason for this resurgent interest in HIV/Aids is because it is now beginning to affect the economy of the country's micro-enterprises, and if we take a longer term view it will have an impact on the global economy, particularly given that consumers are withholding spending money to use for treatment and may die prematurely. Micro-Enterprise development and finance has generated enormous enthusiasm among aid donors, governmental and non-governmental organizations as an instrument for reducing poverty in a manner that is financially self sustaining. Although something of consensus has emerged concerning the principles by which such institutions should be designed, however, we know very little about their impact [9].

Micro-enterprises are typically defined as very small, informally run business, involved in activities other than crop production. These enterprises employ ten or fewer people, including the owner(s) of the business and any unpaid worker [18]. A further distinction may be made between survival of micro-enterprises, low skilled, low return activities and entrepreneurial micro-enterprises which tend to require more skills on the part of the business owner and a greater use of capital and technology in production [7]-[10]. Many enterprises close each year and others fail to grow for all sorts of reasons, but one potentially important reason that has not been well studied is the impact of HIV/Aids on the micro-enterprise owners in the slums. Indeed, enterprise mortality or stunted growth might be closely linked to the mortality and morbidity of the enterprise owners. Obunga Slum is a microcosm of many of the world's most vexing issues: poverty, healthcare, severe water shortage and the spread of HIV/Aids. It is one of the most densely populated slums in Kisumu District and faces an exploding youth population which now represents half of the slum's population [17]. There exist several micro-enterprises which are being funded by both governmental and non-governmental organizations nevertheless no much gain have been realized. Micro-enterprise development as a strategy to help low-income individuals achieve economic self-sufficiency has been used as an important tool of developing the informal sector [2]-[13]. The aim of this research was to establish the impact of HIV/Aids on micro-enterprises in the informal sector.

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Beyond the human tragedy, this situation results in steadily rising costs to micro- enterprises. These enterprises suffer sharp profit losses as a result of the loss of workers and decreased working hours due to illness, death, overwork and stress, attendance at funerals and home care of ill dependants. Micro- enterprise development in Obunga slum is highly susceptible to the transmission of HIV/Aids because its social and economic environment constitutes a risk. Casual and commercial sex is common in the immediate vicinity of the slum and despite the widespread awareness about HIV/Aids, cultural beliefs still dominate the discourse [4].

A micro-enterprise owner is an innovator who is capable of identifying opportunities exploiting them and turning them into marketable ideas. He adds value in terms of time, money, effort and skills; accepts risks in the competitive market, with regard to implementation of ideas or exploitation of opportunities and ultimately reaps the reward of his or her efforts [14]-[3]. Thus, given the micro-enterprise owner's capability and will to progress, they should strive hard not to be discouraged by HIV/Aids. As an entrepreneur, tenacious and obstacles, obstructions or even misfortunes typically do not dissuade them from doggedly pursuing their vision. Micro-enterprises contribute almost 50 percent employment and 30 percent of Gross Domestic Product in Kenya, but the impact of HIV/Aids on these micro-enterprises is poorly documented.

HIV/Aids have become a threat to development; it has profound negative impact on the economy, the workforce, the business, individual workers and their families. Economic growth could be as much as 25 per cent lower than it might otherwise have been over a 20 year period in high prevalence countries. Their population will be about 20 per cent lower by the year 2015 than they would have been without HIV/Aids. HIV/Aids has a significant impact on the composition of the labor force in terms of age, skills and experience [8]. Micro-enterprises in Obunga slum are facing a severe economic and social crisis due to the impact of HIV/Aids. Protracted morbidity and mortality have profound financial, economic and social costs in this region. Deaths of highly trained and skilled / experienced enterprise owners imply lose of skills and experience, in addition to the difficulties presented to manpower planning. The impact of HIV/Aids on the informal sector is devastating, with the disadvantaged population being forced to deplete businesses to pay for the care of family members [12]. Therefore the study sought to establish the impact of HIV/Aids on micro-enterprises in Obunga slum by assessing the economic impact of HIV/Aids on micro-enterprise development, in terms of production loss and increasing labor related costs, examining the possible strategies to address on the effects of HIV/Aids on micro-enterprises in Obunga slum, and the diverse nature of micro-enterprise development and its relationship with HIV /Aids.

## II. MATERIALS AND METHODS

### A. Research design

This study was conducted through cross-sectional sample survey. The study was concerned with an intensive analysis of micro-enterprises in Obunga slum and gave more insight to other slums in the region. The design enabled the researcher to carry out an in-depth and concrete analysis of the sample. This was used to investigate population by selecting samples to analyze and discover occurrences [15].

### B. Study area

Obunga slum where the study was conducted is in Kisumu District, Winam Division. Kisumu District has the largest commercial centre in Western Kenya and is vibrant with many informal sector enterprises which employ thousands of people. The slum consists of low income earners and houses a mixture of tribes in Kenya thus was appropriate for providing a centre for this study.

### C. Target population and sampling technique

The study population was 250 (Two hundred and fifty) micro-enterprise owners of Obunga slum registered by Kisumu Municipal Council from that a randomly selected sample of 50 (fifty) using snowball technique was selected. Snowball sampling is a technique for finding research subjects. One subject gives the researcher the name of another subject, who in turn provides the name of a third and so on [15]-[6]. The sample size chosen was representative to the study and may be used for referential.

### D. Data type, collection method and analysis

The study employed both Primary and Secondary data. Primary data that was collected using formulated structured questionnaires that were self-administered. The questionnaire was used for testing the micro-enterprise owners' knowledge of HIV/Aids and also for gauging their attitude towards people with HIV/Aids. Questionnaires were used since the study was concerned mainly with variables that could not be directly observed such as views, opinions, perceptions and feelings of the respondents. Secondary data that was collected from economic surveys, population council of Kenya, chambers of commerce and Kisumu Municipal Council Statistical Bureau.

The questionnaire was used to design a data sheet in the statistical package for social science (SPSS) data sheet. The data collected was first presented in tables. This helps organize the data to extract basic details. Descriptive statistics such as percentages and averages were used in analyzing the data. The data was used to determine mean score and percentages using Chi-squared statistical method to differentiate between HIV/Aids positive and HIV/Aids negative individuals and how it impacts on the development of the micro-enterprises.

### III. RESULTS

The result shown above in Table I indicate that the most serious disease facing micro-enterprise is HIV / Aids at 68% which increases the death rate of the micro-enterprise workforce and the eventual collapse of the micro-enterprises in the slum. Tuberculosis at 18% is a HIV/Aids related disease affect the micro-enterprises severely, affecting the health and performance of the staff, the tuberculosis affected staff tend to miss coming for work thus leading to increased absenteeism which in turn interferes with the micro-enterprise performance. Other factors affecting micro-enterprise development other than HIV/Aids are represented in Fig. 1.

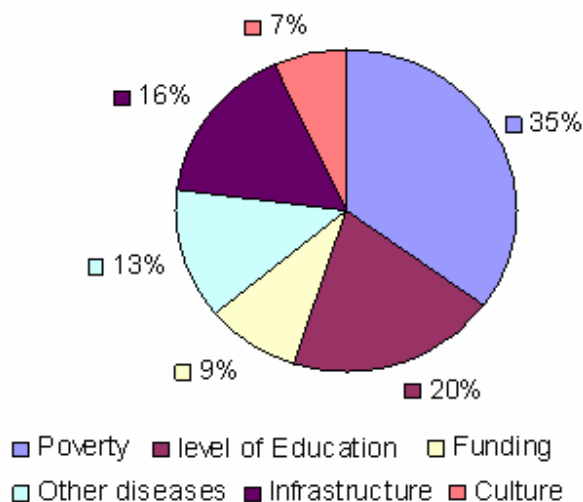


Fig. 1 Factors other than HIV/AIDS affecting micro-enterprise development in Obunga slum – Kisumu, Kenya

Cholera at 4% is a spontaneous disease, though easily contained and treatable it severely affects the micro-enterprise staff and weakens their performance is a spontaneous disease, easily contained and treatable once it has erupted. Malaria at 10% on the other hand is a seasonal disease and is most prevalent during rainy and humid condition and also depends on the geographic setup e.g. highlands and lowland regions. It therefore poses a serious problem to micro-enterprises within Obunga slum since it is controllable and the residents of the slum have since developed some immunity to the disease.

Table II above shows different enterprises that were analyzed at different weeks indicating the attendance of the micro-enterprise staff in the slum. Bars and Restaurants were analyzed in week one, the total number of employees who attended their duties were 72% which led to the decrease in productivity from 1038USD to 1200USD. The second week, Fish Traders micro-enterprises were analyzed. The attendance was at 65% which was attributed to frequent ill health and deaths of the fish mongers who are most vulnerable to HIV/Aids especially the women. Micro-enterprises dealing with Tailors were also observed, the attendance rate was 45% which indicated that 55% were absent from work thus leading to low actual productivity of 649USD compared to the expected 800USD.

Week four cobblers were dealt with and the attendance rate was at 55% which showed a difference of 107USD between the expected and the actual productivity level this indicated that productivity is directly dependent on attendance, i.e. the lower the number of employees the lower the productivity. The attendance rate was at 69% whose actual productivity was 995USD compared to the expected 1100USD. The absenteeism was attributed primarily to HIV/Aids related illness. Micro-enterprises dealing with saloons were also dealt with. Their attendance rate was 74%. Absentism among staff in this category was attributed mainly to the fact that the staff who are mainly female indulge in prostitution to substitute for their low income. The actual productivity was 1067USD compared to the expected 1100USD.

TABLE II  
 THE EXISTING SOURCES FOR DRINKING WATER TO HOUSE HOLDS IN BUSIA TOWN

Type enterprise	Wk	A (%)	AP (USD)	EP (USD)
Bar and Restaurant	1	72	1038	1200
Fish Traders	2	65	937	1000
Tailors	3	45	649	800
Cobblers	4	55	793	900
Car wash	5	69	995	1100
Saloons	6	74	1067	1100
Barber shops	7	35	504	700
Welders	8	77	1110	1300

TABLE III  
 SOURCES OF WATER IN WEST ISUKHA LOCATION; RESPONDENT DATA ON WATER SOURCES FOR DOMESTIC USE

Source	Frequency	Percentage
Tap water	380	35.50%
Borehole	130	12.10%
Rainwater	36	3.40%
Spring/River water	400	37.40%
Other Sources	100	9.30%
<b>TOTAL</b>	<b>1,070</b>	<b>100%</b>

Barber shops had the lowest rate of attendance at 35%. Both the micro-enterprise staff and their clients died of HIV/Aids and other related illness which include tuberculosis. This has led to this micro-enterprises experiencing reduced labor productivity at 504USD compared to the expected 700USD. The attendance rate of welders was at 77% which contributed to the actual productivity of 1100USD and not the expected 1300USD. This was attributed to frequent illness and death of the workers due to HIV/Aids related causes. This has had financial and psychological effects on the micro-enterprise workforce.

The results presented in Table III above shows that poverty is the important variable contributing to poor or lack of micro-enterprise development in the study area. This was at 35%.

The study has also shown that poverty plays a major role in micro-enterprise development. That poverty level in the slum does not encourage development of new micro-enterprise and that low income increases the overdependence. Poverty also leads to other social crimes like theft of micro-enterprise which derails growth and sustainability of the business. The level of education at 20% also affected the performance of the micro-enterprises. The level of education in the slum is worrying despite the free primary education offered by the government; the level of literacy is still low. 20% of the respondents felt that ones education have an impact on micro-enterprise growth and development. Funding of the micro-enterprises in the slums at 9% is not sufficient enough to facilitate the growth and development of the micro-enterprises. Limited funds are allocated to the micro-enterprises which restrain them from starting other new businesses or growing.

Other diseases at 13% which include tuberculosis, malaria and cholera have an impact on the micro-enterprise development. These diseases weaken the performance of the micro-enterprise workforce and in turn lower the performance of the micro-enterprises. Infrastructural facilities at 16% which includes roads and communication networks, health, and recreational facilities are inadequate. Due to lack of physical infrastructure in the slum, formal sector business is reluctant to invest in these areas. Consequently in this slum, there are many social problems such as high unemployment or underemployment. Culture was established to be at 7%. Though the study area is a cosmopolitan region, the entire workforce and the residents as a whole hold up to cultural practices which include wife inheritance and abhorring circumcision which may lead to the spread of HIV/Aids.

#### IV. DISCUSSION

The present study has shown that HIV /Aids impacts negatively on micro-enterprise development in Obunga slum. This has led to the loss of highly trained and experienced workforce. This revealed that HIV/Aids pose a threat to the development of the micro-enterprises in the area. The impact of absenteeism of the micro-enterprises workforce on productivity, confirmed that productivity is directly dependent on attendance of the staff and the lower the attendance rate the lower the productivity level. The analysis done, suggests that the context within which HIV / Aids affects micro-enterprise performance is complex, which include a combination of factors such as poor infrastructure, low levels of education, poverty, other diseases, retrogressive culture and insufficient financial support as shown in Table III. Thus such an environment is a fertile ground that enables these factors to combine in a synergistic way to deter development and performance of the micro-enterprises. The micro-enterprises are not sufficiently financed by micro-financial institutions. The micro-enterprises are still severely affected by HIV / Aids, increasing illness and deaths of the workforce despite the limited funding.

Little research has been done on the impact of insufficient

infrastructural facilities, education, poverty and culture on micro-enterprises in Obunga slum in particular and other slums in general. There is need to implement programs that reduce the vulnerability of micro-enterprises to HIV / Aids. Programs should shift from biomedical and behavioral interventions towards situational interventions and enabling approaches by reflecting the needs of the micro-enterprise staff [5]. This will lead to the reduction of the trained workforce of the micro-enterprises. Review the possible strategies for addressing the effects of HIV / Aids on the micro-enterprise workforce by developing simple strategies such as IEC materials with simple messages on HIV / Aids. This will enlighten the micro-enterprise workforce on their personal susceptibility to HIV/Aids and reduce the rate of absenteeism in the micro-enterprises. Improve the socio-economic environment; these include improvement of and broader access to social activities by the workers, improvement of sanitation and general hygiene in the slum.

Mobilize donors to support micro-enterprises through establishing a donors and stakeholder information forum on micro-enterprise and HIV/Aids and identify best practices (training to increase and improve micro-enterprise performance). The government and non-governmental organization must begin to collaborate and respect their interest and capacity in mitigating the impact of HIV/Aids on micro-enterprise. Further research should be carried out to investigate the impact of HIV/Aids and other related factors such as infrastructure, education, poverty and culture on micro-enterprises in Obunga slum in particular and other slums in general. Conclusive studies need to be conducted in a bigger scale to investigate the impact of HIV/Aids on micro-enterprise in the region and other parts of the country.

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#### REFERENCES

- [1] P. Achola, "Impact of HIV / Aids on micro-finance". A case study on HIV/Aids Mitigation MEDA. 2000.
- [2] J. A. Alade, D. K. Sharma and P. H. Sharma, "The role of micro-enterprise finance in economic development" Journal of Academy of Business and Economics. 2003.
- [3] T. Barnet and P. Blaikie "Aids in Africa its present and future impact". London. Belhaven Press. 1992.
- [4] T. Benett and A. Whitesand, "Poverty and HIV / Aids: impact, coping and mitigation policy". 2004.
- [5] F. D. Cox, "The Aids booklet. New York: McGraw-Hill Book Company. 2000.
- [6] R. F. Denzin, "The Research Act. A Theoretical Introduction to Sociological Methods". New York: McGraw-Hill. 1989.
- [7] D. Gachuhi, "The Impact of HIV/Aids on Education System in the Eastern and Southern Africa Region". 1999.
- [8] ILO, "HIV / Aids; A threat to decent work, productivity and development. A document for discussion at the special High level meeting on HIV/Aids and the world of work". 2000.
- [9] K. King, "Micro-economic environment: revisiting Kenya's (jua kali) sector against the background of formal globalizing economy". New York: McGraw-Hill. 1999.

- [10] Kiragu, K. & Zabin, L.S. (1993). The Correlates of Premarital Sexual Activity Among School –Age Adolescents in Kenya International Perspective in Family Planning, vol. 19, No 3.
- [11] J. E. Mark “The impact of HIV / Aids on Zambian economy. IMF Nalo, D., Hancock, J., Aoko, M., Mutemi, R., Clark, H., & Forsythe, S. (1996). The Macroeconomic Impact of HIV/ Aids. 2002.
- [12] E. Ndemo, “Assessing sustainability of faith-based enterprises in Kenya. International Journal of Social Economics”. Vol. 33, issue 5/6. 2006.
- [13] W. O. Odek, A. Constigan, E. Ngugi, F. Plummer, M. Oneko and S. Moses, “Benefits of collaboration between HIV/STI prevention projects and micro-enterprises development organizations (MDOs). International conference on Aids. 2000.
- [14] H. W. Odiwuor, “The impact of HIV / Aids on Primary Education. A case study on the selected District of Kenya. Institute of International education Stockholm University. 2000.
- [15] W. Y. Oso, and D. Onen, “A general guide to writing research proposal and report. A handbook for beginning researchers”. Kenya: Option Press. 2005.
- [16] C. Shisana and L. Letlape, “The impact of HIV /Aids on the sub-saharan African economy. Commission for Africa. 2004.
- [17] Urban Planning Kisumu Municipal Council Statistical Bureau. 2007.
- [18] USAID/UNICEF, “Children Affected by HIV/AIDS in Kenya: An Overview of Issues and Action to Strengthen Community Care and Support Report of a Combined Assessment of Programming in Kenya for Children and Families Affected by HIV/AIDS”.1999.