

**ELECTRICAL SAFETY MANAGEMENT IN THE
KENYAN INFORMAL SECTOR: A CASE OF ELDORET
JUA KALI SECTOR.**

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS OF THE DEGREE OF MASTER
OF PHILOSOPHY IN TECHNOLOGY EDUCATION,
(Electrical Technology)**

**DEPARTMENT OF TECHNOLOGY EDUCATION,
MOI UNIVERSITY.**

OCTOBER, 2004.



ABSTRACT

The rate and pattern of industrial growth in Kenya in the last two decades has been unsatisfactory. Industry created too few jobs, and many industries tended to use inappropriate, capital intensive technologies. The manufacturing sector continues to depend heavily on imported equipment and raw materials; thus aggravating balance-of-payments problems. The Kenyan government, however, has recognized the important role played by informal sector (Jua Kali) in addressing the challenges of poverty reduction and unemployment in the country. It creates jobs at relatively low capital cost as well as developing a pool of skilled and semi-skilled workers who are the base for future industrial expansion. Currently, the sector employs about four million Kenyans.

Jua Kali sector is involved in the manufacture of a wide range of items which include: Farm implements, household utensils, electrical appliances, and specialized machine parts, among others. Electrical power supplies are essential to Jua Kali sector, just like for any other manufacturing sector. Electricity saves many man-hours of labour by providing energy for fixed and portable tools, equipment, and lighting. Normally, electrical power is supplied to consumers depending on the consumer's maximum expected load demand. This is dictated by the number and the types of consumer's electrical appliances. Some consumers, however, have a bad habit of illegally connecting and extending electrical power to unauthorized premises and also neglecting the electrical safety rules. Apart from being illegal, these extensions may not be complying with the regulations established by Ministry of labour and the Kenya Bureau of Standards regarding both permanent and temporary domestic/industrial installations. Most of these illegal power extensions are used in

open spaces where safety is usually difficult to observe. There are also high chances that these extensions contribute to overloading of power lines resulting in the damage of conductors, energy meters, transformers, and any electrical appliance connected to the lines.

This research was aimed at establishing the status of electrical safety management in Eldoret Jua Kali sector. This study was carried out within the area covered by Eldoret Jua Kali association. The subjects comprised 65 electrical workshops/premises, which was about 75% of the registered electrical/electronic workshops/premises in Eldoret Municipality. The study was both quantitative by the use of self-administered questionnaire, and qualitative by use of interview discussions and observations. Descriptive statistics, Chi-Square was used to analyze the collected data.

The results show that the majority of the Jua Kali operators do not adhere to the electrical safety regulations and requirements established by the ministry of labour and the Kenya Bureau of Standards. They also lacked the appropriate tools and equipment recommended for electrical services. Most of their workshops/premises were temporary. Those offering electronic services, however, were found to be operating in permanent workshops and had most of the recommended electronic tools and equipment. All in all, the Jua Kali working environment makes the operators more vulnerable to electrical hazards. The findings of this research might be used to reduce the cases of electric shocks and electric fires. They may also lead to economic use of electricity, which in turn reduces the over-stretching of power supply.