

**FACTORS THAT LIMIT DIFFUSION OF NEW
TECHNOLOGY IN JUA KALI INDUSTRY**

**A CASE OF KAMUKUNJI AND ZIWANI METAL WORK JUA KALI
INDUSTRY IN NAIROBI-KENYA**

BY
IKINYA SAMSON KARIUKI
EDU/PGT/O8/2003



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF
MASTER OF PHILOSOPHY**

IN

**TECHNOLOGY EDUCATION
(MECHANICAL OPTION)**

**SCHOOL OF EDUCATION
DEPARTMENT OF TECHNOLOGY EDUCATION
MOI UNIVERSITY**

**MOI UNIVERSITY
LIBRARY**

SEPTEMBER 2005



ABSTRACT

Jua kali industry in Kenya is part of small enterprises (SEs) that provide employment and serves as a pivot for economic growth and development of an industrial base in Kenya. Despite this critical role, the industry is faced with many challenges that inhibit the realization of its full potential, the key challenge being lack of access to diffusing technology.

The purpose of this study was to determine factors that limit diffusion of new technology in Jua Kali industry. The significance of the study was mainly to enlighten policy makers and Jua Kali operators on the sources of technology and measures that can enhance access to new technology. The study was guided by sociological theory known as Diffusion of Innovations theory (DOI), postulated by Daniel W. Surry [1900]. Research design adopted was Survey design of descriptive research. The sample was selected from a population of registered workshops under Kamukunji and Ziwani Jua Kali Association using systematic random sampling. Data was collected by use of questionnaire, observation and interview schedule and analysed using the statistical package of social sciences (SPSS).

The study revealed that Jua Kali Industry lacks reliable sources of new technology. Technology accessibility in Jua Kali is difficult since there is no programmes put in place to enhance diffusion of new technology. Jua Kali Industry lacks facilities to ease adoption of new technology, low professional qualification of operators was also found to limit jua kali operators access to new technology.

Based on the findings the study recommended that government should come up with programs that will facilitate diffusion of new technology. Links should be established with learning institutions, formal industries and other sector. The government of Kenya should revitalize Jua Kali demonstration and training centers, Finally, the department of micro and small enterprise should intensify Jua Kali participation at National and Regional exhibition and Improvement of facilities in place.