The Place of Home-Based Industries in Rural Kenya's Socio-Economic Progress: A Case Study of Kakamega County

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Abstract

Home-based industries, also referred to as cottage industries, are those units of production that are mostly located in homesteads, and which rely on human- or animal-propelled skills and technology. The home-based industries focused on in this academic paper are: pottery, crude sugar production, brick-making, liquor production, quarrying and masonry, carpentry, traditional medicine production, charcoal production, basketry and weaving, baking, bicycle repair, flour-grinding, and shoe-making and repair. These industries provide skill training and development, products for rural and urban consumption, employment opportunities, and contribute to development. The socio-economic contribution of home-based industries in rural Kenya is highlighted in this research paper.

Keywords: Home-based Industries, Socio-Economic Progress, Kakamega

1.0 INTRODUCTION

Rao and Saha (1986) observe that the development of cottage industries can provide part-time occupation to the people engaged in agriculture, and full-time jobs to the village artisans and craftsmen. M. T. Haq in Ghosh (1984) explains that industries help develop the skills and disciplines necessary for modern economic society and that it is regarded as the leading means of breaking the traditional stumbling blocks to growth. He argues that industry supports integrated rural development. Ghosh (1984) notes that in most countries, rural skills of a high degree exist for producing articles of artistic excellence from locally available materials. Frequently, such articles are produced as a part-time family occupation.

Puri (1988) is of the opinion that cottage industries provide the greatest opportunity for making every home a factory. Cottage industries have a greater presence in rural than in urban areas; this helps check rural-urban influx by providing jobs to the rural unemployed and reduce their chances of migrating to the urban centers (Rao and Saha, 1986).

Staley and Morse (1965) observe that development leaders in newly industrializing countries cannot afford to overlook the cottage industries that, prior to modernization, have been the traditional source of manufactured articles. The first, according to them, is a *socio-political reason*. It arises from concern for the fate of families that depend for their livelihood on the proceeds from traditional household industries like handloom weaving, pottery making, et cetera. In most countries, these considerations have great political importance. The second is a *developmental reason*.

Hayami (1998) observes that the Korean government had made efforts to promote rural industry for decades. At the end of the 1960s, the government began to adopt rural industrial development policies to alleviate the regional disparity between urban and rural areas.

Koyano (1965) points out that the concept of craftsmen as understood today was established in the sixteenth and seventeenth centuries in Japan, but what is most significant here is the role they played in the course of Japan's modernization. Most of the medium- and large-scale industries are located in the outskirts of major cities and towns, as opposed to cottage industries, a good number of which are located in villages or in the outskirts of small towns. Cottage industries, therefore, help in the decentralization of industrial activities resulting in the balanced development of a country.

Rao and Saha (1986) observe that cottage industries play a crucial role in bringing about balanced regional development in a country. With further development of these industries, their export earnings are bound to go up in future, and this will reduce the tremendous strain on the balance of payment. Kaplan (2009) points out that cottage industries use less capital and simple technology which enables them to be capable of quick production. As a result, they are complimentary to large-scale industries; they offer raw materials or semi-finished goods to the large industries.

According to a report written in the late 1980s by the Bangladesh Ministry of Industries, more than 400,000 rural and cottage industrial establishments employed about 1.2 million workers in rural areas. Puri (1988) observes that the plan on rural economic development can never attain full success without proper emphasis on small-scale and cottage industries. Only a well thought out and comprehensive programme of decentralized industry in rural areas, implemented with drive, sincerity and a sense of paramount urgency can provide an effective answer to the vast problem of rural unemployment. He further observes that the economic history of India abounds in magnificent records of affluent village industries.

Ghosh (1984) states that the demand for consumer items will increase as rural income rises due to greater agricultural productivity stimulated by government policies. More workers will thus be employed in the maintenance and repair of equipment used in the rural zones.

Cottage and small-scale industries provide an entry point for many Kenyan entrepreneurs into the manufacturing and services sector and serve as the testing ground for the development of low cost products. Ndam (1991) points out that in Africa, cottage industries foster entrepreneurship, lay the basis for great industrial endeavors, and contribute to forward and backward integration within the manufacturing and with other sectors, especially agriculture. He further notes that in the United Republic of Tanzania, traditional blacksmiths make a major contribution to the present rural economy and their continued decline would cause considerable disruption and unemployment in related sectors.

The *Fourth Human Development Report* (*2005*) published by the United Nations Development Programme (UNDP) observes that the rate of wage employment in Kenya has been rather low, but that work in informal industrial activities, such as small and medium-scale enterprises, has been substantial, giving livelihood opportunities to many Kenyans.

According to the Kenya's Ministry of Industrialization's *Strategic Plan* (*2008-2012)*, the cottage industries, generally referred to as the micro-industries, provide direct employment to more than 6 million Kenyans. The plan goes to the extent of identifying Micro, Small, and Medium Industries (MSMIs) as being an integral part of Micro and Small Enterprises, which constitute over 80% of industries.

The *Kenya Vision 2030* recognizes the central role to be played by the manufacturing sector in the realization of the goal of making Kenya a newly industrialized country by the year 2030 observes that for Kenya to be an industrialized and become a middle income nation by the year 2030, MSMIs will be the critical engine to propel the industrialization process.

In the *Kakamega District Development Plan (1997-2001)*, it is observed that the informal sector is widespread in the district and contributes considerably to the growth of the district economy. However, the sector requires intensive promotion since it uses affordable and readily available technology and is among the sectors which offer most of the employment opportunities. It is estimated that the district has more than 5,000 units of small-scale business enterprises performing various activities with variety of goods.

The Development Plan identifies wood carving, bakeries, soap production, boat-making, the production of bricks and roofing tiles, bicycle repairs, et cetera, as a few examples of cottage industries.

2.0 METHODOLOGY

This research paper employed the exploratory research design (field studies). This design was preferred because the study was basically a fact-finding mission; to find out the place or contribution of home-based industries in rural Kenya's socio-economic progress. A case study of Kakamega County was used. The study was both qualitative and quantitative in nature.

2.1 Areas of Study

Kakamega County is a part of the larger Western Province of Kenya. It is predominantly inhabited by the Luhya-speaking community. This study was conducted in three districts in the county, namely: Kakamega North, Kakamega East, and Lugari.

Kakamega North District is situated off the Eldoret-Webuye Road, on the way to Kakamega Town. It is 427.4 square kilometres in size, has a population density of 480 persons per square kilometre, and 40,635 households with an approximate population size of 205,166 people. This district has four divisions, namely: Kabras Central, Kabras South, Kabras, East, Kabras North, and Kabras West (*Kenya National Bureau of Statistics, 2009*). However, due to the constraints of time and finances, the study in this district was confined to Manda Sub-Location, which is in Sirungai Location, Kabras North Division.

Kakamega East District is located along the Kakamega-Kisumu Highway. It is 445.5 square kilometres in size, has a population density of 358 persons per square kilometre, and 34,177 households with an approximate population size of 159,475 people. This district has three divisions, namely: Shinyalu, Ileho, and Kakamega Forest. Due to the constraints of time and finances, the study in this district was limited to Mukhonje Sub-Location, situated in Ilesi Location, Shinyalu Division.

Lugari District is situated along the Eldoret-Webuye Road. It is 668.9 square kilometres in size, has a population density of 437 persons per square kilometre, and 59,476 households with an approximate population size of 292,151 people. This district has three divisions, namely: Matete, Lugari, and Likuyani. Because of the limitations of time and finances, the study in this district was confined to Kivaywa Sub-Location, which is in Chevaywa Location, Matete Division.

Kakamega North, Kakamega East, and Lugari Districts have their provincial headquarters in Kakamega Town, also the county headquarters. They receive fairly high levels of rainfall throughout the year, and agriculture is the dominant economic activity. Some of the crops cultivated in these districts include:

sugarcane, maize, beans, sunflower, potatoes, cassavas, fruits, et cetera. A map of Kakamega County is shown in Figure 1.
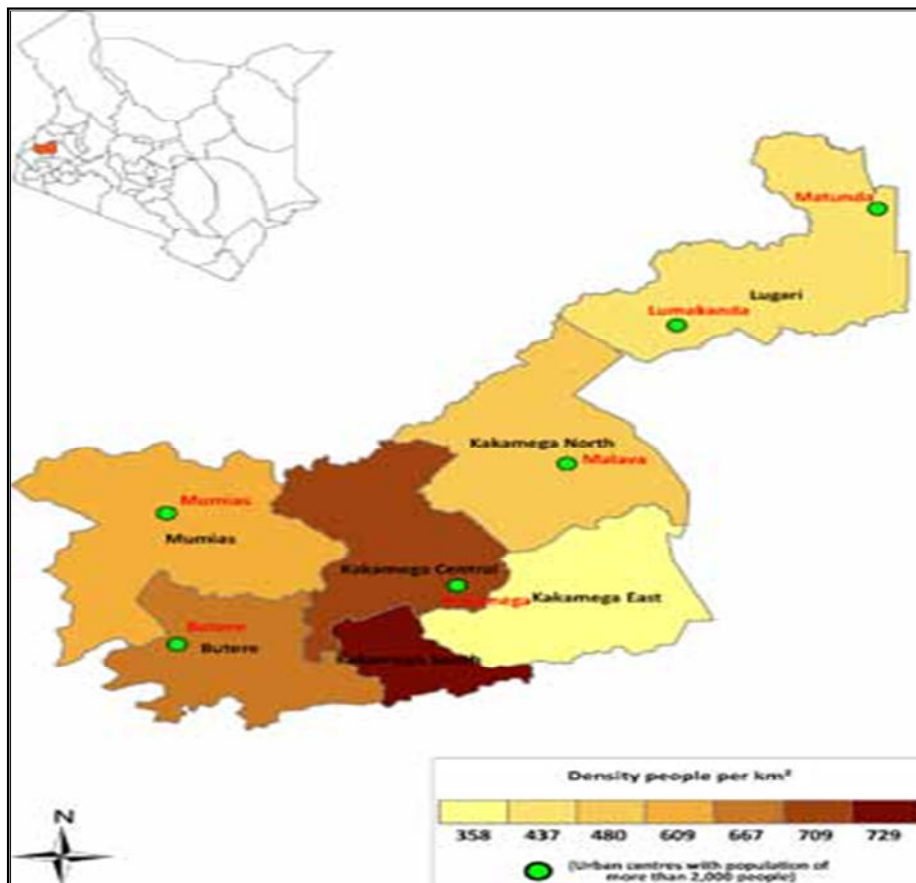

Figure 6: A map of Kakamega County, Kenya.

2.2 Unit of Analysis and Unit of Observation

The unit of analysis was the owners and workers in cottage industries while the unit of observation was the cottage industries in the areas of study.

2.3 Sampling Design and Procedures

Manda, Mukhonje, and Kivaywa were purposively selected for the study. The information obtained from the local leaders of Manda, Mukhonje and Kivaywa revealed that these sub-locations had 180, 200 and 170 cottage industries, respectively (a total of 550). According to Krejcie and Morgan (1970), from a population size of 550, a sample size of 226 is to be used. The Proportionate Random Sampling procedure was applied to come up with a sample size of 70, 82, and 74 respondents in Manda, Mukhonje and Kivaywa, respectively, who were picked out through Simple Random Sampling.

2.4 Sources of Data

2.4.1 Primary Data

The sources of primary data included youth, men, and women owning or working in the cottage industries, local leaders and key informants in the region.

2.4.2 Secondary Data

These included information from publications at the district and national level, for instance, district development plans, national census reports, et cetera.

2.5 Methods of Data Collection

2.5.1   Observation

In the course of the study, snapshots of the various forms of cottage industries seen by the naked eye were taken, including those of respondents in their natural setting. An observation check-list was used.

2.5.2 Focus Group Discussions

A well-selected group composed of 8-12 members was assembled in each of the three sub-locations, and

questions and discussion points were put forth to generate a discussion. Open-ended questions and Focus group Discussion guides were used.

2.5.3 Semi-scheduled Questionnaire

A set of research questions was presented to the respondents so as to extract information.

2.6   Data Analysis

The data collected was both qualitative and quantitative in nature. This study, therefore, employed descriptive statistics and inferential statistics in the analysis of data.

2.7 Main Challenges in the Field

2.7.1 State of roads. Most of the feeder roads were muddy and almost impassable. The researcher and his assistants had a difficult time skipping and, in some cases, stepping into mud.

2.7.2 Distance Involved. The research study was tedious. This is because it entailed walking from village to village, using footpaths that motorbikes could not use, and crossing makeshift bridges.

2.7.3 Constraints of time and finances. The study used up a lot of time since the researcher had to spend adequate time with the respondents so as to get the required information.

3.0 RESULTS AND DISCUSSION

3.1 Demographic Characteristics of Respondents

The demographic characteristics in this study are: gender, age, sub-location, education level, marital status, and number of children.

3.1.1 Gender

This section looks into the composition of the respondents based on their gender. The distribution of males and females based on gender is summarized in Figure 2.

Figure 2: The Gender of Respondents
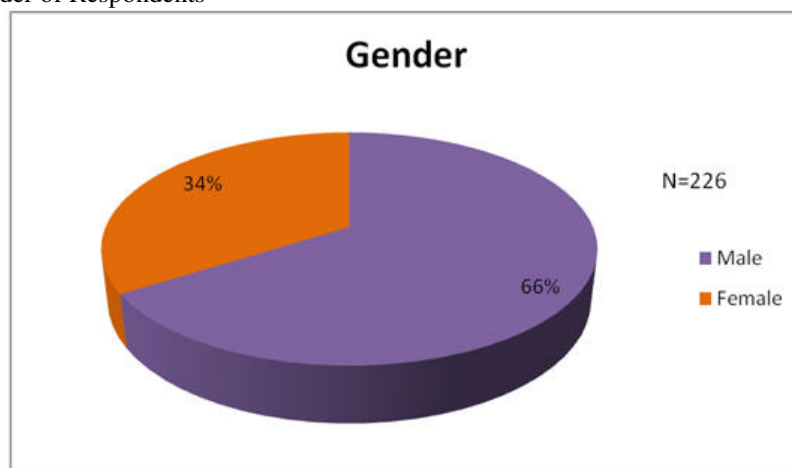
Data in Figure 1 shows that majority (66%) of the respondents were males while minority (34%) were females. This could be because most of the activities in the industries require a lot of stamina. Another reason could be that most women in the countryside spend a lot of time on household chores. Blackden and Wodon (2006) observed that women can only engage in directly productive economic activity after or in conjunction with the discharge of their domestic responsibilities.

According to the Kenya Population and Housing Census Report (2009), the rural population percentage of males in Western Province was 48 percent while that of females was 52 percent. This contrasts with the findings in this study.

3.1.2 Age

This section focuses on the ages of respondents, and was categorized into; 17 years and below, 18-50 years, and 51 years and above, according to Ericson's Model (Boeree, 1997). Classification based on age is summarized in Figure 3.

Figure 3: The Age Brackets of Respondents
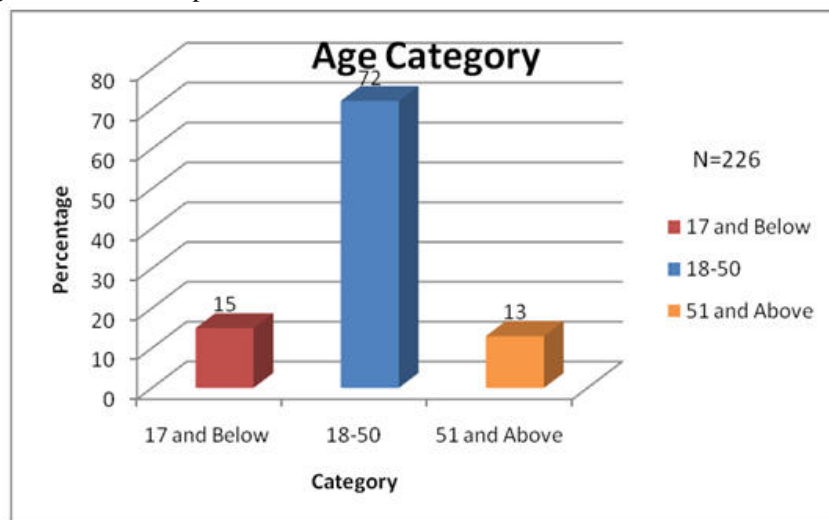
Data in Figure 3 shows that majority of the respondents (73%) fell in the 18-50 age brackets. Mosaddeque et al (2008), while looking into farmers' characteristics associated with the participation in cottage industry activities in Bangladesh, observed that the age of most farmers ranged from 18-50 years. This mirrors the findings in this study whereby majority of the owners and workers in cottage industries were in the 18-50 age brackets.

3.1.3 Level of Education

The respondents' education levels were classified into; no schooling, primary schooling, secondary schooling, and post-secondary schooling. This is presented in Table 1.

Table 1: The Education Level of Respondents

Level of Education	Frequency	Percentage
No Schooling	93	41
Primary Schooling	105	47
Secondary Schooling	22	10
Post-secondary Schooling	5	2
Total	145	100

Data in Table 2 shows that those with primary school education were in the majority (47%) while those with post-secondary education were in the minority (2%). According to the Kenya Population and Housing Census Report (2009), the percentage of those in Western Province who had primary school education was 61 percent while those with post-secondary education were 3 percent. Both in this study, and in the Census Report, it is evident that the percentage of those with post-secondary education was quite low.

It is worth noting that the percentage of those with no schooling was fairly high (41%). This could be a pointer to high illiteracy levels in the areas of study. The Sub-Chief of Manda Sub-Location reinforced this by saying: *"Most of the people engaging in cottage industries in this region have fewer options in terms of the type of employment to engage in because they did not go far academically. This is why most of them either own or are employed home-based industries as their best alternative".*

The perception among most respondents was that the majority of people in the areas of study engaged in cottage industries due to having low levels of education, and therefore, they could not secure white-collar jobs which required higher academic credentials. This reflects findings in *The Human Development Report* (UNDP, 1995) which concluded that the increasingly competitive labour market demands ever-higher levels of education, and that people without it are at a growing disadvantage.

3.1.4 Marital Status

This section highlights the marital status of the respondents in the areas of study, which were categorized into: the single, married, divorced, and the widowed. The marital status is summarized in Figure 4.

Figure 4: The Marital Status of Respondents
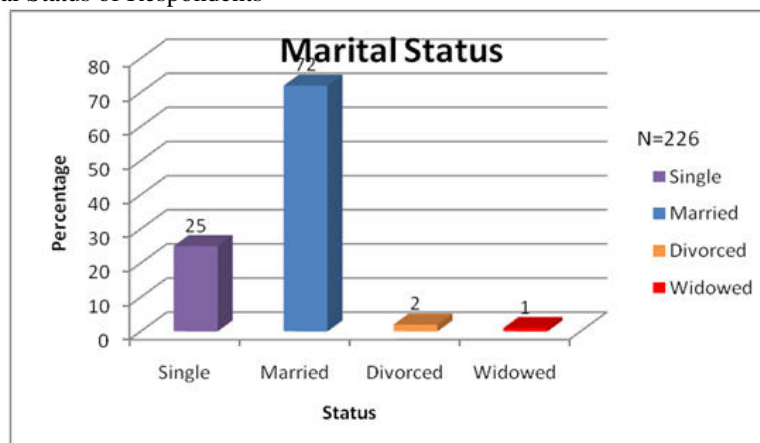
Data in Figure 4 shows that most of the respondents (72%) were married. The perception among most respondents was that married people engaged in the activities of cottage industries more than the unmarried due to the fact that the married were under pressure to meet the needs of their families. A village elder said: *"Most of the owners and workers in these industries are married. They have families to take care of, and therefore, they must find ways to earn a living, hence, their involvement in cottage industries".*

Faridi et al (2009), while examining the impact of marital status on female labour force participation, concluded that those who were married were more likely to participate in productive economic activities than those who were not. This reinforces the perception among most of the respondents in the areas of study.

3.1.5 Number of Children

This section highlights the number of children per respondent, and was categorized into: no child, one to three children, and more than three children. This is presented in Figure 5.

Figure 5: The Number of Children per Respondent
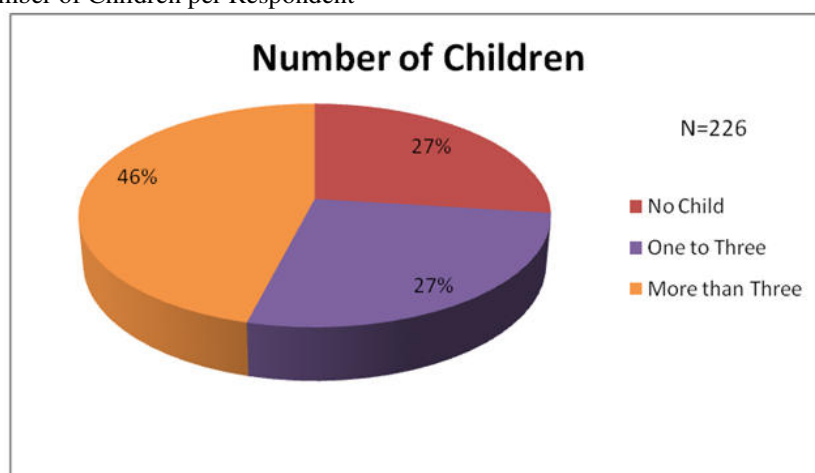
Data in Figure 5 shows that most of the respondents (46%) had more than three children while those with none, and with one to three, were the least (26%). It is noteworthy that the percentage of those with more than three children was fairly high (46%). This could be a pointer to the high population growth rate in the areas of study. A village elder said: *"People in this area have many children; the higher the number of children, the harder they have to work".*

Faridi et al (2009) observed that the household size significantly and positively influenced the decision of households to engage in home-based work. His findings revealed that the more the dependents, and the larger the number of children, the more the financial burden and economic pressure on a family.

3.2 The Home-based Industries in Kakamega County

3.2.1 Pottery

Data collected through questionnaires indicated that 22 percent of the total number of respondents (226) in this study engaged in pottery. The percentage of cottage industries in Mukhonje which were dealing in clay items was 65 percent. The high involvement in pottery in Mukhonje could be due to the abundant availability of clay, which was readily available along river banks in the area. The Sub-Chief of Mukhonje Sub-Location said: *"Most people in this area are potters due to the abundant availability of clay along our river banks".*

Pottery as a cottage industry was either self-owned, family-owned, or owned through partnership. Family members mostly worked for no pay while outsiders worked for pay. On the uses of pots, a village elder said: "Pots are used for preparing liquor, cooking, as traditional fridges for storing and cooling drinking water, and also given out as presents in weddings. Almost every household in Luhya-land, whether poor or rich, at least owns a pot or two". The pots were made with the use of an improvised potter's wheel (tire rims). They are dried under a shade for almost a week, arranged in a kiln and roasted by fire for at least three days, after which the kiln is dismantled and the clay items retrieved. Finished products are ready for use or sale.

The money obtained from the sale of clay items enabled the owners and workers in the pottery-based cottage industries to meet their day-to-day needs, for instance, buying food and clothing for the family, payment of school fees for their children, et cetera. Clay products include: pots, flower jars, and moneybanks. Nelson (2013) conducted a similar study which looked into the social, cultural, and economic setting for the production, distribution, and consumption of traditional pottery among the Kamba people of South-Eastern Kenya. See Plate 1:

Plate 1: A picture taken in Mukhonje Sub-Location in December 2012 by the researcher, showing a potter giving his clay item the final touches.

3.2.2 Crude Sugar Production

Data collected through questionnaires showed that 8 percent of the total number of respondents (226) in this study engaged in crude sugar production. The percentage of those who engaged in crude sugar production in Manda and Kivaywa was 5 percent and 19 percent respectively. Sugarcane, a major cash crop in Western Province, is the raw material used.

Jaggeries were either self-owned, family-owned, or owned through partnership. Members of the family mostly worked for no pay while outsiders worked for pay. The cane from which sucrose has been extracted would be dried up in the sun and used as firewood or decomposed into manure. Frank (1965) looked into crude sugar production. See Plate 2:
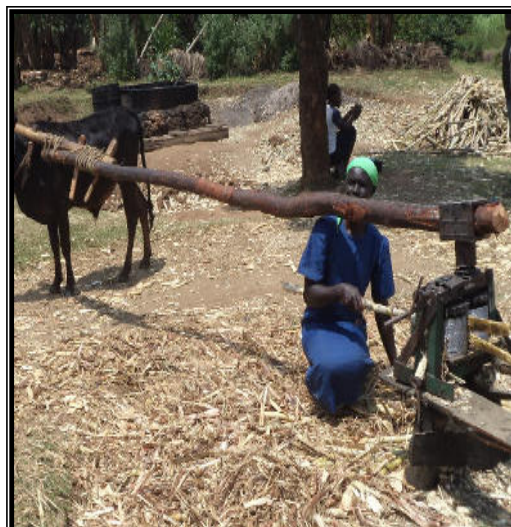
Plate 2: A picture taken in Manda in December 2012, by the researcher, of a woman feeding sugarcane into her oxen-driven crushing machine.

The crude sugar producers either sell the products by themselves or liaise with middlemen and women to re-sell the products in distant markets. Molasses, which is one of the waste products, is used in animal feeds as an appetizer and by liquor producers as a sweetener. Crude sugar is used in making biscuits and sweets. The proceeds obtained by owners and workers in jaggerry-based cottage industries enabled them to meet the needs of the family.

3.2.3 Brick-making

Data collected through questionnaires indicated that 16 percent of the total number of respondents (226) in this study took part in brick-making. The percentage of those who engaged in brick-making in Manda, Mukhonje and Kivaywa was 24 percent, 3 percent, and 23 percent respectively. Soil is the major raw material. Brick-making cottage industries were either self-owned, family-owned, or owned through partnership. Family members mostly worked for no pay while outsiders worked for pay. The typical African traditional houses were mud-walled and grass-thatched. The Sub-Chief of Kivaywa Sub-Location said: *"Brick-making was common among British colonial settlers, who constructed brick-walled houses. The Africans who had experience in brick-making later began constructing brick-walled houses. With time, brick-walled house construction became common practice".*

Bricks are used for construction purposes. The proceeds from the sale of bricks enabled families to meet their day-to-day needs. Muchilwa (2013) conducted a similar study on brick-making, but focused on the clay brick firing process. See Plate 3:

Plate 3: The researcher (left) posing for a picture at a brick-making site in Kivaywa in December 2012.

3.2.4   Liquor Production

Data collected through questionnaires showed that 18 percent of the total number of respondents (226) took part in liquor production. The percentage of those who engaged in liquor production in Manda, Mukhonje, and Kivaywa was 24 percent, 5 percent, and 25 percent. The major raw materials are maize flour and finger millet. Liquor production cottage industries were either self-owned, family-owned, or owned through partnership.

About liquor and brews, a village elder said: "Liquor and brew is served in all our Luhya cultural events. To appease ancestors, a little drink was poured on the ground. Also, elders read the behaviour of the shape of the top foam of the brew to interpret matters in the community". Matzopoulos et al (2011) looked into the economic contribution of liquor. See Plate 4.

Plate 4: A picture taken in Mukhonje Sub-Location in December 2012, by the researcher, of the set-up for liquor production.

3.2.5   Quarrying & Masonry

Data collected through questionnaires showed that 7 percent of the total number of respondents (226) in this study took part in quarrying and masonry. The percentage of those who engaged in quarrying and masonry in Manda, Mukhonje, and Kivaywa was 12 percent, 5 percent, and 4 percent respectively. A good number of people had rocky and stony pieces of land, and therefore, the raw materials were readily available. The masonry-based cottage industries were either self-owned or family-owned. Most family members worked for no pay while outsiders were paid. Masons in the areas of study earned money from their quarrying activities and were able to meet family needs and even invest in new ventures. Birabwa (2006) looked into the ways in which quarrying transformed the socio-economic lives of those who engaged in it. See Plate 5.
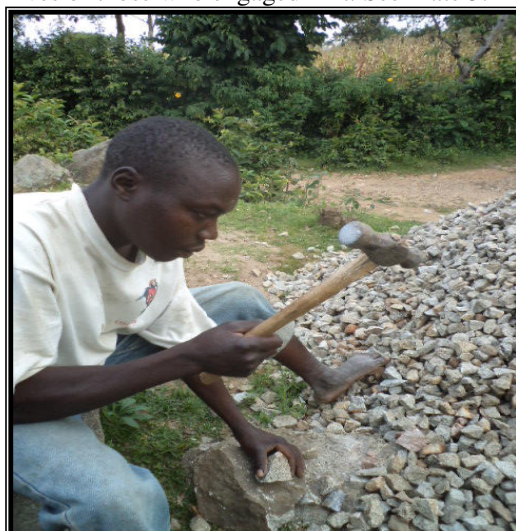

Plate 5: A picture taken in Mukhonje Sub-Location in December 2012, by the researcher, of a young man splitting a rock.

3.2.6   Tree Logging & Carpentry

Data collected through questionnaires indicated that 11 percent of the total number of respondents (226) in this study took part in carpentry. The percentage of those who participated in carpentry in Manda, Mukhonje, and Kivaywa was 13 percent, 7 percent, and 12 percent respectively. Timber is the main raw material. Carpentry-

based cottage industries were either self-owned, family-owned, or owned through partnership. Family members mostly worked for no pay while outsiders worked for pay. Proceeds from the sale of furniture enabled them to meet family needs. On the uses of trees, a village elder said: "*Forests were highly valued in the African traditional set-up, and that is why forests were better conserved back then*". King (1996) looked into different kinds of trade, including carpentry. See Plate 6.

Plate 6: A picture taken in Manda Sub-Location in December 2012, by the researcher, of a carpenter at work.

3.2.7   Traditional Medicine Extraction

Data collected through questionnaires showed that 3 percent of the total number of respondents (226) in this study took part in the extraction of traditional medicine. The percentage of those who engaged in traditional medicine extraction in Mukhonje and Kivaywa was 4 percent and 5 percent respectively. Traditional medicine-related activities were strictly family-owned since the elderly herbalists passed on the knowledge and skills to their offspring. Medicine-persons receive many clients, and the proceeds from the sale of their herbs enable them to meet family needs. Lambert et al (2011) highlighted the contribution of traditional herbal medicine practitioners to Kenyan health-care delivery. See Plate 7.

Plate 7: A picture taken in Mukhonje in December 2012 by the researcher, showing a traditional medicine man crushing and drying herbs.

3.2.8   Charcoal Production

Data collected through questionnaires showed that 3 percent of the total number of respondents (226) engaged in charcoal production. The percentage of those who engaged in charcoal production in Manda and Mukhonje was 7 percent and 1 percent. Trees are the major raw materials. Charcoal production was either self-owned, family-owned, or owned through partnership. Family members worked for no pay while outsiders worked for pay. Charcoal was either used by households or sold in nearby and distant markets. Proceeds from the sale of charcoal enabled families to meet their day-to-day needs, for instance, buying food, medication, school fees for children, and even investment in new ventures. Ruuska (2012) examined the importance of charcoal production to household income. See Plate 8:

Plate 8: A picture taken in Manda in December 2012 by the researcher, showing a charcoal-burning site.

3.2.9   Basketry & Weaving

Data collected through questionnaires showed that 7 percent of the total number of respondents (226) in this study took part in basketry and weaving. The percentage of those who engaged in basketry and weaving in Manda and Kivaywa was 9 percent and 1 percent respectively. Papyrus reeds and the barks of herbs are the major raw materials. Weaving and basketry-based cottage industries were self-owned, family-owned, or owned through partnership. Ropes are made from sisal. Most people in Western Kenya use sisal plants as landmarks on boundaries. This makes it readily available in most areas. King (1996) looked into the different kinds of trade, including carpentry. See Plate 9.

Plate 9: A picture taken in Kivaywa Sub-Location in December 2012, by the researcher, of a man extracting sisal for weaving baskets and ropes.

3.2.10   Baking

Data collected through questionnaires indicated that 1 percent of the total number of respondents (226) in this study engaged in baking. The percentage of those who engaged in baking in Mukhonje was 4 percent. Bakery-based cottage industries were self-owned, family-owned, or owned through partnership. A local leader said: *"Baking is a recent way of cooking because in the African traditional set-up, the main methods of cooking food were boiling and roasting"*. The cakes and bans are sold to earn the family an income that enables them to meet their day-to-day needs. Rono (2014) looked into baking, though he majored on the adaptation of processing technologies in the bakery industry in Kenya. See Plate 10.

Plate 10: A picture taken in Mukhonje Sub-Location in December 2012, by the researcher, of dough that was to be used in baking.

3.2.11   Bicycle Repair

Data collected through questionnaires showed that 2 percent of the total number of respondents (226) in this study engaged in baking. The percentage of those who engaged in bicycle repair in Manda, Mukhonje, and Kivaywa was 3 percent, 1 percent, and 1 percent respectively. Bicycle repair cottage industries were self-owned, family-owned, or owned through partnership. Members of the family worked for no pay while outsiders worked for pay. Proceeds from the render of bicycle repair services enabled the family to meet day-to-day needs, for instance, the purchase of food, medical care, payment of school fees for children, et cetera. King (1996) looked into different kinds of trade, including bicycle repair. See Plate 11.

Plate 11: A picture taken in Manda in December 2012, by the researcher, of a man repairing a client's bicycle.

3.2.12   Flour-grinding

Data collected through questionnaires showed that 1 percent of the total number of respondents (226) in this study engaged in flour-grinding. The percentage of those who engaged in flour-grinding in Mukhonje was 1 percent. The flour-grinding cottage industry was strictly family-owned. Members of the family worked for no pay. The main raw materials are maize, sorghum, cassava, and finger millet. A village elder said: *"Before the emergence of diesel-powered mills, the people of the past used to grind maize with the use of stones".* A number of villagers, one at a time, streamed in to have their cereals or grains ground. They paid for the service through barter trade by coming with extra cereals in a small basket which was given to the owner. See Plate 12.

Plate 12: A picture taken in Mukhonje Sub-Location in December 2012, by the researcher, of a woman grinding maize grains.

3.2.13 Shoe-making & Repair

Data collected through questionnaires showed that 1 percent of the total number of respondents (226) in this study engaged in shoe-making and repair. The percentage of those who engaged in shoe-making and repair in Manda and Mukhonje was 2 percent and 1 percent respectively. Hides and skins are the major raw materials. These cottage industries were self-owned, family-owned, or owned through partnership. Shoe-makers have improvised tools for cutting and sewing animal skins onto a plastic or rubber sole. Others use old tires to cut out make sandals. They also repair torn shoes. Proceeds from shoe-making and repair enables them to meet family needs. King (1996) looked into different kinds of trade, including shoe-making and repair. See Plate 13.

Plate 13: A picture taken in Manda Sub-Location in December 2012, by the researcher, of shoe-makers/repairers busy at work

3.3 The Socio-economic Contribution of the Home-based Industries in Kakamega County

The purpose of this academic paper was to examine the socio-economic contribution of home-based industries. The study was anchored on the theory of dualism which assumes a split of economic and social structures of different sectors (Boeke, 1953). In the pre-capitalistic society, people worked for social needs in lieu of economic needs. For example, if three acres of land were enough to supply the needs of a household, one would not cultivate six acres. Most of the home-based industries in Kakamega County have a few of the elements in the pre-capitalistic society, though the respondents engaged in them for both social and economic gain.

To find out if there was any significant relationship between the establishment of cottage industries and their socio-economic contribution, non-parametric chi-square tests were performed on the 145 owners and 81

workers in the cottage industries, respectively, and the results are shown in Tables 4 and 5.

Table 4:

Investment of Income Earned

	Observed N	Expected N	Residual
Invested	105	72.5	32.5
Did Not Invest	40	72.5	-32.5
Total	145		

Table 5:

	Investment of Income Earned (Owners)
Chi-Square	29.138[a]
df	1
Asymp. Sig.	.000

A significant chi-square indicates that the data varies from the expected values. A chi-square was calculated comparing the frequency of investment of income earned by owners of cottage industries. It had been hypothesized that there was no difference between those who invested and those who did not. However, it turned out that there was a significant deviation from the hypothesized values [chi-square (1) =29.138, p<0.05]. There was, therefore, a distinction between those who invested and those who did not. Those who invested by way of re-investment of their income/profits into their industries, starting a business, farming, payment of school fees, et cetera, had improved socio-economic lives, both in the short- and long-run, as compared to those who did not invest. This is summarized in Table 5 and 6, and later discussed.

Table 5: Wage Bracket (Workers)

|	Observed N	Expected N	Residual
No Pay	27	13.5	13.5
01-50 Kshs	4	13.5	-9.5
51-100 Kshs	10	13.5	-3.5
101-150 Kshs	13	13.5	-.5
151-200 Kshs	11	13.5	-2.5
Above Kshs 200	16	13.5	2.5
Total	81		

Table 6:

	Wage Bracket (Workers)
Chi-Square	22.037[a]
df	5
Asymp. Sig.	.001

A significant chi-square indicates that the data vary from the expected values. A chi-square was calculated comparing the frequency of the wage brackets of workers in cottage industries. It was hypothesized that there was no difference between those who invested and those who did not. There was significant deviation from the hypothesized values [chi-square (2) =22.037, p<0.05]. There was, therefore, a difference between those in lower wage brackets and the ones in higher wage brackets. Those who earned some income were far much better than those who were working for no pay because they would be able to use their wages to meet their needs and also invested whatever little they were left with.

4.4.1 The Number of Workers in the Industry

The number of workers in an industry was categorized into three: one or self, two to four, and more than four. This is summarized in Figure 6.

Figure 6: The number of workers employed in the cottage industries
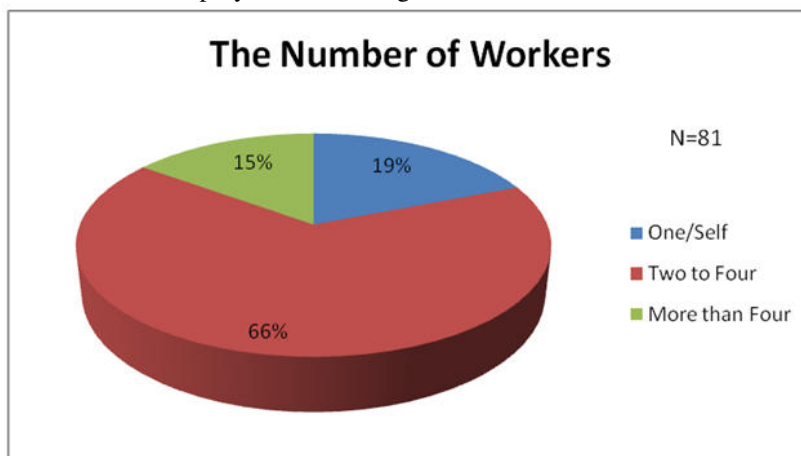
The owners of cottage industries who were working without the help of employees or had only one worker were 19 percent. Those who had between two and four workers were 66 percent. Those with more than four workers were 15 percent. It is evident that cottage industries created opportunities for self-employment and employment. According to the Kenya's Ministry of Industrialization's *Strategic Plan* (*2008-2012)*, the cottage industries, generally referred to as the micro-industries, provide direct employment to more than 6 million Kenyans.

The number of workers is one of the indicators of growth. Alam et al (2011) pointed out that the number of workers determines the size of the enterprise. Ziolkowski (1966) noted that the largest numbers of workers per unit was found in industrial units engaged in production of goods with a fairly large market. Pandey (2013) observed that the number of persons working in an industrial concern indicates the overall strength and capacity of the industry.

4.4.2 Change in the Number of Workers

The change in the number of workers was classified into three: where there was a decrease in the number of workers, where the number of workers was constant, and where there was an increase. This is presented in Table 2.

Table 18: The change in the number of workers in the cottage industries

Change in the Number of Workers	Frequency	Percent
Decrease	3	2
Constant	80	55
Increase	62	43
Total	145	100

One of the indicators of industrial growth is increase in the number of workers, therefore, this question was asked with the intention of determining whether or not the cottage industries registered growth in terms of increase in the number of workers. Of the 145 owners of the cottage industries, only 3 had the number of their employees decrease. Slightly more than half of the owners of cottage industries (55%) had their number of workers remain constant while 43 percent of them recorded an increase in the number of their workers. Only 2 percent recorded a decrease in the number of their workers. In the Economic Weekly (1959), it is pointed out that the addition to or withdrawal from the existing workforce is directly reflected in a corresponding variation in the total output.

4.4.3 Number of Family Members in the Workforce

The number of family members in an industry was categorized into: none, one to three, more than three, and those who did not respond to the question. This is summarized in Figure 7.

Figure 7: The number of family members in the workforce of cottage industries
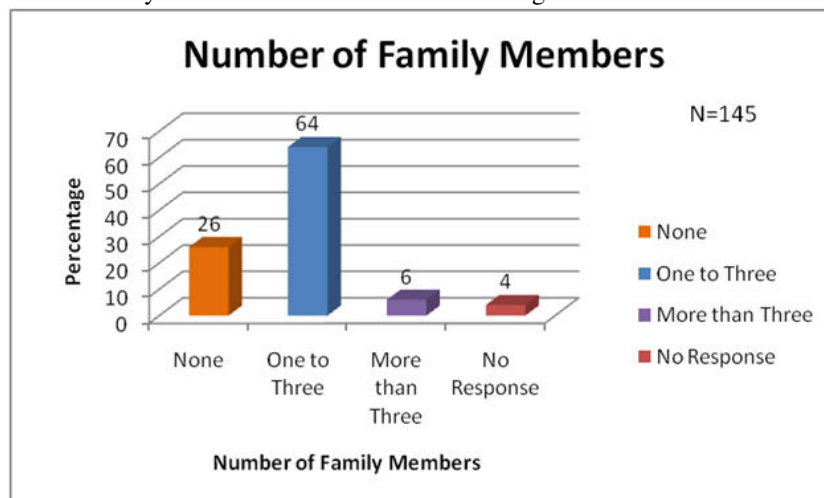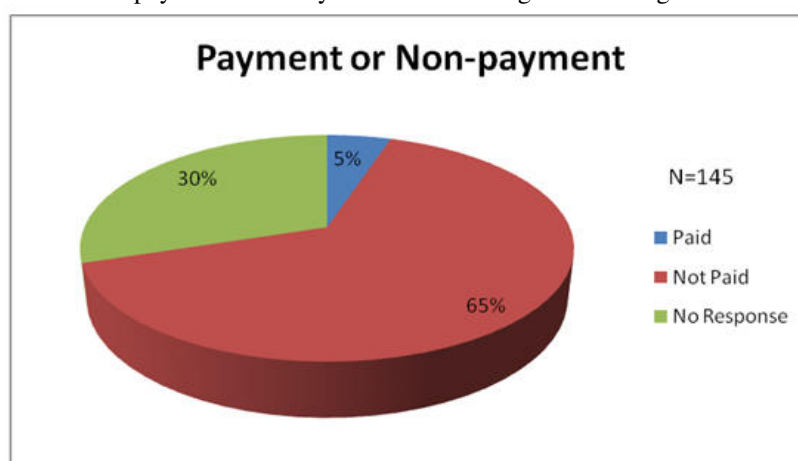

In 26 percent of the cottage industries, there were no family members in the workforce. These were industries that needed only an individual to operate, for instance, basketry. Those owners who had between one and three family members working in their industry were 64 percent. Those with more than three family members were 6 percent. The more the tasks involved or the higher the scale of production, the higher the number of family members required in an industry. A village elder said: *"Instead of the owners of cottage industries paying outsiders to do the work, the family members joined hands and worked as a team"*.

Thanga and Melba (2013) observed that cottage industries involved all the family members' contribution for the development of the family. However, in a good number of cottage industries, there was reliance on both family- and non-family members. Ziolkowski (1966) pointed out that the predominance of relatives and family members in the labour-force would imply that effective control of the production processes in most of the industrial units remained with a homogenous group which functioned jointly in taking the vital managerial decisions.

4.4.4 Payment or Non-payment of Family Members
The payment or non-payment of family members involved in cottage industries was categorized into those who were paid and those who were not paid. This is summarized in Figure 8.

Figure 8: The payment or non-payment of family members working in the cottage industries

Of the 145 owners, only 5 percent paid the family members who were involved in their cottage industries, while those who had family members working for no pay were 65 percent. This means that almost two-thirds of the cottage industries did not pay family members. However, it is noteworthy that those who were working for no pay benefitted non-monetarily. A village elder said: *"Instead of the owner of a cottage industry paying outsiders to do the work, he/she brings on board family members, who work for no pay; they collectively benefit from their involvement"*. Ziolkowski (1966) reinforces this by observing that workers spend on food and clothing (basic needs) more than half of what they earn.

4.4.5 Profit or Loss
This section focuses on the profit- or loss-making status of the cottage industries. This was classified into those who got profits and those who got losses. This is summarized in Figure 9.

Figure 9: The profit- or loss-making status of the cottage industries

Most of the owners of cottage industries (93%) were of the opinion that they were making profits due to low costs of production. A banker said: "Most of the cottage industries rely on readily available raw materials provided by nature, and therefore, only a few may incur the cost of buying them. In basketry and weaving, for instance, what one needs are papyrus reeds, which grow in plenty along river banks. Most family members in the cottage industries work for no pay. Therefore, the cost of production is almost negligible in most cottage industries, thereby shielding them from loss-making".

The few who thought they recorded losses (4%) in the long-run period were mostly those who were forced to buy raw materials at exorbitant prices. However, Chand and Junejo (2008) observe that lack of up-to-date information, out-dated technology, and poor management had an adverse effect on the sales and profit position of most industrial units. In a related study in India (UNESCO, 1996), profits of the industrial units examined were found to be on a modest scale, and only two of the 78 incurred losses since they were new.

4.4.6 Remuneration
The wage brackets of workers in the cottage industries were categorized into those who got no pay, those who got up to Sh100, those between Sh101 and Sh200, and those who got more than Sh200. This is presented in Table 3.

Table 3: The daily wages of the workers in cottage industries

| Daily Wage Brackets of Workers	Frequency	Percent
No Pay	27	33
001-100 Kshs	15	19
101-200 Kshs	25	31
Above 200	14	17
Total	81	100

The employees who worked for no pay were 33 percent. Sivaraman et al (1981) observed that there are difficulties in increasing the earnings of the worker beyond a certain point. They further note that the traditional production chain consists of several operations where boredom is severe and the net earning per hour of time spent is pitiful, and that in most instances the raw material is not prepared to a standard which will make the final product sufficiently attractive for the buyer, thereby, fetching a better value for the time spent. Despite the poor remuneration, the workers of cottage industries are still able to sustain themselves from the very low wages.

Keane and Velde (2008) note that economists suggest that firms pay their workers n hourly wage rate that is equal to the amount by which output would increase as a result of an increase in an extra hour of work. However, some campaigners argue that it is not the appropriate basis for a minimum wage level.

4.4.7 Investment from Income Generated
The investment of income generated section was categorized into those owners of cottage industries who invested, those who did not, and no response. This is summarized in Figure 10.

Figure 10: The investment or non-investment of income generated
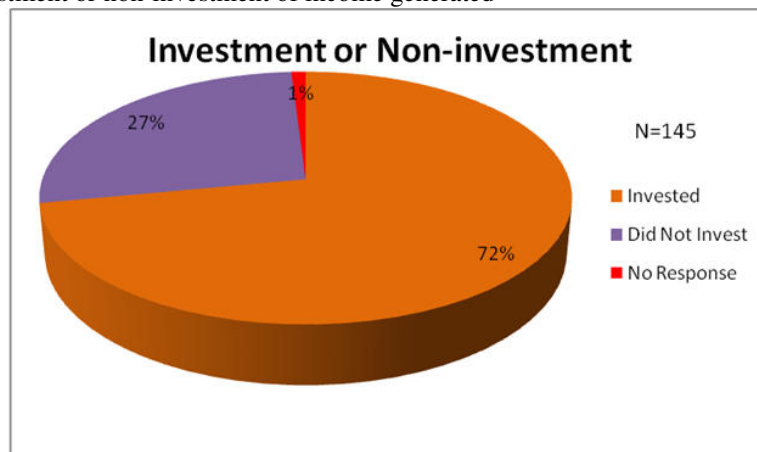
The majority (72%) invested their profits. Investment types were: the payment of school fees (investment in education), meeting of family needs (conceptualized as an investment), acquisition of assets, re-investment, et cetera. Therefore, 72 percent invested while 27 percent did not. In a similar study carried out in India (Ziolkowski, 1966), two-thirds of the respondents owned some kind of property (invested).

4.4.8 Type of Investment

The type of investment was categorized into: farming, asset acquisition, opening a business, re-injection of profits into the industry, education/fees and savings. This is presented in Figure 11.

Figure 11: The type of investment ventured into by the owners of cottage industries
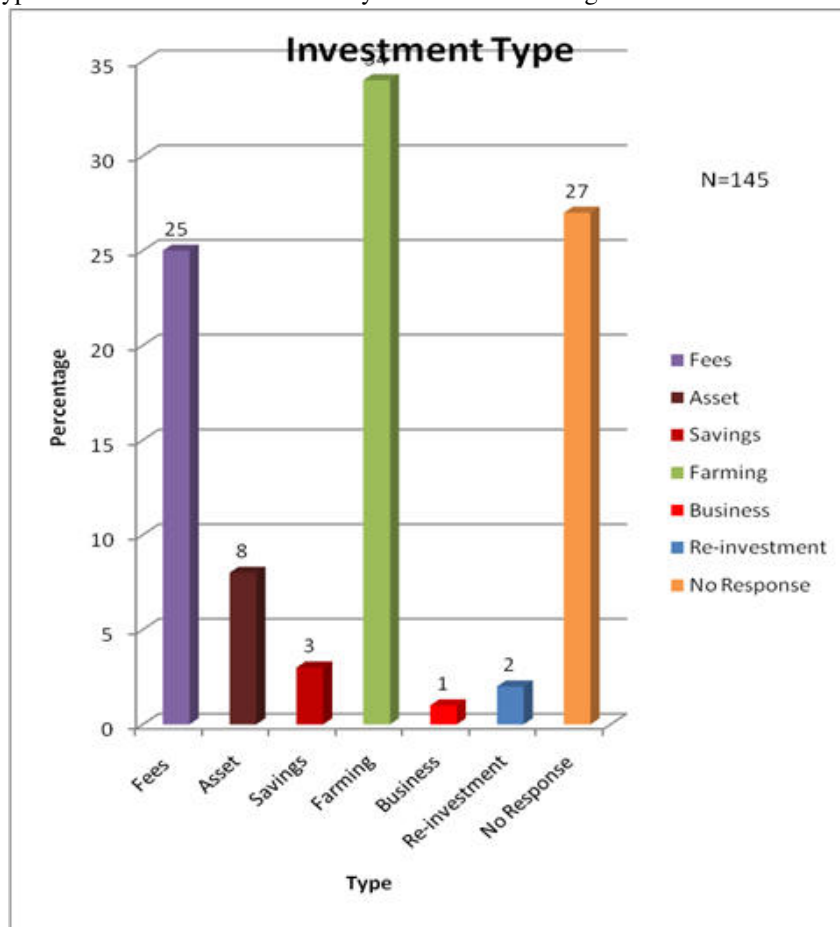
The major investment type was farming (34%) while the least was starting of a business. The payment of school or college fees, meeting of family needs (food, clothing and medication) and savings were conceptually treated by the researcher as investment. Ziolkowski (1966) notes that an examination of the nature of property invested in by the workers in industrial units revealed that in most cases it was land, houses, cattle,

poultry, et cetera.

4.0 CONCLUSION

This study established that cottage industries contributed to the socio-economic well-being of both the owners and employees of the cottage industries in Kakamega County, Kenya.

5.0 RECOMMENDATION

The government and the county governments should renew their focus on cottage industries by providing the necessary and sufficient conditions for their rapid growth and expansion.

REFERENCES

Alam et al (2011). "Effect of Entrepreneur and Firm Characteristics on the Success of Small and Medium Enterprises (SMEs) in Bangladesh", in the *International Journal of Business and Management*: East West University of Bangladesh, Vol. 6, No. 3.

Birabwa, Elizabeth. (). *Small-scale Stone Quarrying: Its Contribution to People's Livelihoods; A Case Study of Kasenge Parish, Nama Sub-County, Mukono District, Uganda*: Department of Geography, Norwegian University of Science and Technology.

Blackden, C. M, and Wodon., Q (Eds). 2006. "*Gender, Time Use, and Poverty in Sub-Saharan Africa* (World Bank Working Paper No. 73)": World Bank, Washington, D. C.

Chand, M. N., and Junejo, M. A. 2008. "Growth and Efficiency of Small-scale Industry and its Impact on Economic Development of Sindh": *Pakistan Journal of Commerce and Social Sciences*, Vol. 1.

Cottage and Small-scale Industries: A Reclassification. 1959. *The Economic Weekly* (pp. 845).

Faridi, M. Z. 2009. "The Socio-Economic and Demographic Determinants of Women Work Participation in Pakistan: Evidence from Bahawalpur District", in the *Research Journal of South Asian Studies*, Vol. 24, No. 2 (pp. 351-367).

Fourth Kenya Human Development Report: Linking Industrialization with Human Development, (2005; pp. v-viii, 1-3): *United Nations Development Programme*.

Frank, C. R. (1965). The Sugar Industry in East Africa: East African Institute of Social Research.

Ghosh, P. K. (1984). *Industrialization and Development: A Third World Perspective*: Greenwood Press, WestPort, Connecticut, London, England.

Hayami, Y. 1988. *Economic Development Institute of the World Bank toward the Rural-Based Development of Communities and Industry: Selected Experiences from East Asia* (pp. 189, 224-225, 250-283): The World Bank, Washington, United States of America.

Itagaki, Y. (1960). *Some Notes on the Controversy Concerning Boeke's "Dualistic Theory" Implications for the Theory of Economic Development in Underdeveloped Countries: Hitotsubashi Journal of Economics.*

Kakamega District Development Plan, 1997-2001 (pp. 37). Rural Planning Development, Office of the Vice-President and Minister of Planning and National Development, Nairobi, Kenya.

Kaplan 2009. *Kaplan AP European History 2009*: Kaplan Publishing Company, USA.

Keane, Jodie and Willem te Velde. 2008. *The Role of Textile and Clothing Industries in Growth and Development Strategies*: Overseas Development Institute.

Kenya National Bureau of Statistics: 2009 Kenya Population and Housing Census Volume 1A (August, 2010; pp. 27-33 and 179-193)

Kenya National Bureau of Statistics: 2009 Kenya Population and Housing Census Volume 1B (August, 2010; pp. 218)

Koyano, S (1979). *Technology of Traditional Industry and the Role of Craftsmen* (pp. 1-5): Tokyo Metropolitan University, Tokyo, Japan.

Krejcie, R. V., and Morgan, D. W., (1970). *Determining Sample Size for Research Activities*: University of Minnesota and Texas A. and M. University, U.S.A.

Lambert et al (2011). *The Contribution of Traditional Herbal Medicine Practitioners to Kenyan Health Care Delivery: World Bank Report*

Matzopoulos et al (2011). *Baseline Study of the Liquor Industry*: DNA Economics, South Africa.

Meier, G. M, and Steel, W.F., (1989). *Industrial Adjustment in Sub-Saharan Africa* (pp. 10, 32-33): Oxford University Press.

Morse, R., and Staley, E (1965). Modern Small Industry for Developing Countries (pp. 4, 36-44): McGraw-Hill Book Company, Australia, Canada, U.K, U.S.A.

Mosaddeque et al (2008). *Farmers' Characteristics Associated with the Participation in Cottage Industry Activities of BAUEC*. j.innov.strategy. 2(3): 38

Pandey, Vivekanand. 2013. "Trends, Opportunities, and Challenges in Small-scale and Cottage Industries in Uttar Pradesh", in the *Asian Journal of Technology and Management Research* (Vol. 3, Issue 2): Sherwood

College of Management, India.

Puri, N. K., (1988). *Rural Industrialization in a Modern Economy: A Study of Traditional Wood and Metal Crafts of Alwar* (pp. 1-30): National Book Organization.

Rao., and Saha. 1986. Complete Guide to Rural Industrialization (pp. 17-46): Sri Durga Pustak Bhandar Publishers, India.

Rasheed, S. 2000. *Development's Last Frontier: What Prospects? Four Essays on African Development* (pp. 13-142): ICIPE Science Press.

Rono, H.K., (2014). *Adaptation of Processing Technologies in the Bakery Industry in Kenya*: McGrill University.

Ruuska E., (2012). *The Significance and Sustainability of Charcoal Production in the Changing Landscape of Dakatcha Woodland, SE Kenya* (pp. 91). University of Helsinki, Finland.

Sivaraman et al (1981). *Report on Village and Cottage Industries*: National Committee on the Development of Backward Areas Planning Commission, Government of India.

Strategic Plan (2008-2012): Ministry of Industrialization, Republic of Kenya.

Thanga., and Melba (2013). "Emerging Opportunities and Challenges for Cottage Industries in India", in *International Journal of Scientific and Research Publications*, Vol. 3, Issue 3.

Ziolkowski, Janusz. 1966. *Small Industries and Social Change, UNESCO Research Centre on Social Economic Development in Southern Asia*: Allied Publishers Private Ltd.