IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 17, Issue 1.Ver. III (Jan. 2015), PP 67-73
www.iosrjournals.org

The Socio-Economic Characteristics and the Challenges of Innovation Faced By Small and Medium Enterprise Operators in Kenya: A Case of Doinyo Lessos Creameries in Eldoret, Kenya

Mary Nyiva;
Catholic University of Eastern Africa, Kenya

Abstract: *Even though innovation is deemed to be a solution to the many challenges that hinder growth of firms, it is believed that it can enhance business growth but it is not clear whether innovation by itself can lead to business growth among the SMEs due to the challenges they face. The main purpose of the study was to investigate the effect of innovation on growth of medium-sized businesses. Based on the study, this paper describes the socio-economic characteristics of entrepreneurs and the challenges they face in trying to innovate towards improving the performance of their firms in Eldoret Kenya. The study adopted a descriptive case study design on a sample of 169 respondents from Doinyo Lessos Creameries in Uasin Gishu County. Response was received from 161 participants who accounted for 95%. Purposive sampling technique was used to identify the area of study; stratified and simple random sampling techniques were used to select the respondents from the target population. Questionnaire and interview schedule were the main instruments of data collection. Qualitative data was analyzed descriptively in form of frequency counts, percentages and measures of central tendency. Some of the challenges include lack of formal innovation policy; inadequate budgetary allocation to innovation; employees not fully motivated to spur innovation; large companies in the dairy industry had invested in more research hence developed most of the ideas originating from Doinyo Lessos Creameries, and that some of the new products do not attract a substantial and economic viable market. It was recommended that the government needs to provide more training to SMEs to ensure innovative ideas are enhanced and patented for maximum benefit to the Firms.*

Keywords: *Socio-Economic Characteristics, Challenges, Innovation Operators, Small, Medium Enterprises, Kenya, Doinyo Lessos Creameries, Eldoret, Kenya*.

I. Introduction

Innovation is often connected to creativity. Even sometimes, the meanings of these two words are mixed. Holt (2008) suggests that creativity is the ability to bring something new into existence. Innovation also involves the process of doing new things. Thus innovation is the transformation of the creative ideas into practical applications, but creativity is a prerequisite to innovation.

Innovation starts with the generation of new ideas. Ideas have little value until they are converted into new products, services, or processes. After a practical implementation of an idea into a new device, or process it can be called innovation (Schilling, 2013). As long as the idea is perceived as new to the people involved, it is an "innovation," even though it may appear to others as an "imitation" of something that exist elsewhere (Van de Ven, 2008). Innovation can represent a new product or a service, a new production process, technology, structure or administrative system, or a new plan, or a programme pertaining to organizational members (Drucker, 2002a). In general, innovation is usually seen as a conducive thing because the new idea must be useful, profitable, constructive, or solution to a problem (Van de Ven, 2008). Thus, an entrepreneur will usually guarantee that good innovations will be adopted.

Innovation is key to ensuring competitive advantage in business and can be a strategic tool that if well deployed can spur a tremendous business growth especially for medium sized enterprises that are faced with stiff competition from the large and well established companies. It is a specific tool of entrepreneurship, a means by which entrepreneurs exploit change (Drucker, 2007b). Innovation is driven by the ability to see connections, to sport opportunities, and to take advantage of them (Besssal & Tidd, 2007). Innovation is about completely new possibilities and can offer new ways of serving established and mature markets.

De Jong and Marsili (2006) posit that innovation can either be 'entrepreneurial', generated by entrepreneurial activity and creativity of small and new firms, or 'routinised', when innovation comes from formal Research and Design expenditures by large and established firms. Luecke and Katz (2003) assert that innovation is the introduction of a new thing or method. Innovation is the embodiment, combination or synthesis of knowledge in original, relevant, valued new products, processes and services. Further, Craig and Moores (2006) defines innovation as a process that can be managed, preferably in an integrated way. Others,

like Avlonitis and Salavou (2007), hold the opinion that innovation is a company's ability to introduce new products, which are also successful.

Following the above definitions by different authors, it is evident that innovation is seen as a process, rather than a single moment in time. Innovation should also bring something new, either to the world, to an industry, or to a firm. Innovation comes in various forms, whether it is in product, process, technology, service, or policy. In addition, from the definitions it can be derived that it seems to be possible to manage the innovation process. Thus, even though various authors used different definitions of innovation, they do have common ideas of what an innovation should comprise (Boonen, 2007).

A study by De Mel et al. (2009) on innovation in micro, small and medium enterprises in Sri Lanka has shown that in terms of incidence a sizeable number of firms carry out some form of innovation. In terms of size of firms, it was found out that 26 per cent of firms with no employees, 38% of firms with 1-4 employees, 44% of firms with 5-9 employees, 48% of firms with 10-24 employees and 59% of firms with 25 or more employees carry out innovation (De Mel et al., 2009). The most common forms of innovation for small firms is marketing innovation, that is, firms have implemented a new design or product packaging, significantly changed the way merchandise is displayed, introduced new channel for selling goods and services, or introduced new methods of pricing products. Product innovation (either introducing new product or significantly improving the existing product) was carried by 13% of small firms. Further, product innovation was found out to vary by firm size and industry sector with bigger firms and manufacturing firms introducing more product innovation that are new to Sri Lanka. Process and organizational innovation have less common incidence among small firms of Sri Lanka.

O'Regan et al. (2006) argue that small and medium sized enterprises (SMEs) are renowned for their creativity, growth and new product development. Acs and Audretsch (as cited in Boonen, 2007), further report that almost half of the number of innovations come from SMEs. Research studies also found that large firms can be more innovative, since they can benefit from scale economies and are able to structurally spend large amounts of money to research and development (R&D) (Decanio et al., 2000). Therefore, it can be seen that innovations are among the most important means through which medium sized enterprises contribute to economic development and growth (Keizer et al., 2002).

Since they are small, they are more flexible and have better opportunities to adapt to situations. Also, they accepted and implement changes more quickly and faster (Hausman, 2005). Hausman (ibid.) further adds that small firms working in a competitive environment tend to be more innovative than firms that are working in an oligopolistic environment. Acs and Audretsch (as cited in Boonen, 2007) claim that "the greater the extent to which an industry is composed of large firms, the greater the innovative activity, and that increased innovative activity emanates more from small firms than from the large firms".

Product and process innovation are the forms of innovation that are most often identified in SMEs. Thus far, many authors have investigated product innovation and factors that determine product innovation. Acs and Audretsch (as cited in Boonen, 2007) found that the total number of innovations is positively correlated to R&D expenditures. Madanmohan (2005) research a number of variables that might be related to incremental product innovation and found that technology planning, support for experimentation, and R&D intensity are the main drivers of incremental product innovations.

Entrepreneurial orientation and commercialization promotes successful radical product innovations (Unger & Zagler, 2003). Abratt and Lombard (1993) noted that product launches, type of product innovation and new product technology are key determinant of product innovation. Human capital development efforts catalyze both external absorption and the internal emergence of novel capabilities. A stronger emphasis on product features and broader market access stimulate the effective replication of extant capabilities, yielding immediate payoffs (Branzei & Vertinsky, 1996).

Beck et al. (2005) have found that there existed a strong, positive association between the importance of SMEs and Gross Domestic Product (GDP) per capita growth. This implies that the medium sized firms are the engine of the many economies of the third world countries. The medium sized firms are a harbour of entrepreneurial spirit and innovation that foster competitiveness in any industry and hence business growth. Some of the common indicators of business growth include sales volume, product portfolio, market share and quality of the products of a certain firm.

According to Prolinnova (2012) and the World Bank (2004), local (farmer) innovation refers to the dynamics of indigenous knowledge, that is, knowledge that grows within a social group, incorporating learning from own experience over generations, but also external knowledge internalised within the local ways of thinking and doing. Promotion of farmer innovation fosters individuals or groups to discover and develop better ways of managing resources, by building on and expanding the boundaries of their indigenous knowledge through interactions. Innovations can occur both in technical and socio-institutional spheres. Wu et al. (2004) argue that innovations are broadly related to the introduction, adoption or creation of either or both elements of

"new knowledge" (ideas, skills or experience) and "new organisation" (principles, forms, networks or mechanisms).

The Kenya government has been involved in development of different strategies to cope with the decline in economic growth. In 2005 the Kenya Government introduced, the Structural Adjustment Programmes (SAPs) which led to actual increased cost in services to private individuals (GoK, 2005). In Kenya, like much of Africa, the informal sector plays a vital economic role and the government is taking steps to help this sector grow. The legal framework and government policies, as articulated in various documents culminating in the most recent Sessional Paper No. 2 of 2005, have set the stage for an environment conducive for entrepreneurship development. This Sessional Paper in particular, outlines the way forward regarding government policy in specific areas including, legal regulatory environment, land laws, markets and marketing, financial services, skills and technology, business management and gender equity (Letting & Muthoni, 2008).

In the dairy industry, there are many cases where innovation has influenced the growth in business. Milk cooling plants can play a significant role to enhance new and/or innovative approaches to production, technology transfer, input supply, credit and output marketing and in knowledge generation, transfer and utilization continuum (Eshetu, 2008).

Doinyo Lessos Profile

Doinyo Lessos Creameries was incorporated as a limited company in 1964 by the late Bryan Cuthbert and developed by him throughout his lifetime until it became the leading cheese producer in East Africa. It is in many respects still the market leader in cheese production, with other producers emulating its products. The core business is production of a wide range of high quality cheeses for the local, tourist and export markets from milk produced in the Rift Valley of Kenya. Subsidiary products include tinned milk, liquid milk products, ice creams and ghee.

Doinyo Lessos Creameries is the only Dairy processor in East Africa known to produce tinned milk products and their Cowbell tinned cream is widely used by hotels and individuals. The Cowbell tinned milk is also widely used in huge quantities by the government-disciplined services and others, who recognize the advantages of its rugged packaging in tins and the fact that it does not require refrigeration. The liquid products are available in sachets, square Tetra Pak's bottles and cups, and include fresh milk, yoghurt, maziwa lala and Mursik (traditionally made sour milk). The Ice cream is believed to be the only one in Kenya, which does not include vegetable oil or fat- it is a farm ice cream based on real dairy cream. The company's vision is to become the most significant producer of quality cheeses in the region, with emphasis on both retail sales and on volume sales to the catering and hotel industries.

There is evidence of innovation as Doinyo Lessos has a variety of milk products. The company further boasts of having some of the products just unique for them. This case was appropriate because it is likely to represent the medium sized business firms that explore the field of innovation with the main goal of maintaining a steady growth.

Many business firms have restructured themselves on the platform of enhancing product innovation. This has been seen as a major source of competitive advantage to the small and medium sized companies as well as firms. The importance of innovation is more spoken about today in the business environment than before and all firms are showing increased attention to Innovation as it is seen as the only sustainable completive advantage, which gives, companies increased capability to cope with change (Clegg, 1999). It is further evident that many authors are in agreement that innovation is mostly born in small and medium sized companies.

It is against this background that the author set out to carry out a research to find out the effect of innovation on the growth of medium sized businesses. This paper documents the characteristics of the respondents who represent the entrepreneurs in the study area. It also examines some of the challenges they face in undertaking their businesses.

Statement of the Problem

Although SMEs contribute much to GDP, their growth has been hindered by several factors. Wanjohi (2010) alludes that small businesses in Kenya face a number of challenges which affect their growth and profitability and hence, may in the long run exit the market. He cited the following as some of the challenges that can retard or stop growth of medium sized businesses; lack of managerial training and experience, inadequate education and skills, technological change, poor infrastructure and scanty markets information. Most SMEs in Kenya tend to copy existing ideas rather than develop innovative value. This leads to undifferentiated markets that compete purely on price rather than on new market value (Letting & Muthoni, 2008).

Innovation is deemed to be a solution to many of the challenges that hinder growth. It is believed that innovation is likely to enhance business growth. Nevertheless, it is not clear whether innovation by itself can lead to business growth in SMEs owing to the fact that these firms face various challenges. It has been reported

in literature that some firms do not even get the pay offs of their innovation due to other factors that determine growth. This study attempted to unravel the role played by innovation in the growth of the SMEs, a case study of Doinyo Lessos creamery in Eldoret.

II. Materials And Methods

This study adopted a descriptive case study design. Mugenda and Mugenda (2003) defines a case study as an in-depth investigation of an individual, group or a phenomenon whose primary objective is to determine factors and relationships among the factors that have resulted in the behaviour under study. A case study makes a detailed examination of a single subject, group or phenomenon placing more emphasis on full analysis of a limited number of events or condition and their interactions giving a clear insight into what is being investigated. It was therefore deemed appropriate for this study which concerns examining the effect of innovation on growth of medium sized enterprises taking a case of Doinyo Lessos Creameries.

The target population to be studied comprised of all employees of Doinyo Lessos Creameries including those in management. A total of 302 employees were targeted from which the sample was drawn. The researcher adopted a sample design which was reliable and appropriate for this study. Being a case study, non probability sampling was used, employing purposive sampling technique which allowed the researcher to use cases that had the required information with respect to the objectives of the study. In addition, stratified random sampling technique was used to select the study sample from three groups of employees that included management, processing employees and those in marketing and sales in the organization. The sample size in this study was one hundred and sixty nine (169) respondents of Doinyo Lessos Creamery. To ensure that each stratum was represented in the sample the researcher used stratified random sampling. Under stratified sampling respondents were selected from each sub group to constitute the proportion of each stratum in the sample meaning that the sizes of the sample from different stratum was kept proportional to the sizes of the strata (Kothari, 2004).

For the study in question, data collection was done through use of questionnaire prepared by the researcher. This was presented to respondents in order to collect the required information. The researcher used drop and pick method to collect data from the respondents. Based on the data collection instruments, data was analysed both quantitatively and qualitatively. Open-ended questions were analysed through reporting themes and quotas that emerged. The data was analyzed and presented in frequency tables, graphs and charts to present the findings of the study. The themes emerging from secondary data were identified to augment the primary data. The quantitative measure was used to generate descriptive statistics that were presented in frequency tables, bar charts, percentages, means and standard deviation.

Limitations of the Study

III. Results And Discussion

The Socio-Economic Characteristics of Entrepreneurs from Doinyo Lessos Creameries

Gender

There was a total of 91 male respondents in the study, representing 56.5% of the study sample. The female respondents were 70, accounting for 43.5% of the sample population. This was a fair distribution of both sexes in the study and therefore made the results of the study objective Figure 1 illustrates these proportions.

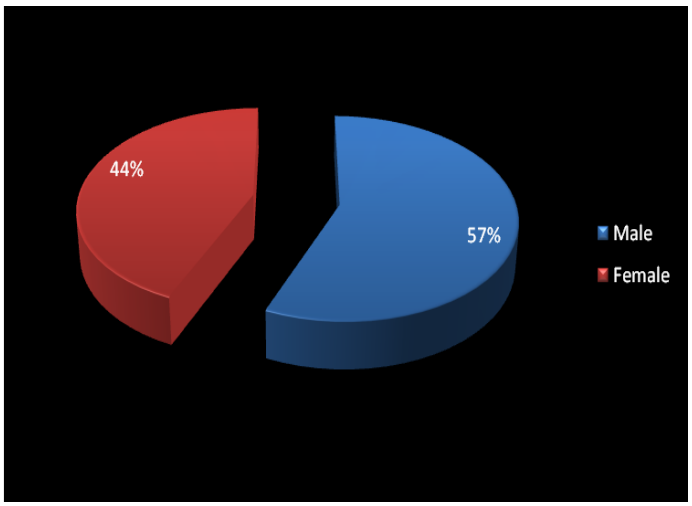

Figure 1: Proportion of respondents by gender

Source: Field data, 2013

Age

Of the respondents sampled in the study, 30(18.6%) were in the 18-20 years age bracket, 54(33.5%) were in the 20-30 years age bracket while those respondents who were over 50 years constituted 9.9% of the sample respondents. The majority of the respondents of the study belonged to the 31-50 years cohort and constituted 61(37.9%) of the sampled respondents. This analysis was as presented in Figure 2.

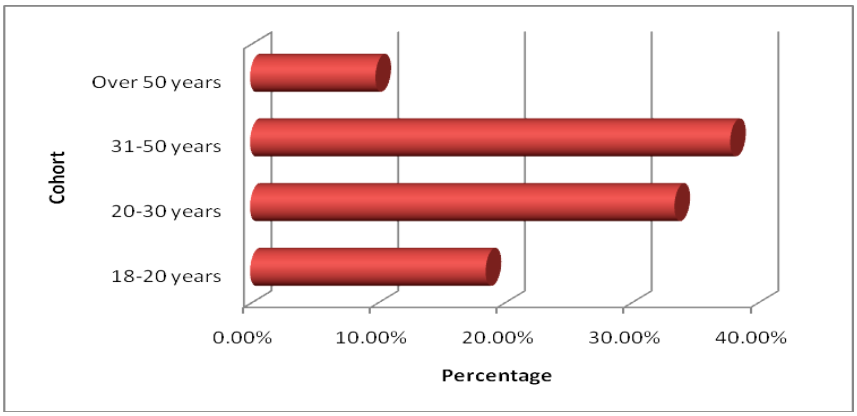

Figure 2: Proportion of respondents by age.

Source: Field data, 2013

Education Level

A majority (81) of the employees of Doinyo Lessos who formed the sample for the study were certificate/diploma holders. They constituted 50.3% of the sample population. This category was followed by those respondents who had attained O-Level education. They constituted 36.0% of the sample population (58). The primary school certificate holders and those who had no formal education constituted 6.2% and 1.9% of the sample population respectively. Nine respondents, representing 5.6% of the respondents were first degree holders. Those who had no formal education were majorly labourers who attended to manual duties in the factory. The sample cut across all the respondents with varied education levels and therefore presented authentic findings that could be relied upon. This was as illustrated in Figure 3.

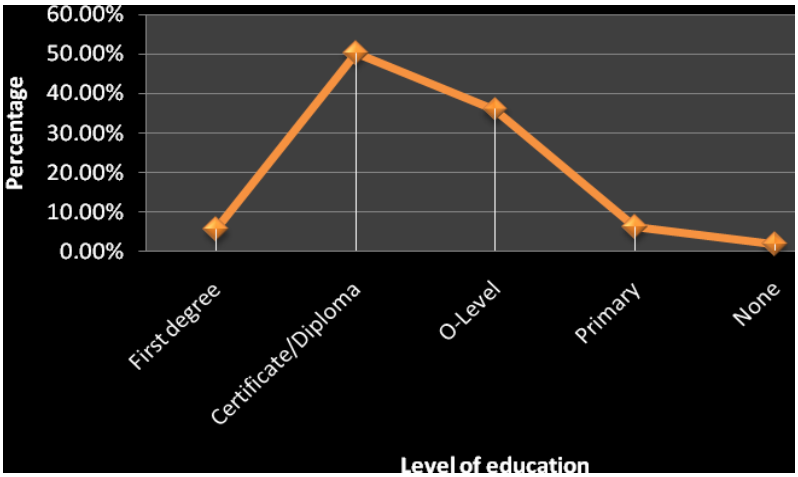

Figure 3: Proportion of respondents by level of education.

Source: Field data, 2013

Experience in the Dairy Industry

The greatest percentage (43.5%) of the sample respondents, representing 70 employees, had a work experience of 6-10 years in the dairy factory sector. This category of respondents was followed by those who had a work experience of between 11 and 15 years in the dairy factory. They constituted 34.2% of the sampled respondents, representing 55 respondents. Those respondents who had a work experience of at most 5 years and at least 15 years constituted 16.8% and 5.6% of the sample respondents, respectively. They were 27 and 15 in number respectively.

It was necessary to collect this data since working experience is source of a wide range of opportunities and potentials that constitute discovery and creativity. It has a crucial influence on the success of innovation processes in companies and plays a vital role as a company resource and as a success factor that supports innovation and hence growth. These results were as presented in Figure 4.

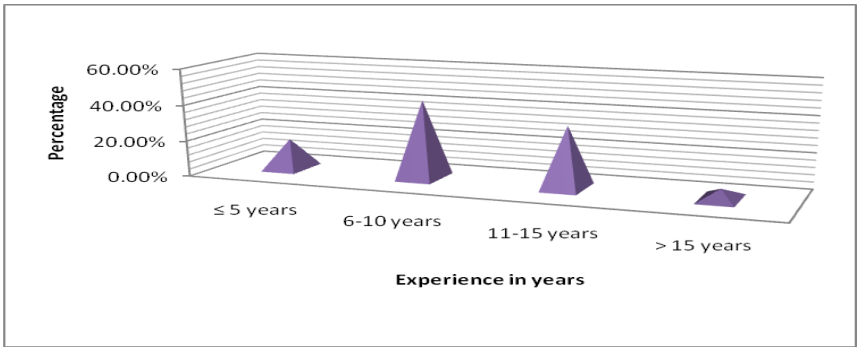

Figure 4.4: Proportion of respondents by experience in years.

Source: Field data, 2013

Work Department

Seven (4.3%) of the respondents were at the factory management level, 61(37.9%) were at the products processing department while 93(57.8%) of the employees in the sample were working in the marketing and sales department. There was therefore a fair distribution of respondents from all the departments and therefore the findings of the study represented the views that were considered representative. Besides, given that respondents from the marketing/sales department were the majority, they were better placed to comment on the trend of the sales based on various innovations in the factory. Table 1 illustrates these categories.

Table 1: Proportion of respondents by work department

Department	Frequency	Percentage
Management	7	4.3%
Processing	61	37.9%
Marketing/Sales	93	57.8%
Total	**161**	**100%**

Source: Field data, 2013

Challenges of Innovation on Business Growth

Innovation enhancement is a challenging activity. The study therefore set out to evaluate the challenges that befell medium sized enterprises in their pursuit of innovation and the results were tabulated. It was evident that three-quarters of the respondents agreed Doinyo Lessos had no formal innovation policy. Almost all of the respondents further agreed that Doinyo Lessos had inadequate budgetary allocation to innovation. This scenario could be a downturn for the company because the findings of Acs and Audretsch (as cited in Boonen, 2007) show that the total number of innovations is positively correlated to expenditures.

The results further showed that most respondents agreed that employees were not fully motivated to spur innovation. Nevertheless there a few of them held a contrary opinion on the same assertion. It was also evident that almost all of the respondents in the study agreed that large companies in the dairy industry had invested in more research hence developed most of the ideas originating from Doinyo Lessos Creameries. It was further evident that most respondents, accounting for about three–quarters, agreed that some of the new products did not attract a substantial and economic viable market. This finding is in agreement with what Avlonities and Salavou (2007) argue that innovative technology can be "pushed" by technical staff or "pulled" by customers. Nevertheless, the customers can 'pull' a product in a case where, products may differ significantly from the firm's or its competitors' existing products.

IV. Conclusion And Recommendations

There exist challenges in every organization that is in pursuit of innovation. The study therefore set out to evaluate the challenges that befall medium sized enterprises in their pursuit of innovation and the results were tabulated. Some of the challenges include lack of formal innovation policy; inadequate budgetary allocation to innovation; employees not fully motivated to spur innovation; large companies in the dairy industry had invested in more research hence developed most of the ideas originating from Doinyo Lessos Creameries, and that some of the new products do not attract a substantial and economic viable market.

References

[1]. Abratt, H., & Lombard, E. (1993). The Impact of Product Innovation on Performance. Journal of Product Innovation Management, 8(4), 240-51.
[2]. Acs, Z.J., & Audretsch, D. B. (1990). Innovation And Small Firms. Cambridge: MIT Press.
[3]. Alvonitis, G.J., & Salavou, H.E. (2007). Entrepreneurial Orientation of SMEs, Product Innovativeness and Performance. Journal of Business Research, 566-575.
[4]. Beck, T., Demirgue-Kunt, A., & Lavine, R. (2005). SMEs, Growth, and Poverty: Cross country Evidence. Journal od Eonomic Growth, 10, 199-229.
[5]. Besssal, J., & Tidd, J. (2007). Managing Innovation: Integrating Technological, Market, and Organizational change. Chichester: Wiley.
[6]. Boonen, S. (2007). Determinants of Innovation in SMEs: Comparing Family and Non-Family SMEs in Netherlands (Unpublished MA Thesis). Maastricht University, Netherlands.
[7]. Branzei, O., & Vertinsky, I. (2006). Strategic Pathways to Product Innovation Capabilities in SMEs. Journal of Business Venturing, 21, 75-105.
[8]. Clegg, B. (1999). Creativity and Innovation for Managers, 1-7 & 88-91.
[9]. Decanio, S.J., Dibble, C., & Amir, A.K. (2000). The Importance Of Oranizational Structure For The Adoption Of Innovation. Management Science, 46(10), 1285-1299.
[10]. De Jong and Marsili (2006)
[11]. De Mel et al. (2009)
[12]. Drucker, P.F. (2002a). The Discipline of Innovation. Harvard Business Review, 80(8), 95.
[13]. Drucker, P.F. (2007b). Innovation and Entrepreneurship. Oxford: Butterworth-Heinemann.
[14]. Eshetu, T. (2008). The Role of Dairy Co-operatives in Stimulating Innovation and Market Oriented Smallholders development (Unpublished MA Thesis). Addis Ababa.
[15]. Government of Kenya (GoK),(2005).
[16]. Hausman, A. (2005). Innovativeness Among Small Businesses: Theory and Propositions For Futture Research. Industrial marketing Management, 34, 773-782.
[17]. Holt, D. (2008). Entrepreneurship and Innovation: The Strategy of Managing Innovation and Technology (1st ed.). New York: Prentice Hall.
[18]. Kaizer, J.A., Dijikstra, L., & Halman, J.I. (2002). Explaining Innovative Efforts in SMEs: An Explanatory survey among SMEs in The Mechanical and Electrical Engineering Sector in The Netherlands. A journal of Technovation, 1-13.
[19]. Kothari, C.R. (2004). Research Methodology: Methods and Techniques. Mumbai: Prakashan.
[20]. Letting, N., & Muthoni, M. (2008). Innovation Through Business Planning Among Micro, Small and Medium Enterprises in Kenya (Unpublished). KIM and The University of Nairobi, Nairobi.
[21]. Luecke, R., & Katz, R. (2003). Managing Creativity And Innovation. Boston: Harvard Business School Press.
[22]. Madanmohan (2005)
[23]. Mugenda, A. G & Mugenda, O. M. (2003). Research Methods: Quantitative and Qualitative. Nairobi: ACTs.
[24]. O'Regan, N., Ghobadian, A., & Sims, M. (2006). Fast Tracking Innovation in Manufacturing SMEs. Journal of Technovation, 26, 251-261.
[25]. Prolinnova, (2012). Annual Report on Promoting Local Innovation. NGO. Kampala: Prolinnova Secretariant.
[26]. Schilling, M. (2013). Strategic Management of Technological Innovation (4th ed.). New York: McGraw-Hill Irwin.
[27]. Unger, B., & Zagler, M. (2003). Institutional and organizational determinants of Product Innovation. Journal of Product Innovation Management, 16(3), 293-310.
[28]. Van de Ven, A.H. (2008). Central Problems in The Management of Innovation: the Strategy of Managing Innovation and technology. Journal of management Science, 590-607.
[29]. Wanjohi, A.M. (2010). Challenges Facing SMEs in Kenya. Nairobi. Buzzle.Com
[30]. World Bank (2004). Promoting Local Innovation: Enhancing Ik Dynamics and Links with Scientific Knowledge. Retrieved January 3, 2013 from ik notes: http.worldbank.org/afri/ik/defaultm
[31]. Wu, B., Flynn, A., & Mersden, T. (2004). Farmer Innovation in Marginal Areas of China: A Farmer Innovation System.