



DRIVERS OF SUSTAINABILITY OF DONOR FUNDED FOOD SECURITY PROJECTS IN KENYA: A CASE OF SAMBURU COUNTY

ELIUD OMBUI KEURA, DR. MAKORI MORONGE

**DRIVERS OF SUSTAINABILITY OF DONOR FUNDED FOOD SECURITY PROJECTS IN KENYA: A CASE OF
SAMBURU COUNTY**

¹Eliud Ombui Keura ²Dr. Makori Moronge

¹Student, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

²Lecturer, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

Accepted October 17, 2016

ABSTRACT

The aim of the study was to establish the drivers of sustainability of donor funded food projects after donors' exit in Kenya. Census survey was used to select a total of 103 projects and respondents from the various projects identified in the study area. The study adopted a descriptive research approach to collect primary data. A pilot study was conducted to pretest the validity and reliability of instruments for data collection. The study involved the use of questionnaire method to collect data. With the help of the statistical package for social sciences (SPSS) programme version 22 regression analysis was done and the results were tested. The study found out that Stakeholder participation was the first most influencing important factor that affects sustainability of donor funded food security projects. The regression coefficients of the study showed that stakeholder participation had a significant influence on sustainability of donor funded food security projects. This implied that increasing levels of stakeholder participation by a unit would increase the levels of sustainability of donor funded food security projects. Thus this showed that stakeholder participation had a positive influence on sustainability of donor funded food security projects. Monitoring and evaluation was the second most influencing factor that affect sustainability of donor funded food security projects on sustainability of donor funded food security projects. This implied that increasing levels of monitoring and evaluation by a unit would increase the levels of sustainability of donor funded food security projects. This showed that monitoring and evaluation had a positive influence on sustainability of donor funded food security projects.

The study recommends for effective stakeholder participation in the projects community involvement enhance engagement initiatives of the projects. This can be achieved through taking an active role in identifying their needs and prioritizing those needs, mobilizing internal and external resources and implementing internal and external resources and implementing activities towards achieving their objectives, self-reliance is stimulated thus reducing dependency on the outside agencies and improve efficiency and local participation yields better projects.

Key Words: Stakeholder Participation, Management Practices

INTRODUCTION

The sustainability of poverty and hunger development projects has been an important concern in developing countries (Panda, 2007). Sustainability of a project ensure that the benefits from a project are felt for extended periods of time that can justify the economic and social input invested in to the project (Hayward & Neuberger, 2010). Unfortunately, sustainability of poverty and hunger development concepts and principles are not taken much seriously in these projects especially after donors' exit (Gareis, Huemann, & Weninger, 2010). Kiloppenborg (2011) defines a donor as the one who owns a project and is considered responsible for ensuring its success- is typically the one propose a project and whose business unit will reap the benefits of successfully completed projects. (Dr.xavier ,Harold Goodwin, Racheal Walton, 2012) argued that there is a myriad of donors of aid to both developed and developing countries including multilateral (World bank, UNDP and ADB) and bilateral donors (national cooperation and development aid agencies), Nongovernmental organizations and foundations.

Donors spread their aid very widely. Data shows that over 80% of aid events involved less than 1%of donors total aid budget. The result is appearance of success at the micro project level competitive donor practices, where there are many small donors and no dominant donor erodes administrative capacity in recipient country Government and yet the effort for coordination between donors relate to harmonizing reporting system or sharing evaluation reports not specializing geographically or by sector. The appearance of success would be less if there were more thorough and careful reporting distinguishing between outputs (what was spent), outcomes and impacts as well as the benefits achieved. (Drxavier ,Harold Goodwin, Racheal Walton, 2012) .Projects funded by donors deals with several activities which include and are

not limited to food security programmes, education, transportation and water harvesting among others.

There has been a drastic move to ensure sustainability of the projects due to donor funding and donor orientation to alleviate the problem of hunger and poverty in Kenya. Maintaining goods and services that are deliverable outcomes of project interventions has continued to be critical in Kenya, and more particularly in the rural areas such as Samburu (Swiss Agency for Development and Cooperation, SDC, (2008). The reports still adds that it is the objective of every donor funded project to meet the desired outcomes and continue giving support to community even after the donors have phased out. The available studies reveal that within each project work plan, there are sustainable mechanisms put in place to ensure continuity beyond project timeline. Guijt & Woodhill (2002) states that the community as well as the donor's goodwill within a project coupled with a sound strategy from the donors and government to provide continued support to donor funded projects contributed to sustainability of the same.

Sustainability of projects has always been lacking in as much as several billions and billions of money has been pumped in by donors for projects throughout the Country. There are still several programs which have not been successful and people still depend on donor funding to implement more projects without any mechanism to sustain the projects beyond their timelines. According to Oriola (2009), analysis of the capital economic structure have identified the complexity of getting resources to the people, getting people to participate, financing and managing delivery of services at micro and macro levels as major challenges. Unsurprisingly, poor communities have continued to witness a decline in living standards, increasing levels of poverty and deterioration in infrastructures (Kilifi DDP 2005 – 2012). A good example of this given by the District

Development Plan is the donor funded food security projects in Ganze which were initiated long since 1999, gravity fed water system and irrigation scheme projects are up to date available in papers and not a reality on the ground. This indicates failure in national state institutions to sustain aid driven services beyond the involvement of international donor agencies (Mutimba, 2013).

In the various literatures reviewed, poverty as a social problem has been realized to be a deeply embedded wound that permeates every dimension of culture and society in the world (World Bank, 2002). The IUCN (1997) adds that poverty includes sustained low levels of income for members of a community. On the same note, Pearce & Robinson (2004) stated that it includes a lack of access to services like education, markets, health care, lack of decision making ability, and lack of communal facilities like water, sanitation, roads, transportation, and communications; and in this context, food insecurity as well. The above diversification of literature seems to have a similar outlook of how poverty is and permeates at the community. It gives an outline of understanding how poverty is viewed by various schools of thoughts in the development world.

Donor funded projects have been started throughout the world to reduce the levels of poverty within the society and elevate development to another level. Several studies conducted throughout the world have had a positive impact to the community although continued implementation after donor support has been the challenge. To some extent, poverty levels have gone down during the implementation stages although sustaining the same after phasing out proved impossible. The World Bank Report (2008) clearly puts it across that poverty relates very well with sustainability of projects within a certain context. It adds that when the community is extremely poor beyond support, continued implementation of projects at an independent

level becomes very impossible. However, when poverty levels are higher, the rate of sustainability on donor funded projects increases.

Globally, billions of shillings have been spent in communities to enhance the living situation of the people. However, one of the most critical obstacles is the extent to which the food projects are able to persist despite the exit of donors, while the beneficiaries reap dividends; appreciate their participation and ownership role in the project. Apparently, it is sustainability that makes the difference between success and failure of community-based projects (World Bank, 2014). In recent years the donors have stepped up efforts to find a lasting solution to the problem of extreme poverty and hunger which has ravaged many parts of the country. Towards this end, the donors and government have joined forces with various stakeholders to ensure that efforts towards this noble objective are sustainable in order to ensure a lasting solution to the problem of poverty, hunger and to achieve MDGs. Similarly the United Nations has laid prominence on the MDGs as a one way ticket out of poverty and hunger problems across the world (GoK, 2013). Sustainability of the poverty and hunger project is dependent on the performance of institutions. Project sustainability is indicated by the ability to continue to meet objectives defined in terms of benefit levels. Clarke & Oswald (2010) adds that projects produce specific benefits for targeted beneficiaries which ideally should continue to increase after project completion.

The number of undernourished people in the world remains high. In 2013, the Food and Agriculture Organization (FAO) estimated that more than 900 million people suffered from hunger. This indicates a global structural problem threatening the achievement of the Millennium Development Goal (MDG) to halve hunger by 2015 (FAO 2010). Consequently, FAO dedicated its 2010 annual report on "The State of Food Insecurity in the World" to countries in protracted

crises, i.e. which are experiencing chronic food deficits, disruption of livelihoods over a prolonged time and the incapability of the state to respond to and mitigate threats to its population. For the period from 1996 to 2010 the FAO classified 22 countries as being in protracted crisis, out of which 17 are in Africa (FAO 2010). USAID (2010), rates poverty and hunger projects sustainability levels at 42.85 percent in Sub Saharan Africa.

In Kenya, food security debate received a boost after the passage of the current Constitution of Kenya 2010, which expressly recognizes the right of every person to be free from hunger, and to have adequate food of acceptable quality as well as the right to clean and safe water in adequate quantities (Article 43(1) (c). On October 1, 2009, U.S. In FY 2009 and to date in FY 2010, the U.S. Government (USG) has provided more than \$245 million for humanitarian assistance programs in Kenya, including more than \$24 million in USAID/OFDA funding to support nutrition, economic recovery and market systems, health, agriculture and food security, and water, sanitation, and hygiene interventions, as well as local procurement and distribution of food. In the 2013/2014 financial year, Kenya made substantial allocations towards achievement of food security. Kenya Shillings 2 billion was set aside for Agri-Business Fund, while K.shs 3.6 billion was allocated for the implementation of the first phase of the 1 million acre irrigation and food security project in Galana.

This project was expected to, among others: Produce adequate food for the country and supplying to the market at affordable price; creating at least 3 million jobs along the agriculture value-chain, including multiplier effects; and transforming the Galana ranch and, by extension the coastal region, into an economic hub for production, agro-processing, packaging, distribution, exporting and tourism. To deal with the perennial challenges of food insecurity and to reduce cost of living associated with high food

prices, the Cabinet Secretary for Agriculture stated that they will implement a comprehensive agricultural revitalization program aimed at expanding, enhancing productivity and transforming agriculture into a business venture. To this day, the country is still struggling with increase in numbers of chronically hungry people, skyrocketing food prices due to lower production of staple food which is basically maize and lack of agricultural inputs. This is despite having put in place several legislation and sectorial policies on agriculture some of which are highlighted herein. It is against this background that there is need to look at factors that contribute to all these initiatives not being sustainable so as to ensure food security and poverty projects in Kenya.

Samburu County

Samburu County is an administrative county in the former Rift Valley Province; it borders Laisamis district to the East and North east, Isiolo to the South east, Laikipia North to the South, Baringo East to the South west and Turkana South district to the west and North west. (Lelegwe, 2012). The County is sparsely populated with a population of 223,947 (Kenya population census, 2009); 80% of the inhabitants are Samburu who are the main ethnic group while the remaining 20% is shared among the Turkana, Kikuyu, Meru and the other tribes of Kenya. The County is semiarid and well known all over the country for its contribution to the Livestock Industry majorly the slaughter stock. Majority of the inhabitants are semi-pastoralists who also practice agriculture. Another sector that has potential is the tourism industry since the county lies in the Northern tourism circuit implying that it has potential to be exploited (Lelegwe, 2012).

About 80 percent of the county population live below the poverty line. Factors attributed to the vicious cycle of poverty in the county include: cross border insecurity; low enrolment in schools; unpredictable weather patterns; poor infrastructure and retrogressive cultural practices.

Poverty creates a vicious cycle where the poor lack knowledge and awareness a situation that hinders one to benefit from new technologies. For example, poor farmers are unable to embrace modern farming practices due to the high costs of inputs involved as well as skill level. Coincidentally, the poor lack other assets to fall back to in case of crop or animal failure and therefore are unable to try new technologies in farming and animal keeping (Samburu County Development Plan 2013-2017). Donor funded projects have been active in the County already involved in poverty and hunger eradication developmental projects. According to Ribeiro (2009), Donor Funded Projects (DFPs) in Samburu county are conceived due to the need of development shortcomings and are time bound in the county to eradicate poverty and hunger. The projects are majorly funded by a small budget and sometimes they are set up in a much disorganized structure especially in cases of emergency and relief needs (Coppola, 2011). Donor funded food security projects reach the communities through various means which include International Financial Institutions (IFIs), United Nations (U.N) Agencies for example the United Nations Development Program (UNDP) provides grants through government and UNDP offices to start up programs, Consultative Groups to Assist the Poorest (CGAP) where funds flow from global headquarters to individual grassroots institutions as grants and finally public philanthropic foundations (Delmon, 2011). In any donor funded project there is a strategy on financial and economic analyses of the project to determine the viability and contribution it will make to development says Ribeiro (2011) adding that most donors today are considering sustainability of the various projects as an essential ingredient of development. The tension between sustainability to donors and beneficiaries can only be satisfied through understanding the factors affecting it since it comes with empowerment (Igweonu, 2011).

Statement of the Problem

Despite the numerous efforts to develop sustainable poverty and eradication projects in rural areas of Sub-Saharan Africa, the sustainability is rather low leading to spending of massive resources on projects that have restricted benefits to the target population (AfDB, OECD & UNDP, 2012). There's unmistakable evidence that community participation has a favourable impact on the outcomes of a project and this linkage gets established through better aggregation of preferences, better design through use of local knowledge, (Manikutty, 2010) pressure by community on bureaucracies to perform and better sustainability through ownership. According to (Oduwo, 2014), most of the poverty and hunger related eradication projects in Kenya, (66.7%) fail due to poor participatory monitoring and evaluation during the project implementation process. The performance of agriculture, which remains the backbone of the economy slackened dramatically over the post-independence years from an average of 4.7% in the first decade to only below 2% in the recent past. It is instructive to note that a sizeable proportion of the rural labour force (over 51%) is engaged in small-scale agriculture and that women are the majority in the sector (UNDP, 2012).

In Samburu land, 19 percent of children who are aged between 6 to 59 months are moderately or severely underweight due to poor diet and poverty. Only 28 percent of the population in the community uses drinking water from improved sources with only 57 percent children of primary school entry age being enrolled in school (UNICEF, 2008). Donors have flocked arid and semi-arid areas including Samburu land in the past with others still implementing food security projects that ran into millions of dollars. Despite this, the communities living in this part of Samburu County still face starvation and other signs of poverty with development food security project failing to live to their expectations within a short period

with most losing their impact once they are handed over to the community (USAID, 2010).

Despite the high low rate of sustainability of donor funded poverty and hunger related development projects in Samburu County, no empirical research study had been found in local libraries, journals, or any other form of peer reviewed publications that had reported any investigation into the drivers of sustainability of donor funded food security related development projects in Kenya. This had posed a knowledge gap, which this study sought to fill.

1 Objectives of the Study

The aim of this study was to establish the drivers of sustainability of donor funded food security projects in Kenya. The study sought to be guided by the following specific objectives:

- To find out how stakeholder participation influence sustainability of donor funded food security projects in Kenya
- To determine how management practices influence sustainability of donor funded food security projects in Kenya

LITERATURE REVIEW

Theoretical Review

This section reviews theories related to the study.

Stewardship Theory

In stewardship theory, the top management of the organizations are regarded as the stewards of the projects assets and liabilities and are expected to act in the best interest of the stakeholders (Mallin, 2007). He further observes that the stewards must take fiduciary position. Stewardship theory relates to the board's task of providing support and advice to management (Davis, 1993). The theory has its roots in psychology and sociology. Abdulla and Valentine (2009), note that stewards are organizations managers and leaders working for the interest of shareholders. The stewards protect and make profits for shareholders and are satisfied and

motivated when organizational success is attained.

The theory emphasizes that effective control held by professional managers empowers them to maximize firm performance and corporate profits. The theory is applicable in the management of donor funded food security projects. The project managers and committee leaders elected to manage the water pans play the managers role on behalf of the members (Tas, 2008). Acquiring the project management skills is helpful to provide knowledge and ability that will enhance sustainability of these projects. In this study, since organizations and governments develop policies to guide the development of a given region for the projects to be implemented, applying this theory in study presupposes flexibility on the part of an organization to come with sound policies to enhance sustainability of the projects. There is need to have best management practices to enhance sustainability of donor funded food security projects.

Stakeholder Theory

Freeman (2004), identifies and models the groups which are stakeholders of a corporation, and both describes and recommends methods by which management can give due regard to the interests of those groups. Agle et al (2008) argue that the theory has multiple distinct aspects that are mutually supportive: descriptive, instrumental, and normative. The descriptive approach is used in research to describe and explain the characteristics and behaviors of firms, including how companies are managed, how the board of directors considers corporate constituencies, the way managers think about managing, and the nature of the firm itself in the implementation of projects.

The central idea is that an organization's success is dependent on how well it manages the relationships with key stakeholders such as customers, employees, suppliers, communities,

financiers, and others that can affect the realization of its purpose (Freeman & Phillips, 2002). Patton (2008) emphasizes that the stakeholder models entails all people with legitimate interest to participate in an enterprise do so to gain benefits. Michell et al (2008) state that the exercise of stakeholder power is triggered by conditions that are manifest in the other two attributes of the relationship i.e. legitimacy and urgency. Power gains importance when it is legitimate and exercised through a sense of urgency. Highly important and powerful stakeholders are located where power, legitimacy and urgency intersect (Freeman & Phillips, 2002). The overall purpose of stakeholder theory is to enable the managers to understand stakeholders and strategically manage them (Patton, 2008). The theory emphasizes the significance of the relationship between the stakeholder participation for sustainable donor funded food security projects.

mobilizing internal and external resources and implementing activities towards achieving their objectives (Aworti, 2008). According to Moser (1989) community participation is essential in ensuring sustainability of community projects since local people and their legitimate organizations are able to develop the needed capacities to transform community development process beyond the short-term interventions. Community participation is therefore a means through which local self-reliance is stimulated thus reducing dependency on the outside agencies (Comwall, 2008). According to Okafor (2005) what we observe when communities participate in their own projects include empowering communities improve efficiency, local participation yields better projects, better outcomes as well as greater transparency and accountability enhances service delivery. Community participation can kick start local, private contractors, service providers and it also encourages donor harmonization. Communities who are the beneficiaries of the projects should not be seen as targets of poverty reduction efforts but should be seen as assets and partners in the development process.

Participation may involve contribution of ideas, priorities, resources, time or decision-making, implementation and evaluation. The goal of participation is to give the communities ownership, the ability to express themselves, to learn from them and ultimately to empower them through the transfer of skills, abilities and knowledge (Shannon McNulty & Judy Aibel, 2001). Despite the use of participation approaches in community development, it does not automatically produce sustainable solutions since decisions made by a community are influenced by the community's understanding of the issues involved, such as health related implications of poor water quality and inadequate sanitation (Barnes as Ashbolt, 2007).

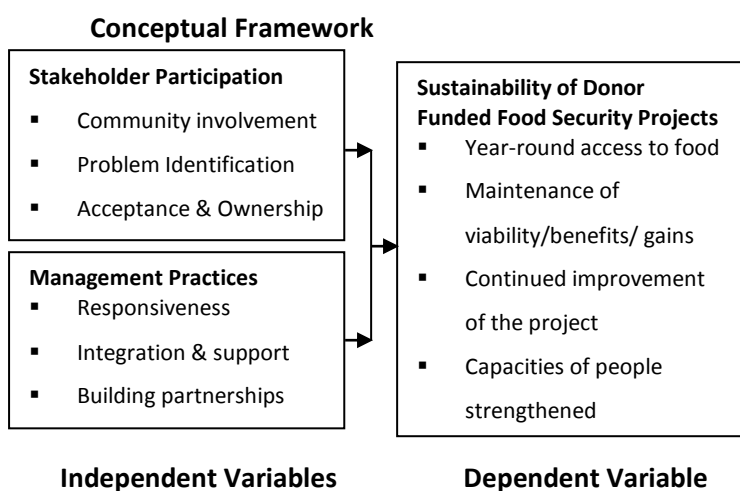


Figure 1: Conceptual Framework

Stakeholder Participation

Community participation is a ‘process’ whereby people who are to benefit from local development influence the direction and execution activities rather than merely receiving a share of the benefit. This means they take an active role in identifying their needs, prioritizing those needs,

Management Practices

Attainment of any form of project sustainability is not an endeavour of a single day, but a life-long process (Wanjohi, 2010). Poverty and hunger projects supported by donors are complex and require multifaceted management skills (Weinberg, 2008). For project sustainability to be achieved the institutions and management involved in project implementation from the community to the national or international levels need to be empowered in terms of information, skills and resources (human and capital) for smooth running of activities for sustainability of projects. The World Bank (2008) defines empowerment as the process of enhancing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Central to this process are actions which both build individual and collective assets, and improve the efficiency and fairness of the management and institutional context which govern the use of these assets.

According to McDade (2004), good management ensures that sufficient local resources and capacity exist to continue the project in the absence of outside resources. Espinosa, et al. (2007) opines that task familiarity is important in the community based projects and this is usually linked to performance which in turn is linked to sustainability. Good management goes beyond mere skills (Kirksch, 2000) to technical and expertise required to successfully implementing the project (Little, 1993). This study argues that management strategy is a recipe to effective project implementation as it encourages participation and involvement of the community in all the processes of project implementation, hence people feeling empowered. Empowered people have freedom of choice and action, which in turn enables them to better influence the course of their lives and the decisions which affect them.

Projects that build links with different organizations are more likely to be sustainable. They support and learn from each other, and are able to exploit others' agendas, for example, for new funding opportunities. It has also been found to be essential for the long-term survival of community-based programs. Many researchers including (Bamberger & Cheema, 1990; Lefebvre, 1990; Lerner, 1995) have found that creating conducive environment for collaboration contributes to a program's continuation and that these collaborations need to include all relevant community leaders and agencies and active community participation at all levels.

Programs and projects which integrate with and build on local management structures, have better prospects for promoting project sustainability (Mulwa, 2010). The capacity of local agencies to manage (or absorb) new structures, systems, ideas and funds is often not adequately assessed, and over-optimistic assumptions are often made. Getting the management structure right requires an adequate institutional analysis during the project formulation phase and this requires specific knowledge, skills and field time.

Capacity building is a key approach used by development organs to ensure sustainability of development projects (Langran, 2002). Capacity building as an approach to community development builds independence and can be a 'means to an end' with the key goal being enabling the community to take over a project of an 'end' with the key goal being to enable parties ranging from individuals to government officers to work together to solve common problems (Temali, 2012). Capacity building requires a deep analysis of existing capacity, identifying capacity needed and designing of appropriate measure to fill the capacity gap. Capacity building can take various dimensions including human resources, social resources and financial capacity (Temali, 2012). Financial capacity will include knowledge of resources and opportunities. Human resources

dimension will include issues such as motivation of individuals and teams, skill development, development of relational abilities as well as trust within the project team and community in general to ensure equitable benefiting from the project. Social dimension of capacity building will include issues such as participation structure and shared trust (UNDP, 1997). Capacity building increases the ability of organizations, groups and individuals to solve problems, perform key functions and finally defines and moves effectively towards achieving objectives, effectively understand and handle development needs in a wider context and in a sustainable way (UNDP, 1997).

Sustainability of Donor Funded Food Security Project

Project sustainability is one of the most critical challenges for all grassroots, national and international development agencies. The concept of sustainability can be seen within time and changing social, economic and political contexts. According to Williams, (2003), sustainability is reflected in the capacity of the community to cope with change and adapt to new situations. A project that is seen as worth sustaining today may not be so in future. In the researcher's perspective, some definitions consider as a criterion of sustainability that the beneficiaries cover all costs after donor assistance has ended. The capacity to implement a program or facility exists and the beneficiaries are self-reliant (Bennett & Lynn 2003). EU (2004) defines sustainability as the likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended. Mulwa (2010) noted that project sustainability concerns itself with the continuity of a project until it attains its set objectives. Sustainability is the ability of a community development project to maintain or expand a flow of benefits at a specified level for a long period after project inputs have ceased. In other words, the project is the physical infrastructure established and

maintained and operated by the participating institutions. The basic idea of determinacy of sustainability should be designed to produce a continuous flow of outcomes for a long time. This refers to the continuation of benefits after development assistance has been completed because sustainability includes projects effects after implementation, the notion of building resilience to risk is party of the reason for focusing on the determinants of sustainability. Sustainability hence refers to sustainability of donor funded effect rather than any particular project organization which can be dissolved at the end of project implementation (World Bank, 2006).

Sustainability is the ability of an organization to develop a strategy of growth and development that continues to function indefinitely. This implies that organizations need to have proper strategies covering advocacy, foundations and fundraising, governance, management and leadership among others (Dorothy, 2007). Donors play a significant role in the social development process in all regions of the world. They are particularly critical in circumstances where State funds are limited, political situations are fluid, natural disasters resulting from both predictable and unpredictable environmental circumstances occur, ethnic strife is rampant, and the level of per capita income severely restricts the ability to purchase needed goods and services - social, educational and economic.

Several projects run throughout the Country have shown a paradigm shift from self-sufficient to donor funded dependency and as a result sustainability of the same has been wanting. Donors have responsibilities when funding development interventions and one such important responsibility relates to phasing out support. Projects are not always a life time intervention, they have timelines. Donors phase out support at project levels for a number of reasons. In many instances phasing out is a part of

a carefully-considered approach to ensuring the long-term sustainability of a programme or project. In other instances there may be higher level “political” reasons that remove some or all of the control that programme managers have over investment decisions. A recent joint donor evaluation of exit strategies in bilateral aid programmes concluded that planning for a proper exit and sustainability is the exception rather than the rule (Heldgaar, 2008).

Within country programmes, politically motivated decision making on programming priorities can impact significantly on phasing out decisions and sustainability. These in-country processes are characterized by donors shifting from bilateral to (harmonized) multilateral budget support; or deciding on a shift in sector priorities due to domestic political pressure. By its nature, however, support to empowerment processes enables donors in country offices to insulate themselves somewhat from these external risks by integrating a “phasing over” approach into programme and project design, transferring programme activities to local organizations and networks (C-Safe, 2005). During programme design and implementation, emphasis is placed on capacity building so that the services provided can continue through local organizations. Ensuring this approach is implemented from the start of a programme can reduce any negative impact of phasing out and better prepare programme partners for the unexpected.

Empirical Review

Rono (2008) in her study on financial sustainability of NGOs projects in Nairobi revealed that dependence on donor funding was high with low utilization of internal resources, with use of the services offered to provide a decent return lacking. Khan and Hare (2005) pointed out that for an NGO funded project to be sustainable it has to develop a sound institutional base, a strong programmatic approach, and sufficient funds. At the institutional level, the NGO needs to establish

the internal systems, structure, and work culture that promote strong leadership and positive organizational image, foster the belief that people are willing to support products and services they find valuable, and facilitate the development plans for sustainability. They noted that for the NGO to be financially sustainable, it must have financial systems and procedures that provide clear and timely accounts of the financial position of the organization, reduce the costs of providing services, recover costs of service provision from clients and community, raise resources through institutional earnings and use assets to attract and leverage resources from the community, the government, and diverse donors.

In Kenya the sharp deterioration in economic performance worsened the poverty situation in the country as outlined in the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) report 2003-2007. The number of people living in poverty was estimated to have risen from 11 million or 48 per cent of the population in 1990 to 17 million or 56 per cent of the population in 2002 (GoK, 2003). This called for a concerted effort aimed at poverty alleviation. This was in form of private public partnerships geared at improving the standards of living of the locals mainly through rural projects initiation (GoK, 2001). The need for sustaining the initiated projects is therefore inherent.

In a study conducted in Vietnam, Hibbard and Tang (2004) highlighted the importance on NGOs’ part in sustainable community development. One observation was that NGOs give a balance to economic, social and environmental factors in promoting sustainable community development. In his work, Baccaro (2001) describes how NGOs promote empowerment and organization of the poor and marginalized through community development projects. In a general perspective, the major aim of NGOs is to support sustainable development in the community through activities that engage the community in their own

development, capacity building and initiate self-reliance (Langran, 2002). In the poor and marginalized communities, the communities lack specialized labour and skills to do professional work and tap locally available resources that are important for particular community development projects (Nikkhah & Redzuan, 2010). Hibbard and Tang (2004) noted that sustainable development in any community is process oriented requiring extensive participation from the community members with reliance on strong networks to share knowledge, resources and expertise.

Wabwoba and Wakhungu (2013) observed that Kenya is one of the countries in sub-Saharan Africa not able to feed its population sufficiently and therefore, relies on outside assistance. A study on factors affecting the sustainability of community food security projects funded by various organizations between 2005 and 2009 in the Karai and Ndeiya divisions of Kiambu County, Kenya concluded that food security projects are not sustainable. Despite much food security projects having been funded by both the Kenyan government and other development partners in an effort to mitigate against food insecurity and rampant 'poverty' the impact remained low as revealed by assessment reports. The study did not however establish the root causes of the projects failure but dwelt on general management issues, which even when addressed might not lead to sustainability of the projects.

PDA Coast (2012) noted that over 95% of all Njaa marufuku projects had collapsed due to resource challenges, project prioritization, and leadership related problems thus leading to a total loss of over 30 million shillings used for funding the projects. PDLP Coast (2012) similarly reported that most livestock based projects were doing poorly due to lack of proper feasibility studies done to establish the opportunities and challenges to the projects. Kilifi county Kenya received financial support for dairy farming through Heifer International and Plan International since early

1990's but due to various challenges, sustainability and performance remained below average for some of the beneficiaries. However over the same period of time some of the farmers supported have moved up the income ladder. PDLP Coast (2012).

In Nigeria, Maduagwu (2000) indicated that Governments should not presume that they knew what will benefit the poor better than the poor themselves. Projects embarked need to be demand driven and on clear sustainability frameworks. Mansuri and Rao (2004) noted that community development was more effective where the community was more cohesive, better educated and better managed. The findings however did not indicate the level of complexity of the project and implementation; whether it was at individual or communal level. In Japan, similar sentiments were raised by Pandey and Okazaki, (2005) who argued that Community programs initiated the government and the international donor agencies failed to be sustainable at local level after completion of project. Kakaza (2009) further indicated that it was necessary to have the community involved during the project initiation so as to enhance the success rate of the project. Proper communication and information sharing was also observed by Magano (2008) as critical in enhancing projects success. The level of beneficiary involvement was not clearly spelt out in the report to enable adoption by other projects

Patricio (2013) reported that aspirations' failure among the poor may be a consequence of poverty, rather than a cause. The study however failed to expressly support the sentiment especially on why aspirations could not be both a cause and consequence of poverty. It was also not clear on how the aspirations could be enhanced alongside other factors so as to enhance projects success among the poor. Bradshaw 2005 stated that, increasing the effectiveness of anti-poverty programs required those designing and

implementing those programs to not only develop adequate theories of poverty to guide programs, but ensure that the community development approaches are as comprehensive as possible.

Josiya (2012) indicated that if poverty alleviation players understood the theory of a system, and the role of cooperation in optimization of all of its parts, they can promote change through a cooperative mode rather than adversarial competition. Ndou (2013) revealed that lack of funds, poor project management, poor management of funds, lack of commitment and motivation, low level of education of project members, lack of youth involvement in community-based projects, lack of monitoring and evaluation by government officials and community leaders, lack of training and unavailability of workshops for project members and lack of government involvement in addressing project challenges were the reasons for failure of community-based projects. The study however failed to disaggregate the various reasons so as to know how to deal with them for future project success. Lalima (2013) observed that for any poverty alleviation project to work at individual, community or national level, a policy framework that prominently includes an orientation towards integration into the global economy needs to be put in place. The finding points out to the fact that, as one develops or escapes out of poverty, needs to be aware of all that happens around him or her and where it is above his/her means then the government or international community needs to come in.

In their research, Iyer and Jha (2005) identified many factors as having influence on project cost performance, these includes : project managers competence, top management support ,project managers coordinating and leadership skills, monitoring and feedback by participants, decision making , coordination among project participants owner's competence,social condition ,economic condition and climatic conditions. Elyamany *et.al*

(2007) introduced a performance evaluation model for the construction companies in Egypt.

RESEARCH METHODOLOGY

This study used descriptive survey design with mixed approaches. The descriptive survey design was also desirable since it enabled the study to use closed ended questionnaires as noted by (Punch, 2013). The design was considered suitable as it allows an in-depth study of the problem under investigation. The target population comprised of 103 donor funded food security projects in Samburu County completed between 2011 and 2015. The donor funded projects implementation period ranged between one year to five years. It was necessary therefore to include projects which were funded and completed within the five year period. The study adopted a census survey design with respect of unit of analysis which is the donor funded food security project in Samburu County. This therefore ruled out application of specific sampling technique. The study did use a census since the population of 103 is small and the study aims to reach all the projects. The study did collect views from the project managers of the projects because they were the decision makers in these projects and were actively involved in their day to day operations and were information rich for the purpose of this study and therefore targeted as respondents for the study. The study used questionnaire as the research instrument. This is because of their simplicity in the administration and scoring of items as well as data analysis (Gronhaug, 2005).The study utilized questionnaire that were developed for generating information on key variables of interest from the targeted respondents in this study. The study also undertook desk review of existing information about the study areas and collected quantitative data from respondents who were conversant with the subject through various interactions or experiences. These respondents were specifically targeted for their ability to provide pertinent

information to the study. The questionnaires were self-administered and distributed to the respondents and reasonable time given before they were collected. The purpose of a pilot test was to test the reliability and validity of the questionnaire and enable the researcher to amend the questionnaire as appropriate so as to capture data accurately. It is supported by Riel (2010) who recommends that a pilot test of 10% of the population can be used for pilot testing. The findings of the pilot test was included in the actual study (Riel, 2010). A pilot study was undertaken on 10 projects in the neighbouring Marsabit County. In order to test the reliability of the instruments, internal consistency techniques were applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is commonly recommended that indicates acceptable reliability and 0.8 or higher was good. This study was adopt a reliability threshold of 0.7 as recommended by Tavakol & Dennick (2011).

The study adopted Content Validity Index which refers to the extent to which a measuring instrument provides adequate coverage of the topic under study. The Content Validity Index was achieved by subjecting the data collection instruments to an evaluation group of experts who provided their comments and relevance of each item of the instruments and the experts indicated whether the item was relevant or not. The data collected was quantitative. Once the questionnaire was received they were coded and edited for completeness and consistency. To ensure easy analysis, the questionnaires were coded according to each variable of the study to ensure accuracy during analysis. Quantitative data was analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS) version 22 and excel.

DATA ANALYSIS, PRESENTATION AND DISCUSSION

A population of 103 was selected using census survey design technique. Out of the covered population, 70 were responsive representing a response rate of 67.96%. A pilot study was carried out to determine reliability and validity of the data collection instrument. The study used descriptive statistics to present the frequency and the percentages of the gathered data on drivers of sustainability of donor funded food security projects in Kenya.

The study established the demographic analysis. They were asked to state their gender, age, level of education and work experience. The study sought to establish the gender distribution of the respondents. From the results, both male and female respondents participated in the study and results showed that 40% (28) were male, 37.14% (26) were female and 22.86% (16) of the respondents did not indicate their gender. The results indicated that the two genders were adequately represented in the study since there was none which was more than the two-thirds. Based on the age of the respondents, 53.85% of the owner-managers were aged between 18 to 35 years, 32.76% were more than 35 years old while 13.39% did not indicate their age. On the level of education, majority (70%) had college education level, 20% had university education level, 5% had post graduate education level, 3% had secondary education level and 2% had professional qualifications. These findings implied that most of the respondents were qualified to understand the nature of the study problem. This concurs with Joppe (2000) that during research process, respondents with technical knowledge on the study problem assist in gathering reliable and accurate data on the problem under investigation. This demonstrated that most of the organization employees were qualified professionals with technical knowledge and skills on the study problem and thus provided the study with reliable

information on drivers of sustainability of donor funded food security projects in Kenya.

The study determined the working experience held by the respondents in order to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. From the findings, (60%) indicated to have a working experience of 6-10 years, 20% had a working experience of less than 5 years, 15 % had a working experience of 11-15 years and 5% had a working experience of 16 years and above. These findings were in line with Braxton (2008) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study. This indicates that 50% of the respondents had worked in the projects for a long time and thus understood technical issues on of sustainability of donor funded food security projects in Kenya.

Stakeholder Participation

The study sought to assess the influence of stakeholder participation on sustainability of donor funded food security projects in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). The scores of 'Very Great Extent' and 'Great Extent' had been taken to represent a statement not agreed upon, equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' had been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement highly agreed upon equivalent to a mean score of 1.0 to 2.5 The study findings indicate that the respondents indicated to a great extent that the community involvement enhance engagement initiatives in the projects (3.454); there was community involvement in

mobilization of the resources for implementation of the project activities(2.554); the community involvement yielded sustainable projects (2.331); the community involvement enhanced transparency and accountability in the projects (1.654); the community involvement ownership encouraged ownership of the project activities (3.465); there were sustainable problem solutions from the problem identification in the projects (2.654) and there was community empowerment through transfer of management skills to users for the sustainability of the projects (1.876). The study findings corroborated with literature review by Okafor (2005) who observed that when communities participate in their own projects include empowering communities improve efficiency, local participation yields better projects, better outcomes as well as greater transparency and accountability enhances service delivery. Communities who were the beneficiaries of the projects should not be seen as targets of poverty reduction efforts but should be seen as assets and partners in the development process.

Management Practices

The study sought to assess the influence of management practices on sustainability of donor funded food security projects in the study area. This section presented findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement not agreed upon, equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' was taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' was taken to represent a statement highly agreed upon equivalent to a mean score of 1.0 to 2.5.

Form the study results, majority of the respondents stated that the leadership of the

project enhanced building of partnerships for sustainability of the projects(1.954); the leadership enhance self-reliance after the donors' exit(2.674); there was responsiveness to the complaints on the management issues in the projects (2.857); the leadership encourage sustainable solutions to the management of the project (3.098); there was transparency and accountability on the management of the projects (2.786). Attainment of any form of project sustainability was not an endeavour of a single day, but a life- long process (Wanjohi, 2010). Poverty and hunger projects supported by donors were complex and required multifaceted management skills For project sustainability to be achieved the institutions and management involved in project implementation from the community to the national or international levels needed to be empowered in terms of information, skills and resources (human and capital) for smooth running of activities for sustainability of projects.

According to McDade (2004), good management ensures that sufficient local resources and capacity exist to continue the project in the absence of outside resources. Espinosa, et al. (2007) opines that task familiarity is important in the community based projects and this is usually linked to performance which in turn is linked to sustainability. Good management goes beyond mere skills (Kirksch, 2000) to technical and expertise required to successfully implementing the project This study argues that management strategy is a recipe to effective project implementation as it encourages participation and involvement of the community in all the processes of project implementation, hence people feeling empowered. Empowered people have freedom of choice and action, which in turn enables them to better influence the course of their lives and the decisions which affect them

Sustainability of Donor Funded Food Security Projects

The study sought to establish number of engagement initiatives for sustainability of the projects had been in existence after completion. Majority (50%) of the respondents indicated that the projects took an average of 5 to 10 number of engagement initiatives after; 16.67% of the respondents indicated that the projects were in existence for less than 5 years after number of engagement initiatives during and after completion while 33.33 % indicated of the respondents indicated that the projects had been in existence for more than ten year after number of engagement initiatives and after completion. Generally, the findings indicated a low rate of sustainability of the projects with majority of the projects being in existence after short period of time for long and short period of number of engagement initiatives. The findings of the study collaborated with literature review by Gichoya (2011) who observed that sustainability of the projects established in developing African countries remained very critical due to the lack sustainable engagement initiatives. Respondents were requested to indicate the percentage of complaints registered over the last five years. The study findings illustrated that majority (28%) of the respondents indicated that less than ten percentage of the complaints were registered in the year 2011; 36% of the respondents indicated that less than ten percentage of the complaints were registered in the year 2012; 37% of the respondents indicated that less than ten percentage of complaints were registered in the year 2013, 57% of the respondents indicated that less than ten percentage of the complaints were registered in the year 2014 while 34% of the respondents indicated that less than ten percentage of the complaints were registered in the year 2015. Generally, the finding indicated a low rate of complaints was registered within their scope for the last five years.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of the Study Findings

The general objective of the study was to determine the drivers of sustainability of donor funded food security projects in Kenya. The study specifically determined the effect of stakeholder participation, and management practices on sustainability of donor funded food security projects in Kenya. The reviewed literature showed that sustainability of donor funded food security projects played an important role in curbing hunger in the country. Further, it was revealed that the type of the employed stakeholder participation and management practices significantly affected sustainability of donor funded food security projects. The major findings summarized from the five specific objectives are as follows:

Stakeholder Participation

The study findings indicated that majority of the respondents stated that the community involvement enhance engagement initiatives of the projects. This can be achieved through taking an active role in identifying their needs and prioritizing those needs, mobilizing internal and external resources and implementing activities towards achieving their objectives, self-reliance is stimulated thus reducing dependency on the outside agencies and improve efficiency and local participation yields better projects. The community involvement decrease complaints on management issues in the projects as it encourage greater transparency and accountability enhances service delivery, the goal of participation is to give the communities ownership, ability to express themselves, to learn from them, empower them through the transfer of skills, abilities and knowledge and produce sustainable solutions since decisions made by a community are influenced by the community's understanding of the issues involved. The study also established that s problem identification enhance engagement initiatives of the projects

and decrease of complaints on management issues of the projects?

Management Practices

The study established that building partnerships enhance engagement initiatives of the projects as it encouraged management to take an active role in identifying their needs and prioritising those needs. The study established that management practices facilitated mobilizing internal and external resources and implementing activities towards achieving their objectives. Self-reliance was stimulated thus reducing dependency on the outside agencies and promoted efficiency and local participation yielding better projects. The responsiveness decrease complaints on management issues in the projects as it leads to greater transparency and accountability enhances service delivery, goal of participation is to give the communities ownership, ability to express themselves, to learn from them and empower them through the transfer of skills, abilities and knowledge and improve efficiency and local participation yielded better projects.

Conclusions of the Study

Based on the study findings, the study concludes that sustainability of donor funded food security projects is affected by stakeholder participation followed by monitoring and evaluation, management practices and donors' exit are the major factors that mostly affect sustainability of donor funded food security projects in Kenya.

The study concludes that stakeholder participation is the first important factor that affects sustainability of donor funded food security projects. The regression coefficients of the study show that stakeholder participation has a significant influence of 0.876 on sustainability of donor funded food security projects. This implies that increasing levels of stakeholder participation by a unit would increase the levels of sustainability of donor funded food security projects by 0.876. This shows that stakeholder

participation has a positive influence on sustainability of donor funded food security projects.

Further, management practices are the third important factors that affect sustainability of donor funded food security projects. The regression coefficients of the study show that management practices has a significant influence of 0.673 on sustainability of donor funded food security projects. This implies that increasing levels of management practices by a unit would increase the levels of sustainability of donor funded food security projects by 0.673. This shows that monitoring and evaluation has a positive influence on sustainability of donor funded food security projects.

Recommendations of the Study

The study recommends for effective stakeholder participation in the projects community involvement enhance engagement initiatives of the projects. This can be achieved through taking an active role in identifying their needs and prioritizing those needs, mobilizing internal and external resources and implementing activities towards achieving their objectives, self-reliance is stimulated thus reducing dependency on the outside agencies and improved efficiency and local participation yields better projects.

The management of the projects should be responsive to the management of the issues affecting the sustainability of the projects. There is need to offer relevant support to the beneficiaries and building partnerships to ensure there is interaction for effective decision making. The responsiveness decrease complaints on management issues in the projects as it leads to greater transparency and accountability enhances service delivery, goal of participation is to give the communities ownership, ability to express

themselves, to learn from them and empower them through the transfer of skills, abilities and knowledge and improve efficiency and local participation yields sustainable projects.

Knowledge Gained for Policy and Practice

The study contributes the body of knowledge by determining that sustainability of food funded security projects in Kenya is greatly affected by stakeholder participation and management practices. The study contributes to the existing literature in the field of project management by elaborating exiting theories, models and empirical studies on factors sustainability of food funded security projects in Kenya. The study thus contributes to the existing knowledge in project management by reviewing theories and models that can be applied to improve sustainability of donor funded projects.

Recommendations for Further Studies

The study is a milestone for further research in the field of sustainability of donor funded food security projects in Africa and particularly in Kenya. The findings demonstrated the important factors to sustainability of donor funded food security projects to include; stakeholder participation and management practices. The current study should therefore be expanded further in future in order to determine the effect of project legal framework on sustainability of donor funded food security projects. Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other arid and semi-arid areas in Kenya and other countries in order to establish whether the explored factors can be generalized to affect sustainability of donor funded food security projects.

REFERENCES

- AfDB, O. E. C. D., & UNDP, U. (2012). African Economic Outlook 2012. *Country Note Burundi*.
- Agle, B. R., Donaldson, T., Freeman, R. E., Jensen, M. C., Mitchell, R. K., & Wood, D. J. (2008). Dialogue: Toward superior stakeholder theory. *Business Ethics Quarterly*, 18(02), 153-190.
- Amin, M. E. (2005). *Social science research: Conception, methodology and analysis*. Makerere University.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.
- Ariya, G., & Momanyi, S. (2015). Contribution of Gold-ecorated Lodges to Poverty Reduction among Local Residents in Maasai Mara and Amboseli Protected Areas, Kenya. *Journal of Tourism & Hospitality*, 2015.
- Bazeley, P. (2009). Editorial: Integrating data analyses in mixed methods research. *Journal of Mixed Methods Research*, 3(3), 203-207.
- Béné, C., Macfadyen, G., & Allison, E. H. (2007). *Increasing the contribution of small-scale fisheries to poverty alleviation and food security* (No. 481). Food & Agriculture Org.
- Bith, B. (2011). *Community-based ecotourism and empowerment of indigenous people: the case of Yeak Laom community development, Cambodia* (Doctoral dissertation, Lincoln University).
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Chan, A. P., Scott, D., & Lam, E. W. (2002). Framework of success criteria for design/build projects. *Journal of Management in Engineering*, 18(3), 120-128.
- De Merode, E., Homewood, K., & Cowlshaw, G. (2004). The value of bushmeat and other wild foods to rural households living in extreme poverty in Democratic Republic of Congo. *Biological conservation*, 118(5), 573-581.
- Delmon, J. (2011). *Public-private partnership projects in infrastructure: an essential guide for policy makers*. Cambridge University Press.
- Emmanuel, K. T., Frempong, G., Obirih-Opareh, N., & Rose, O. (2015). Does Microcredit Create Employment For the Poor? The Case of the Microcredit Scheme of Upper Manya Krobo Rural Bank in Ghana. *Business and Economics Journal*, 2016.
- Ghuri, P. N., & Grønhaug, K. (2005). *Research methods in business studies: A practical guide*. Pearson Education.

- Gareis, R., Huemann, M., & Weninger, C. (2010). The consideration of sustainability principles in the project assignment process: An analysis of Project Management approaches. In *IPMA World Congress* (pp. 1-7).
- FAO. 2010. Adding value to livestock diversity: Marketing to promote local breeds and improve livelihoods. *FAO Animal Production and Health Paper*, 168.
- Gichoya, D. (2005). Factors affecting the successful implementation of ICT projects in government. *the Electronic Journal of e-government*, 3(4), 175-184.
- Guijt, I., & Woodhill, J. (2002). *Managing for impact in rural development: A Guide for Project M & E*. International fund for Agricultural Development.
- IGWEONU, K. (2011). Interculturalism revisited: identity construction in African and African-Caribbean performance. *Trends in Twenty-first Century African Theatre and Performance*, 6, 61.
- Haughey, D. (2012). The project management body of knowledge (PMBOK).
- Hayward, R., & Neuberger, L. (2010). *A new era of sustainability: UN Global Compact-Accenture CEO Study 2010*.
- Kitivi, D. M. (2014). *Performance of poverty eradication donor funded projects in Mwingi sub-county–Kenya* (Doctoral dissertation).
- Kloppenborg, T. J., Tesch, D., & Manolis, C. (2011). Investigation of the sponsor's role in project planning. *Management Research Review*, 34(4), 400-416.
- Lelegwe, S. L. (2012). *Factors influencing community ownership of donor funded projects: a case of Saidia, Samburu County, Kenya* (Doctoral dissertation, University of Nairobi, Kenya).
- Manikutty, S. (2010). CK Prahalad and his work: An assessment. *Vikalpa: The Journal for Decision Makers*, 35(2), 1-5.
- Manyara, G., & Jones, E. (2007). Best practice model for community capacity-building: A case study of community-based tourism enterprises in Kenya. *Turizam: znanstveno-stručni časopis*, 55(4), 403-415.
- Mallin, M. L., & Finkle, T. A. (2007). Social entrepreneurship and direct marketing. *Direct Marketing: An International Journal*, 1(2), 68-77.
- Meyer, R. L. (2010). Microfinance, poverty alleviation and improving food security: Implications for India. *Food security and environmental quality in the developing world*, 347.
- Mutimba, E. M. (2013). *Determinants Of Sustainability Of Donor Funded Projects: The Case Of Selected Projects In Ganze Constituency In Kilifi County, Kenya* (Doctoral dissertation, University of Nairobi).

- Mugenda, O. M., & Mugenda, A. G. (2012). *Research methods dictionary*.
- Muhangi, L., Woodburn, P., Omara, M., Omoding, N., Kizito, D., Mpairwe, H., ... & Elliott, A. M. (2007). Associations between mild-to-moderate anaemia in pregnancy and helminth, malaria and HIV infection in Entebbe, Uganda. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 101(9), 899-907.
- Mwita, E. J. (2013). Land Cover and Land Use Dynamics of Semi-Arid Wetlands: A Case of Rumuruti (Kenya) and Malinda (Tanzania). *Journal of Geophysics & Remote Sensing*, 2013.
- Oduwo, B. O. (2014). *Implication of informal land uses on Ngong River. Case of Bunyala Road* (Doctoral dissertation, University of Nairobi).
- Oriola, E. O. (2009). A framework for food security and poverty reduction in Nigeria. *European Journal of Social Sciences*, 8(1), 132-139.
- Orodho, A. J. (2009). *Techniques of Data Analysis Using Statistical Package for Social Sciences (SPSS) Computer Package. Maseno, Kenya: Kanezja Publishers*.
- Panda, J. J. & Sahoo, S. K., Parveen, S., (2007). The present and future of nanotechnology in human health care. *Nanomedicine: Nanotechnology, Biology and Medicine*, 3(1), 20-31.
- Patton, M. Q. (2008). *Utilization-focused evaluation*. Sage publications.
- Pearce, T., Ford, J. D., Duerden, F., Smit, B., Andrachuk, M., Berrang-Ford, L., & Smith, T. (2011). Advancing adaptation planning for climate change in the Inuvialuit Settlement Region (ISR): a review and critique. *Regional Environmental Change*, 11(1), 1-17.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. Sage.
- Riel, M. (2010). Understanding action research. *Research Methods in the Social Sciences*, 17(1), 89-96.
- Robson, C., & McCartan, K. (2016). *Real world research*. John Wiley & Sons.
- Saunders, M. N. (2011). *Research methods for business students, 5/e*. Pearson Education India.
- Sarason, I. G. (Ed.). (2013). *Social support: Theory, research and applications* (Vol. 24). Springer Science & Business Media.
- Sekaran, U. (2006). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human resource development review*, 4(3), 356-367.
- Wishitemi, B. E. L. (2008). Sustainable Community-Based Conservation and Tourism Development Adjacent to Protected Areas in Kenya. *Moi university Inaugural Lecture*, 5(3).

- Xavier, Harold Goodwin, and Rachael Walton. "Donor funded tourism projects: factors for success." *ICRT occasional paper 25* (2012).
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.
- UNDP, U. (2012). African Economic Outlook 2012. *Country Note Burundi*.
- Van Lerberghe, W. (2008). *The world health report 2008: primary health care: now more than ever*. World Health Organization.
- Vezzoli, C., Pruul, K., & Coad, R. (2010). *System Design for Sustainability: Theory, Methods and Tools for Sustainable "Satisfaction-System" Design*. Maggioli editore.
- UNICEF. (2008). *The state of the world's children 2009: maternal and newborn health* (Vol. 9). Unicef.
- Wambua, L. M. (2013). Poverty reduction Approaches in Kenya: Assessing the Usefulness of the Right Based Approach in Kenya. *Journal of Arts and Humanities*, 2(1), 155.
- World Bank. 2012. *Linking Poverty Reduction and Environmental Management: Policy Challenges and Opportunities*.
- World Health Organization. (2014). Trends in maternal mortality: 1990 to 2013: estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division: executive summary.
- Zeller, M., & Meyer, R. L. (Eds.). (2002). *The triangle of microfinance: Financial sustainability, outreach, and impact*. Intl Food Policy Res Inst.