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## Project Activities and Beneficiaries' Economic Sustainability in Rwanda: A Case Study of World Vision Nutrition Centre Gicumbi District

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### **Abstract:**

*The main objective of the study was to discuss the economic sustainability of village nutrition project for Gicumbi district. Though the project has been running, there was a need to find out whether its activities would be sustainable after the project has ended. In order to achieve this purpose the researcher aimed at the following research objectives. 1) To determine the relationship of Community Health Workers participatory training on the economic sustainability of the beneficiaries. 2) To assess the importance of child nutrition centre management training on economic sustainability of the beneficiaries. 3) To identify the effect of home-based health management training on the economic sustainability of the beneficiaries. A sample of 50 respondents was selected using both probability and non-probability methods and a survey questionnaire were administered to them complemented with observation. The field data was edited and coded then analyzed using SPSS analysis tool. Findings revealed the following: All 47 respondents in Rutare sector benefited from trainings in 3 areas: Community health workers' trainings; Maternal and child health training; Health centre management training. The second finding was in regard to community health worker training activities, where regression results indicated that both the availability and reliability of community health workers had a significant effect on economic savings in Gicumbi district, meaning that the project activity had a positive influence on economic sustainability. Thirdly, the contingency of nutritional training center savings effect on the sector of respondents' residence proved to be important there was a significant effect of nutritional center activities on economic status improvement. This contingency study was for addressing research objective 2. Finally, the findings on Objective 3 suggested that the management skill impartation project to the nutritional center operators had a significantly positive bearing on economic sustainability of the residents.*

## **1. Introduction**

### *1.1. Background of the Study*

Following the devastating effects of the genocide against the Tutsis on Rwanda's economy in 1994, the government embarked on an extensive reconstruction program based on sound economic policies, peace and stability. In the post-genocide era Rwanda has hosted a number of NGOs among which world vision is inclusive. World vision operates in 15 districts in Rwanda one of them being Gicumbi district (John, 2012). It provides support in areas like maternal newborn and Child Health, health and nutrition, HIV/Aids, malaria, water, sanitation, hygiene, livelihood and food security, gender, child protection, education, disaster response, peace building, gender, environment.

Malnutrition is caused by a combination of individual, household, community, national, and international factors, ranging from disease, cultural beliefs, customs, high fertility rates, poor economic status, limited access to health, and other social lack services (Gillespie et al., 1996). The consequences of malnutrition make its prevention a highly pertinent priority. It is clear that significant efforts are needed to prevent malnutrition and a further deterioration in the nutrition situation. Significant improvements in nutritional status and well-being in the long term can only be achieved through sustainable and equitable economic growth and social development, particularly through education (Kennedy, 1999). However, there is a major role for community nutrition programs as a direct means of improving nutrition in the short term, and as a means of focusing attention on nutrition concerns and policies (Kennedy, 1999).

Despite of Rwanda's efforts to improve its economic status, household food security and poor nutrition remains a challenge (RDHS, 2010) About 460,000 households (21 %) have unacceptable food consumption and may be considered (food insecurity by provinces in Rwanda 2012 VS 2009). The areas of highest food insecurity in Rwanda are the northern and western areas bordering Lake Kivu and along the Congo Nile Crest (ibid 2012 VS 2009). From 2005 to 2010 there were improvements in nutritional status among children

under 5 and among women. These improvements were largely attributed to the implementation of the National Multi sectoral Strategy to Eliminate Malnutrition, which includes active nutrition screening of children by community health workers (RDHS, 2010).

Rates of stunting, underweight and wasting have somehow decreased, and there has been a remarkable reduction in anemia in children under 5 years MOH report, (2010) pointed out that, health services improved, tremendous decreases in child, infant and malaria mortality, and maternal health indicators were improved very substantially. HIV prevention and treatment are expanded all over the country. However, even with these improvements, chronic malnutrition is still far too high, with disparities that overwhelmingly affect rural children: 47 % of rural children are stunted, as compared with 27% of urban children. Regions with the highest rates of food insecurity also have the highest rates of stunting: 51 % and 50 % in the Northern and Western provinces, while the lowest rates (24 %) are in the city of Kigali.

Mothers' levels of education and wealth quintile have a clear inverse relationship with prevalence of stunting (DHS, 2011). Under nutrition in children is attributed not only to food insecurity and poverty, but also to inadequate feeding, particularly during weaning, and insufficient intake of micronutrients — only 20% of Rwandan children consume food rich in iron, which is critical to growth and cognitive development (RDHS, 2005). According to the recent results of a cost of hunger study in Rwanda, 21.9% of child mortality is associated with under nutrition, while the social and economic impact of child under nutrition leads to the loss of \$820 million, equivalent to 11.5% of Rwanda's GDP (USAID, 2012).

Children who are at risk of malnourishment have been systematically referred to health facilities for appropriate treatment such as therapeutic milk, and ready to use therapeutic food for severe cases, and corn soy-blend for moderate cases. Other sustainable approaches have also been initiated and include infant and young child feeding, community based nutrition programs and behavior change communication and home food fortification (CAAPD, 2013).

As a result of the above problems world vision is promoting the integration of nutrition programs in primary health care services by supporting 2 village child nutrition centers. These centres are dealing with issues of nutrition through tackling malnutrition and helping families, and mothers in particular, to learn about good nutrition and safe hygiene practices (John, 2012). Children are benefiting from vitamin A and immunisation campaigns, which are occasionally run at the centres, and monthly growth checks are helping parents monitor their children's development.

World vision, envisions a world where every child has the opportunity for life in all its fullness. good nutrition is an essential foundation for health and development, yet malnutrition continues to be one of the serious health problem and the single-biggest contributor to child mortality around the globe (Black et al, 2013; UNICEF, 2013). Acute malnutrition is a strong predictor of mortality among children, it affects over 52 million children under five years of age, with highest prevalence in south Asia and Africa WHO, (2012) it pointed out that out of the total population, 4 percent of Rwandan households equivalent to 82,000 homes, had poor food consumption, which represents an extremely insufficient and unbalanced diet.

One of the goals of world vision in terms of health is to ensure vulnerable mothers and their children are well nourished and empowered economically. In this respect, world vision formed village nutrition centers to empower the mothers with nutrition skills to fight against poverty and malnutrition Nutrition is so critical to human well-being that investing in good infant and child nutrition can lead to an estimated two to three per cent growth in the economic wealth of developing countries. World Vision report, (2011) Malnutrition in all its forms is estimated to be either directly or indirectly responsible for approximately half of all child-death worldwide, including both prenatal and infectious diseases as well as chronic diseases (World Organization Report, 2013). Thus, a society with improved nutrition is a society with improved health status, which is an important aspect of societal sustainability.

In spite of these good intentions by world vision, one wonders to what extent the beneficiaries have been empowered economically by project activities and if they have acquired any potential skills to sustain them therefore it is against this background that this research is conducted to assess the effect of the nutrition project on the beneficiaries' economic sustainability.

### *1.2. Problem Statement*

The fight against poverty and economic degradation is the foremost concern of developing countries and dominates policy planning agenda. This fight is so broad-faceted that it can be done through direct and indirect means. One of such means is family health promotion, which has implications on the household budgets, reducing economic deprivation that would result from the consequences of leaving the issue of health management at large. Indeed, the World Health Organization ranks health promotion as one of the key drivers of economic development, because failure to have health interventions is tantamounts to spending heavily on the health consequences and in trivial cases, an ailing society is a candidate for economic collapse (WHO, 2003).

With funding from the Australian Government, World Vision is promoting the integration of nutrition programs in primary health care services by supporting 20 village child nutrition centres to reduce Malnutrition of children in 15 districts. According to World Vision report (2006), this is done through promotion of healthy child growth and development, prevention of illness, appropriate home-based care for healthy and sick children, and recognition of life-threatening signs for timely referral to health specialists. Though the project has been running in the district for over 5 years now, it remains to be determined whether it has had a significant economic effect on beneficiaries or not and once the project ends the beneficiaries will sustain the activities of the nutrition centre.

According to a survey from the Rwanda Development Board (RDB) (2014), a majority of Rwandan rural sectors remain substantially dependent on extra-community initiatives for economic empowerment. Moreover, other than the operation and monitoring reports, World vision does not have any documented assessment of the sustainability of its project on the community (WV, 2014). This necessitates the question as to whether such a community empowerment initiative has reliable contribution to the economics of the target beneficiaries or not. A research therefore would provide guidelines on how to design activities that would suit the knowledge and capacities of the beneficiaries.

### *1.3. Main Objective*

The overall objective of this study is to assess the economic sustainability of the nutrition project activities in Gicumbi districts. In order to achieve this objective, the research addressed the following specific objectives and research questions:

#### 1.3.1. Specific Objectives

- i. To determine the relationship of Community Health Workers participatory training on the economic sustainability of the beneficiaries.
- ii. To assess the importance of child nutrition centre management training on economic sustainability of the beneficiaries.
- iii. To identify the effect of home-based health management training on the economic sustainability of the beneficiaries.

### *1.4. Research Questions*

1. What is the relationship of Community Health Workers training on the economic sustainability of the beneficiaries?
2. What is the importance of child nutrition centre management training on economic sustainability of beneficiaries?
3. What is the effect of home-based health management training on the economic sustainability of the beneficiaries?

### *1.5. Justification of the study*

This research is important to different parties for different reasons. To the candidate, it is a partial fulfillment of the requirements for the award of the master's degree in project management. To JKUAT, the research would be a source of reference in related study areas, whereby other academic scholars and student may benefit. The third beneficiary from the study is the World Vision. By using the findings of this and other researches, the management may have a project review complement. Finally, the research findings would be useful to social and economic development planners of Rwanda at large. These may benefit from the study in form of recommendations to enhance development using the study recommendations.

### *1.6. Limitations of the Study*

The first limitation of this study was language barrier. Some of the respondents were not able to respond to the survey instruments in English. To overcome this challenge, the instrument was translated at the time of administration by the researcher, according to the respondents' suitable languages. Secondly, due to the sensitive nature of the information elicited, some respondents were not willing to co-operate. This was overcome by creating rapport with the sampled group. A researcher identification tag was requested from the World vision offices to further allay the respondents fear and doubt about the researcher.

### *1.7. Scope of the study*

This study was a case study research conducted in Gicumbi district at Rutare in 2 world vision nutrition centre. Demographically, it was conducted on both gender categories depending on the variables under scrutiny. Only adults participated in the survey due to their capacity to provide objective answers. The content of the study included the three activities of World Vision Rwanda, which are: Child nutrition centre activities, Community Health Worker training and Home-based health management training.

### *1.8. Organization of the Study*

This proposed study is organized into five chapters: The first chapter provides introduction and background to the study, statement of the problem, objectives of the study, significance of the study, study variables, scope and organization of the study. The second chapter deals with the literature review. It shows what other researchers have done on the issues of sustainability of project. Chapter Three provides the details of the methodology followed in conducting this study. It analyzes data collection methods that include sampling, sample size and sampling techniques be used and data collection methods. Chapter Four deals with presentation analysis and interpretation of research findings while the last chapter (Five) presents briefly the summary, conclusions, and recommendations of the study.

## **2. Literature Review**

### *2.1. Introduction*

This chapter provides related literature to the current study with a focus on community based project sustainability beyond donor support. By analyzing and identifying at the weaknesses and gaps of the previous researches, it supports the current study by suggesting possible viable measures or ways of filling the gaps. This chapter therefore begins by looking at the background to sustainability, followed by sustainability theories and efforts to enhance sustainability, challenges and the conceptual framework

### *2.2. Theoretical Review*

#### 2.2.1. Resource Based Theory

From resource-based theory, resources are important unit of analysis to understand a firm's strategy (Kay, 2005). These resources develop organizational capabilities; heterogeneity and immobility of these resources define an organization's competitive advantage in an industry; sustained competitive advantage reward superior economic and financial performance. The currently dominant view of

business strategy resource-based theory or resource-based view (RBV) of firms is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making (Kay, 2005).

The resource-based theory view (RBV) offers critical and fundamental insights into why firms with valuable, rare, inimitable, and well organized resources may enjoy superior performance (Barney, 1995). Its current prominence is reflected not only by its dominance in the academic journals, by its inclusion in leading strategic texts which warrants the conclusion that it is widely taught to students and practitioners in undergraduate, masters' and executive programs.

Building on the RBV, Hoopes, Madsen and Walker (2003) suggest a more expansive discussion of sustained differences among firms and develop a broad theory of competitive heterogeneity. The RBV seems to assume what it seeks to explain and this dilutes its explanatory power.

For example, one might argue that the RBV defines, rather than hypothesizes, that sustained performance differences are the result of variation in resources and capabilities across firms. The difference is subtle, but it frustrates understanding the Resource Based View's possible contributions (Hoopes et al., 2003).

The Resource Based View's lack of clarity regarding its core premise and its lack of any clear boundary impedes fruitful debate. Given the theory's lack of specificity, one can invoke the definition-based or hypothesis-based logic any time. Again, it is argued that resources are one potential source of competitive heterogeneity. Competitive heterogeneity can obtain for reasons other than sticky resources (or capabilities) (Hoopes et al., 2003).

The RBV uses firms' internal characteristics to explain firms' heterogeneity in strategy and performance. A firm is an organized, unique set of factors known as resources and capabilities, and RBV theory cites two related sources of advantages: resources and capabilities. Resources are a firm's accumulated assets, including anything the firm can use to create, produce, and/or offer its products to a market. Resources are eligible for legal protection (as such, firms can exercise property rights over them; can operate independently of firm members and intervene as factors in the production process to convert input into output that satisfies needs (Camisón, 2005).

In this study, since resources develop organizational capabilities; heterogeneity and immobility of these resources define an organization's competitive advantage in an industry; sustained competitive advantage reward superior economic and financial performance, the researchers seeks to establish whether the village nutrition centre project has enough resources that could offer them sustainability. Further, it sought to unearth factors that hinder this village nutrition centre to gain enough resources that help them gain sustainability.

#### 2.2.2. Resource Dependence Theory (RDT)

Resource Dependence Theory (RDT) is based upon how the external resource of organizations affects the behavior of the organization. The theory is based upon the following tenets: Organizations are dependent on resources, these resources ultimately originate from the environment of organizations, the environment to a considerable extent contains other organizations, the resources one organization needs are thus often in the hand of other organizations, resources are a basis of power, legally independent organizations can therefore be dependent on each other (Pfeiffer and Selznick 1978).

In as much as organizations are inter-dependent, the theory of Resource Dependence needs a closer examination. It's very weakness lies in its very assertions of dependence. With changing trends of financial uncertainties, there is need to lean towards other theories of uncertainties. According to this theory, organization depends on resources for their survival; therefore, for any organization to achieve sustainability, resources are indispensable. In the similar manner, for village nutrition centre project at Gicumbi to achieve sustainability, resources are important. These resources will come in the form of human resource – therefore the need to involve all the stakeholders in the project for sustainability, other resources of land and finances (Merriam, 2010).

#### 2.2.3. Complexity Theory (CT)

Complexity theory, which is the study of nonlinear dynamic systems is claimed to be a useful conceptual framework that reconciles the essential unpredictability of industries with the emergence of distinctive patterns. Despite the fact that the theory was originally developed in the context of physical and biological sciences, today it has found applications in social, ecological and economic systems which also tend to be characterized by nonlinear relationships and complex interactions that evolve dynamically over time (Kiel and Elliott, 1996).

During the 1990s, there was an explosion of interest in complexity as it relates to organizations and strategy. The theory suggests that simple deterministic functions can give rise to highly complex and often unpredictable behavior. Thus, applying this theory in strategic planning presupposes flexibility on the part of an organization. Any strategic planning should be done in such a manner that it accommodates the "unexpected". Thus organizations would not only depend on others but devices alternative strategies to counter the unexpected. The two theories (resource dependency and complexity theories) thus fit well in the current study, but not one without the other. Village nutrition project need a merger of these theories in strategic financial planning to acquire sustainability.

#### 2.2.4. Sustainability in the Context of Projects

According to Sugden (2003), Sustainability "has become one of the most over used and abused words in the development vocabulary". In the most obvious sense, the term "sustainable" refers to something which can be kept going. But, it also refers to resource use and lifestyles which do not damage resources or society (Merriam, 2010). Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future" (UN 1987). "Sustainable

development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.”

Hodgkin (1994) defines sustainability as the ability of a development project to maintain or expand a flow of benefits at a specified level for a long period after project inputs have ceased. Mihelcic *et al.* (2003) highlighted that sustainable development refers to the design of human and industrial systems to ensure that humankind’s use of natural resources and cycles do not lead to diminished quality of life due either to losses in future economic opportunities or to adverse impacts on social conditions, human health, and the environment.

Ingle (2005) indicated that sustainability encompasses conventional approaches while adding a longer-term perspective. This longer-term perspective invites other, less traditional considerations for project identification and selection. Further, Ingle (Ibid) highlighted that, for a project to achieve sustainability, it needs to be implemented through a strategic approach.

The strategic approach incorporates four main elements, future Orientation: assuming things will change, and planning to maximize benefits which can be derived during and from that change; external emphasis: recognizing the diversity of the project environment and the many dimensions which impact on project outcomes, including technology, politics, society, and economics; environmental fit: planning for a continual fit between the project (both benefits and delivery institution) and its environment, including mission, objectives, strategies, structures, and resources; and process Orientation: planning and management priorities evolve in an iterative (Ingle, 2005)

Sustainability can be gauged using a multiplicity of parameters. Harvey and Reed (2004) identify eight main sustainability factors. These factors are presented as building blocks and include: policy context, institutional arrangements, financial and economic issues, community and social aspects, technology and natural environment, spare parts supply, maintenance, and monitoring. For each of these factors, issues relating to planning, effective demand, financing, and management are explored along with guidance for addressing sustainability. This research is centered on the social, financial, management and economic issues of the World Vision project in the study district.

#### 2.2.5. Stakeholders’ Participation and Sustainability of a Project

According to Aras and Crowther (2008), there are four aspects of sustainability, which are needed to be recognized and analyzed, namely; societal influence, which measures the effect a society makes upon the corporation in terms of the social contract and stakeholder influence; environmental effect, which is the effect of the actions of the corporation upon its geophysics environment; organizational culture, which is the relationship between the corporation and its internal stakeholders and finances an adequate return for the level of risk undertaken in pursuit of sustainable development and financial sustainability.

Brager, Specht, and Torczyner (2001) defined participation as a means to educate citizens and to increase their competence. It is a vehicle for influencing decisions that affect the lives of citizens and an avenue for ensuring success of a project. However, it can also be a method to co-opt dissent, a mechanism for ensuring the receptivity, sensitivity, and even accountability of social services to the consumers. Armitage, (2003) indicated that citizen participation as a process by which citizens act in response to public concerns, voice their opinions about decisions that affect them, and take responsibility for changes to their community, their support, he pointed out is key for the sustainability of a community project.

Chappel, (2005) suggest that stakeholders support may also be a response to the traditional sense of powerlessness felt by the general public when it comes to influencing government decisions: by their support, community ensures the success of a project through collective efforts to increase and exercise control over resources and institutions on the part of groups and movements of those hitherto excluded from control”.

Further, Group on Participatory Development report, (2001) indicated that this support ensures that stakeholders influence and share control over development initiatives, and the decisions and resources which affect them. This is key in ensuring that resources in village nutrition centre projects in Rutare are managed effectively, minimizing wastes and thereby ensuring their sustainability more so financial sustainability.

According to Oakley and Marsden (2007) stakeholders’ support brings together individuals, families, or communities who assume responsibility for their own welfare and develop a capacity to contribute to their own and the community’s development. In the context of development, community participation refers to an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive a share of project benefits. In their support, the community participates in the community projects and therefore saves the projects resources which can later be channeled to produce more benefits to the project.

As noted therefore by Chappel, (2005), through their participation the community shares project costs: (money or labour) during the project’s implementation or operational stages. This save the project money and can therefore contribute to ensuring financial sustainability. As pointed out by Oakley and Marsden, (2007), community participation is a major form of stakeholder support. Chappel, (2005) ascertains that community support increases project efficiency: Therefore, he recommended that there should be consultation with the community during project planning or beneficiary involvement in the management of project implementation or operation to ensure project sustainability.

Further, Arbitrage, (2003) highlighted that community support increases project effectiveness as it helps to ensure that the project achieves its objectives and that benefits go to the intended groups. Also community support coupled with community participation, helps in building beneficiary capacity: either through ensuring that participants are actively involved in project planning and implementation or through formal or informal training and consciousness-raising activities.

Building a partnership with the communities that should lead towards improving the people's problem solving capacities improves the expectation that the sustainability to be achieved. According to Mbata (2006), if willingness to pay for specific services increases in the community, then it is possible to conclude that the awareness of the community about ownership also increase for that service. Similarly, if households are willing to contribute cash and labor useful for the management of nutritional centre, then the service that they obtain from the centre is valued; and, it is a means of promoting its sustainability.

#### 2.2.6. Health Management and Economic Sustainability

The World Vision nutrition and health programme in Gicumbi, attempts to impart a home-based health management culture among the beneficiaries. Culture is gradually emerging out of the realm of social sustainability and being recognized as having a separate, distinct, and integral role in sustainable development in order to achieve sustainable development governments should give priority to interventions aimed at addressing the needs of the people world bank report,(2009) Within the community development field, culture is broadly defined as the whole complex of distinctive, material, intellectual and emotional features that characterize a society or social group. According to Belat *et al* (2008) a sustainable culture is that one with infrastructure, roads, access to financial institutions, access to market and free from calamities.

Society includes not only the arts and letters but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs (UNESCO, 1995). Within the sustainability field, culture is discussed in terms of cultural capital, defined as "traditions and values, heritage and place, the arts, diversity and social history" (Roseland et al., 2005).

The stock of cultural capital, both tangible and intangible, is what we inherit from past generations and what the societies pass onto future generations. From a policy perspective, UNESCO (2006) encompass cultural development as related to social policy and goals such as fostering social inclusion, cultural diversity, rural diversity, public housing, health and sustainable development. Culture needs to be protected from globalization and market forces, as many fear that individual communities will lose their cultural identity and languages to dominant ideals and culture. The creation of opportunities to expand and deepen diversity may- act as a balance to this.

Sustainability discussions on cultural heritage focus on the need to preserve cultural heritage for future generations, and to recognize the history of a place and the tangible and intangible attributes of its landscapes and communities Matthews and Herbert, (2004). Mills and Brown (2004) argued that cultural development in a community has come to be understood as a collective process, often involving creativity interpreted in the broadest sense.

This contributes to changes in people's lives and long-term developmental benefits for a community. Cultural development in a community encompasses a huge range of activities that give communities the opportunity to tell their stories, build their creative skills, and be active participants in the development of their culture O'Hara, (2002). Discussion of sustainability, as Doubleday, Mackenzie, & Dalby, (2004) observe, incorporate both dynamic understandings of culture and the recognition that place matters because the practice that is in need of sustaining, as well as those that pose threats, happen in particular communities and in specific geographic contexts.

Serious discussions of sustainability require considerations of the dynamics of complex cultural arrangements in particular places, rather than assumptions of either peoples or their ecological contexts" and that fundamental debates on sustainability must contrast environmental and cultural preservation with active practices of living in culturally constituted places. Bezemer and Headey,(2008) pointed out that sustainable economic development is retarded by cultural beliefs, norms and religious practices. As Ledwith (2005) observes, community development begins at the everyday lives of local people. Community development projects empower communities to position local issues within a larger political context. The community development process is often characterized as a bottom line of amalgamating environmental, social, and economic well-being into a common audit. The bottom line is now expanding to include cultural well-being and good governance. The central goals of community development rely on residents having the ability to express their values, be self-reliant, satisfy basic human needs, and have greater participation and accountability in their community.

This is accomplished by education, citizen participation, consensus building, and access to information. Creating a sense of place in the community is central as it empowers residents to become decision-makers over their own environment, resources, and future. According to Williams (2003), sustainability is reflected in the capacity of the community to cope with change and adapt to new situations. Community sustainability is about creating a more just and equitable community through encouraging social and cultural diversity (Roseland et al., 2005). It also requires the community to define sustainability from its own values and perspective. This involves community participation and a collective decision-making process that meets the social, cultural, environmental, and economic needs of the community. Sustainable community involves development of a local and self-reliant economy that does not damage the social well-being of communities. Community residents in sustainable communities employ strategies and solutions that are integrative and holistic.

Communities seek ways of combining policies, programs, and design solutions to bring about multiple objectives (Beatley and Manning, 1997). Sustainable project design utilizes essential aspects of cultural identity, can serve to synthesize the past with the present for the benefit of the future (Matthews and Herbert, 2004). Including residents in the design process can contribute to improving their quality of life.

#### 2.2.7. Management Skills and Sustainability of Projects

Management of projects involves increasing the alignment of development projects with host communities priorities and coordinating aid efforts at all levels (local, national, and international) to increase ownership and efficient delivery of services. It is therefore

basically offering leadership to achieve certain laid objectives. According to McDade (2004), good management ensures that sufficient local resources and capacity exist to continue the project in the absence of outside resources.

Community based projects are complex (Weinberg, 2008) and require multifaceted management skills. A project manager (PM) has to manifest not only project management related skills (Kirsch, 2000), but also technical and expertise as required by the project (Thite, 2001). Project management activities include but are not limited to defining project scope and requirements gathering, managing resources and relevant training issues within a project, advising about technical architecture, identifying specific and general project management practices and escalation procedures, estimating project schedule and budget, ascertaining and managing risks within a project and preparing risk mitigation

The matching or fit between a PM and project extends not only to the technical skills as enumerated above, but also to other general project-PM profile attributes, such as prior exposure to the methodology experience (Swanson and Beath, 2000). A PM is likely the most senior person within a project and is often perceived as a sounding board for technical and architectural decisions made for the project.

In addition, the PM is also expected to demonstrate a deep knowledge of the business objectives of the project being undertaken (Bloom, 2006). Prior literature has shown that task familiarity helps in improving performance and increasing sustainability of a project (Goodman and Leyden, 2001). Prior exposure to the project characteristics such as technology, or methodology would make the current task more familiar to the PM, and hence improve sustainability (Banker and Slaughter 2000).

According to Espinosa, *et al.* (2007) task familiarity is important in the community based projects and this is usually linked to performance which in turn is linked to sustainability. As Kirsch (2000) and Thite (2001) suggest, a PM should be able to take on the leadership role with respect to not only managing the project but also leading the technological initiatives.

Fiedler, Chemers and Mahar, (2004) define leadership as a process by which one individual influences others toward the attainment of group or organizational goals. They emphasize three points about the definition of leadership. First, leadership is a social influence process. Leadership cannot exist without a leader and one or more followers. Second, leadership elicits voluntary action on the part of followers.

The voluntary nature of compliance separates leadership from other types of influence based on formal authority. Finally, leadership results in followers' behavior that is purposeful and goal-directed in some sort of organized setting. Many, although not all, studies of leadership focus on the nature of leadership in the workplace, however, leadership has benefits in a wider scope.

McDade (2004) indicated that individuals with good management skill are considered to be good leaders and therefore, through their leadership organizations are steered to prosperity.

Precise nature of leadership and its relationship to key criterion variables such as subordinate satisfaction, commitment, and performance is still uncertain, leadership does remain pretty much of a 'black box' or unexplainable concept." However, not all leaders are good managers. Therefore, in the quest to establish effect of management skills on sustainability of community projects, leadership should be distinguished from management. Chemers and Mahar, (2004) indicated that management involves planning, organizing, staffing, directing, and controlling, and a manager is someone who performs these functions. A manager has formal authority by virtue of his or her position or office. Leadership, by contrast, primarily deals with influence. A manager may or may not be an effective leader. A leader's ability to influence others may be based on a variety of factors other than his or her formal authority or position (Andriessen and Drenth, 2007).

### 2.3. Critical Review

In this literature review, the authors have presented the whole concept of community development vis-à-vis its effects on economic posterity variables. The literature informed that community empowerment initiatives are an important aspect of economic well-being, and works across continents and cultures. According to the same literature, community leadership pioneers the way for development (Thite, 2001), the leadership is best able to perform when its initiatives are participatory (Williams, 2003). On the dimension of community preparedness, it was clear that familiarity with the task improves project performance, thus some kind of training is necessary (Goodman and Leyden, 2001).

The issue of the cultural mindset as a necessary project success ingredient was also manifested in the literature. Mills and Brown (2004). for example, argue that cultural development in a community has come to be understood as a collective process, often involving creativity interpreted in the broadest sense. This way a culture can hamper or foster the development of a region or country, depending on its degree of alignment with the project ideals. Out of all the literature, not one of them had a particular context in terms of the project itself, the country and the specific tasks in relation to economic sustainability. Majority of performance in general. The literature did not generalize any way of measuring projects activities towards economic sustainability. This gives room for the researcher to contribute towards the measurement of economic sustainability.

#### 2.3.1. Research Gap

World Vision Rwanda opened its operations in Gicumbi district with a view to helping the local community to be economically sustained, through addressing child and maternal health issues. The project also trained community health workers and started animal husbandry projects for them to supply milk and finance for improvement of the societies. Further, the project instituted cultural change programs that trained the mothers of Rutare sector on home-based health management so that they would not have to look far for healthy nutrition, common medication and handling of health incidences, safe for emergencies beyond their reach.

The third aspect of the project was the creation of a child nutrition centre; where children up to the age of five years are left by the mothers as they go on to do their economic activities. Five years on, no documented evidence is available, regarding the effect of the

project activities on the economic sustainability to the recipient community. Besides, since economic sustainability has diverse faces and measures, no research is an exact copy of another, so no other research is applicable for Gicumbi. Other researchers have related the two variables in their findings, but the ground realities they encountered were not like those of Gicumbi.

### 2.3.2. Summary

Project management skills, cultural mindset of the target beneficiaries, community participation and project support from the partners are core success factors to be considered for any target activity. The success of a project fosters the economic condition which in turn forms a basis for development, if not directly affecting it. This is to say that by carrying out a project in line with the recommended tenets, the society economically benefits in two ways: directly and indirectly, the latter case being that of preventing spending on goods and services the project results can deliver

### 2.4. Conceptual Framework

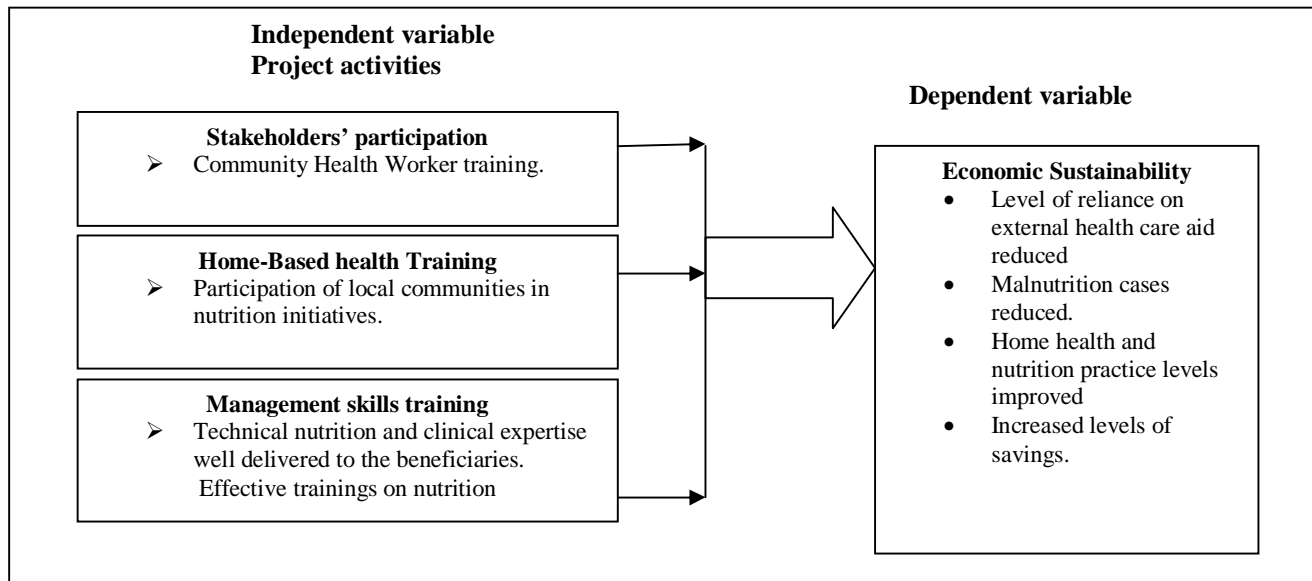


Figure 1: Conceptual Framework

Source: Researcher (2015)

## 3. Research Methodology

### 3.1. Introduction

In this chapter, the researcher presents the specific methods and procedures to be followed in the study. These include the research design, the target population, the data collection instrumentation; sampling; data processing and analysis techniques.

### 3.2. Research Design

The research adopted a qualitative study design the case study approach. its descriptive research this is because it determines and reports how the situation is in the study and also helps a researcher to describe phenomenon in terms of attitude, values and characteristic(Mugenda,1999).

### 3.3. Target Population

Target population is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. Mugenda (2003), explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. A total of 100 participants constituted the target population of this study. This included the community members from the two nutrition projects of Rutare that is 50 beneficiaries from EER and Marembo nutrition centres of Rutare sector in Gicumbi district.

### 3.4. Sampling

#### 3.4.1. Sample Size

Simple random technique was used to select the respondents. Simple random sampling is a sampling technique in which all the elements in a sample frame have equal likelihood of being selected (Frerichs, 2008). To determine a representative sample of which result could be generalized, systematic random sampling was carried out where a list of all community members who are benefiting from the nutrition centre was obtained from the administration; every 3<sup>rd</sup> person was chosen until the expected number was reached.



With Solvin formula computed on a population figure, it was determined that the resulting number would be a representative sample. It is in this regard that a sample size of 50 respondents was drawn.. This formula is used to calculate the sample size (n) given the population size (N) and a margin of error (e) of 0.05. (Black, 1999)

Where

n=sample size

N= Target population

e=sample error

$$n = \frac{N}{(1+N(e)^2)}$$

$$n = \frac{100}{(1+100(0.1)^2)}$$

$$n = \frac{100}{(1+100(0.1)^2)}$$

$$n = \frac{100}{1+100.0.01}$$

$$n = \frac{100}{2} = 50$$

### 3.5. Sampling Technique

Both probability and non-probability sampling techniques was used in the study. At the non-probability level, the researcher used purposive sampling to identify the district to be studied and the 2 world vision nutrition centres, the study sectors and families with children aged up to 5 years benefiting from the nutrition centres. Simple random sampling was applied next to determine 50 individual respondents.

### 3.6. Data Collection Tool.

Primary data was collected regarding project activities and beneficiaries' economic sustainability. The respondents were the project beneficiaries of the nutrition center. Data was collected using structured questionnaires which was self-administered. Questionnaires were preferred because of the simplicity in their administration and low cost associated and to cater for language barrier Nachmias,(2008).

### 3.7. Reliability and Validity for the Research Instrument

#### 3.7.1. Reliability

Reliability is the extent to which results of a study are consistent. Out of sampled respondents over time there is an accurate representation of the total population under study (Golafshani, 2003). Test retest method of determining the reliability was carried out within the same project using the same respondents. This method involves giving the same test to the same test respondents on two separate occasions. The scores on the two occasions are then correlated.

This correlation is known as the coefficient of stability. The closer each respondent's scores are on T1 and T2, the more reliable the test measure (and the higher the coefficient of stability was). A coefficient of stability of one (1) indicates that each respondent's scores are perfectly correlated. That is, each respondent score the exact same thing on T1 as they did on T2.

A coefficient correlation of zero (0) indicates that the respondents' scores at T1 were completely unrelated to their scores at T2; therefore the test is not reliable (Oladunni, 1996). 1week duration allowed between the first test T1 and the second test T2. A coefficient of stability of 0.7 is required to consider the test as reliable. A coefficient of stability of 0.8 was found when calculating the reliability in this study.

#### 3.7.2. Validity

Validity determines whether the research items truly measure what they are intended to measure or how factual the research results are (Golafshani, 2003). To test content validity (extent to which the sample is a representative of the population), experts opinion was sought. The research items or questions in the questionnaire was developed to represent dimensions of each variable in the research

### 3.8. Data Analysis

The data collected was edited, coded, and analyzed using SPSS latest 21 version. Descriptive statistics such as percentages were used and represented in tables regarding the project activities and beneficiaries' economic sustainability.

### 3.9. Ethical Consideration

The researcher sought authorization from the management of village nutrition center in Gicumbi district. An authorization and approval of the research was sought from Jomo Kenyatta University before data collection. All information obtained in this research was only be used for academic purposes and respondents were assured of the confidentiality of information they provided.

## 4. Research Findings

### 4.1. Introduction

In this chapter, the researcher presents the major research findings, according to the specific research objectives postulated in chapter one, following the research methodology in chapter three. The first section of this chapter however presents basic information on the study sample in an exploratory manner.

### 4.2. Geographical Distribution of Respondents in Gicumbi

The researcher collected data from the Gicumbi district in 2 world nutrition centres located in Rutare sector, a sample at the World vision project area (Rutare sector). The following table shows the responses of the beneficiaries of the world vision nutrition project. The table below describes data obtained from 47 respondents out of 50 respondents whom the researcher managed to get from the 2 world vision nutrition projects from Rutare sector representing the number of respondents (N), the minimum (Min) and maximum (Max) ordinal number of items answered in each objective question; the mean within the range of answered items in their ordinal arrangement, and their standard deviation (Std. Dev.), which is defined by statisticians as the scatterdness of data from central tendencies (Mean, Mode, Median).

### 4.3. World Vision Projects Benefiting Gicumbi Resident.

Project activities offered by world vision	N	Minimum	Maximum	Mean	Std. Deviation
Community health worker training and its economic benefits	47	2.00	5.00	4.1489	.90838
Management skills training	47	1.00	5.00	3.6809	1.35304
Maternal and child health training	47	2.00	5.00	3.9149	.85541
Valid N (list wise)	47				

Table 1: Project Activities Generated By World Vision

The findings in table 1 indicate that all participants (47 world vision project beneficiaries) responded to the different indicators of project activities that improved their economic status. The response pattern varied from strongly disagree (minimum=1) to strongly agree (maximum=5).

The responses regarding the benefits enjoyed from world vision generated a variety of mean which indicate the degree to which the majority of respondents agreed on a particular variable.

Community health worker training and its economic benefits (mean is 4.15).

Management skills training (mean= 3.68)

Maternal and child health training (mean =3.91)

Descriptive Statistics					
Indicators of economic sustainability	N	Min	Max	Mean	Std. Dev.
1. Time community health worker attention is needed	47	.00	3.00	<b>1.6383</b>	.64016
2. Degree to which health management is sufficient	47	2.00	5.00	<b>3.3617</b>	.79196
3. Degree to which one gets helped in healthcare	47	2.00	5.00	<b>3.8723</b>	.94678
4. Degree to which the issue is sorted out by self	47	1.00	3.00	<b>1.8936</b>	.63362
5. After 3 years it is possible to make a rich diet with low expenditure because of community project in the sector	47	2.00	5.00	<b>3.7447</b>	.70612
6. Capacity for managing living with less support compared to previous years	47	2.00	5.00	<b>3.6809</b>	.86241
7. Mindset change to engage into better healthcare with less external aid.	47	3.00	5.00	<b>4.3617</b>	.73501
8. Compared to before, malnutrition and its consequences are dealt with	47	2.00	5.00	<b>3.9574</b>	.97707
9. There is sufficient technical expertise to manage project activities	47	2.00	5.00	<b>3.6809</b>	.72551
10. Project managers are experienced and capable	47	2.00	5.00	<b>3.1702</b>	.91649
11. Having a child in nutrition centre can help me to take care of other activities to increase my income	47	1.00	5.00	<b>3.4255</b>	.99443
12. Without the nutrition centre my daily diet and income would be poorer	47	1.00	5.00	<b>3.7872</b>	1.04124
13. Children who are not in nutrition centre suffer unnecessarily	47	1.00	5.00	<b>4.2128</b>	.88308
14. The leadership skills of managers is satisfactory	47	1.00	5.00	<b>3.7872</b>	1.08219
Valid N (list wise)	47				

Table 2: Response of the Beneficiaries of the Project.

The findings in table 2 indicate that all participants (47 world vision project beneficiaries) responded to the different indicators of project economic sustainability that came from the different trainings and support they obtained. The response pattern varied from either strongly disagree (minimum=1) to strongly agree (maximum=5); or none (minimum=0) to 5 times (maximum=5) or never (minimum=0) to always (maximum=5)

The mean in the table indicates the degree to which an indicator was considered in the range that goes from minimum to maximum, where greater figures are closer to maximum and smaller numbers are closer to minimum.

#### 4.3.1. Indicators of Economic Sustainability as a Result of Community Health Workers Training.

	Times health attention is needed in a month	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	2.1	2.1	2.1
	Once	18	38.3	38.3	40.4
	Twice	25	53.2	53.2	93.6
	three times	3	6.4	6.4	100.0
	Total	47	100.0	100.0	

Table 3: Times Health Attention Is Needed

Concerning the times respondents feel they need health attention from the center, the mean in table 2 shows that majority of respondents are close to 2 times a month. Also in this table (3), majority of respondents need such attention twice a month only. This could implies that the malnutrition related diseases were reduced in a such a way that these people need less health care. In the interview, participants confirmed this by saying: “since we obtained training in health care, we cater for ourselves in many cases. For example, we improved our diet and our children no longer suffer from malnutrition.”

	Degree to which health management is sufficient	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	6	12.8	12.8	12.8
	Quiet often	21	44.7	44.7	57.4
	Often	17	36.2	36.2	93.6
	Always	3	6.4	6.4	100.0
	Total	47	100.0	100.0	

Table 4: Degree to Which Health Management Is Sufficient

It was confirmed by majority of respondents that health management is well performed a good number of times as it is shown in this table 4. This could imply that if the mothers have enough health management skills, to manage their livelihoods, there are reduced malnutrition cases and increased savings since resources that could be spent on treatment of malnutrition related diseases is saved. This explanation was confirmed by the respondents during the interview, who said: “the money we used to spend on health issues is invested in other economic activities that improve our well being”. The literature review also supports this by recommending the same to governments. In order to achieve sustainable development governments should give priority to interventions aimed at addressing the needs of the people. (World bank report,2009)

Degree to which one gets Healthcare service		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	8	17.0	17.0	17.0
	Often	29	61.7	61.7	78.7
	Always	10	21.3	21.3	100.0
	Total	47	100.0	100.0	

Table 5: Degree to Which One Gets Healthcare Service

The degree to which respondents get helped in healthcare is said to be often and always (mean= 4), this findings suggest that the beneficiaries' health is catered for. It is also confirmed in table 5 where majority of beneficiaries said often=61.7% and always=21.3% resulting to 83% which implies a high level of health care attention received from the health work. This was confirmed by the beneficiaries who said that, “even in the night whenever we detect high temperature on our children we easily access medical facility to cool the temperature down because of world vision training we got and the help from other expert health workers. We no longer spend money unnecessarily running up and down because we know what to do”

	Degree to which the issue is sorted out by self	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	12	25.5	25.5	25.5
	Sometimes	28	59.6	59.6	85.1
	Often	7	14.9	14.9	100.0
	Total	47	100.0	100.0	

Table 6: Degree to Which the Issue Is Sorted Out by Self

Autonomy in solving problems by self is not just rarely but grows in number from sometimes to often as indicated by respondents in the table above. The interview interventions indicated the following: “compared to the situation before where we used to depend on external assistance from health centres, today we solve many health issues by ourselves without seeking external help. We have gained a lot of knowledge and skills in terms of solving health problems. To say it well, we solve different problems related to health unless we face complicated cases”. As shown in the table above, self reliance is still not complete. This is understandable from the fact that health issues are varied and complicated. Most cases concerning our respondents are simple cases related for example to knowing how to balance a diet to avoid malnutrition; knowing how to prevent oneself from malaria by using a mosquito net; knowing how to deal with a child’s temperature at night; knowing how to carry out a first aid intervention.

#### 4.3.2. Indicators of Economic Sustainability as a Result of Maternal and Child Health Training

	<b>After 3 years it is possible to make a rich diet with low expenditure because of community project in the sector</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Disagree	2	4.3	4.3	4.3
	Neutral	13	27.7	27.7	31.9
	Agree	27	57.4	57.4	89.4
	Strongly agree	5	10.6	10.6	100.0
	Total	47	100.0	100.0	

Table 7: After 3 Years Things Are Cheap and Good Because of Community Project in the Sector

68% respondents in agreed (mean= 4) that after 3 years their capacity has increased in identifying rich diet without using much expenditure. This means that they are able to save an amount of money which was formerly used to purchase expensive but not rich diet. As confirmed in the interview, “we are now able to grow vegetables at home, to rear chicken for eggs, and identify cheap but rich food in the market. We used to eat unbalanced meal thinking that good meal is expensive. That bias has now gone because we know that eating well does not necessarily need much money” In line with this , Arbitrage, (2003) highlighted that community support increases project effectiveness as it helps to ensure that the project achieves its objectives and that benefits go to the intended groups.

<b>Capacity for managing living with less support compared to previous years</b>		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Disagree	5	10.6	10.6	10.6
	Neutral	12	25.5	25.5	36.2
	Agree	23	48.9	48.9	85.1
	Strongly agree	7	14.9	14.9	100.0
	Total	47	100.0	100.0	

Table 8: Capacity for Managing Living with Less Support Compared to Previous Years

Majority of participants (63.8%) agreed that there is increase of capacity in managing living with less support compared to previous years (mean= 4). This is an indication of economic autonomy, which is also an indicator of economic sustainability. Respondents said the following in the interview:” Because of training we got, we live in cooperatives which was previously supported by world vision. They gave us seeds and we are able to grow crops by ourselves and are able to cater for our daily needs”

<b>Mindset change to engage into better healthcare with less external aid.</b>		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Neutral	7	14.9	14.9	14.9
	Agree	16	34.0	34.0	48.9
	Strongly agree	24	51.1	51.1	100.0
	Total	47	100.0	100.0	

Table 9: Mindset Change to Engage Into Better Healthcare with Less External Aid.

Respondents agreed (85.1%) that their mindset towards health has changed. In the interview, some respondents informed us that they are capable to detect some diseases, especially those related to malnutrition or hygiene. They cater for most of such cases without going to look for external assistance.

	Compared to before, malnutrition and its consequences are dealt with	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	6	12.8	12.8	12.8
	Neutral	5	10.6	10.6	23.4
	Agree	21	44.7	44.7	68.1
	Strongly agree	15	31.9	31.9	100.0
	Total	47	100.0	100.0	

Table 10: Compared to Before, Malnutrition and Its Consequences Are Dealt With

Compared to before, malnutrition and its consequences are dealt with according to respondents who agreed to that (mean= 4) and (76.6%). The interview confirmed this: ““we are now able to grow vegetables at home, to rear chicken for eggs...” they explained later that they give balanced food to their children which reduced malnutrition related diseases and improved their economic status.

#### 4.3.3. Indicators of Economic Sustainability as a Result of Management Skills

There is sufficient technical expertise to manage project activities		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.1	2.1	2.1
	Neutral	19	40.4	40.4	42.6
	Agree	21	44.7	44.7	87.2
	Strongly agree	6	12.8	12.8	100.0
	Total	47	100.0	100.0	

Table 11: There Is Sufficient Technical Expertise to Manage Project Activities

There is sufficient technical expertise to manage project activities. (mean= 4) and (57.5%). This is an indication of self reliance. It could be also an indication of being able to plan and implement activities. When the interview was addressed to those who are involved in the center management, they said the following:” we were trained on how to prepare nutritious meal for children and for a family. We mix different types of food taking into account to involve food that bring energy such as maize, potatoes, cassava; other that work for body construction such as beans, soya, meat, eggs, milk and meals which provide body protection such as fruits and vegetables.”

	Project managers are experienced and capable	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	12	25.5	25.5	25.5
	Neutral	19	40.4	40.4	66.0
	Agree	12	25.5	25.5	91.5
	Strongly agree	4	8.5	8.5	100.0
	Total	47	100.0	100.0	

Table 12: Project Managers Are Experienced and Capable

Project managers are experienced and capable of providing facility to those who come to receive support to the centre. This was confirmed by respondents who said:”in the centre we have project managers who are more experienced and who gave us training. When we have a particular problem in relation to what we have been trained for, they help us and we feel comfortable working with them. They are good partners and sometimes we see them as our parents.” This affirmation shows a continuous collaboration between trainers and trainees, which help all of them to refresh their skills and knowledge and provide better services.

	Having a child in nutrition centre can help me to take care of other activities to increase my income	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	4.3	4.3	4.3
	Disagree	8	17.0	17.0	21.3
	Neutral	8	17.0	17.0	38.3
	Agree	26	55.3	55.3	93.6
	Strongly agree	3	6.4	6.4	100.0
	Total	47	100.0	100.0	

Table 13: Having a Child in Nutrition Centre Can Help Me to Take Care of Other Activities to Increase My Income

Respondents agreed that having a child in nutrition centre can help them to take care of other activities to increase their income (61.7%). One respondent added this: “I can leave my children at the centre and go to look for money in a part-time employment. My husband and I know how to construct houses and often we go together. The centre gives me a relief when my other colleagues take

care of our children in our absence. It makes me get more money. Before, I used to stay at home to prepare food for my children, but now I can go to work at least 3 times a week and come to the centre the other days to help others.”

<b>Without the nutrition centre my daily diet and income would be poorer</b>		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Strongly disagree	1	2.1	2.1	2.1
	Disagree	5	10.6	10.6	12.8
	Neutral	10	21.3	21.3	34.0
	Agree	18	38.3	38.3	72.3
	Strongly agree	13	27.7	27.7	100.0
	Total	47	100.0	100.0	

Table 14: Without the Nutrition Centre My Daily Diet and Income Would Be Poorer

66% respondents agreed that without the nutrition centre their daily diet and income would be poorer. They explained that in these terms: “Before the existence of the centre, we used to spend a lot of money in buying expensive food or drinks. Now we have learnt how to minimize expenditures by buying cheaper, but rich food for our families. Moreover, the expenditure we used to have could create poverty in our homes. We are able to save little money for school fees after selling vegetables and other crops. We have gained there is no doubt...we are also able to leave our children in the centre while we go to look for money.”

	<b>Children who are not in nutrition centre suffer unnecessarily</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Strongly disagree	1	2.1	2.1	2.1
	Disagree	2	4.3	4.3	6.4
	Neutral	2	4.3	4.3	10.6
	Agree	23	48.9	48.9	59.6
	Strongly agree	19	40.4	40.4	100.0
	Total	47	100.0	100.0	

Table 15: Children Who Are Not In Nutrition Centre Suffer Unnecessarily

89.3 % of respondents said that children who are not in nutrition centre suffer unnecessarily. The explanation from the interview was as follows: “parents who don’t come with their children here don’t know what is happening. Most of them ignore how to take care of a little child’s health and their children suffer from malnutrition or other diseases. They spend a lot of money when the child falls sick while ours don’t easily fall sick because they eat well and they are cared for.”

<b>The leadership skills of managers is satisfactory</b>		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Strongly disagree	2	4.3	4.3	4.3
	Disagree	5	10.6	10.6	14.9
	Neutral	6	12.8	12.8	27.7
	Agree	22	46.8	46.8	74.5
	Strongly agree	12	25.5	25.5	100.0
	Total	47	100.0	100.0	

Table 16: The Leadership Skills of Managers Is Satisfactory

Respondents (72.3%) agreed that the leadership skills of managers are satisfactory. This implies that activities at the centre could be well managed. Respondents said the following: “Managers are good people who know their responsibilities and who provide the centre with some necessities. We have experienced their commitment and skillfulness during our trainings. But some of them do not pay attention to our needs...This is confirmed also by the literature review. A leader’s ability to influence others may be based on a variety of factors other than his or her formal authority or position (Andriessen and Drenth, 2007). Participants continued saying : “We were also trained in management skills but some of us have not got enough skills yet”

Among the dependent variables of this study, 3 of them came out to signify the same as economic sustainability and were therefore correlated with the independent variables as shown in the table below.

Pearson correlation coefficient		Community health workers training	Management skills training	Maternal and child health training
After 3 years it is possible to make a rich diet with low expenditure because of community project in the sector	Pearson Correlation	-.064	-.103	.070
	Sig. (2-tailed)	.667	.489	.638
	N	47	47	47
Degree to which the issue is sorted out by self	Pearson Correlation	.225	-.095	.029
	Sig. (2-tailed)	.129	.526	.845
	N	47	47	47
Compared to before, malnutrition and its consequences are reduced	Pearson Correlation	.044	.105	.065
	Sig. (2-tailed)	.767	.484	.662
	N	47	47	47

Table 17: Pearson's Correlation Co efficiency

The Pearson's correlation coefficient is significant at 95% confidence level

In the table above, the significance varies between -1 and 1. As observed, most data is observed as positive, meaning that there is a positive correlation between those variables. The negative sign means that there is a negative correlation.

## 5. Summary, Conclusions and Recommendations

### 5.1. Summary of Findings

This study sought to assess the effect of World Vision project activities in Gicumbi District on beneficiaries' economic sustainability. World Vision Rwanda runs three core projects in the district, including the Well Mother and Child, Community Health home-based management and the running of a village nutrition center wherein the managers are equipped with management skills. The overall purpose of these projects and related activities is to foster socio-economic welfare of the locals by imparting the necessary skills related to these activities and a cultural paradigm to go with it. Specifically, the study aimed at addressing the main objective as these: To evaluate the contribution of Community Health Workers participatory training on the economic sustainability of Gicumbi residents, to identify the effect of home-based health management training on the economic sustainability of Gicumbi residents. To assess the importance of child nutrition centre management training on economic sustainability Gicumbi residents.

The main findings of the research were as follows:

First, the presence of world vision project in the district was a welcome idea as there was a significant effect of world vision project activities on the economic sustainability of respondents. All 47 respondents in Rutare sector benefited from trainings in 3 areas: Community health workers' training; Maternal and child health training; Health centre management training. The second finding was in regard to community health worker training activities, where regression results indicated that both the availability and reliability of community health workers had a significant effect on economic savings in Gicumbi district, meaning that the project activity had a positive influence on economic sustainability. Thirdly, the contingency of nutritional training center savings effect on the sector of respondents' residence proved to be important there was a significant effect of nutritional center activities on economic status improvement. This contingency study was for addressing research objective 2. Finally, the findings on Objective 3 suggested that the management skill impartation project to the nutritional center operators had a significantly positive bearing on economic sustainability of the residents

### 5.2. Conclusions

Following the research findings, it can be concluded that:-

Having the World Vision projects at Rutare sector is a viable idea whose importance is observable. Both the availability and reliability of community health workers at Rutare sector is a key driver of sustainable health management. Health management training of the local community is a core ingredient of the rural economic sustainability. Having in place a well-managed rural nutrition center like the two in Rutare is a critical source of poverty prevention as it militates against unnecessary spending by the beneficiaries of the center. Nevertheless, there is still a way to go especially in training the beneficiaries in management skills.

### 5.3. Recommendations

Based on the empirical evidence of this study, the researcher recommends that the world vision nutrition projects in Rutare be replicated to other parts of the district and the country at large.

The researcher also recommends for a further study on the effects of other related programmes, to see if their empowerment can also bolster poverty reduction.

## 6. Acknowledgements

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## 7. Abbreviations and Acronyms

→ ACC/SCN-	Administrative Committee on Coordination Sub-committee on Nutrition
→ CAADP	Comprehensive Africa Agriculture Development Programme
→ GoR	Government of Rwanda
→ HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
→ MDG	Millennium Development Goals
→ MINAGRI	Ministry of Agriculture, Livestock, and Forestry
→ PM	Project Manager
→ RDHS	Rwanda Demographic and Health Survey
→ SPSS	Statistical package for social science
→ UN	United Nations
→ UNDP	United Nations Development Programme
→ USAID	United States Agency for International Development
→ WBR World	Bank Rwanda
→ WHO	World Health organization

## 8. Definition of Terms

- Cultural practices: generally refers to the manifestation of a culture or sub-culture, especially in regard to the traditional and customary practices of a particular ethnic or other cultural group.
- Management skills: refers to using expertise in coordinating the efforts of people to accomplish desired goals and objectives using available resources efficiently and effectively. It comprises planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal.
- Nutrition- The science of food and how it is utilized by the body for growth, work, play, sustain health and resist diseases.
- Project: A project is an undertaking that has an objective of meeting human needs and aspiration and has specific budget and timeframe
- Stakeholders' participation: refers to individuals, families, or communities assuming responsibility for their own welfare and develop a capacity to contribute to their own and the community's development
- Sustainability: The continuing ability of a project embraces the concept of doing this beyond the time of donor to meet the needs of its community and agency involvement
- Impact: Measure of the tangible and intangible effects from a given activities .in this case the positive effects obtained from Rutare nutrition centre.
- Poverty: For the sake of this research, poverty means unmet demands in the poverty reduction Strategy in Rwanda. As a result of illiteracy and unemployment are the main causes of malnutrition among Rwandans.

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**APPENDICES**

**Appendix I: Residents Survey Questionnaire**

- **Research Topic:** Project Activities and Beneficiaries’ Economic Sustainability of World Vision Rutare Nutrition Centre.
- **Study Area:** Gicumbi.
- **Researcher:** Mbabazi Jane
- **Affiliation:** Jomo Kenyatta University of Agriculture and Technology

**1. Section A: General Information.**

1. Which sector of Gicumbi district do you reside in? (Please give a sector name)  
.....
2. Is your family a beneficiary of the World Vision Projects in this district?  
(Please indicate with a “Yes” or “No” in the space provided:.....)
3. If your answer to Question 2 is “Yes”, to what extent did the following trainings improve your economic capacity ?

Project activities	Strongly disagree=1	Disagree=2	Neutral=3	Agree=4	Strongly agree=5
Community Health Worker training					
Management skills training					
Maternal and Child health training					

Table 1

**2. Section B: Indicators of Economic Sustainability as a Result of Community Health Workers Training**

Below are statements and questions related to your health care access in the sector? Kindly indicate by ticking, the box corresponding to your choice of response.

	Statements	0	1	2	3	4	5
1.	How many times in a typical week do you think you need health worker attention?						
2.	To what extent do you think that the community has attained community health management sufficiency, given that you have health workers around?						
3.	Out of the number of times you need a health worker in your family, how many times do you get helped?						
4.	Out of the number of times you need a health worker in your family, how many times can you sort the issues by yourself?						

Table 2

**3. Section C: Indicators of Economic Sustainability as a Result of Maternal, Child Health Training.**

The following statements relates to how cultural practices affects the sustainability of the village nutrition centre project. To what extent are they reflected in your nutrition centre?

Use scale where: 1- Strongly Disagree 2 - Disagree 3 - Neutral 4- Agree and 5- Strongly Agree.					
Statements	1	2	3	4	5
After 3 years it is possible to make a rich diet with low expenditure because of community project in the sector					
I have some management skills to enable me to make a living with minimal support as opposed to the situation before.					
My mindset regarding healthy living has been transformed in that nowadays, I can take sufficient healthcare diagnosis to my family, so my reliance on eternal aid has reduced.					
As opposed to the situation before, I rarely have a child suffering from malnutrition, so am better off or nutrition-related ailments.					

Table 3

**4. Section D: Indicators of Economic Sustainability as a Result of Management Skills Training**

The following statements relates to how management skills affects the sustainability of nutrition centre project. To what extent are they reflected in your village nutrition centre?

Use scale where: 1- Strongly Disagree 2 - Disagree 3 - Neutral 4-Agree and 5- Strongly Agree.

Statements	N/A	1	2	3	4	5
There is sufficient technical expertise to manage the project activities						
Project managers have adequate and experience (task familiarity) in management						
Having a child in a nutrition center can help me take care of my other activities and increase my income significantly						
If it were not for the nutrition centre, the availability of the daily diet and income would be sparse and I would be worse-off.						
Many children who are not enjoined to a nutrition centre suffer unnecessarily.						
The leadership skills of the managers is satisfactory						

Table 4

Thank you for your time and participation

- Interview Protocol

The interview protocol went through the following aspects:

- A. Trainings received
- B. Economic benefits as a result of trainings.

1. Time community health worker attention is needed
2. Degree to which health management is sufficient
3. Degree to which one gets helped in healthcare
4. Degree to which the issue is sorted out by self
5. After 3 years it is possible to make a rich diet with low expenditure because of community project in the sector
6. Capacity for managing living with less support compared to previous years
7. Mindset change to engage into better healthcare with less external aid.
8. Compared to before, malnutrition and its consequences are dealt with
9. There is sufficient technical expertise to manage project activities
10. Project managers are experienced and capable
11. Having a child in nutrition centre can help me to take care of other activities to increase my income
12. Without the nutrition centre my daily diet and income would be poorer
13. Children who are not in nutrition centre suffer unnecessarily
14. The leadership skills of managers is satisfactory

Table 5

**Appendix II: Study Budget**

Activity	Estimated Cost in RWF
Transport	150,000
Lunch	100,000
Typing, Printing & photocopy	100,000
Data analysis	150,000
Data bundles	100,000
Binding	10, 000
<b>Total</b>	<b>610,000</b>

Table 6

**Appendices III: Work Plan**

ACTIVITY(IN 2015)	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
Proposal Writing						
Proposal presentation						
Data collection						
Data analysis						
Final Report writing						
Presentation						

Table 7