

## Multidimensional Analysis of the Determinants of Poverty Indicators in the Lake Victoria Basin(Kenya)

<sup>1</sup>Anthony Ngunyi, <sup>2</sup>Peter. N. Mwita, <sup>2</sup>Romanus O. Odhiambo,  
<sup>3</sup>Verdiana. G. Masanja

<sup>1</sup>.Dedan Kimathi University of Technology (Kenya)P.O BOX 657-10100, Nyeri

<sup>2</sup>. Jomo Kenyatta University of Agriculture & Technology (Kenya) P.O BOX 62000-00200, Nairobi

<sup>3</sup>. University of Rwanda(Head Quarters) P.O Box 4285, Kigali, Rwanda

<sup>3</sup>.Affiliated to University of Dar es Salaam, P.O.Box 35062 ,Dar es Salaam,Tanzania

**Abstract:** The study main objective is to examine the multidimensional aspects of poverty in one Kenya's culturally diverse region of the Lake Victoria basin. The analysis using data collected by IUCEA researchers in 2007 and also the 2009 census on households in Kenya. This study investigates statistical models based on factors that characterize the demographic characteristic of individuals, in determining the predictors of poverty for better policy formulation.. The research findings indicate that poverty measures do overlap to capture a percentage of the sample as poor. The analysis shows that education, gender (being male), marital status, assets (livestock, water sources, and wall materials) and age of the head of the family have statistically positive effects on the likelihood of an individual falling into poverty.

**Keywords:** Poverty, Demography, Augmented, Logistic, Assets

### I. Background Information

According to the World Bank,(2010).[1], "poverty is pronounced deprivation in well-being." This of course begs the questions of what is meant by well-being and of what is the reference point against which to measure deprivation.

The objective of the study was to look at the different factors that influence poverty in a household, and the policy formulation that can be put in place in order to achieve bettering living standard for the members of the household. This study based its results on a multidisciplinary aspects on the fact that many studies on poverty in Kenya have been on regressing well known determinants even though other factors may be able to give an informative and simple to interpret facts on poverty levels in the region.

One approach is to think of well-being as the command over commodities in general, so people are better off if they have a greater command over resources. The main focus is on whether households or individuals have enough resources to meet their needs, see, S. Pudney(1999) [2]. Typically, poverty is then measured by comparing individuals' income or consumption with some defined threshold below which they are considered to be poor. This is the most conventional view-poverty is seen largely in monetary terms-and is the starting point for most analysis of poverty.

A second approach to well-being (and hence poverty) is to ask whether people are able to obtain a specific type of consumption: Do they have enough food? Or shelter? Or health care? Or education? As cited in Ravallion and Bidani (1994); Kakwani (1990),[3,4]. In this view the analyst goes beyond the more traditional monetary measures of poverty: Nutritional poverty might be measured by examining whether children are stunted or wasted; and educational poverty might be measured by asking whether people are literate or how much formal schooling they have received, well articulated in Lipton and Ravallion (1995),[5].

Perhaps the broadest approach to well-being is the one articulated by Sen (1999), [6], who argues that well-being comes from a capability to function in society. Thus, poverty arises when people lack key capabilities, and so have inadequate incomes or education, or poor health, or insecurity, or low self-confidence, or a sense of powerlessness, or the absence of rights such as freedom of speech. Viewed in this way, poverty is a multidimensional phenomenon and less amenable to simple solutions. For instance, while higher average incomes will certainly help reduce poverty, these may need to be accompanied by measures to empower the poor, or insure them against risks, or to address specific weaknesses such as inadequate availability of schools or a corrupt health service (Datt and Jolliffe, 2005). [7].

WHO (2000),[8] noted that poverty is related to, but distinct from, inequality and vulnerability. Inequality focuses on the distribution of attributes, such as income or consumption, across the whole population. In the context of poverty analysis, inequality requires examination if one believes that the welfare of individuals depends on their economic position relative to others in society. Vulnerability is defined as the risk of falling