

Egerton University



**Tegemeo Institute Of Agricultural
Policy And Development**

**DEVELOPING INCOME PROXY MODELS FOR USE
BY TITLE II-FUNDED NGOS IN KENYA:
A TECHNICAL REPORT FOR NGOS AND
USAID/KENYA**

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Developing Income Proxy Models for use by Title II-funded NGOs in Kenya: A Technical Report for NGOs and USAID/Kenya

By

David Tschirley and Mary Mathenge

I. Introduction

Title II-funded NGOs in Kenya administer a range of interventions designed to enhance the welfare of rural households in vulnerable areas of the country. Many of these interventions are oriented towards USAID/Kenya's Strategic Objective of increased household income in target areas. Yet measuring income in rural areas of Africa is difficult, due to the many different sources of income and the methodological challenges of quantifying each. The expense in human and other resources of collecting, cleaning, and processing good quality income data is beyond the capacity of all but dedicated research projects. To facilitate such reporting, Tegemeo Institute and MSU Department of Agricultural Economics worked with NGOs to develop income prediction models which the NGOs could use in future years to report on these outcomes. The main objective of this work was to develop an integrated package that would allow USAID-funded NGOs working in Kenya to monitor rural household income and income components using easy-to-collect proxy variables. The package was to include 1) sampling guidelines for the periodic income proxy surveys, 2) model questionnaires for these surveys, 3) econometric models relating the proxy variables to household income and income components, 4) SPSS/Windows syntax files based on these models that generate the quantitative estimates of household income and income components, and 5) a manual for operating the package.

This paper details the specific procedures utilized to develop the income proxy method for Kenya NGOs, reports on the performance of the method, and brings together in one place each part of the package needed to implement the method. The next section provides general background on income proxy methods; section III reports on the full income survey that formed the basis for development of the proxy method; section IV provides details on model development, including definition of income components, the types of proxy variables tested, and the performance of the models, while section V briefly explains how the models are to be used. Finally, section VI provides an overview of the rural economy in the study zone based on the detailed income data set collected by the NGOs.

II. Income Proxy Models: What Are They and How Can They Be Useful?

A. Background

An income proxy model is one part of a package of procedures that NGOs, donors, governments, or research institutions can use to monitor rural household income and income