DEDICATIONS

This research is dedicated to the sole of my father, to dear mother, who give

Me moral support, and appreciation to my wife Mabrouka and my children

Naba, Abed, Nebras, and Zahid for the helpful

Also, I would like to dedicate this thesis

To all poor in Sudan

To my teachers

To my family

And friends

I dedicate every one supports me.

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ABSTRACT

The phenomenon of poverty has become a great global economic and social problem that affects most of the countries of the world, especially the developing countries. The objective of this study is to identify the most important demographic, social and economic factors that influence poverty household in Sudan. The problem of the study is represented by how to identify the main variables that affect poverty household and individuals in the country. The data for the study was obtained from the National Household Budget and Poverty Survey that was undertaken by the Central Bureau of Statistics in 2014/2015, which gathered 11953 households in three-stage and, 50% were randomly selected for researchers about 5965 households. A logistic regression model was used to estimate and determine which variables might be significant in explaining poverty. The dependent variable is the probability of a household being poor or not and a set of demography and socio-economic variables as the explanatory variables. Households are classified as either poor or non-poor on the basis of per capita annual spending of 6082 SDG as the poverty threshold and a daily energy intake of 2110 calories per person identified by Central Bureau of Statistics. The study reveals that nearly 36.1% of the sample households live below the poverty line with an average of 10.3 poverty gap, while about 67.2%for the poorest state (Central Darfur). Data were analyzed by statistical packages for social sciences SPSS and STATA. The results showed that the variables which are positively correlated and significantly explain with the probability of being poor are: place of residence, household size, dependency ratio, crop farming and "khalowa" education. While the gender, age of household head, university level and marital status (married/widowed) was negatively associated and significantly explain with the probability of being poor. Moreover, the model correctly predicted 78.9% of the observations. The study recommends using the optimal model of the logistic regression to predict household poverty in future through the variables that affect it and, for the government should be focusing on

improving the livelihood situation, education, and intensification of family planning programmers in Sudan.

المستخلص

لقد أصبحت ظاهرة الفقر مشكلة اقتصادية واجتماعية عالمية تعاني منها معظم دول العالم خاصة الدول النامية. تهدف هذه الدراسة للتعرف على أهم العوامل الديموغرافيةو الاجتماعية والاقتصادية التي تؤثر علىفقر الأسرة في السودان. وقد تمثلت مشكلة الدراسة في كيفية تحديد أهم المتغيرات التي تؤثر على فقر الأسرة والفرد في السودان. تم الحصول على بيانات الدراسة من المسح القومي لميزانية الأسرة والفقر التي قام بها الجهاز المركزي للإحصاء في الفترة من2015/2014م والتي تم جمعها من ثلاثة مراحل شملت 11953 أسرة,و اختيرت منها 50% عشوائيا للباحثين 5965 أسرة تقريبا . تم استخدام نموذج الإنحدار اللوجستي لتقدير وتحديد المتغيرات التي قد تكون مهمة في تفسير الفقر. المتغير التابع يتمثل في احتمال أن تكون الأسرة فقيرة أوغير فقيرة، وبينما المتغيرات الديموغرافيةو الاجتماعية والاقتصادية تم إستخدامها كمتغيرات تفسيرية. صنفت الأسر على أنها أسر فقيرة وأ غير فقيرة على أساس نصيب الفرد من النفقات السنوية البالغة 6082 جنيه سوداني كعتبة الفقر وكذلك الحصول على طاقة يومية مقدارها2110 سعر حراري للفرد حددتها الجهاز المركزي للاحصاء. وتم تحليل البيانات بواسطة برامج الحزم الاحصائية للعلوم الاجتماعية SPSS وSTATA. اوضحت الدراسة أن ما يقارب 36.1% من أسر يعيشون تحت خط الفقر وبمعدل 10.3 فجوة الفقر, بينما بلغت نسبة الفقر 67.2% لأفقر ولاية (وسط دارفور) في السودان. أظهرت نتائج الدراسة أن المتغيرات التي لها ارتباط إيجابي وذو دلالة على تفسير احتمال فقر الأسر ة هي: مكان الإقامةو حجم الاسرة ونسبة الإعالة وتعليم الخلو ة وزراعة المحاصيل. بينما نوعو عمر رب الاسرة ومستوى الجامعي و حال المتزوجينو الأرامل لها ارتباط سلبي وذو دلالة على تفسير احتمال أن تكون الاسرة فقيرة. علاوة على ذلك أن النموذج يتنبأ بشكل صحيح بنسبة 78.9% من المشاهدات. توصي الدراسة باستخدام النموذج الأمثل للانحدار اللوجستي لتوقع فقر الأسرة في المستقبل من خلال المتغيرات

المؤثرة عليه,و على الحكومة التركيز في تحسين حالة المعيشة والتعليم واستحكام برامج تنظيم الأسرة في السودان.

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ABBREVIATIONS

MDG	Millennium Development Goals
CBS	Central Bureau of Statistics
NHBPS	National Household Budget Poverty Survey
SPSS	Statistical Package for Social Science
STATA	Statistical Analysis Software
SNNPR	Southern Nations, Nationalities, and Peoples' Region
BFED	Bureau of f Finance and Economic Development
NBHS	National Baseline Household Survey
IUCEA	Inter-University Council for East Africa
PCA	Principle Component Analysis
SES	Socio-economic Status
DHS	Demography and Health Survey
ZHBS	Zanzibar Household Budget Survey
LSMS	Living Standards Measurement Study
FGT	Foster, Greer and, Thorbecke
HIS	Household Income Survey
OLS	Ordinal Least Square
ECAM	Electronic Centralized Aircraft Monitor
CFA	Chartered Financial Analyst
GDP	Gross Domestic Product
IDPs	Internally Displaced Person
US$1	Unite States One Dollar
HCR	Head Count Ratio
UBN	Unsatisfied Basic Human Needs
PG	Poverty Gap
HCI	Head Count Index
FAO	Food and Agriculture Organization
UNDP	United Nation Development Program
SSA	Sub-Saharan Africa

PGI Poverty Gap Index
ICARDA International Center for Agricultural Research in the Dry Areas
SDG Sudanese Pound
IMF International Monetary Fund
HIPC Heavily Indebted Poor Countries
LDCs Least Development Countries
HYVs High-yielding Variety
EA Enumeration Area
GLM General Linear Model
ANOVA Analysis Of Variance
AIC Akaike Information Criterion
BIC Bayesian Information Criterion
MLE Maximum Likelihood Estimation
LR Likelihood Ratio
LM Lagrange Multiplier
D Deviance
TP True Positive
TN True Negative
FP False Positive
FN False Negative
ROC Receiver Operating Characteristic
AUC area under the curve
NCSS Number Cruncher Statistical System