DETERMINANTS OF ADOPTION OF IMPROVED SOYBEAN VARIETIES AMONG SMALLHOLDER FARMERS IN EASTERN UGANDA

BY

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DECLARATION

This thesis contains my original work and has not been submitted for any degree award in any other university or institution of higher learning.

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DEDICATION

I Dedicate This Thesis To My Mother Joviah Tukahairwa and My Employer Africa 2000 Network Uganda.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

A2N	Africa 2000 Network Uganda
A2N Project	Improving Smallholder Productivity and Controlling STriga in Eastern Uganda. Grant Number 2010 SHP 008
AGRA	Alliance for Green Revolution of Africa
CAADP	Comprehensive Africa Agriculture Development Program
CIAT	International Center for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Center
DSIP	Development Strategy and Investment Plan
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
HIV/AIDs	Human Immune Virus/ Acquired Immune Deficiency syndrome
ISVs	Improved Soybean Varieties
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
NAADs	National Agricultural Advisory Services
NARS	National Agricultural Research System
NDP	National Development Plan
NPA	National Planning Authority
NIOP	National Institute of Oilseed Products
NOPA	National Oilseed Processors Association
PMA	Plan for Modernization of Agriculture
UBOS	Uganda Bureau of Statistics
USDA	United States Development Agency

ABSTRACT

Improved soybean varieties were introduced by Africa 2000 Network Uganda (A2N) project (*Improving Smallholder Productivity and Controlling STriga in Eastern Uganda* funded by *AGRA* in three selected districts of Tororo, Namutumba and Busia. However, since their introduction there has not been adequate documentation on adoption of these improved soybean varieties. This study therefore examined the adoption rates and factors that influenced the adoption of improved soybean varieties in Eastern Uganda. Data were collected through structured questionnaires from 239 smallholder soybean farmers selected through multistage sampling in the three districts and analyzed using descriptive statistics and Logit regression. Results of the study showed that the average age of soybean farmers was 43 and most of them had attained at least eight years of formal schooling. Most households (82%) were male headed, 61.1% did not receive any extension visit in a farming season and majority (89.1%) lacked access to credit. The key attributes of improved soybean varieties that influenced farmers' preference for different varieties were; high yielding capacity (21.7%), big size of seed (17.1%), short maturity periods (14.5%), pest resistance (12.5%), pleasant taste (11.3%), drought tolerance (8.7%), rust resistance (5.8%), resistance to pod shuttering (4.5%) and appealing seed color (3.9%). Rate of adoption and degree of adoption of improved soybean varieties in Eastern Uganda was estimated at 73% and 57% respectively. Determinants found to significantly influence adoption of improved soybean varieties among smallholder farmers in Eastern Uganda included farmer participation in training on soybean agronomic practices ($p \leq 0.01$), number of times a household is visited by extension workers ($p \leq 0.05$), yield of soybean variety ($p \leq 0.05$) and size of the household ($p \leq 0.1$). It is therefore recommended that breeders focus on incorporating the key attributes of varieties mostly preferred by soybean farmers in their breeding programmes. A2N Uganda and other institutions should focus on improving knowledge levels of farmers in key aspects of the entire soybean value chain including agronomic practices, application of bio-inoculants and value addition. Government and A2N Uganda extension workers should upscale and sustain their extension service delivery as these have proved to be reliable source of agricultural information for increased uptake of improved soybean varieties in the rural areas.