# SUPPLY CHAIN RISK PERCEPTION, UNCERTAINTY, SUPPLY CHAIN RISK MANAGEMENT AND UPSTREAM SUPPLY CHAIN PERFORMANCE OF AGRO PROCESSING INDUSTRIES IN UGANDA.

## PATRICK KIGOZI

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### PLAN A

A DISSERTATION SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN PROCUREMENT AND SUPPLY CHAIN MANAGEMENT OF MAKERERE UNIVERSITY.

## SEPTEMBER 2014

# **DECLARATION**

I, the undersigned, Patrick Kigozi declare that, to the best of my knowledge, the work presented
in this dissertation is truly my original work and has never been submitted for the requirement of
the award of a degree in this or any other university of learning. Where work of others has been
used, due acknowledgement has been made.
Signed:

Date: .....

# **APPROVAL**

This is to certify that this dissertation has been submitted in partial fulfilment of the requirement for the award of a Master of Science in Procurement and Supply Chain Management degree of Makerere University with my approval as University Supervisor.

Signed: Date:
PROF.,DR. JOSEPH NTAYI (PhD)
MAKERERE UNIVERSITY BUSINESS SCHOOL
Signed: Date:
DR. MOSES MUHWEZI (PhD)

MAKERERE UNIVERSITY BUSINESS SCHOOL

# **DEDICATION**

I dedicate this research report to my late mother; Ms. Effulansi Nanyunjja and the rest of the family and friends who have supported me in every way.

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## LIST OF ABBREVIATIONS

**UBOS** Uganda Bureau of Statistics

**SMEs** Small and Medium Enterprises

**SPSS** Statistical Package for Social Scientists

**UGSH** Uganda Shillings

**ANOVA** Analysis of Variance

NAADS National Agricultural advisory departments

NARO National Agricultural Research Organization

**CWD** Coffee wilt disease

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### **ABSTRACT**

The main purpose of this study was to examine the relationship between supply chain risk perception, Uncertainty, supply chain risk management and supply chain performance of Agro processing industries in the Central and Eastern Uganda. A quantitative cross-sectional survey was conducted using a sample of 134 private Agro processing firms from a population of 3,232 (UBOS, 2010/11), Data collection was conducted using self-administered questionnaires to get data from the respondents. Overall, 134 usable questionnaires representing 100% respondent rate was attained while 20 question guide issued to farmers to obtain their opinion about the research topic were all obtained back.

The results indicate a significant positive relationship between Supply chain risk perception, supply chain risk management and supply chain performance. Supply chain risk perception and supply chain performance were significantly negatively related. Results also indicate that supply chain risk perception, uncertainty and supply chain risk management are significant predictors of supply chain performance, accounting for 5.8% of the variance.

It is recommended that special attention be paid to supply chain risk perception, supply chain risk management and uncertainty in order to promote supply chain performance. Farmers' perception can be improved through training acquired from cooperative unions as well as sensitization through government agencies like Naads and Naro while perception of agro processing firms can be improved through calling seminars/workshops with suppliers for skills enhancement, signing long term contracts and profit sharing with both employees and farmers.

Supply chain risk management through effective identification, assessment and mitigation of potential sources. At farm level, this can be handled through early spraying of pests and

irrigation scheme in case of drought and preparedness in case of natural disaster, hiring large storage facilities to accommodate over production, having financial schemes to handle long-time contracts in case of bankruptcy, as well as farmers' development to minimise supply disruption; while at processing firm level, risk can be managed through multi-sourcing, Supplier qualification screening, non-performance penalties, prompt maintenance of equipment to reduce down time, provision of alternative energy to ensure continuity of production and employee motivation to minimise strikes.

Finally, farmers can address uncertainty through irrigation in case of drought while suppliers and processing firms need to have binding contracts with farmers for produce to ensure continuity.