Contracts and Marketing Decisions of Indonesian Potato Growers

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In memory of my beloved father, T. Heru Wuryanto, who now lives in the eternal life and will always be in my mind.

Dedication

This thesis is dedicated to my family: my father, T. Heru Wuryanto who had always encouraged me to achieve higher education; my mother, Rumaikah who has been continually supportive and prayed for me, and has encouraged me throughout my years of study; and my brother and sisters, Bayu, Ima, Linda, and Bella who have given me inspiration to finish this thesis.

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Declaration

I certify that this work contains no material which has been accepted for the award of any

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Abstract

Numerous studies have examined modern supply chains particularly agribusiness firms in the agrifood transformation, but how the transformation excludes or includes growers and how social factors, particularly relationship quality, influence growers to participate are limited to be investigated. Focusing on Indonesian potato producers, this thesis addresses the literature in five essential ways. Firstly, most current studies use farmers' capacity and demography variables, but pay less attention to the social capital contributing to farmers' participation. Secondly, few studies utilize per capita income to analyze the impact of farmers' participation in modern supply chains. Thirdly, numerous studies examine the *ex post* perspective of potato farmers' motives to contract with modern supply chains; however, *ex ante* motives are seldom highlighted. Fourthly, the topic of relationship quality in relational marketing with buyers in the emerging markets has received little attention. Finally, limited research draws attention to women's roles in emerging markets and the gender differences related to agribusiness relational marketing.

This thesis addresses how the potato producers make marketing decisions and interact with their buyers and what influences them to engage in the modern supply chains to improve their business performance. The specific research objectives are to investigate: (1) the factors influencing farmers' participation in the modern supply chains and the impacts of contract farming with the modern supply chain on the potato farmers' income; (2) the motivations for the potato farmers to engage in contracting; (3) the determinants of trust as a construct of relationship quality within the groups of potato

farmers; and (4) the differences of relationship quality factors between males and females.

A farmers' participation model was developed. It includes socio-demographics, contextual characteristics, farm capacity, and incentives as determinant factors involved in the emerging markets. Furthermore, the farmers' participation is associated with an increased per capita income. The analysis from an *ex ante* perspective of farmers engaging in contracts shows four factors influencing farmers' motivations: (1) market uncertainty; (2) direct benefits; (3) economic motive; and (4) intangible benefits.

The research demonstrates the determinants of relationship quality between three groups of potato producers and buyers including communication, flexibility, dependence, and joint problem solving. In addition, this study finds relational variables which differ between male and female farmers among the groups i.e. communication, reputation, joint problem solving, price fairness, uncertainty, performance and organizational culture. Although the females' roles in production and marketing are significant, the females tend to rate the relational factors lower than the males.

The results of this study have crucial implications on how to enhance smallholders' participation in modern supply chains. The results confirm that integrating smallholders should be promoted as a strategic policy for assisting farmers to raise income. Developing and establishing relational quality between farmers and their buyers will create efficiency in marketing as it reduces transactions costs. Agribusiness firms or retailers need to maintain and improve the quality of their relationships with potato farmers. The government should pay attention to production and market infrastructure, and access to production inputs and credits through increasing national budget for

agricultural infrastructure and development to support small farmers' entrance into modern supply chains.

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List of Acronyms

ACIAR the Australian Centre for International Agricultural Research

ANCOVA Analysis of Covariance

ANOVA Analysis of Variance

CGIAR Consultative Group on International Agricultural Research

CIP the International Potato Center

CO Contract Oriented

FAO Food and Agriculture Organization

FDI Foreign Direct Investment

FFS Farmer Field School

GA Genetic Algorithm

GFP General Farmer Population

HSD Honestly Significant Difference

HVAP High Value Agricultural Products

ICASEPS Indonesian Centre for Agriculture, Socio-Economic and Policy Studies

IFM Indofood Fritolay Makmur

IMR Inverse Mills Ratio

IPM Integrated Pest Management

IVEGRI Indonesian Vegetables Research Institute

KMO-MSA Kaiser-Meyer-Olkin Measure of Sampling Adequacy

MANCOVA Multivariate Analysis of Covariance

MANOVA Multivariate Analysis of Variance

MD Market Driven

NIE New Institutional Economics

OLS Ordinary least squares

PCA Principal Component Analysis

RM Relationship Marketing

SAS Statistical Analysis System

SME Small and Medium Enterprise

SPSS Statistical Package for Social Sciences

STATA Data Analysis and Statistical Software

SUSENAS Survei Sosial Ekonomi Nasional (the National Socioeconomic Survey of

Indonesia)

USAID U.S. Agency for International Development