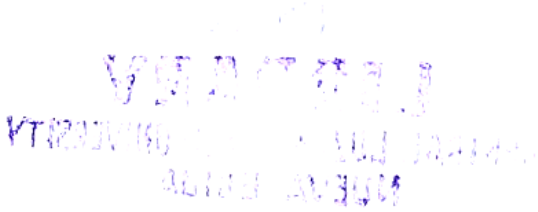
UTILIZATION OF ORGANIC-BASED RICE FARMING TECHNOLOGIES AMONG FARMERS IN AURORA PROVINCE, PHILIPPINES

BELEN PASCUA TRIMOR



A master's thesis submitted to the faculty of the Institute of Graduate Studies,
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the requirements for the degree

MASTER OF SCIENCE
(Rural Development)

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This thesis entitled, **UTILIZATION OF ORGANIC-BASED RICE FARMING TECHNOLOGIES AMONG FARMERS IN AURORA PROVINCE, PHILIPPINES**, prepared and submitted by **BELEN P. TRIMOR** in partial fulfillment of the requirements for the degree **MASTER OF SCIENCE** (Rural Development) is hereby accepted.

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BIOGRAPHICAL SKETCH

On the Christmas midnight of December 1975, a baby girl was born in Diteki, San Luis, Aurora. She was named Belen after her late aunt and the Filipino term for nativity reflecting the birth of Jesus Christ.

Len, as she is fondly called by her closest friends and family, is the youngest of five children of Manuel and Remedios Pascua Trimor. She was reared in Aurora until 9 years old and in San Isidro, Subic, Zambales until she reached 17 years old.

She spent her first three grades in Diteki Elementary School where she consistently was second honors. In 1984, she transferred to the San Isidro Elementary School and finished her elementary education in 1987. She graduated from high school at Sto. Niño High School in Pili, San Marcelino, Zambales in 1991.

To pursue her long time dream to be an agricultural engineer, she enrolled at Central Luzon State University (CLSU). During her college days, she was a varsity player of the women's basketball team. Life was tough to her so she had to shift to another course. She was student assistant at the CLSU Alumni Center. On April 17, 1998, she finished the degree Bachelor of Science in Agriculture, major in agricultural economics.

After graduation, she was immediately hired as research assistant on contractual basis at the Research Office, CLSU, for almost five and a half years. In February 2004, she was hired as Statistician Aide in the same office. On July 2003, she took the Licensure Examination for Agriculturists and passed it.

In June 2000, she enrolled in the Saturday class of the Institute of Graduate Studies of CLSU for a Master of Science in Rural Development degree. In 2001, she stopped schooling due to her busy work schedule. She continued pursuing her master's degree in 2004 and is on the road to success.

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BELEN PASCUA TRIMOR

TABLE OF CONTENTS

LIST OF TABLES

TABLE		PAGE

LIST OF FIGURES

LIST OF APPENDICES

ABSTRACT

TRIMOR, BELEN P., Institute of Graduate Studies, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, November 2007. **UTILIZATION OF ORGANIC-BASED RICE FARMING TECHNOLOGIES AMONG FARMERS IN AURORA PROVINCE, PHILIPPINES**

Adviser: FE L. PORCIUNCULA, Ph.D.

The study was conducted to determine the extent of use of organic-based rice farming technology and the influencing factors related to technology use in Aurora Province, Philippines. Sixty-three organic-based rice farmers from the five municipalities of Aurora were interviewed. Snowball sampling was used in identifying the respondents and interview schedule was employed in data collection. The data gathered were analyzed using descriptive statistics, correlation, and multiple and stepwise regression.

Organic rice farming has been the original type of farming practice in Aurora province. However, government policies and programs on the use of HYVs which imposed the massive use of chemical fertilizers and pesticides in rice farming made farmers resort to chemical-dependent farming system.

The respondents revealed a good concept of organic farming. This was associated to the organic-based farming technologies that they were using such as compost application, green manuring, manual weeding, use of organic fertilizer/organic foliar spray, biological and botanical pest/disease management. They viewed organic-based rice

farming as valuable in maintaining ecological balance, rejuvenating the fertility and sustaining good condition of the soil, producing rice based on its natural environment which is safe to the ecosystem, safe guarding the health of farmers and consumers, and providing high quality grains and high income. However, majority of the respondents (71.43%) claimed that the nutrient contents of organic fertilizers and compost were not sufficient which goaded them to combine organic and inorganic fertilizers in rice production.

Also, the respondents preferred HYVs - Super 60 and PSB Rc 18 during wet and dry seasons, respectively. In terms of yield attributes, most of the respondents (90.48%) experienced an increase in grain yield both in pure organic and combination rice farming. The others (87.3% and 82.54%, respectively) claimed to have observed notable improvement in the physical appearance of grains and spikelets of the rice.

The farmers perceived the five technology components as adequate in relative advantage, compatibility, high trialability, simplicity and observability. Only the use of organic fertilizer or organic foliar spray and compost application were related as having high relative advantage, very compatible, and highly observable. A ll the technology components were rated highly trialable and very simple.

The average net income per hectare in pure organic rice farming was significantly lower by P1,046.93 during the wet season and P4,611.72 during dry season. On the other hand, mixed organic farming generated a per hectare net income of P4,132.99 and P12,659.00 for wet and dry season, respectively.

The extent of used of organic-based farming technology was found moderate due to the relatively small area planted to organic rice, less quantity of organic fertilizer use and moderate number of organic technologies used. This may be attributed to the relatively low organic farming experience and limited knowledge of the other technology components.

Correlation analysis revealed 12 variables related to the use of organic-based rice farming technology. These were age, number of years in farming, membership in organization, number of projects or services, market support, trainings, educational tours, filled grain spikelets, perceived relative advantage, compatibility, simplicity and observability.

The predictive variables which were revealed to influence the technology use were educational field tour, credit, market assistance, and compatibility of the technology.

The respondents' identified strengths of organic-based rice farming were basically economic, environment, technology and social-related. Opportunities for massive organic-based rice farming technology utilization were perceived to be high. Among the threats identified were related to production of commercial organic fertilizers, government policies, position of organic-based farmers in the market, and possible outbreak of soil-borne diseases of animals and humans.

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