THE IMPACT OF THE RICE INTENSIFICATION LOANS ON LAND PRODUCTIVITY, INPUT USE AND INCOME DISTRIBUTION, THE WEST JAVA CASE, INDONESIA

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JANUARY 1983

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SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
UNIVERSITY OF THE PHILIPPINES AT LOS BAÑOS
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
DEGREE OF

MASTER OF SCIENCE
(Agricultural Economics)

January 1983

ABSTRACT

TAMPUBOLON, SAKTI M. H. University of the Philippines at Los Baños, January 1983. The Impact of the Rice Intensification Loans on Land Productivity, Input Use and Income Distribution; the West Java Case, Indonesia. Major Professor: Dr. Cristina C. David.

The impact of the BIMAS Rice Intensification Loans (RIL) on land productivity, input use and income distribution are analyzed. Data from the Indonesian Consequences of Small Rice Farm Mechanization of the International Rice Research Institute are used.

This study employs three main hypotheses namely, (i) that credit rationing seems to appear and biased favoring wealthy farmers; (ii) that given the production possibility boundaries and the farmers are rational, farmers participating in the BIMAS-RIL program tend to use higher level of input- factors with higher level of output, and thus farm income, since the RIL serves to reduce financial stress and thus, the effective price of input factors; and (iii) that the wealthy farmers on the other hand, tend to employ more non-land capital instead of labor and its complement: fertilizer and chemicals.

Test of independence indicates that participation in the BIMAS-RIL program ~~cannot~~ could not be said to be independent from farm wealth and thus conforms the first hypothesis. Using t-test procedure, with an analysis of variance as a cross-check, it is concluded that particularly in wet seasn, land productivity for the participants-farmers tend to be higher than non-participant ones due to higher use of fertilizer and chemicals. While not more productive than less wealthy ones, wealthy farmers tend to use more per hectare non-land capital instead of labor and its complement: fertilizer and chemicals. Input demand econometric model further suggests that first, RIL has no effect on preharvest (hired and total) labor employed and positive effect on non-land capital and second, fram wealth (and so farm size) has negative effect on preharvest labor employed but positive on non-land capital.

Pattern of shares, absolute and relative, indicate that participant farmers belonging to the less wealthy ones tend to be more productive than other groups but per hectare from income belongs to the lowest because of considerable amount of land-rent payment and at the same time, this group tend to pay the highest to hired labor. More RIL given to the less wealthy farmers is therefore suggestable.

TABLE OF CONTENTS

CHAPTER	PAGE

LIST OF TABLES

TABLE		PAGE

LIST OF FIGURES

LIST OF APPENDIX TABLES

LIST OF APPENDIX FIGURES

CHAPTER I

INTRODUCTION

Statement of the Problem

Credit has been an important instrument of agricultural development in low income countries (LICs) not only to increase production, and thus farm income, but also to improve income distribution. In almost all LICs, agriculture, which is typically composed of small farms, is the dominant sector and the main source of income particularly for rural households.[1]

The importance of rice in Indonesian economy is quite clear. In 1976, food crops which are mainly rice, contributed 21.5 percent to the Gross Domestic Product (GDP) at 1973 prices. Rice is a staple food and with past experience of the hyperinflation in 1963-65, the rice economy seems bearing a disguised threat for that socio-political stability of the country.[2]

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[1]This context is also valid for the Indonesian Rice Intensification Program (RIP) through which a series of extension programs; the Bimbingan Massal" or BIMAS, the "Intensifikasi Massal" or INMAS, and the "Intensifikasi Khusus" or INSUS; are instituted. See Abdoer Rachman, 1973 and Anon., 1975. This program will be discussed rather extensively in Chapter IV.

[2]In Indonesia, it is well believed that, although without sufficient and formal evidences, the increase in rice price is the central factor affecting the hyperinflation in 1963-65 which then followed by the fall of the Soekarno regime. For example, see Palmer, 1977.