FACTORS AFFECTING FARMERS' RAINFED LOWLAND RICE MANAGEMENT PRACTICES IN VICTORIA, TARLAC

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ABSTRACT

ANDRIANILANA FIDELIS JUSTIN, Institute of Graduate Studies, Central Luzon State University, Munoz, Nueva Ecija, Philipines, March 1994, FACTORS AFFECTING FARMERS´ RAINFED LOWLAND RICE MANAGEMENT PRACTICES IN VICTORIA, TARLAC.

Adviser: Dr Artemia L. Ferrer

The study analyzed the farmers´ rainfed lowland rice management practices in Victoria, Tarlac and the factors related to these, Tarlac. The respondents consisted of 150 farmers selected at random and in equal number from those who used at least one traditional rice variety and those who planted only modern rice varieties. Data were collected from these respondents using a pre-tested interview schedule and were analyzed by means of descriptive statistics, chi-square test and ANOVA. Respondents´ main landform was used as the basis to analyze their farm´s physical characteristics and rice management practices.

Data showed that mean farm size was 1.3 ha. Based on this, 59% of the respondents had a farm size below or equal to the mean. Other data showed that, most (60%) of the farmers were tenants and 52% were earning

a mean annual gross income of P 31,100 only. Thus many respondents resorted to borrowing from private money lenders. The mean amount borrowed was P 4,200.

The respondents' farm soils were highly fertile with blackish color and clay loam texture; their rice fields were characterized as "seldom flooded" and "easy to drain".

Most of the rainfed lowland farmers planted modern rice varieties, applied inorganic fertilizers, used pesticide and herbicide and practiced transplanting as their method of crop establishment.

Only four socio-economic variables and management practices variables were highly and significantly related: farm size with use of herbicide; access to credit with type of rice variety, use of inorganic fertilizer and crop establishment method; and amount of credit with crop establishment method. In contrast, all the farms' physical characteristics were highly and significantly related to rice management practices except for use of pesticide and the use of herbicide. Apparently, ones own ethno-ecological orientation on how farmer characterized and assessed their farms was more important in determining their rice management

practices.

Comparison of yields by landform revealed that the *turod* and *lungog* areas had significantly higher yields than the *kalungogan* area. Thus, the *kalungogan* areas could be considered as a relatively unfavorable environment for rice production.

Considering rice management practices, the yields obtained by farmers who adopted modern practices were significantly higher than those who followed traditional practices.

From the significant results, some recommendations were drawn: (1) Credit institutions and NGOs to strengthen their support to rice farmers in less favorable environment; (2) application of bio-diversity principles and other natural resources to control pests and diseases ; (3) construction of flood control, drainage channel and locally relevant irrigation system; (4) use of improved traditional varieties as breeding materials; (5) increased participation of farmers in rice technology developments; (6) use of participant observation method to fully understand farmers' rice management practices.

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