

International Transfer and Diffusion of High-Yielding-Varieties of Rice in Java

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Nowadays, international transfer of technology is widely recognized to be the most crucial source of agricultural development in Asia. Then, in this paper the author tried a theoretical analysis of diffusion process of IR varieties in Java.

Firstly, the author compared the economic characteristics of Rice-varieties grown in Java. The criteria adopted is Mean and Standard Deviation of yield per ha. Then, IR varieties was found to be not only more profitable than others, but also more risky. Secondly, the author assumed the rational behavior of Java's farmers towards profitability and risk. According to this assumption, Varieties-Adoption-Function was estimated. From this estimation, the author could get the following finding. For farmer's choice of new technology (IR varieties), the Risk-element is important as well as profitability. Lastly, the author presented a theoretical model which is consistent to the above estimation. By this model, the author can interpret the different behavior in farmers.