The Effect of Agricultural Products Insurance on Value Added in Agricultural Sector

A Case Study: Rice Crop in Gilan Province

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Abstract

Agriculture been one of the most risky business activities. has always Every year, the appearance of natural disasters as well as pest and plant diseases imposes huge losses on farmers. In developing countries, due to farmers' low income, the social and economic losses caused by these disasters seem to be greater. This is the reason why agricultural products insurance can be considered as one of the levers of agricultural development, since adopting agricultural products insurance can both bring about more security for agricultural crops producers and make more suitable conditions for attracting private capital in agricultural sector. Hence, this study aims at investigating the effect of agricultural products insurance on value added in this sector during 1989-2010 (a case study on rice crop in Gilan province). With regard to the research subject, the following variables were considered as the effective factors on the value added dependant variable: the amount of applied fertilizers, the amount of applied pesticide, the number of daytime workforce, the cultivated area, and the damages paid by agricultural insurance fund. Therefore, Vector Autoregressive Model (VAR) was applied through using the Eviews7 software. The findings show that there is a direct and significant relationship between the three variables the amount of applied fertilizers, the amount of applied pesticide, and the cultivated area, and the rice crop value added, while the two variables the workforce and the paid damages have an indirect significant effect on the rice crop value added. Finally, based on Granger Causality, it can be noted that with regard to the value added variable. there is a unilateral relationship from economic growth towards agricultural insurance development (paid damages) while the inverse relationship is not established.

Keywords:

Agricultural Insurance, Vector Autoregressive Model (VAR), Granger Causality, Value Added, Agricultural Sector, Rice Crop.



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