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Select Theme	: Sustainable and equitable farming systems
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Keyword 1	: Livelihood and social equity
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Keyword 3	: Advisory systems
Title of Entry	: The Impacts of Multi-Peril Crop Insurance on Indonesian Rice Farmers and Production
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Select only one type of presentation	: 15 minute oral presentation
Abstract	: Rice is a crucial commodity and a major source of livelihood for many small-scale subsistence farmers in Indonesia. However, many poor Indonesian rice farmers face substantial risks caused by pests and disease outbreaks and extreme weather (floods and droughts) exacerbated by climate change, which makes their income and main food source highly vulnerable to variables outside of their control. This paper analyzes the effect of Multi-Peril Crop Insurance policy for risk-averse Indonesian rice farmers located in Tuban and Gresik Regencies of the East Java Province. Based on the model, comparative static analysis of a change in

policy variables (coverage levels and premium subsidies) on input use through the coupling, wealth, and insurance effects are presented. The comparative static results are largely ambiguous and left as empirical questions. Consequently, the model is numerically simulated to quantify the effects of different coverage levels and subsidy rates on input use, expected net insurance payments, and certainty equivalents. This study contributes to the literature both theoretically, by decomposing comparative statics for MPCl into coupling, wealth, and insurance effects, and empirically, by employing simulation-based methods with endogenous input choices when analyzing crop insurance for a developing country. The theoretical findings provide a strong background for understanding the empirical findings. The results of this study will be valuable to policy makers in the Ministry of Agriculture in Indonesia by providing ex ante estimates of the impact of different combinations of coverage levels and premium subsidies on farmers' optimal production decisions. The empirical analysis shows that MPCl crop insurance results in a decline in expected yield for coverage levels above about 82.5% for both regencies. Furthermore, higher subsidy rates amplify the reduction in input use and yield. Therefore, incomplete coverage with relatively low premium subsidies is the best policy to minimize the impact on input use and yield. However, from the farmers' perspective, the optimal policy combination results from the highest coverage level and subsidy, which offer the largest expected net insurance payments and certainty equivalent.

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