



Agricultural Disaster Insurance Policy in Indonesia

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Introduction

Indonesia is one of the countries that are prone to natural disasters affect agriculture due to pests and diseases outbreak, earthquakes and tsunamis, floods and droughts. The disasters may directly affect the lost of crop yield and indirectly the lost of assets and public infrastructures influencing livelihood of the people in the rural community. Average data of 2007-2013 showed that 1.05 out of 13.12 million hectares (8.0%) of rice crop in Indonesia experience the risk of natural disasters (drought, flood, and pest/diseases outbreak). Furthermore, 131.79 thousand hectare (0.99%) of the crop experienced total loss. In extreme cases, the outbreak of brown plant hoppers in 1998 and 2011, as the most significant pest affecting rice production, has reduced rice production by as much as 12%.

To partially compensate for the impact of natural disasters to the farmers experiencing total loss of crops, the government provides direct assistance in the amount of US\$ 69.3/ha. The budget is managed and released by the Ministry of Agriculture after receiving request from the local government. Provinces and districts government also set similar policies but with different amount of assistance depending on their budget capacity. For those farmers experiencing partial damage of the crops, the Ministry of Agriculture also provides assistance in the form of seeds, to stimulate farmers to replant in their own fields.

The Law No.19/2013 on Farmers' Empowerment and Protection, Article 37 mentions that the Government (both Central and Local) has the obligation to protect farmers from financial loss due to crop damage, with the instrument of agricultural insurance. The purpose of this brief is to review the design of the pilot project on crop insurance.

Design and results of the pilot project on crop insurance

The Ministry of Agriculture has conducted the pilot project on crop insurance in 5 districts of the East Java and South Sumatera provinces, covering 623.12has of rice area in 2012 and

220,000ha in 2013 (Table 1). The percentage of the area claimed is 14.01% in 2012 and 7.75% in 2013.

Basic elements of the pilot project are summarized in Table 2. As can be seen from the table, the beneficiaries are rice farmers as members of the Farmers' Group. Any member of the group will face the same risk and receive the same benefits. Registering the Farmers' Group instead of individual farmers as formal insurance policy holders is intended to simplify administrative matters. At the pilot stage, the farmers only pay 20% of the premium cost, and the rest (80%) is subsidized by the government. As the program develops, this proportion may change toward larger proportion of the cost paid by the farmers. It is also necessary to mention that the insurance policy only covers the risk of total crop damage (equal or larger to 75% of the planted area loss).

Response from the participating farmers may be summarized as follows: (a) the insurance program provides benefit to the farmers, particularly those having working capital constraints to replant the damage crops; (b) 20% premium paid by the farmers is acceptable; (c) broader socialization program is need to enable farmers to understand the design and benefit of the program. Some of the difficulties in implementing the program are as follows: (a) administrative cost in collecting the premium from the farmers is significant due to fragmented location of the farmers' residences; (b) there is dispute in determining the area damage to determine insurance claim.

Table 1. Location and area of pilot project on rice crop insurance

No	Provinces	Districts	Planted area (ha)	Area claimed (ha)	%
	2012				
1	East Java	Tuban	320.00	80.00	25.00
		Gresik	150.87	0	0
2	South Sumatera	East OKU	152.25	7.28	4.78
	Total		623.12	87.28	14.01
	2013				
1	East Java	Jombang	727.50	16.00	2.20
		Nganjuk	709.11	0	0
2	South Sumatera	East OKU	766.25	42.5	5.55
	Total		2202.86	58.50	7.75

Table 2. Basic elements of the pilot project on rice crop insurance

Item	Description
Beneficiaries	Individual farmers belong to a Farmers' Group, cultivating rice farm
Coverage	Rice field operated by farmers as members of the Farmers' Group
Insurer	A consortium of state own enterprises operating on general/loss insurance and insurance company
Insurance policy	Each Farmers' Group receives an insurance policy representing members of the group
Insurance period	One planting season (approximately 4 months), from planting until harvest
Value of the coverage	US\$ 501.30/ha (refer to the cost of rice production)
Premium	3% of the coverage (US\$ 15.04/ha), 80% (US\$ 12.03/ha) subsidized by

	the government and 20% (US\$ 3.02/ha) paid by the farmer
Type of the risk covered	Flood, drought, pest/diseases outbreak
Conditions of the claim	<ul style="list-style-type: none"> a. Harvest loss due to flood, drought, and pest/diseases outbreak, with the rate of greater than or equal to 75% b. The premium has been paid c. The loss is verified by local pest/diseases inspector/extension specialist and reported to the company d. The insurance company determines the value of the claim
Payment of the claim	14 days after approval, the claim is transfer to the account of the Farmers'Group

Conclusion

As mandated by the Law No.19/2013, the government should develop agricultural insurance to cushion the farmers from financial loss due to natural calamities such as floods, droughts, and pests/diseases outbreak. Implementation of the pilot project on the rice crop insurance in two provinces has shown positive results. This is supported by government subsidies which pay 80% of the premium cost. Major challenge is on how this program may sustain if the premium subsidy is reduced or completely phased out. Therefore, it is necessary to continue the pilot project with higher percentage of premium paid by the farmers. Before implementing the program nationwide, it is also worth to consider alternative models which have been applied in other countries, such as *Weather Index Insurance*.

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