RISK MITIGATION FOR RICE PRODUCTION THROUGH AGRICULTURAL INSURANCE: FARMER’S PERSPECTIVE

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Background

- Rice production is susceptible to lost due to:
  - drought
  - flood
  - pests and disease attack

- Agricultural insurance becomes an important issue to solve farmer’s problems
The Government of Indonesia has launched a crop insurance scheme through Asuransi Usaha Tani Padi (AUTP) by the end of 2015.

The scheme is based on indemnity of the rice production cost at maximum claim of IDR 6 million per planting season.

Premium is 3% of the claim; 80% subsidized by the government and 20% is paid by farmers.

The insurance covers flood, drought and several pest and diseases attacks subject to the intensity of damaged reached 75% as per criterion set by the insurer (PT JASINDO).
What are the issues?

- AUTP is ‘new’ program to farmers.
- It is interesting how AUTP works on the field.
Aims of the study

- To portray rice production risks to failure
- Farmer’s perception on the implementation of AUTP in Bali
Site selection

Bali is only 0.29% of Indonesia
Bali – AUTP

- 10,591 farmers participated in the agricultural insurance covering 5,675.57 ha land.
- Area claimed for the insurance by March 2016 was 34.06 ha, accounting for only 0.6% of the total area insured in Bali.
- It implies that rice farming in Bali works well.
Sampling, data collection, and analysis

- Farmers participated in agricultural insurance (AUTP) in Tabanan, Jembrana and Denpasar in 2015/2016.

- 60 farmers selected in each regency using random sampling, totaling 180 farmers.

- A structured farmer survey.

- Data analysis: descriptive qualitative and a chi-square test to find out if there is different perception between regions.
Results

- Main claims for the insurance were:
  - Blast: 43.75%
  - Rats: 37.50%
  - Drought: 12.50%
  - Brown planthopper: 6.25%
Farmer’s perception on agricultural insurance

- 85% willing to pay premium
- 15% asking for full premium subsidy
Perception to Premium Payment

<table>
<thead>
<tr>
<th>No</th>
<th>Regency</th>
<th>Asking for full subsidy</th>
<th>Willing to pay 20% premium</th>
<th>Total farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jembrana</td>
<td>50</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>Tabanan</td>
<td>55</td>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Denpasar</td>
<td>48</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>153</td>
<td>27</td>
<td>180</td>
</tr>
</tbody>
</table>

Chi square test results:
Pearson chi2(2)=3.3987 Pr=0.183
Likelihood-ratio chi2(2)=3.6393 Pr=0.162
Fisher’s exact =0.175
4. Concluding Remarks

- Agricultural insurance is an important issue to support farmers to continue their rice production.
- Agricultural insurance implementation is workable. Farmers perceived that insurance is seen as a mitigation risk from harvest failure by considering premium payment.
Thank you