



Evaluation of the Impact of the Agricultural Insurance Program of the Philippine Crop Insurance Corporation

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Outline of Presentation

1. Motivation of the study
2. Review of the design and implementation of the agricultural insurance program of PCIC
3. Impacts of crop insurance on farmers
4. Moving forward

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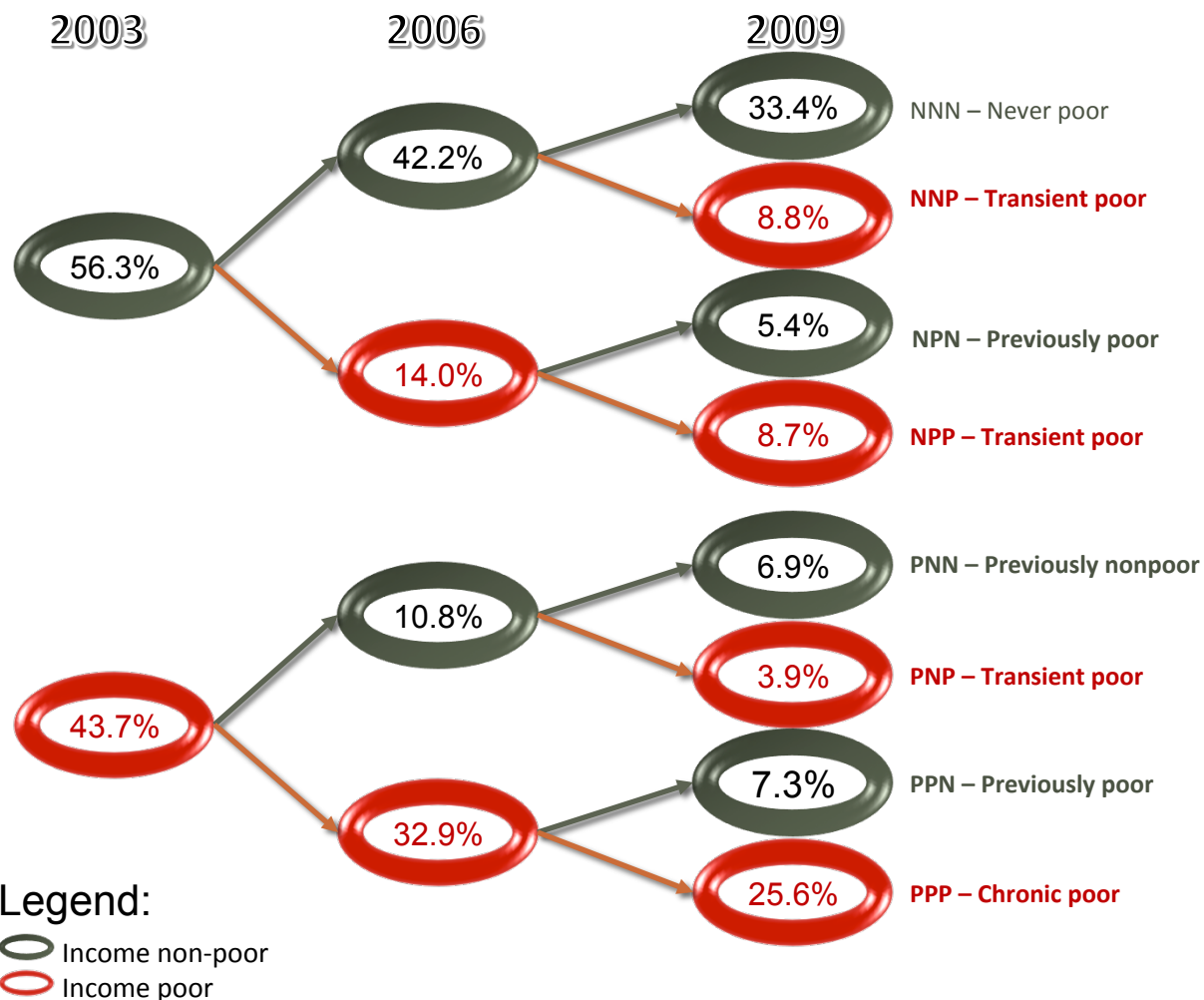
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Motivation

Movements of agricultural households in and out of poverty

- There are considerable movements in and out of poverty among households engaged in agriculture.
- Among households whose head are engaged in agriculture, 33 percent are never poor, 26 percent are always poor and 41 percent are sometimes poor.



Chronic and Transient Poverty

- Of those who were poor in 2009, 55 percent are chronic poor while the remaining 45 percent are transient poor (poor now but were previously non-poor)
- This is not surprising given that agriculture is exposed to many risks.

Poverty Status	All Households	Agricultural Households
Chronic poor	11.1	25.6
Transient poor	12.3	21.4
Poor	23.4	47.0

Source: Authors' estimates based on Panel dataset 2003, 2006, and 2009



Agricultural insurance could be an effective risk management tool that can significantly reduce poverty among agricultural households

Process of securing agri insurance



Philippine Crop Insurance Corporation (PCIC)

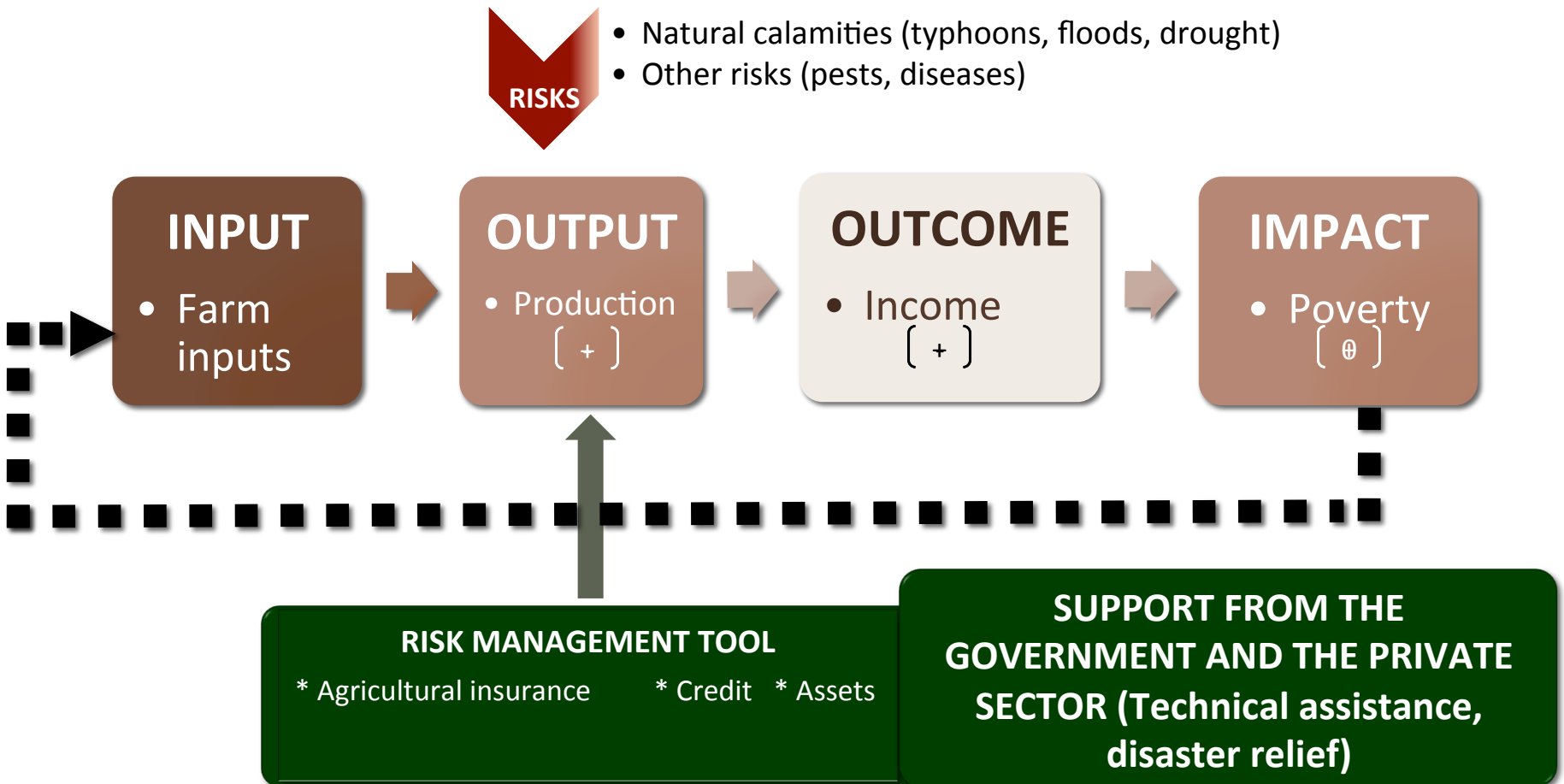
- Principal mandate is to provide insurance protection to farmers against losses arising from natural calamities, plant diseases and pest infestation of their crops
 - Covered risks: natural calamities with official declaration from PAGASA (typhoons, floods, droughts and other typhoon-related occurrences) and PHIVOLCS (earthquakes, volcanic eruptions)
- Crop and non-crop insurance)

Crop insurance

- Crop insurance is considered as a production cost insurance since it typically covers cost of production inputs (*with prescribed [cover ceilings](#)*)
- period of cover: one cropping period/ planting-harvesting (*for temporary crops*); one year (*for permanent crops*)

Product line	Share to total premium collections (%) (1981-2014)	Share to total claim payments (%) (1981-2014)
Rice and corn	88.4	94.9
High-value crops	6.5	1.5
Non-crop (i.e., livestock/ poultry, fishery, non-crop agricultural asset, term)	5.1	3.6

Role of agricultural insurance



Review of Design and Implementation of Agricultural Insurance Program



PCIC enabling laws...

Enabling Law	Pertinent Provisions
RA 3844 (Aug 8, 1963)	Creation of Land Bank, to finance the distribution and acquisition of agri land
RA 6390 (Sep 10, 1971)	Earmarked P20M for the Agriculture Guarantee Fund (AGF) that would shoulder 70% of losses from the supervised agricultural credit program administered by Land Bank
PD 1467 (Jun 11, 1978)	PCIC was created, AGF transferred to PCIC as part of capital contribution of gov't (P250 million capital contribution, P750 million authorized capital stock)
PD 1733 (Oct 21, 1980)	Crop insurance was made compulsory for all lending institutions granting production loans for palay under the supervised credit program of government, and the same shall act as underwriters of PCIC
LOI 1242 (May 21, 1982)	Creation of Special Revolving Trust Fund (P450 million) administered by PCIC as payment for claims of banks that participated in the Masagana 99
RA 8175 (Dec 29, 1995)	PCIC charter revised; increased authorized capital stock to P2billion, creation of state reserve fund (P500 million) for catastrophic losses

Crop insurance was government's response to improve the old agricultural guarantee fund

Enabling Law	Pertinent Provisions
RA 3844 (Aug 8, 1963)	Creation of Land Bank, to finance the distribution and acquisition of agri land
RA 6390 (Sep 10, 1971)	Creation of the Agricultural Guarantee Fund (AGF), to guarantee 70% of losses of rural banks extended to finance agricultural loans to farmers. Aside from NG shares in Lepanto Mines, P20 million was allocated to the AGF
PD 1467 (Jun 11, 1978)	PCIC was created, AGF transferred to PCIC as part of capital contribution of gov't (P250 million capital contribution, P750 million authorized capital stock)
PD 1733 (Oct 21, 1980)	Crop insurance was made compulsory for all lending institutions granting production loans for palay under the supervised credit program of government, and the same shall act as underwriters of PCIC

Note that for unpaid loans with agricultural guarantee, the farmer will still have to pay the loan to the creditor, even if the AGF has already remitted funds to the creditor. For crop insurance, indemnity claims will be used to pay the farmers' loan.



Benefits of agricultural insurance

Benefits to Farmers

- Helps farmers manage risks
- Provides farmers funds to cover production costs for the next season
- Helps farmers to finance household expenditures after a shock
- Better than agricultural guarantee fund



Areas for improvement

Low level of awareness

1. Awareness about PCIC programs: Low level of awareness among farmers, even LGUs
 - FGDs among farmers groups, KIIs with LGUs, not aware of all the different types of PCIC programs
 - Some farmers are not aware that they are insured under the RSBSA program. One of the reasons is that they do not have the insurance policy with them.

Low penetration rate

2. Penetration rate: Low penetration rate, especially in certain regions and groups of farmers

Region	by No. of Farmers				by Hectares		
	Rice	Corn	HVCC	Livestock	Rice	Corn	HVCC
Philippines	27	12.2	3	3.7	31	14.2	3.3
Region IX (Zamboanga Peninsula)	35.1	26.2	3.7	1.7	34.2	17.7	3.1
Region X (Northern Mindanao)	25	8.8	1.2	2.1	28	9.1	1.1
Region XI (Davao)	26.5	3.3	2.9	3.5			
Region XII (SOCCSKSARGEN)	30.1	9.5	2.2	1.9	32.7	2.7	2.9
Caraga	24.8	2.1	0.2	1	34.6	10.9	2.2

Penetration Rates in Mindanao, 2014

Low penetration rate

2. Penetration rate by **number of farmers**: Low penetration rate, especially in certain regions and groups of farmers

Region	Rice	Corn	HVCC	Livestock
Philippines	27.0	12.2	3.0	3.7
Cordillera Administrative Region	16.3	51.2	2.3	0.9
Region I (Ilocos)	8.2	10.8	3.7	1.3
Region II (Cagayan Valley)	40.8	18.6	2.0	0.3
Region III (Central Luzon)	34.4	4.2	4.2	13.5
Region IV-A (CALABARZON)	16.8	5.1	3.2	4.1
Region IV-B (MIMAROPA)	23.4	13.5	2.1	3.0
Region V (Bicol)	26.6	13.9	5.5	2.7
Region VI (Western Visayas)	40.3	13.1	3.4	1.2
Region VII (Central Visayas)	16.6	10.2	3.2	9.2
Region VIII (Eastern Visayas)	25.4	3.1	2.9	4.1
Region IX (Zamboanga Peninsula)	35.1	26.2	3.7	1.7
Region X (Northern Mindanao)	25.0	8.8	1.2	2.1
Region XI (Davao)	26.5	3.3	2.9	3.5
Region XII (SOCCSKSARGEN)	30.1	9.5	2.2	1.9
Caraga	24.8	2.1	0.2	1.0

Low penetration rate

2. Penetration rate by hectares: Low penetration rate, especially in certain regions and crop

Region	Rice	Corn	HVCC
Philippines	31.0	14.2	3.3
Cordillera Administrative Region	16.4	60.4	1.0
Region I (Ilocos)	13.6	42.4	2.8
Region II (Cagayan Valley)	42.8	10.2	0.6
Region III (Central Luzon)	45.2	35.4	3.9
Region IV-A (CALABARZON)	19.6	13.5	7.4
Region IV-B (MIMAROPA)	24.0	34.5	2.8
Region V (Bicol)	24.4	17.6	5.2
Region VI (Western Visayas)	35.0	17.8	3.9
Region VII (Central Visayas)	24.7	22.6	4.4
Region VIII (Eastern Visayas)	26.1	3.0	3.4
Region IX (Zamboanga Peninsula)	34.2	17.7	3.1
Region X (Northern Mindanao)	28.0	9.1	1.1
Region XI (Davao)	32.7	2.7	2.9
Caraga	34.6	10.9	2.2
Note: Excluding provinces of NCR and ARMM	27.2	1.3	0.1

Limited coverage of special programs

3. Limited coverage of special programs

Funds of special programs are not enough to cover all eligible beneficiaries. This leads to “First-come, first-served” implementation policy.

Product line	No. of eligible farmers listed in the RSBSA	No. of beneficiaries enrolled under the RSBSA program in 2014
Rice	1,923,075	135,551
Corn	1,112,823	58,695

Sources of basic data: RSBSA and 2014 PCIC lists

Low insurance cover

4. Insurance cover (Amount of Cover): Crop insurance below average production cost for rice and corn

Trade-off: higher penetration rate among farmers vs. higher insurance cover

	Rice	Corn
Average Production Cost/Ha.	PHP 42,475.00	P 25,546.00
Average Prod Cost Less Labor/Ha.	PHP 31,147.00	P15,928.00
Average Amount of Cover/Ha. (2014)	PHP 22,901.72	P 24,151.88
Average Indemnity/Ha. (2014)	PHP 5,129.79	P 6,645.57
Average Amount of Cover/Ha. (2015)	PHP 20,730.08	P19,842.37
Average Indemnity/Ha. (2015)	PHP 6,326.96	P6,427.83
Ceiling cover/Ha. (RSBSA)	PHP 20,000 (starting 2015); PHP 50,000 (2014)	PHP 20,000 (starting 2015); PHP 40,000 (2014)
Ceiling cover/Ha. (DA Sikat Saka)	PHP 50,000	(rice only)

Source of basic data: PCIC 2014 and 2015, PSA BAS for 2012 Cost of production for rice and corn

Bias towards rice and corn

5. Premium: **Only rice and corn have partial subsidy in regular program (about 50%).** This reflects priority towards rice and corn over other crops that is also reflected in DA budget allocation.

For 2014, **about 80% of the government premium subsidy was allocated to rice and corn,** further reflecting the bias to these crops

Crop	Total Premium Rate	Government Share
Rice	9.36 - 12.27	5.90
Corn	16.45 - 22.10	10.62
HVCC	1.55 - 7	0

PCIC Utilization of Government Subsidy by Product Line, 2014

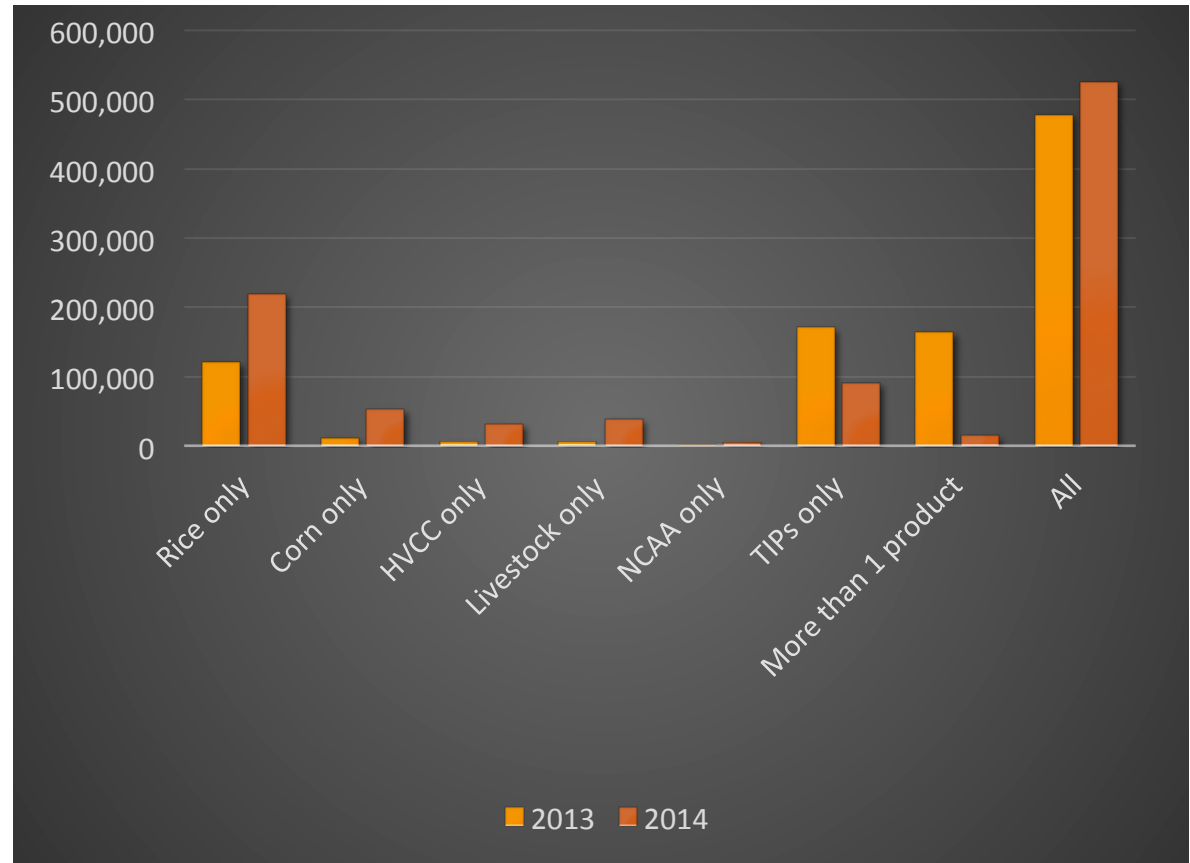
Rice	56.56%	Non-crop	0.20%
Corn	26.82%	Livestock	3.43%
HVCC	12.60%	TIP	0.39%

Source of basic data: PCIC 2014

Term insurance package

6. Product lines:

- PCIC has been addressing clamor for additional product lines
- **Term insurance package** has been offered in 2005 and fisheries insurance in 2011 to provide **life and accident insurance to farmers and their relatives (up to 4th degree of consanguinity)**
- Should TIP be offered alone?



Varied processing time

7. Processing time for claims:

- Settlement of claims is done on a piece-meal basis because claims applications are received on a piece-meal basis.
- On the average, it takes around 2 weeks to process a claim; from filing of notice of loss to receipt of claims payment.
- Based on the results of the FGDs, if claims are simultaneously filed because a lot of areas are damaged, processing of claims would take around 3 months or more.
- Apparently, this could be attributed to limited manpower resources of the PCIC.

Year	Rice		Corn	
	No. of Farmers	No. of days	No. of Farmers	No. of days
2008	12,304	15.33	1,787	17.62
2009	24,817	15.31	1,093	16.63
2010	25,782	16.89	2,133	18.08
2013	58,372	17.42	7,449	17.42
2014	79,876	22.11	15,609	22.11

Source: PCIC

Indemnity payments

8. Indemnity amounts: Clients not aware of how the indemnity payments were determined

	Rice	Corn
Proportion of average indemnity to average insurance cover, 2014	22%	28%
Proportion of average indemnity to average production cost, 2014	12%	26%

Sources of basic data: PCIC 2014, PSA-BAS 2012 Cost of Production for Rice and Corn

Targeting of beneficiaries for insurance premium subsidies

9. Given the limited funds, insurance premium subsidies should be directed to the poorest farmers.
 - 1995: Sec.5 of RA provides for limited partial premium subsidy to **subsistence farmers (total landholding: 7 has. and below)**
 - 2015: **Maximum cover ceiling of 3 ha/farmer** at P20,000/ha for RSBSA implemented in 2015 (PCIC MC 2015-004) to cover more beneficiaries
 - 2017: DBM has asked PCIC to cull out **farmers with farm sizes 3ha and below** in the RSBSA as priority beneficiaries

Need to validate list of farmers in the Registry System for Basic Sectors in Agriculture (RSBSA) and list of agrarian reform beneficiaries. There are many ARBs not in the RSBSA. RSBSA list contains non-farmers and excludes some farmers.

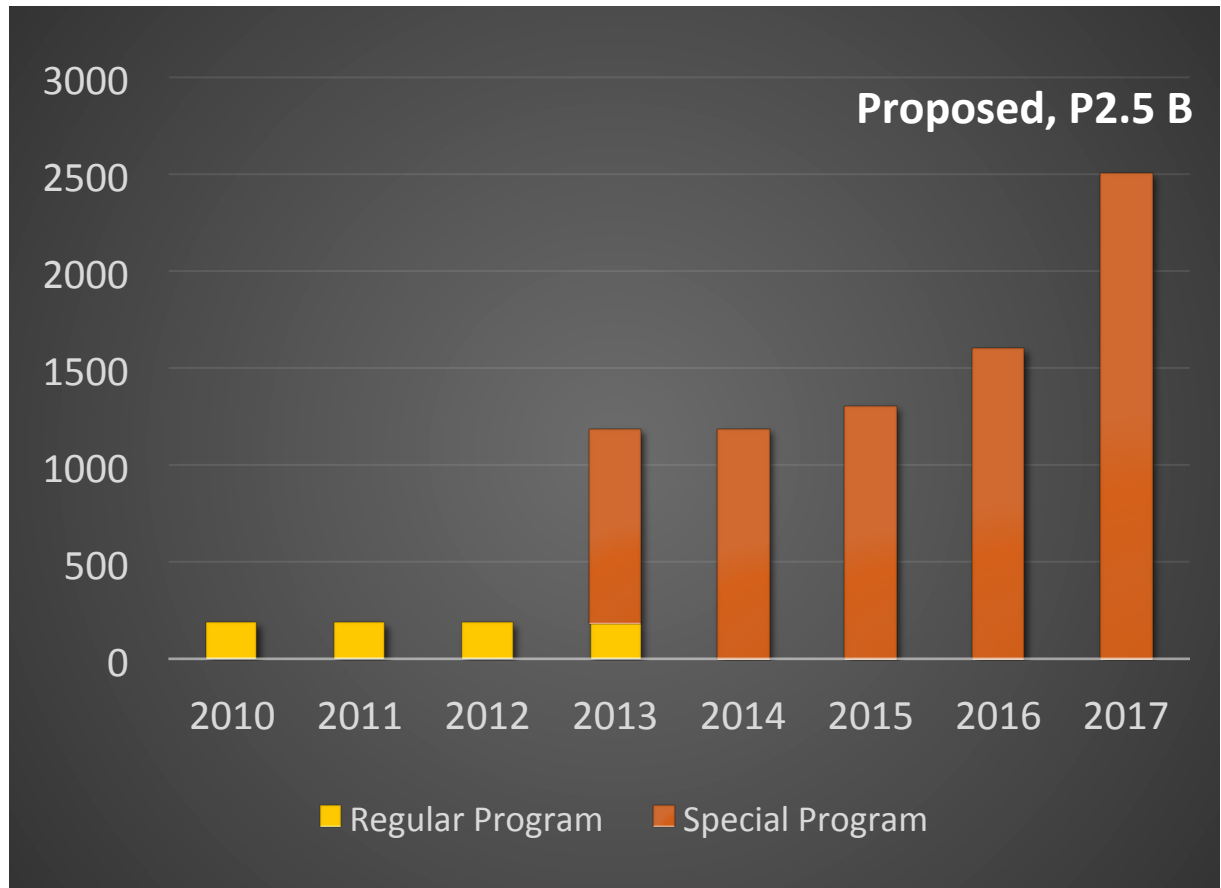
Premium subsidy

Special program	Product lines covered	Beneficiaries	Maximum insurable area (ha.)
RSBSA	all lines, except term	Subsistence farmers listed in the RSBSA	3
DA Sikat Saka	rice	Rice farmers who are IA members	5
DA WARA	rice	Rice farmers whose farms are located in flood-prone areas	7
DA NIA-Third Cropping	rice	Rice farmers who are IA members	7
DAR APCP / ARB-AIP	rice, corn, HVC, livestock, and accident insurance	agrarian reform beneficiaries (ARBs)	3
Yolanda	all lines	Yolanda victims from Regions VI, VII and VIII	7

Government Premium Subsidy increased

For 2017, the proposed budget for PCIC is P2.5 billion. The RSBSA will still be used as a targeting tool. DBM has asked PCIC to cull out farmers with farm sizes 3ha and below in the RSBSA as priority beneficiaries

In Million P



Expanded program using RSBSA

Maximum cover ceiling of 3 ha/ farmer at P20,000/ ha for RSBSA implemented in 2015 (PCIC MC 2015-004) to cover more beneficiaries

But note that 97% of rice and corn farmers listed in the RSBSA have farm sizes 3 ha and below

Farm size	Rice	Corn
0.5 & below	1,065,902	669,806
> 0.5 to 1.0	501,205	257,715
> 1.0 to 2.0	237,892	116,477
> 2.0 to 3.0	74,728	41,037
> 3.0 to 5.0	36,247	22,822
> 5.0 to 7.0	7,101	4,966
All	1,923,075	1,112,823

Long-term policy on agricultural insurance

10. No long-term national policy/long term-funding on agricultural insurance
 - Will the special programs (i.e. RSBSA) continue?
 - Partnerships with local governments

Bulk of premium subsidies come from special programs

Year	Special Program	Amount	Funding Source
2013	DAR ARB AIP	P1 B	DAR
2013-2014	WARA	P167.235 M	DA
2013-2014	DA Sikat-Saka and NIA Third Cropping	P150 M	DA
2014	RSBSA	P1.184 B	DBM
2014	Yolanda	P228.016 M	PCIC corporate funds
2015	RSBSA	P1.3 B	DBM
2015	Yolanda	P250 M	PCIC corporate funds
2016	RSBSA	P1.6 B	DBM

Source of data: COA Annual Audit Reports for PCIC, 2014-2015

PCIC Policy Updates, 2015-2017

Relevant	Relevant Sections
RA 10651 (GAA 2015)	DBM allocated GPS of P1.3 billion for PCIC to finance agricultural insurance of those in the RSBSA, provided that they are not receiving any other insurance subsidy
PCIC MC 2015-004	Instituted a maximum cover ceiling of P20,000 / ha for a max of 3 hectares per farmer/household for the RSBSA program for all rice, corn, and HVCC
PCIC MC 2015-005	Allocated P250 million from its internal funds for the Yolanda affected areas
PCIC MC 2015-017	Added supplemental allocation of P46 million to the Agrarian Production Credit Program beneficiaries of the DAR-DA-LBP
RA 10717 (GAA 2016)	DBM allocated GPS of P1.6 billion for PCIC to finance agricultural insurance of those in the RSBSA, provided that they are not receiving any other insurance subsidy

PCIC Policy Updates, 2015-2017

Relevant	Relevant Sections
Proposed Subsidy (DBM Expenditure Program for PCIC, FY 2017 Volume III)	<p>Subsidy to the PCIC in the amount of 2.5 billion pesos shall be used for full insurance premiums of subsistence farmers and fisher folks to cover crop, livestock and non-crop agri. asset. PCIC shall ensure the Beneficiaries are registered under the RSBSA. Priority given to localities declared as geo-hazard or no build zones identified by the Mines and Geo-Sciences Bureau.</p> <p>(Source: http://www.dbm.gov.ph/wp-content/uploads/NEP2017/BSGC/A.pdf)</p>

Size of organization

11. Personnel complement of PCIC: Organization needs to adjust to cope with bigger programs

Employee Type	2014	2015
Regular	191	209
JO/ Consultant	324	379
Total	515	588

Source of data: COA Audit Reports, 2014 and 2015

Underwriting network

12. Underwriting

- Need to expand underwriting network
- Need clearer policy on how to provide underwriting fee for government personnel

Partnerships with LGUs

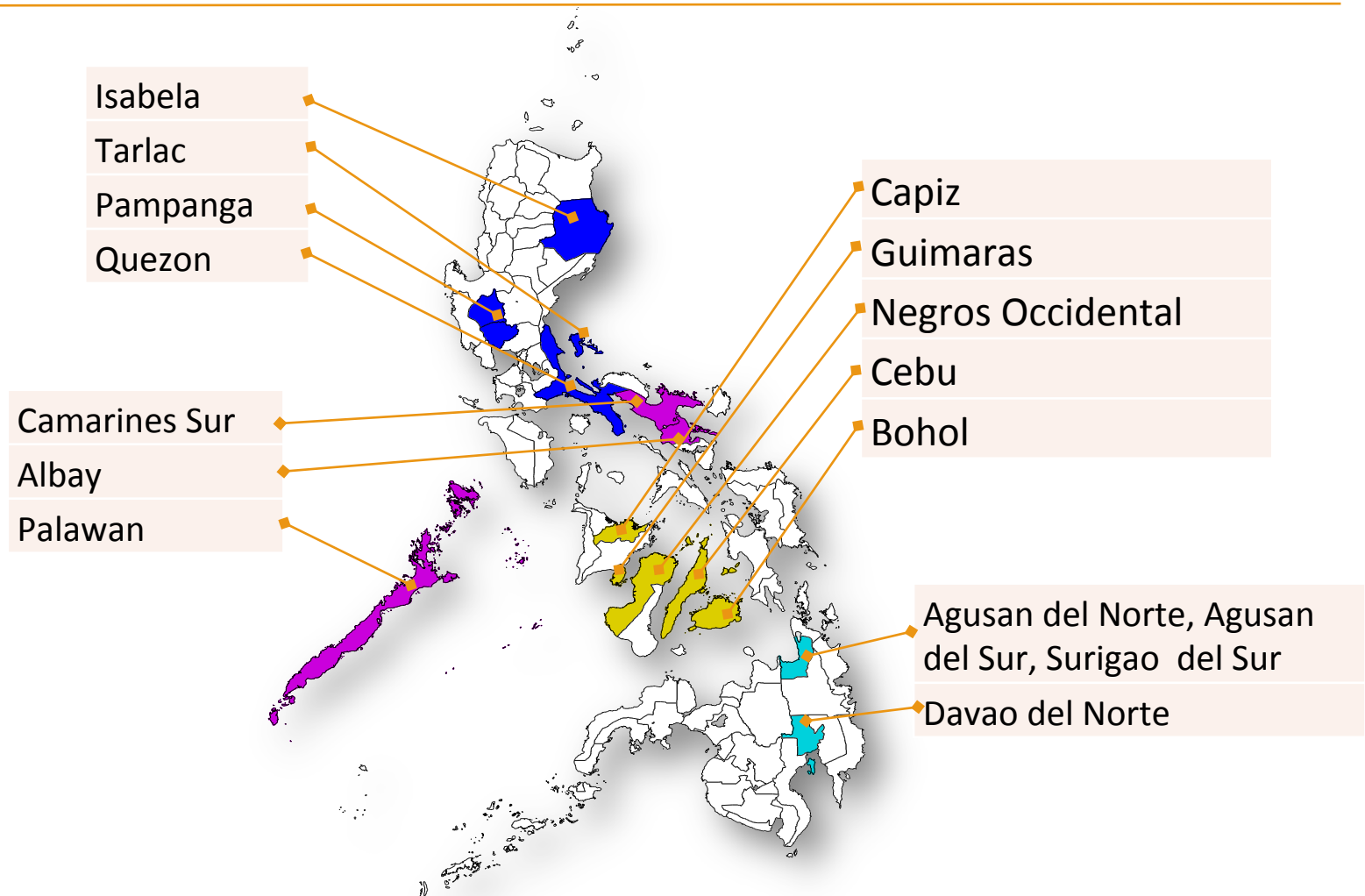
13. LGU PCIC partnerships can possibly increase coverage rate of insured farmers (especially those not in the RSBSA).

Different modalities in the LGU PCIC partnership (full premium subsidy by the LGU or farmers' counterpart in the insurance premium in a form of loan).

Davao del Norte	2014	2015
Rice Farmers with Insurance under LGU Program	393	206
Total Rice Farmers with Insurance in the Province	5,471	7,282

Isabela	2013	2014
Rice Farmers with Insurance under LGU Program	1954	1840
Corn Farmers with Insurance under LGU Program	1236	1581

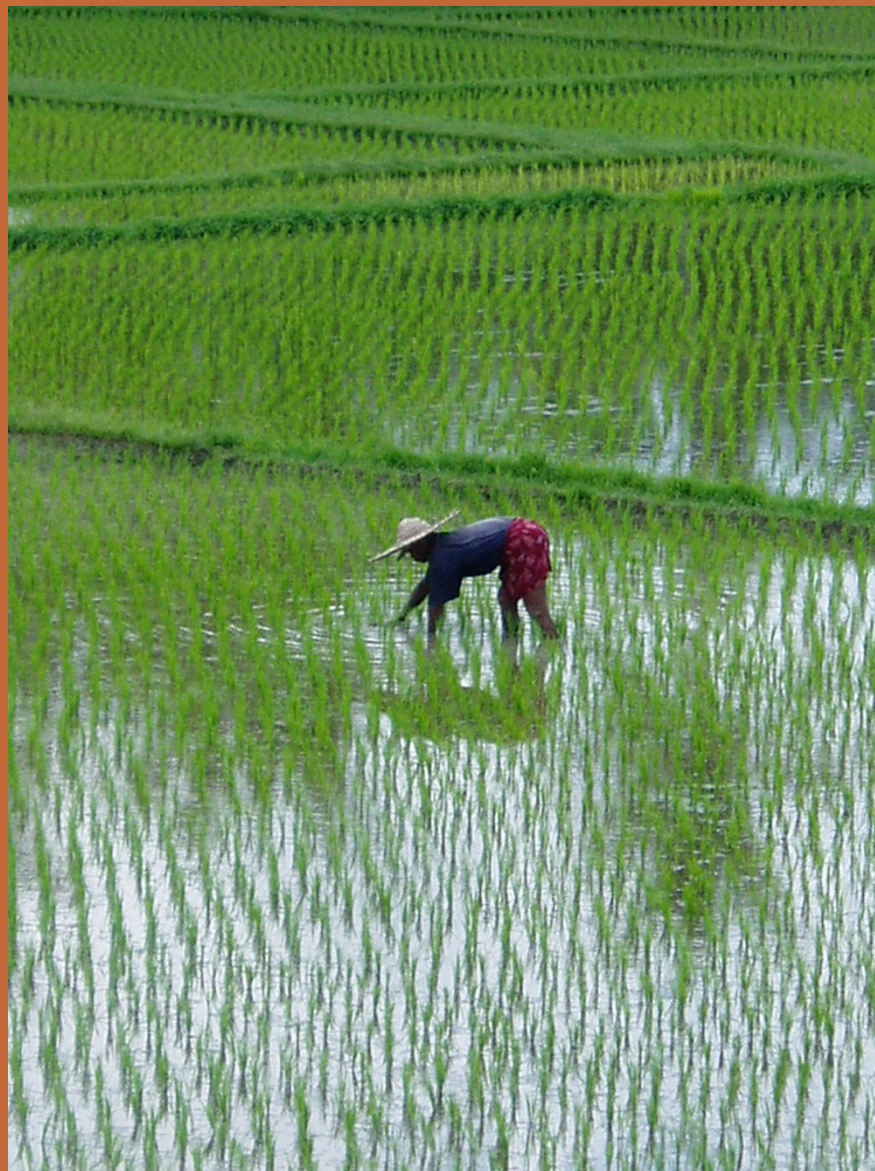
PCIC and LGU Partnerships on AIP

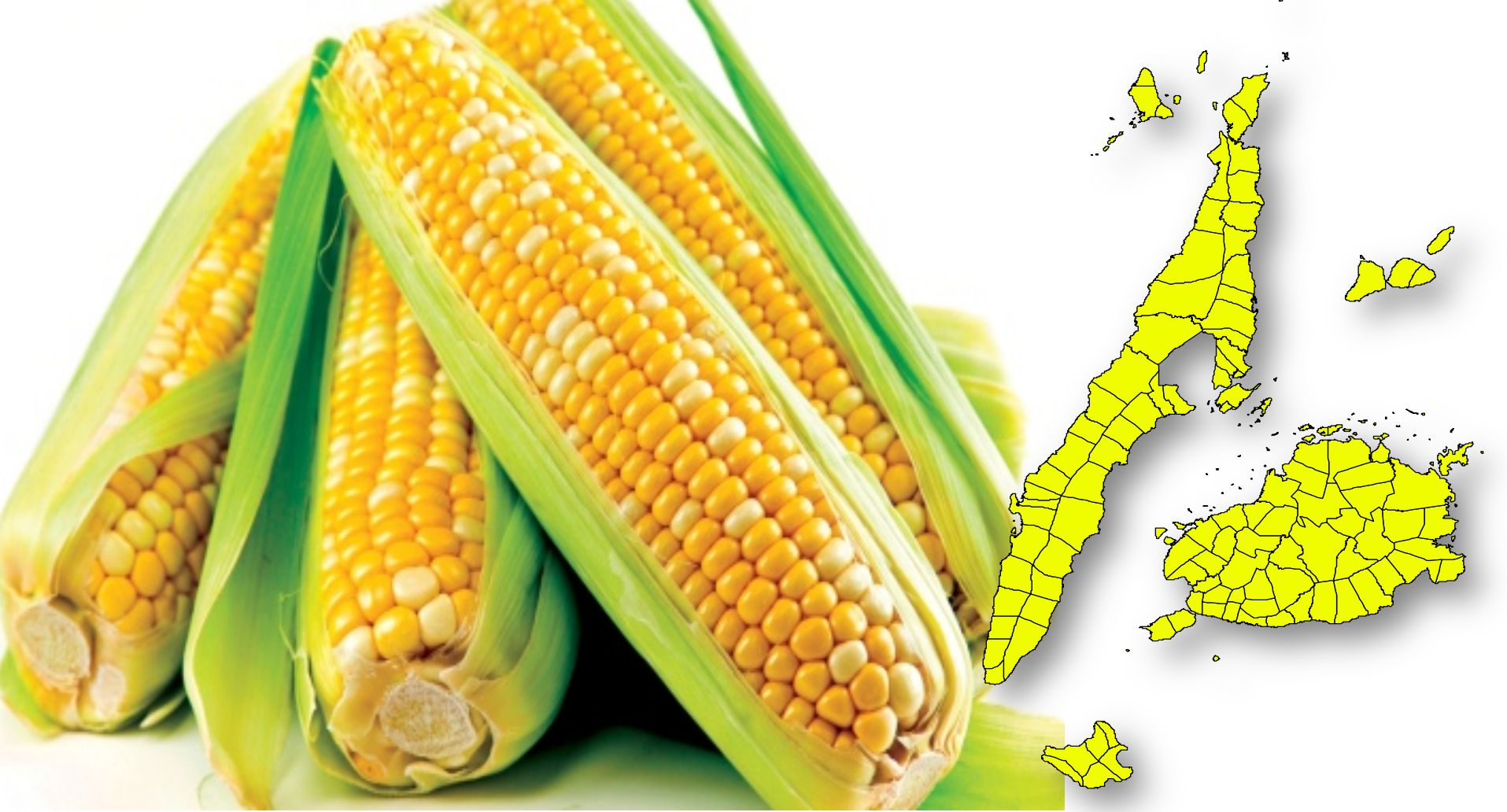


Funds allotted by LGUs

LGUs	Program	Subsidy	Funds Allotted (PhP)
Isabela	BRO - Paseguro sa Pananim	Farmer and LI share only	7,000,000
Victoria , Tarlac	Palay Insurance CY 2013 and 2014	Wet Season - 8.48%	300,000
Guagua , Pampanga	Palay Insurance 2014	Wet Season - 8.48%	60,000
San Fernando , Pampanga	Palay Insurance	Dry & Wet Season - 5.13%	231,500
	ADSS (CY 2014 & 2015)	8.48%	25,700
Lucena City , Quezon	Corn Production	Phase A - 5.84%	850,000
		Phase B - 9.51%	
Palawan	Cacao Production	3.00%	9,000,000
Negros Occ.	Negros First Universal Crop Insurance (NFUCIP)	4.75%	5,000,000
Capiz	Viable Insurance for Capiz	5.94%	3,200,000
Guimaras	LGU DA Guimaras	5.94%	150,000
Cebu	Agri Fishery Insurance Program	Farmer and LI share only	12,000,000
Bohol	Rice Accelerated Engagement Response (RACER),	Farmer and LI share only	2,072,000
	Rice Action Program for Institutional Dev. (RAPID)		
Davao del Norte	Insurance coverage of Agri-Fishery Projects/ Programs	50%	1,034,000
Agusan del Norte	Climate Change Resiliency thru Risk Transfer Mechanism for Farmers, 2015		500,000

Impact of crop insurance on farmers

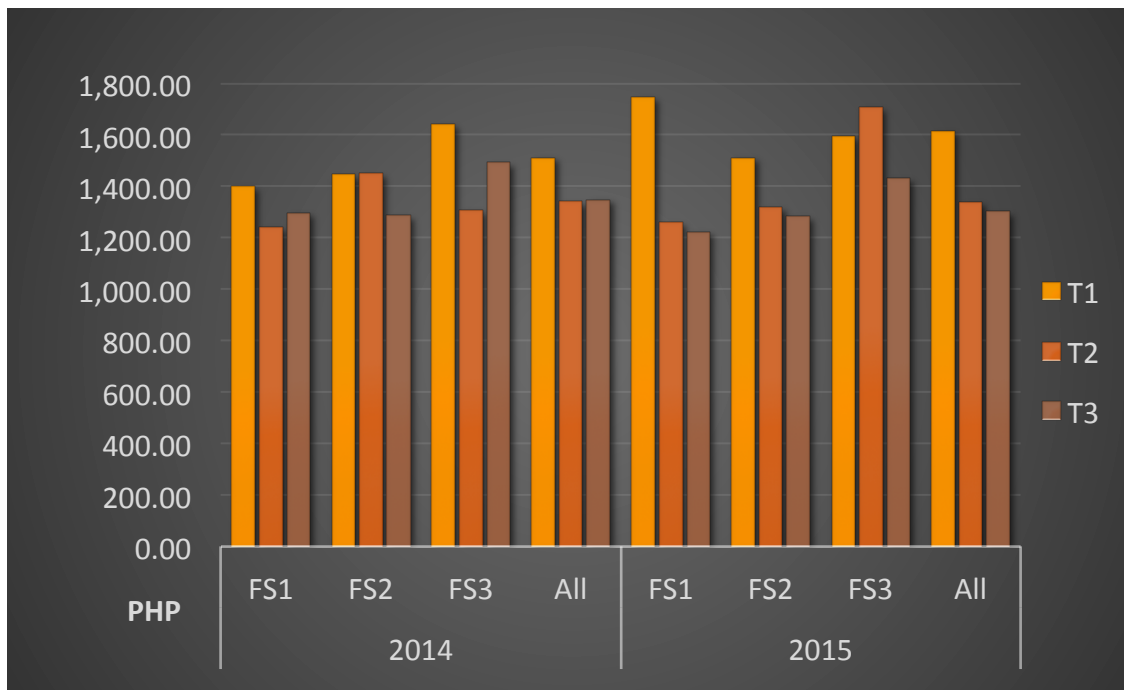




Findings from Central Visayas (Corn)

- Both in 2014 and 2015, net farm income earned by sample corn farmers with insurance and received indemnity claims, on the average, is relatively higher than that earned by those from the other groups.
- Indemnity claims payment account for a significant portion of net farm income, particularly for FS1 (63%) and FS3 (59%).

Average per-hectare net farm income from corn production (₱) of all sample corn farmers in Region 7, 2014-2015, by treatment group and farm size



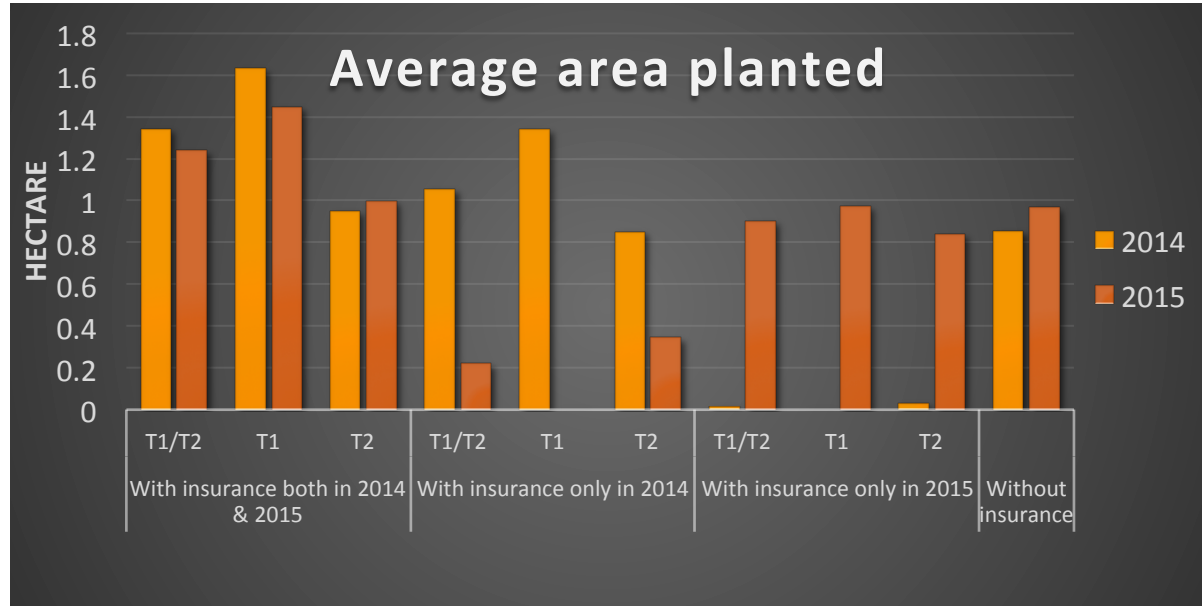
T1 = with insurance/with claims; T2 = with insurance/without claims; T3 = without insurance; FS1 = 0.5 ha. & below; FS2 = >0.5 to 1 ha.; FS3 = > 1 ha.

Source of basic data: 2015 IE Survey on Agricultural Insurance

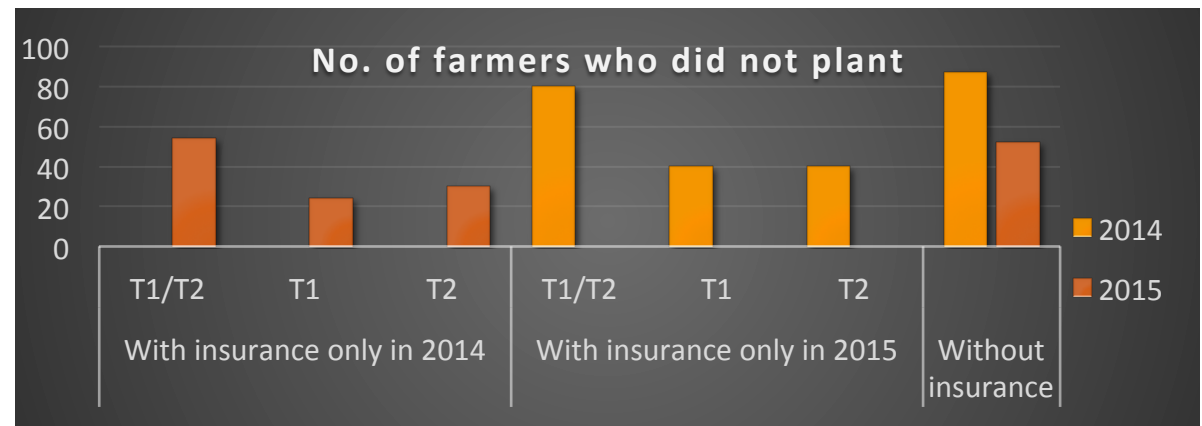
- It can be seen from the charts that, indeed, sample corn farmers did not plant during the periods when they did not avail of a crop insurance.

- It can also be seen from the second chart that many of those who skipped planting were farmers without insurance.

Average area planted to corn by sample corn farmers in Region 7 and number of those who did not plant, 2014-2015, by treatment group



T1 = with insurance/with claims; T2 = with insurance/without claims; T3 = without insurance;
Source of basic data: 2015 IE Survey on Agricultural Insurance



Access to formal credit

Having a crop insurance increases the probability of accessing formal credit by about 10 percent

CONCLUSION

- Crop insurance improves farmers' welfare, as measured by net farm income.
- Indemnity payments have been used mainly to pay for farm production inputs. They have also been used to smooth household food consumption.
- Improvements in the design and implementation, particularly with regards to the penetration rate and insurance cover, can further increase these benefits. This will make crop insurance an effective risk management tool.

MOVING FORWARD

- Implementing improvements in the design and implementation, such as
 - Higher penetration rate
 - Higher insurance cover
 - Targeting of beneficiaries for the free insurance premium
 - Validate and update list of farmers and fisherfolks and agrarian reform beneficiaries
 - Partnerships with more LGUs
- Weather index based insurance (WIBI)
 - Trigger for payment – ex. Rainfall volume
- Role for PCIC - Reinsurance?
 - Reinsurance is insurance for insurance companies
 - To transfer part of the risks of private insurance companies to PCIC
 - Can encourage private insurance companies to offer agricultural insurance thereby increasing penetration rate

PCIC Policy Updates, 2015-2017

Relevant	Relevant Sections
HB 2445 (August 2016)	Proposes compensation to farmers who suffer from recurrent disasters and calamities, sustain agricultural credit and financing
HB 3560 (September 2016)	Mandating the PCIC to offer index based insurance coverage and allowing PCIC to engage in reinsurance, increase funding source and imposing heavier penalties for spurious claims.
SB 977 (August 2016)	Proposes increased capitalization for PCIC, from P2B to P10B, and for PCSO to remit P5M to PCIC annually until the unreleased GPS is fully paid
SB 1171 (September 2016)	Compulsory insurance for PALAY farmers obtaining production loans. Optional for Self-financed farmers provided they agree to place themselves under the supervision of agricultural production technicians. NFA- National Food Authority shall pay for the insurance premium and shall become at least 50 percent beneficiary of the insurance proceeds or claim. (<i>Section 4</i>)



Thank you!

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