

Towards a more inclusive agricultural insurance program

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Towards a More Inclusive Agricultural Insurance Program (PIDS Discussion Paper DP 2019-38)

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PIDS publications on agricultural insurance program and RSBSA

Publication	Title
DP 2015-07	Review of Design and Implementation of the Agricultural Insurance Programs of the Philippine Crop Insurance Corporation
DP 2015-08	Targeting the Agricultural Poor: The Case of PCIC's Special Programs
DP 2016-42	Impact Evaluation of Banana Insurance Program of the PCIC in the Davao Region
DP 2016-43	Evaluation of the Impact of the Agricultural Insurance Program of PCIC on Rice Producers in Region VI
DP 2016-47	Impact Evaluation of the Agricultural Insurance Program of the Philippine Crop Insurance Corporation on Agricultural Producers in Central Visayas
DP 2017-01	Opportunities for Strengthening Agriculture Insurance Programs: Philippine Crop Insurance Corporation and LGU Partnerships
DP 2017-02	Agricultural Insurance Program: Lessons from Different Country Experiences
DP 2017-03	Evaluation of the Registry System for Basic Sectors in Agriculture

PIDS publications on agricultural insurance program and RSBSA

Publication	Title
DP 2017-07	Evaluation of the Financial Sustainability of the Agricultural Insurance Programs of the Philippine Crop Insurance Corporation
DP 2017-12	Evaluation of the Impact of Agricultural Insurance Program of the Philippine Crop Insurance Corporation on Agricultural Producers in Region 02 (Cagayan Valley), Philippines
DP 2017-15	Evaluation of the Impact of Agricultural Insurance Program of the Philippine Crop Insurance Corporation on Agricultural Producers in Region IV-A (CALABARZON)
DP 2017-39	Crop Insurance Program of the Philippine Crop Insurance Corporation: Integrative Report from the Five Case Regions in the Philippines
PN 2017-01	Is the Agricultural Insurance Program of the Philippines Serving the Poor?
PN 2017-11	Assessment of the Targeting and Financing Aspects of the RSBSA-AIP
PN 2017-19	Design Issues of the Philippine Agricultural Insurance Programs

Outline of the presentation

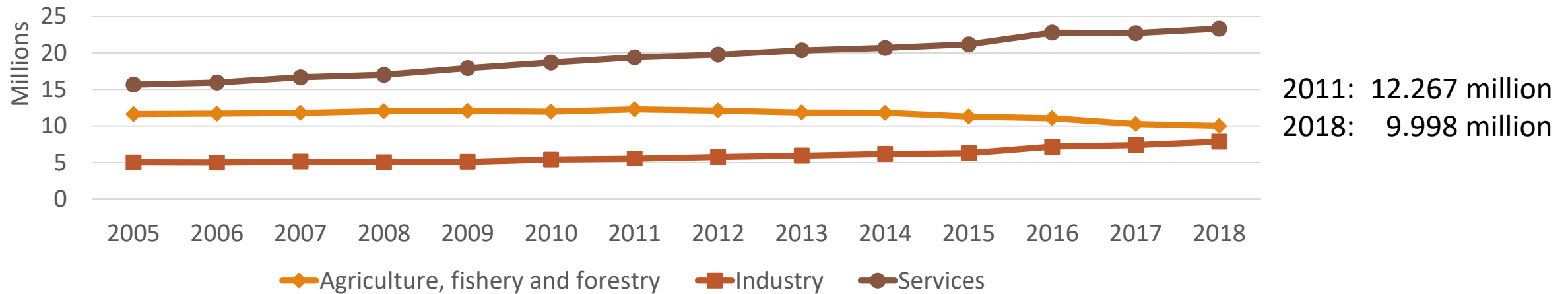
- Motivation of the study
- Agricultural segments in the Philippines
- PCIC agricultural insurance program
- Farmers' awareness of agricultural insurance
- Updates on agricultural insurance
- Summary and recommendations

Motivation of the study

- Agricultural insurance is used as a mechanism for managing risk, providing a safety net for agricultural producers who suffer from external shocks to their productivity.
- Vital to the development or improvement of agricultural insurance program design to ensure effective and **inclusive** coverage is an understanding of the segments of the Philippine agriculture.
 - Possible priority areas in the expansion of the current agricultural insurance programs
 - Improvements in the implementation to ensure greater coverage

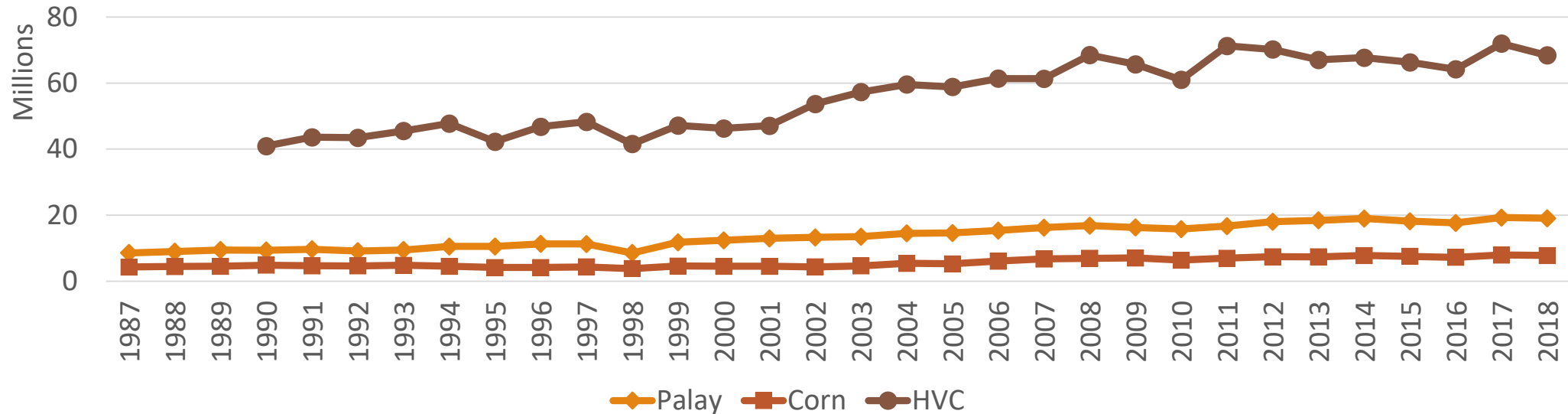
Agricultural segments in the Philippines

There has been a continuous decline in the number of agricultural workers since 2011



- Climate-related phenomena usually cause short-term decline in the number of agri workers
 - Severe El Nino (1997 to 1998); Typhoon Yolanda (2013 to 2016) particularly in Eastern Visayas
- Economic factors are usually associated to long-term declines
 - Rapid economic growth and tightening labor markets

Segments in terms of agricultural products



2018 Volume of production (CAGR 2009 to 2018):

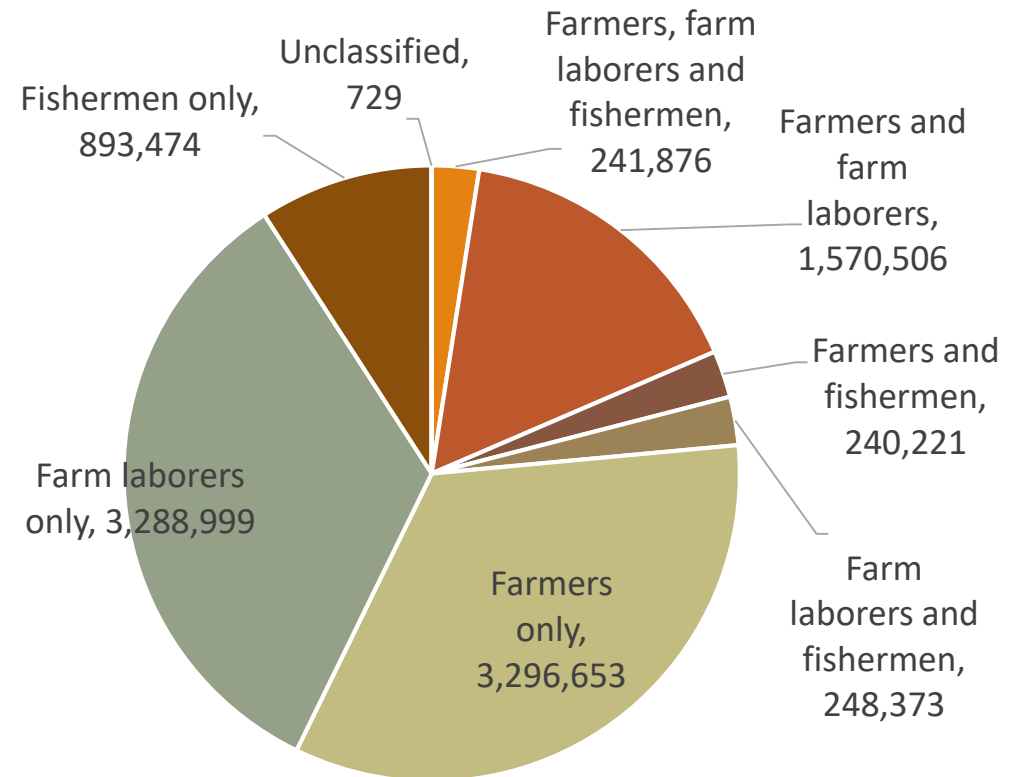
- Palay – 19.1 million metric tons (1.6%)
- Corn – 7.7 million metric tons (1.0%)
- HVCs – 68.4 million metric tons (0.4%)

Regional top producers in 2018:

- Palay – Central Luzon, Cagayan Valley, W. Visayas
- Corn – Cagayan Valley, N. Mindanao, SOCCSKSARGEN
- HVCs – Western Visayas, N. Mindanao, Davao

The largest known registry of agricultural producers in PH is the RSBSA (2012)

- The Registry System for Basic Sectors in Agriculture (RSBSA) is a database of information on farmers, laborers and fisherfolk nationwide (excluding NCR and ARMM)
- The RSBSA registered about 10 million agricultural producers, of which 8.9 million are engaged in farming as either farmers or laborers.



The average size per farm landholding is 0.9 hectare (CAF 2012)

- Based on the 2012 Census of Agriculture and Fisheries (CAF), farm landholdings that are at most 3 hectares comprise 88.9% of farm holdings and 48.4% of total farm area in the Philippines.
- In terms of agricultural area by type of crop, 36% of total agricultural area in 2016 is allotted for palay farming, and 19.6% for corn farming.

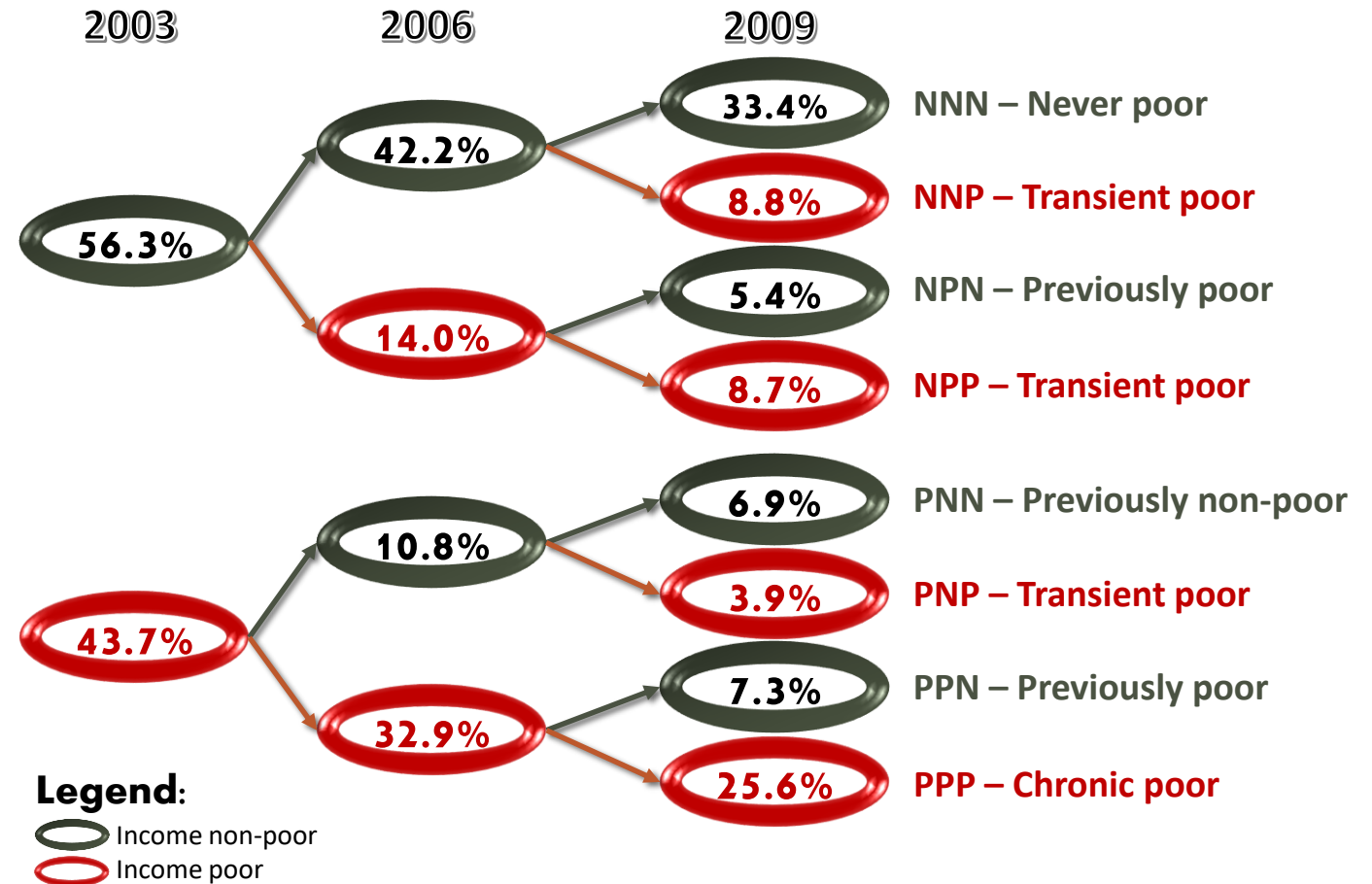
Size of Farm (ha)	CAF, 2012			RSBSA, 2012		
	Number of Farms	% of Farms	Area (ha)	Number of Farms	% of Farms	Area (ha)
Under 0.5	2,159,963	38.8	277,781	1,107,785	42.3	139,655
0.5 - 0.999	1,004,633	18.1	609,084	452,911	17.3	267,861
1.000 - 2.999	1,780,702	32.0	2,594,815	776,532	29.6	1,115,009
3.000 - 7.000	518,046	9.3	2,112,232	239,100	9.1	973,757
7.001 - 9.999	44,102	0.8	363,202	19,408	0.7	160,360
10.000 - 24.999	49,657	0.9	655,134	24,274	0.9	315,872
25.000 - 49.999	3,877	0.1	125,214	1,569	0.1	49,666
50.000 and over	1,597	0.0	452,626	449	0.0	56,213
Total	5,562,577	100.0	7,190,087	2,622,028	100.0	3,078,394

A large segment of the agricultural sector earns less than the poverty line

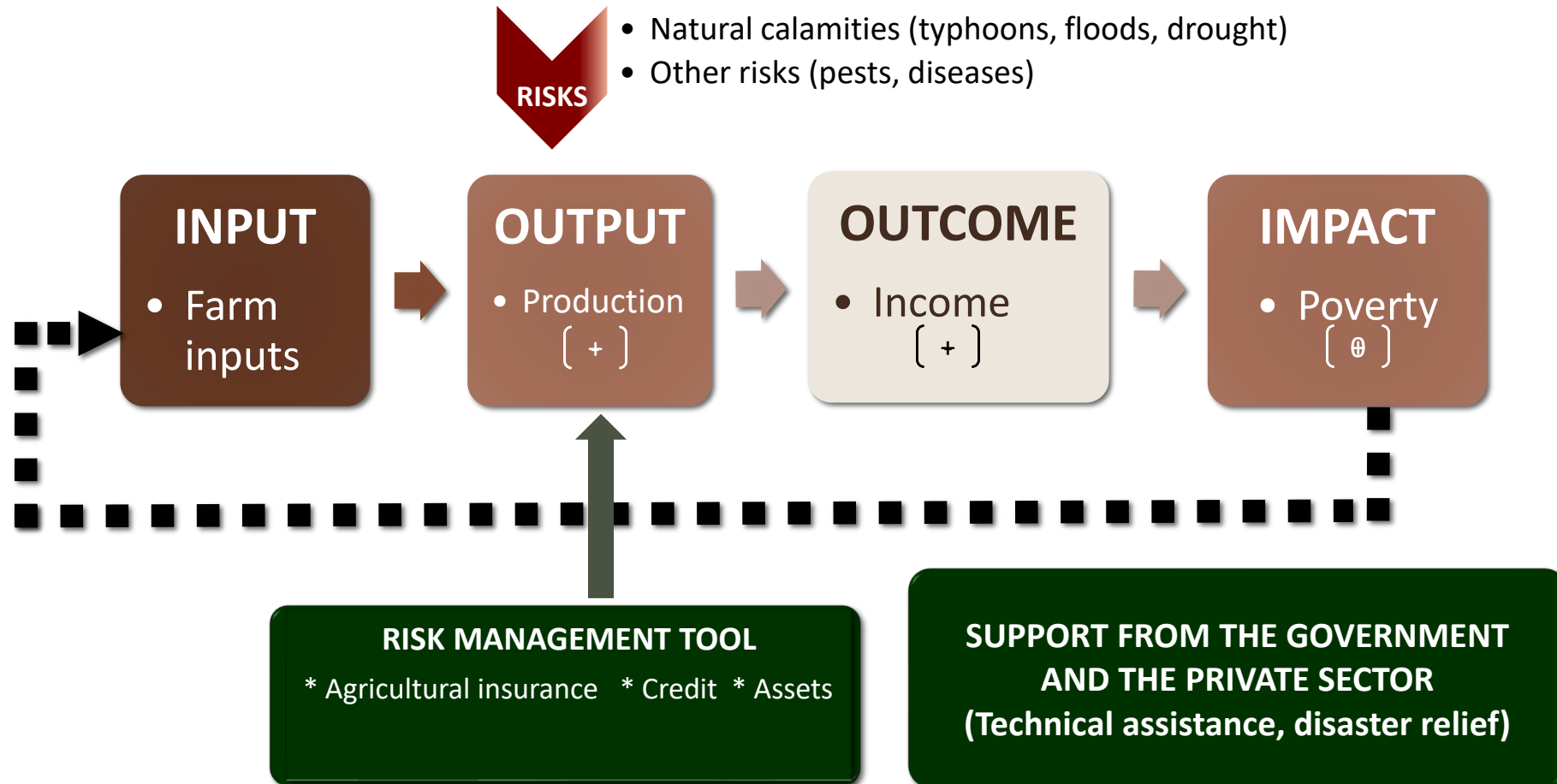
	2006	2009	2012	2015
Poverty incidence among families				
National	21.0	20.5	19.7	16.5
Agricultural HH	49.9	48.4	47.4	41.1
Non-agricultural HH	12.0	12.5	12.6	11.3
Subsistence incidence among families				
National	8.8	7.9	7.5	5.7
Agricultural HH	24.2	21.5	22.0	17.6
Non-agricultural HH	4.0	4.0	3.8	3.2

A large segment of the agricultural sector are chronic or transient poor

- 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.



Role of agricultural insurance



Benefits of crop insurance to farmers

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



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

PCIC Agricultural Insurance Program

FEATURES OF THE PCIC AGRICULTURAL INSURANCE PROGRAM

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 and other agricultural assets.
- The PCIC has seven major product lines:
 - Rice
 - Corn
 - High-value crops (HVCs)
 - Livestock
 - Fisheries
 - Non-crop agricultural asset
 - Credit and life term
- Insurance coverage is based on the cost of production inputs (if farmer is self-financed) or amount of loan (if farmer is borrowing)
→ **production cost insurance**

PCIC agricultural insurance program

- Period of cover:
 - For temporary crops: one cropping period or from planting to harvesting
 - For permanent crops: one year
- Types of insurance cover:
 - **Multi-risk cover:** natural disasters, selected major plant diseases and pest infestations
 - **Natural disaster cover**

Maximum cover ceilings for rice and corn insurance

Crop	Variety	Maximum Cover Ceiling
Rice	Inbred, irrigated/rainfed	PHP 41,000
	Inbred, seed production	PHP 50,000
	Hybrid, commercial production	PHP 50,000
	Hybrid, seed production	PHP 65,000
Corn	Hybrid	PHP 76,000
	Open-pollinated	PHP 68,000

Regular insurance program

- For rice and corn insurance, premium rate is variable per region, season and risk classification. **Premium rates are shared by the farmer, lending institution (if borrowing), and the government.**

Sample: Premium rates and sharing for rice and corn insurance (Region III)

REGION III	RICE						CORN					
	WET SEASON			DRY SEASON			PHASE B			PHASE A		
	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH
Borrowing	11.09	12.91	14.74	2.39	2.79	3.18	2.96	3.62	4.27	6.34	7.74	9.13
Farmer	1.82	3.64	5.47	0.39	0.79	1.18	0.65	1.31	1.96	1.40	2.80	4.19
LI	2.00	2.00	2.00	0.43	0.43	0.43	1.31	1.31	1.31	2.80	2.80	2.80
Gov't	7.27	7.27	7.27	1.57	1.57	1.57	1.00	1.00	1.00	2.14	2.14	2.14
Self-financed	11.09	12.91	14.74	2.39	2.79	3.18	2.96	3.62	4.27	6.34	7.74	9.13
Farmer	3.82	5.64	7.47	0.82	1.22	1.61	1.96	2.62	3.27	4.20	5.60	6.99
Gov't	7.27	7.27	7.27	1.57	1.57	1.57	1.00	1.00	1.00	2.14	2.14	2.14

- For other insurance lines, premium rates are borne solely by the farmer.

PCIC also offers special programs, wherein the insurance premium is fully subsidized

- **Registry System for Basic Sectors in Agriculture (RSBSA) program**
 - Coverage: all farmers and fisherfolk registered under the RSBSA
 - Farmers are prioritized based on their location and size of farm landholding
 - *1st priority*: 1.5 hectares and below
 - *2nd priority*: > 1.5 to 2.0 hectares
 - *3rd priority*: > 2.0 to 3.0 hectares
 - *4th priority*: More than 3.0 hectares
 - Limitation: A maximum of 3 hectares per farmer is entitled to full premium subsidy
 - Amount of cover:
 - *Borrowing farmer*: amount of loan, subject to cover ceiling per hectare
 - *Self-financed farmer*: **maximum of P20,000 per hectare**

PCIC also offers special programs, wherein the insurance premium is fully subsidized

- Insurance programs under the Department of Agriculture
 - ***Sikat Saka Program***
 - Coverage: rice farmers in 45 major rice-producing provinces
 - Amount of cover: amount of loan granted by the Land Bank of the Philippines
 - ***Weather Adverse Rice Areas (WARA) program***
 - Coverage: rice farmers within the climate change affected areas and area with adverse agro-climatic conditions
 - Amount of cover: **maximum of PHP 10,000 per hectare**
 - **Program for Unified Lending in Agriculture/Production Loan Easy Access (PUNLA/PLEA)**
 - **High Yielding Technology Adaptation (HYTA)**
 - **Yolanda Rehabilitation and Recovery Program (YRRP)**
 - **Survival Recovery Assistance Program (SURE)**

PCIC also offers special programs, wherein the insurance premium is fully subsidized

- **Agrarian Production Credit Program (APCP) and Credit Assistance Program for Program Beneficiaries Development (CAP-PBD)**
 - Coverage: agrarian reform beneficiaries participating in APCP and CAP-PBD
 - Amount of cover: amount of loan granted by the Land Bank of the Philippines

Number of insured farmers and fisherfolk, by insurance program, 2015-2019

Insurance Program	2015	2016	2017	2018	2019*
Regular Program	373,138	395,259	592,235	630,329	854,034
Special Programs	821,794	699,765	1,105,342	1,637,164	2,205,531
RSBSA	589,534	651,132	1,029,112	1,342,786	1,595,163
Non-RSBSA/Agri-Agra**	..	..	..	217,677	488,841
DA Insurance Programs	212,962	28,450	55,651	51,774	83,826
Sikat Saka	12,899	13,967	14,659	15,642	17,215
WARA	37,638	11,214	2,543	..	..
YRRP	156,072	..	34,863	20,815	48,180
PUNLA/PLEA	..	..	2,530	14,238	14,637
SURE	..	..	..	457	2,962
HYTA	6,353	3,269	1,056	622	832
DAR-DA-LBP APCP & CAP-PBD	19,298	20,183	20,579	18,494	21,130
Other special programs***	..	..	..	6,433	16,571
Total	1,194,932	1,095,024	1,697,577	2,267,493	3,059,565

Notes:

* Preliminary data for 2019

** This pertains to premium subsidies for farmers and fisherfolk not listed in the RSBSA. This subsidy was sourced from remittances of BSP pertaining to PCIC's share in the penalties charged against financial institutions for non- or under-compliance with Agri-Agra Law.

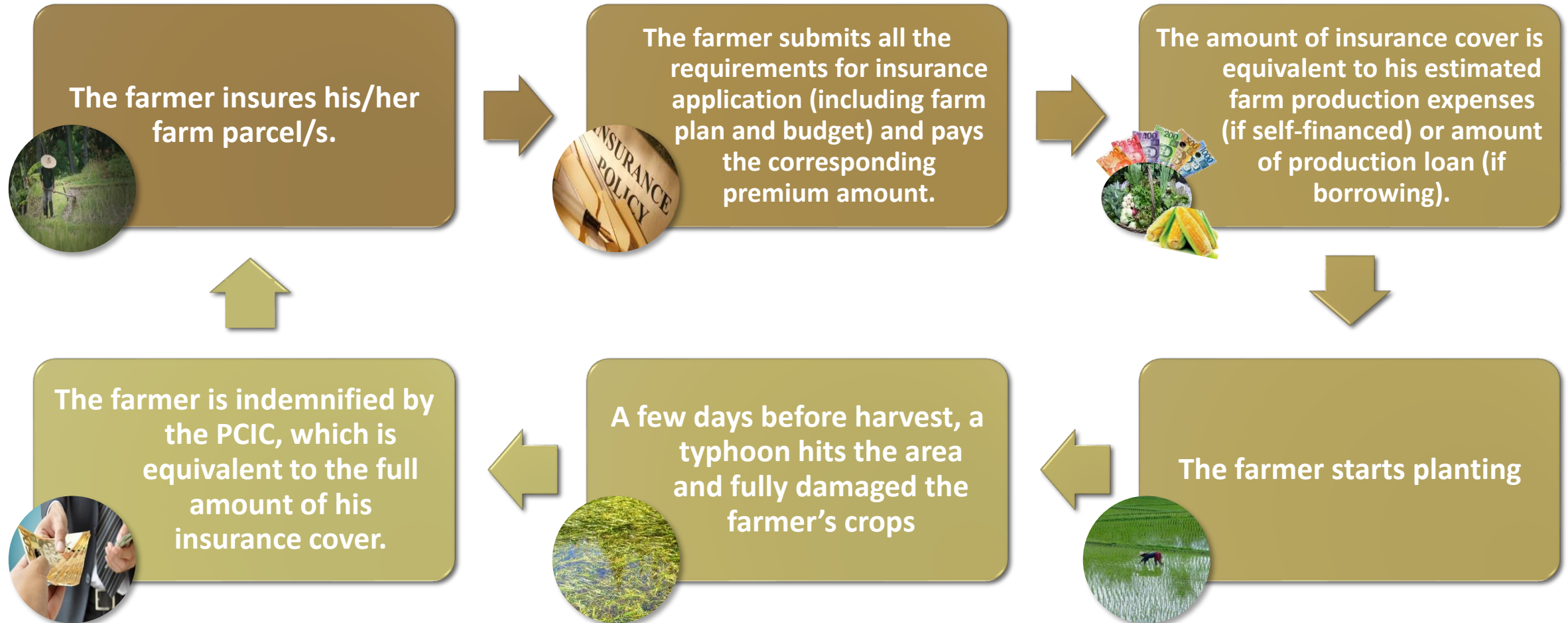
*** Hybrid Rice Program, FMEFLP, NFUCIP, Rice Model Farm

PCIC also piloted index-based crop insurance

- Pilot testing of index-based crop insurance has been a continuing effort since 2011.
 - Weather Index-Based Insurance (WIBI)
 - Area-Based Yield Index Insurance (ARBY)

Period	Area	No. of farmers insured	Amount of cover (PHP M)	Area insured (hectares)	No. of claimants	Indemnity paid (PHP M)
2011-2013	Agusan del Norte	851	18.853	1,154.00	140	1.849
2012-2016	Tuguegarao and Penablanca (Cagayan), Dumangas (Iloilo)	481	4.392	426.55	202	0.791
2015-2017	Region X, XI	2,413	..	..	178	1.5

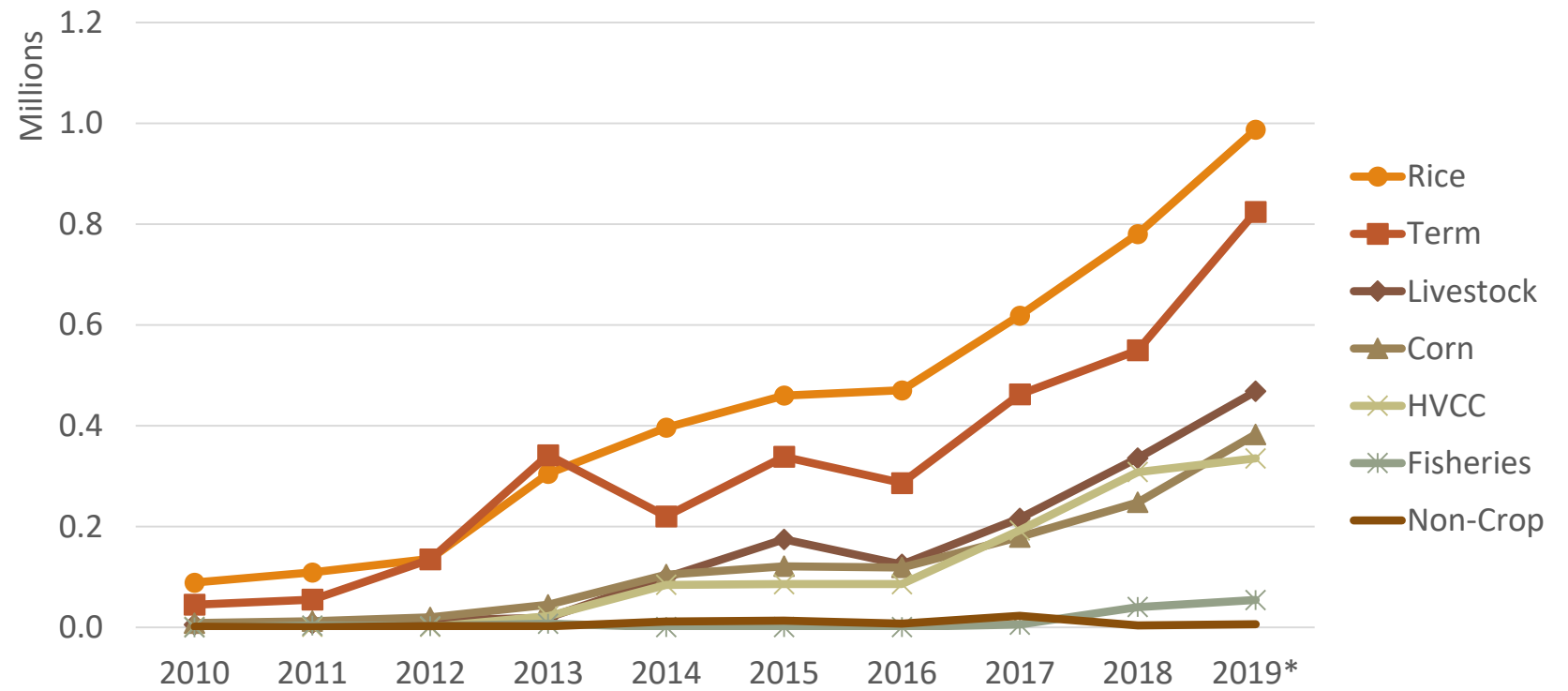
Process of securing agricultural insurance



Updates on the agricultural insurance program

Number of insured farmers is significantly increasing – 3.1 M policies issued in 2019

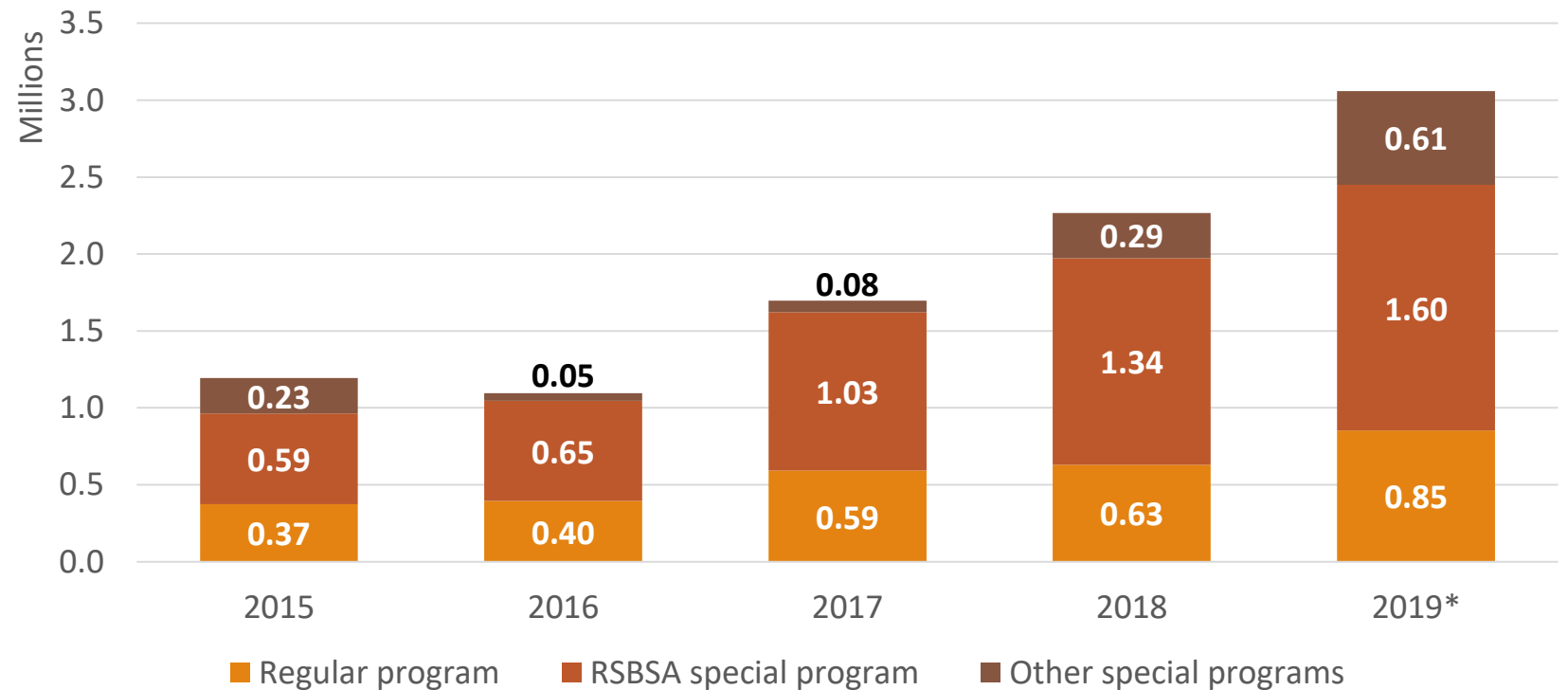
- Crop insurance (i.e. rice, corn, HVCC) has consistently been the most availed among the insurance lines of PCIC
- Rice has been the most commonly insured agricultural product (34.4% in 2018, 32.3% in 2019)
- Farmers enrolled under credit and term insurance comprise 26.9% of total insured in 2019



*Preliminary

Majority of insured farmers are enrolled under PCIC special programs

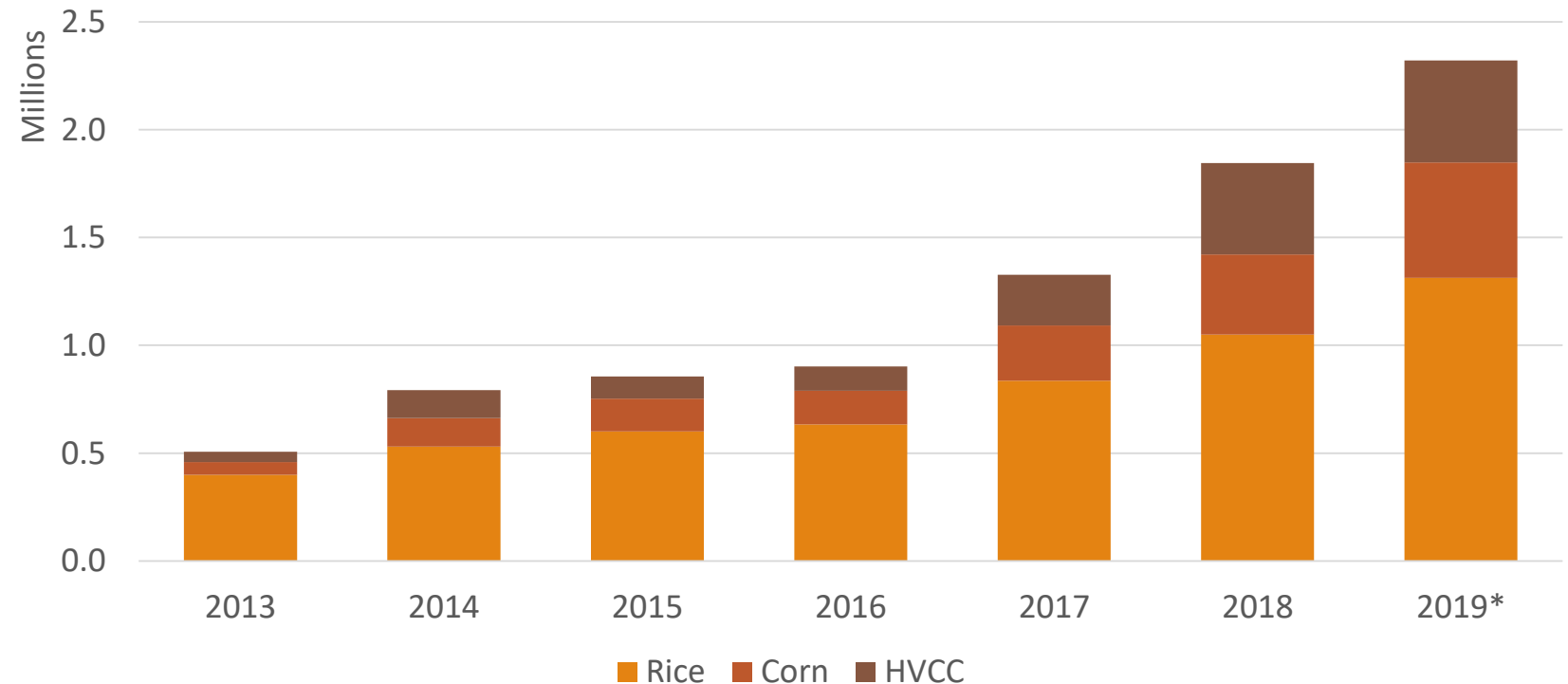
- Since 2016, more than 60% of all insured farmers are enrolled under the special programs of the PCIC (i.e. subsidized premiums) (80% in 2019)
- Farmers enrolled under the RSBSA program comprised 59.2% (2018) and 52.1% (2019*) of total number of insured



*Preliminary

PCIC coverage in terms of area insured is also increasing

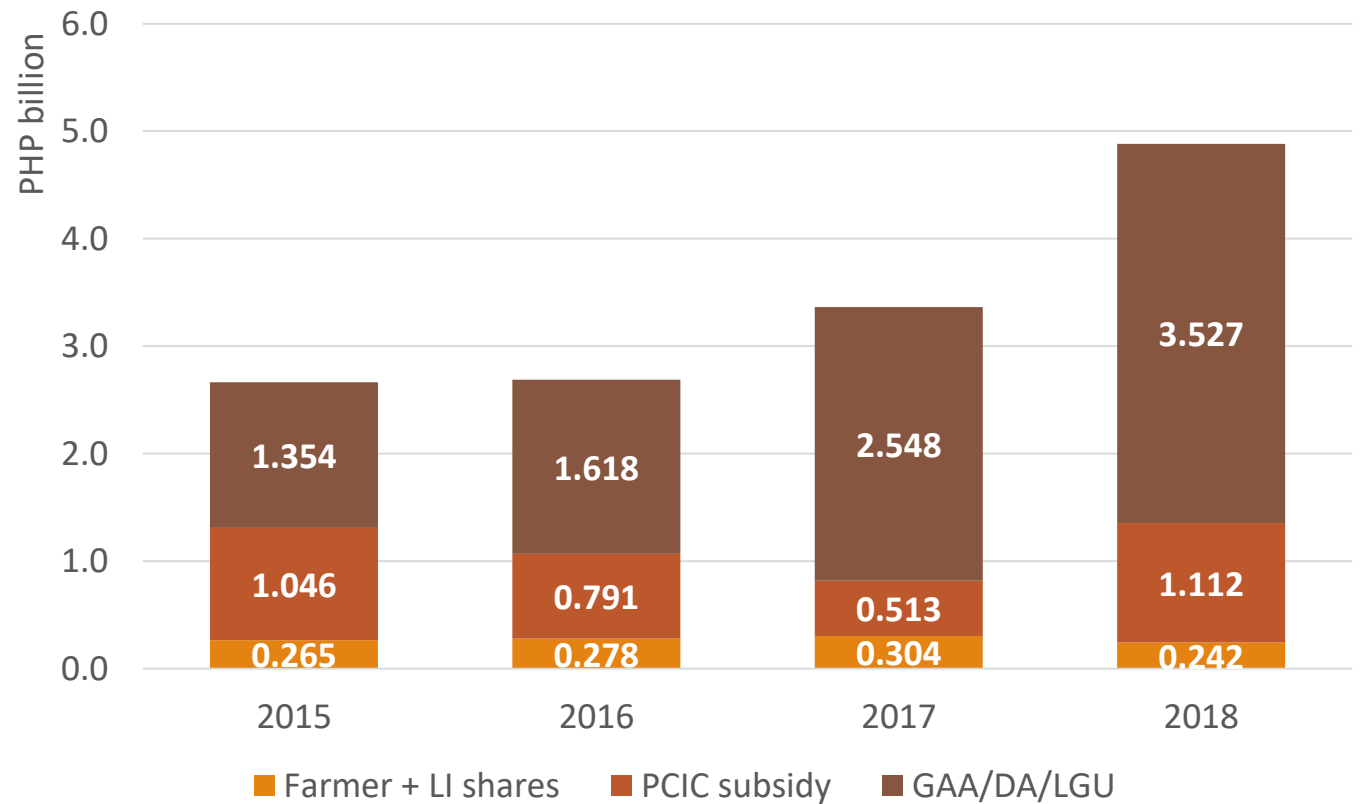
- From almost 500 thousand hectares insured in 2013, coverage increased to 2.3 million hectares in 2019
- Compared with total farm area of PH based on the RSBSA (3.5 M hectares in 2012), crop insurance is covering 75.4% of total farm area in the country



*Preliminary

Shares of government premium subsidy has been significantly increasing

- Farmer shares (in the case of regular programs) account for less than 10% of collected premium
- Premium subsidies coming from the General Appropriations Act, Department of Agriculture, and LGUs account for PHP 3.5 billion or 72.3% of total premium collected in 2018



Sources of information on agri insurance

- Recent studies also show the role of LGU agricultural technicians as one of the key sources of agricultural insurance information
- The awareness of many farmers about agricultural insurance programs arises from their availment of credit services → **agri insurance as loan requirement**
- Other farmers know only of agricultural insurance after experiencing a calamity
 - FGD in Cagayan show that farmers learned about agri insurance after Typhoon Ompong as other farmers in their community were able to file for insurance claims
 - Had they been informed about agricultural insurance, FGDs show that farmers are very much willing to be insured under the program

Efforts to increase awareness of the agricultural insurance program

- In the recent years, there has been an increase in the number of insured farmers, indicating increasing level of awareness among farmers
- The share of insured farmers and fisherfolk to total farmers and fisherfolk as listed in the RSBSA has also increased:

	2017	2018	2019*
Total farmers and fisherfolk insured	1,697,577	2,267,493	3,059,565
Penetration rate (<i>based on total persons insured</i>)	17.55%	23.45%	31.64%
Unique farmers and fisherfolk insured	981,745	1,717,551	..
Penetration rate (<i>based on unique persons insured</i>)	10.15%	17.76%	..

Notes: 1. Penetration rate is defined as the share of total number of farmers and fisherfolk insured to total number of farmers and fisherfolk listed in RSBSA (2012) at **9.67 million**

2. Number of unique farmers as validated by the Governance Commission for GOCCs (GCG)

* Preliminary

Penetration Rate (no. of farmers), by region, 2014

Region	Rice	Corn	HVCC	Livestock
Philippines	15.82	7.19	1.92	2.17
Cordillera Administrative Region	7.78	22.67	1.27	0.47
Region I (Ilocos)	5.09	7.22	2.29	0.75
Region II (Cagayan Valley)	19.60	7.90	0.96	0.11
Region III (Central Luzon)	21.78	2.78	3.13	7.83
Region IV-A (CALABARZON)	10.91	3.91	2.44	2.97
Region IV-B (MIMAROPA)	12.43	6.04	1.14	1.51
Region V (Bicol)	15.19	7.48	3.16	1.50
Region VI (Western Visayas)	23.58	7.43	2.04	0.73
Region VII (Central Visayas)	9.57	7.10	2.30	6.24
Region VIII (Eastern Visayas)	14.56	1.76	1.70	2.22
Region IX (Zamboanga Peninsula)	22.13	15.55	2.45	1.06
Region X (Northern Mindanao)	15.96	5.10	0.76	1.22
Region XI (Davao)	18.43	1.91	2.01	2.15
Region XII (SOCCSKSARGEN)	18.61	5.68	1.39	1.11

Sources of basic data: PCIC and DBM (RSBSA)

Penetration Rate (area), by region, 2014

Region	Rice	Corn	HVCC	Livestock
Cordillera Administrative Region	7.78	22.67	1.27	0.47
Region I (Ilocos)	5.09	7.22	2.29	0.75
Region II (Cagayan Valley)	19.60	7.90	0.96	0.11
Region III (Central Luzon)	21.78	2.78	3.13	7.83
Region IV-A (CALABARZON)	10.91	3.91	2.44	2.97
Region IV-B (MIMAROPA)	12.43	6.04	1.14	1.51
Region V (Bicol)	15.19	7.48	3.16	1.50
Region VI (Western Visayas)	23.58	7.43	2.04	0.73
Region VII (Central Visayas)	9.57	7.10	2.30	6.24
Region VIII (Eastern Visayas)	14.56	1.76	1.70	2.22
Region IX (Zamboanga Peninsula)	22.13	15.55	2.45	1.06
Region X (Northern Mindanao)	15.96	5.10	0.76	1.22
Region XI (Davao)	18.43	1.91	2.01	2.15
Region XII (SOCCSKSARGEN)	18.61	5.68	1.39	1.11
Caraga	15.07	1.21	0.15	0.59

Sources of basic data: PCIC, PSA-NSO

Efforts to increase awareness of the agricultural insurance program

- PCIC also extended its operations by adding more provincial extension offices and service desks
 - Since 2014, PCIC now has 13 regional offices, 58 provincial extension offices, and 20 service desks nationwide (as of December 2019)
- PCIC workforce in its national and regional offices are continuously increasing to cope with the demand for agricultural insurance

PCIC Workforce	2014	2015	2016	2017
Regular	191	209	208	211
Job order	316	373	413	621
Consultants	8	6	7	4
Total	515	588	628	836

PCIC has been establishing partnership and linkages with LGUs and other institutions

*Data as of
December 2019

Regional Office	Gov't agencies	Lending Inst.	LGUs	Coop-eratives	Farmers/ Fisherfolk Assoc.	Micro Finance Inst.	Local Radio Stations	Total
I	12	3	143	4	0	2	1	165
II	12	10	118	85	86	4	7	322
III	12	9	75	83	112	22	0	313
III-A	11	4	42	92	229	5	0	383
IV	6	10	198	44	124	3	0	385
V	12	17	114	19	14	7	0	183
VI	16	8	114	61	27	0	0	226
VII	26	22	132	83	126	127	7	523
VIII	12	8	143	14	103	3	4	287
IX	7	21	88	37	22	0	1	176
X	5	4	101	16	1	2	0	129
XI	9	4	68	11	7	4	2	105
XII	8	15	50	16	10	8	2	109
Total	148	135	1,386	565	861	187	24	3,306

PCIC have increased the insurance cover for rice and corn; trade-off between more insured farmers vs. adequate insurance cover

Crop	Varieties / Item	Cover ceiling (per hectare)	Average production cost per hectare (2018)
Rice	<i>Inbred varieties</i>		PHP 47,675
	Irrigated/rainfed	PHP 41,000 (prev. PHP 39,000)	
	Seed production	PHP 50,000 (prev. PHP 41,000)	
	<i>Hybrid varieties</i>		
	Commercial production (F1)	PHP 50,000 (prev. PHP 42,000)	
	Seed production (A x R)	PHP 65,000 (prev. PHP 52,000)	
Corn	Hybrid varieties	PHP 76,000 (prev. PHP 40,000)	PHP 24,562
	Open-pollinated varieties	PHP 68,000 (prev. PHP 28,000)	

However, given fixed (limited) subsidies, there is still a trade-off between higher penetration rate among farmers vs. higher insurance cover

Improvements in resolution of complaints but still need to improve claims processing

- More than 90% of total complaints received were resolved within 10 days
- About 70% of claims application were processed and settled within 20 days

	2017	2018	Target
Percentage of complaints resolved within 10 days	93.60%	95.33%*	90%
Percentage of claims processed within 20 days	72.52%	67.34%	90%

*GCG validated score for 2018 was only 49.8% due to the failure of one regional office to submit supporting documents.

Targeting of beneficiaries for insurance premium subsidies

- The RSBSA is used as the main targeting tool for the provision of free agricultural insurance coverage
 - Since 2016, almost 60% of insured farmers were enrolled under the RSBSA special program
 - Although the RSBSA is the largest known registry of agricultural producers nationwide, there is a need to validate the database.
 - Our earlier studies found that there are **leakages** (non-agri producers listed in the registry) and **exclusions** (legitimate agri producers not listed in the registry).

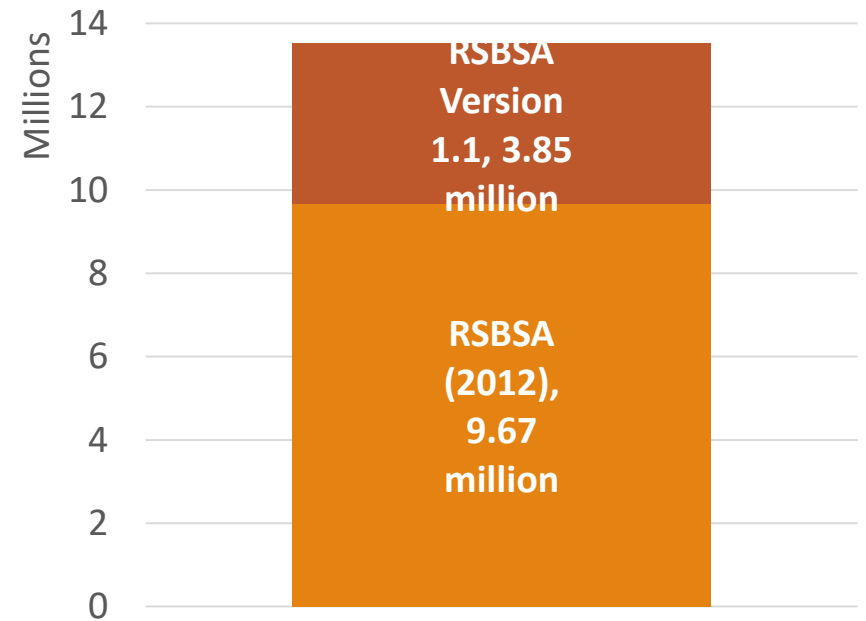
In an effort to update the RSBSA...

- Various line agencies submitted a list of farmers and other agricultural producers to the Department of Budget and Management (DBM)

→ consolidated to form
RSBSA Version 1.1

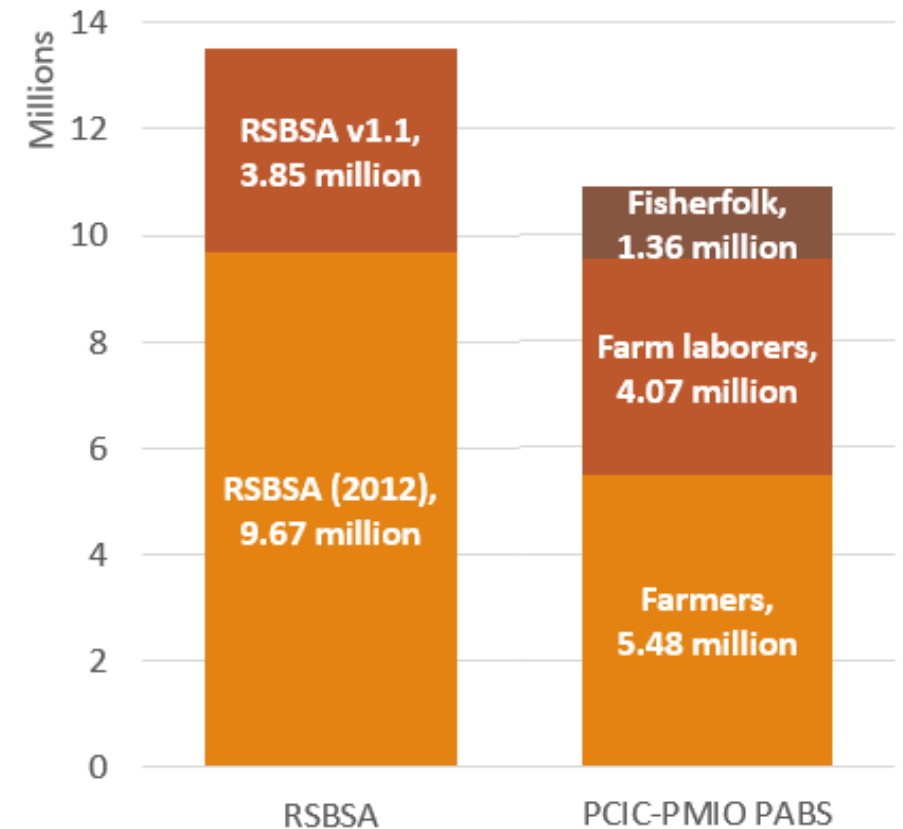
DAR:	1,938,923
BFAR:	1,238,788
DA:	643,829
PCIC:	20,957
NIA:	2,940

- Department of Agriculture (DA) is tasked to clean and consolidate the registry to account for name duplication in both “versions” of the RSBSA



For the purposes of special programs, PCIC analyzed both versions of the RSBSA

- PCIC-Planning and Management Information Office (PMIO) combined and analyzed the two versions of the RSBSA
- Using the PCIC Automated Business Systems (PABS), the list of farmers and fisherfolk were adjusted to account for name duplication
- From 13.5 million records in the combined versions of the RSBSA, the PABS reduced the list to 10,915,180 records.



Summary and recommendations

- Increasing number of farmers with agri insurance but still low penetration rate.
- Insurance cover of free insurance program is not enough to cover production costs.
- Improvements in resolution of complaints, but claim processing still need to be improved
- Increasing level of awareness of insurance program but more farmers need to be reached.
- RSBSA of 2012, and the expanded version needs to be validated and updated.
- Providing all farmers with free insurance will be costly, so alternative financing schemes need to be tapped.

Recommendations to make agri insurance program more inclusive

- As the main tool used for the provision of free agricultural insurance,
 - The RSBSA must be updated to reflect changes in the composition of agri sector
 - The newly institutionalized **Community Based Monitoring System (CBMS)** may be utilized to identify and geotag agricultural households in the country
- Improve penetration rates and targeting of beneficiaries for free insurance
 - PCIC can **establish more partnerships with other institutions** in providing information dissemination and assistance
- Increase insurance cover by partnering with LGUs and encouraging farmers to pay for insurance

End of Presentation
