Review of the Philippine Agricultural Insurance*

I. INTRODUCTION

The agricultural sector is a major contributor to the Philippine economy with a significant portion of the population being involved in the production and marketing of different types of agricultural commodities like crops, fisheries, livestock, and poultry, among others. However, the country is also considerably one of the most vulnerable to the effects of climate change. Hence, agricultural insurance is an important industry that protects the agricultural sector and its stakeholders in particular and the economy in general.

This paper aims to review the current status of the country's agricultural insurance, identify the current gaps and challenges in its implementation, and provide an overview of its taxation and other relevant legislative proposals affecting the said industry to serve as valuable inputs to fiscal policymakers.

II. BACKGROUND INFORMATION

A. Agricultural insurance and its importance

The agricultural sector is not only considered complex but also inherently challenging as it is exposed to various risks such as uncertainties in weather, prices, and crop diseases. Although some risks can be mitigated through diverse set of traditional risk-coping strategies, approaches, and mechanisms, there are still those that are, more often than not, uncontrollable (See Table 1).

* Prepared by Jemimah Kezia M. Gaylican, Economist II. Reviewed and approved by Monica G. Rempillo, Economist V, Economics Staff and OIC-Deputy Executive Director, Tax Research Group.

Table 1

Risks in Agriculture

Nature of Risk	Description
Weather Risks	Deficit/Excess rainfall, extreme temperature (heat or cold)
Biological Risks	Pests, disease, contamination, soil degradation
Price Risks	Input output price volatility, shortage of inputs
Institutional Risks	Credit supply, interest rates, market distortions, support prices
Labor and Health Risks	Illness, death, injury, availability of labor
Political Risks	Agriculture policy, taxation, subsidies

Note: Chatterjee, A., & Oza, A. (2017). *Agriculture Insurance ADB Brief No. 77.* Retrieved from Asian Development Bank: http://dx.doi.org/10.22617/BRF178762-2

Because of the important role that agriculture plays in one's economy, there is a huge need to protect the industry from its ever-increasing risk exposure through insurance. Although agricultural insurance does not and cannot obliterate risk, it helps to manage risks arising from the production, changes in commodity prices, and climate and weather variability. In the Philippines, farmers avail agricultural insurance as substitute to access to credit in cash or in kind (inputs for production). Lending institutions require agricultural insurance from farmer-borrowers (Decena, 2016).

B. History of agricultural insurance in the Philippines

In 1976, a study was conducted by the Inter-Agency Committee for the Development of Crop Insurance, which was composed of various representatives from different government and private agencies. The study disclosed the feasibility of providing crop insurance protection to rice farmers covered by the supervised credit program[1], as well as to self-financed farmers who placed themselves under the supervision of duly accredited technicians.

As a result, the Philippine Crop Insurance Commission (PCIC) was created in 1978 pursuant to Presidential Decree (PD) No. 1467[2]. The PCIC is a government-owned and -controlled corporation, which provides insurance protection to farmers against losses arising from natural disasters as well as plant diseases and pest infestation, initially to palay crops and later on to other crops. Such insurance

[1] As early as the 1950's, the government was already providing agricultural credit programs but for agricultural mechanization only.

[2] Entitled, "Creating the "Philippine Crop Insurance Corporation" Prescribing its Powers and Activities, Providing for Its Capitalization and for the Required Government Premium Subsidy, and for Other Purposes", (June 11, 1978).

protection, however, excluded losses arising from avoidable risks emanating from or due to neglect, malfeasance or fraud by the insured or any member of his immediate farm household or employee or the failure of the insured to follow proven farm practices, and that the indemnity for such losses shall not exceed at all time the cost borne by the insured farmer in the production of the crop.

In 1988, PD 1467 was amended by PD 1733[3] to insure the attainment of the objective of the law. It highlighted the obligatory nature of crop insurance under the supervised credit program, providing that no lending institution shall grant palay production loan under the supervised credit program without crop insurance coverage. It also defined the duties and obligations of all lending institutions granting palay production loans under the supervised credit program. Penal sanction for violation of the provisions of the said Decree was likewise provided.

In 1995, PD 1467 was further amended by Republic Act (RA) No. 8175[4], which made the PCIC an attached agency of the Department of Agriculture (DA) for budgetary purposes. The said law also extended the insurance to the production of other crops other than palay and all other non-crop agricultural assets including but not limited to machineries, equipment, transport, facilities, and other infrastructures. This covers the cost of inputs, value of farmer's labor or of his household, and/or hired workers.

Since September 2021, the supervision of the PCIC has been transferred to the Department of Finance (DOF) by virtue of Executive Order No. 148[5] to ensure that its operations are rationalized and monitored centrally so that government assets and resources are used effectively, and the government's exposure to all forms of liabilities including subsidies is warranted and incurred through prudent measures.

C. Agricultural insurance programs in the Philippines

Estimates show that the Philippines is highly vulnerable to natural disasters and the impacts of climate change with 60% of land area and 74% of the population being prone to the occurrences of flood, cyclone, drought, earthquake, tsunami, and landslide. There are also at least 20 typhoons passing through the Philippine area of responsibility annually. Consequently, there have been a minimum of 565 disasters with death toll of 70,000 and damages valued at $23 billion since 1990 (Climate Change Knowledge Portal, 2021).

[3] Entitled, "Amending the Presidential Decree No. 1467 Creating the 'Philippine Crop Insurance Corporation' by Adding Penal Sanctions Therein", (October 21, 1980).

[4] Entitled, "An Act Further Amending Presidential Decree No. 1467, as amended, Otherwise Known as the Charter of the Philippine Crop Insurance Corporation (PCIC), in Order to Make the Crop Insurance System More Stable and More Beneficial to the Farmers Covered Thereby and for the National Economy, (December 29, 1995)."

[5] Entitled, "Transferring the Philippine Crop Insurance Corporation (PCIC) from the Department of Agriculture to the Department of Finance, and Reorganizing the PCIC Board of Directors, (September 14, 2021).

Hence, an effective and sufficient agricultural insurance is an integral part of agricultural production and supply chain of all types of crops, livestock, fisheries, or agricultural assets. This helps farmers to manage the risks and finance the next cycle or season of production. Agricultural insurance also cushions the cashflow of the farmers and their households, financing their basic consumption after external shocks which can be a useful instrument to reduce cyclical poverty (Reyes, 2019).

The following are some of the agricultural insurance programs being offered by the government and the private sector.

1. PCIC

The PCIC offers seven insurance lines, six of which cater to the majority of agricultural producers including those of rice, corn, high-value crops, livestock, non-crop agricultural assets, and fisheries. The other one focuses on the producer, providing credit and life term insurance including Accident and Dismemberment Security Scheme, Agricultural Producers Protection Plan, and Loan Repayment Protection Plan (Philippine Crop Insurance Corporation, n.d.). Moreover, the PCIC also implements other programs as funded by other government agencies such as the DA, Department of Agrarian Reform (DAR), and Land Bank of the Philippines (LBP), among others.

a. Rice and corn

The insurance for rice and corn shall cover the amount equivalent to the cost of production inputs as indicated in the Farm Plan Budget and an additional optional (subject to farmer discretion) amount of cover up to a maximum of 20% thereof as payment for the portion of expected foregone yield subject to a maximum cover ceiling per hectare depending on the variety planted (See Table 2).

Table 2

PCIC Maximum Cover Ceiling Per Crop Per Hectare, by Variety

Type of crop	Variety	Maximum cover (in pesos)
Rice	Inbred (Irrigated/Rainfed)	41,000
	Inbred (Seed Production)	50,000
	Hybrid (Commercial Production)	50,000
	Hybrid (Seed Production)	120,000

Type of crop	Variety	Maximum cover (in pesos)
Corn	Hybrid (Corn Production)	50,000
	Open-pollinated (Corn Production)	34,000
	Hybrid (Corn Seed Production)	76,000
	Open-pollinated (Corn Seed Production)	68,000

Notes. Rice data from Philippine Crop Insurance Corporation. (2022). *General information on the rice crop insurance program.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2023/05/HO-RICE-2022-JULY-V13.pdf
Corn data from Philippine Crop Insurance Corporation. (2022). *General information on the corn crop insurance program.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2023/05/HO-CORN2022-JULY-v13.pdf

Risks that are covered include natural disasters (typhoons, earthquake, flood, drought, tornado, and volcanic eruption), plant diseases (tungro, rice blast, grassy stunt, bacterial leaf blight, sheath blight, banded leaf blight, and bacterial stalk rot), and pest infestations (rats, locusts, armyworms, cutworms, stemborers, bugs, among others).

b. High value crops (HVCs)

As for the HVCs, the amount of cover shall be agreed upon by the PCIC and the assured farmer including the value of expected yield which is at most 120% of the production input costs (Philippine Crop Insurance Corporation, 2018). The period of coverage is one year for annual, biennial, and perennial crops[6] or less than one year for crops with early maturity.

c. Livestock

The livestock insurance program of the PCIC is available for both commercial and non-commercial production of cattle, carabao, horse, goat, sheep, and swine. The same is true for commercial poultry production including chicken and duck. The coverable number of animals per non-commercial grower ranges from 2 to 25, subject to a maximum sum insured of at least P15,000 per animal. On the other hand, minimum coverable number of animals per commercial grower ranges

[6] On the basis of their life cycles, plants are classified as either annual, biennial, or perennial crops. Annual crops complete their life cycle in one growing season (e.g., rice, corn, tomato, squash). Biennial crops complete theirs in two seasons (e.g., sugar beet and onion). Perennial crops, on the other hand, reproduce and repeat their life cycles indefinitely and do not die after flowering in one season (e.g. grapes and fruit-bearing trees) (Tamayo, 2010)

from 1 (for cattle and carabao) to 26 for livestock and at least 1,000 heads for poultry (See Table 3).

Table 3

PCIC Maximum Cover Ceiling per Livestock, by Purpose

Insurance cover	Animal	Purpose	No. of heads per grower	Remarks
Non-commercial	Cattle and Carabao	Draft, Dairy, Breeder, Fattener	2-10	Maximum total sum insured of less than P110,000 or at least P15,000 per head
	Horse	Draft/Working	2-10	
	Goat and Sheep	Breeder/Fattener	10-25	
	Swine	Breeder	2-10	
		Fattener	7-20	
Commercial	Cattle and Carabao	Draft, Dairy, Breeder, Fattener	11 (or at least 1 animal with at least P15,001 cover)	
	Horse	Draft/Working	11	Minimum total sum insured of P110,000
	Goat and Sheep	Breeder/Fattener	26	
	Swine	Breeder	11	
		Fattener	21	
	Chicken	Broiler	5,000	
		Pullet/Layers	1,000	
	Duck	Pullet/Layers	1,000	

Note. Philippine Crop Insurance Corporation. (2019). *Guidelines on the livestock mortality insurance program.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2020/01/01-Livestock-april-12-2019-Final-Printing-APRIL-15-2019.pdf

Meanwhile, livestock and poultry are insured subject to insurable age requirements per type of animal with premium rates and amount covers determined based on the age when they were accepted for insurance. For animals beyond the prescribed insurable age, additional premium will be charged and may be renewed annually from 4 to 17 years depending on the type of animal (see Table 4). The insurance covers mortality due to accidents and/or diseases and/or other covered risks.

Table 4

Insurable Age of Livestock and Poultry to PCIC

Animal	Purpose	Insurable age		Remarks
		From	To	
Cattle and carabao	Draft, Dairy Breeder, Fattener	7 months	5 years	Animals that are 5-17 years old can be accepted for coverage subject to additional premium up to age 17
Horse	Draft/Working	1 year	5 years	Animals that are 5-17 years old can be accepted for coverage subject to additional premium up to age 17
Goat and Sheep	Breeder	4 months	1 year	Renewable annually up to 7 years old
	Fattener	4 months	1 year	Until sold whichever comes first
Swine	Breeder	6 months	2 years	Renewable annually up to 4 years old
	Fattener	45 days	6 months	Until sold whichever comes first
Chicken	Broiler	1 day	8 weeks	N/A
	Pullet/Layers	1 day	75 weeks	Or insurable age could be agreed upon
Duck	Pullet/Layers	12 weeks	65 weeks	Or insurable age could be agreed upon

Note. Philippine Crop Insurance Corporation. (2019). *Guidelines on the livestock mortality insurance program.* Retrieved May 20, 2023 https://pcic.gov.ph/wp-content/uploads/2020/01/01-Livestock-april-12-2019-Final-Printing-APRIL-15-2019.pdf

d. Non-crop assets

As for the non-crop agricultural assets protected by the PCIC insurance program, properties covered include buildings, machineries, equipment, transportation facilities, and other related infrastructures used directly or indirectly for production and processing, marketing, storage, and distribution of agricultural products and services.

The period of insurance will be at most one year from the date of effectivity or as specified in the policy contract and the corresponding premium payments covering for damages due to fire and lightning on warehouses, poultry houses, pig pens, stables, and other similar and related structures are covered. Direct physical loss or damage due to external causes to tractors, threshers, trailers, shallow tube wells, and other related farm machineries are also covered. The PCIC insurance also protects commercial vehicle such as trucks and pick-ups lost or damaged due to accident collision or overturning because of mechanical breakdown or regular depreciation, fire, explosion, self-ignition, lightning, burglary, or while in transit.

e. Fisheries

For fisheries insurance, the cost of inputs, value of labor of fish farmer/fisherfolk/grower and of his household, and hired workers as indicated in the Fisheries Farm Plan Budget shall be included in the coverage. Meanwhile, the period of coverage for the fisheries insurance program will be from stocking up to harvest as indicated in the Fisheries Farm Plan Budget. The beginning of such coverage is from the date of policy issuance or actual date of seeding/stocking.

Fisheries insurance program has a limited and extended coverage. Limited coverage includes loss due to natural disasters while extended coverage includes loss due to unexpected events and force majeure.

f. Credit and life term insurance (CLTI)

The CLTI offers different amounts of coverage depending on the type of insurance. For Accident and Dismemberment Security Scheme (ADS^2), individual and group plans of agricultural producers and/or their family members and/or farm workers who are 15 to 80 years old are insurable with at least P15,000 to at most P100,000 with annual premium rates at 0.1% to 0.5% of the amount coverage. For Agricultural Producers Protection Plan (AP^3), principal coverage of P15,000 to P50,000 is offered to any agricultural producer, farmer, or fisherfolk and/or their family member or hired worker who is 15 to 80 years old with premium rate of 0.75% of the principal. Lastly, for Loan

Repayment Protection Plan (LRP[2]), insurance amount will be equivalent to the amount of approved loan and its interest.

The ADS[2] cover includes deaths and dismemberment of either both hands or both feet or both eyes, either hand or foot and sight of one eye, one hand and one foot, either hand or foot, and sight of one eye. The AP[3], on the other hand, covers for agricultural producers' death due to accidents, natural causes, and murder or assault, while the LRP[2] covers death or total and permanent disability arising from accident, natural causes, and murder or assault.

g. Registry system for basic sectors in agriculture - agricultural insurance program (RSBSA)

The RSBSA is a special insurance program implemented by the PCIC, which is funded by the annual general appropriations. It is a repository of nationwide information on farmers, fisherfolks, and farm workers established through a number of surveys conducted in 2012 by the Department of Budget and Management. The list has been extended to include that of the DA, DAR, National Irrigation Administration, and the Bureau of Fisheries and Aquatic Resources. The RSBSA currently lists 13.52 million farmers.

The most recently published guidelines[7] for the implementation of the said program, pursuant to RA 11639, or the "General Appropriations Act for 2022", provides that P4.5 billion in Government Premium Subsidy to the PCIC for full premium of subsistence farmers and fisherfolks to cover agricultural crop and non-crop assets. The RSBSA Program budget shall provide for listed farmers the same opportunities provided by the seven insurance lines of the PCIC under its own conditions.

For rice and corn crops, the allowable amount of cover is P20,000 per hectare subject to a maximum of three hectares. Meanwhile, the maximum cover for banana is P100,000 per hectare and P50,000 for other HVCs. The maximum livestock cover for cattle, carabao, horse, swine, goat, and sheep vary from P6,000 to P20,000 per animal subject to maximum volume conditions set by the Implementing Guidelines. Poultry growers are eligible for a maximum of P200,000 cover for varying maximum volume depending on the particular purpose of the production, that is, whether as broiler or layer. Fisheries are covered based on the area covered of fish cages or pen (See Table 5).

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[7] Entitled, "Guidelines for the Implementation of the "Agricultural Insurance for Farmers and Fisherfolks Under the RSBSA" as Provided for under Republic Act 113639, or the General Appropriations Act, FY 2022.", (January 1, 2022).

Table 5

Maximum Amount and Volume of Insurance Coverage Under the RSBSA

Particulars	Maximum cover	Maximum volume
Cattle, carabao, horse	P20,000 (per head)	10 heads
Swine (Fattener)	P10,000 (per head)	20 heads
Swine (Breeder)	P14,500 (per head)	10 heads
Goat and Sheep	P6,000 (per head)	25 heads
Poultry (Broiler)	P200,000 (per farmer)	2,000 heads
Poultry (Pullets/Layers)	P200,000 (per farmer)	1,000 heads
Poultry (Quail Layers)	P200,000 (per farmer)	5,000 heads
Fisheries (in land fish pond)	N/A	2,500 square meters
Cultured under fish cage	P300,000 (per fish grower)	400 cubic meters
Cultured under fish pen	N/A	1,000 square meters
Seaweed farm	N/A	1,000 square meters

Note. Summarized from the unnumbered implementing rules and regulations, Entitled, "*Guidelines for the implementation of the "Agricultural insurance for farmers and fisherfolks under the RSBSA" as provided for under Republic Act 113639, or the General Appropriations Act, FY 2022.*", January 1, 2022.

Meanwhile, capital assets for fisheries shall be within the maximum allowable amount of P300,000 per fisherman/fish grower covering at most three units of fishing boat or equipment used within waters under the jurisdiction of the municipality at a maximum gross tonnage of three tons. On the other hand, agricultural equipment and machines are insurable with up to P300,000 for at most three individually owned properties (Philippine Crop Insurance Commission, 2022).

h. Innovative crop insurance products

Aside from the traditional delivery of insurance to agricultural producers, the PCIC also developed innovative crop insurance products with the primary purpose of expediting the process of claims filing, damage assessment, and indemnity payment, which is primarily the inefficient segments of insurance delivery. These innovative crop insurance products include Weather Index Based Insurance (WIBI), Area Based Yield Index (ARBY), Yield Insurance Product for HVCs under the Hybrid Scheme, and the Yield Insurance Coverage under Traditional Indemnity Based.

In particular, the WIBI is a system of insurance which gives payout on the basis of the weather index used accounting for location specific rainfall-crop yield and loss indices and threshold levels. This means that a farmer is covered against drought and excessive flooding in scientifically set thresholds depending on the stage of crop growth. The PCIC, in collaboration with PAGASA, monitors the daily rainfall data providing immediate payout once the threshold is breached. The ARBY, on the other hand, provides payout automatically when the farmers' actual yield falls below the average yield of a specific area. Meanwhile, under the hybrid scheme, the PCIC provides insurance cover for the difference between the actual yield and the average yield of the area due to natural calamities or pests and diseases. The payout will be computed using the amount of the farmgate price of the HVC in the farm location from the commencement of the policy. Lastly, the yield insurance coverage under traditional indemnity-based scheme was also developed by the PCIC for mango in 2011 and is now being tested for other HVCs such as coconut, cacao, and coffee.

Although these innovative insurance products are promising, they are challenged by the products' extensive dependence on technical expertise for each type of crop or livestock or fisheries all the while benchmark data relevant to insurance product development are still very limited. Advanced equipment and technology, especially on weather tracking and mapping, are still needed for better accuracy and sustainability of implementation beyond the pilot areas where these programs were tested (Cajucom, 2021).

2. DA

The PCIC also provides subsidies on the insurance premium of the Sikat-Saka Program under the DA in partnership with the LBP. The direct beneficiaries of the said program are the subsistence rice farmers. In this program, the amount of cover allowable is equivalent to the loan value granted by the LBP, subject to farm eligibility criteria where the standard premium rates for respective provinces are used. The Sikat-Saka program is available to 45 major rice producing provinces of the country and may be availed individually or in groups through the National Irrigation Administration – Irrigators Association focal person (Philippine Crop Insurance Corporation, 2015).

Aside from the Sikat-Saka Program, the DA also gives a total insurance premium subsidy for farm/fisheries investments and assets with a loan repayment plan guaranteeing for loans in the unfortunate event of death or disability of subsistent farmers and fisherfolks who are participant of Agricultural Credit Policy Council Program for Unified Lending in Agriculture. The same is provided for subsistence farmers and fisherfolk in areas under state of calamity for participants of the

Survival and Recovery Program. For farmers participating in High Yield Technology Adoption and hybrid production, total insurance premium subsidy is also provided to further encourage the participation of farmers in pursuit of the program objectives The DA also provides 100% insurance premium subsidy under the Weather Adverse Rice Areas Crop Insurance Programs for DA-verified subsistent rice growers with farms in a suitable area for rice production.

There are also targeted insurance programs like the DA-Masaganang Ani 200 for growers of palm oil and corn and rice farmers in selected municipalities in North Cotabato and Rehabilitation Program for farmers and fisherfolk from who were extremely affected by the typhoon Yolanda (Haiyan) (Cajucom, Agricultural Insurance in the Philippines: Innovative Product Development, 2021).

3. DAR

The DAR also has an insurance program in partnership with the PCIC. In 2013, the pilot implementation of the Agricultural Insurance Program for Agrarian Reform Beneficiaries (AIP-ARBs) commenced with at least 500,000 consistently enrolled ARBs under the Joint Memorandum Circular No. 4[8] There is also an AIP for Subsistence Farmers and Fisherfolk and ARBs that are not listed under the RSBSA.

4. Private Sector Insurance

Aside from government sanctioned agricultural insurances, private companies have also started to offer microinsurance products to farmers, fisherfolks, and livestock and poultry growers. In 2016, the Philippine government in partnership with the Asian Development Bank has begun the first private-public partnership to provide crop insurance to selected HVCs such as coconut, coffee, cacao, banana, sugarcane, and pineapple. This will be through a co-insurance scheme between the CARD Pioneer Microinsurance, Inc. and the PCIC with a risk sharing ratio of 70:30 (Asian Development Bank, 2022).

Meanwhile, the Microensure started to provide microinsurance products and services in 2007 to at least 50 provinces. Some of which include life and funeral insurance, health insurance, personal accident insurance, micro-housing, calamity insurance, and weather index-based insurance (Cajucom, 2017).

[8] Entitled, "Implementing Rules and Regulations (IRR) on the Agrarian Reform Beneficiaries-Agricultural Insurance Program (ARB-AIP) for FY 2021 Implementation", 2021

D. Cross Country Comparison

Among members of the Association of Southeast Asian Nations (ASEAN), the Philippines is the oldest institutional agricultural insurance provider under the PCIC. Thailand and Indonesia have also developed a national subsidized agricultural insurance providing comprehensive coverage among small hold agricultural producers within the past decade. Meanwhile, Cambodia, Myanmar, and Vietnam have already started small pilot testing of their own version of the initiative. However, known agricultural economies, Malaysia and Lao PDR, are yet to develop a program of their own. Brunei and Singapore do not provide agricultural insurance at all. Lastly, it was found that the most sustainable way to provide agricultural insurance is through public-private partnership (PPP) (Deutsche Gesellschaft fürn Iternationale Zusammenarbeit (GIZ), 2022) (See Table 6).

Table 6

Agricultural Insurance Provision in ASEAN as of 2021

Country	Agri. insurance	Year started[1]	Status	Crop insurance[2,3]	Livestock insurance	Fisheries/ aquaculture insurance	Main market: Public/ private/ PPP	Gov't support for premium subsidies
Philippines	Yes	1976	Scaling -up	Commercial (MPCI; NPCI); Pilot (AYII; WII)	Commercial (Indemnity)	Commercial (Indemnity)	Public	Yes
Brunei	No	-	-	-	-	-	-	-
Cambodia	Yes	2015	Pilot	Pilot (WII)	X	X	Private	No
Indonesia	Yes	2016	Scaling -up	Commercial (NPCI); Pilot (WII)	Commercial (Indemnity)	Commercial (Indemnity)	Public	Yes
Lao PDR	No	-	-	-	-	-	-	-
Malaysia	No	-	-	-	-	-	-	-
Myanmar	Yes	2018	Pilot	Pilot (MPCI)	X	X	Private	No
Singapore	No	-	-	-	-	-	-	-
Thailand	Yes	1978 (2011)	Scaling -up	Commercial (NPCI) Pilot (WII)	Pilot (Indemnity)	Pilot (Indemnity)	PPP	Yes
Vietnam	Yes	1982 (2011)	Pilot	Pilot (AYII)	Pilot (Indemnity)	Pilot (Indemnity)	PPP	Yes

Notes. Deutsche Gesellschaft fürn Iternationale Zusammenarbeit (GIZ). (2022). *ASEAN guideline on agricultural insurance implementation.* Retrieved from https://asean.org/: https://asean.org/wp-content/uploads/2022/11/9.-ASEAN-Guideline-Agricultural-Insurance-Implementation-Adopted.pdf

[1] Years in parenthesis are when governments introduced national subsidized agricultural insurance
[2] Index-based crop insurance including: weather index insurance (WII) and area yield index insurance (AYII)
[3] Traditional indemnity-based crop insurance: multiple peril crop insurance (MPCI), named peril crop insurance (NPCI)

III. COMMENTS AND OBSERVATIONS

A. Challenges in the agricultural insurance industry in the Philippines

The contribution of the agriculture and fisheries sector to the economy is undeniably significant. From 2017 to 2021, the PSA (2022) reports that the value of agricultural production was at an average of P1.79 trillion per year but PCIC records showed only an average of P91.02 billion worth of insurance cover annually. Hence, only 5% of the total value of agricultural production was insured even when the industry has always been susceptible to typhoons, drought, pests, and diseases. While the value of agricultural production has barely changed during the period under review, the amount of covered value of production increased by 88% from P58.46 billion to P110.10 billion. Even so, the proportion insured was still very low and has a room for growth (See Table 7).

Table 7

Value of Agricultural Production vs Insured Amount, 2017-2021

Year	Value of agricultural production (in million pesos)	Amount of cover (in million pesos)	% Insured
2017	1,796,333.00	58,464.92	3.25
2018	1,806,368.00	79,828.43	4.42
2019	1,810,914.00	112,110.08	6.19
2020	1,788,762.00	94,591.59	5.29
2021	1,758,746.00	110,095.79	6.26
Average	1,792,224.60	91,018.16	5.08
% Growth	(2.09)	88.31	92.34

Notes. Philippine Crop Insurance Corporation. (2017). *Annual report 2017.* https://pcic.gov.ph/wp content/uploads/2019/02/AR-2017.pdf
Philippine Crop Insurance Corporation. (2018). *Annual report 2018.* https://pcic.gov.ph/wp-content/uploads/2019/08/FINAL-annual-repot-2018.pdf
Philippine Crop Insurance Corporation. (2019). *Annual report 2019.* https://pcic.gov.ph/wp-content/uploads/2020/12/PCIC-2019-ANNUAL-REPORT.pdf
Philippine Crop Insurance Corporation. (2020). *Annual report 2020.* https://pcic.gov.ph/wp-content/uploads/2021/10/annual-2020-for-website-final.pdf
Philippine Crop Insurance Corporation. (2021). *Annual report 2021* https://pcic.gov.ph/wp-content/uploads/2023/02/ANNUAL-REPORT-2021.pdf
Philippine Statistics Authority. (2022). *2022 Selected statistics on agriculture and fisheries.* https://psa.gov.ph/sites/default/files/%28ons-cleared%29_SSAF%202022%20as%20of%2030082022_ONS-signed.pdf

The importance of agricultural insurance could not be overemphasized as seen in the efforts of the Philippine government to provide coverage especially to subsistent farmers and fisherfolk. This is evident in the increase in the number of agricultural producers availing the varied lines of insurance offered and administered by the PCIC. From 2017 to 2022, the number of insured grew by 98% from 1.7 million to 3.4 million while those who were able to claim grew by 205% from 241,069 to 518,046. However, this is a reflection of the small proportion of insured and indemnified agricultural producers as compared to the 13.52 million as indicated in the RSBSA. For the period under review, the average number of insured farmers was approximately 2.7 million, which was only 20% of the RSBSA list. The number of claimants, on the other hand, was just approximately 4% of the same (See Table 8).

Table 8

Proportion of Insured Farmers and Claimants to the Total in the RSBSA List 2017-2021

Year	Number of insured	% of RSBSA list	Number of claimants	% of RSBSA list
2017	1,697,577	12.56	241,096	1.78
2018	2,267,493	16.77	433,188	3.20
2019	3,146,866	23.28	569,344	4.21
2020	3,090,251	22.86	611,998	4.53
2021	3,357,540	24.83	734,605	5.43
Average	2,711,945	20.06	518,046	3.83
% Growth	97.78	97.78	204.69	204.69

Notes. Philippine Crop Insurance Corporation. (2017). *Annual report 2017.* Retrieved from https://pcic.gov.ph/wp content/uploads/2019/02/AR-2017.pdf

Philippine Crop Insurance Corporation. (2018). *Annual report 2018.* https://pcic.gov.ph/wp-content/uploads/2019/08/FINAL-annual-repot-2018.pdf

Philippine Crop Insurance Corporation. (2019). *Annual report 2019.* https://pcic.gov.ph/wp-content/uploads/2020/12/PCIC-2019-ANNUAL-REPORT.pdf

Philippine Crop Insurance Corporation. (2020). *Annual report 2020.* https://pcic.gov.ph/wp-content/uploads/2021/10/annual-2020-for-website-final.pdf

Philippine Crop Insurance Corporation. (2021). *Annual report 2021.* https://pcic.gov.ph/wp-content/uploads/2023/02/ANNUAL-REPORT-2021.pdf

Aside from deficient funds as the overarching reason for lack of coverage, the inherent inefficiencies in insurance implementation also lowers participation among farmers even if the government already provides full premium subsidy. Rola and Querijero (2017) reports that there is a large gap between the ideal and actual number of days before the response of the team of adjusters, number of days before receipt of indemnity, and amount of damage estimate (see Table 9). In particular, the farmers' unmet expectation on the value of indemnification corroborates the PCIC guidelines on the limits of volume and value of insurance coverage. Moreover, their research found that because agricultural insurance in the country has become a risk reduction mechanism for credit providers, farmer participation on the PCIC insurance is mainly due to its being a loan application requirement.

Table 9

Gaps Identified on the Efficiency of the Rice Crop Insurance Program in Laguna

Task	Perceived competence	Ideal	Gap
Response of the team of adjusters (in days)	36	5	31
Indemnity received (in days)	103	60	43
Estimated damage gap (in Pesos)		20,727.27	

Note. Rola, A., & Querijero, N. (2017). Efficiency and effectiveness of the Philippine Crop Insurance Corporation's rice crop insurance program: the case of Laguna Province, Philippines. *Journal of Public Affairs and Development, 4*, 29-49. Retrieved from https://ovcre.uplb.edu.ph/journals-uplb/index.php/JPAD/article/view/705/664

The inferences discussed are also captured by the study of the World Bank, which reports that the PCIC insurances do not give sufficient value for money to taxpayers and enough protection to farmers. The institution itself is also highly vulnerable to catastrophe losses which are not reinsured. In response, the PCIC, under the supervision of the Insurance Commission, is required to submit an annual examination of its financial affairs, conditions, and methods of business to the Department of Finance pursuant to Department Order No. 038-2022.

B. Taxation of Agricultural Insurance and Proposed Policy Reforms

In line with the provision of Section 16 of PD 1467, the PCIC shall be exempt to the extent allowed by national policy from all national, provincial, municipal, and city taxes and assessments now enforced, Provided, that said exemption shall apply only to such taxes and assessments for which the Corporation itself would otherwise be liable and shall not apply to taxes and assessments payable by persons or other entities doing business with the Corporation. The said tax exemptions were repealed by Executive Order (EO) No. 93[9], s. 1986 to institutionalize tax subsidy as implemented by the Fiscal Incentives Review Board (FIRB).

In support of the plight of farmers and the mandate of the PCIC, there has been a proposal that the latter be granted with a Tax Expenditure Subsidy (TES) to be administered by the FIRB subject to the provisions of Title XIII of the National Internal Revenue Code (NIRC) of 1997, as amended, EO 93, as amended, and the Annual General Appropriations Act (GAA) under House Bill (HB) No. 10276[10]. The use of the

[9] Entitled, "Withdrawing All Tax and Duty Incentives, Subject to Certain Exceptions, Expanding the Powers of the Fiscal Incentives Review Board and for Other Purposes", (December 17, 1986).

[10] Entitled, "An Act Strengthening the Philippine Crop Insurance Corporation, Repealing for the Purpose Presidential Decree No. 1947, as Amended, Entitled ' Creating the Philippine Crop Insurance Corporation Prescribing its Powers and Activities, Providing for Its Capitalization and for the Required Government Premium Subsidy and for Other Purposes'". Eighteenth Congress, Third Regular Session, 2021.

TES, however, is not automatic and entitlement must be requested from the FIRB. Such application is subject to thorough evaluation to avoid leakage, abuse, and/or fiscal inefficiencies. The TES entitlement, if approved, may also be canceled, suspended, or withdrawn by the FIRB.

The proposal no longer provides for its tax exemptions but instead replaced with a tax subsidy provision. The general objective of the bill of strengthening the PCIC and extending government's financial support through tax subsidy, is aligned with the thrust of Package 4 of the Comprehensive Tax Reform Program of the government. Package 4, among others, aims to remove various tax exemptions and preferential tax treatments under special laws to simplify the overly complicated tax structure of passive income and financial intermediaries to achieve the goal of having lower tax rates but larger tax bases. Although the tax exemptions of the PCIC were already withdrawn in 1986 and since then has been a recipient of tax subsidy through the FIRB, its tax exemptions under PD 1467 insofar as interest income, capital gains, and DST are concerned, is one of the laws to be repealed under Package 4, though for housekeeping purposes only. Thus, the proposed PCIC bill complements the position of Package 4 for the government to provide direct subsidy, rather than outright tax exemption, to continue supporting PCIC's endeavors.

The grant of non-tax incentives such as subsidies is preferred over outright tax exemption to government entities including government-owned and controlled corporations such as the PCIC, because it is more transparent and can be evaluated and monitored properly to enable the government to determine their financial and related repercussions.

In the 18th Congress, three bills were filed to strengthen the PCIC namely, Senate Bill (SB) Nos. 883[11], SB 1915[12], and HB No. 10276[13]. Both SBs proposed the tax exemption of the PCIC from all national, provincial, municipal, and city taxes and assessments, while the HB pushed for its entitlement of the TES.

[11] Entitled, "An Act Strengthening the Philippine Crop Insurance Corporation, Expanding its Powers and Activities, Increasing its Capitalization and Amending for this Purpose Presidential Decree No. 1467 Entitled 'Creating the 'Philippine Crop Insurance Corporation' Prescribing Its Activities, Providing for its Capitalization and for Other Purposes,' and Other Laws". Eighteenth Congress, First Regular Session, 2019.

[12] Entitled, "An Act Strengthening the Philippine Crop Insurance Corporation, Repealing for the Purpose Presidential Decree No. 1947, as Amended, Entitled ' Creating the Philippine Crop Insurance Corporation Prescribing its Powers and Activities, Providing for Its Capitalization and for the Required Government Premium Subsidy and for Other Purposes'". Eighteenth Congress, Second Regular Session, 2020.

[13] Entitled, "An Act Strengthening the Philippine Crop Insurance Corporation, Repealing for the Purpose Presidential Decree No. 1947, as Amended, Entitled ' Creating the Philippine Crop Insurance Corporation Prescribing its Powers and Activities, Providing for Its Capitalization and for the Required Government Premium Subsidy and for Other Purposes'". Eighteenth Congress, Third Regular Session, 2021.

IV. CONCLUSION

The government has long been extending support and assistance to the farmers because of their crucial role of carrying the burden of feeding the entire nation. A comprehensive agricultural insurance program in the Philippines has been implemented for almost five decades already and a number of amendments have extended its coverage to different major crops, livestock, poultry, fisheries, and other assets.

Although it is considered the oldest institutional agricultural insurance provider in the ASEAN region, the Philippines still faces challenges. While the insured amount and adoption among farmers have increased over the years, the rampant increases in occurrences of natural disasters due to climate change calls for stronger management, higher insurance coverage, more efficient delivery of services, and wider adaptation on agricultural insurance among farmers. Moreover, the need for agricultural insurance in the country is, more often than not, primarily meant to facilitate credit access, especially in formal lending institutions. Thus, there is a need to promote financial literacy and build trust in financial services to make agricultural insurance products more attractive to farmers as well as address the low penetration of agricultural insurance in the country.

References

Asian Development Bank. (2022). *Testing public–private partnership in crop insurance to boost Filipino farmers' resilience.* Retrieved from Asian Development Bank: https://www.adb.org/news/features/testing-public-private-partnership-crop-insurance-boost-filipino-farmers-resilience

Cajucom, N. R. (2017). *Agricultural insurance in the Philippines: enhancing resilience to climate change.* Retrieved from Southeast Asian Regional Center for Graduate Study and Research in Agriculture: https://www.searca.org/pubs/discussion-papers?pid=382

Cajucom, N. R. (2021). *Agricultural insurance in the Philippines: innovative product development and scale-up amid climate risks and other hazards.* Retrieved from https://transactions.nast.ph/?p=2395: https://doi.org/10.57043/transnastphl.2021.2395

Chatterjee, A., & Oza, A. (2017, April). *Agriculture insurance.* ADB Briefs No. 77. Retrieved from Asian Development Bank: https://www.adb.org/sites/default/files/publication/239181/adb-brief-agriculture-insurance-rt-4th_1.pdf

Climate Change Knowledge Portal. (2021). *Philippines.* Retrieved May 21, 2023 from https://climateknowledgeportal.worldbank.org/country/philippines/vulnerability

Decena, F. C. (2016). *Agricultural insurance in the Philippines*. Retrieved from Food and Fertilizer Technology Center for the Asian and Pacific Region: https://ap.fftc.org.tw/article/1056

Department of Finance. (2022). *Dominguez orders PCIC to only implement demand-driven foreign-supported projects.* Retrieved June 5, 2023, from https://www.dof.gov.ph/dominguez-orders-pcic-to-only-implement-demand-driven-foreign-supported-projects/

Department of Finance. (2022). *Dominguez places PCIC under the supervision of Insurance Commission*. Retrieved April 28, 2023, from https://www.dof.gov.ph/dominguez-places-pcic-under-the-supervision-of-insurance-commission/

Deutsche Gesellschaft fürn Iternationale Zusammenarbeit (GIZ). (2022). *ASEAN guideline on agricultural insurance implementation.* Retrieved from https://asean.org/: https://asean.org/wp-content/uploads/2022/11/9.-ASEAN-Guideline-Agricultural-Insurance-Implementation-Adopted.pdf

Philippine Crop Insurance Corporation. (2015). *Sikat saka.* Retrieved May 21, 2023 from https://pcic.gov.ph//wp-content/uploads/2015/08/SIKAT-SAKA8.7.2015.pdf

Philippine Crop Insurance Corporation. (2017). *Annual report 2017.* Retrieved May 21, 2023 from https://pcic.gov.ph/wp-content/uploads/2019/02/AR-2017.pdf

Philippine Crop Insurance Corporation. (2018). *Annual report 2018.* Retrieved May 21, 2023 from https://pcic.gov.ph/wp-content/uploads/2019/08/FINAL -annual -repot-2018.pdf

Philippine Crop Insurance Corporation. (2018). *General information on the high value crop insurance program.* Retrieved May 21, 2023 from https://pcic.gov.ph/wp-content/uploads/2019/01/HVCC-Final.pdf

Philippine Crop Insurance Corporation. (2019). *Annual report 2019.* Retrieved May 20, 2023 https://pcic.gov.ph/wp-content/uploads/2020/12/PCIC-2019-ANNUAL-REPORT.pdf

Philippine Crop Insurance Corporation. (2019). *Guidelines on the livestock mortality insurance program.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2020/01/01-Livestock-april-12-2019-Final-Printing-APRIL-15-2019.pdf

Philippine Crop Insurance Corporation. (2020). *Annual report 2020.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2021/10/annual-2020-for-website-final.pdf

Philippine Crop Insurance Corporation. (2021). *Annual report 2021.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2023/02/ANNUAL-REPORT-2021.pdf

Philippine Crop Insurance Corporation. (2022). *General information on the corn crop insurance program.* Retrieved May 20, 2023 https://pcic.gov.ph/wp-content/uploads/2023/05/HO-CORN2022-JULY-v13.pdf

Philippine Crop Insurance Corporation. (2022). *General information on the rice crop insurance program.* Retrieved May 20, 2023 from https://pcic.gov.ph/wp-content/uploads/2023/05/HO-RICE-2022-JULY-V13.pdf

Philippine Crop Insurance Corporation. (n.d.). *Insurance products*. Retrieved May 20, 2023 from https://pcic.gov.ph/insurance-products-2/

Philippine Statistics Authority. (2022). *2022 Selected statistics on agriculture and fisheries.* Retrieved May 20, 2023 from https://psa.gov.ph/sites/default/files/%28ons-cleared%29_SSAF%202022%20as%20of%2030082022_ONS-signed.pdf

Reyes, C. M. (2019). *Towards a more inclusive agricultural insurance program.* Retrieved from Philippine Institute for Development Studies: https://pidswebs.pids.gov.ph/CDN/EVENTS/pids_agri_insurance_ppt_2july2020_final.pdf

Rola, A., & Querijero, N. (2017). *Efficiency and effectiveness of the Philippine Crop Insurance Corporation's rice crop insurance program: the case of Laguna Province, Philippines*. Journal of Public Affairs and Development, Volume 4, 29-49. Retrieved from https://ovcre.uplb.edu.ph/journals-uplb/index.php/JPAD/article/view/705/664

Tamayo, N. V. (2010). *2010 Agricultural licensure exam review-crop science classification of crops.* Retrieved from Studocu: https://www.studocu.com/ph/document/southern-luzon-state-university/agriculture/classification-of-crops/31017287