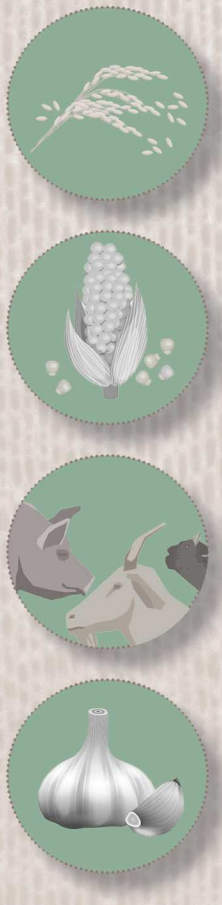
Annual Report

2018

Department of Agriculture Ilocos Region



ANNUAL REPORT
2018

DEPARTMENT OF AGRICULTURE
Regional Field Office 1

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Foreword

CY 2018 has been a very fruitful year for the Department of Agriculture – Regional Field Office I (DA-RFO I). This is also the first full term year I have served as the Regional Executive Director of this office since my official transfer here in Region I last August 2017.

As the newly designated head, the remaining four months of 2017 when I took over the leadership was an adjustment period. I took time to familiarize myself with the place, the people, the culture, along with fulfilling the remaining works left by my predecessor.

The adjustment period was brief but with the support I received from the entire workforce of the DA-RFO I, I was able to assess the strengths and weaknesses of the region in terms of resources, policies that may need to be changed or improved for better implementation of programs and projects of the Department, among others. I came, I saw, and I know I have to deliver.

Hence CY 2018 was a very promising year to initially realize what I have set to accomplish for the region bringing with me new set of strategies tried and tested from my previous work assignment.

First, I initiated the crafting of the Corporate Plan harnessing the full participation and support of the entire DA-RFO I Management. Together, we re-evaluated the strategies we have in implementing the current programs, projects, and activities of DA in the region through series of workshops and we came up with an action plan to identify and address appropriately the needs of our agri-stakeholders. The Corporate Plan was successfully crafted and launched in February, 2018, and the entire DA-RFO I family take pride that we are the first to achieve this from among all other DA-RFOs in the country.

To be consistent in our quest for excellent service for the agriculture sector in Ilocos Region, our efforts did not end in the successful crafting of our Corporate Plan. With renewed strength and re-fueled enthusiasm to achieve more, we set our goal to be ISO 9001:2015 certified before the year ends. It was a very rigorous step towards better public service. We were challenged physically, mentally and financially to achieve this goal, but we remained steadfast, hence, in the end we achieved! DA-RFO I is now ISO 9001:2015 Certified!

The attainment of these two giant goals for the DA-RFO I was not the be all and end all of our productive CY 2018. Living up to our name as the premiere region, and with our new battle cry to be “All for One, Always Number One”, we have solidified our stand as the number one region not only in the production of major commodities like garlic, peanut, mango, eggplant, tomato,mungbean, and tobacco, but we also emerged as the over-all number one region with excellent performance in terms of physical and financial performance of the five Banner Programs of DA during the year.

I believe that this could be one if not the most productive year for DA-RFO I and I salute all the people that worked with us to accomplish this much in a year’s time. My heartfelt gratitude to the entire DA-RFO I Family, our partners in the Local Government Units, private sector, the academe, our partner-agencies, farmers and fisherfolk, we all worked for this! May we all remain committed to be partners in development.

To God Be All the Glory and Honor!

LUCRECIO R. ALVIAR, JR., CESO III
Regional Executive Director

Vision

A prime-lover towards a modernized and competitive agriculture sector.

Mission

We provide suitable, timely, and innovative interventions for a sustainable and vibrant agriculture in the Ilocos.

Core Values

Dedication	*Serving with a heart*
Resiliency	*Overcoming challenges*
Integrity	*Valuing public trust*
Vigilance	*Responding to clients' needs*
Excellence	*Raising the bar*

Executive Summary

For FY 2018, the Department of Agriculture Regional Field Office I was hailed as Number 1 for the over-all excellent performance in terms of physical and financial performances of the five Banner Programs of the Department of Agriculture– the Rice, Corn High Value Crops Development, Livestock and Organic Agriculture. With the full support and commitment of the workforce of the Department, the region achieved the said highest performance from among 16 regions in the country.

Another milestone of DA Ilocos Region for this year is the certification to ISO 9001:2015 Quality Management System (QMS) conducted by the Certification International Philippine, Inc., (CIPI), as the certifying body.

Correspondingly, the agri-fishery sector in Ilocos Region showed the following noteworthy accomplishments registering positive results in 2018:

• Ilocos Region sustained its rank as the 4th major rice producing region contributing 9.12% to the national rice production of more than 19.07 million metric tons (Source: Philippine Statistics Authority (PSA). Rice sufficiency level at 168% is still more than enough to cater the population in the region.

• Region I is still the major producer of the country's best quality corn grains, sustaining its rank as the 5th corn producing region in the country. The region's production of 560,880 metric tons shared 7.22 % to the national aggregate production of 7.77 Million metric tons. Yield per hectare in corn grew by 0.5% from the average of 5.87 metric tons in 2017 to 5.90 metric tons in 2018. Ilocos Region is still the top yielder among the regions in the country.

• Compared to other regions, Region I is the top-notcher in the production of

- » mango
- » pinakbet vegetable and
- » key producer of peanut, mungbean, onion, garlic and tobacco.

• For livestock, Ilocos Region maintained its Foot-and-Mouth Disease (FMD) and Avian Infuenza-free status.

• In terms of sufficiency level, Region 1 continued to be more than sufficient in all food commodities.

• DA-Regional Field Office I ranked No. 1 amongst the 14 Regional Field Offices and 15 DA bureaus and attached agencies in terms of fund utilization for CY 2018.

• The Research Division was given with outstanding awards in research projects, namely:

Gold Award (Development Category) for the Community-based Participatory Action Research (CPAR) on Integrated Rice-Based Farming

Systems Management: Approach Towards Community-driven Agricultural Development Project in Ilocos Norte during the National Research Symposium at PICC Manila on November 7-8, 2018;

First Place (Development Category) for the CPAR on Integrated Rice-Based Farming Systems Management: Approach Towards Community-driven Agricultural Development Project in Ilocos Norte during the National Research Symposium at PICC Manila on November 27-29, 2018;

Best Livestock Research Project for the Technology Commercialization on Slaughter Goat (Triple Cross) in Pangasinan during the 1st National Livestock Program Research and Development Review on November 21, 2018, winning Php5 Million worth of projects;

First Prize in Best Booth Category during the 14th Agriculture and Fisheries Technology and Product Exhibition at SM Megamall on August 30-September 02, 2018, won Php3 Million worth of projects; and

First Prize in Best Booth Category, winning PhP10,000.00 cash prize during the Ani Festival of Dingras, Ilocos Norte.

• DA RFO I is the first RFO and Operating Unit of the DA that has taken the big leap in crafting its Corporate Plan for 2018-2022 – a guide for the agency to be a more credible source of public goods and services and a responsible trustee of public resources. It is a preceding activity in its quest for ISO Quality Management System (QMS) Certification.

• The Regional Feed Chemical Analysis Laboratory of the Integrated Laboratories Division (ILD-RFCAL) was awarded with Certificate of Registration to ISO 9001:2015 or the QMS and to ISO 14001:2015 or the Integrated Management System (IMS) by the CIPI. The region is the 1st Laboratory in the DA issued with ISO QMS and IMS Certification. This certification covers the two (2) laboratory facilities of the ILD-RFCAL located in Tebag, Sta. Barbara, Pangasinan (main) and Sevilla Norte, San Fernando City, La Union (satellite).

• Ilocos Region gained recognition during the awarding of the 2018 National Quality Corn Awards on November 15, 2018 at Davao City which bagged a total of 24 awards as follows:

Top 5 Provinces, Provincial Agriculturist and Provincial Coordinator (3 awards)
Pangasinan (Hall of Famer)

Top 25 Municipal/City, Municipal/City Agriculturists and Coordinators (12 awards)
Alcala, Pangasinan (Hall of Famer)
Sto. Tomas, Pangasinan
Burgos, Ilocos Sur
Vigan City, Ilocos Sur

Top 100 Agricultural Extension Workers (9 awards)
Pangasinan-4 awardees
La Union – 2 awardees
Ilocos Sur – 1 awardee
Ilocos Norte– 2 awardees

• Under the Organic Agriculture Program (OAP), a total of 2,582.48 hectares or 19 % were already converted out of the targeted area of 13,533 hectares of conversion to Organic Agriculture, which is 5% of the total regional production area of 340,000 hectares in Region I, with OA practitioners totaling 3,884.

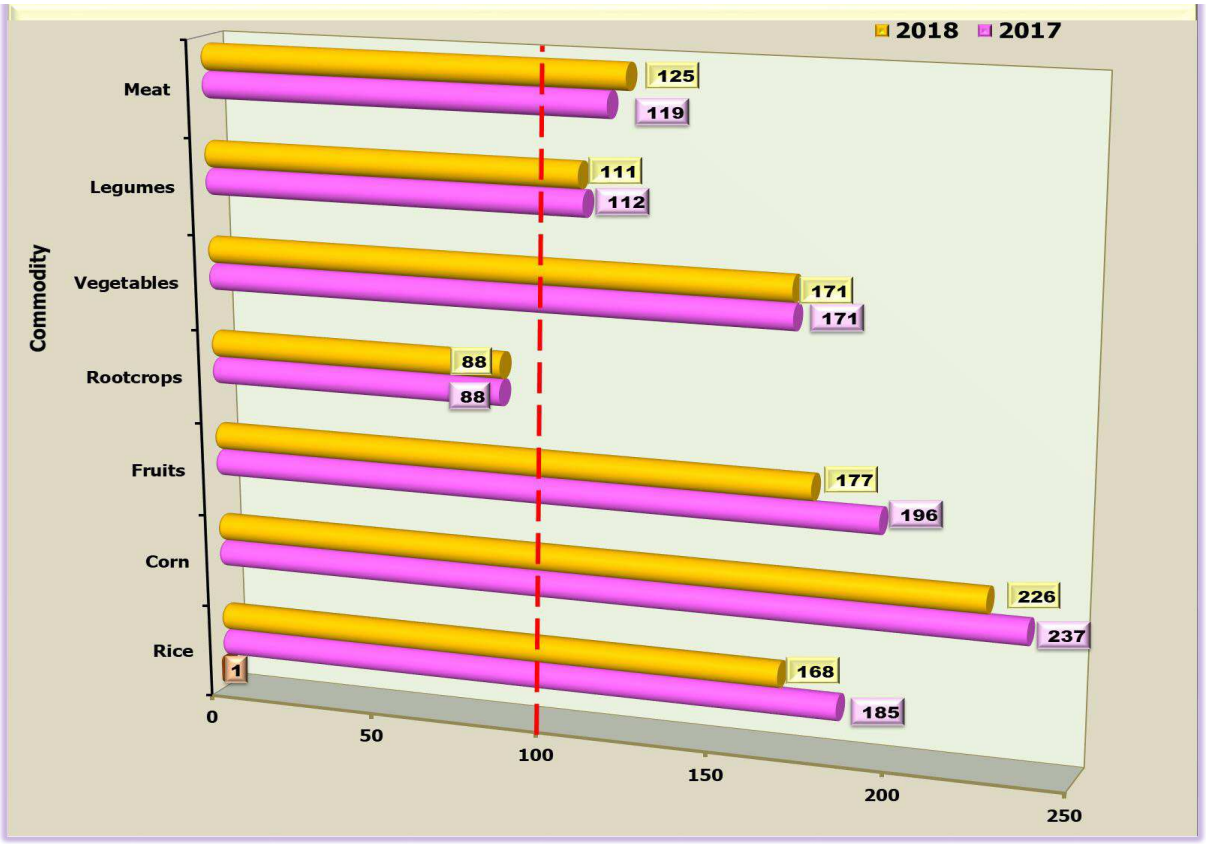
PART 1

Agriculture Sector Outputs & Outcomes

Food Sufficiency Level

For 2018, Region I is still more than sufficient in almost all major food commodities. Rice, although it declined in sufficiency level by negative 9.05 points from 185% in 2017 to 168% in 2018, has still a production surplus of 411,944 metric tons enough to cater for more than 5.0 million population in the region. Corn, which also has

Figure 1. Production of major food commodities in Region 1



a surplus in production necessary to meet the requirement of human and livestock consumption, attained a 226% sufficiency level. The sufficiency level is 0.05 points decrease from last year's 237%.

There were also surplus in the production of fruits, vegetable and legumes with sufficiency levels of 177%, 171% and 111%, respectively. Rootcrops, which is deficit in production this year, recorded 88% sufficiency level this year.

Meat supply is more than enough to meet the requirement of the population registering 125% sufficiency level.

Commodity Performance

A. RICE

Ilocos Region maintains its rank as the 4th rice producing region in the country contributing 9.02 to the national rice production of 19.07 million metric tons.

However, the level of production, area and yield decreased in 2018 due to the damages in rice plantings, mostly at vegetative and reproductive stages, caused by typhoons and Southwest Monsoons in the region. Nevertheless, the production output, which is still more than enough to cater the rice food requirement in the region, is still higher than the levels in 2008-2011.

Specifically, there was an over-all reduction of 8.12% in production, 1.42% in area and 6.80% in yield.

Figure 2. Rice production in Region 1 from 2008-2011

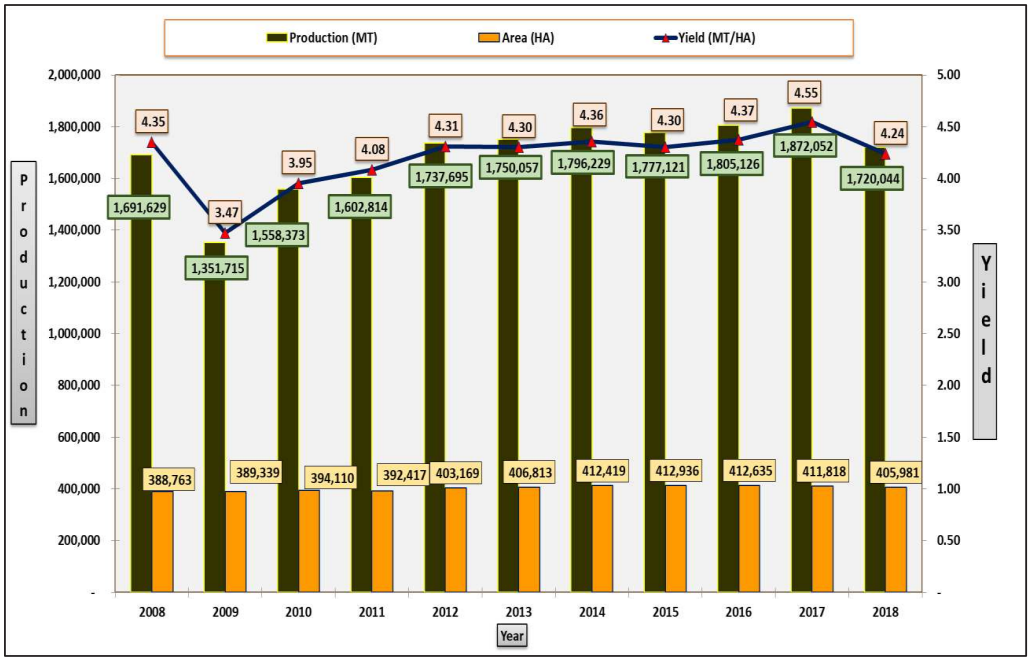


Table 1. Rice production in Region 1 per province from 2017-2018

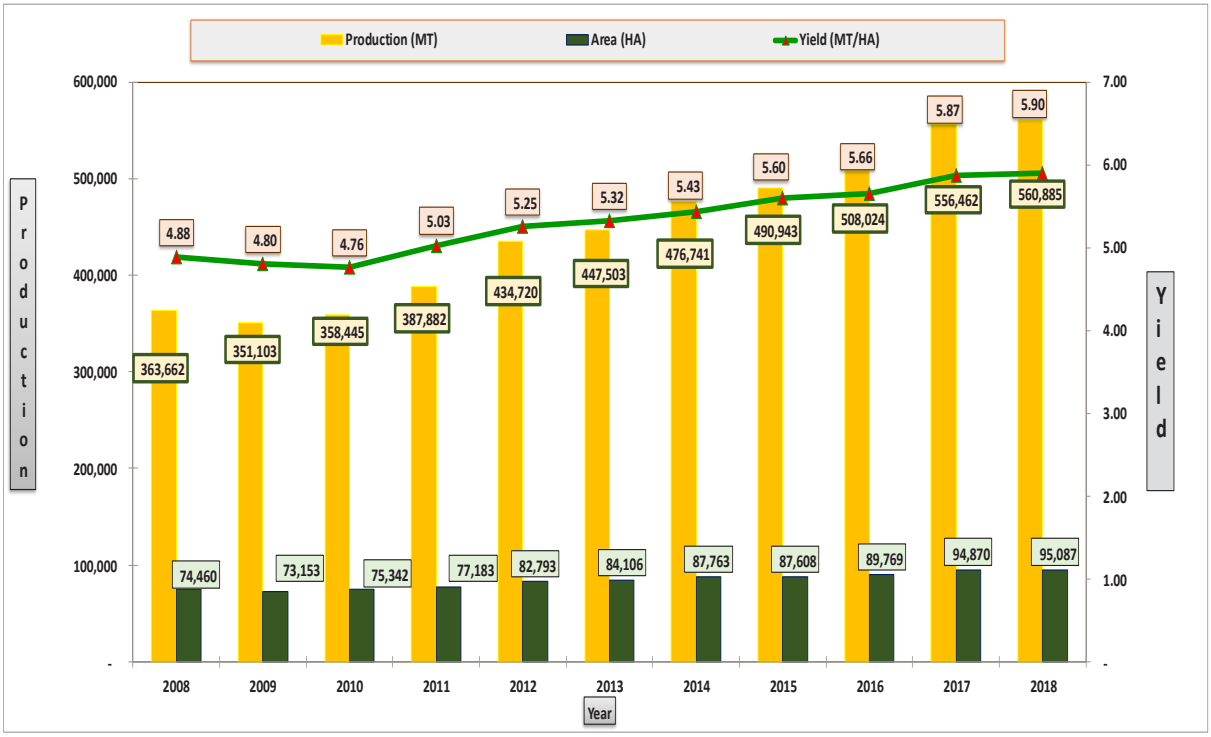
Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2017	% GR	2016	2017	% GR
Pangasinan	1,125,065	1,077,039	(4.27)	258,367	253,005	(2.08)	4.35	4.26	(2.24)
La Union	187,015	159,451	(14.74)	38,810	37,919	(2.30)	4.82	4.21	(12.74)
Ilocos Sur	230,228	201,992	(12.26)	48,343	49,004	1.37	4.76	4.12	(13.45)
Ilocos Norte	329,744	281,562	(14.61)	66,298	66,053	(0.37)	4.97	4.26	(14.30)
Region	**1,872,052**	**1,720,044**	**(8.12)**	**411,818**	**405,981**	**(1.42)**	**4.55**	**4.24**	**(6.80)**

Commodity Performance

B. CORN

Corn outputs in Ilocos Region continued to grow for the past years. This year's corn aggregates on production of 560,885 metric tons, area harvested of 95,087 hectares and yield per hectare of 5.90 metric tons are the highest levels ever recorded in the region. Aside from these milestones, Region I is still the highest corn yielder among the regions in the country.

Figure 3. Corn production in Region 1 from 2008-2018



The region's output contributed 7.22 % to the total production of 7.7 million metric tons in the Philippines. Corn output levels in production, area harvested and yield per hectare increased by 0.80%, 0.23% and 0.57%, respectively, from 2017 level. Almost all provinces performed well in the production and yield of corn.

Table 2. Corn production in Region 1 per province from 2017-2018

Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2017	% GR	2016	2017	% GR
Pangasinan	365,865	357,890	(2.18)	59,867	58,817	(1.75)	6.11	6.08	(0.43)
La Union	38,440	38,927	1.27	7,411	7,159	(3.40)	5.19	5.44	4.83
Ilocos Sur	89,465	99,476	11.19	15,861	17,419	9.82	5.64	5.71	1.24
Ilocos Norte	62,672	64,592	3.06	11,731	11,692	(0.33)	5.34	5.52	3.41
Region	**556,442**	**560,885**	**0.80**	**94,870**	**95,087**	**0.23**	**5.87**	**5.90**	**0.57**

C.1. HIGH VALUE CROPS (GARLIC)

The garlic, known as the white gold in Ilocos, is still recovering from the 2016 downfall in production due to pest and disease infestations. This year's production of 4,983 metric tons with a yield level of 2.51 metric tons per hectare, decreased by 2.3% and 2.1%, respectively. These levels, however, are higher than the 2016 outputs in production of 4,488 metric tons and yield per hectare of 2.23 metric tons, the lowest levels recorded in the region. Despite of the setbacks, Ilocos Region is still the major producer of garlic in the country contributing 65.92% to the national production of 7,559 metric tons.

Figure 4. Garlic production in Region 1 from 2008-2018

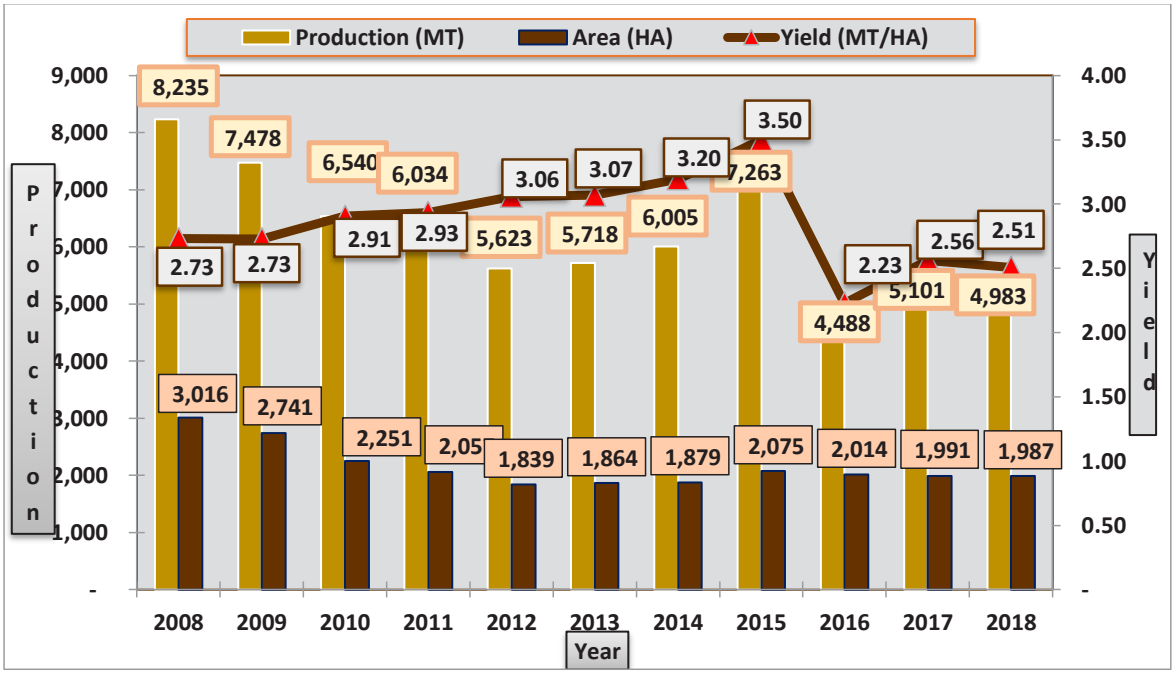


Table 3. Garlic production in Region 1 per province from 2017-2018

Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2017	% GR	2016	2017	% GR
Pangasinan	6.9	7.5	8.7	3.8	4.0	5.3	1.8	1.9	3.3
La Union	-	-	-	-	-	-	-	-	-
Ilocos Sur	310.5	317.9	2.4	131.0	131.0	-	2.4	2.4	2.4
Ilocos Norte	4,784.0	4,657.7	(2.6)	1,856.3	1,851.7	(0.2)	2.6	2.5	(2.4)
Region	**5,101.4**	**4,983.1**	**(2.3)**	**1,991.1**	**1,986.7**	**(0.2)**	**2.6**	**2.5**	**(2.1)**

Commodity Performance

C.2. HIGH VALUE CROPS (MANGO)

Ilocos Region is still the major producer of mango in the country. This year's production of 167,594 metric tons contributed to the national aggregate of 711,660 metric tons. However, mango recorded a continuous declining trend in production and yield from 2008-2018. The decline was due to the adverse effects of typhoons and monsoon rains that occurred in the region coinciding the fruit formation.

The provinces of Pangasinan and Ilocos Norte, the top mango producing provinces in the region, recorded negative growth rates in production by 16.41% and 12.68%, respectively.

Figure 5. Mango production in Region 1 from 2008-2018

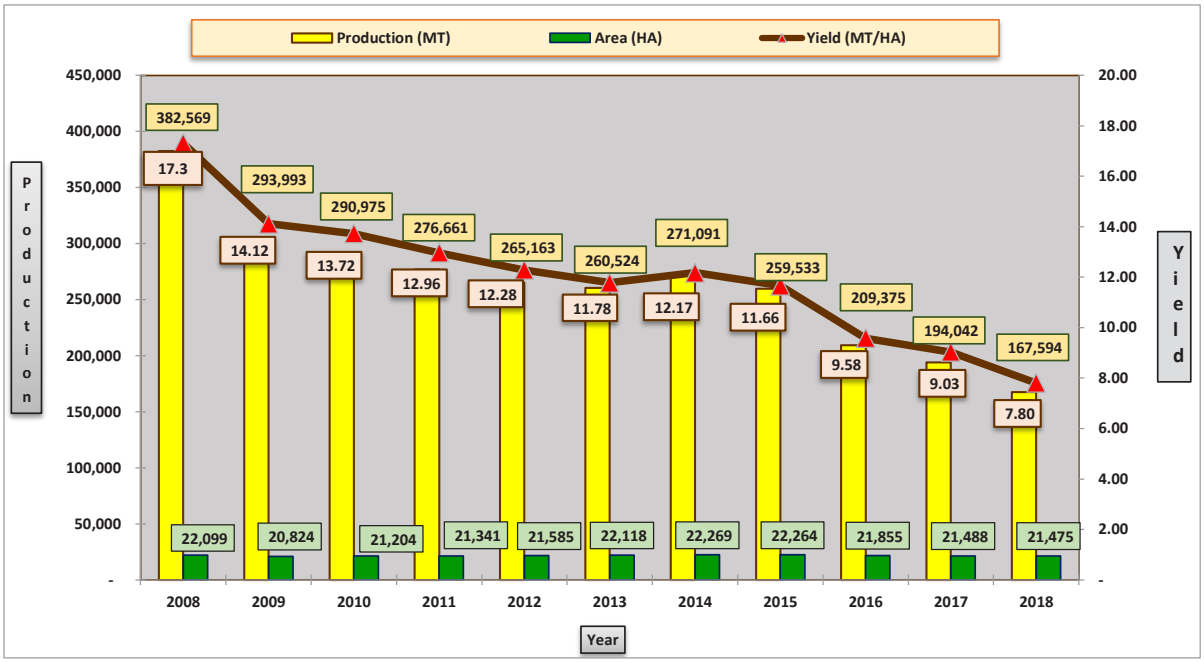


Table 4. Mango production in Region 1 per province from 2017-2018

Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2017	% GR	2017	2018	% GR
Pangasinan	142,183	118,852	(16.41)	12,839	12,839	-	11.07	9.26	(16.41)
La Union	11,544	12,083	4.67	2,476	2,476	-	4.66	4.88	4.67
Ilocos Sur	8,149	8,571	5.18	1,312	1,312	-	6.21	6.54	5.18
Ilocos Norte	32,167	28,087	(12.68)	4,876	4,861	(0.30)	6.60	5.78	(12.42)
Region	**194,042**	**167,594**	**(13.63)**	**21,502**	**21,487**	**(0.07)**	**9.02**	**7.80**	**(13.57)**

C.3. HIGH VALUE CROPS (ONION)

Onion production in the region declined from 40,292 metric tons in 2017 to 38,320 metric tons in 2018. This year's sharp decline in production is similar with the downtrends recorded in 2009 and 2011 because of the damages brought by devastating typhoons during the bulb formation of onion plantings, and the pests and diseases infestations in the region.

The region is the end top producing region in the country next to Central Luzon, contributing 22.19% to the national production of 172,666 metric tons. In Ilocos Region, Ilocos Norte is the major producing province followed by Ilocos Sur and Pangasinan. Among the provinces, Pangasinan registered the highest decrease in onion production and yield per hectare by 36.37% and 14.41%, respectively.

Figure 6. Onion production in Region 1 from 2008-2018

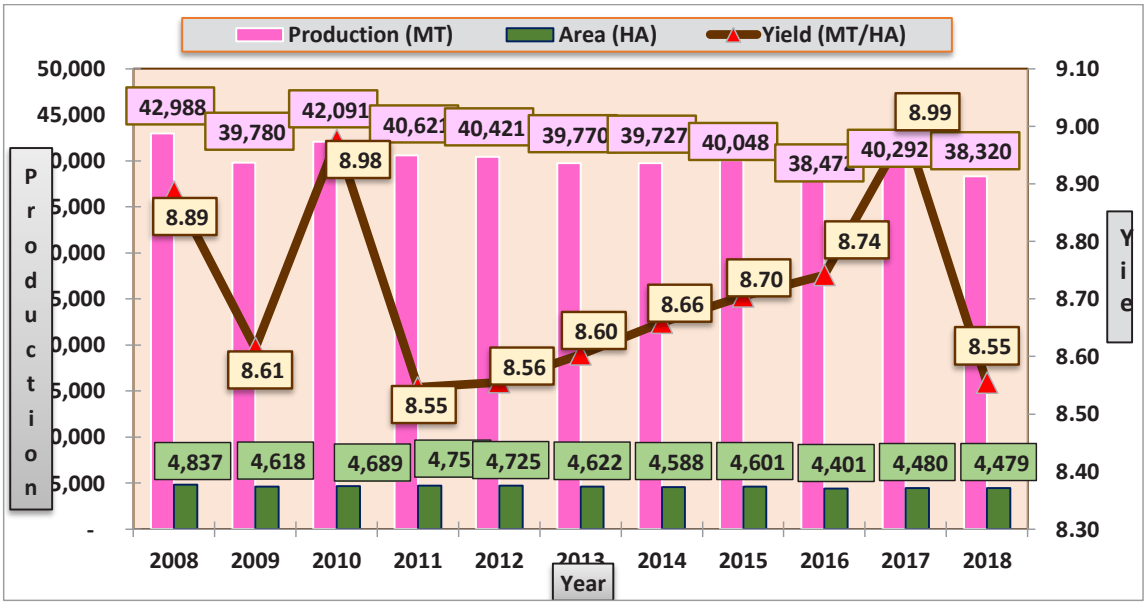


Table 5. Garlic production in Region 1 per province from 2017-2018

Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2018	% GR	2017	2018	% GR
Pangasinan	3,911.50	2,488.70	(36.37)	752.00	559.00		5.20	4.45	14.41)
La Union	126.00	148.70	18.02	17.80	20.50	15.17	7.08	7.25	2.47
Ilocos Sur	16,939.40	17,021.80	0.49			0.27	10.77	10.79	0.21
Ilocos Norte	19,315.30	18,660.80	(3.39)			0.02	9.04	8.73	(3.41)
Region	**40,292.20**	**38,320.00**	**(4.89)**			**(4.14)**	**8.99**	**8.92**	**(0.79)**

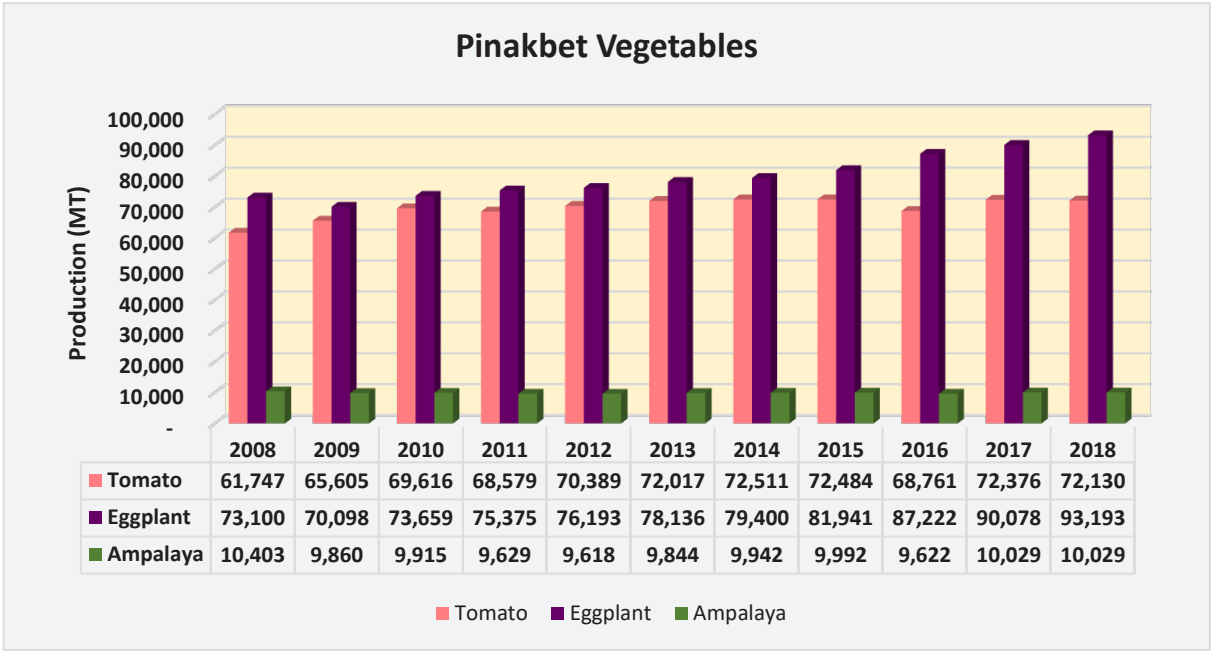
Commodity Performance

C.4. HIGH VALUE CROPS (PINAKBET VEGETABLES)

Ilocos Region is the top producer of tomato and eggplant among the regions in the country contributing 33% and 35%, respectively, to the national aggregates. Both commodities showed uptrend in production for the past ten years. On the other hand, production of bitter gourd, known as ampalaya, showed a steady trend from 2008 to 2018.

In terms of yield, tomato and eggplant showed significant increase from 2008 levels. Yield per hectare of ampalaya registered a stable trend for the past ten years, but showed a slight decrease/increase in 2018 from 2017 level.

Figure 7. Pinakbet vegetables production in Region 1 from 2008-2018 in metric tons



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Tomato	61,747	65,605	69,616	68,579	70,389	72,017	72,511	72,484	68,761	72,376	72,130
Eggplant	73,100	70,098	73,659	75,375	76,193	78,136	79,400	81,941	87,222	90,078	93,193
Ampalaya	10,403	9,860	9,915	9,629	9,618	9,844	9,942	9,992	9,622	10,029	10,029

C.5. HIGH VALUE CROPS (LEGUMES)

Ilocos Region is also the top producer of legumes, both in peanut and mungbean, among the regions in the country. The region dominated about 36-40% of the total national production.

Figure 8. Pinakbet vegetables production in Region 1 from 2008-2018 in metric ton per hectare

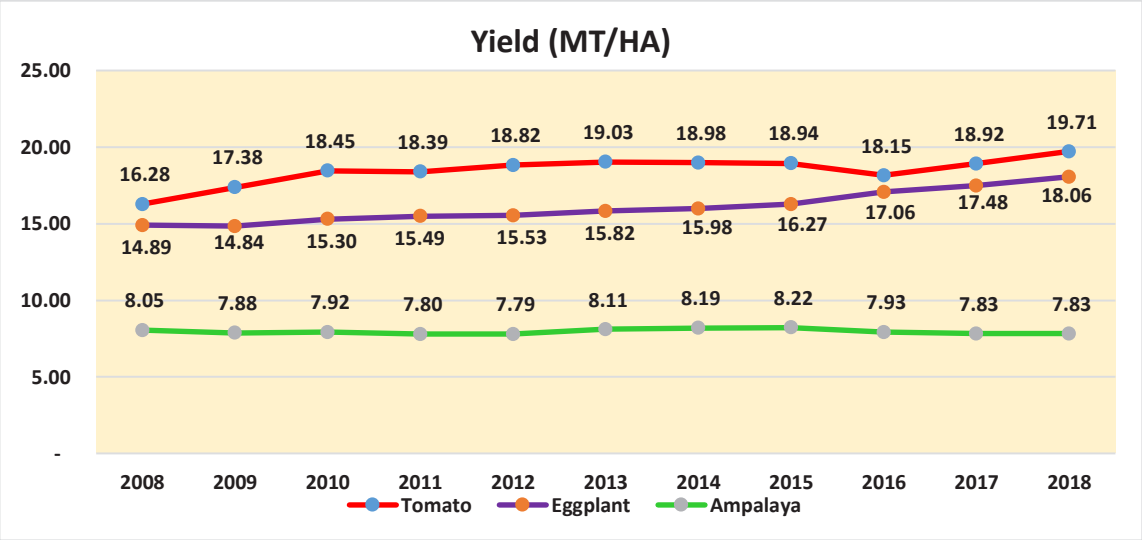
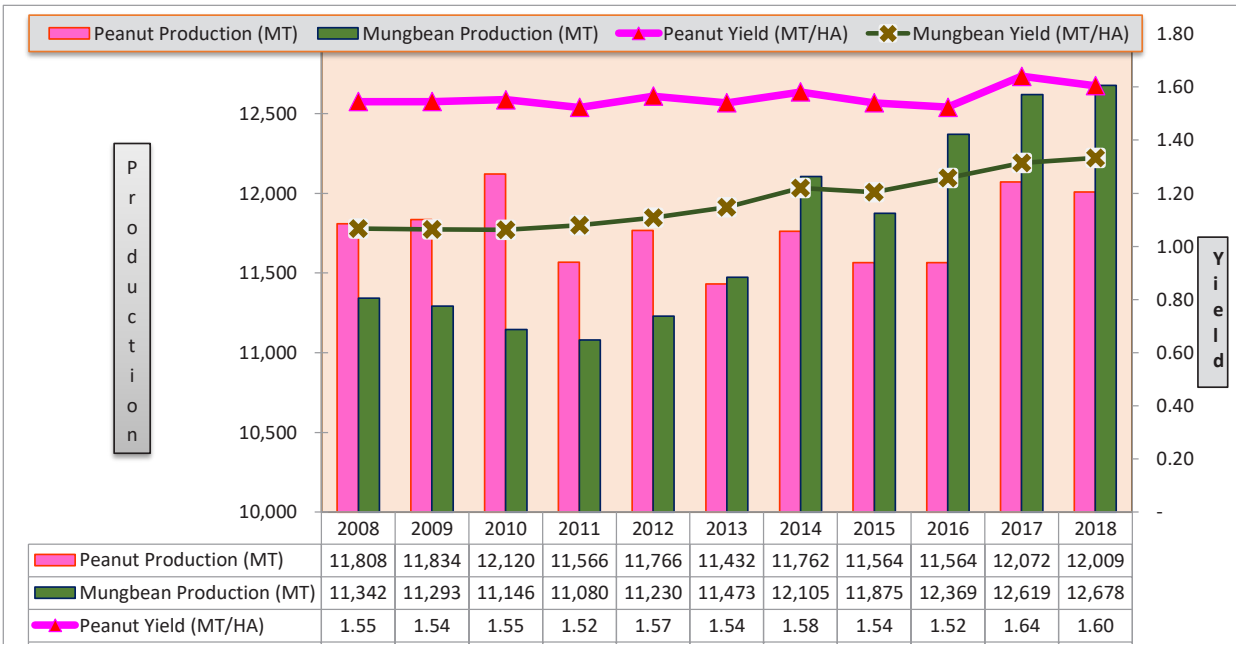


Figure 9. Legumes production in Region 1 from 2008-2018



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Peanut Production (MT)	11,808	11,834	12,120	11,566	11,766	11,432	11,762	11,564	11,564	12,072	12,009
Mungbean Production (MT)	11,342	11,293	11,146	11,080	11,230	11,473	12,105	11,875	12,369	12,619	12,678
Peanut Yield (MT/HA)	1.55	1.54	1.55	1.52	1.57	1.54	1.58	1.54	1.52	1.64	1.60

Figure 9 shows the production and yield levels of peanut and mungbean for the past ten years peanut and mungbean production fell slightly in 2011 due to occurrence of various disasters but were able to recover from 2012 onwards. In terms of yield,

Table 6. Legumes production in Region 1 per province from 2017-2018

Commodity/ Province	Production (MT)			Area (Ha)			Yield (MT/Ha)		
	2017	2018	%GR	2017	2017	% GR	2016	2017	% GR
Peanut	*12,072.40*	*12,009.10*	*(0.52)*	*7,361.10*	*7,483.40*	*1.66*	*6.17*	*6.10*	*(1.26)*
Pangasinan	5,772.60	5,553.60	(3.79)	3,030.00	2,981.40	(1.60)	1.91	1.86	(2.23)
La Union	3,136.90	3,259.90	3.92	1,975.90	2,157.40	9.19	1.59	1.51	(4.82)
Ilocos Sur	1,700.60	1,696.40	(0.25)	1,215.00	1,209.50	(0.45)	1.40	1.40	0.21
Ilocos Norte	1,462.30	1,499.20	2.52	1,140.20	1,135.10	(0.45)	1.28	1.32	2.98
Mungbean	*12,619.30*	*12,677.60*	*0.46*	*9,600.90*	*9,512.20*	*(0.92)*	*4.98*	*5.07*	*1.69*
Pangasinan	6,189.10	6,253.00	1.03	4,006.00	3,965.00	(1.02)	1.54	1.58	2.08
La Union	226.60	233.70	3.13	219.40	218.70	(0.32)	1.03	1.07	3.46
Ilocos Sur	895.40	903.90	0.95	705.00	706.60	0.23	1.27	1.28	0.72
Ilocos Norte	5,308.20	5,287.00	(0.40)	4,670.50	4,621.90	(1.04)	1.14	1.14	0.65

peanut showed constant trend registering an average of 1.56 metric tons per hectare from 2008-2018. On the other hand, mungbean recorded significant increase of 25% in yield per hectare from 1.07 metric tons in 2008 to 1.33 metric tons in 2018.

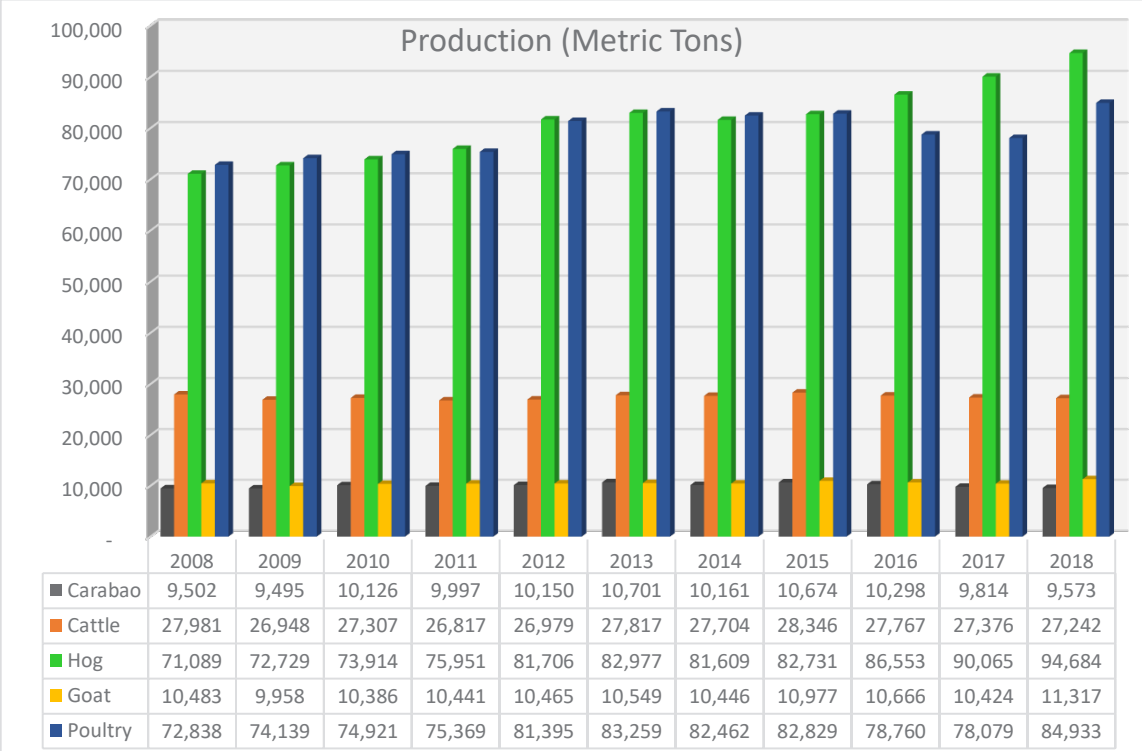
D. LIVESTOCK

Production of all the livestock commodities, except for cattle, exhibited positive increase from 2008 to 2018 levels. Hog posted the highest increase among the commodities at 33.2% from 71,089 metric tons in 2008 to 94,684 metric tons in 2018. The graph of hog shows an upward trend, except for the slight fall in 2014.

Poultry recorded the 2nd highest increase in production for the past 10 years exhibiting 16.6% growth in 2018 from 2008 level. Goat and carabao remain stable in production. Likewise, output level of cattle stay constantly with minimal drop in 2018 from 2008 level.

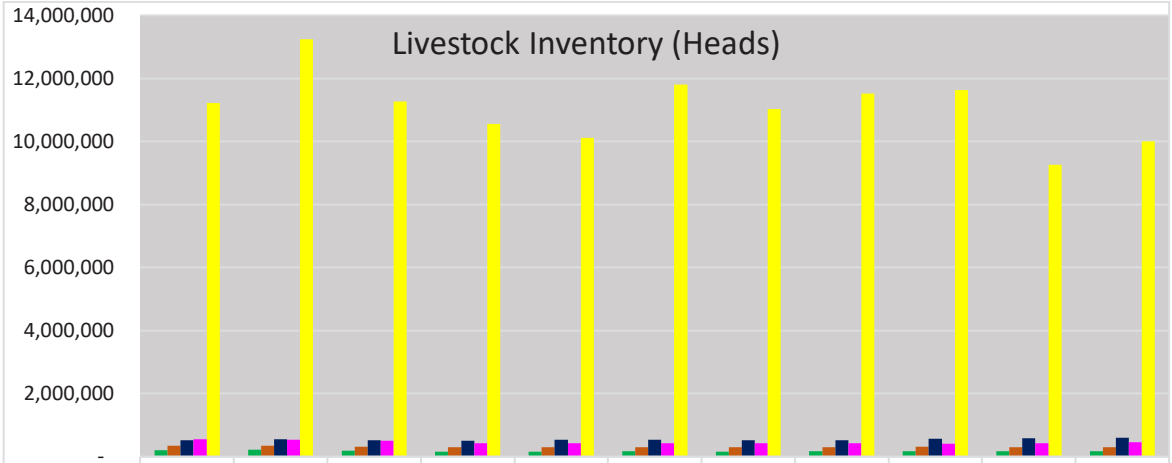
On the other hand, only swine among the livestock commodities grew in the number of heads in 2018 from the 2008 inventory level. Carabao, cattle, goat and poultry declined of about 10-18% due to low number of disposition and more deaths due to disasters.

Figure 10. Livestock production in Region 1 from 2008-2018



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Carabao	9,502	9,495	10,126	9,997	10,150	10,701	10,161	10,674	10,298	9,814	9,573
Cattle	27,981	26,948	27,307	26,817	26,979	27,817	27,704	28,346	27,767	27,376	27,242
Hog	71,089	72,729	73,914	75,951	81,706	82,977	81,609	82,731	86,553	90,065	94,684
Goat	10,483	9,958	10,386	10,441	10,465	10,549	10,446	10,977	10,666	10,424	11,317
Poultry	72,838	74,139	74,921	75,369	81,395	83,259	82,462	82,829	78,760	78,079	84,933

Figure 11. Number of inventoried livestock commodities in Region 1 from 2008-2018



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Carabao	206,099	207,221	185,297	155,678	152,804	161,197	157,057	160,310	163,561	165,850	169,592
Cattle	347,710	347,950	317,073	291,442	286,449	292,545	291,347	297,743	301,578	300,323	299,111
Swine	518,030	539,411	519,598	502,916	534,535	529,317	521,370	521,622	555,397	577,227	599,143
Goat	539,101	527,761	494,057	420,639	420,445	421,321	425,476	423,829	406,321	419,821	455,364
Poultry	11,228,7	13,242,1	11,262,4	10,551,8	10,113,0	11,799,9	11,028,9	11,520,7	11,631,3	9,263,45	10,009,0

Outcome & Output Commitments

PROGRAM 1. TECHNICAL AND SUPPORT SERVICE PROGRAM

Outcome Indicator 1. 125% of beneficiaries rating the provision of technical support services to be at least satisfactory.

Outcome indicator 2. 100% delivery of production support services validated by LGUs to have been delivered at the appropriate time

Output Indicators:

• 4 provinces provided with production support services

• 107 group beneficiaries provided with market development services

• 468 LGU extension workers and 3,510 farmers trained and provided with training support services

Figure 12. Various activities for the provision of production support services and trainings to farmer-beneficiaries

Outcome & Output Commitments

PROGRAM 2: AGRICULTURAL MACHINERY, EQUIPMENT, FACILITIES, AND INFRASTRUCTURE PROGRAM

Outcome Indicator 1. 125% of beneficiaries rating the technical support services to be at least satisfactory

Outcome indicator 2. 100% delivery of production support services validated by LGUs to have been delivered at the appropriate time

Output Indicators:

• 802 hectares of service area generated from the establishment and installation of small scale irrigation projects

•78.74 kilometers of Farm-to-Market Roads (FMR) validated for construction/ rehabilitation

•97% of DPWH-constructed FMRS monitored

Figure 13. Photo documentation of various agricultural infrastructure programs in the region

PART II

Accomplishment of Banner & Regular Programs

Rice Banner Program

A. OUTCOMES/OUTPUTS

The Rice Banner Program in Region I has been adjudged as the Top 1 amongst the 13 regional program in the Department of Agriculture in terms of physical and financial accomplishments in 2019.

The Program attained its goal in sustaining self-sufficiency and one of the top producers and suppliers of quality rice in the country. Region I ranked 4th among the rice producing regions producing a total of 1.72 Million metric tons.

The outputs in rice production were attributed to the implementation of key production and productivity enhancing technology interventions such as utilization of high quality seeds (Hybrid and Inbred), technology demonstrations with field days, distribution of farm production and post-harvest machineries and equipment/ facilities, research and development, and capability building activities for farmers and Agricultural Extension Workers.

A total of 60, 360 farmer individuals, 298 farmer groups and 601 Agricultural Extension Workers were benefited from the various interventions of the Program.

B. INPUTS/INTERVENTIONS

I.TECHNICAL AND SUPPORT SERVICES PROGRAM

a. Production Support Services

a.1. Distribution of high quality rice seeds

- Distributed a total of 1,061,274 kilograms of Hybrid Seeds planted to 70,751 hectares
- Distributed a total of 420,480 kilograms of Certified Seeds planted to 10,512 hectares as immediate rehabilitation to disaster-affected rice planting areas

Figure 14. Distribution of hybrid seeds to various sites

a.2. Procurement and distribution of various chemicals as buffer stock
• Procured and distributed 1,250 liters of insecticides and 1,875 kilograms of copper-based fungicides for the immediate control and/or elimination of pests and diseases during infestations and disasters

a.3. Production and distribution of biological control agents
• Distributed 22,621 kilograms of Metharizium anisopliae to control pests particularly Rice Black Bug, including Onion Armyworm, and Brown Plant Hopper, benefiting 2,053 farmers covering 9,084.4 hectares
• Distributed 107,000 Trichogramma cards for the control of Rice Stem Borer in irrigated rice areas that benefited a total of 1,070 farmers

a.4. Conduct of rice pests surveillance and Early Warning System (EWS)

a.5. Established 12 Observation Stations (O.S) for irrigated rice areas during the CY 2018 Wet Season cropping in collaboration with the LGU with 12 on-site project briefings benefiting 25 rice farmers per station

a.6.Analysis of soil samples for soil fertility assessment and mapping
• Analyzed a total of 4,088 soil samples for macro elements (organic matter, available phosphorus, available potassium), microelements (Zinc, Manganese, Iron, Copper), pH (acidity/alkalinity), electric conductivity (salinity) and texture, in support to the multi-year study entitled, “Calibration Trial for Fertilizer Recommendation of Hybrid and Inbred Rice and Hybrid Corn”

b. Market Development Services

b.1.Conduct of product development training
• Conducted one product development training on packaging and leveling on rice benefiting 13 farmer groups in the region.

b.2.Support to the operation and maintenance of Regional Bantay Presyo Coordinating Team
• Conducted regular price monitoring of rice.

c. Extension Support, Education and Training Services

c.1.Establishment of Hybrid Rice Model Farm
• Established a total of 30 model farms regionwide - 15 sites during the wet season 2018 and 15 sites during the dry season 2018-2019 wherein each site

Rice Banner Program

Figure 15. Rice farmers along with the DA-RFO 1 staff during the implementation of trainings, establishment of hybrid model farms, and other services in support to the development of rice industry in the region.

is composed of 10 hectares contiguous irrigated area

c.2.Implementation of Local Farmer Technician Program
• Conducted a total of 56 Farmers Field School (FFS) with 114 Local Farmer Technicians (LFTs) region-wide in different ecosystem both on wet season 2018 and dry season 2018-2019

c.3.Dissemination of IEC materials
• Contracted with four (4) local radio stations in the region at a certain time slot in order to allocate time for the dissemination of various DA programs
• Distributed 9,000 copies of IEC materials on Rice Production Technologies

d. Research and Development

<table>
<tr><th>Project Title</th><th>Brief Description of the study</th><th>Highlights/Status</th></tr>
<tr><td>1. Accelerating the Development and Adoption of Next Generation Rice Varieties for the Major Ecosystems in the Philippines (NEXTGEN)</td><td>This project is a collaborative effort among the breeding institutions like PhilRice, IRRI, UPLB and other private seed companies in generating rice varieties for the various ecosystems. It has four components in Region 1, namely: Participatory Varietal Selection, On-station Seed Production, Techno-demo cum Seed Production and National Comprehensive Testing/ Multi-location Environment Trial (NCT/MET). For 2018, irrigated and rain-fed are the ecosystems for different hybrid and inbred tested.</td><td>During the dry season of 2018, PSB Rc18 yielded the highest with 5,640.60 kg/ha which is the farmer's/check variety, a registered variety for seed production. Other high yielding varieties observed during the same season are NSIC Rc440 and NSIC Rc216 with 5,520.93 kg/ha and 5,310.94 kg/ha respectively. On the other hand, NSIC Rc238 revealed the best variety during the wet season obtaining a yield of 5,956.19 kg/ha which was also the most preferred by farmers. Aside from NSIC Rc238, NSIC Rc440 and NSIC Rc222 showed also a good yield during the season.

A good yield of hybrid was noted during the dry season of 2018 showing NSIC Rc406H, NSIC Rc458H and NSIC Rc204H the top yielding among the nine NEXTGEN varieties tested in Bangar, La Union. Most of the highest yielder were also the most preferred such as NSIC Rc406H and NSIC Rc408H.

<table>
<tr><th>Ecosystem/ Varietal Type</th><th>Cropping Season</th><th>Varieties</th><th>Yield</th></tr>
<tr><td></td><td>Dry Season</td><td>NSIC Rc440</td><td>5,520.93</td></tr>
<tr><td>Irrigated inbred</td><td></td><td>PSB Rc18</td><td>5,640.60</td></tr>
<tr><td></td><td></td><td>NSIC Rc216</td><td>5,310.94</td></tr>
<tr><td></td><td>Wet Season</td><td>NSIC Rc238</td><td>5,956.19</td></tr>
<tr><td></td><td></td><td>NSIC Rc440</td><td>5,600.71</td></tr>
<tr><td></td><td></td><td>NSIC Rc222</td><td>5,819.56</td></tr>
<tr><td>Irrigated hybrid</td><td>Dry Season</td><td>NSIC Rc406H</td><td>9,059.22</td></tr>
<tr><td></td><td></td><td>NSIC Rc458H</td><td>8,972.04</td></tr>
<tr><td></td><td></td><td>NSIC Rc204H</td><td>8,830.92</td></tr>
<tr><td></td><td>*Wet Season</td><td>NSIC Rc358</td><td>5,217.00</td></tr>
<tr><td></td><td></td><td>NSIC Rc250H</td><td>5,205.95</td></tr>
<tr><td></td><td></td><td>NSIC Rc380H</td><td>5,086.55</td></tr>
<tr><td>Rain-fed</td><td>Wet Season</td><td>NSIC Rc430</td><td>4,441.83</td></tr>
<tr><td></td><td></td><td>NSIC Rc428</td><td>4,433.83</td></tr>
<tr><td></td><td></td><td>NSIC Rc472</td><td>4,284.21</td></tr>
</table>
* Affected by Typhoon Ompong at reproductive stage and Typhoon Rosita during maturity stage</td></tr>
</table>

Rice Banner Program

Project Title	Brief Description of the study	Highlights/Status
2. Philippine Rice Information System (PRISM)	This project aims to develop an online system that would consolidate and present timely information on the status of the rice crop to policy and decision makers as a decision- support tool using data from remote sensing, crop models, crop health surveys, and other field work activities. Rice area by season, including planting date estimates were delivered from high resolution Synthetic Aperture Radar (SAR) remote sensing information that can penetrate cloud and provide a continual source of information regardless of weather conditions (critical for the rainy season) by the use of satellite 20-m-resolution Multi-temporal Synthetic Aperture Radar (SAR) specifically Terra SAR-X (TSX) from Airbus defense and space and Sentinel-1A (S1A) from the European Space Agency (ESA). SAR imagery were obtained throughout the rice season providing regular updated estimates of rice area, planting dates and cropping intensity at 1 ha resolution.	Rice map were generated using a rule-based rice detection algorithm implemented in MAPscape-RICE. These were validated by ground truth surveys. A total of 20 sampling/ monitoring sites each of selected municipality was established. There were additional field visits to get validation points (50% rice and 50% non-rice) within the region for use in accuracy assessment of rice maps. GPS coordinates, photo, growth stage of the rice crop, and land cover descriptions were collected at each point. Ground truth activities and survey forms used: 1. A_Metadata1 – data collected by initial farmer's interview and identify PRISM area. This is done before land preparation to identify and map start of the season of rice areas 2. A_Monitoring_Visits1st – 8th – data collected during land preparation up to booting stage; monitor rice growth(LAI & status) and farmer's cultural management (variety, planting distance & irrigation) through-out the season. 3. A_Metadata2 – data collected during tillering stage by measuring at least 200sqm. Rice area serves as sampling area and for Pest and Disease assessment (component B). 4. A_Metadata3 – data collected after harvesting; Farmer's interview by getting the actual harvest (sacks/ha) and status of crop before harvesting. 5. A_RNR – data collected between tillering to maturity; Travel across the region and identify areas with land use whether rice or non-rice as assigned with regional target number of points. Region 1 targeted 120 points and evenly distributed throughout the region with a minimum distance of 1 km-radius per point. SAR imagery, taken at specific dates throughout the season also provides information on rice crop biomass, water content and leaf area which were used to drive a crop growth simulation model to estimate rice yield and production at municipal level for all major rice growing areas of the country. Yield estimates were validated against crop cut experiments in all participating regions. Testing a range of destructive and non-destructive crop measurement techniques was done to determine the most cost effective and reliable methods that would form part of an operational validation and monitoring protocol for rice crop growth and rice yields in PRISM.

Project Title	Brief Description of the study	Highlights/Status
3. Techno demo cum seed production in Ilocos Sur and Ilocos Norte	Techno demo for inbred rice was established to introduce and demonstrate the performance of newly released rice varieties for the specific ecosystem in the locality, to produce and disseminate new inbred rice varieties through quality seed production to have available quality seeds within the region/province.	During the WS 2018, 4 hectares each in Ilocos Norte and Ilocos Sur, and 10 hectares in Pangasinan were planted with NEXT GEN varieties in irrigated ecosystem, namely: NSIC Rc 216, NSIC Rc222, NSIC Rc300, and NSIC Rc160. Data showed that NSIC Rc 216 was the tallest variety-105.5 cm and NSIC Rc 300 was the shortest-97.6 cm. Crop cut yield (14% MC) NSIC Rc216 was the highest yielder- 8.3 t/ha which was due to longer panicle length, most number of productive tillers with 82% spikelet fertility and heaviest weight of 1000 seeds. Lowest yielder was NSIC Rc160-5.52t/ha. In Ilocos Sur, NSIC Rc222 was the highest yielder- 6.6 t/ha followed by NSIC Rc216-4.46 t/ha. Lowest yield was obtained by NSIC Rc300 which was damaged by Typhoon Ompong. In Pangasinan, NSIC Rc222 obtained yield production of 113 bags per ha followed by NSIC Rc216 with a yield of 105 bags per ha & NSIC RC 300 with a yield of 96 bags per ha.
4. Rice Crop Manager (RCM)	A comprehensive decision tool for increasing yield income in the Philippines.	A total of 39,030 recommendations were generated and deployed to farmers in Region 1 registering 8,199 fields and monitored 522 fields that received RCM recommendations.

Rice Banner Program

<table>
<tr><th>Project Title</th><th>Brief Description of the study</th><th>Highlights/Status</th></tr>
<tr><td>5. On-station mushroom modules</td><td>The project is composed of four modules, namely: Module 1: mushroom culture and spawn production, Module 2: mushroom production, Module 3: Mushroom postharvest, processing, and marketing and Module 4: Training, information and advocacy.

This project aims to: 1) serve as a show window to farmers and other entrepreneur in gaining basic skills, knowledge and principles on the basic of mushroom production; 2) cater the mushroom spawn requirement of the mushroom growers; and 3) serve as technical support facility in establishing community based mushroom production.</td><td>For 2018, the following were accomplished:
<table>
<tr><th>INDICATOR</th><th>ACCOMPLISHMENT</th></tr>
<tr><td>Mother culture produced, no. of bottle</td><td>572</td></tr>
<tr><td>Mother culture distributed, no. of bottle</td><td>15</td></tr>
<tr><td>Mushroom spawn produced, no. of bags</td><td>15,868</td></tr>
<tr><td>Mushroom spawn distributed, no. of bags</td><td>11,669</td></tr>
<tr><td>Fruiting bags produced, no. of bags</td><td>9,030</td></tr>
<tr><td>Fruiting bags distributed, no. of bags</td><td>3,185</td></tr>
<tr><td>Fruiting bags as techno demo, no. of bags</td><td>4,483</td></tr>
<tr><td>Fruits harvested, kgs</td><td>1,017</td></tr>
</table>
A total of three products were processed, namely: mushroom empanada, lumpianada and mushroom seasoning. Moreover, 10 groups/farmer associations were benefited from various trainings on mushroom production and processing.
<table>
<tr><th>NAME OF ASSOCIATION/GROUP TRAINED</th><th>ADDRESS</th><th>DATE OF TRAINING</th></tr>
<tr><td>1. OJT students from Mariano Marcos State University taking up Bachelor of Agricultural Technology</td><td>MMSU, Dingras</td><td>February 7-9, 2018</td></tr>
<tr><td>2. Mushroom growers from Sta. Maria, Alilem, Cervantes, Suyo, and San Emilio, Ilocos Sur, Balaoan and Rosario, La Union, Alaminos, Anda and Binmaley, Pangasinan</td><td>Sta.Maria, Alilem, Cervantes, Suyo and San Emilio, Ilocos Sur, Balaoan and Rosario, La Union, Alaminos, Anda and Binmaley, Pangasinan</td><td>March 20-22, 2018</td></tr>
<tr><td>3. OJT students from Mariano Marcos State University taking up Bachelor of Agricultural Technology</td><td>MMSU, Dingras</td><td>April 03-04, 2018</td></tr>
<tr><td>4. DA-INREC Batac & Dingras staff</td><td>DA-INREC, Batac and Dingras</td><td>April 05, 2018</td></tr>
<tr><td>5. CPAR farmer cooperator</td><td>Brgy. Kalumsing, Lancuas, Sibsibu, San Emilio, Ilocos Sur</td><td>May 24, 2018</td></tr>
<tr><td>6. Out of School Youth from different municipality of Ilocos Norte</td><td></td><td>May 29, 2018</td></tr>
<tr><td>7. Residence of Barangay Maan-anteng & Manalpac, Solsona</td><td>Maan-anteng and Manalpac, Solsona, Ilocos Norte</td><td>August 1-3, 2018</td></tr>
<tr><td>8. Brgy. Poblacion, Ablan, Paayas, Agaga and faculty staff from Burgos Agro-industrial School</td><td></td><td>August 15-17, 2018</td></tr>
<tr><td>9. Parent of pupils of Vira Elementary School</td><td>Vira, Laoag City</td><td>November 7-8, 2018</td></tr>
<tr><td>10. Mushroom Growers from Ilocos Norte and Ilocos Sur</td><td>Dingras, San Nicolas, Ilocos Norte and Vigan, Ilocos Sur</td><td>November 21, 2018</td></tr>
</table></td></tr>
</table>

Project Title	Brief Description of the study	Highlights/Status
6. Strategic research for mushroom production	Four researches were conducted to improve the technology on mushroom production and product development.	Under the research on Potential of Spent Mushroom Substrate (SMS) in Vermicomposting under Ilocos Condition, Treatment 6 which is 20% cow manure plus 80% spent mushroom substrates has the heaviest weight of worms 296.62 grams and heaviest vermicast harvested of 1832.88 grams while treatment 2 – 80% cow manure: 20% spent mushroom substrates has the lightest weight of vermiworms and vermicast harvested 273.62 grams and 1646.25 grams respectively. Meanwhile treatment 2 has the most harvested vermicompost of 8341.13 grams. For the study on Product Development and Commercialization of Oyster Mushroom, mushrooms are processed for long-term preservation by drying, canning and pickling. Under the On-Station Mushroom Technology Modules in Pangasinan, a total of 50 bottles pure culture oyster mushroom and 828 bags sub-culture were produced. Of the sub-cultures produced, 663 bags were distributed to five (5) group beneficiaries Activities conducted under the Mushroom Production to Raise Productivity of Rice Farms (Development of Community Mushroom Enterprises) were 5 hands-on training on mushroom production and cross-visit to mushroom farms benefiting two group beneficiaries.

Rice Banner Program

II. AGRICULTURAL MACHINERIES, EQUIPMENT, FACILITIES, AND INFRASTRUCTURE PROGRAM

a. Irrigation Network Services

• Distributed 150 units pump and engine sets generating a service area of 450 hectares
• Rehabilitated three Small Water Impounding Projects (SWIP)/Diversion Dam (DD) generating a service area of 50 hectares
• On-going construction nine (9) units Solar Power Irrigation System , 6 SWIPs and 6 DD
• On-going rehabilitation of 8 SWIPs and 29 DD restoring 700 hectares

b. Agricultural Machineries, Equipment and Facilities

• Distributed the following agricultural machineries and equipment benefiting a total of 232 groups:

NAME OF AGRI-FARM MACHINERIES/ EQUIPMENT	NUMBER OF UNITS DISTRIBUTED
Four-wheel drive tractor	66
Hand tractor	50
Transplanter (Walk-behind)	22
Transplanter (Riding-type)	35
Combine harvester	49
Recirculating Dryer	10

• On-going construction of 10 units of warehouses

Figure 16. Documentation of the on-going construction and rehabilitation of irrigation network services and distribution of machineries among rice farmers

Corn Banner Program

A. OUTCOMES/OUTPUTS

The Corn Banner Program in Ilocos Region was hailed as the Top 1 amongst the 15 regions in the Department of Agriculture in terms of physical and financial accomplishments in 2018.

Correspondingly, as the production and yield levels grew this year from 2017, Region I remains to be the highest corn yielder among the regions in the country.

Figure 13.

Figure 17. The DA-RFO 1 key officials and staff alongside the awardees during the National Corn and Cassava Achievers Awards in Davao City

The region's type 1 climate is ideal to grow the best quality corn in the country making it as one of the top performing regions during the 2018 National Corn Achievers Awards. The region bagged the following 24 awards:

• Top 5 Provinces, Provincial Agriculturist and Provincial Coordinator (3 awards)
Pangasinan (Hall of Famer)

• Top 25 Municipal/City, Municipal/ City Agriculturists and Coordinators (12 awards)
Alcala, Pangasinan (Hall of Famer)
Sto. Tomas, Pangasinan
Burgos, Ilocos Sur
Vigan City, Ilocos Sur

• Top 100 Agricultural Extension Workers (9 awards)
Pangasinan-4 awardees
La Union – 2 awardees
Ilocos Sur – 1 awardee
Ilocos Norte– 2 awardee

Corn Banner Program

B. INPUTS/INTERVENTIONS

I. Technical and Support Services Program

I. a. Production Support Services

• Distribution of high quality seeds and planting materials
- Distributed 16,380 kilograms of 2,469 bags of Genetically Modified Hybrid Yellow corn seeds (@9 kg/bag) to farmers affected by Typhoons Ompong and Rosita
- Distributed 605,000 cassava seed pieces planted to 60.5 hectares benefiting 60 cassava growers

• Production and distribution of biological control agents
- Distributed 9,354,000 pieces of Earwigs (Euborellia annulata) for the control of corn pests in white and conventional yellow hybrid growing areas benefited 935 farmers
- Distributed 255,000 Trichogramma cards to 255 hectares of corn areas benefiting 2,630 farmers

• Conduct of corn pests and disease management and surveillance system
- Established thirty-six (36) Corn Bantay Peste Volunteer Brigade sites or observation stations covering 9,000 hectares or 13 % of the total corn cluster areas of the region for the early pest detection and preventive measures ahead of outbreak

I.b.Market Development Services

• Conduct of market linkage
- Conducted four (4) market linkage of the following local corn growers with various institutional buyers

GROWERS	VOLUME	INSTITUTIONAL BUYERS
1. Local Seed Growers	16.7 metric tons OPV Corn	St. Joseph Agri-marketing Corporation
2. Mamarlao Multi-Purpose Cooperative	350 metric tons Yellow Corn	New Hope Feed Milling and Oishi
3. Ilocos Sur Corn Cluster Association	100 metric tons Yellow Corn	Chechzers Feed Mill
4. Local Seed Growers	No identified volume	Nutridense Food Manufacturing Corporation

I.c. Extension Support, Education and Training Services

• Conduct of trainings and training-related events
- Conducted four batches of entrepreneurial training on cassava processing as livelihood benefiting 120 members of women and youth organizations where sets of kitchen and baking utensils, cassava grater with presser, vacuum pack sealer and cassava pulverizer were awarded as grant

- Conducted two (2) batches of cassava production technology training benefiting farmers in Mangaldan and Binalonan, Pangasinan where cassava seed pieces of different varieties (Lakan II, Rayong 5 and Golden Yellow) were given to beneficiaries

• Establishment of technology/model farms
- Established three model farms: 1) 10-hectare area for White Flint Corn in support to the Rice-Corn Blend Program; 2) 40-hectare area for Hybrid Yellow Corn; and 3) the 20-hectare area for cassava plantation

I.d.Research and Development
Three research studies were conducted, namely:
• Evaluation on the Effect of Zero tillage for hybrid corn production in Ilocos Region

• Verification Trial on Cassava Production using Pit (gahung-gahung) Method

• Site-Specific Nutrient Management (SSNM) as a Management Decision Tool for Corn Farmers in Region I

Figure 18. Documentation of conducted trainings on cassava processing.

Corn Banner Program

II. Agricultural Machineries, Equipment, Facilities and Infrastructure Program

II.a. Irrigation Network Services

• Distributed a total of 105 units pump and engine set for shallow tube wells (STWs) benefiting 105 farmer groups or associations generating a total service area of 315 hectares

• On-going establishment of two units of Solar Power Irrigation System (SPIS) with 20- hectare service area each in Alcala, Pangasinan and in Santa, Ilocos Sur

II.b. Agricultural Machineries, Equipment and Facilities

• Distributed the following farm production and postharvest machineries and equipment benefiting 53 farmer groups/associations:

NAME OF AGRI-FARM MACHINERIES/ EQUIPMENT	NUMBER OF UNITS DISTRIBUTED
Four-wheel drive tractor	10
Combine harvester	3
Corn picker	1
Cassava digger	2
Mobile flash dryer	10
Mechanical corn sheller	15
Vacuum pack sealer	4
Cassava grater	4
Cassava pulverizer	4

Figure 19. Documentation of machineries distributed under the Corn Banner program at various sites.

High Value Crops Dev't Program

A. OUTCOMES/OUTPUTS

Ilocos Region is still the top producer of major high value crops such as mango, garlic, onion, tomato, eggplant, peanut and mungbean, and second top producer in onion. The region provided about 70% and 30% of locally-produced garlic and onion, respectively, in the country. Mango, tomato, eggplant, mungbean and peanut contributed 30-40% to the national production.

For years, the High Value Crops Development Program continuously provided interventions such as distribution of high quality seeds and planting materials, provision/establishment of production, irrigation and post harvest equipment and facilities, and facilitate market development and extension support services.

For 2018, a total of 500 individuals, 443 groups and1,003 LGUs were benefited from various interventions of the Program.

B. INPUTS/INTERVENTIONS

I.Technical and Support Services Program

I.a.Production Support Services

• Distribution of high quality seeds and planting materials

SEEDS/PLANTING MATERIALS	UNIT	DISTRIBUTED
Seeds		
Mungbean	kilogram	24,000
Peanut	kilogram	6,000
Yellow Onion	kilogram	233
Shallot	kilogram	905
Red Onion	kilogram	150
Lowland Vegetables	kilogram	1,716
Planting Materials		
Mango	number	100,000
Cacao	number	77,195
Yam	number	60,000

High Value Crops Dev't Program

• Distribution of other farm inputs
- Distributed 2,237 bags of flower inducers - Calcium Nitrate and Potassium Nitrate

• Maintenance of production facilities in the stations

FACILITIES	NUMBER
Greenhouse	
Established	13
Rehabilitated	5
Nursery	8
Seed Storage	4
Foundation Scion Grove	4
Clonal Garden	1
Budwood Garden	2

I.b. Market Development Services

• Conduct of market linkage

I.c. Extension Support, Education and Training Services

• Conduct of trainings and training-related events
- Conducted 13 trainings on Package on Technology (POT)

• Establishment of technology/model farms
- Established 41 technology demonstrations – 33 on the rehabilitation of old mango trees with 18,500 trees fertilized, and 8 on vegetable production

• Distribution of IEC materials
- Established 41 technology demonstrations – 33 on the rehabilitation of old mango trees with 18,500 trees fertilized, and 8 on vegetable production

II. Agricultural Machineries, Equipment, Facilities and Infrastructure Program

II. a. Irrigation Network Services
• Distributed the following irrigation equipment and other paraphernalia

benefiting a total of 67 farmer groups or associations generating a total service area of 60 hectares.

IRRIGATION EQUIPMENT/MACHINERIES	DISTRIBUTED
Small Scale Irrigation Projects constructed/installed	
Shallow Tube Well (no.)	30
Other irrigation Paraphernalia	
HDPE Pipe (meters)	3.600
Water Plastic Drum (pieces)	860

II.b. Agricultural Machineries, Equipment and Facilities

• Distributed the following farm production and postharvest machineries and equipment benefiting 152 farmer groups/associations and 1,000 LGUs:

MACHINERIES/EQUIPMENT/FACILITIES	DISTRIBUTED
Farm-production machinery & equipment	
Tractor	7
Hand tractor/Multi-cultivator	50
Power sprayer	60
Knapsack sprayer	375
Production facilities	
Budwood garden	2
School garden	1,000
Postharvest/processing equipment & machineries	
Hauling truck	3

Figure 20. Documentation of distribution and awarding of machineries under the HVCDP program at various sites.

Livestock Banner Program

A. OUTCOMES/OUTPUTS

Region I maintained its FMD and avian influenza-free status. The supply of livestock and poultry is more than enough registering an average of 124 % sufficiency level.

This year, production of livestock and poultry registered a growth of 19.5% from 2017 level. The increase in production was attributed to the continuous implementation of major interventions such as maintenance and production of quality breeder stocks and forage planting materials, genetic improvement thru Unified Artificial Insemination Program (UNAIP), animal health services, conduct of trainings, intensification of information dissemination and regulatory services.

A total of 10,568 individuals and 66 groups were benefited with the various interventions of the Program.

B. INPUTS/INTERVENTIONS

I. TECHNICAL AND SUPPORT SERVICES PROGRAM

a. Production Support Services

• Distribution of forage seeds and planting materials
- Distributed a total of 100,561 various forage cuttings and seedlings such as napier grass, maramais, rensonii, tricanthera, indigofera and mulberry benefiting 86 individual farmers and 11 farmer associations

- Distributed a total of 125 kilograms of forage seeds was distributed to 26 individuals and 18 group beneficiaries

•Genetic Improvement Program
- Distributed a total of 11,746 frozen semen straws of cattle and carabao under the Unified Artificial Insemination Program (UNAIP) to 60 accredited Village-based Artificial Insemination Technicians (VABAITs) benefiting 9,824 farmers

- Provided 22 and 32 heads of native swine to the Don Mariano Marcos Memorial State University (DMMMSU) and the Mariano Marcos State University (MMSU), respectively, under the Philippine Native Animal Development Program (PNADP) to purify the Ilocos breed native pig

Livestock Banner Program

Figure 21. Documentation of the native pig dispersal project which was implemented through the Livestock Banner Program under the Philippine Native Animal Development Program

Figure 22. Documentation of the distribution of doses of drugs, biologics, and vaccines in some of the Provincial Veterinary Offices in Region 1.

• Animal Health Program
- Distributed a total of 92,691 doses of drugs, biologics and vaccines to the four (4) Provincial Veterinary Offices in the region to avoid disease outbreak of Foot and Mouth Disease, Avian Influenza, Rabies, Hog Cholera, Blackleg, Hemorrhagic septicemia, Newcastle Disease and parasitism

• Laboratory services
- Conducted a total of 947 confirmatory tests for virology (rabies test) parasitology (Fecalysis, Blood Parasite Exam) and serological tests (Brucellosis, Caprine Arthritis Encephalitis Test and Hog Cholera)

- Analyzed 2,275 feed samples for proximate analysis of feed retailers in the region

Livestock Banner Program

TECHNO DEMO	LOCATION	INTERVENTION
Techno Demo on Native Pig Production	Lancuas, San Emilio, Ilocos Sur	6:35 heads native pig
	Kalumsing, San Emilio, Ilocos Sur	5:33 heads native pig
	Sibsibo, San Emilio, Ilocos Sur	6:35 heads native pig
Techno Demo on Free-range production	Nueva Segovia St., Vigan City, Ilocos Sur	3,200 improved chicken
Techno Demo on Free-range production	Casilagan, Sto. Tomas, La Union	1:25 heads goat
	Imelda, Burgos, La Union	1:25 heads goat
	Narra Oeste, San Fernando City, La Union	1:25 heads goat
	Consuegra, Bangar, La Union	1:25 heads goat
	Bulalaan, Sudipen, La Union	1:25 heads goat
	Bacnit, Mabini, Pangasinan	1:25 heads goat
	Rabon, Rosario, La Union	1:25 heads goat

b. Extension Support, Education and Training Services

• Conduct of trainings and training-related events
- Conducted 15 batches of Farmer Livestock School on Goat Enterprise Management (FLS-GEM) benefiting 420 farmers providing them with one head of buck and two heads of doe for each class for upgrading of the stocks

- Conducted four (4) production-related trainings basic beekeeping and training on animal production and management practices benefiting six (6) LGU Livestock Technicians from Sta. Lucia, Ilocos Sur and Bauang and Rosario, La Union

• Establishment of technology demonstrations
- Established 12 technology demonstrations on livestock showcasing different livestock and poultry technologies which are economical, effective and practical in a given agro-economic setting

II. AGRICULTURAL MACHINERIES, EQUIPMENT, FACILITIES AND INFRASTRUCTURE PROGRAM

a.Agricultural Machineries, Equipment and Facilities

• Establishment of LGU multiplier farms
- Established three (3) multiplier farms in Bauang and Rosario, La

Union, and Sta. Lucia, Ilocos Sur

- Upgraded 16 multiplier farms in:

PROVINCE	MUNICIPALITIES
Pangasinan	Tayug
	Sta. Barbara
	San Fabian
	Mangaldan
	Mangatarem
	Alaminos City
La Union	Agoo
	Aringay
	Naguilian
	Santol
Ilocos Sur	Sta. Maria
	Galimuyod
Ilocos Norte	Laoag
	Vintar
	Marcos

Figure 23. Documentation of some of the implemented FLS-GEM (up) and monitoring of target multiplier farms (down) for upgrading and validation of prospective clients.

Organic Agriculture Program

A. OUTCOMES/OUTPUTS

The region continuously supports the implementation of the Organic Agriculture Program towards a competitive and sustainable organic agriculture industry that contributes to better incomes and sustainable livelihood, improved health and environmental protection.

This year, a total of 2,582.48 hectares or 19% were already converted out of the targeted area of 13,533 hectares of conversion to Organic Agriculture, which is 5% of the total regional production area of 340,000 hectares in Region I, with OA practitioners totaling 3,884.

A total of 671 individuals and 69 beneficiaries were provided with various interventions such as production support services, maintenance of technology demonstrations, conduct of trainings and training-related events, and distribution of machineries and equipment.

B. INPUTS/INTERVENTIONS

I. TECHNICAL AND SUPPORT SERVICES PROGRAM

a. Production Support Services

• Distribution of production inputs and equipment
- Distributed a total of 19,000 kilograms of molasses benefiting 873 farmers

- Distributed 140 pieces of fiber drums and 100 rolls of nets for organic vegetable production

• Maintenance of production facilities
- Maintained nine (9) production facilities in the stations

b. Market Development Services

• Conduct of Organic Congress
- Conducted the 2nd Regional Organic Congress last June 20-22, 2018 at Hotel Linda Suites, Vigan City, Ilocos Sur with 294 participants which showcased Organic Agriculture practitioners' products, technologies and marketing strategies

- Provided stall rental subsidy of two (2) Organic Agriculture producers at CSI

Figure 24. Ilocos Sur Bureau of Jail Management and Penology (BJMP) Organic Farm Project Leader Mr. Tito Batin proudly tours the participants of the ROAC in the 3,000 sq.mtrs. vegetable garden of the inmates.

Lucao, Dagupan City, Pangasinan and CSI San Fernando City, La Union

c. Extension Support, Education and Training Services

• Conduct of trainings and training-related events
- Installed three (3) Organic Agriculture Internal Control System (ICS) for smallholder groups to reduce cost for farmers with low income towards a system of combined internal and external controls for organic certification

- Conducted a hands-on training on OA technologies benefiting 251 farmer-individuals and 16 consultation-meetings with 153 LGU partner-participants

- Participated during the National Organic Agriculture Congress held last November 12-16, 2019 at Cebu City with 52 delegates from the region

• Installation of Organic Agriculture Internal Control System (ICS)
- Installed three (3) Organic Agriculture Internal Control System (ICS) for smallholder groups to reduce cost for farmers with low income towards a system of combined internal and external controls for organic certification

• Dissemination of IEC materials
- Produced and disseminated 4,000 copies of IEC materials on LikaSaka Manwal and Organic Vegetables Production to the organic practitioners, organic advocates, LGUs, academe, and walk in clients

• Maintenance of OA technology farms
- Maintained six (6) technology demonstration farms with the following details:

Organic Agriculture Program

LOCATION	CONTACT PERSON	COMMODITY	AREA (HA)
LGU Cervantes, Ilocos Sur	Ms. Cecilia Sawey	rice, vegetables	1.7
Sumader, Batac City, Ilocos Norte	Mr. Rogelio Balisacan	vegetables, swine, and chicken	0.53
Palacapac, Candon City, Ilocos Sur	Ms. Angelita Wagayen	dragon fruit	0.5
Banao & Arwas, Bani, Pangasinan	Mr. Marianito Castelo	fruit trees, vegetables, vermicompost	2.2
Bolo, Labrador, Pangasinan	Mr. Hipolito Mislang, Sr.	rice, vegetable	1.0
Mangato, Laoag City, Ilocos Norte	Dr. Johnny Jose	native pig and chicken	0.5

II. AGRICULTURAL MACHINERIES, EQUIPMENT, FACILITIES AND INFRASTRUCTURE PROGRAM

a. Irrigation Network Services
• Distributed four (4) units pump and engine set for shallow tube wells (STWs) benefiting 4 farmer groups or associations

b. Agricultural Machineries, Equipment and Facilities
• Distributed the following farm production and postharvest machineries and equipment
- 5 units of hand tractors with trailers
- 45 units of shredders (as one component of the Small-Scale Composting Facility (SSCF)
- 6 units of brown rice mill (micro mill)
- 7 units of vacuum sealers

Figure 25. Distribution of machineries and equipment to organic farmer-beneficiaries.

Other Regular Programs

The region provided various interventions for the development of crops and livestock sector. For 2018, a total of 1,582 individuals and 81 groups were benefited from production support services, market development services, training and training-related events, and regulatory services.

I. TECHNICAL AND SUPPORT SERVICES PROGRAM

a. Production Support Services

• Distribution of forage seeds and planting materials, and soil inoculants
- Distributed a total of 8,009 forage cuttings/materials, such as Napier and Trichantera, benefiting 18 individual CPAR project cooperators on goat, IFED project on free-range chicken (trichantera seedlings) and interested individual farmer/raisers

- Distributed 100 kilograms of soil inoculants

b. Market Development Services

• Conduct/Assistance/Funding of marker-related events
- Facilitated the conduct of 22 local market-related-events, assistance to 2 trade fairs, and funding of 12 same events benefiting 81 groups and 2,404 individuals

- Generated a total of PhP4.12 Million from sales of market-related events

- Consummated 552 metric tons of assorted commodities valued at PhP17.77 Million

c. Extension Support, Education and Training Services

• Conduct of trainings and training-related events
- Conducted 7 trainings on Gender and Development, and Capability Enhancement for Senior Citizens benefiting 860 participants

d. Research and Development

• Conduct of research and development activities
- Conducted eight (8) production-related research studies as follows:

1.Improvement of Integrated Nutrient Management of Adaptable Peanut

Varieties in Ilocos Region
2. Field Trial of Biological Pesticides for the Control of Major Insect Pests of Mango

3. Evaluation on the Growth and Yield Performance of Garlic Applies with Different Plant Growth Promoter

4. Establishment of Good Agricultural Practices (GAP) on Garlic

5. Establishment of GAP on Onion

6. Potential Yield of Garlic using Different Processed Manure in Combination with Inorganic Fertilizer

7. Evaluation of Micronutrient Balls for Growth Performance of Goats

8. Evaluation of Commercially Available Probiotics on the Growth Performance of Broilers

- Maintained 6 research facilities:

1.Ilocos Norte Research and Experiment Center (INREC) – Batac City, Ilocos Norte

2. INREC- Dingras, Ilocos Norte

3. Ilocos Region Integrated Agricultural Research Center (ILIARC) – Bacnotan, La Union

4. Pangasinan Research and Experiment Center (PREC) – Sta. Barbara, Pangasinan

5. PREC-Sual, Pangasinan

6. PREC – Breeding Station, Sta. Barbara, Pangasinan

II. AGRICULTURAL MACHINERIES, EQUIPMENT, FACILITIES AND INFRASTRUCTURE PROGRAM

a. Farm-to Market Roads (FMR)

Funded the construction of 104 Farm-to-Market Road (FMR) projects with 67.1 kilometers length valued at PhP546.3 Million. These FMR projects were constructed through the Department of Public Works and Highways.

PROVINCE/DISTRICT	NO. OF FMR PROJECTS	LENGTH (KM)	PROJECT COST (PHP '000)
Pangasinan	**49**	**30.0**	**304,000.00**
District 1	6	3.0	30,000
District 2	11	8.2	82,000
District 3	6	3.2	36,000
District 4	7	3.7	37,000
District 5	5	2.7	27,000
District 6	14	9.2	92,000
La Union	**18**	**12.8**	**128,000.00**
District 1	9	5.1	51,000
District 2	9	7.7	77,000
Ilocos Sur	**17**	**10.0**	**100,000.00**
District 1	6	4.1	41,000
District 2	11	5.9	59,000
Ilocos Norte	**20**	**14.3**	**14,300**
District 1	10	9.7	9,700
District 2	10	4.6	4,600
Total	**104**	**67.1**	**546,300.00**

Figure 26. Completed FMR projects for CY 2018 in various sites.

Other Regular Programs

III. AGRICULTURE AND FISHERY REGULATORY SUPPORT

a. Registration and Licensing

• Evaluated, inspected and endorsed applications of the following:

APPLICANTS	APPLICATION	NO. OF APPLICANTS			APPROVING ENTITY
		New	Renew	Total	
Poultry and Livestock Transport Carriers	Accreditation	158		158	Bureau of Animal Industry (BAI)
Veterinary Drugs and Products (VDAP)	License to operate	62	392	454	BAI
Feed Establishments	Registration	190	870	1,065	BAI (new), DA-RFO 1 Regional Executive Director (renewal)
Livestock, Poultry & By-Products Handler's (LPH)	Registration certificate	183		183	BAI
Animal Welfare Facilities	Registration and accreditation	59		5	
• Petshop		5		13	
• Veterinary Clinic Farms		13		34	
• Farms		34		3	
• Laboratory Animal Facility		3		4	
• Zoo Animal Boarding Facility		4		5	
GAP farms	Certification	136		136	GAP Certification Committee

b. Quality Control and Inspection

• Conducted monitoring and inspections of 1,435 feed establishments and 590 veterinary drugs and product outlets

• Collected 2,106 feed samples from different feed establishments for laboratory analysis to test the quality assurance of feed and feed ingredients being sold in the market

• Collected 421 corn samples – grits, cracked and whole and submitted for aflatoxin analysis

• Maintained the multi-commodity quarantine checkpoint in Carmen, Rosales, Pangasinan where 1,864 vehicles were flagged down to monitor and inspect animals, crops and fish commodities that are being shipped-in and out in the region

Figure 27. Monitoring and inspection of feed establishments.

PART III

Development Initiatives

Enhanced Assets Dev't & Mngmt System

For 2018, the agency has enhanced/improved assets development and management system through construction/establishment of physical infrastructure projects in the regional office and in the provincial/research stations. The table below shows the list of infrastructure projects with corresponding cost and status.

NO.	LOCATION	PROJECT TITLE	PROJECT COST	STATUS
1	PREC-Sta. Barbara, Pangasinan	CY 2018 Repair & Rehab of Dormitory cum Crops Laboratory	33,628,606.10	26% On-going fabrication and installation of column rebars
2	PREC-Sta. Barbara, Pangasinan	CY 2018 Repair & Rehab of AEW Training Center cum Archive Building	13,000,000.00	76% On-going installation of tiles, roofing and windows
3	PREC-Sta. Barbara, Pangasinan	CY 2018 Repair & Rehab of Ilocos Region Integrated Agricultural Laboratories Phase 3A	41,501,539.98	28% For payment of 15% mobilization
4	DA-RFo 1. San Fernando City, La Union	CY 2018 Construction of DA GAP Building	3,784,104.06	2% Excavation for mat footing
5	DA-RFo 1. San Fernando City, La Union	Repair/Rehab of Roof Deck Annex	7,911,172.68	On-going installation of trusses
6	DA-RFo 1. San Fernando City, La Union	Construction of DA-RFO 1 Extension Building	29,887,995.81	12% Installation of for, works and rebars for columns
7	DA-RFo 1. San Fernando City, La Union	Additional Lightings (Gym & Function Hall) at DA-RFO 1 Deck	162,026.26	Completed

Figure 28. (On-going) CY 2018 Repair & Rehab of Dormitory cum Crops Laboratory

Figure 29. The proposed design of the dormitory cum crops laboratory.

Enhanced Assets Dev't & Mngmt System

Figure 30. (On-going)CY 2018 Repair & Rehab of AEW Training Center cum Archive Building

Figure 31. The proposed design of the AEW training cum archive building.

Enhanced Assets Dev't & Mngmt System

Figure 32. CY 2018 Repair & Rehab of Ilocos Region Integrated Agricultural Laboratories Phase 3A

Figure 33. The proposed design of the Integrated Agricultural Laboratories Phase 3A.

Enhanced Assets Dev't & Mngmt System

Figure 34. (On-going) CY 2018 Construction of DA GAP Building

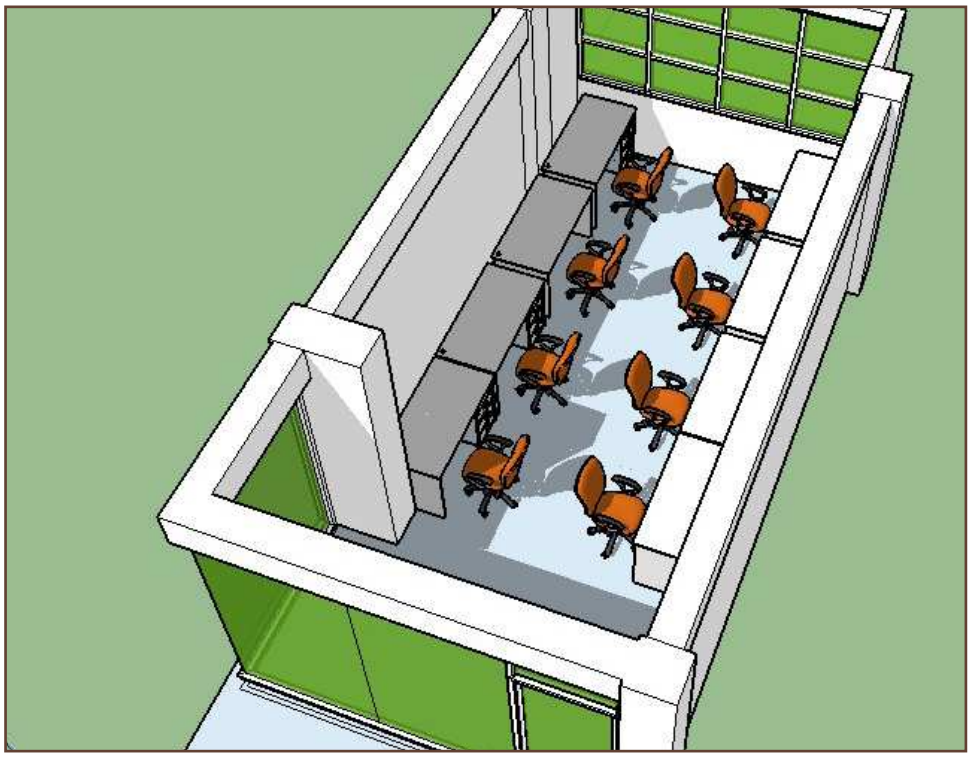


Figure 35. The proposed design of the DA GAP building.

Enhanced Assets Dev't & Mngmt System

Figure 36. (On-going) Repair/Rehab of Roof Deck Annex

Figure 37. The propose design of the Roof deck annex.

Enhanced Assets Dev't & Mngmt System

Figure 38. (On-going) Construction of DA-RFO 1 Extension Building

Figure 39. The proposed design of the DA-RFO 1 extension building.

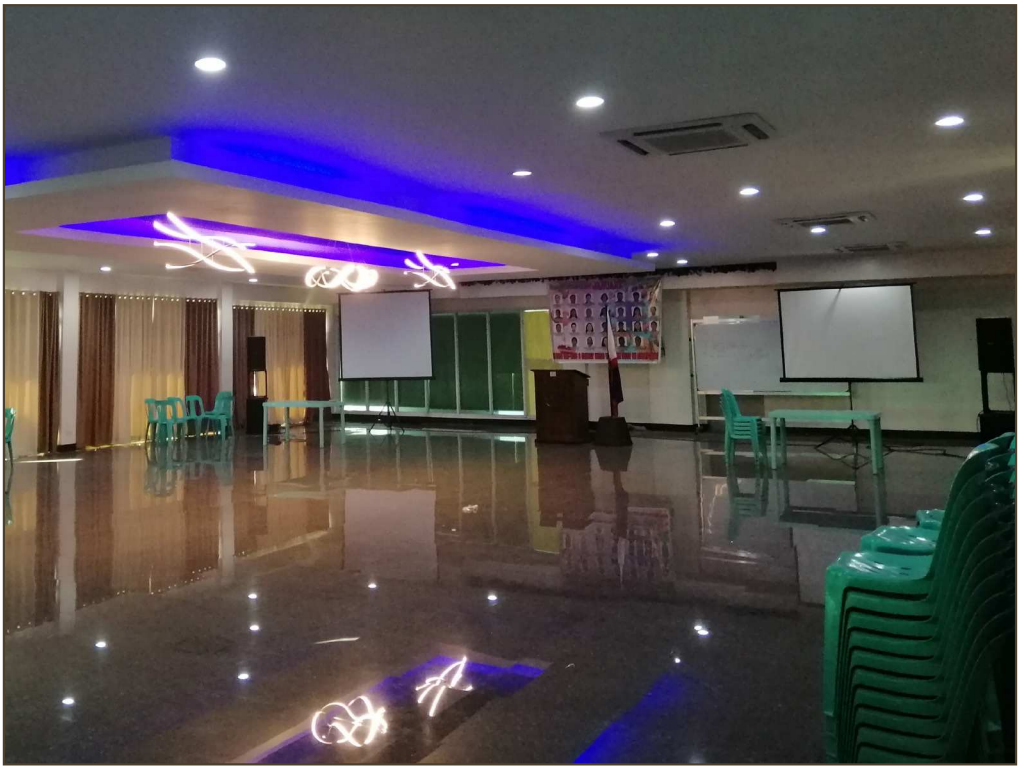


Figure 40. The completed additional lightings (Gym & Function Hall) at DA-RFO 1 Roof Deck.

Enhanced Organization System Mgmt

A. CERTIFICATION TO INTERNATIONAL QUALITY STANDARDS

The Certification, which was issued by the Certification International Philippines, Inc., is a proof that the agency meets the requirements for a quality management system in demonstrating the ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements conforming with the international standards. DA-RFO I's ISO 9001:2015 Certification is the second DA-Regional Field Office in the country to be ISO certified, along with the DA-RFO II in Cagayan Valley Region.

Figure 41. RED Lucrecio R. Alviar, Jr. poses for posterity alongside other DA-RFO 1 key officials upon the awarding of the ISO certification by the Certification International.

Likewise, the Regional Feed Chemical Analysis Laboratory (REFCAL) of the Integrated Laboratories Division of DA-RFO I was also awarded the Certificates of Registration to ISO 9001:2015 and to ISO 14001:2015 by the Certification International Philippines, Inc. Being awarded with IMS Certificates capped the RFCAL's journey towards establishing an Integrated Management System (IMS) to ensure the deliverance of fast and reliable services to meet the customers' expectations and satisfaction.

Earning the Integrated Management System certification means that ILD-RFCAL satisfactorily meet the requirements of ISO Management System Standards.The scope of the certification includes the provision of laboratory services in support to regulatory functions of DA-RFO I.

Figure 42. Mr. King Bergonio (left), Regional Field Chemical Analysis Laboratory Chief, receives the laboratory's ISO-IMS certification (QMS&EMS) together with the Integrated Laboratories Division Chief, Ms. Consuelo Belarmino, and RED Alviar.

B. FORMULATION OF THE 5-YEAR CORPORATE PLAN

For 2018, the DA RFO I crafted and launched its 5-Year Corporate Plan for 2018-2022 with the theme, "A Big Leap to the Future: DA Ilocos Region in the next five years". The Corporate Plan serves as guide on how the agency become a more credible source of public goods and services and a responsible trustee of public resources. It is a reflection of the DA-RFO I whole system's aspiration of what to achieve in the next five years, how to do it in tandem with its partners in agricultural development, all for the benefit of the entire agriculture sector.

DA-RFO I is the first DA regional field office in the country to craft its own corporate plan.

Figure 43. RED Alviar leads the launching of the corporate plan alongside NEDA R1 Dir. Nestor G. Rillon, RTD for Operations Erlinda F. Manipon, RTD for Research & Regulations Orlando J. Lorenzana, and corporate plan consultant Dr. Evelyn Aro-Esquejo.

Enhanced Organization System Mgmt

During the launching of the Corporate Plan, the DA RFO I awarded Engr. El Tubon and Mr. Richard Regacho, staff of the Regional Agriculture Engineering Division and the Planning, Monitoring and Evaluation Division, respectively, as winners of the DA-Corporate Hymn and Logo Contest. Mr. Tubon and Mr. Regacho received from DA a certificate of recognition and a cash prize of P50,000.00 and P10,000.00, respectively. As winners, Mr. Tubon's composition is now adopted as the DA Ilocos Hymn to be sang during the flag raising ceremonies while the Corporate logo designed by Mr. Regacho is being used in all the DA-RFO I's information and communication materials which will provide a unique identity for the DA-Ilocos Region.

Figure 44. From right to left: RTD for Operations Erlinda F. Manipon, Mr. Richard Regacho (winner), RTD for Research and Regulations Orlando J. Lorenzana, and RED Lucrecio R. Alviar, Jr. during the awarding of the certificate of recognition for the logo contest.

Figure 45. From right to left: RED Alviar, Mr. El Tubon (winner), RTD Manipon and RTD Lorenzana during the awarding of the certificate of recognition for the DA-Hymn corporate hymn competition.

C. MORE EFFICIENT RESOURCE MANAGEMENT SYSTEM

The DA RFO I has showed more efficient resource management system as it was hailed as Number 1 for the over-all excellent performance in terms of physical and financial performances of the five Banner Programs of the Department of Agriculture– the Rice, Corn High Value Crops Development, Livestock and Organic Agriculture in 2018. With the full support and commitment of the workforce of the Department, the region achieved the said highest performance from among 16 regions in the country.


DEPARTMENT OF AGRICULTURE
awards this
CERTIFICATE OF RECOGNITION
to
Regional Field Office 1
(Ilocos Region)
1st Place
for their Over-All excellent performance in the physical and financial accomplishment of the National Rice, Corn, High Value Commercial Development, Livestock and Organic Agriculture Programs of the Department of Agriculture for FY 2018.
Given this 8th day of February, 2019 at Bureau of Soils and Water Management Convention Hall, Diliman, Quezon City, Philippines
EMMANUEL F. PIÑOL
Department of Agriculture, Secretary

Figure 46. The certificate of recognition awarded to DA-RFO 1 for bagging the 1st place in physical and financial accomplishments among other regions.

PART 4

Special/Other Projects and Activities

Philippine Rural Development Project

A. I-PLAN COMPONENT

The Investments on AFMP Planning at the Local and National Levels (I-PLAN) Component of the PRDP is tasked to draft value chain analysis, evaluate Provincial Commodity Investment Plans, and strengthen the planning and budget execution process of the DA through the institutionalization of the Agriculture and Fishery Modernization Plan.

The I-PLAN Component is also designated to prioritize commodities to be supported by the PRDP in the regions. For Region 1, the priority commodities include mango, goat, peanut, mungbean, onion, garlic, bangus, tomato, dragon fruit, and coffee. All enterprise and infrastructure subprojects funded by the Project shall be supportive of these commodities.

In 2018, the PRDP funded the updating of the AFMP 2018-2023 which targets to mainstream and adopt approaches used by the PRDP such as the Expanded Vulnerability and Suitability Analysis (eVSA), Value Chain Analysis (VCA), and the Provincial Commodity Investment Plan (PCIP) in DA regular programs.

Figure 47. Priority commodities in Region 1.

Figure 48. The Pasuquin Farmers Garlic and Onion Growers Association (PFGOGA) received the packages of the Onion Production, Consolidation and Marketing Enterprise under the Philippine Rural Development Project (PRDP) during a turnover ceremony held at Barangay Nalvo, Pasuquin, Ilocos Norte on October 19, 2018.

B. I-REAP COMPONENT

The Investments on Rural Enterprises for Agri-Fishery Productivity (I-REAP) Component in Region 1 has funded 66 enterprise subprojects with a total investment cost of Php139.72 million. The Province of Pangasinan received the biggest share of the enterprise subprojects in Region 1 or 36 subprojects worth Php59.06 million.

Several PRDP enterprise subprojects were awarded in CY 2018. Among them are the Onion Production, Consolidation and Marketing Enterprise of the Pasuquin Farmers Garlic and Onion Growers Association in Pasuquin, Ilocos Norte; Salad Tomato Contract Farming and Support Facility Enterprise of the Tugui Grande Fresh Produce Farmers Association in Bani, Pangasinan; Tomato Production, Consolidation and Trading Enterprise of the Urdaneta City Organic Farming Rice Corn Vegetable Growers Association, Inc. in Urdaneta City, Pangasinan; Salad Tomato Production and Marketing Enterprise of the Hundred Islands Farmpreneurs Agriculture Cooperative in Alaminos City, Pangasinan; and Integrated Quality Peanut Seed Production and Farm Service Enterprise of Conconig East Multi-Purpose Cooperative in Sta. Lucia, Ilocos Sur.

The I-REAP Component aims to increase productivity and marketability of agriculture and fishery products through increased access to information and support

services; increase farm and fishery household incomes through engagement in value-adding activities; and improve the protection and conservation of the natural resource base of identified enterprises through alternative livelihoods and support facilities.

Figure 49. Number of established PRDP subprojects and identified beneficiaries in Region 1.

C. I-BUILD COMPONENT

The Intensified Building-Up of Infrastructure for Logistics and Development (I-BUILD) Component generally aims to reduce average travel time from farms to markets, increase traffic count in subproject areas, increase cropping intensity and yield in subproject areas, reduce water-fetching time, decrease incidence of water-borne diseases in households, and increase farmer households access to post-harvest/production/processing/marketing and fishery infrastructure facilities by the end of PRDP.

There are 33 infrastructure subprojects in Region 1 with a total portfolio cost of Php1.974 billion. The region's portfolio is composed of infrastructures such as farm to market roads, farm to market road with bridges, communal irrigation system, potable water system, and other infrastructures (i.e. municipal warehouse, multipurpose drying pavement, and tramline).

Philippine Rural Development Project

In 2018, four (4) infrastructure subprojects funded by the PRDP were completed. These include the Rehabilitation of the Balecbec-Basca Farm to Market Road and Balecbec Bridge traversing the municipalities of Naguilian and Aringay in La Union, the Construction of Oraan Bridge with Approaches in Manaoag, Pangasinan, the Construction of Municipal Warehouse with Multi-Purpose Drying Pavement in Manaoag, Pangasinan, and the Construction of the Namita Agricultural Tramline in Cervantes, Ilocos Sur.

In the recently held Luzon A Cluster Year-end Assessment and General Assembly, the PRDP hailed the Oraan Bridge as the best I-BUILD bridge subproject in Northern Luzon while the Province of Ilocos Norte was given recognition for having the highest average of subproject completion in North Luzon Cluster.

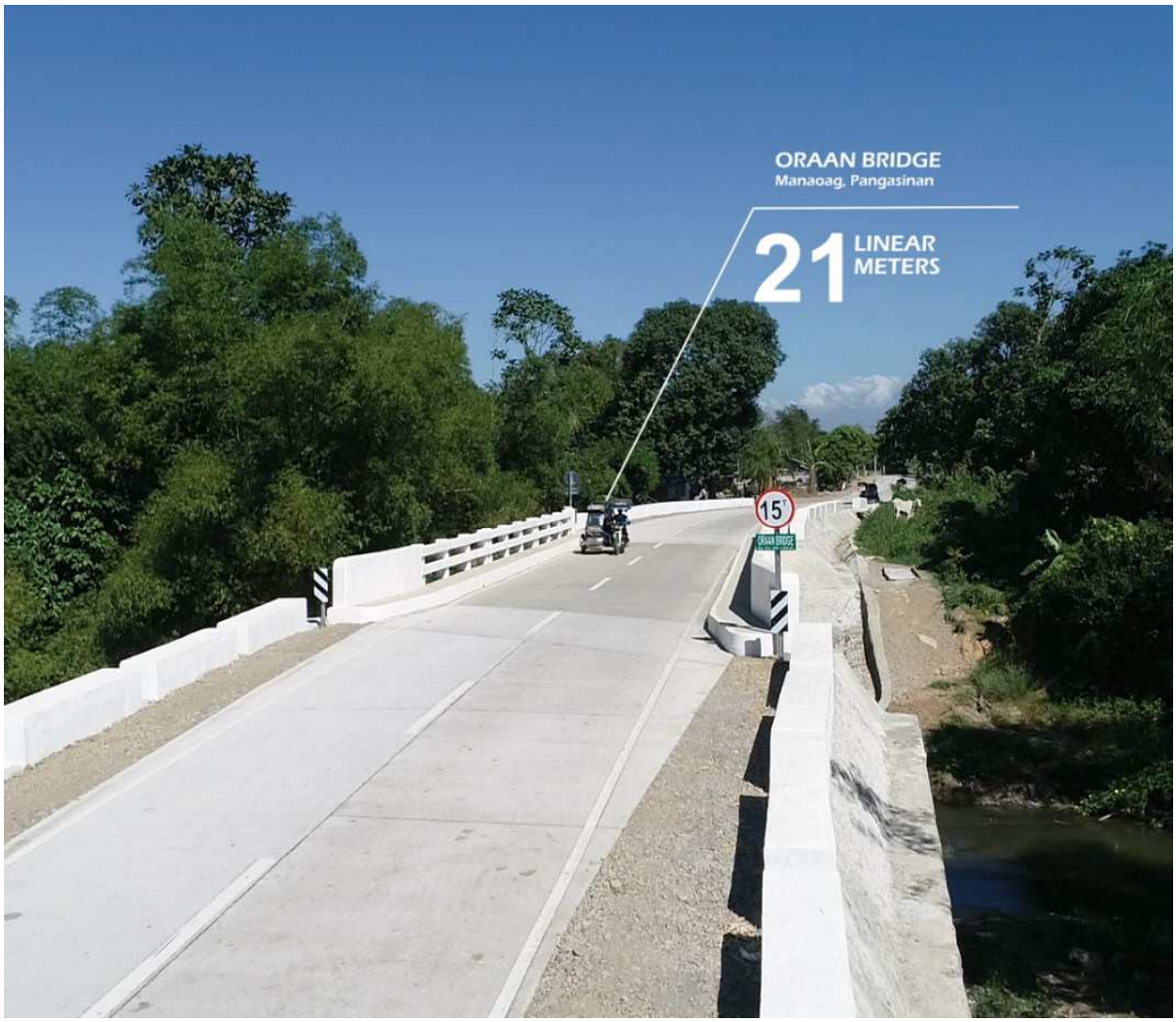


Figure 50. PRDP hailed the Oraan Bridge with Approaches located in Manaoag, Pangasinan as the best IBUILD bridge subproject in Northern Luzon.

Philippine Rural Development Project

D. HIGHLIGHTS OF PRDP ACTIVITIES IN 2018

• Citizen's Monitoring

Citizens can monitor the subprojects daily because they reside in the subproject sites. The PRDP saw this fact as an opportunity to intensify its monitoring methods. With the Citizen's Monitoring Training, residents of subproject sites are taught basic elements of quality construction. Teaching the residents about quality construction is aimed to ensure that the subproject is accomplished according to PRDP standards Also through the CMT, the PRDP aims to create a sense of ownership in the citizens through their involvement and help ensure the sustainability and maintenance of the infrastructure subproject.

Figure 51. Rehabilitation of Tapao-Tigue-Poblacion 2-Sta. Cruz-Lang-ayan Farm to Market Road Currimao, Ilocos Norte

• Accreditation Training of Peanut Seed Growers

The Conconig East Multi-Purpose Cooperative of Sta. Lucia, Ilocos Sur and the Municipal Federation of Rural Improvement Club of Sto. Domingo in Sto. Domingo, Ilocos Sur attended the Accreditation Training of Peanut Growers in Batac City, Ilocos Norte on August 8-10, 2018. The training featured lectures on the Mechanics, Policies and Guidelines on Seed Certification; Field Inspection and Rouging; Seed Sampling, Sample Preparation and Tagging; Varietal Selection, Varietal Maintenance and Seed Storage; Cultural Management Practices; and Process Flow of Good Agricultural Practices.

The participants also had a hands-on workshop on seed testing procedure supervised by Ms. Editha Gamet from the Bureau of Plant Industry (BPI). The BPI is responsible for the issuance of accreditation certificates to farmer groups.

• Farmers get an average 15.98% discount on PRDP tractors

In March 2018, a Rapid Appraisal of Emerging Benefits (RAEB) was held among the members of Piddig Basi Multi-Purpose Cooperative in Piddig, Ilocos Norte; Lumaban Agrarian Reform Cooperative in Burgos, Ilocos Sur; and Talogtog Agrarian Reform Cooperative in San Juan, La Union. Each farmer organization received a Farm Mechanization Service Facility (four-wheel tractor) from the PRDP. The RAEB, a tool for gauging the immediate impacts of the PRDP, revealed that farmer's expenses on tractor rental was reduced by 15.98% on the average.

Figure 52. Farmer-beneficiaries' testimonies on the impacts of the distributed tractors under PRDP.

Adaptation & Mitigation Interventions in Agriculture

The Department of Agriculture has launched the Adaptation and Mitigation Initiative in Agriculture (AMIA) with an overall vision of a Philippine agri-fisheries sector that enables local communities to manage climate risks while pursuing sustainable livelihoods. As one of its overall approaches, AMIA promotes Climate Resilient Agriculture (CRA) technologies/ practices which are highly responsive to the needs of our stakeholders. For this purpose, the DA has supported the establishment of AMIA pilot project entitled Community-Based Action Research for Climate Resilient Agriculture through DA- Bureau of Agricultural Research (DA-BAR).

The municipality of San Emilio in Ilocos Sur was identified as the recipient of the pilot BAR-funded AMIA project in Region I. The said municipality is highly vulnerable to climate hazards because it has low capital indices in economic, human, institutional and physical aspects. The three (3) pilot barangay-beneficiaries are Kalumsing, Lancuas and Sibsibbu with the following agri-fishery profile:

SPECIFICATIONS	
Ecosystem	Steep, rolling, flat, pond/river
Major crops	Rice, corn, tobacco, pinakbet, vegetables, root crops, mongo
major livestock	Exotic pig, native pig, native chicken, goat, cattle
Major cropping pattern	Rice-tobacco-corn/ vegetable
Major problems encountered in crop and livestock production	Pest and diseases, insufficient water, insufficient technical knowhow, insufficient capital, low income because of low price of agri products; increased cost of inputs for crops and livestock
Market of products	Candon City, Vigan City, Mt. Province
Source of water	Raine, river, irrigation, Drought typhoon, landslides
Major climate hazards/risks	Drought, typhoon, landslides
Pronounced weather	Wet (June - November) Dry (December - May)

In order to capacitate farmer partners on the different basket of options on CRA technologies to address the major climate hazards identified, the following were the various capacity development activities conducted:

- Hands on Training on Agricultural Residues and By-product Processing;
- Training on Good Agricultural Practices for Crop-Livestock Production Systems in the Uplands;
- Training on Climate Change Mitigation Practices for Upland Agriculture;
- Mushroom Production and Processing;
- Soya Production and Processing;
- Bee Production;

- Native Pig and Chicken Production;
- Training on Entrepreneurship Development and Financial Literacy; and
- Value-Adding for the major commodities.
- low cost drip irrigation;
- livestock, poultry and crop integration; use of drought variety crop;
- use of fermented feed for native pig;
- water harvesting polyethylene plastic and drums; intercropping; bee production and value adding/ processing; and
- Strengthened three (3) newly registered farmer associations

Processed value adding products such as soya polvoron, soya coffee, soya energy drink, turmeric tea, ube halaya, atsarang papaya, flavoured vegetable chips, embotido, native longanisa, assorted vegetables, duck eggs and vermicast

The outputs of the project are as follows:
Established three (3) CRA learning sites featuring different CRA technologies:

- diversified farming;
- Increased production in rice by 12%;
- Increased income of farmers by 22-25% of additional PhP2,125 per month through value adding of assorted commodities and livestock raising;
- Increased number of farmers by 90%;
- Improved access to weather information; and
- Increased access to credit by 10%

Figure 53. Processed products of the AMIA project beneficiaries which are supplied to Candon City, Ilocos Sur; Baguio City; and as far as in Mt. Province.

Regional Agriculture and Fisheries Council

The Agricultural and Fishery Council (AFC) has implemented the mandated programs and projects taking along its role as the policy recommending body and the monitoring arm of the Department of Agriculture (DA).

For CY 2018, the Regional Agricultural and Fishery Council (RAFC) in Region I was able to spearhead the conduct of 13 meetings that include 4 regular meetings, 4 sectoral meetings, 2 operational meetings and 3 working committee meetings. Likewise, supervised and participated provincial and municipal AFC consultations.

Figure 54. Recipients of the 'AFC Handog Ko, Pagmamahal Ko' outreach program fall in line to receive medical assistance from the volunteers.

Among the significant accomplishments of the RAFC I were as follows:

• Launching of the newsletter “Damdamag AFCs Rehiyon I” on July 27, 2018 as the official quarterly publication of RAFC I to highlights the activities and accomplishments of the AFC in the region;

• Conduct of “AFC Handog Ko, Pagmamahal Ko” outreach program that benefitted over 200 residents of Brgy Lipit Sur in Manaoag, Pangasinan. The event was successfully conducted in partnership with the local nurses, pharmacists, doctors and dentists from the Department of Health through the Region I Medical Center of Dagupan City, Pangasinan; the Rotary Club of Paniqui, Tarlac, and the Local Government Unit of Manaoag, Pangasinan;

Figure 55. Among the healthcare services provided for the AFC outreach program were free medical and dental check-ups and tooth extractions alongside orientation briefing on the awareness of proper nutrition, common diseases like dengue, leptospirosis, and rabies.

• Initiated the Search for Best Performing AFCs in Region I to give due recognition to deserving target city/municipal AFCs for their outstanding accomplishments;

• Conduct of Regional Summit on Climate Change benefiting 120 farmer participants from the provinces of Pangasinan, La Union, Ilocos Sur, and Ilocos Norte. The summit is anchored on the innovations in winning the war on climate change; and

•Monitoring of major projects of DA RFO I through the AFC Monitoring Teams.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PART 5

Agricultural Achievers

Gawad Saka

The Gawad Saka is an annual search of the DA for outstanding individuals and groups in the farming and fishing sectors who displayed exemplary performance and contributions in the development and promotion of agriculture in their community.

For 2018, the following seven (7) individuals and five (5) groups were awarded by the DA RFO I during the Regional Gawad Saka Awarding Ceremonies:

AWARDEES		CATEGORY	BARANGAY/MUNICIPAL/ PROVINCE
1	Romeo Ganiron	Outstanding Rice Farmer	Brgy. Ben-agan, Batac City, Ilocos Norte
2	Edmar Piano	Outstanding Corn Farmer	Brgy. Isidro, Bantay, Ilocos Sur
3	Gilbert Pasion	Outstanding Large Animal Raiser	Solsona, Ilocos Norte
4	John Lei Ganiron	Oustanding Young Farmer	Brgy. Ben-agan, batac City, Ilocos Norte
5	Edita Dacuycuy	Outstanding Agri-Entrepreneur	Burgos, Ilocos Norte
6	Young Farmer 4H club	Outstanding Young Farmer/ Fisherfolk Organization	Rosario, La Union
7	Ray Raphael Dacones	Outstanding Organic Farmer	Mangatarem, Pangasin-an
8	Magumbayan MPC	Outstanding Small Farmer Organization	Laoag City, Ilocos Norte
9	Balidbid RIC	Outstanding Rural Improve-ment Club	Salcedo, Ilocos Sur
10	Dominador Ignacio	Outstanding Farm Family	Laoag City, Ilocos Norte
11	Municipal Agriculture and Fishery Council	Outstanding MAFC	San Nicolas, Ilocos Norte
12	Liza Domingo	Outstanding Agricultural Ex-tension Worker	Solsona, Ilocos Norte

Nat'l Corn Quality Achiever Award

The National Corn Program spearheaded the 2018 National Quality Corn Achievers' Award to distinguish the achievements of top performing LGUs and DA RFOs in support to the development of the corn industry, enhance the corn cluster participation and strengthen the DA-LGU partnership in the production of quality corn.

For 2018, Region I bagged one Outstanding Province award, four Outstanding Cities and Municipalities award, 11 Outstanding Agricultural Extension Workers (AEWs) and four Municipal Corn Coordinators awards.

The province of Pangasinan having been chosen for three consecutive years as Outstanding Province along with the municipality of Alcala in the same province were among the Hall of Famer Awardees receiving cash prizes of P5 million and P2 million, respectively.

The non-Hall of Famer awardees like the municipalities of Sto. Tomas, Burgos and Vigan City received P1 million worth of projects while the Outstanding AEWs received P50,000 and P20,000 for the Hall of Famer Awardees and Non-Hall of Famer awardees, respectively.

Figure 56. Awardees from Region 1 during the National Corn and Cassava Achievers Awards.

R & D Outstanding Awards

This year, the Research Division was given with various outstanding awards in research projects, namely:

• Gold Award (Development Category) for the Community-based Participatory Action Research (CPAR) on Integrated Rice-Based Farming Systems Management: Approach Towards Community-driven Agricultural Development Project in Ilocos Norte during the National Research Symposium at PICC Manila on November 7-8, 2018;

• First Place (Development Category) for the CPAR on Integrated Rice-Based Farming Systems Management: Approach Towards Community-driven Agricultural Development Project in Ilocos Norte during the National Research Symposium at PICC Manila on November 27-29, 2018;

• Best Livestock Research Project for the Technology Commercialization on Slaughter Goat (Triple Cross) in Pangasinan during the 1st National Livestock Program Research and Development Review on November 21, 2018, winning Php5 Million worth of project;

Figure 57. Mr. Ariel Agresor presents their project on CPAR on Integrated Rice-Based Farming Systems Management: Approach Towards Community-driven Agricultural Development Project in Ilocos Norte during the National Research Symposium at PICC, Manila.

Figure 58. The booth showcases the champion commodities of the Ilocos Region. Among the materials used as decorations were corn, garlic, and mung bean.

• First Prize in Best Booth Category during the 14th Agriculture and Fisheries Technology and Product Exhibition at SM Megamall on August 30-September 02, 2018, won Php3 Million worth of projects; and

• First Prize in Best Booth Category, winning PhP10,000.00 cash prize during the Ani Festival of Dingras, Ilocos Norte.


Outstanding
Excellent
Very Good
Satisfactory
Fellow Average
GREEN VALLEY HOTEL
BLUE

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BLUE


2018
DA-RFO 1
YEAR-END REVIEW, GENERAL ASSEMBLY &
TEAM BUILDING
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2018
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YEAR-END REVIEW, GENERAL ASSEMBLY &
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TEAM BUILDING
TEAM
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SQUAD


INCREDIBLE


R E D

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