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Department of Agriculture MANDATTE The (DA) is a government agency responsible for the promotion of agricultural development by providing framework, public investments, and support services needed for domestic and export-oriented business enterprises.

In the fulfillment of this mandate, it shall be the primary concern of the Department to improve farm income and generate work opportunities for farmers, fishermen and other rural workers. It shall encourage people's participation in agricultural development through sectoral representation in agricultural policy-making bodies so that the policies, plans and programs of the Department are formulated and executed to satisfy their needs.

It shall also use a bottom-up self-reliant farm system approach that will emphasize social justice, equity, productivity and sustainability in the use of agricultural resources.



A modernized smallholder agriculture and fisheries; a diversified rural economy that is dynamic, technologically advanced and in-

ternationally competitive. Its transformation is guided by the sound practices of resource sustainability, the principles of social justice, and a strong private sector participation.



To help empower the farming and fishing communities and the private sector to produce enough, accessible and affordable food for every Filipino and a decent income for all.

message



or two consecutive years, the Department of Agriculture-Regional Field Office No. 02 (DA-RFO No. 02) had been operating on a billion budget, from an allocation of P1.175B in 2012 to P1.589B this 2013. We are thankful that the national government had entrusted us this huge budget. This means three things for us. First, more services for our clients, second, more responsibilities to handle and, third,

higher expectation for us to judiciously spend the said budget.

There is a need to prepare ourselves for this budget scenario next year. In order not to rush things, we should start planning this early and see to it that we



keep our group intact. There is no better substitute than being ready and united.

I learned much from you in the past two years. Your support has overwhelmed me. We have done so much even beyond what is expected to us. Thank you DA Region 02 family.

Join me in thanking our visitors who came around and gave their feedbacks. We will cherish the good ones and improve on our weaknesses. We also thank our partners in promoting agricultural development and those who embraced DA's programs and initiatives. I am referring to the Local Government Unit (LGUs), private sector, peoples' and non-governmental organizations, other government entities and our farmers and fisherfolks in the region. Above all, we thank the Divine Providence who gave us good weather and high production.

Noong Disyembre, kahit paano ay nakapagbigay tayo ng regalo bilang pamasko sa ating mga kasamahan at kaibigan sa indus-triya. We had a surplus production in rice so there is no reason why we cannot share our blessings to others. May kasabihan na mas maganda raw ang nagbibigay kaysa sa tumatanggap. I agree with that. And as government employees, we should al-

ways give the best service to our clients without expecting anything in return.

We received an award from DA Central Office as "Natatanging-DA Regional Field Unit 2011-2012" during the Rice Achievers Awarding Ceremonies last March 2013 at the Philippine International Convention Center (PICC). Just recently, the office was also awarded the "Sigkat Award" given by the Provincial Government of Cagayan for our ability to open more opportunities to the agriculture sector that greatly benefited our farmers in the province.

Congratulations to the provinces of Isabela and Nueva Vizcaya for making it to the 2013 Rice Achievers' Awards. Likewise, to the six municipalities, 62 Agricultural Extension Worker (AEWs) and the Pussian Small Water Impounding System Association, Pussian, Alcala, Cagayan. These awards are results of hard work and exemplars of our good working relationship with the agricultural stakeholders in Region 02.

We are now slowly reaping the fruits of our labors. Majority of us are already housed in buildings equipped with good amenities.

As we transfer to our new workplaces, may we also bring with us the renewed enthusiasm and work harder. Let us bear in mind that these developments are geared towards a sustainable agriculture that benefits our clients, the farmers and fisher folks.

The Office of the Regional Executive Director (ORED) had transferred to a new and wider place in the Agribusiness Enterprise Development Center (AEDC) building. We are already utilizing the Organic Building for our meetings and conferences and the gymnasium as a venue of our flag ceremony and convocations during Mondays and other activities.

Currently occupied are the research, operations, archives and the second floor of soils laboratory buildings. Still under renovation/ construction are the main building and guest house at the Nurse-ry Compound, San Gabriel, Tuguegarao City while the Cagayan Valley Integrated Agricultural Laboratory (CVIAL), One Stop Agribusiness Center (OSAC) and the Food and Technology Processing Center (FTPC) are established at the Regional Government Center, Carig, Tuguegarao City. Rehabilitation of our research outreach and satellite stations are likewise done simultaneously in the entire region.

Well, this is the result of empowering our station chiefs by giving them wider elbow room in planning and decision making. To ensure immediate and smooth project implementation, we also clothed them with authority to sign and approve vouchers with the agreed minimum ceiling. I am happy to see that our projects are now being implemented faster because of these policies. I am looking forward to see our clients fulfilled with our fast and courteous actions after applying these innovations.

The most important resource in an organization is its manpower. Recognizing this, we had professionalized our agency's manpower. We hired contractual staff based on Civil Service Commission (CSC) rules and agreed internal standards in order to have well-rounded, qualified and competent manpower complement not only for today but in the future. Now you can see agriculturists, accountants, engineers and information officers in our stations.

We also revitalized the Department of Agriculture Employees Association (DAEA) Region 02 Chapter. This is to ensure that the rights and privileges of our employees are being heard. We also have a strong employees' cooperative but let us try to delineate ones responsibilities to avoid conflict of interests.

As far as I remember, there was no filling up of positions since 2005. We are glad that the Rationalization Plan (RATPLAN) of the department is about to be implemented. But just the same, we requested the approval of the Department of Budget and Management (DBM) and DA-Central Office for the filling up of





positions. Of the 16 positions requested, five were approved just recently. So, there were five staffs promoted. They deserved their promotion and we congratulate them.

For the others, please bear with the management meantime. I know you will also have your time. We cannot promote all of you at the same time. But one thing is sure, the promotions and placement board was not biased in the process of selection and they will continue to do so. The board is an independent body and let us respect its recommendations. You can also count on me as the appointing authority. Rest assured that I will be fair in practicing my discretion.

I guess we effectively delivered the messages to our clients in the first half of 2013. Last January, DA-RFO No. 02 led the simultaneous launching of the 2013 National Year of Rice (NYR).

This is in support to the government's aim of achieving rice selfsufficiency by end of 2013. We also conducted grand field days and festivals. The rice group held their rice summit cum grand field day, the High Value Crops Development Program (HVCDP) with their Gulayan sa Paaralan Festival, the livestock group with their livestock and poultry exposition and similar activities were initiated by our research outreach stations. These activities are necessary for technology promotion and adoption. But I am proposing that we will conduct one big activity exhibiting all our banner programs next year. We will hold this at Quirino Experiment Station (QES), formerly Upland Research Outreach Station (UPROS), in Aglipay, Quirino, which is one of our progressing stations nowadays. Let 2014 be the year of QES. To the other stations, don't worry because we will be staging a banner year for your stations after 2014. All of you, definitely, will be hosting such kind of activity.

As to our financial performance, I am happy to inform you that our region is no. 1 as far as fund utilization is concerned. Again, thank you for heeding to my instructions to fast track our procurement activities. As early as fourth quarter last year, we had already undergone public bidding for our projects for 2014. Let's continue to be pro-active in whatever we do. We should, however, still strictly adhere to the prescribed government procurement guidelines and accounting and auditing rules. Meanwhile, let's fast track our physical performance vis-a-vis our financial performance to balance everything. By the end of the first semester, obligations should already reach 90% and physical accomplishment of 60%. We will give incentives to those who can meet or even surpass these targets. We have a new set of auditors and we warmly welcome them.

Their presence means better hope and good start for DA-RFO No. 02. All we can promise them is our being transparent in all our undertakings. We briefed them of our programs and projects and we will continue to do so. We will provide them the necessary assistance when they go around the region. They are here to guide us.

They are our partners for good governance. *Marami na po tayong nagawa pero di pa po tapos ang ating mga trabaho. Dumaan na rin tayo sa napakaraming mga pagsubok.* Let those experiences guide us to become better public servants. As they say, there is always room for improvement.

Again, I must thank all of you because you have not abandoned me during hard times. *Di ninyo lang alam pero may mga pagkakataon na di ako nakakatulog lalo na noong napakaraming Audit Observation Memorandum (AOM) na natatanggap. Diyan po ako bilib dahil andiyan pa rin kayo maski sa alanganin na sitwasyon. Muli, salamat sa inyong lahat dahil unti-unti na nating nasasagot ang mga issues na dumating sa ating atensiyon.*

Let us practice good housekeeping. We should do things in their proper timing and approach. *Iwas AOM tayo sa taong ito*. Let us keep our lines open and meet our group often. In the past months, you have observed that we regularly hold Management Committee (MANCOM) and special meetings. Well, you have seen the good results of doing these since we were able to thresh out matters that are not clear to us. During performance reviews and related activities, I urge you to always attend and give these your priority. It is here that the management can see your plights and act on these. And vice versa.

Finally, ladies and gentlemen, let us not forget our battle cry, "From Marun to Green". Right now, we are at the middle of the war. There is no turning back. Let us move further and together paint the region green.

DIR. LUCRECIO R. ALV **Regional Executive Director**





Where are we now? The MIDTERM ANALYSIS

The Cagayan Valley economy in the midterm of the Aquino Administration posted positive growth. Table 1 shows the percentage growth of Agriculture, Hunting, Forestry and Fishing (AHFF) sector from year 2011 to 2013 including the contribution of AHFF to the Gross Regional Domestic Product (GRDP) and the GRDP.

The AHFF sector reflected a decelerated positive growth, as follows: CY 2011 being the highest with 13.3% growth, CY 2012 with 8.3% growth and CY 2013 being the lowest with 0.1% growth. Under the AHFF are the Agriculture and Forestry and the Fishing subsectors. The Agriculture and Forestry subsector which the Agriculture sector belongs to reflected a decelerated positive growth, as follows: CY 2011 being the highest with 13.8% growth, CY 2012 with 9.4% growth and CY 2013 being the lowest with 0.1% growth.

CY 2011 was the year of the AHFF sector as it posted 13.3% growth. The sector contributed 4.9% to the 5.4% GRDP. The main contributory subsector to this high growth is Agriculture and Forestry which posted 13.8% growth. Fishing subsector also had a positive share with a 5.3% growth. In 2012, despite having a contraction of 6.4% from the Fishing subsector, AHFF managed to post 8.3% growth with the augmentation of the Agriculture and Forestry subsector; the AHFF sector contributed 3.4% in the 8.2% GRDP. The slowest growth was accounted in CY 2013 with the AHFF sector posting 0.1% growth and contributing 0.1% to the 6.6% GRDP. The Agriculture and Forestry subsector posted 0.1% growth while the Fishing subsector posted 0.4% growth which is an improvement from its previous growth.

Growth slowed down with the AHFF sector through years 2011 to 2013 but with the joint contributions with the Industry and Service sectors, GRDP still reflected positive growth, as follows: 5.4%, 8.2% and 6.6%.

GRDP		2011		2012		2013
AHFF	疗	13.3	Л	8.3	₽	0.1
Agriculture and Forestry		13.8	7	9.4	Ŷ	0.1
Fishing		5.3	Ŷ	(6.40)	⇒	0.4
Contribution of AHFF to GRDP	疗	4.9	7	3.4	₽	0.1
GRDP	Ŷ	5.4	疗	8.2	\Rightarrow	6.6

Table 1. Cagayan Valley's Percentage Growth of AHFF, its Contribution to the GRDP and the GRDP in CY 2011-CY 2013

Source: National Statistics Coordination Board (NSCB)

In terms of sufficiency level, Cagayan Valley's main commodities had surplus rather than deficit. Figure 1 shows the sufficiency level, in percentage, of selected commodities of Region 02 in CY 2010 to CY 2013.

As a main commodity, rice in 2010 to 2013 was sufficient. In fact, Cagayan Valley was self-sufficient in rice in prior years; And some regions depend on regions like Cagayan Valley for rice supply. Going back, rice reflected a sudden acceleration through years 2010 to 2011 with sufficiency levels 232.73% and 295.5%, respectively. However, through years 2012 to 2013, rice reflected a slight deceleration with sufficiency levels 289.11% and 284.88%, respectively.

As an alternative to rice, white corn in 2010 to 2013 was also sufficient. Through years 2010 to 2012, white corn reflected an acceleration with sufficiency levels, as follows: 146.64%, 163.58% and 176.35%. In 2013, white corn sufficiency level dropped to 140.76%.



Sources: Bureau of Agricultural Statistics (BAS), National Statistics Office (NSO)[†]

Performance of the Agriculture Sector

Under the high value crops are vegetables, fruits, and roots and tubers. For vegetables, sufficiency was hardly maintained in 2010 to 2013; In 2010, sufficiency level hit 118.36% but plummeted to 19.84% in 2011; However, in 2012 to 2013, sufficiency levels rebounded to 85.54% and 101.43%, respectively. For fruits, sufficiency level through years 2010 to 2013 reflected a topsy-turvy pattern, as follows: 371.97%, 282.61%, 372.72% and 274.13%. Albeit topsy-turvy, Cagayan Valley was still fruit sufficient. Of the three high value crop groups, roots and tubers reflected an acceleration through years 2010 to 2013 with sufficiency levels, as follows: 162.18%, 174.07%, 175.82% and 186.49%. Bulk of the contribution to roots and tubers sufficiency level acceleration were due to high productions from commodities like cassava and sweet potato which are also considered as alternatives to rice.

Under the livestock and poultry are carabeef, beef, pork, chicken, duck and chevon. All livestock commodities posted insufficient levels in 2010 to 2013. However, beef and pork both reflected accelerations which were huge improvements to attaining beef and pork self-sufficiency; For beef, in 2010 to 2013, sufficiency levels were as follows: 36.9%, 36.17%, 72.18% and 82.85%; For pork, in 2010-2013, sufficiency levels were as follows: 54.5%, 55.28%, 79.87% and 81.02%. Moreover, carabeef also improved in 2010 to 2013 with sufficiency levels, as follows: 57.91%, 51.12%, 90.64% and 85.39%. Of the livestock commodities, chevon, more commonly known as goat meat, was far below at attaining sufficiency; Sufficiency levels in 2010 to 2013 were as follows: 0.53%, 0.59%, 0.47% and 0.45%. Contrary to livestock, poultry commodities in 2010 to 2013 were sufficient; For chicken, in 2010 to 2013, sufficiency levels were as follows: 143.5%, 163.55%, 133.28% and 142.98%. Lastly, for duck, the only commodity in the figure that decelerated through years 2010 to 2013, sufficiency levels were as follows: 288.6%, 243.63%, 179.12% and 171.12%.



† Population data used for CY 2010 and CY 2011 was based on 2007 Census while for CY 2012 and CY 2013, it was based on 2010 Census.

Performance of the Agriculture Sector

Relative to sufficiency is the production performance. Table 2 shows the Agricultural Crop, Livestock and Poultry Production Performance of Region 02 in CY 2010 to CY 2013.

The production performance of Cagayan Valley's major agricultural commodities from years 2010 to 2013 mostly reflected increments. However, sustenance and mitigation to climate change effects remains a huge challenge as climate change is evidently *a*ffecting the performance of the agriculture sector in the region. As a matter of fact, in CY 2013, natural calamities like typhoon and dry spell were the main reasons for the deceleration of rice and corn productions. The details for the performance of rice and corn in CY 2013 are expounded on pages 13 and 29, respectively. As to the midterm productivity, rice reflected an accelerated growth through years 2010 to 2012 but slightly dropped in 2013; For corn, production performance reflected an accelerated growth through years 2010 to 2012 then dropped in 2013.

High value crop's production performance on its major commodities varied. For banana, productivity decelerated through years 2010 to 2011, improved conservatively in 2012 then dropped in 2013, as follows: 16.37 mt/ha, 11.86 mt/ha, 12.83 mt/ha and 10.17 mt/ha. For pineapple, productivity decelerated through years 2010 to 2011 then accelerated in 2012 to 2013, as follows: 19.51 mt/ha, 17.48 mt/ha, 23.19 mt/ha and 25.07 mt/ha. For mango, productivity decelerated through years 2010 to 2012 but improved conservatively in 2013, as follows: 5.84 mt/ha, 4.7 mt/ha, 3.49 mt/ha and 4.63 mt/ha. Of the major industrial crops, sugarcane performed really well with an accelerated growth through years 2010 to 2013, as follows: 31.21 mt/ha, 32.18 mt/ha, 39.36 mt/ha and 40.36 mt/ha. For coconut, productivity decelerated through years 2010 to 2011 then rebounded in year 2012 to 2013, as follows: 4.93 mt/ha, 4.34 mt/ha, 4.7 mt/ha and 4.95 mt/ha. For coffee and cacao, its industries still needs a lot of support. Under vegetables, productivity of both lowland (eggplant, tomato) and upland (cabbage, cauliflower) remained at its levels through years 2010 to 2013.

As to the major commodities of livestock and poultry, production performance improved. For hog, production levels increased conservatively in 2010 to 2011 then accelerated in years 2012 to 2013, as follows: 66.1 thousand mt, 66.24 thousand mt, 68.53 thousand mt and 68.77 thousand mt. For chicken, production levels accelerated through years 2010 to 2013, as follows: 39.41 thousand mt, 46.97 thousand mt, 51.76 thousand mt and 55.53 thousand mt.



PARTICULAR	2010	2011	2012	2013					
Yield of Major commodities increased / sustained (mt / ha.)									
Palay	3.45	3.81	4.16	4.14					
Corn	3.46	3.79	4.33	4.11					
White	2.08	2.31	2.79	2.42					
Yellow	3.56	3.89	4.42	4.20					
Banana	16.37	11.86	12.83	10.17					
Coconut	4.93	4.34	4.70	4.95					
Pineapple	19.51	17.48	23.19	25.07					
Mango	5.84	4.70	3.49	4.63					
Sugarcane	31.32	32.18	39.36	40.36					
Cassava	12.38	14.42	13.82	15.88					
Coffee	0.36	0.39	0.32	0.29					
Cacao	0.37	0.29	0.21	0.14					
Vegetables									
Eggplant	10.48	10.3	10.50	10.65					
Tomato	11.87	11.69	11.18	11.18					
Cabbage	6.97	6.62	6.23	6.20					
Cauliflower	2.9	3.08	2.72	2.46					
Volume of Product	ion of Major commo	dities increased ('0	00 mt)						
Palay	1,745.72	2,144.77	2,425.40	2,423.19					
Corn	1,263.62	1,601.69	1,875.40	1,713.67					
White	50.91	56.79	66.60	53.89					
Yellow	1,212.71	1,544.9	1,807.40	1,659.78					
Banana	675.71	490	308.47	360.40					
Pineapple	29.38	26.7	28.22	31.14					
Mango	101.37	78.94	34.74	47.78					
Coffee	2.08	2.02	0.813	0.767					
Cacao	0.083	0.064	0.061	0.069					
Vegetables									
Eggplant	18.26	19.32	19.84	20.45					
Tomato	10.61	10.32	9.49	9.46					
Cabbage	1.36	1.27	1.20	1.16					
Cauliflower	0.087	0.31	0.272	0.24					
Livestock									
Hog	66.1	66.24	68.53	68.77					
Chicken	39.41	46.97	51.76	55.53					

Table 2. Cagayan Valley's Agricultural Crop, Livestock and Poultry Production Performance in CY 2011-CY 2013

Source: BAS



RELOPMENT PROGRAM



In 2013, palay production slightly decreased from 2,425,433 mt in 2012 to 2,423,187 mt reflecting a minimal decline of 0.09%. This production resulted to a 4.95% shortfall in the production target of 2,549,390 mt. Although the area harvested increased from 582,456 ha in 2012 to 585,285 ha, the average yield slightly decreased from 4.16 mt/ha in 2012 to 4.14 mt/ha. This is attributed to the occurrence of drought and typhoons (Labuyo, Odette and Vinta) that hit the region. Nevertheless, Cagayan Valley remained the 2nd top palay producer in the country, and contributed 13.14% to the national production (see figure 2).





Source: BAS

Isabela remained the top palay producer in the region and 2nd top producing province in the country contributing 51.58% and 6.79% to the national production, respectively. Production increased from 1,216,535 mt in 2012 to 1,249,873 mt (see figure 3). This is attributed to the increase in area harvested from 283,149 ha in 2012 to 286,618 ha and the interventions implemented by the Regional Field Office and the LGUs.



Figure 3. Palay Production in the provinces of Cagayan Valley

Source: BAS

Rice Development Program



- The Region was affected by various calamities such as typhoons and drought that brought about 47,823.14 mt volume losses. In order to recover the losses about 7,211 bags @ 40 kg were immediately distributed to the farmers in the affected municipalities.
- Conduct of Farmers' Day Celebration showcasing various technologies on rice production, techno demo on the different Hybrid Rice and Upland Rice varieties and Demonstration Farm Mechanization/Post Harvest Facilities. This was attended by 2,447 farmers in the region.





- Attendance to the Community Seed Bank (CSB)/Farm Service Provider (FSP) National Conference and Farmer-Led Extensionist (FLE)/Local Farmer Technician (LFT) National Convention held at Oasis Hotel and Resort in Cavite and Fontana Leisure Park, Clark Field Pampanga on December 2-6 and 10-12, 2013, respectively. These were attended by 35 Community Seed Bank Farmers, 25 Farm Service Providers and 114 LFTs'/FLEs'.
- There were 15 groups of Service Providers who were organized and trained to improve their skills in farming for enhanced productivity.





 High Quality Seed Utilization (HQSU) is one of the major factors to increase yield. One of the sources of HQSU was the Certified Seeds distributed in the Five Cropping's in Two Years Program that totaled about 71,767 bags @ 40 kg. Region II attained about 85.8% HQSU from the total area of 577,909 ha planted in 2013.

PRODUCTION SUPPORT SERVICES

SEED PRODUCTION/DISTRIBUTION

1. Production of Breeder Seeds of Inbred & Nucleus Breeder Seeds of Hybrid Parentals

FS-RS. Seed Production in our station strives to strengthen and sustain the production, distribution, and maintenance of high-quality seeds that responds to recommended and most preferred rice varieties by rice seed growers/farmers in the region.

The nine ha on-station seed production area was planted with foundation seeds to supply the registered seed requirements of Seed Growers. About 35,990 kg or almost 100% was produced out of the 36,000 kg seed production.

Furthermore, the 2.6 ha on-farm seed production area produced 10,660 kg or 102.5% of the 10,400 kg target production, with an average yield of 4.10 mt/ha. This is higher than the on-station average seed production of 3.18 mt/ha.

Seed production of varieties for Climate Change Adaptation/Mitigation. The production of climate change tolerant rice varieties is given equal attention to meet the requirements for seeds in time of climate adversity. A total of 25.49 ha or 100% of target area were planted to climate change varieties broken down as follows: submerge tolerant -8 ha; drought tolerant - 9.57 ha; and saline tolerant - 7.92 ha.

For submergence tolerant variety, results showed that only 9,793 kg or 40.8% of target production were harvested from the four ha planted. The area planted was partially damaged by typhoon and infected with Rice Tungro Virus at maturity stage that resulted in the discoloration of seeds. Hence, some of the produce were downgraded as commercial class.

Drought tolerant registered seeds were planted in 9.57 ha. About 24,365 kg or 84% of the target production were produced in the 6.07 ha harvested while some of the seeds are



Rice Development Program



still on process for the 3.5 ha harvested. The crop was also partially damaged by Typhoon Vinta at maturity stage.

For the saline tolerant varieties, only 53% of the production target of 12,741 kg was obtained in the 5.42 ha harvested.

Upland Seed Production. To sustain the seed requirements for the upland rice varieties, about 7.97 ha were planted. Although the production of purified upland rice seed totaling 7,863.90 kg represents only 78% of the target, this was sufficient to supply the seed requirement for about 196 ha of upland rice areas.

2. Establishment of CSB

Community Seed Bank is an extension tool to increase farmers access to quality seeds. These are controlled and operated by the farmers within the community which encourage seed production and exchange among farmers within and outside its community and between farmers and breeding institution for greater diversity.

Under the Lowland Ecosystem, four out of the five units targeted 3. for rehabilitation or 80% were accomplished and ready for use while under establishment or construction, six units were already completed and operational. The remaining one unit is still ongoing construction at 80% accomplishment.

Under the upland ecosystem, five units community seed bank as targeted were already completed and operational.



. Simple Seed Processing Equipment

The provision of simple seed processing equipment is an important component to make CSB warehouses operational and also one of the strategies for our farmers to have an access to modern technology to further improve the quality of

Rice Development Program

their produce. Farmer recipients were provided with 12 units each of seed cleaner, moisture tester, platform weighing scale and portable bag closer with 125 pieces plastic pallets and 1,000 pieces super grain bags.

4. Starter Seeds (RS)

The provision of registered starter seeds to farmers serviced by Small Water Impounding Project/Diversion Dam (SWIP/DD) ensures utilization of high quality seeds in areas without seed growers. This is one of the primary strategies to increase production. The allocation for starter seeds is 7,000 bags (@ 20 kg) and 3,939 bags, and were already distributed to different SWIP/DD systems regionwide and expectedly, will provide about 315,120 bags at 50 kg of informal seeds (Good Seeds).

5. Support to Hybridization.

Hybrid rice utilization exhibits about 6.1% usage in the region. Hybrid rice is noted to have 15-20% advantage over the inbred rice. In order to increase and promote the usage of hybrid rice seed in the region, about 3,000 bags of hybrid rice seeds were distributed to 1,042 farmer beneficiaries.

6. Support to Rainfed Areas

This project aims to demonstrate viable and latest technologies for rainfed rice on a wider scale and to serve as a technology model in the promotion of rainfed rice cultivation to attain at least 3.5 mt/ha during Wet Season and 4.0 mt during Dry Season. Out of the 108 sites that were targeted, all sites were 100% established covering an area of 3,106 ha.

7. Provision of Seeds to Early Planting in Five Cropping's in Two Years Areas.

The early planting practice is considered as one of the strategies to increase yield. Hence, 50,000 bags of certified seeds were distributed without cost to the farmers who signified their interest in the said program.

DISASTER RESPONSE

1. Buffer Seed Stocking (Inbred Certified Seeds)

The DA-RFO No. 02 programmed different interventions to respond to the needs/losses of farms in Region 02 affected by typhoons and drought.

Buffer seed stocking is indispensable in rice production, since it will respond to the seed requirement of our farmers during calamities. As mandated, every region should allot 10% of the total seed requirement as buffer stock. Region 02 alloted 31,900 bags @ 40kg for this purpose.



2. Crop Weather Base Insurance Coverage

The DA-RFO No. 02 also subsidized the crop insurance for 28,874.89 ha of rice in collaboration with the Philippine Crop Insurance Corporation (PCIC). This involves the provision of financial assistance to farmers when their crops are damaged during calamities/disasters. Beneficiaries of this project were the farmers who participated in the Five Cropping's in Two Years Program.

3. Other Agricultural Inputs/Small Equipments

Small equipment like flame thrower and power sprayer were also distributed to the DA Stations to be used by farmers in times of rat infestation and other pests and diseases outbreak.

Zinc Sulphate at 10 kg were also procured. A total of 6,715.7 packs were distributed to farmers for application either at seedbed or under field condition within 15 days after transplanting.

4. Cloud Seeding

The region was severely affected by drought in the months of May-July, hence, about 88 sorties of Cloud Seeding Operations were done to augment the supply of water for the crops during their growth stages.

REHABILITATION AND MAINTENANCE OF MULTI-PURPOSE BIO-ORGANIC FERTILIZER PLANT

The rehabilitation of Bio-organic fertilizer plant located at the Regional Crop Protection Center (RCPC) and Ilagan Soils Laboratory (ISL) were 100% completed. In the Nueva Vizcaya Experiment Station (NVES), formerly Hillyland Research Outreach Station (HILROS), the Bio-organic fertilizer is 50% complete. The existing Bio-organic plants at Southern Cagayan Research Center (SCRC), formerly Cagayan Valley Lowland and Marine Research Outreach Station (CVLMROS), and Regional Soils Laboratory (RSL) were maintained regularly for efficient operation.

A total of 140,674 packets or 94% of Compost Fungus Activator (CFA) were produced and distributed for the Modified Rapid Composting Technology (MRCT). Likewise, about 34,435 packets of Bio-N (69%) were distributed for upland rice seed inoculation.

CONDUCT OF PEST / DISEASES SURVEILLANCE/SEWS

1. Pest Outbreak Control Measures

The DA-RFO No. 02 purchased 394 litre insecticides, 301 kg fungicides and 13,864 sachets rodenticide. There were 210 kg of insecticides, 100 litre of fungicides and 3,300 sachets of rodenticide distributed to farmers whose crops were infested by pest and diseases. Metarhizium (5,087 packets) and trichogramma (75,070 cards) were produced as biocontrol agents for rice and corn. Moreover, 5,092 packets of metarhizium and 70,008 cards of trichogramma were distributed.

2. Strengthening of RCPC Pest Surveillance Team

Strengthening of RCPC Pest Surveillance Team was given equal attention to capacitate farmers in managing pest out-



break in the region. Retooling of Provincial and Municipal AEWs was also conducted for 2,049 attendees. The team was able to monitor and survey about 95,000 ha or 100% of its target.

3. Maintenance of Laboratory

In the region, there are four existing laboratories that are based in different research outreach stations. These are being maintained to ensure their standard operations for the production of bio-organic fertilizers.

SOIL ANALYSIS & MAPPING

The DA-RFO No. 02 has acquired Mobile Soils laboratory to service the far flung barangays in analyzing and testing farmers' soils. Walk-in clients that submit their soils in the Soils Laboratory were also accommodated. With this equipment, soil samples analyzed were doubled (222%). Likewise, 32 soil fertility maps in adverse ecosystems have been updated/delineated. Said equipment is regularly maintained for its efficient operation.



FARM AND FISHERY PRODUCTION-RELATED MACHINERY AND EQUIPMENT DISTRIBUTED

The distribution of five units Rice Trans-planter, 15 units Mini-Four-Wheel Drive Tractor with accessories, 22-36 hp and 184 units Hand Tractor with Trailer to farmer associations had facilitated and increased the efficiency in pre-planting and planting activities which contributed to the attainment of rice selfsufficiency. Furthermore, the machineries augmented the unavailability of manpower during the peak of land preparation and planting operations.

IRRIGATION DEVELOPMENT SERVICES

In 2013, there were 23 irrigation projects allocated in the different provinces of the Region for the construction/ rehabilitation of SWIP/DD. Of this number, eight are in the province of Cagayan, six in Isabela, seven in Nueva Vizcaya and two in the province of Quirino.

tional with a total service area of 462 ha of rice lands. Delays in the construction of the remaining 13 ongoing projects were due to unfavorable weather conditions at the project sites and right of way problems. This resulted to the transfer of site and suspension of construction works. To date, issues and problems regarding right of way were already resolved.

Ten projects or 43.5% were completed and are already opera-



Rice Development Program

OTHER INFRASTRUCTURE & POST HARVEST DEVELOPMENT SERVICES

To address the needs of marginal farmers, DA-RFO No. 02 implemented different infrastructure and post-harvest projects to boost agricultural productivity and reduce post-harvest losses.

There were 46 units of rice thresher, 10 units Rice Combine Harvester, 22 Medium Size Multi-Crop Combine Harvester distributed to farmers' association/cooperatives. Likewise, 333 units of Multi-Purpose Drying Pavement (MPDP) and Palay shed were constructed for farmers' association/cooperatives. Out of 56 units/sites Reversible Airflow Bin Dryer, 23 units/sites or 21% were completed while the remaining 33 units/sites are 5-10% accomplished. The delayed completion was attributed to the contractor's inability to fabricate due to limited workforce and mobility problems. For the rehabilitation of Flatbed Dryer projects, 27 units out of 59 units/ sites targeted or 45.8% were completely rehabilitated while the remaining 32 unit/sites are still ongoing. The rehabilitation work was delayed due to reasons similar to the Reversible Airflow Bin Dryer. In addition, relocation of initial project site as per request of recipient and that some associations with damaged unit are no longer interested hence the change of recipients was done. There were eight units/sites targeted for Recirculating Dryer with Biomass Furnace, but only three units/sites were completed.

Two units/sites were allocated for QES and NVES wherein the delivery and installation was delayed due to delayed completion of warehouse. The two units/sites for Quirino Seed Grower MPC and Bagnos IA, Aurora, Isabela were also delayed due to ongoing rehabilitation of existing warehouses. The remaining one unit was reallocated to SCRC because the original recipient (Isabela Providers Cooperative, Naguilian, Isabela) waived its allocation just lately due to lack of its counterpart funds for the construction of a warehouse.

MARKET DEVELOPMENT SERVICES

Activities conducted by the Agribusiness & Marketing Assistance Division (AMAD) include the conduct of market matching, participation in trade fairs to promote promising varieties of agriculture products with market potentials, and price monitoring.



In 2013, market matching for rice was conducted which were participated by the rice producers (CAVOFA/SIMCA and other cooperatives) and traders (KNC and DA-MPC). As a result, 53 mt volume were matched. To date, transaction is still ongoing.

EXTENSION SUPPORT, EDUCATION & TRAINING SERVICES

1. Hybrid-Inbred Techno Demo

Hybrid rice is noted to have 15-20% higher advantage than the inbred rice. This is why it has long been patronized by farmers even though the cost of production is very high. This started with the inclusion of hybrid rice technology in the government's rice production program in support to food security and rice self-sufficiency.

There were 112 technology demonstration sites established in which 40 sites are in the province of Cagayan; 40 sites in Isabela; 20 sites in Nueva Vizcaya and 12 sites Quirino.

2. Double rice cropping in the rainfed areas

Promoting the double rice cropping in rainfed lowland areas offer substantial and potential increase in production. Its

main objective is to showcase the package of recommended and adaptable technology to rice farmers in rainfed areas.

There were 11 technology demonstration sites established in Region 02: five sites in the province of Cagayan, two sites in Isabela, two sites in Nueva Vizcaya and two sites in Quirino.

3. Technology Commercialization in the Adverse (Saline & Submerge) Ecosystem

Climate change is a serious problem affecting agriculture. Floods, drought and other adverse effects of climate change severely and significantly reduce productions. There are two ways of responding to climate change namely: lessening its effect (mitigation) and living with it



Rice Development Program

(adaptation). Mitigation is however unaccountable due to many contributory factors of climate change. Adaptation is more realistic.

Low-cost and affordable technologies and tolerant and resistant crop varieties were developed and produced to address this phenomenon. Commercialization of rice under the Saline and Submerged Ecosystem were established at 10 sites respectively in the province of Cagayan.



4. Low-cost storage for home-saved seeds

This project aims to reduce post-harvest losses especially among upland farmers who are using home-saved seeds. In addition, it aims to help maintain seed viability and quality (germination, physical purity, vigor, etc.) in upland areas to assure its planting values.

Region 02 procured 170 low-cost storage for home-saved seeds and distributed 60 units in the province of Cagayan, 50 units in Isabela, 30 units in Nueva Vizcaya and 30 units in Quirino.

5. Compact Techo-Demo on Expanded Modified Rapid Composting Technology (EMRCT)

Generally, this technology addresses the concern in soil fertility deterioration through organic based fertilization scheme and to preserve the soil and water resources being degraded by heavy applications of chemical inputs. Likewise, it aims to establish a cost-efficient, competitive, environmentally-sound and sustainable agricultural production system to achieve sufficiency, productivity and profitability through the establishment of technology demonstration projects.

In Region 02, there were 400 ha in the province of Cagayan, 400 ha in Isabela, 100 ha and 100 ha in Quirino which were established for this project.

6. Strengthening of Small Water Impounding System Association (SWISA) in Region 02

To create strong and sustainable rural communities in rice cluster areas, strengthening of SWISAs was done. Six SWISAs were strengthened through trainings which were attended by 164 males and 96 females. The participants were as follows:

- * Dullao SWIP, Bambang, Nueva Vizcaya
- * San Antonio South SWIP, Bambang, Nueva Vizcaya
- San Antonio North SWIP, Bambang, Nueva Vizcaya
- * Cabannungan SWIP, Ilagan City, Isabela
- Garab SWIP, Iguig, Cagayan
- * Santiago II SWIP, Iguig, Cagayan.
- 7. Technical Briefing

Prior to the implementation of a specific project, technical briefings were conducted to discuss the protocol and the technology interventions to be included in the establishment of technology demonstrations.

The Package of Technology (POT) on rice under the different ecosystems was discussed during the briefing and was attended by 50,864 farmers and supervising technicians.



8. Skills Training for Women in the Rice Sector

Women's participation in agricultural development has already been institutionally recognized. Women are considered part of the labor force and their contributions in farm production management, enterprise development, and business management remain relevant. However, not all women have the opportunity to exercise their capabilities, hence, livelihood trainings were conducted.

The training on agricultural and other plant by-product utilization were conducted for Rural Improvement Club (RIC) officers and members in the region. Likewise, training on vermiculture and mushroom production were given to Home Economics and Daycare Teachers in Baggao, Cagayan. Both trainings were attended by 14 males and 92 females.



9. Development of Farmer Technician/Support to LFT/FLE Program

The Farmer-Led Extension Delivery System Model has been adopted in Region 02 since 2004. This extension approach helps facilitate the transfer of improved technology through the assistance of advanced farmers and farmer leaders.

Selected advanced farmers/farmer leaders were trained to implement the FLE/LFT under the supervision of rice technicians. Each farmer extensionist was required to establish a technology demonstration to showcase various interventions wherein at least two method demonstrations were conducted in two seasons and participated by at least 25 farmers.

At present, there are 428 FLE and 100 LFT in the region composed of 102 in Cagayan, 252 in Isabela, 152 in Nueva Vizcaya and 22 in Quirino. The said FLE's have established demonstration sites employing various technology interventions.

A total of 442 Field Days were conducted regionwide, and these were attended by 40,117 participants purposely to disseminate the result of the demonstration sites that were established.

10. Strengthening and Development/Organization of Farm Service Providers

Strong power involvement in rice production has been one of the major concerns of the DA. This involves capacitating farm laborers/workers who deliver the needed manpower to land owners as FSPs. In 2013, the Institutional Development (ID) Section has conducted all the six targeted strengthening/capability building for FSPs with 128 male and 168 female participants. On the other hand, 15 groups of FSPs were organized and trained on basic rice farming technologies. These were attended by 71 males and 174 females.

- 11. Intensive information dissemination campaign and distribution of Information Education Campaign (IEC) materials
 - a. Packaged and distributed 48,360 copies of IEC materials with the following titles:
 - * Rice Techno Guide for Transplanted Rice
 - * Dayami Huwag Sunugin Flyer
 - * Rice Grain Bug Flyer
 - * Soil Sampling Techniques Flyer
 - * Farm Service Provider Flyer
 - * Local Farmer Technician Flyer
 - Farm Mechanization Program Brochure (Iloko Version)
 - Bounty Valley Newsletter (DA-RFO No. 02 Official Publication)
 - b. Aired/Discussed 14 broadcast episodes on rice related technologies, Agripinoy Rice Program interventions and DA-RFO No. 02's plans and services through the "Magsasakang Pinoy" radio farm program. Said program was aired every Tuesdays and

Rice Development Program

Thursdays at 5:00 – 5:30 AM at DZNC Bombo Radyo, Cauayan City, Isabela and DWPE Radyo ng Bayan, Tuguegarao City, Cagayan.

- c. Packaged 32 Audio Visual Presentation (AVPs) on Gawad Saka Agricultural Achievers and other successful farmers and organizations such as the FSP, LFT and CSB.
- d. Co-sponsored and financed a two-day Rice Summit cum Grand Field Day with the theme "Sapat na Pagkain, Kaya Natin" showcasing rice varieties for favorable and adverse conditions, rice-based research breakthroughs and technology options and pre and post-harvest farm machineries attended by thousands of farmers, LGUs, AEWs, LFTs, Agriculture and Fishery Council (AFCs) and students regionwide.
- e. Spearheaded launching and the observance of the NYR through the conduct of Rice Cooking Contest and "Be RicePonsible" Run for Rice which were attended by 200 runners. Proceeds were donated to typhoon Yolanda victims.



RESEARCH & DEVELOPMENT SERVICES

Under the Rice R&D Program for CY 2013, a total budget of ₱56,196,630.00 was allotted for the different rice research and development services. Total funding allocation of ₱30,065,000.00 was provided for the conduct of R&D projects: Knowledge Product Management Services with ₱900,000.00, R&D Support Services with ₱21,992,000.00, Human Resource Development with ₱900,000.00, and the R&D Program Management with ₱2,339,630.00.

These projects aim to address the problems on low productivity, limited utilization of quality seeds, high cost of inputs, poor quality of produce and multi-layered marketing channels.

- For the development and promotion of appropriate technologies for lowland rice under favorable condition in Region 02, there were 17 projects implemented with 147 trials conducted with a total budget allotment of ₱11,645,000.00
- For the development and promotion of appropriate technologies for lowland rice under unfavorable condition in Region 02, there were seven projects with 34 trials conducted with a total funding of ₱2,150,000.00.
- 3. For the development and promotion of appropriate technologies for lowland rainfed rice in Region 02, there were



four projects with 107 trials conducted with a total funding allotment of ₱2,150,000.00

- The development and promotion of appropriate technologies for upland rice in Region 02 covered five projects with 58 trials established. The total budget allocation for the different projects was ₱8,270,000.00 for CY 2013.
- 5. The conduct of Socio-economic Impact Assessment Research Projects is one of the major strategies implemented in the Rice Program. In 2013, five researches were conducted in which three were done in collaboration with the Philippine Rice Research Institute (PhilRice), San Mateo, Isabela. These researches aim to provide inputs to policy makers and stakeholders in the formulation of sound and effective policies to address the identified problems on rice production. A total budget of ₱4,700,000.00 was allocated for these researches.

Also, under the Rice R & D program, Knowledge Product Management Services were provided to various stakeholders in partnership with the Agricultural Communication (AgCom) Section. These include the development, packaging and promotion of technology updates through print/ IEC material production; video documentation; conduct of techno-forum in the region and compilation and popularization of matured technologies. In 2013, AgCom created and reproduced two IEC materials and three video documentations, conducted four techno-forums with 745 participants regionwide registering a 149% accomplishment; identified and promoted seven matured technologies; compiled one and printed 50 copies for distribution to the farmers and other stakeholders. These required ₱900,000.00 budget allocation.

The Research and Development Support Services and Human Resource Development Support were also part of the Rice R &D Program. Specifically, the Research and Development Support Services provide support in the upgrading of R & D Equipment and Facilities, Maintenance/ Improvement of R & D Centers/ Stations. In 2013, five centers/stations were maintained and upgraded three laboratory equipment; procured 18 office equipment and two office fixtures. On the other hand, the Human Resource Development Support conducted trainings, expository tour and international visits to R & D projects for the employees. Moreover, four employees were given the chance to visit R & D projects in three trainings conducted in other countries.



REGULATORY SERVICES

The National Seed Quality Control Services of the Bureau of Plant Industry (BPI) Region 02 supports the major thrusts of the DA through the provision of quality assurance and control services for seed and planting material production towards sustainable agriculture and environmental protection.

There are two Seed Testing Laboratories in Region 02 namely: Regional National Seed Quality Control Services in San Mateo, Isabela which serves the clienteles and stakeholders in the provinces of Isabela, Nueva Vizcaya and Quirino; and Satellite National Seed Quality Control Services in San Gabriel, Tuguegarao City which serves the clienteles in the whole province of Cagayan.

The services offered under this program include Seed Certification, Seed Testing Accreditation of Seed Growers and Seed Technology Training. The crops eligible for certification are rice, corn, mungbean, soybean, peanut, tobacco and sorghum. In Region 02, rice and corn as well as peanut and mungbean to some extent are the major crops being certified since these are the main crops being grown in the area. For Seed Certification of rice crop in CY 2013, the area submitted for preliminary inspection of Inbred Rice was 4,587.90 ha while the area submitted for Hybrid Rice was 8.63 ha. With the combined area of 4,596.53 ha, it reflects a 109% accomplishment over the targeted area of 4,179 ha. For final inspection, 2,659 ha (79.53%) were accomplished from the target of 3,343 ha with 2,657.05 ha for inbred rice and 7.95 ha for hybrid rice. There were 3,254 samples representing 267,870 bags of inbred rice while 13 samples representing 364 bags of hybrid rice which were submitted for laboratory analysis. As a result of the laboratory analysis, 251,834 bags were tagged and sealed, reflecting 80.4% accomplishment against the targeted 313,215 bags. The certified seeds were distributed to 1,077 or 80.31% of the targeted seed growers.

PLANS, POLICY COORDINATION, MONITORING & EVALUATION SERVICES

Policy reviews/technical updates were 100% accomplished. This is a principal activity or protocol which serve as a guide in decision-making and help especially in attaining the Food Staples Sufficiency Program (FSSP) target of the DA.

Monitoring of Palay Planting/Harvesting. This is a weekly activity wherein monitoring of crop stages in production and yield in rice were 100% accomplished. Data review and validation of Palay Production were done provincewide and regionwide. Year -end review on production estimates of agricultural crops were done in collaboration with BAS.

Planning and monitoring of program activities/conduct of coordination with stakeholders. Several meetings/workshops were conducted in the region in order to achieve all the programmed activities and to strengthen DA-RFO No. 02's relationship with partner stakeholders. Program implementation and service delivery were improved through regular operational and program monitoring and evaluation activities. There were four provinces and 87 barangays covered in Region 02 under this activity.



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In 2013, Region 02 had a total corn production of 1,713,674 mt. The production for the year was 13.7% below the target of 1,986,436 mt. Total production in 2013 registered 8.62% decline from the 1,875,385 mt in 2012. The non-attainment of production target were due to the occurrence of drought and typhoons "Labuyo", "Odette", and "Vinta" that brought in strong winds and flooding in some low lying corn areas. Despite the decline in production, Region 02 still remained as the number one corn producer in the country, and was able to contribute 23.23% of the national corn production in 2013 (see figure 4).



Figure 4. Contribution of Cagayan Valley to the National Corn Production



The province of Isabela also maintained its rank as the topnotch province in the production of corn nationwide. In 2013, it contributed 68.7% of the total regional production and 15.96% of the national production (See figure 5).





Source: BAS

Corn & Cassava Development Program

PRODUCTION SUPPORT SERVICES

The Cagayan Valley Region aimed to become the major producer/supplier and user of world class corn for food, feeds and for industrial uses. As such for CY 2013, Corn Development Program focused on two objectives as follows:

- 1. Increase in Productivity from 4.33 mt/ha to 4.56 MT/ha
- 2. Increase quality of production and reduce post harvest losses







Produced 52,957 kg of registered seeds of Open Pollinated Variety (OPV) corn and distributed 49,756 kg to 2,300 beneficiaries from Cagayan, Isabela, Nueva Vizcaya, Quirino and other regions which can be recycled for planting.





Produced and distributed 929,925 pieces planting materials for cassava covering 30 ha with 79 farmer beneficiaries.

Corn & Cassava Development Program



Produced and distributed 14,693 packets of Bio-N for Corn FLEs and enrolled corn farmers in the Corn Techno Demo areas with 1,836 farmer beneficiaries.



Analyzed 6,013 soil samples from 16,820 ha with 1,791 corn farmer clients from Cagayan, Isabela, Nueva Vizcaya and Quirino.


Produced 156,291 trichogramma cards and distributed 152,000 cards for corn borer control for 1,516 ha benefiting 1,466 corn farmers.



Produced 1,517 colonies earwig and distributed 1,507 colonies earwig for 501 ha with 414 beneficiaries.



Coordinated and supervised pest and disease surveillance in 83,420 ha corn areas and provided technical assistance/recommendation to farmers regarding pest control.

OTHER INFRASTRUCTURE & POST HARVEST DEVELOPMENT SERVICES

- 1. Distributed nine units four wheel drive tractor for Corn and Cassava.
- 2. Distributed nine units Corn Grits Mill.
- 3. Installed two sites Village-Type Corn Postharvest Processing Center; Two sites ongoing construction of warehouse.
- 4. Distributed one unit vacuum pack sealer at Cagayan Valley Research Center (CVRC), formerly Cagayan Valley Integrated Agricultural Research Center (CVIARC).
- 5. Distributed seven units Cassava Grater.
- 6. Distributed 11 units Cassava Granulator cum shredder.



MARKET DEVELOPMENT SERVICES

- Assisted 15 groups in market matching activities
- Conducted 48 corn price monitoring in 12 major trading centers in Cagayan, Isabela, Nueva Vizcaya and Quirino.

EXTENSION SUPPORT, EDUCATION & TRAINING SERVICES

- Conducted and established 300 sites FLE, 20 sites LFT-FLE and 10 Tipid Abono-FLE on Corn technology demonstrations with 8,250 enrollees. Corn production in these sites increased from an average of 4.33 mt/ha in 2012 to 4.56 mt/ha in 2013.
- Conducted and established 12 sites on Cassava Techno Demo with 12 farmer cooperators.
- Conducted seven trainings/ID Activities/Consultations participated by 370 Corn FLE, Task Force Mais members/DA Staff, and other organization.



- Conducted eight trainings for Cassava Livelihood and 40 other trainings which were participated by 2,456 participants.
- Extended support to 233 LGU-AEW under the Corn Program.
- Printed six titles and distributed 5,833 pieces IEC materials/flyers such as "BIO-N para iti mais ", "Leaf Color Chart para iti Mais", "Panagusar iti Apog", "Mycotoxin flyers", Panagpaamiris iti Daga" and "Trichogramma iti Mais" to corn farmers in Region 02.
- Printed one booklet and distributed 6,500 copies: Cassava Recipes "Panagpatanur ti Kamote a Kahoy".

RESEARCH & DEVELOPMENT SERVICES

Conducted researches on the following:

- 1. Development and Improvement of climate smart varieties of Yellow, White Flint and Glutinous Open Pollinated Corn Varieties. The newly approved National Seed Industry Council (NSIC) varieties are: IES 10-04 White Flint, IES CN 7 Yellow and IES CN 9 Yellow;
- 2. Implemented Farmers' Participatory Technology Development Projects, conducted six workshops and reviewed project proposals;
- 3. And Conducted research on Intercropping Technologies of Cassava.

REGULATORY SERVICES

- 1. On seed certification, issued 4,825 tags for CVRC OPV Corn Registered Seeds and two private seed growers.
- 2. Analyzed aflatoxin content of 261 samples of corn grains with significant reduction in aflatoxin content.



INFORMATION SUPPORT SERVICES

• Finalized 47 base maps in the different municipalities of Isabela, Cagayan, Nueva Vizcaya and Quirino.

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PRODUCTION SUPPORT SERVICES

* Vegetable (Spices)



Distributed 4,300 kg of garlic for expansion production in Itbayat, Batanes covering an area of 9.0 ha with 96 farmer beneficiaries. The project is handled by the Itbayat Garlic Producers Multipurpose Cooperative. Through the cooperative, they were able to supply the DA-HVCDP program with 25 mt of garlic for CY 2014 planting.



The program covered 150 ha onion expansion areas in Aritao, Nueva Vizcaya. There were 700 kg of red pinoy onion distributed to 207 onion growers under the supervision of Aritao Farmers Marketing Cooperative. Through the project, the production of onion in Aritao increased by 75% due to the expansion areas contributed by the project.

* Vegetable (Lowland)



There were 157 kg of lowland vegetables (pinakbet type) procured to support the supply of lowland vegetable in the local market. These were distributed in Isabela and Cagayan vegetable growers with a total area of 64 ha and generated 237 new jobs.

Vegetable (Upland)



Procured and distributed 153 kg assorted upland vegetables (Bell Pepper, Squash, Tomato, Snap Bean & other brassicas). The recipients of the program were the Indigenous People's Irrigators Association of Tidang Village, Kayapa; Dacling Womens Association of Tiblac, Ambaguio and Besong Vegetable Growers of Kayapa, Nueva Vizcaya. There were 322 farmer beneficiaries of the project covering an area of 87 ha. The project generated 435 new jobs.

Vegetable (Indigenous)

Malunggay

- "The leaves could save millions of lives."
- "It's just like growing vitamins at your doorstep."

Procured and distributed 4,800 pieces of malunggay cuttings generating 1,589 new jobs. Also, distributed 40 kg of malunggay seeds in support to the Gulayan sa Paaralan Program.



* Fruits



For Banana, the Cooperative for Rural Development (CORDEV), Capagaran MPC and Cabatacan Indigenous Peoples Association were the beneficiaries of the program. Distributed 50,004 pieces of banana suckers and tissue cultured seedlings covering an area of 80 ha with 200 farmers benefited.



Through the Mango Enhancement Project, expanded the area for mango in Isabela and Nueva Vizcaya by distributing 5,024 pieces asexually propagated mango. There were 76 farmers benefited to this project.

* Rootcrops



One of the staple food of the lvatans.

The program focused on sweet potato production in Batanes to support the food sufficiency of the province. Provided 140,000 sweet potato cuttings covering an area of 3.5 ha for quality planting material production. This will be the source of planting material for sweet potato farmers in the province.



Yam – a new commodity to support small – scale processing facility. The program is now in the process of establishing foundation production area for quality planting materials.

* Industrial Crops



Cacao – a priority commodity of HVCDP in the region. Distributed 57,830 cacao seedlings for expansion of 59 ha to support Lasam Cacao Growers Association of Lasam, Cagayan. This expansion generated 87 new jobs in the province of Cagayan.



Coffee – another priority commodity of HVCDP in the region. Distributed 185,555 coffee seedlings with 150 farmers benefited. These are members of CORDEV, Ilagan Inter Barangay Cooperatives and Nagtipunan Local Government Employees Cooperative. Coffee plantation are being established in idle lands specifically in rolling to sloping areas of the region.

Gulayan sa Paaralan

This is a project in collaboration with the Department of Education (DepEd). The objective of the project is to train elementary and high school teachers incharge in their agriculture subjects. The project provided assorted vegetable garden tools and organic fertilizers. Out of the 2,700 elementary schools region wide, 423 schools were assisted. A field day was also conducted at Gamu Rural School which were attended by 2,000 participants. Container gardening and other production technologies on vegetables were highlighted.



Draft Animals - support to vegetable growers in land preparation and hauling of their products from the production area to the nearest road network. Procured and distributed 50 heads draft animals to the different farmers association/ coops involved in the program.



Maintained six nurseries, six greenhouse systems and two tissue culture laboratory to support the production of quality planting materials and vegetable seedlings. These facilities are used for grow-out of sexually and asexually propagated seedlings in the stations.



Distributed two brand new four wheel tractors with power take-off of 35 hp with complete accessories (Rotavator, Disc plow and Disk Bed maker). The beneficiaries of the two units were DA-Batanes Experiment Station (BES), formerly Island Agricultural Research Outreach Station (IAROS), Basco, Batanes and Llanera, Nueva Ecija.



There were three units APT self-propelled shredder with hydraulic system powered by 10 hp mitsubishi engine procured. It consists of mechanism for mobility, feeding table, feeding mechanism with hydraulic system, shredding chamber and output outlet. Input capacity is 339.2 kg/hr. These were distributed to DA-NVES, Tapaya, Bagabag, Nueva Vizcaya; DA-QES, Dungo, Aglipay, Quirino and DA-SCRC, Minanga Norte, Iguig, Cagayan. The machine will support the production of organic fertilizer in the stations.



There were 25 units of power sprayer distributed to support the enhancement of off-season mango production in the region. The unit is powered by 5 hp gasoline engine with 100 m high pressure hose, 2.5-3.0 megapascal (Mpa) capacity with 8.5mm diameter. These were distributed to mango growers association and DA stations in the region.

OTHER INFRASTRUCTURE & POST HARVEST DEVELOPMENT SERVICES



Banana Chipper – equipment used for cutting banana into thin strips horizontally or vertically. There were three units procured and distributed to DA stations for demonstration purposes and one unit was awarded to Capagaran Multi-purpose Cooperative at Capagaran, Allacapan, Cagayan. The unit is powered by ½ hp electric motor with a capacity of 100-150 kg/hr.



Coffee Grinder - equipment used for grinding all kinds of beans and grains either wet or dry like coffee, rice, corn, mongo, paminta, ube or cacao. This equipment is operated by 2 hp motor, 220 volts, single phase 60 Hz with a capacity of 60 kg/hr. The units were distributed to three DA stations for demonstration purposes.





The equipment is used in the production of vegetable capsules for food supplement. This is a manually operated capsule filling machine with 400 holes per operation. Procured three units of this machine and distributed to three DA stations for demonstration purposes.

IRRIGATION DEVELOPMENT SERVICES



Spring Development – consists of plastic tank as reservoir and PE pipes as its delivery and distribution lines which is tapped from a high elevated body of water such as spring, creeks and the likes. This project will irrigate upland vegetables of at least one hectare. There were seven systems constructed/installed regionwide to expand the production areas for vegetable production.

Wind pump – a machine that converts kinetic energy to mechanical energy to pump water from a productive well. Constructed four units in Cagayan and Isabela.













PRODUCTION SUPPORT SERVICES

Small ruminant production is continuously gaining popularity, hence, the three nucleus farms of the DA-RFO NO. 02 are into the production of specific species of small ruminants.

The first nucleus farm is located at the SCRC, formerly Cagayan Breeding Station (CBS) in Maguirig, Solana, Cagayan. It maintains breeder stocks of 88 heads of Boer and 25 heads of Kalahari Red goats. Fifty heads of Boer and 23 heads of Kalahari Red offspring were produced. Of the offspring, 12 Boer bucks, three Boer does, and five Kalahari Red bucks were dispersed.

The second nucleus farm is located at the NVES, Villaros, Tapaya, Bagabag, Nueva Vizcaya. This nucleus farm produces and maintains superior breeder stocks of Anglo Nubian goats. The location and climate is cool and elevated, hence, is very conducive to maintain said species.

From the original 60 heads purebred stock from Australia, the station had produced an additional 91 heads of Island born stocks wherein 137 were dispersed not only within the region but other regions as well. Modification on the management

strategies from semi to full confinement is being done in the station and proved to be very advantageous as manifested by the reduction of mortality from 18 to 11 heads in 2012 and 2013, respectively. For 2013, a total of 46 heads of offspring were produced. In line with the thrust of the station to enhance milk production, additional stocks of Saanen and Alpine were acquired under the United States Public Law (USPL) 480 program. Crossbreeding the three purebred stocks will enhance the genetic performance using the three-way cross breeding. Based on the monitoring and evaluation of the USPL 480 program (Saanen and Alpine) conducted by the National Agriculture and Fishery Council (NAFC), Central Office of the DA, the stocks were categorized as the healthiest among the stocks distributed nationwide.

Purebred bucks were loaned out to various qualified recipients to upgrade the genetic performance of their native breeds. Deworming was also undertaken to loaned-out animals.

Peking duck production is also undertaken as one component of an integrated farming system in the station. The stocks were



distributed to qualified recipients. The eggs not used for hatching are sold to walk-in clients at the Agribusiness Center. Visitors from different places, local as well as international, frequently visit the station not only to see what is inside the station but also to learn the updated technology being implemented by the station.

The third nucleus farm which is a sheep farm is the Isabela Experiment Station (IES), formerly Isabela Breeding Station (IBS) in Gamu, Isabela. It maintains 14 rams and 86 ewes of Katahdin, St. Croix and Dorper species. The herd produced 65 heads of offspring. The station was able to Ioan-out three Katahdin, 12 St. Croix and 35 upgrades. It likewise established five production



farms and evaluated 26 farms of would-be recipients for the breeder loan program.

For large ruminants, particularly cattle development, the QES in Dungo, Aglipay, Quirino maintains the Brahman breed. There are 96 heads of breeder stocks being maintained in the station producing 15 heads of offspring. For this year, seven heads of bull and 15 heads of heifer were dispersed.

BES in Basco, Batanes is the Island Production Center of the Region. It maintains 36 goats, five sheep and 12 cattle. It was able to disperse three heads of cattle. Forages are also produced/procured in the station and 1,000 pieces of plant materials were distributed to 100 farmers.

Under the Unified Artificial Insemination Program (UNAIP), the region was able to inseminate 1,886 cattle, 713 goats and 9,812 carabaos serving 1,155 clients. For large ruminants, a total of 431 heads of cattle, and 1,039 heads of carabao were produced this year through the artificial insemination administered last year. Likewise, 537 heads of goat offspring were produced this year.





FORAGE DEVELOPMENT

Forage grasses and fodder trees were planted and maintained in the nucleus farms to improve and satisfy the nutritional needs of animals not only within the station but also for other interested animal raisers in the region and other regions like CAR and IV-A as well. The region developed 10.2 ha of pasture and forage areas in addition to the 54 ha being maintained. As a result, the region distributed 5.75 kg of forage seeds and 1,576,825 pieces of plant materials to 363 recipients.

ANIMAL HEALTH SERVICE

To prevent and control livestock diseases, disease surveillance on Foot and Mouth Disease (FMD) and Avian Influenza were conducted. Blood samples were collected for analysis. Technical assistance to clients was undertaken by the Regional Animal Disease Diagnostic Laboratory (RADDL) on the following diagnoses:

- 1. Brucella abortus Diagnosis: 122 samples.
- 2. Blood parasite examination with Direct Blood Smear examination: 96 samples.

- Fowl cholera, Newcastle disease, Mycoplasma, Infectious coryza, hypocalcemia, white muscle disease, colisepticemia, haemophilus or glassers disease through necropsy:
- 4. Rabies through Flourescence Antibody Test (FAT): 56 clients/samples.
- 5. Avian Influenza through Hemaglutination/ Hemaglutination Inhibition (HA-HI): 1306 samples.
- Bacterial Isolation of Pasteurella sp., E. coli, Bacillus sp., Staphylococcus sp., Haemophilus sp., Clostridium sp., through Analytical Profile Index (API) Test: 105 clients/ samples.
- 7. Determination of Blood Calcium, Phosphorous and Magnesium levels of animals through Blood Chemistry Analysis: 423 samples.
- 8. Bacillus Anthracis through bacterial isolation from soil samples: six samples and one confirmed Bacillus Anthracis isolate from soil at San Mariano, Isabela thru Polymerase Chain Reaction (PCR) with the assistance of Bureau of Animal Industry (BAI).
- 9. Blood picture of animals through complete blood count

& differential Count: 555 samples.

- 10. Parasite identification from feces through fecalysis: 874 samples.
- 11. Caprine Arthritis & Encephalitis thru Enzyme Link Immunosorbent Assay (ELISA) – 122 samples
- 12. Anaplasmosis thru ELISA 80 samples
- 13. Bluetongue thru Agar Gel Immuno Diffusion Test 11 samples

- 14. Histopathology of tissues 51 samples with 205 slides
- 15. Antibiotic Sensitivity Test six samples
- 16. Squamous cell carcinoma & Enterotoxemia thru Histopathology – 12 samples.
- 17. Avian Influenza thru ELISA Test 28 samples

Aside from the diagnostic services, the region vaccinated 27,134 heads of cattle and 42,282 heads of carabao on hemosepticemia serving 14,612 raisers. Rabies vaccination was administered also to 69,056 heads of animals serving 7,325 pet owners. Another prevention and control of other economically important livestock disease is the deworming activity. A total of 11,988 heads of animals were dewormed this year with 5,821 clients.

Because of these concerted efforts, the region still remains FMD and Avian Influenza disease free region while Batanes is rabies free province.

RESEARCH & DEVELOPMENT SERVICES

The region conducted the following researches:

- 1. Development of Small Ruminant Dairy Production Project
- 2. Anthrax Disease Mapping
- 3. Ethno veterinary practices
- 4. Commercialization of Biodewormer
- 5. Small Ruminant Breed Improvement Project

EXTENSION SUPPORT, EDUCATION & TRAINING SERVICES

The different Experiment Stations in the region conducted a total of 26 briefings/trainings for the breeder loan recipients aside from the briefings to 382 walk-in clients and 97 lakbay aral groups/visitors from other regions. Stations in the region also trained on-the-job training students from different state universities.

The operation of the Farmers' Information and Technology Services (FITS) in the experiment stations served as a technical advisory and consultancy veterinary services center for walk-in clients. A total of 598 IEC materials were distributed to 497 clients.

Retooling/Skills trainings for livestock raisers, AEWs and entrepreneurs were conducted in the provinces with 206 participants. A national livestock congress/expo was also conducted in Cagayan with 815 participants. As part of the extension delivery system, technical assistance and periodic monitoring of 56 farm loan recipients were conducted. Forty-eight would be recipients of loan packages in the region were evaluated for the year.

Nine lectures/demos on meat processing for walk-in clients were conducted for 61 participants. Moreover, meat processing seminar was conducted during the National Livestock Expo with 104 participants. Technical assistance were also extended to students, thesis writers, station veterinarians, and Non-Government Organization (NGOs), thru hands-on training on disease diagnostic techniques.



There were 29 participants who were trained on Specialized Training on Research Design and Technical Writing, while five participants were trained on Molecular Biology Laboratory Techniques for rabies and anthrax.

Continuous training of manpower in the livestock division were conducted to enhance and strengthen their capabilities, hence, five staff were trained locally and three staff were sent abroad for international training.

REGULATORY SERVICES

Eight quarantine checkpoints in airports, seaports and ports of entry in the region were maintained/strengthened through the provision of manpower and other logistics. These greatly contributed to the sustained record of the Region as FMD and Avian Influenza disease free.

The quarantine stations inspected/cleared 181 international vessels/aircraft and issued 146 clearances/permits. Under the domestic services, inspected/cleared 1,056 domestic vessels/aircrafts and issued 3,685 clearances/certificates.

With the enforcement of R.A. 1556 and 3720 and A0 8, the region processed 615 licenses and conducted three trainings on licensing with 155 participants.

Under R.A. 8485, there were 13 livestock facilities that were registered with seven farms accredited. The Regional Feed Laboratory analyzed 1,156 feed samples for proximate analysis for protein, fat, fiber, moisture and ash, feed microscopy, mineral analysis and aflatoxin. Training on Animal Welfare Act was also conducted to increase awareness of said law.











PRODUCTION SUPPORT SERVICES

There were 30 projects approved by the Organic Agriculture-Regional Technical Working Group (OA-RTWG) funded under the Organic Agriculture Program for CY 2013.

Funded projects and activities consist of production support; extension support, education and training; market development services and program management.

1. Seed production and commercialization

A total area of 36 ha was planted with upland rice, 10 ha with OPV corn and 2.13 ha with assorted vegetables. This aims to produce chemical-free seeds to be distributed to farmers willing to engage in organic farming.

As a result, there were 27,592 kg of upland rice seeds, 3,951 kg of OPV corn seeds and 144 kg of assorted vegetable seeds were distributed to 3,274 individual beneficiaries and 12 farmer groups. 2. Production and distribution of vegetable seedling planting materials

Chemical-free vegetable seedlings were produced in the stations to promote backyard organic farming in the communities. It is with the knowledge that organic farming must start in ones' backyard before going into commercial production. A total of 57,251 pieces of vegetable seedlings were produced. Of this number, 47,918 were distributed to 1,508 individuals and nine farmer groups.



3. Production of Livestock

There were 21 heads of native pigs distributed in support to organic farming. A total of 64 heads of various animals were maintained consisting of 12 heads native pig, eight heads Philippine wild pig, 17 heads native goat, 17 heads native sheep and 10 heads Vuhus cattle. With the animals maintained, a total of 51 offspring (31 native pigs, 6 native goats, 11 native sheep and three native Philippine wild pigs) were produced. The stocks are maintained to free them from any chemical contaminants of feeds, medicines and biological agents to provide a certified organic nucleus farm for native livestock.

4. Biological Control Agent (BCA)

To protect the crops from pest and the harmful effects of synthetic chemicals, BCAs were produced. The RCPC produced 198,210 cards of *Trichogramma sp.* and 605 colonies of earwig (*Euborella annulata*). Of this production, 197,312 tricho cards and 603 colonies were distributed to 1,951 individuals covering 1,060 ha of rice, vegetable and corn production areas.



5. Nematophagus Fungi (Biodewormer)

The RADDL conducted mass deworming of small ruminants using nematophagus fungi in 35 farms within the region. It benefited 1,005 small ruminants with 35 stakeholders.



MARKET DEVELOPMENT SERVICES

AMAD updated the profiles of organic producers/processors; participated in four local and one international fairs; conducted training for organic trading post operators and accomplished the expansion of OSAC for organic products.

To promote organic products, an organic market day and trade fair was conducted. Sixteen exhibitors from the different Research Outreach Stations, Non-Government Organizations and Cooperatives participated and generated total sales of ₱138,000.00.

One Organic Trading Post at Kayapa, Nueva Vizcaya was established. Construction of similar establishments at Bayombong, Nueva Vizcaya and City of Ilagan, Isabela is ongoing.



OTHER INFRASTRUCTURE & POST HARVEST DEVELOPMENT SERVICES

The rehabilitation of the seed storage facility as well as the training and showroom center were completed.

Storage facility was established at NVES, in Bagabag, Nueva Vizcaya for seeds produced to avoid contamination. Harvested seeds of rice, vegetable and corn are stored in this facility before distribution to farmers.

The training and showroom center was established at LGU-Quezon, Isabela. This will serve as a venue for training and showroom for organic seeds being produced such as organic rice, vegetables and fisheries. This will also serve as learning site for farmers, students, members of RIC and other groups who are interested to learn organic farming.



EXTENSION SUPPORT, EDUCATION & TRAINING SERVICES

Technology demonstration established and maintained

There were 11 technology demonstrations (NVES, SCRC, Northern Cagayan Experiment Station (NCES), formerly Abulug Seed Farm (ASF), LGU-Alicia, Isabela; LGU-Diffun, Quirino; LGU-Quezon, Isabela; Pen-Doy Bayanihan Service Cooperative, CSU -Sanchez Mira) established/maintained. These will serve as learning sites for organic agriculture.

NVES

A technology demonstration project on root crops (ube, tugi, gabi & kamote) production was established to showcase the different technologies in the production of root crops such as the use of natural farming inputs, mulching and trellising of ube.

Also, a technology demonstration on free-range native chicken production is being maintained. There are 100 heads of native chicken procured as initial stock. For this year, a total of 221 offspring were produced. There are five farmers who adapted the said technology.

• SCRC

A mushroom-vermicompost production is being showcased. Hands-on trainings on the production technologies were conducted for stakeholders, agricultural technicians and Municipal Agriculturists.

NCES

The station established two technology demonstration centers for organic rice-duck technology and organic sheep-citrus technology.

The different technologies employed in organic riceduck production were demonstrated during two cropping seasons. Field days cum method demonstrations were conducted to show the process as well as the results of the project.

There are 10 heads of sheep raised in the citrus plantation. The sheep grazed on the forages within the citrus plantation while the sheep dung is collected and used as a fertilizer for the citrus.

LGU-Alicia, Isabela

The project consists of windmill and vermicomposting facility that is necessary for organic rice, vegetable seeds and seedlings production.

• LGU-Diffun, Quirino

The project consists of organic livestock (goat, rabbit, and swine) production and vermicomposting facility to support the requirement of organic fertilizer for the organic vegetable production.







• LGU-Quezon, Isabela

An old building was rehabilitated to serve as an organic training center and showroom for their organically produced commodities such as organic rice and vegetables.

• Pen-Doy Bayanihan Service Cooperative

There were 110 heads of organic native chicken and 11 heads of native pig funded to serve as breeder stocks. Also, a 0.5 ha of upland rice production area was established. The production area will serve as a show window to the cooperative members on the different technologies applied as well as the feasibility of organic agriculture in the area.

• Cagayan State University-Sanchez Mira, Cagayan

An integrated farm was established within the campus. It consists of native pig production, native chicken production, organic vegetable production and vermicompost production. This serves as a learning center for students and other stakeholders on the different organic farming technologies within the municipality and adjacent municipalities of Northwestern Cagayan. A field day was conducted wherein Secretary Manuel Mamba graced the occasion as the guest speaker.

PLANS, POLICY COORDINATION, MONITORING & EVALUATION SERVICES

Operations monitoring was conducted to validate and supervise the projects implemented by the proponents. This is a way to check whether the planned activities are executed vis-à-vis the Work and Financial Plan.

Coordination through meetings with proponents and project leaders were conducted to facilitate the implementation of projects. As a result, appropriate interventions are recommended to address the identified implementation bottlenecks.

Project documentations were done to show proofs that the projects are undertaken as basis for the release of funds in tranches mode.

Other significant accomplishments

Attendance to Biofach, Japan

- Biofach is the world's leading exposition for organic products. It is celebrated annually and it features high quality consumer products and forms a comprehensive purchasing platform for trade visitors from wholesale, retail, import and manufacturing.
- The Regional Organic Agriculture Focal Person participated in this exposition to widen her knowledge and perspective on product labeling and promotions.
- Exhibitors from the Philippines including DA-Agibusiness and Marketing Assistance Service (AMAS) Central Office displayed organic products and DA Region 02 displayed organic fresh banana (Native Balangon) which were produced by CORDEV based in Cordon, Isabela.

RESEARCH AND DEVELOPMENT ANNUAL REVIEW SYNTHESIS



MANDATE

By virtue of AO #19, series of 1991 – "Operationalization of the Rationalized DA Research & Extension Stations & Facilities" Perform the decentralized functions of DA-Bureau of Agricultural Research (BAR) in R&D planning, orchestration of project implementation, monitoring and evaluation of the integrated R&D programs of Region 02.

R&D Annual Review Synthesis

Synthesis of Annual Agency R&D Inhouse Review

Papers presented under Research Category:

Commodity	Ongoing	Completed	Total
Rice	2	3	5
Corn/Cassava	3	3	6
HVCDP/Adlai	2	-	2
Livestock	2	-	2
Farming System	2	-	2
TOTAL	11	6	17

Papers presented under Development Category:

Commodity	Ongoing	Completed	Total
Rice	2	-	2
Corn/Cassava	1	1	2
HVCDP/Adlai	3	-	3
Livestock	3	-	3
FS/CPAR	5	1	6
TOTAL	14	2	16

Posters presented/evaluated:

Commodity	Total
Rice	8
Corn	6
HVCDP	7
Livestock	1
CPAR	5
Farming System	1
TOTAL	28

Identified breakthroughs during the review:

For Research Category:

CORN

- 1. At the range of 0-2% OM, N fertilizers rates of 70, 140, 210 kg N/ha yields 5, 6 and 7 tons/ha. (Calibration of Fertilizer for Corn)
- 2. Site-specific Nutrient Management (SSNM) fertilizer rates of 97-28-28 kg Nitrogen, Phosphorous & Potassium (NPK) during dry season and 120-28-58 kg NPK during wet season gives a yield increase of 2 t/ha for white flint corn
- 3. New OPV Corn varities and elite lines in the pipeline

UPLAND RICE

1. Yield increase 660kg/ha is obtained with the application of 25-30 packs of Bio-N/ha to upland rice

For Development Category:

1. Registration for glutinous OPV Corn

- -IES Glutinous 2
- -IES Glutinous 4
- -IES Glutinous 6
- -IES Glutinous 7
- 2. Registration for white flint
 - -IES 89-06
 - -IES 89-12
 - -IES 90-2
 - -IES 89-10
- 3. Develop peanut food products (Cagayan Valley magic peanut)
- 4. Approve 3 fruit trees as certified parent source (NSIC varieties)
- 5. Integration of goat and duck in rice
- 6. Organic dewormer



R&D Annual Review Synthesis

CALIBRATION OF FERTILIZER RECOMMENDATIONS FOR N, P & K USING YIELD RESPONSE TO CORN

Restituto E. Samatra, Generoso M. Oli, Avelina C. Ramilo, Jennelyn R. Binarao, Eva V. Eslava, Eugene P. Ramos, Lovelyn A. Gaspar, Bernadette T. Galoso, Margaret C. Aguinaldo, Josephine D. dela Cruz, Cristina P. Allas, Victor S. Crisologo, Melecio S. Agorilla and Orlando J. Lorenzana

ABSTRACT

The main goal of the study is to update fertilizer recommendations for corn at various levels of soil nutrient. Regression analyses and Analysis of Variance (ANOVA) were utilized to generate the best model for updating the recommended nutrient requirement.

Updated fertilizer rates for Nitrogen were 70, 140, 210 kg/ha giving a yield of five, six, and seven t/ha with available OM range of 0-2%. For Phosphorus it requires 84 and 130-387; 61 and 65-296 kg/ha to attain a yield of six and seven t/ha for P2O5 ranges of 0-6 and 7-10 ppm respectively. The required P decreases from 0 to 183 kg/ha for six ton and seven ton yield respectively for ranges of 11 to 24 ppm and above. For Potassium with K2O range of 56-70 ppm a maximum of 65 kg K is required to attain a yield of six and seven t/ha. For greater than 75 ppm K2O, non-addition of K can yield six and seven ton/ha as currently recommended.

Soil texture affects availability of nutrients for corn and has a significant relationship to yield. Nutrient uptake/removal of corn from the soil varies with the stage of the crop. Higher uptakes of nutrients were recorded during tasseling stage, the stage where maximum nutrient utilization is undertaken by the corn.



OPV White Corn Industry Development Program in Region 02

Severino C. Tumamang, Lucrecio R. Alviar, Jr., Orlando J. Lorenzana, Virgilio E. Adriatico, Roynic Y. Aquino, Carlos A. Malana, Robert M. Atalin, Juan S. Agsawa, Renato A. Maguigad, Vivien Delos Santos, Alberto M. Bongat, Oliver Masinna, Lorna Malenab, Reymar A. Gulatera

ABSTRACT

Marginal farmers cultivating marginal corn areas are generally dependent on affordable and lowinput corn varieties.

White corn is gaining popularity due to its importance as alternative staple crop, cash crop and high value crop when harvested as green corn and further processed into popular "cornick" product. This justifies the local industry development program on OPV white corn in Region 02 through variety development and promotion, seed production, commercial production and enterprise/market development.

The variety development activity had resulted to the registration of four glutinuous and four white flint OPV corn. Considering the average obtained grain yield of the improved varieties of 2,866 kg/ha (OPV glutinuous) and 5,177 kg/ha (OPV white flint) with net income of ₱34,680/ha and ₱43,924/ha for glutinuous and white flint, respectively, fast adoption of the said varieties is therefore realized. Hence, a total of 163.265 kg certified seeds were produced and distributed yearly supporting the commercial production of more or less 7,346 ha improved white corn varieties production business enterprise of about 1,242 farmers in Cagayan Valley. These undertakings had indeed sustained the need for fresh raw materials supply for food (corn grits) and the local "cornick" food processing industry.


DA-CVIARC OPEN POLLINATED VARIETIES (OPV) CORN CROP IMPROVEMENT

Severino C. Tumamang, Roynic Y. Aquino, Robert M. Atalin, Virgilio E. Adriatico, Orlando J. Lorenzana, Lorna A. Malenab, Reymar A. Gulatera

ABSTRACT

Despite the income-attractiveness of hybrid corn, OPV corn is stubbornly planted in the Region due to its affordability, importance as staple food and in food (cornick) processing and cash-crop as in the case of green corn (boiled or roasted). Hence, DA-CVIARC, is implementing corn crop improvement to develop varieties and technologies suitable to the soil, climate and resource capability of the farmers and market preference. Following the standard breeding procedure of OPV corn, three varieties developed and approved by the Corn Technical Working Group (TWG-Corn) for commercial release to the NSIC recently namely: IES Cn 7 (yellow), IES Cn 9 (yellow) and IES-10-04 (white flint). These varieties were approved by the CSTWG due to its high-yield (3-4% yield advantage than check varieties) and their special attributes thus responding to the farmers and market preference (deliberated in July 2013 by NSIC Secretariat).



COMMUNITY-BASED PARTICIPATORY ACTION RESEARCH IN ENHANCING PRODUCTIVITY AND INCOME IN THE COASTAL AND UPLAND AREAS OF BATANES

Priscilla V. Nanud, Lovelyn A. Gaspar, Celso B. Batallones, Cesar Doroteo V. Hostalero, Lalaine P. Estamo, Joel Florencio C. Cabugao, Teresita A. Vinalay, Peregrin L. Horlina, Ma. Lalaine M. Cobico, Enriqueta N. Cabugao, Alejandro B. Camacho, Florencia C. Pabilla

(DA-RFO No. 02-RIARC & IAROS/Bureau of Agricultural Research/PLGU & MLGU-Batanes)

ABSTRACT

This project was conducted to enhance productivity and profitability in the coastal and upland farming system in the province of Batanes. It was conducted in two development zones following the Community-Based Participatory Action Research (CPAR) approach. It was designed to initially characterize and/or assess the situation in the community in terms of strengths, problems and other attributes as tools in crafting 'best fit' interventions within the farming systems using the Participatory Rural Appraisal (PRA) as a tool.

Six farmer-partners were identified across three sites in two development zones where the projects were established. Year-round vegetable production and organic vegetable production POT demonstration was introduced in the coastal areas while camote-garlic-mungbean cropping pattern trials and organic garlic POT demonstration was done in the upland areas. Necessary production and economic data were taken throughout the project and subsequently analyzed to determine its impact on the farming systems considered.

Results showed that adoption of year-round vegetable production coupled with organic vegetable production technologies were both productive and profitable with an estimated increase in income of 84.91% over the farmers' practice. On the other hand, adoption of camote-garlic-mungbean cropping pattern in the upland areas coupled with organic garlic production technologies can increase income to as much as 221.89%.



EVALUATION OF DIFFERENT SOIL AMELIORANTS UNDER SALINE PRONE AREAS OF CAGAYAN

Corazon C. Cardenas, Ferdinand B. Enriquez, Henry C. Cabayan, Jr., Vicente I. Miguel and Ernesto D. Guzman

ABSTRACT

The study was conducted in San Isidro, Buguey, Cagayan during the 2011 wet season to 2013 dry season to develop a soil management technique using soil ameliorants to increase the yield of rice in saline prone areas by at least 500 kg/ha. It aimed to showcase and promote the use of organic fertilizer to improve soil condition in the adverse ecosystem.

The treatment evaluated consist of the recommended relate(RR) alone, RR + Commercial organic fertilizer, RR + Biomeg, RR + Miracle Soil Conditioner, RR + Masinag organic fertilizer, RR + vermicompost + vermitea, RR + zinc sulfate and no fertilizer. The highest level of soil salinity observed of the test area was 8.0 mmhos/cm

The application of RR + organic fertilizer either commercial or vermicompost consistently increased the yield of NSIC Rc184 by over 500 kg/ha during wet season. Rice applied with RR and 10 Bags of commercial fertilizer as soil ameliorant increased yield by 818 kg/ha and 711 kg/ha when RR is added with 5 bags of vermicompost. Although the application of other ameliorants increased the yield of NSIC Rc184, the increment is minimal ranging from 126 to 448 kg/ha.

In the dry season, application of RR + 10 bags commercial organic fertilizer as soil ameliorant increased the yield by 539 kg/ha while other soil ameliorants only gave a yield increment of only 140 to 283 kg/ha.

The net benefit derived with the application of 10 bags organic fertilizer as soil ameliorant is ₱1,260.00/ha for wet season and ₱58, 764.00 for only season.

Considering the result of the study, it is recommended to use organic fertilizer at the rate of 10 bags per ha as soil ameliorant in saline prone areas.

FARADA HILLER HILLER PROGRAM



In 2013, DA-RFO No. 02 received fund allocation of ₱145,500,000.00 for the improvement/rehabilitation of priority Farm-to-Market Road Projects as identified by Farmers' Association and LGUs. These projects were validated by DA staff to ensure if they are in accordance with the Philippine Agricultural Engineering Standards. Of the 24 km targeted for improvement this year, 11.5 km or 47% was rehabilitated while construction for the remaining 53% or 12.5 kilometers are still ongoing (see table 3). About 15,000 farmers benefited from these projects. The delay in project implementation is attributed to inadequate construction materials especially in Batanes and Right of Way problems.

NO	DDOV	DIST		PROJECT	IMPLEMENTING	LENGTH		PROJECT COST	CTATUS
NU.	PROV	0151	WUNICIPALITY	PROJECT	AGENCY	TARGET	ACTUAL	(₱'000.00)	SIAIUS
1	CAGAYAN	2	ABULUG	CONSTRUCTION OF BRGY. SAN AGUSTIN FMR	MLGU-ABULUG	1.400	1.400	3,000.00	COMPLETED
2	CAGAYAN	2	ABULUG	CONCRETING OF BRGY. PINILI FMR	MLGU-ABULUG	0.500	0.500	5,000.00	COMPLETED
3	CAGAYAN	2	STA. PRAXEDES	CONSTRUCTION/ REHABILITATION OFCAPACU- AN-SALUNSONG ROAD FMR	MLGU-STA PRAXEDES	0.182	0.182	2,000.00	COMPLETED
4	CAGAYAN	2	STA. PRAXEDES	CONSTRUCTION/ REHABILITATION/ IMPROVE- MENT OF CENTRO 2 - WACA FMR	MLGU-STA PRAXEDES	0.113	0.113	1,000.00	COMPLETED
5	CAGAYAN	3	SOLANA	IMPROVEMENT OF DA-CAGAYAN BREEDING STATION ROAD NETWORK		0.375	0.338	3,000.00	ON GOING CONSTRUCTION
6	ISABELA	2	SAN MARIANO	CONCRETING OF SAN JUAN, DEL PILAR UPHILL Road Section FMR	MLGU SAN MARIANO	3.500	3.500	3,000.00	COMPLETED
7	ISABELA	4	CORDON	CONSTRUCTION/ REHABILITATION/ IMPROVE- MENT OF CAQUILLINGAN- ANONANG FMR	DPWH ISABELA DEO 4	0.376	0.376	3,000.00	COMPLETED; FOR BALANCE PAYMENT OF 10% RETEN- TION
8	ISABELA	4	RAMON	CONCRETING OF PAGRANG-AYAN FMR	MLGU-RAMON	1.250	1.250	10,000.00	FOR PAYMENT OF 10%
9	ISABELA	4	ECHAGUE	CONSTRUCTION/ REHABILITATION OF AROMIN- PAG-ASA FMR	MLGU-ECHAGUE	1.000	1.000	8,000.00	RETENTION, AWAITING FOR THE SUBMISSION OF TPI (COA) REPORTS AND LIQUI-
10	QUIRINO	LONE	MADDELA	REHABILITATION OF SAN MARTIN-VILLA YLAN- AN FMR	MLGU-MADDELA	1.700	1.700	4,000.00	COMPLETED
11	QUIRINO	LONE	AGLIPAY	IMPROVEMENT OD DA-UPLAND RESEARCH OUTREACH STATION ROAD NETWORK	PLGU-QUIRINO	0.875	0.219	7,000.00	ON-GOING CONSTRUCTION
12	QUIRINO	LONE	AGLIPAY	IMPROVEMENT/ CONCRETING OF VICTORIA San Francisco-Ramos FMR	PLGU-QUIRINO	0.625	0.438	5,000.00	ON-GOING CONSTRUCTION
13	QUIRINO	LONE	AGLIPAY	IMPROVEMENT/ CONCRETING OF VILLA PA- GADUAN-DAGUPAN-TRES REYES FMR	PLGU-QUIRINO	0.625	0.500	5,000.00	ON-GOING CONSTRUCTION
				TOTAL		11.515			

Table 3. List of Rehabilitated FMR in CY 2013

ON-GOING CONSTRUCTION OF PAGRANG-AYAN FARM-TO-MARKET-ROAD BRGY. PAGRANG-AYAN, RAMON, ISABELA











CONCRETING OF SAN JUAN, DEL PILAR UPHILL ROAD SECTION BRGY. DEL PILAR, SAN MARIANO, ISABELA

LOCALLY FUNDED PROJECT CASECNAN SOCIAL MEASURES



The Casecnan Social Measures Project (CSMP) was established to compensate the constituents of Quirino who were directly affected by the Casecnan Multi-Purpose Irrigation and Power Project (CMIPP). This project is intended to provide assistance to farmers and farming households of Quirino to enhance farming systems and increase farm income through the conduct of appropriate farming technologies; provision of farm inputs and other support facilities; improvement/rehabilitation of Farm-to-Market Roads and provision of post-harvest facilities and structures that can withstand climate change. In order to realize the aforementioned objectives of the project, a total of \$70,000,000.00 was allocated for CY 2013, which led to the implementation of the following projects:

- Gravelling of 14,824 m or 14.824 km Farm-to-Market Roads in 46 Barangay sites in Quirino
- Construction of 1,506 m or 1.506 km of Farm-to-Market Roads in 34 sites
- Completion of 6 out of 7 units MPDP with shed (construction for one unit is still on-going)
- Completion of 7 units of MPDP
- Completion of 3 units Multi-Purpose Building were completely constructed

Regular monitoring was undertaken by project leaders and status reporting of project accomplishments have been institutionalized on a monthly, quarterly and annually basis.





As of 2013, the DA is currently implementing 13 projects funded under the Agricultural Competitiveness Enhancement Fund (ACEF). The ACEF is a special fund created by RA 8178 to support projects and activities that will help enhance the competitiveness of the agriculture and/or fisheries sectors. The total loan approved for the 13 projects was \Rightarrow 162,482,914.00. Fund for the eight projects amounting to \Rightarrow 135,082,914.00 have been fully released while \Rightarrow 27,400,000.00 were partially released for five projects (see table 4).

Table 4. List of Implemented ACEF Projects

		Project Cost (in Peso)			
Project Title	Proponents/Recipients	ACEF	Proponent's Equity	Total	
CAGAYAN					
1. Upgrading of Bio-Organic Fertilizer Manufacturing Project	Norphil Farmers Multi-Purpose Cooperative (MPC), Sampaguita, Solana, Cagayan	8,297,914	23,058,547	31,356,461	
2. Acquisition of 4WD Tractor with accessories and Forward Truck	Calayan SN MPC Calayan, Gonzaga, Cagayan	2,800,000	650,000	3,450,000	
3. Acquisition of 4WD Tractor with accessories	Sto. Domingo MPC, Centro, Baggao, Cagayan	2,800,000	700,000	3,500,000	
4. Nararagan Valley MPC Grain Center	Nararagan Valley MPC, Nararagan, Ballesteros, Cagayan	6,740,000	3,035,000	9,775,000	
ISABELA					
5. Acquisition of 4WD Tractor with accessories	ARBA MPC, Reina Mercedes, Isabela	2,500,000	500,000	3,000,000	
6. BGD Farm Swine Production Upgrading Facilities	Mr. Bernard Faustino Dy, Nagrumbuan,Cauayan City, Isabela	45,000,000	42,536,250	87,536,250	
7. Establishment of Tunnel Ventilated Chicken Contract Growing Farm in Isabela	Atienza Agribusiness Enterprises / Lourdes Liwag, Minante II, Cauayan City, Isabela	14,800,000	6,650,000	21,450,000	
8. Establishment of Tunnel Ventilated Chicken Contract Growing Farm in Isabela	Y.E.F. Farm Dominic Laguatan, Minante II, Cauayan City, Isabela	14,800,000	6,650,000	21,450,000	
9. Establishment of Tunnel Ventilated Chicken Contract Growing Farm in Isabela	EDV Marketing Eloisa D. Valle, Minante II, Cauayan City, Isabela	14,800,000	6,650,000	21,450,000	
10. Establishment of Tunnel Ventilated Chicken Contract Growing Farm in Isabela	RVJ Industrial Sales & Services. Engr. Romulo V. Valle, Jr., Minante II, Cauayan City, Isabela	14,800,000	6,650,000	21,450,000	
11. Establishment of Tunnel Ventilated Chicken Contract Growing Farm in Isabela	Raymond D. Valle San Isidro, Cauayan City, Isabela	14,800,000	6,650,000	21,450,000	
QUIRINO					
12. Acquisition of 4WD Tractor with accessories	Maddela Integrated Farmer Cooperative, Dumabato Norte, Maddela, Quirino	2,500,000	500,000	3,000,000	
NUEVA VIZCAYA					
13. Malabing Valley Citrus & Tropical Fruit Services Center	Malabing Valley MPC, Malabing, Kasibu, Nueva Vizcaya	17,845,000	22,813,000	40,658,000	













Norphil Farmers Multi-Purpose Cooperative, Sampaguita, Solana, Cagayan













BGD Farm Swine Production, Mr. Bernard Faustino Dy, Nagrumbuan, Cauayan City, Isabela













Sto. Domingo Multi-Purpose Cooperative (MPC), Centro, Baggao, Cagayan







Nararagan Valley MPC, Nararagan, Ballesteros, Cagayan













Atienza Agribusiness Enterprises / Lourdes Liwag, Minante II, Cauayan City, Isabela













Y.E.F. Farm Dominic Laguatan, Minante II, Cauayan City, Isabela













Raymond D. Valle San Isidro, Cauayan City, Isabela













Maddela Integrated Farmer Cooperative, Dumabato Norte, Maddela, Quirino







Calayan SN Multi-Purpose Cooperative (MPC) Calayan, Gonzaga, Cagayan

ACEF Scholars (Batch IV) 2013-2014

GRADUATES OF SY 2013-2014

	Name	Course	School
1	Glen dela Peña	BS in Fisheries	Nueva Vizcaya State University
2	Ivy Ivette Fernando	Veterinary Medicine	Nueva Vizcaya State University
3	Rocel Galicia	BS in Forestry	Isabela State University - Cabagan Campus

CAGAYAN STATE UNIVERSITY - CARIG CAMPUS

	Name	Course	Year Level		Name	Course	Year Level
1	Arturo Magbitang	Veterinary Medicine	5	33	Jojo Tabarejo	BS in Agricultural Engineering	1
2	Norlyn Taule	Veterinary Medicine	3	34	Ameliz Margaret Villaspin	BS in Agricultural Engineering	1
3	Djahnella Gayle Capili	Veterinary Medicine	1	35	Eduardo Balawag	BS in Agricultural Engineering	1
4	Angelica Erjas	Veterinary Medicine	1	36	Princess Tumanguil	BS in Agricultural Engineering	1
5	Judy Libay	Veterinary Medicine	1	37	Venus Caranguian	BS in Agricultural Engineering	1
6	Eduard Sibal	Veterinary Medicine	1	38	Julie Ann Ramirez	BS in Agricultural Engineering	1
7	Marian Joy Pattugalan	Veterinary Medicine	1	39	Dorris Caranguian	BS in Agricultural Engineering	1
8	Eunice Anne Tungcul	Veterinary Medicine	1	40	Lailanie Eclipse	BS in Agricultural Engineering	1
9	Mark Francis Simon	Veterinary Medicine	1	41	Silvino, Lasam, Jr.	BS in Agricultural Engineering	1
10	Jemalyn Lopez	Veterinary Medicine	1	42	Jesica Paguirigan	BS in Agricultural Engineering	1
11	Jeam Abby Keith Panganiban	Veterinary Medicine	1	43	Luzviminda Adolfo	BS in Agricultural Engineering	1
12	Jowelee Gem Barasi	Veterinary Medicine	1	44	loijakim Kyle Dammay	BS in Agricultural Engineering	1
13	Ariestotle Alnas	Veterinary Medicine	2	45	Angelica Addatu	BS in Agricultural Engineering	-
14	Cindy dela Cruz	Veterinary Medicine	4	46	Javnee Gubatan	BS in Agricultural Engineering	1
15	Anabelle Duran	BS in Agricultural Engineering	1	40	Nicko Cabling	PS in Agricultural Engineering	1
16	Leonora Simangan	BS in Agricultural Engineering	1	47		BS in Agricultural Engineering	1
17	Ralf Delfin	BS in Agricultural Engineering	1	40	Antonino Llanto	BS in Agricultural Engineering	1
18	Jimmy Vicente	BS in Agricultural Engineering	1	49			1
19	Mary Rose Macarubbo	BS in Agricultural Engineering	1	50	Alexandrine Colleen Mendoza	BS in Agricultural Engineering	1
20	Rustom Ibo	BS in Agricultural Engineering	1	51	Godfred Belon	BS in Agricultural Engineering	1
21	Chester Pillos	BS in Agricultural Engineering	1	52	Rodante Madriaga, Jr.	BS in Agricultural Engineering	1
22	Paul Angelo Padua	BS in Agricultural Engineering	1	53	Baby Jane Cabasag	BS in Agricultural Engineering	1
23	Ace Gerson Gamboa	BS in Agricultural Engineering	1	54	Abigail Elchico	BS in Agricultural Engineering	1
24	Remalyne Cusipag	BS in Agricultural Engineering	1	55	Jaylloyd Manuel	BS in Agricultural Engineering	1
25	Jhay AR Duruin	BS in Agricultural Engineering	1	56	Jenny Mae Elchico	BS in Agricultural Engineering	1
26	Noriel Duran	BS in Agricultural Engineering	1	57	Arhian Daye Daroni	BS in Agricultural Engineering	1
27	Aileen Garinggan	BS in Agricultural Engineering	1	58	Judy Ann Semana	BS in Agricultural Engineering	1
28	Juliet Abalos	BS in Agricultural Engineering	1	59	Azenith Rocel Daguio	BS in Agricultural Engineering	1
29	Alejandrino Pascua IV	BS in Agricultural Engineering	1	60	Ezeria Giwo	BS in Agricultural Engineering	1
30	Julius Henry Duran	BS in Agricultural Engineering	1	61	Rodel De Guzman	BS in Agricultural Engineering	1
31	Romeo Carambay, Jr.	BS in Agricultural Engineering	1	62	Leizl Anne Cariño	BS in Agricultural Engineering	1
32	Johny Natividad	BS in Agricultural Engineering	1	63	Ajie Balbuena	BS in Agricultural Engineering	1

ACEF Scholars (Batch IV) 2013-2014

CAGAYAN STATE UNIVERSITY - LALLO CAMPUS

	Name	Course	Year Lev
1	Harold Erro	Bachelor in Agricultural Technology	1
2	Nelia Quindatan	BS in Agriculture	3
3	Shirlyflor Pattung	BS in Agriculture	3
4	Roldan Sawadan	BS in Agriculture	3
5	Devine Ramirez	Bachelor in Agricultural Technology	1
6	Myla Abella	BS in Agriculture	3
7	Bellie Borromeo	BS in Agriculture	3
8	Rommel Sacramento	BS in Agriculture	3
9	Ruby Jane Doran	BS in Agriculture	3
10	Fernando Rabut, Jr.	BS in Agriculture	3
11	Mialyn Abella	Diploma in Agricultural Technology	2
12	Jamil Javier	BS in Agriculture	2
13	Gene Rose Verbo	BS in Agriculture	2
14	Rodel Cababag	BS in Agriculture	3
15	Remalyn Javier	BS in Agriculture	4
16	Maryjane Duruin	Diploma in Agricultural Technology	2
17	Rhona Hazel Rodrigo	BS in Agriculture	3
18	Ely Jane Balino	BS in Agriculture	3
19	Maerose Locate	BS in Agriculture	3
20	Marlon Suldan	BS in Agriculture	2
21	Gary Utanes	BS in Agriculture	2
22	Romel Urmatam	BS in Agriculture	4
23	Francis Buscas	BS in Agriculture	2
24	Alwin Melad	BS in Agriculture	2
25	Joy Duruin	Diploma in Agricultural Technology	2
26	Vinson Llanto	BS in Agriculture	1
27	Raymond Taguiam	BS in Agriculture	2
28	Lizel Oli	Diploma in Agricultural Technology	2
29	Remedios Concordia	BS in Agriculture	2
30	Argin Dominic Conciso	BS in Agriculture	1
31	Lorrence Rivera	BS in Agriculture	4
32	Gerome Tumamao	BS in Agriculture	1
33	Alexander Bitamog	BS in Agriculture	1
34	Canny Rose Cabanting	Diploma in Agricultural Technology	2
35	Marlon Gudasen	BS in Agriculture	1
36	Ernesto Villanueva, Jr.	BS in Agriculture	2
37	Geraldine Bacuyag	Diploma in Agricultural Technology	1
38	Ma. Isabel Caraang	Diploma in Agricultural Technology	2
39	Lorilyn Alupani	Diploma in Agricultural Technology	1
40	Bryan Balbuena	BS in Agriculture	1
41	Samuel Duque Jr.	BS in Agriculture	4
42	Julie Ann Respicio	Diploma in Agricultural Technology	2
43	Boyet Pattung	BS in Agriculture	4
44	Ma. Kassandra Pattung	BS in Agriculture	1
45	Warlito Tomas, Jr.	BS in Agriculture	3
46	Keon Medico	Diploma in Agricultural Technology	2
47	Ara Sharmaine Gabriel	BS in Agriculture	3
48	Marife Duque	BS in Agriculture	1
49	Jamesly Cancejo	BS in Agriculture	1
50	Jaydilyn Leonillo	BS in Agriculture	1
51	Ma. Theresa Que	BS in Agriculture	1

CAGAYAN STATE UNIVERSITY - APARRI CAMPUS

	Name	Course	Year Level
1	Mighty Molina	BS in Fisheries	1
2	Irish Gay Pedronan	BS in Fisheries	1

CAGAYAN STATE UNIVERSITY - PIAT CAMPUS

	Name	Course	Year Level
1	Jayson Palanggoy	BS in Agriculture	1
2	Rica Mae Arios	BS in Agriculture	1
3	Leymar Bayubay	BS in Agriculture	3
4	Karen Capili	BS in Agriculture	1
5	Jenelyn Cabasag	BS in Agriculture	1
6	Marykris Saquing	BS in Agriculture	1
7	Monina Cabasag	BS in Agriculture	2
8	Julius Oandasan	BS in Agriculture	1
9	Caren Costudio	BS in Agriculture	1
10	Aljon Isip	BS in Agriculture	1
11	Rosetom Marzan	BS in Agriculture	1
12	Romart Miranda	BS in Agriculture	1
13	Jheron Dela Cruz	BS in Agriculture	1
14	Azalea Mayormita	BS in Agriculture	1
15	April Navarro	BS in Agriculture	1
16	May Daniel	BS in Agriculture	1
17	May Tamayo	BS in Agriculture	1
18	Jesus Pamittan	BS in Agriculture	1
19	Myra Ruma	BS in Agriculture	1

CAGAYAN STATE UNIVERSITY - GONZAGA CAMPUS

	Name	Course	Year Level
1	Maenard Gorospe	BS in Agriculture	1

CAGAYAN STATE UNIVERSITY- SANCHEZ MIRA CAMPUS

	Name	Course	Year Level
1	Caesar Chano	BS in Agriculture	2
2	Mark Joseph Galapia	BS in Agriculture	3
3	Edmar Macugay	BS in Agriculture	3
4	Glen Dela Cruz	BS in Agriculture	3
5	Mehlou Jean Roldan	BS in Agriculture	1
6	Mazda Aurora Pagdilao	BS in Agriculture	1
7	Maricel Culasing	BS in Agriculture	1
8	Mac Edison Pasilabban	BS in Agriculture	1
3 4 5 6 7 8	Edmar Macugay Glen Dela Cruz Mehlou Jean Roldan Mazda Aurora Pagdilao Maricel Culasing Mac Edison Pasilabban	BS in Agriculture BS in Agriculture BS in Agriculture BS in Agriculture BS in Agriculture BS in Agriculture BS in Agriculture	3 3 1 1 1 1

ACEF Scholars (Batch IV) 2013-2014

ISABELA STATE UNIVERSITY - ECHAGUE CAMPUS

	Name	Course	Year Level
1	Rona Jane Reyes	BSA-LADD I	1
2	Zellica Mae Bautista	BSA-LADD I	1
3	Gladys Sabaliones	BS in Agricultural Engineering	1
4	Rosemarie Valdez	BS in Environmental Science	1
5	Shirlyn Sajonia	BS in Agriculture	1
6	Jefferson Marzan	BSA-LADD I	3
7	Ardie Belan	BSA-LADD I	4

ISABELA STATE UNIVERSITY - CABAGAN CAMPUS

	Name	Course	Year Level
1	Sherly Dela Fuente	Diploma in Agricultural Technology	1
2	Blacy Josephine Cabauatan	BS in Agriculture	1

ISABELA STATE UNIVERSITY - SANTIAGO CAMPUS

	Name	Course	Year Level
1	Jessie Sadiarin	BS in Agriculture	1
2	Jerry Sadiarin	BS in Agriculture	1

NUEVA VIZCAYA STATE UNIVERSITY

	Name	Course	Year Level
1	Julia Agustin	BS in Agriculture	2
2	Viane Jumawan	BS in Agriculture	2
3	Joshua Benito	BS in Agriculture	1
4	Jackielyn Tulian	BS in Agriculture	1
5	Jhen Rhey Hope Tugguin	BS in Agriculture	2
6	Lenlen Depayso	BS in Agriculture	1
7	Erlene Joy Cabiso	BS in Agriculture	1
8	Lyra Mae Tabajonda	BS in Agriculture	1
9	Jervis Keen Apostol	Veterinary Medicine	5
10	Keziah Ruth Bimmulog	Veterinary Medicine	3
11	Realyn Bataan	BS in Forestry	1
12	Noime Balahyas	BS in Agriculture	1
13	Airal Baltazar	BS in Agricultural Engineering	1
14	Wilma Bunglay	BS in Agriculture	1
15	Marijon Estong	BS in Agriculture	1
16	Freda Libcon	BS in Agriculture	1
17	Gerlie Mayangao	BS in Agricultural Engineering	1
18	Femarie Molito	BS in Agriculture	1
19	Esther Nayusan	BS in Agriculture	1
20	Gelian Umis	BS in Agricultural Engineering	1
21	Flordeliza Dalmacia	BS in Agriculture	1
22	Chindy Paay	BS in Agriculture	1
23	Mark Dave Sahoy	BS in Agriculture	1
24	Jocelyn Framil	BS in Agriculture	1
25	James Padilla	BS in Agriculture	1
26	Princess April Lino	BS in Agriculture	1
27	Rema Serafin	BS in Agriculture	1
28	Analyn Bucasan	BS in Agriculture	1
29	Felordeen Raymundo	BS in Agriculture	1
30	Marcelyn Sinacay	BS in agriculture	1
31	Rosalinda Agamas	BS in Agriculture	1
32	Lea April Sambrano	BS in Agriculture	1
33	Mary Joy Bacudo	BS in Agriculture	1
34	Laymar Umhao	BS in Agricultural Engineering	1

QUIRINO STATE UNIVERSITY

	Name	Course	Year Level
1	Arzel Zonio - ATI Scholar	BS in Agriculture	4
2	Bencie Casuga	BS in Agriculture	1
3	Clariza Dulnuan	BS in Agriculture	3
4	Devited Jaramillo	BS in Agriculture	2
5	Dimson Apiit	BS in Agriculture	3
6	Dominic del Rosario	BS in Agriculture	2
7	Elizabeth Lunag	BS in Agriculture	3
8	Elvira Villeza	BS in Agriculture	2
9	Estrella Puguon	BS in Agriculture	2
10	Honas Halipan	BS in Agriculture	4
11	Janette Lunag	BS in Agriculture	3
12	Jaydison dela Cruz - ATI Scholar	BS in Agriculture	4
13	John Mark Bayangan	BS in Agriculture	3
14	Jonalizel Eugenio	BS in Agriculture	2
15	Jonalyn Carino	BS in Agriculture	4
16	Judilyn Sagayo	BS in Agriculture	4
17	Junie Eugenio	BS in Agriculture	4
18	Lizel Hawete	BS in Agriculture	1
19	Marjorie Calderon	BS in Agriculture	3
20	Mark Gregor Concepcion	BS in Agriculture	2
21	Marvie Esquejo	BS in Agriculture	2
22	Melba Bautista	BS in Agriculture	3
23	Michelle Juguiad	BS in Agriculture	4
24	Michelle Tayaban	BS in Agriculture	3
25	Misty Bermillo	BS in Agriculture	2
26	Monica Busania	BS in Agriculture	3
27	Mylene Vagay	BS in Agriculture	2
28	Niki Saldaen	BS in Agriculture	3
29	Novelyn Fermin - ATI Scholar	BS in Agriculture	4
30	Primalyn Gatchalian	BS in Agriculture	2
31	Randy Lahing	BS in Agriculture	3
32	Rhea Nalimma	BS in Agriculture	2
33	Ronalyn Kindipan	BS in Agriculture	4
34	Roselle Buluran	BS in Agriculture	2
35	Rowena Baybayan	BS in Agriculture	3
36	Sharomae Cabbigat	BS in Agriculture	2
37	Tessie Dulnuan	BS in Agriculture	3
38	Vangie Sebastian	BS in Agriculture	2
39	Zarina Joy Legaspi - ATI Scholar	BS in Agriculture	4
40	Zeny Halipan	BS in Agriculture	3

























pilot by profession turned farmer is this year's Most Outstanding **Rice Farmer Adopting Integrated Rice-Based Farming System for Cagayan Valley.** His limited farming experiences, however, did not hinder him from becoming an outstanding farmer. He was then encouraged to try new farming technologies and attended seminars and trainings. His aggressiveness and entrepreneurial inclination pushed him to integrate other farming enterprises. Of his five ha, an approximately one ha was utilized into a vegetable production, an organic-based piggery and a fishpond. Driven by his interest to try new inventions, Jomar had constructed an elevated and modified vermi-composting facility that allows him to continuously col-

lect vermi-tea. This serves as one of the major factors that contributed to his profit. He also constantly applied the recommended package of technology in his farm, like the application of vermi compost, vermi tea, Bio-N, use of Minus-One Element Technique (MOET) as basis in fertilizer application and Indigenous Microorganism (IMO). He also used carbonized rice hull to prevent the attack of golden kuhol. Jomar implements the Integrated Pest Management (IPM) strategy and practiced the Palay Check System or the integrated crop management. Jomar likewise strictly practiced the rice-mungbean-rice cropping pattern. With all the technologies he applied, he was able to obtain remarkable yield and income. To date, as a Teacher-Cooperator of the School for Practical Agriculture (SPA) of DA-Agricultural Training Institute (ATI) Region 02, he is now on the process of constructing an "Aquaponics technology", growing of fish and plants. Such technology will be the first of its kind in the Cagayan Valley Region and second in the entire Philippines next to Palawan. He learned the said technology when he was sent by DA-ATI Region 02 to attend such training in Palawan City. The continuing search of the nominee for new technologies made him an outstanding farmer that needs to be emulated and be properly recognized. he municipality of Piat, Cagayan is being considered the Land of Promise- with its vast agricultural land dedicated to corn production and the place of residence of this year's most outstanding corn farmer of Region 02. A graduate of BS Agriculture at the Gregorio Araneta University Foundation (GAUF), Mang Anong started with a 1.8 ha farm land which he planted with corn. Through patience and determination, he was able to expand his land by acquiring an additional 8 ha farm land. After retiring from his teaching stint at the National Agricultural School which later became the Cagayan State University, he was transformed into a full time hands-on farmer. An agriculturist in nature, Mang Anong also engaged in integrated farming where he plants commercially important crops like cacao, coconut, mango and banana. Being a model farmer in the community on corn growing, he started his own large cattle dispersal program where his farm workers are the beneficiary of 56 heads of cow and 10 heads

of carabao in the so called "PAIWI" system. He took the challenges of being a leader in his own modest way by helping his co farmers get familiarized with the latest technologies in farming. For that, he is regarded as the focal person when it comes sharing updated to technologies to fellow farmers.



A side from being a registered Doctor of Veterinary Medicine, Doc Alvin is a full-fledged vegetable farmer. Before fully engaging in vegetable production, he first practiced his profession by entering government and various private companies venturing in Agriculture and Livestock related businesses. By visiting different places, he observed the different agricultural practices per region and the many agricultural business ventures especially in vegetable production. He started plowing and tilling his idle land in 2010 by improving soil quality through application of organic fertilizer and various decomposed farm wastes. To improve his technical know-how in crop production, he conducted test planting of different kinds and varieties of vegetable in collaboration with private seed companies and the CVRC. He also adopted different farming system technologies in order to produce abundant and good quality vegetables. Aside from making his own organic fertilizer, Doc Alvin also ventured in making his own chili



powder and malunggay capsules and sells it to commercial establishments and public markets. Doc Alvin never ceases to teach other farmers not to burn corn cobs, rice hull and rice straw but instead compost them into organic fertilizer. Doc Alvin's organic fertilizer is a combination of chicken dung and rice hull.

r. Simplicio C. Valdez of Gonzaga, Cagayan is this year's Region 02 Most Outstanding Small Animal Raiser. To start a living, he tilled small parcel of land with rice and corn. The income from this venture was not enough to meet their family's basic needs. As such, he transformed these areas into an integrated farm in 1995 to augment their limited income and to support a growing family. They integrated ten swine fatteners and initiated the production of breeder stocks from an initial sow level of two. To hone his skills in swine production, he attended trainings and seminars. One of the most environment friendly projects they es-



tablished is the biogas digester that provided fuel for their gas burners which was used for cooking food for human and animal. The effluent of the project was used as fertilizer for their crops. The project also contributed in the mitigation of the effect of climate change particularly the production of methane gas. Their income derived from their projects grew which enabled them to expand their business ventures. They were able to acquire farm machineries, equipment and facilities. At present, their swine project is at the ten-sow-level and served as their major source of income. As a man blessed with a happy family, generous for the material and intellectual blessings he has gained through hard work and perseverance, he is looked upon by his constituents as a model in his community whose achievements are worth imitating.

DR. ANITA T. ASUNCION Isabela Breeding Station, Gamu, Isabela

Region 02 Most Outstanding Agri-Researcher

true enthusiast and advocate of the development of the livestock industry in the region, Dr. Anita T. Asuncion pioneered the identification of the best technology options on sheep production emulated by other regions. She was able to craft and implement research development programs and geared towards developing location specific production management technologies for sheep, forage and pasture development. Under her leadership, technologies relating to sheep production are now the subject for technology promotions through on-site research and trainings. She was instrumental in consolidating all

resources and support starting from the establishment of the IES as the first nucleus farm for sheep in the entire country. The different location specific production management technologies created under her leadership has been helpful in mitigating climate change and ensuring higher technology production efficiency in strengthening Region 02's sheep industry. The main evidence of Doc Ani's efforts is the Region 02 Guide to Successful Sheep Raising- the ultimate guide for interested sheep raiser, in the region. She believes that her brainchild on focusing research and development undertakings on sheep would serve the interest of a flourishing sheep industry in the entire region.

This year's Most Outstanding Coconut Farmer of Region 02 is Mrs. Zosima Rapanut, 45 years of age, married and hails from Pamplona, Cagayan. At first, she and her husband engaged themselves in selling coconut fruits in the nearby town of Laoag City. The income realized from this venture was invested in buying 3.5 ha coconut farm. To maximize the area, they intercropped various kinds of vegetables and raised livestock and poultry animals, which gave them an income enough to acquire additional 1.5 ha coconut plantation and 3.0 ha corn area. To hone her farming skills, she attended trainings and seminars on Good Agricultural Practices (GAP) on crops and livestock and sought the assistance of DA and the Philippine Coconut Authority (PCA). Employing all the technologies she gained from these trainings and seminars, she produced 100 to 110 nuts per year or an equivalent of 60,900 nuts from her 580 coconut bearing trees. She also produced "copra" when the price of nuts is low. She generated a total of 3.14 mt copra/ha per year. She also planted coconut seedlings for replanting and for sale. Aling Zosima is a United Coconut Planters Federation (COCOFED)/Small Coconut Farmer Organization (SCFO) member and a regis-

tered coconut seed nuts/ seedling supplier with PCA. She directly sold her nuts, copra, and seedlings in and outside the municipality and as far as neighboring llocos Region. Aling Zosima never leaves any part of the coconut wasted. In her latest operation, she posted a net income of **₱326,200.00**/year from her five hectares coconut plantation. The nominee with her passion and love for coconut farming always thank the LORD for making their life easier with this productive undertaking.



Region 02 Most Outstanding Coconut Farmer arangay Kapanikian in Sta. Ana, Cagayan where Mr. Arthur Agra known as "Mang Pablito" lives has the largest agricultural land area in the municipality with farming and livestock raising as the main source of livelihood. He started with only 0.30 ha of rice field and two heads carabao to support his family. With trainings and technical assistance Mang Pablito availed from the office of the Municipal Agriculturist especially in livestock, poultry and vegetable production, he was able to expand his livelihood to acquire an additional four ha of land, 1.5 ha of which is devoted to rice. Today, he has 25 heads carabao (6 bull, 11 female, 8 caraheifer), four heads sow, one boar, five fattening, 150 native chickens and two heads cow with three ha pasture area complete with fencing and 100 sqm planted with napier and other grasses. The other 100 sqm of the pasture area is planted with banana, 50 coconut trees and guyabano and other fruit trees and a 0.10 ha dedicated to fishpond. He was able to maximize utilization of his lands and integrate animals and crops knowing too well the complimentary and



supplementary benefits of these commodities. He implemented a livelihood program for his relatives and neighbors giving them piglets for fattening to be paid after furrowing. He likewise unselfishly gave a small portion for them to till as additional source of income.

ven at a young age, Mr. Miguel B. Decena, Jr., this year's Most Outstanding Agri-Entrepreneur, is already considered as a business minded person for selling ice-drop during summer months just to earn ₱80.00 on weekends. Now, as a local Tai-pan and who is a millionaire, his story is actually a failure turned success. He was once a vegetable dealer and a sari-sari store owner. He also worked as a tricycle driver, a jeepney driver, a coconut dealer, among others. He started as a hauler of chickens in 1991. After four years, he became a sub-contract hauler and fi-



nally, an official hauler. Owing to his resilient willpower, he became a contract grower and started with only 5,000 heads. To date, he now has with him 68 contract growers. The areas of operation are within Region 02 and partly CAR. To support his business, he constructed his own feed mill with a 1,000-bag capacity per day, a dressing plant and a cold storage. The dressing plant was classified double "A" by the National Meat Inspection Service (NMIS). From here, came the birth of the "FRESHKANOK"... the pride of Enrile, Cagayan, produced in province of Cagayan and his own product. His proposed expansion are hatchery operations with 130,000 heads capacity and breeder stock with 60,000 parent stock capacity. This will be equipped with modern equipment on poultry livestock operations, transportation, manpower and others. Today, that same boy who gets ice-drop from Tuguegarao to sell it in nearby town of Enrile is now the humble Manager of the well known MB Decena, Jr. Livestock .



Region 02 Most Outstanding Fisherfolk (Fish Capture Category)

r. Arsenio dela Peña or Mang Asyong as he is fondly called rose from a situation of limited opportunities due to poverty into a state of being looked upon by his barriomates due to his innate leadership skills and innovative character. As Chairman of Barangay Taggat Norte in 2007-2010, he initiated programs and projects that generated funds for the barangay, led his co-officials in safeguarding the fishing grounds of the town by donating one "lampitaw" for monitoring and patrolling illegal fishing activities to curb blast fishing. As a three -decade fisherman, he acquired expertise in his field as he developed his own fishing gears that included squid trap. own hooks and lures and the "kitang" or long line. By observing gravid and berried

lobsters, he was able to craft the "lying-in" cages of these lobsters. Also, he was able to strengthen and extend the lifespan of "payao" to make it more durable for a better catch through observation of wind currents and waves. In 1994, he devised a technique to keep lobsters alive for 18-24 hours while in transit to gain a higher market value. With his dedication to fisheries protection and development, Bureau of Fisheries and Aquatic Resources (BFAR) Region 02 chose him to be the cooperator of Lobster and Sea Urchin Production in the coastal area, was a recipient of the Outstanding Fish Warden Award given by the LGU of Claveria in 2006, Presidential Citation as Outstanding Fisherfolk in Fish Capture category for CY 2006-2007 and Outstanding Regional Deputy Fish Warden in 2012. Mang Asyong engages himself in different programs of the government and commits himself to take part in the advocacy of the government for food security, poverty alleviation, job generation and in the protection, management and conservation of fisheries and aquatic resources.

eacher by profession turned farmer, Mr. Rovelle P. Mendoza of Mabnang, Claveria, Cagayan is this year's Most Outstanding Young Farmer. Born of poor family and deprived of many luxuries in life but managed to finish his college degree, he dreamt to be a teacher, but ended up being a farmer. At first, he tilled a small parcel of rice land given by his parents in 2008. In 2010 his brother lent him his 1,500 sq m farm area to develop. He planted it with fruit trees and vegetables. He also developed fishpond where he was able to yield 50 kg of tilapia. The income derived from fishpond together with his brothers' financial support, enabled him to acquire an additional 1,000 sq m lot. He planted assorted vegetables, fruit trees, put up piggery, poultry and developed more fish ponds out of the natural spring present in his farm. To make his farm more productive, he sought the assistance of the Municipal Agriculturie. Armed with entrepreneurial ability, he had established a "talipapa" in front of their house to market his products. He also linked his products with traders. As such, traders procured his products in bulk. He also strate-gized his cropping production period to ensure the availability of his products at all times and be able to attain high price. Employing all the technologies gained in his farm, he was able to earn a remarkable income. Rovelle being a full-fledge young farmer is currently the President of the 4-H Club in their barangay and a member of Pag-asa Youth Association, a youth-oriented organization supported by the Department of Social Welfare and Development

(DSWD). He was also recognized as community leader by the LGU Municipal Agriculture Office. Optimistic as he is, persistent as he was, and responsible as he may be, Rovelle is an epitome of a successful farmer. He may not be a successful teacher as he dreamt it to be, but, Rovelle believed that "he can be a successful farmer and be able to prove that success is measured not only in terms of examination, wealth and popularity, but by determination to achieve it."



Region 02 Most Outstanding Young Farmer Fisherfolk eing the owner of the fingerling hatchery called the Kingfishers Hatchery, Mr. Danilo Santos made his mark in the fisheries industry by producing quality fingerlings distributed to clients as far as Ifugao, Nueva Vizcaya and Ambuklao Dam. Initially, he invested on a bangus fry concession in Occidental Mindoro aside from leasing a 5.0 ha fishpond in Domalandan, Lingayen, Pangasinan through said ventures did not prosper due to a natural calamity. After a series of tribulations, Mang Danilo went back to San Mateo, Isabela and established his restaurant and fish dealing business venturing once again in tilapia hatchery. By redesigning his 14 compartments pond into seven deep, wide compartments, he was able to control fish kill and continued producing even during summer months. To maintain the water quality, he used probiotics from combining sugarcane husk with fruits and plants applied in the pond during preparation and before draining to ensure that the water is free from pollution. He also used his self-produced probiotic during breeder collection and during fingerling transport. To further reduce his expenses, he made use of pig manure mixed with waste from sweet fruits, fish entrails and sugar as fly attractants and



added his own probiotics for removing foul odor in order to produce large larvae by batch ensuring enough food for the fingerlings. Because of the high demand for tilapia fingerlings, he instituted a program for rearing breeders to replace mortalities during breeder collection, making it a point to always have available conditioned breeders for clients. All these innovations eventually paved his way to success gaining more profits than what he initially anticipated.

Region 02 Most Outstanding Fisherfolk (Fish Culture Category)
s. Imelda P. Galiza of Bantay, Solana, Cagayan is this year's Most Outstanding Sugarcane Farmer of Region 02. Imelda started sugarcane farming in 1988 with an initial area of two ha which she leased. As a start, she sought the assistance of technical experts and successful sugarcane farmers in the municipality. She adopted and practiced all the technologies she learned from Sugar Regulatory Administration (SRA), **Mill Corporations** Sugar **Planters Association, DA and** Private Companies which gave her a remarkable income. Imelda also practiced



zero burning of waste, which helps reduce greenhouse gas emissions. Owing to this, Imelda attained high yields and realized significant income. With her remarkable income and successful operations, Imelda was able to purchase additional ha of sugarcane farms, machineries and equipment which helped her from the drudgery of manual farming. With all the hardwork and perseverance coupled with God's Providence, her family is now reaping the fruits of her labor and deserves to be the Most Outstanding Sugarcane Farmer in Cagayan Valley.



ACDECO was established on July 10, 1979 as a Mala-Kilusang Bayan through the Amos Child Care Project (ACCP) of the World Vision Philippines (WVP). In 1983, a plan to disintegrate the association under the umbrella of ACCP was initiated and approved. Thus, the cooperative attained its full autonomy and became a community-based cooperative. After the first **Pre-Membership Seminar conducted by the** DA-RFO No. 02, 76 participants signified their intention to be a part of the organization and generated a fresh capital of ₱7,600.00. After which, the cooperative was registered as Credit Cooperative and was named SANTIAGO AMOS CREDIT COOPERA-TIVE, INC. (SACCI). After five years, a move to convert the Credit Cooperative into a Multi-

Purpose Cooperative was adopted by the General Membership. The organization was renamed "SANTIAGO AMOS CREDIT AND DEVELOPMENT COOPERATIVE, INC. (SACDECO). To date, the coop has a total membership of 2000. Owing to its unparalleled growth in terms of membership, financial resources and excellent service, SACDECO was adjudged as the Most Outstanding Credit Cooperative of the Philippines in 1987. SACDECO was also confronted with high percentage of member-borrowers delinquency rates. As such, they initiated intensive loan collection strategies and was awarded as the "Most Improved Cooperative in Credit and Collection Management by the Land Bank Countryside Development Foundation, Inc. (LCDFI) due to its success. Owing to good management, the coop is now slowly recovering from its setback in the past. The cooperators are now increasing their share capital, there was a surge on the number of savings depositors and a new business line emerged. Despite their ups and downs, SACDECO is determined to cope up with the fast changing times and continue to provide relevant and quality programs and services not only to its members but the whole community as well. he establishment of the biggest SWIPs in the province strategically located at Barangay Liwan Norte have made significant changes in the Magbitang's farming life. With an initial area of 2.8 ha farm land awarded to them under the Land Reform Program, the family was able to develop and expand it to 5 ha, 3.5 ha of which is devoted to planting rice and the rest to accommodate other crops like corn. Seeing the potential of agribusiness ventures as an additional source of income, the family expanded their production area to introduce crops like banana, root crops, and vegetables and opened a sari-sari store in Liwan Norte serving their more or less 20 neighbors. The couple also extends assistance to farmers by supplying them with different farm inputs to be paid after harvest either in cash or in kind without interest. Mang Berting, the head of the family, buys farmers' produce at the same prevailing price in the market so as for other farmers to no longer bring it to other rice and corn traders and lessen the farmers' expenses. In 2011, the family started planting 70 mango seedling trees near the rice and corn warehouse as a way for them to contribute in protecting the environment and as additional income in the future. Mang Berting

is an active member of the Liwan Norte Irrigators' Association Inc. while his wife Nora is an active member of the Rural Improvement Club's predecessor, Balikatan sa Kaunlaran. Their children have been assisting them in the management and operation of the family's farm business.



Region 02 Most Outstanding Farmer / Fisherfolk Family The HILLTOP 4-H Club was established in June 16, 2006 with 20 but active and determined youth leaders. To be a competent club, they solicited the support of the Office of the Municipal Agriculturist for them to be exposed with trainings to harness their technical and social skills and eventually engage in development endeavors. For only three years of rigorous operation, the Hilltop 4-H Club has exhibited exemplary performance as partner of the local government and institutions in molding the youths into responsible citizens and developing Sta. Clara a self-reliant community. The youths' dynamism and commitment resulted to various livelihood projects established by the club. At first, they tilled a half ha area lent to them. They developed this into a communal vegetable garden and a fishpond. They also established their own Purok and backyard gardens. Their communal farm was transformed into an integrated diversified farm to include vegetable, upland rice, forest trees, poultry and livestock commodities. The club also established their own vermi-compost project, produced fermented plant juice and fermented fruit juice as supplemental organic fertilizer for their crops. They were able to earn a remarkable income from all their enterprising activities, which led to provision of soft loans to members and health, education and livelihood project loans for their family. The club also conducted re-echo trainings and seminars to promote awareness and develop interest of other youths. Owing to their remarkable performance, the Club has been recognized in the provincial, regional and national level and was awarded the Gawad Saka Plaque of Recognition for Most Outstanding Young



Farmer Organization from 2008 to 2012 and Top Ten Accomplished Youth Organization (TAYO) Award for Luzon Area, among others. Today, the Hilltop 4-H Club has a total membership of 78 and still increasing to inspire and draw interest of other youths to become member. Indeed, the Hilltop 4-H Club has proved its worth as a strong instrument in empowering the people towards proactive and self-reliant community.

onzaga is considered a first class municipality that resulted from the increase in its production performance and local revenues. Through the active representations of MAFC Gonzaga to the DA, the Provincial Government of Cagayan and the Municipal LGU, disaster response and rehabilitation of damaged crops were efficiently addressed. Through its committed efforts in monitoring, the municipality achieved incremental production in rice that brought about 256% surplus



for the last two years with more than 900 thousand mt production in fisheries and enough fruits and vegetables for its requirements. The council monitored and evaluated the effective constructions and operations of 28 units MPDPs, 7 units flatbed dryers, 7 units palay shed and management of 200 ha mangrove areas. MAFC Gonzaga also launched different livelihood projects such as seed weed and nursery production, dispersal of tilapia and bangus, provision of fishing boat and fish processing equipment, eco-tourism projects and different RIC projects and implemented animal development programs through vaccination of large animals, vaccination of dogs against rabies, treatment of large and small animals and artificial insemination. Likewise, the Council has implemented an integrated coastal resource management projects funded by the Department of Environment and Natural Resources (DENR), BFAR and Integrated Coastal Resources Management Project (ICRMP). MAFC Gonzaga is also instrumental in the approval of technology demonstration projects on upland rice, corn, fish sanctuaries as well as the season long trainings on palay check system and vegetable production.



he PAFC Cagayan has been an effective feedback mechanism in the implementation of the agriculture programs in the province. Part of their function is to closely monitor the implementation of these programs and make recommendations needed in policy formulation. The council's commitment to service goes beyond agriculture as it is active in many community activities. All members of the council were actively involved in the seed rehabilitation program of DA and the Provincial Government of Cagayan. Aside from monitoring damages during calamities, the members also extend material and financial resources to typhoon-victims. The council was also instrumental in the nomination of 13

provincial entries in the contested categories of 2012 Gawad-Saka Search for Agricultural Achievers. For CY 2011 to 2012, the council among others has actively campaigned on how to mitigate climate change. As such, they were able to conduct seminars on climate change mitigation provincewide. They are also actively involved in the monitoring of the different DA and NAFC/ACEF assisted projects such as the radio program of DA-RFO No. 02 and successful cooperatives in Cagayan Province. To safeguard farmer's interest, the council also advocates the implementation of no selling of untagged certified seeds through the MLGU and Local Ordinances. The above-mentioned activities undertaken by the Cagayan PAFC are achieved because of proper coordination, linkage and good relationship among its members, LGUs, National Government Agencies and the other agriculture stakeholders. They continue to do all these for the sake of public service.

Due to shortage of supply for agricultural products and the manipulation of buyers and traders of hogs, cattle and other products, the Barangay Council of Yeban Norte in Benito Soliven, Isabela requested the DA for one unit Barangay Food Terminal (BFT) Project to cater to the agricultural needs of the residents of the community. Given an initial funding of ₱198,700.00, the BFT of Yeban Norte now serves as the one stop shop of the community also serving adjacent barangays of Yeban Sur and Maluno Norte and providing basic food requirements and a steady market outlet for growers/raisers of agri-fishery products. The BFT is being managed by competent officers with 93 active members equipped with the necessary knowledge and skills in business management acquired from trainings given by the DA-RFO No. 02. To date, there are 100 suppliers of assorted vegetables and two suppliers of meat, poultry and fishery products making the BFT the main source of supplies of two school canteens and one purok canteen. The BFT is also venturing into food processing like lumpiang shanghai, fish shanghai, tapang bangus, embutido, pork tapa, tocino, siomai and peanut butter and repackaging of dishwashing liquid and fabric conditioner. A supplemental feeding program is also being organized and sponsored by the BFT in collaboration with the Barangay Local Government Unit catering to pre-schoolers and malnourished children within the locality. With able management

and continuous support from BLGU, the BFT of Yeban Norte will keep on providing the community with affordable, accessible, safe and quality agri-fishery commodities.



den RIC can be traced back in year 2000 when the then Municipal Rural Improvement Club Coordinator called for a meeting to establish the RIC-Eden chapter giving birth to women entrepreneurs that are well united to become effective and productive constituents of the community. With eager and responsible members, the club has made it possible to implement activities that could roll out funds in sustaining their other activities. The P35,000 profit from the first activity was used as their initial capital in their micro-lending project lent to the members at 35% interest rate per cropping season. As the initial 35,000 capital increases, members made changes in the club's lending interest rates from 35% to 25% in 2005 and was further reduced to 20% in 2006 up to present. Some of the most notable projects of the club include hog dispersal, individual backyard gardening, soap and dishwashing making, banana chips making, puto/suman making, communal beautification and gardening and utensil lending. Individual group projects also include swine, poultry and duck production, a sari-sari store and a vegetable



and orchard production. The implementation of the club's various activities turned the women in Barangay Eden as effective and productive partners of the local government in community development empowering them to be instrumental to live in unity and selfreliance.

he Fisheries and Aquat- ic Resources Management Council (FARMC) serves as advisory and recommendatory body on fishery issues like high fishing pressure, illegal fishing, low catch, resource degradation, and even weather disturbances. Acting as local enforcement authority in relation to the local and national fishery code, the FARMC is instrumental in the crafting, updating and implementation of the Municipal Fisheries Code of Claveria for the development, conservation and management of the coastal, fisheries and aquatic resources of the town. In July of 2012, 300 pieces abalone and 5,000 pieces sea



cucumber juveniles were dispersed in the town's Marine Protected Area (MPA) as measure to safeguard its marine resources. A Reef Discovery project is likewise set for implementation to serve as alternative livelihood for the fishers displaced by the establishment of MPA and to boost the tourism industry in the area increasing the economic utility of the MPA. Also, the FARMC planted 47,000 mangrove propagules in 3.8 ha and established a lying-in hatchery, under the BFAR's Philippine National Aquasilvi Program. Out of the prize money from last year's Gawad Saka Search, the FARMC has financed a number of livelihood projects on fishery and farming technologies, giving the marginalized fisherfolk a chance to a decent housing through the fisherfolk resettlement areas established in Barangays Centro 06 and Pata. Through the FARMC, Claveria, Cagayan is gradually gaining headway on the adoption and application of various integrated coastal resource and fisheries management principles.



Ilamarzo Barangay Food Terminal, this year's Most Outstanding BFT-LGU Operated is located at the northwestern part of Cordon, Isabela, about 6.4 km away from Santiago City, Isabela Public Market, the nearest public market to Cordon. There is no market stall in the area, only the ambulant vendors selling wage goods with exorbitant prices brought about by the high transportation cost incurred from Santiago public market to Villamarzo. The situation led to the establishment of BFT as requested by the Villamarzo Barangay Officials. The BFT has a total project cost of ₱190,992.00. During its inception stage, the Villamarzo BFT experienced struggles but was overcame by the BFT management. And this is the beginning of the smooth operation of the

BFT that led to the opening of opportunities to include job for the operators with good incentives. Whenever unexpected visitors knock-in in the Barangay, the Barangay Council members resorted to BFT resources such as meals and snacks of the visitors. Owing to the establishment of the project, the residence of the Villamarzo saved money from transportation because almost all basic commodities are available in the BFT. Moreover, because of the BFT, almost all idle lands in the barangay are planted to vegetables because of the assurance to sell their produce to the terminal. As such, BFT offers fresh and nutritious vegetables. With all the income derived, the BFT procured one unit Honda motorcycle, established school canteen and sari-sari rolling stores, procured vegetable display rack, constructed BFT building extension and sponsored five highschool and four pre-schooler, scholars, among others. The Villamarzo BFT has been operating for more than two years now and still actively operates as a catalyst of direct marketing of fresh agri-products and basic commodities at lower price compared to existing markets nearby. The success of Villamarzo BFT was attributed to the determined and humble behavior of the BFT management and staff to meet the basic needs of its customers.

TOP RICE AWARDEES

Top Provinces Nueva Vizcaya Isabela

Top City/ Municipalities

Aritao Solano Cauayan City San Mateo Alicia Lallo

Province/ City/ Mu- nicipality	AEWs
OPA	Virgilio V. Dela Cruz
	Fidel G. Ballesteros
	Noda S. Galla
	Ramon E. Sagadraca
Aritao	Denia M. Fragata
	Maria Lita L. Gaboy
	Luzviminda Q. Espiritu
	Divina Gracia F. Peralta
	Elmer A. Aleman
	Remigio B. De Guzman
	Norman Jexter D. Flores
	Edilberto R. Bataliones
Bagabag	Julia P. Torio
	Hiyasmin A. Daquioag
Solano	Ramon P. Ramento
	Oliver F. Sibug
	Norberto B. Butac
	Rachelle Ann M. Medrano
	Marc Evans E. Tamani
	Esmeralda S. Alejandro
	Victoria C. Damian
	Shirley S. Lumicao
Кауара	Elgine R. Iritan
Claveria	Girlie P. Catulin
	Dante A. Castillo
	Roselle H. Agcaoili
	Dinia L. Dela Cruz
Lallo	Jimmy C. Bacuyag
Diffun	Gundalina B. Sison
	Mary Florence V. Ronquillo
	Remedios P. Fernandez

Province/ City/ Mu- nicipality	AEWs
OPA	Danilo B. Tumamao Florencio G. Viesca, Jr. Narciso G. James Marina V. Camba Corazon C. James
San Mateo	Emiliano P. Camba Jeminio B. Rillon Josephine A. Agruda Adelia B. Pascua Ana Maylene S. Basilio Ricky M. Pasamonte Ronald Allan V. Basilo Wilfredo V. Otia
Cauayan City	Rufino C. Arcega Constante M. Barroga Bernadette B. Batori Vilma S. Dominguez Rudy C. Alejandro Dulce L. Dela Cruz Dovisita T. Acierto Ruben A. Luna
Alicia	Daniel B. Salviejo Sammy M. Zamora Isabel M. Gabrillo Alona E. Andrada Loreto S. Soriano
Cabatuan	Pablito L. Guloy
Santiago City	Leonardo V. Maylem Edilberto P. Abes
Roxas	Jesusa T. Lipaopao Sophelina S. Flores Pedie R. Lazaro

Top Province

Isabela

Top Provincial Corn Coordinator

Florencio G. Viesca, Jr., Isabela

Top Municipalities/Cities

Solana, Cagayan Cauayan City, Isabela Ilagan City, Isabela Diadi, Nueva Vizcaya Villa Verde, Nueva Vizcaya Concepcion C. Viernes, Villa Verde, Nueva Vizcaya

Top Municipal/ City Corn Coordinators

Norma L. Brande, Solana, Cagayan Constante M. Barroga, Cauayan City, Isabela Jenita Z. Fernandez, Ilagan City, Isabela Jasmin S. Ballesteros, Diadi, Nueva Vizcaya

TOP CORN AWARDEES



9th Philippine National

2013 National Quality Con

Magmamais ating para sa Ikauunlad ng Sambayanan October 23, 2013

TOP CORN AGRICULTURAL EXTENSION WORKERS (AEWs)

AEWs	Municipality/Province
Samson E. Macapulay	Solana, Cagayan
Lilina D. Gudoy	Solana, Cagayan
Annamarie C. Taguiam	Solana, Cagayan
Venturado C. Ampa	Burgos, Isabela
Constante M. Barroga	Cauayan City, Isabela
Ruben A. Luna	Cauayan City, Isabela
Vilma S. Domingues	Cauayan City, Isabela
Aurora M. Pulido	Cauayan City, Isabela
Resie C. Lamug	Cauayan City, Isabela
Dulce L. Dela Cruz	Cauayan City, Isabela
Diovisita T. Acierto	Cauayan City, Isabela
Julia A. Magaoay	llagan City, Isabela
Zosima V. Cadatal	llagan City, Isabela
Rosalia T. Canceran	llagan City, Isabela
Lilian A. Bayani	llagan City, Isabela
Jenita Z. Fernandez	Ilagan City, Isabela
Virginia S. Labaro	Bagabag, Nueva Vizcaya
Susana T. Muli	Diadi, Nueva Vizcaya
Johna Viola P. Dacanay	Villa Verde, Nueva Vizcaya
Concepcion C. Viernes	Villa Verde, Nueva Vizcaya
Sonny C. Pacunla	Diffun, Quirino
Hedie R. Marquez	Nagtipunan, Quirino
Jovencio G. Salvador	Maddela, Quirino
Telesfora T. Tomas	Maddela, Quirino
Romeo S. Ylarde	Maddela, Quirino
Elizabeth S. Ylarde	Maddela, Quirino
Nida M. Juan	Maddela, Quirino

Outstanding Municipality

The municipality of Sabtang, Batanes was awarded the Most Outstanding Municipality implementing Organic Agriculture Program. This was made possible due to the presence of Vuhus Cattle Organic Project in the Island of Sabtang with more than 1, 000 heads of cattle being managed by an organized farmers' association. The cash award is One Million Pesos (PhP 1,000,000.00) worth of project grant.



Outstanding Municipal Organic Agriculture Focal Person

The Municipal Agriculturist, Mr. Francisco Ramos of Sabtang, Batanes was awarded the Most Outstanding Municipal Organic Agriculture Focal Person for his exemplary accomplishment in the supervision and implementation of Organic Agriculture program and projects. The cash award amounts to Thirty Thousand Pesos (PhP 30, 000.00).



Outstanding Agricultural Extension Worker

The AEW of Sabtang, Batanes in the person of Ms. Remedios Esperanza for her support in extension activities in assisting the farmers practicing Organic Agriculture in the municipality. Her cash award amounts to Thirty Thousand Pesos (PhP 30, 000.00).

Table 5. DA-RFO No. 02 Comparative Budget 2012-2013

FUNCTION	2012 ACTUAL	2013 ACTUAL	
REGULAR			
GASS (General Administrative Support Services)	25,557,000	31,244,000	
STO (Support to Operations)	7,596,000	8,990,000	
CROPS	48,115,000	54,912,000	
LIVESTOCK	27,892,000	31,814,000	
OPERATIONS			
RICE	512,740,326	787,475,400	
CORN	93,425,000	125,683,000	
HVCDP	71,141,000	102,752,000	
LIVESTOCK	28,382,000	26,752,000	
ORGANIC AGRICULTURE	18,166,000	54,538,000	
OTHERS			
CASECNAN SOCIAL MEASURES PROJECT	75,000,000	70,000,000	
FMR	209,500,000	121,500,000	
OTHER FUNDS	184,007,799.22	255,343,045.08	
CONTINUING APPROPRIATION	51,910,279	47,922,379	
TOTAL	1,353,432,404.22	1,718,925,824.08	

Operating Units/Division	Permanent	Contractual
Office of the Regional Director	6	10
Planning, Monitoring and Evaluation Division	4	8
Agri-business and Marketing Assistance Division	4	7
Administrative and Finance Division	31	44
Operation Division	47	36
Regulatory Division	32	37
Research Division	17	23
Research/ Experiment Stations:		
Batanes Experiment Station	5	16
Northern Cagayan Experiment Station	14	12
Southern Cagayan Research Center	17	48
Cagayan Valley Research Center	21	53
Isabela Experiment Station	7	9
Quirino Experiment Station	10	23
Nueva Vizcaya Experiment Station	5	25
Total	220	351



DIR. LUCRECIO R. ALVIAR, JR., CESO III

Regional Executive Director



DR. GERONIMA G. LUDAN

Chief, Livestock Division,

Co-Coordinator, Livestock Development Program



DIR. ORLANDO J. LORENZANA

Regional Technical Director for Research and Regulatory & Regional CORN Program Coordinator



DR. ERNESTO GUZMAN

Chief, Operations Division



DIR. LORENZO M. CARANGUIAN

OIC-Regional Technical Director for Operations and Extension



MS. KAY S. OLIVAS

OIC-Chief, Planning, Monitoring and Evaluation Division



MR. ROBERT B. OLINARES

Chief, Research Division & Regional High Value Crops Development Program (HVCDP) Coordinator



MR. JAIME M. PAGALILAUAN Chief, Finance Division



MS. MARINA ACEBEDO

Focal Person, Organic Agriculture



MS. VIVIEN DELOS SANTOS

Chief-Agribusiness and Marketing Assistance Division



MR. JOSELYN BOSITO OIC-Chief Administrative Officer/General Services Administrative Division



MS. ROSEMARIE MARTIN

Chief, Institutional Development (ID) Section



MR. HECTOR TABBUN OIC-Chief, Agricultural Communication (AgCom) Section



DR. RONNIE ERNST DUQUE

Co-Coordinator, Livestock Development Program



MS. PAZ FURIGAY OIC-Chief, Personnel Section



MS. BETTY TAMARAY Chief, Records Unit



MR. BONIFACIO TUGADE Chief, Accounting Section



ENGR. RUBEN CUBERO Chief, Supply Unit



ENGR. RESTITUTO SAMATRA Chief, Regional Agriculture and Engine

Chief, Regional Agriculture and Engineering Group (RAEG)



MS. MARGARET C. AGUINALDO Chief, Regional Soil's Laboratory



MS. TERESITA G. FLORES OIC-Chief, Budget Section



MS. ERMA T. BARIUAN Chief, Cashiering Unit



DR. ZALDY A. OLIVAS Chief, Regional Quarantine



MS. ROSE MARY G. AQUINO Manager, Cagayan Valley Research Center (CVRC) San Felipe, Ilagan, Isabela



MR. VICENTE I. MIGUEL Manager, Southern Cagayan Research Center (SCRC)- Iguig Site Minanga Norte, Iguig, Cagayan



MARILOU A. AGAID, Ph. D. Manager, Northern Cagayan Experiment Station (NCES) Maquire, Lucban, Abulug, Cagayan



MS. CELERINA T. MIRANDA Manager, Nueva Vizcaya Experiment Station (NVES) Tapaya, Bagabag, Nueva Vizcaya



MR. RODOLFO BAYUCAN Manager, Quirino Experiment Station (QES) Dungo, Aglipay, Quirino



MR. CELSO R. BATALLONES

Manager, Batanes Experiment Station (BES) Basco, Batanes



DR. ANITA ASUNCION

Manager, Isabela Experiment Station (IES) Upi, Gamu, Isabela



MS. CHARITY A. VERSOZA

Head, Southern Cagayan Research Center - Solana, Site Maguirig, Solana, Cagayan





ENGR. FIDELINO R. CABANTAC

Head, Soil and Water Management Station (SWMS) Baligatan, Ilagan, Isabela

MS. CARLITA COLLADO Head, Regional Crop Protection Center

RMC MEMBERS – AGENCIES & BUREAUS

AGENCY / BUREAU	NAME AND POSITION
Agricultural Training Institute-Regional Training Center (ATI-RTC), San Mateo,	MR. RENATO A. MAGUIGAD
Isabela	Center Director
Bureau of Agricultural Statistics (BAS),	MS. MARILYN T. ESTRADA
Tuguegarao City, Cagayan	Regional Agricultural Statistics Officer
Bureau of Fisheries and Aquatic Resources (BFAR),	DR. JOVITA P. AYSON
luguegarao City, Cagayan	Regional Director
PHILMECH, Science City of Muñoz, Nueva Ecija	ENGR. REX L. BINGABING Executive Director
Bureau of Plant Industry (BPI) - NSQCS, San Mateo, Isabela	MR. RIONI B. DELOS TRINOS Officer-in-Charge
Bureau of Soils & Water Management(BSWM),	DR. SILVINO Q. TEJADA
Quezon City	Executive Director
Cagayan Valley Agricultural Resources Research & Dev't. (CVARRD), ISU,	DR. WILLIAM MEDRANO
Echague, Isabela	Consortium Director
Fertilizer and Pesticide Authority (FPA)	MR. HENRY FRONDA
Fuguegarao City, Cagayan	Manager
and Bank of the Philippines (LBP)	MR. BERNARDO B. BAYANGOS Head, Northern
Γuguegarao City, Cagayan	Cagayan Valley Lending Center
National Food Authority (NFA), Santiago City	DIR. MARIO GONZALEZ Regional Manager
National Meat Inspection Service (NMIS),	DR. EDUARDO R. OBLENA
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^P hilippine Coconut Authority (PCA)	EDILBERTO M. NICOLAS
lagan City, Isabela	OIC - Provincial Manager
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Γuguegarao City, Cagayan	Regional Manager
Philippine Rice Institute (PHILRICE)	MR. DEMOCRITO B. REBONG II
San Mateo, Isabela	Regional Manager

AGENCY / BUREAU

QUEDANCOR Santiago City, Isabela

Regional Agriculture & Fishery Council (RAFC) Tuguegarao City, Cagayan

Regional Fishermen's Training Center (RFTC) Maura, Aparri, Cagayan

Sugar Regulatory Administration CARSUMCO Compound, Piat, Cagayan

NAME AND POSITION

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MR. ISIDRO B. ACOSTA, SR. Chairman

DR.MILAGROS MORALES Center Director & OIC - Asst. Reg'l. Director (BFAR)

MR. LITO M. CARANGUIAN Regional Coordinator

RMC MEMBERS - LOCAL GOVERNMENT UNITS

	LGU & ADDRESS	NAME AND POSITION	
	PLGU BATANES Basco, Batanes	MRS. PRISCILLA V. NANUD Provincial Agriculturist	_
		DR. ALBERT TABILE Provincial Veterinarian	
	PLGU CAGAYAN Tuguegarao City, Cagayan	DR. MILDRED S. ABELLA Provincial Agriculturist	
		DR. JAIME GUILLERMO Provincial Veterinarian	
	PLGU ISABELA Ilagan City, Isabela	MR. DANILO B. TUMAMAO Provincial Agriculturist	
		DR. ANGELO NAUI Provincial Veterinarian	
	PLGU NUEVA VIZCAYA Bayombong, Nueva Vizcaya	MR. ALEXANDER B. DOMINGO OIC, Provincial Agriculturist	
		DR. CHRISTOPHER SERASPI Provincial Veterinarian	
	PLGU QUIRINO Cabarroguis, Quirino	MR. PEDRO V. GARCIA OIC - Provincial Agriculturist	
-		DR. MARCELINO G. DELSON, JR. Provincial Veterinarian	

ACCP	Amos Child Care Project	DSWD	Department of Social Welfare and Development
ACEF	Agricultural Competitiveness Enhancement Fund	ELISA	Enzyme Link Immuno Sorbent Assay
AEDC	Agribusiness Enterprise Development Center	EMRCT	Expanded Modified Rapid Composting Technology
AEW	Agricultural Extension Worker	FAT	Flourescence Anti-Body Test
AFC	Agriculture and Fishery Council	FARMC	Fisheries and Aquatic Resources Management Council
AGCOM	Agricultural Communication	FITS	Farmers' Information Technology Services
AHFF	Agriculture, Hunting, Forestry and Fishing	FLE	Farmer-Led Extensionist
AMAD	Agribusiness and Marketing Assistance Division	FMD	Foot and Mouth Disease
AMAS	Agribusiness and Marketing Assistance Service	FSP	Farm Service Provider
ANOVA	Analysis of Variance	FSSP	Food Staples Sufficiency Program
AOM	Audit Observation Memorandum	FTPC	Food and Technology Processing Center
API	Anlytical Profile Index	GAP	Good Agricultural Practices
ASF	Abulug Seed Farm	GAUF	Gregorio Araneta University Foundation
ATI	Agricultural Training Institute	GASS	General Administrative Support Services
AVP	Audio Visual Presentation	GRDP	Gross Regional Domestic Product
BAI	Bureau of Animal Industry	H A-HI	Hemagglutination-Hemagglutination Inhibition
BAR	Bureau of Agricultural Research	HILROS	Hilly Land Research Outreach Station
BAS	Bureau of Agricultural Statistics	HQSU	High Quality Seed Utilization
BCA	Biological Control Agent	HVCDP	High Value Crops Development Program
BES	Batanes Experiment Station	IAROS	Island Agricultural Research Outreach Station
BFAR	Bureau of Fisheries and Aquatic Resources	IBS	Isabela Breeding Station
BFT	Barangay Food Terminal	ICRMP	Integrated Coastal Resources Management Project
BPI	Bureau of Plant Industry	ID	Institutional Development
C AVOFA	Cagayan Valley Organic Farmers Association	IEC	Information Education Campaign
CBS	Cagayan Breeding Station	IES	Isabela Experiment Station
CFA	Compost Fungus Activator	IMO	Indigenous Microorganism
CMIPP	Casecnan Multi-Purpose Irrigation and Power Project	IPM	Integrated Pest Management
COCOFED	United Coconut Planters Federation	ISL	Ilagan Soils Laboratory
CORDEV	Cooperative for Rural Development	LCDFI	Land Bank Countryside Development Foundation, Inc.
CPAR	Community-Based Participatory Action Research	LFT	Local Farmer Technician
CSB	Community Seed Bank	LGU	Local Government Unit
CSC	Civil Service Commission	MANCOM	Management Committee
CSMP	Casecnan Social Measures Project	MOET	Minus-One-Element Technique
CVIAL	Cagayan Valley Integrated Agricultural Laboratory	MPA	Marine Protected Area
CVIARC	Cagayan Valley Integrated Agricultural Research Center	MPC	Multi-Purpose Cooperative
CVLMROS	Cagayan Valley Lowland and Marine Research Outreach Station	MPDP	Multi-Purpose Drying Pavement
CVRC	Cagayan Valley Research Center	MRCT	Modified Rapid Composting Technology
DA	Department of Agriculture	NAFC	National Agriculture and Fishery Council
DAEA	Department of Agriculture Employees Association	NAFC	National Food and Agriculture Council
DA-RFO No. 02	Department of Agriculture-Regional Field Office No. 02	NCES	Northern Cagayan Experiment Station
DBM	Department of Budget and Management	NGO	Non-Government Organization
DENR	Department of Environment and Natural Resources	NMIS	National Meat Inspection Service
DepEd	Department of Education	NPK	Nitrogen Phosphorous & Potassium

NSIC	National Seed Industry Council	Figure 1	Region II Sufficiency Level (%) of Selected Commodities in CY
NVES	Nueva Vizcaya Experiment Station	Figure 2	2010–CY 2013,page 8 Contribution of Cagayan Valley to the National Rice Produc-
NSCB	National Statistics Coordination Board	0.	tion, page 13
NSO	National Statistics Office	Figure 3	Palay Production in the Provinces of Cagayan Valley, page 13
NYR	National Year of Rice	Figure 4	Contribution of Cagayan Valley to the National Corn Produc-
O A-RTWG	Organic Agriculture-Regional Technical Working Group	F ' -	tion, page 29
OFY	Outstanding Farmer of the Year	Figure 5	Corn Production in the Provinces of Cagayan Valley, page 29
OPV	Open Pollinated Variety	Table 1	Cagavan Valley's Percentage Growth of AHFF. its Contribu-
ORED	Office of the Regional Executive Director		tion to the GRDP and the GRDP in CY 2011–CY 2013, page 7
OSAC	One Stop Agribusiness Center	Table 2	Cagayan Valley's Agricultural Crop, Livestock and Poultry Production Performance in CV 2011–CV 2013, page 11
PCA	Philippine Coconut Authority	Table 3	List of Rehabilitated FMR in CY 2013, page 75
PCIC	Philippine Crop Insurance Corporation	Table 4	List of Implemented ACEF Projects, page 79
PCR	Polymerase Chain Reaction	Table 5	DA-RFO No. 02 Comparative Budget 2012-2013, page 119
PhilRice	Philippine Rice Research Institute		
PICC	Philippine International Convention Center		
РОТ	Package of Technology		
PRA	Participatory Rural Appraisal		
QES	Quirino Experiment Station		
R &D	Research and Development		
RADDL	Regional Animal Disease Diagnostic Laboratory		
RATPLAN	Rationalization Plan		
RCPC	Regional Crop Protection Center		
RIC	Rural Improvement Club		
RS	Registered Seed		
RSL	Regional Soils Laboratory		
S ACCI	Santiago Amos Credit Cooperative, Inc.		
SACDECO	Santiago Amos Credit and Development Cooperative, Inc.		
SCFO	Small Coconut Farmer Organization		
SCRC	Southern Cagayan Experiment Station		
SPA	School for Practical Agriculture		
SRA	Sugar Regulatory Administration		
SSNM	Site-specific Nutrient Management		
STO	Support to Operations		
SWIP/DD	Small Water Impounding Project/ Diversion Dam		
SWISA	Small Water Impounding System Association		
TAYO	Top Ten Accomplished Youth Organization		
UNAIP	Unified Artificial Insemination Program		
UPROS	Upland Research Outreach Station		
USPL	United States Public Law		
WVP	World Vision Philippines		



Department of A GRICULTURE Regional Field Office No. 02

Produced by Planning, Monitoring & Evaluation Division (PMED)