2017

2017 ANNUAL REPORT OF ACCOMPLISHMENTS

Republic of the Philippines
SUGAR REGULATORY ADMINISTRATION
North Avenue, Diliman, Quezon City
www.sra.gov.ph

CORPORATE OBJECTIVES

The Sugar Regulatory Administration (SRA) was created by virtue of Executive Order No. 18 s. 1986 which declares that: *"it shall be the policy of the State to promote the growth and development of the sugar industry through greater and significant participation of the private sector and improve the working conditions of laborers"*.

RA 10659 or the Sugarcane Industry Development Act of 2015 further declares the policy of the State to promote the competitiveness of the sugarcane industry and maximize the utilization of sugarcane resources, and improve the incomes of farmers and farm workers, through improved productivity, product diversification, job generation, and increased efficiency of sugar mills.

In order to carry out the foregoing policies of the State, the SRA shall operate with the following objectives"

1. *To institute an orderly system in sugarcane production for the stable, sufficient and balanced production of sugar, for local consumption, exportation and strategic reserves;*

2. *To establish and maintain such balanced relation between production and requirement of sugar and such marketing conditions as will ensure stabilized prices at a level reasonable profitable to the producers and fair to consumers;*

3. *To promote the effective merchandising of sugar and its by-products in the domestic and foreign markets so that those engaged in the sugar industry will be placed on a basis of economic viability;*

4. *To undertake such relevant studies as maybe needed in the formulation of policies and in the planning and implementation of action programs required in attaining the purposes and objectives set forth under E.O. 18 s. 1986.*

5. *To implement productivity improvement programs such as block farming, farm support initiatives like farm management, technical assistance and socialized credit, farm mechanization, research and development, and extension services to promote the competitiveness of the sugarcane industry and maximize the utilization of sugarcane resources and improve incomes of sugarcane farmers and workers.*

6. *To establish a supply chain monitoring system from sugarcane to sugar at the retail level to ensure sufficiency and safety of sugar.*

MANDATE

The legal mandate of SRA is embodied in Executive Order No. 18 dated May 28, 1986 creating the Sugar Regulatory Administration. It states that the policy of the State is to promote the growth & development of the sugar industry through greater participation of the private sector and to improve the working conditions of the laborers.

Further, Republic Act 9367 s. 2006 (Biofuels Act of 2006) mandated SRA, as member of the National Biofuel Board (NBB), to develop and implement policies supporting the Philippine Biofuels Program and ensure security of domestic sugar supply.

Furthermore, Republic Act 10659 otherwise known as the *"Sugarcane Industry Development Act of 2015"* mandates SRA and other government entities to promote the competitiveness of the sugarcane industry and maximize the utilization of sugarcane resources, and improve the incomes of farmers and workers, through improved productivity, product diversification, job generation and increased efficiency of sugar mills.

VISION

"By 2040, the Philippines shall have globally competitive sugarcane industry that supports food, power, and other related industries through an institutionally competent SRA and committed stakeholders, for a secured future for Filipinos."

MISSION

"SRA is a Government-Owned and Controlled Corporation which formulates responsive developmental and regulatory policies, and provides RD&E services to ensure sufficient supply of sugarcane for a diversifies, sustainable and competitive industry that improves productivity and profitability of sugarcane farmers and processing industries, and provides decent income for workers towards enhancing the quality of life of Filipinos."

CORE VALUES

Integrity	***We employ the highest ethical standards, demonstrating honesty and fairness in every action that we take.***
Innovativeness	***We deliver public service to the stakeholders of the sugarcane industry in a creative way, anticipate change and capitalize on emerging opportunities.***
Competence	***We will strive to deliver public service effectively by improving our knowledge base socially, environmentally and technically.***
Professionalism	***We treat others with the highest degree of dignity, equality and trust and respect their beliefs and rights as fellow public servants and stakeholders of the sugarcane industry.***
Accountability	***We take responsibility for our performance as public servants and compliance to legal requirements pursuant to government rules, regulations and existing laws.***

STRATEGIC GOALS
(2017-2022)

SOCIO-ECONOMIC IMPACT

Empowered Sector significantly contributing to food security and poverty reduction.

Maintain balanced sugar supply and demand requirements.

STAKEHOLDERS

Improve income, profitability and global competitiveness of the sugarcane industry.

INTERNAL PROCESS

Provide responsive technical assistance and extension services to sugarcane industry stakeholders.

Enforce and implement pro-active and effective policies, rules and regulations.

LEARNING & GROWTH

Sustain the development of expertise and human resources in the field of sugarcane industry, development and related areas.

FINANCE

Maintain sound financial management.

CORPORATE GOVERNANCE STATEMENT

Section 6. Corporate Governance Statement – Guiding principles to the governing boards, executive officers and employees, SRA adopts a Corporate Governance Statement which will inspire their actions and decisions in the operations and affairs of SRA:

> ***"The SRA shall be a transparent, accountable, dynamic, trustworthy, responsive, competitive and professional Government-Owned and/or Controlled Corporation (GOCC) primarily responsible for the growth and development of the Philippine sugarcane industry. It shall be governed by an ethical and competent Board and Management who shall promote good governance and maintain high quality standards of public service to protect and safeguard the interests and rights of its stakeholders, sugarcane industry partners and other clienteles."***

DIRECTORY OF SRA KEY OFFICERS

SRA OFFICIAL/ DESIGNATION	DEPARTMENT	CONTACT NUMBER/s	EMAIL ADDRESS
HERMENEGILDO R. SERAFICA	SRA Administrator	srahead@sra.gov.ph	(632) 455-3376 / (632) 455-2135 / (632) 929-3633
EMILIO BERNARDINO L. YULO	Board Member (Planter's Sector)	brd_plnt@sra.gov.ph	(632) 455-8245
ROLAND B. BELTRAN	Board Member (Miller's Sector)	brd_mill@sra.gov.ph	(632) 455-2518
JOSEPHINO M. AGOSTO	OIC – Deputy Administrator II & Department Manager III, Administrative & Finance Department	dep_adm@sra.gov.ph / afd_mgr@sra.gov.ph	(632)924-4034 / (632)455-1589 / (632)926-6471/ (632)455-7656
MARY ANTOINETTE S. TAMPO	OIC – Assistant Administrator (Visayas)	asst_adm@sra.gov.ph	(6334) 434-5124
ROSEMARIE S. GUMERA	Department Manager III, Planning & Policy Department & OIC – Research Development & Extension Department	ppd_mgr@sra.gov.ph / rde_mgr@sra.gov.ph	(632)929-6137/ (632)455-0446 / (632)455-8615
GUILLERMO C. TEJIDA, III	OIC – Legal Department (Luzon, Visayas & Mindanao)	rd_vis@sra.gov.ph	(6334)435-3755
DAISY CORAZON N. FABIA	Department Manager III, Regulation Department (Luzon)	rd_mgr@sra.gov.ph	(632)926-4493/ (632)929-9223
IGNACIO S. SANTILLANA	OIC – Research Development & Extension Department (Visayas)	legal@sra.gov.ph/ legal_vis@sra.gov.ph/ rde_vis@sra.gov.ph	(632)236-0063/ (6334)435-3759/ (6334)433-6887
LUIS M. MARAJAS	Department Manager III, Internal Audit Department (Luzon)	iad_mgr@sra.gov.ph	(632)929-6131
ERLINDA J. ABACAN	Chief Accountant, Accounting Division (Luzon)	acctg@sra.gov.ph	(632)455-2336
WILFREDO R. MONARES	OIC – Manager III, Regulation Department (Visayas)	rdmonitor _vis@sra.gov.ph	(6334)434-1470
THERESA G. RICAFORT	OIC – Budget & Treasury Division (Luzon)	budgettreasury@sra.gov.ph	(632)236-0009
MARILOU C. DELOS REYES	Chief Sugar Production & Regulation Officer, Sugar Transaction Division (Luzon)	sug_transact@sra.gov.ph	(632)455-7592/ (632)926-4493

LAVERNE C. OLALIA	OIC – Research & Laboratory Division (LAREC)	larec@sra.gov.ph	(6345)970-0795
HELEN B. LOBATON	OIC – Extension & Technical Services Division (Visayas)	extn_vis@sra.gov.ph	(6334)433-6887
NARCISO R. CABALQUINTO, JR	OIC – General Administrative Division (Luzon)	hrd_gsd@sra.gov.ph	(632)455-3524
MA. LOURDES I. DORMIDO	OIC- Chief Science Research Specialist, Research & Laboratory Division (LGAREC)	lab_lgarec@sra.gov.ph	(6334)735-0141
LUISITO C. MALAGKIT	Chief Sugar Production & Regulation Officer, Licensing & Monitoring Division (Luzon & Mindanao)	sug_monitor@sra.gov.ph	(632)455-8340
MARIETTA DINA PADILLA-FERNANDEZ	Chief Agriculturist, Extension & Technical Services Division (Luzon & Mindanao)	extn_off@sra.gov.ph	(632)929-6135
MA. NATALIA R. TASIS	OIC – Sugar Regulation & Enforcement Division (Luzon & Mindanao)	sred@sra.gov.ph	(632)455-0793
MA. ROSARIO R. SOLA	OIC – Sugar Regulation & Enforcement Division (Visayas)	sred_vis@sra.gov.ph	(6334)434-1470

BIOGRAPHICAL DETAILS OF THE SRA BOARD

NAME & DESIGNATION	AGE	QUALIFICATIONS	DATE OF FIRST APPOINTMENT	RELEVANT EXPERIENCE
HERMENEGILDO R. SERAFICA *Administrator and Co-Chair Sugar Board*	60	- Bachelor of Science in Mechanical Engineering, University of San Carlos (1978)	09/29/2017	• CHAIRMAN Philippine Sugar Corporation • PRESIDENT HFT&E Serafica Realty Inc. • PRESIDENT H Serafica & Sons Corporation • PRESIDENT F.S. Serafica Enterprises, Inc. • CORPORATE SECRETARY Pepite Serafica Development Corporation • PRESIDENT HR Serafica Plantation Corp. Brgy. Valencia, Ormoc City, Leyte from July 2015 to September 30, 2017 • CHAIRMAN Ormoc-Kananga Mill District Development Council Foundation, Inc (MDDC) • MEMBER – PRIVATE SECTOR REPRESENTATIVE LOGISTICS SECTOR Regional Development Council – • PRESIDENT Leyte Cane Planters Association, Inc. • MEMBER – BOARD OF DIRECTOR United Sugar Producers Federation of the Phils. Inc. (UNIFED) • MEMBER BOARD OF TRUSTEES Philippine Sugar Research Institute (PHILSURIN • GUEST DIRECTOR PHILSURIN Finance Committee • BOARD MEMBER Ormoc Sugarcane Planters Association (OSPA)
ROLAND B. BELTRAN *Board Member* Miller's Sector	53	Bachelor of Laws – San Beda College (1989) Bachelor of Arts Major in Economics – San Sebastian College (1985)	12/12/2016	• COMMISSIONER on Bar Discipline – Integrated Bar of the Philippines • LAWYER-PARTNER – Beltran & Reyes Law Offices • ASSOCIATE LAWYER – Ledesma Saludo & Associates • LEGAL ASSISTANT – SM Investment

EMILIO BERNARDINO L. YULO *Board Member* Planter's Sector	55	Bachelor of Laws – University of La Salle, Bacolod	07/01/2017	• PARTNER, Yulo Villarin & Barcelona Law Office (2004-Present) • CHAIRMAN- Committee on Laws& Good Governance-Province Negros (2010-2013) • MEMBER - Sanguniang Panlalawigan of 5th District Province of Negros Occidental (2010-2013) • VICE GOVERNOR, Province of Negros Occidental (2008-2010) • PROFESSOR, College of Law University of La Salle-Bacolod (1997-2011) • CHAIRMAN, Committee on Environment-Province of Negros Occidental (2018-2010) • Co-CHAIRMAN/MEMBER, Provincial School Board-Province of Negros Occidental (2004-2010) • REGIONAL CHAIRMAN - Region VI Provincial Board Members League of the Philippines (2007-2008) • CHAIRMAN- Committee on Education-Province of Negros Occidental (2004-2008) • MEMBER - Sanguniang Panlalawigan of 5th District Province of Negros Occidental (2004-2008) • CITY LEGAL OFFICER, City of Himamaylan (2001-2003) • PARTNER, Sarmiento Yulo Law Offices • PROFESSOR, College of Business & Accountability University of La Salle-Bacolod (1997-2000)

TRAININGS ATTENDED BY THE ADMINISTRATOR & THE SUGAR BOARD

NAME & DESIGNATION	Title & Date of Training
HERMENEGILDO R. SERAFICA *Administrator and* *Co-Chair Sugar Board*	▸ **Corporate Governance Orientation Program for Government Owned or Controlled Corporations** February 8, 2017 ▸ **Public Corporate Governance,** April 3-4, 2017 ▸ **Program on Strategy Design for Directors,** April 6, 2017 ▸ **Strategy Execution Pathway-Essentials (StEP) Program,** July 20-21, 2017 ▸ **23rd Executive Course on National Security (ECNS),** July 3-7, 2017 ▸ **Strategic Execution Pathway – Masters**, November 7-8, 2017
ROLAND B. BELTRAN *Board Member* Miller's Sector	▸ **Corporate Governance Orientation Program for Government Owned or Controlled Corporations,** February 8, 2017 ▸ **Public Corporate Governance,** April 3-4, 2017 ▸ **Program on Strategy Design for Directors,** April 6, 2017 ▸ **23rd Executive Course on National Security (ECNS)** July 3-7, 2017 ▸ **Strategy Execution Pathway 3-1 (StEP) Essentials,** July 20-21, 2017 ▸ **Finance for Directors Module I and II**, August 24, 2017 ▸ **Strategic Execution Pathway – Masters**, November 7-8, 2017

ANNUAL REPORT OF ACCOMPLISHMENTS OF THE FOLLOWING DEPARTMENTS:

REGULATION DEPARTMENT – LUZON/MINDANAO

The first half of the year was a challenging period for the Regulation Department. The biggest issue that confronted the Department was the importation of **HIGH FRUCTOSE CORN SYRUP (HFCS)** which greatly affected the sugar industry particularly the livelihood of farmers and the supply and demand for sugar due to unregulated importation. Because of this, mill withdrawals were reportedly slow at 1,766,492 MT compared to the same period last year which was at 2,163,170 MT affecting millsite price. From P1,792 of "B" sugar price at the start of CY 2016-2017, it went down to P1,385.64 as of June 30, 2017. During the same period of 2016, millsite price was at P1,645.00.

Since this commodity is not regulated, the said importation has been killing the sugar industry resulting to various pleas, campaigns and manifestation of assistance to protect the whole industry.

As a result of this importation, the SRA, through the Regulation Department acted the call to regulate and implement the said importation through the issuance of Sugar Order (SO) # 3 and 3-A Series of 2016-2017. The said SO was issued mainly not to stop the HFCS importation but to regulate it. Based on the Sugar Order, an importer or consignee of imported HFCS must be an international trader duly-registered with the SRA at the time of the application of clearance for release.

For the release of imported HFCS and chemically pure fructose, applicants must submit to the Regulation Department various requirements, which must all be complied before the application can be accepted for processing.

The Sugar Order also provides that the clearance for the release shall indicate the classification of the fructose as either "B" for domestic market, "C" for reserved, and "D" for world market.

As of December 31, 2017, there were 706 Clearances issued to 31 HFCS/Crystalline Fructose Importers. The highest volume of importation was from Coca Cola Femsa Philippines. Total volume of HFCS and crystalline fructose imported with SRA clearance was 244,823 MT.

Aside from the implementation of the HFCS policy, the other accomplishments of the Department covering this Calendar Year are the following:

• **A SUGAR QUOTA** With an initial allocation of "A" sugar beginning Crop Year 2016-2017, the United States of America has allocated a regular quota for the Philippines in the quantity of 136,201 Metric Tons Commercial Weight (MTCW) with two (2) tranches of additional quota in the quantity of 46,848.38

MTCW and 14,303.11 MTCW. The Philippine's commitment to US for raw sugar allocation is based on the country's historical shipment to US. The Philippines has been exporting sugar to the US under a program in which the United States buys the sugar from developing countries at a price higher than those in the world market.

As of December 31, 2017, sugar shipment to US Market covering Crop Year 2016-2017 was 30,000 MTCW. 456 US Export Clearances were issued with a gross income for the agency in the amount of P8,135,356 higher than last year's collection amounting to P6,780,410.

- For the **WORLD MARKET "D" sugar**, there are 449 Clearances issued in the total quantity of 198,080.36 MT with a total collection of P99,050,018.

• **IMPORTED ALLOCATION** Total imported sugar allocation to Food Processors/exporters/CBWs used as raw materials for their products was 64,840 MT which is lower by 6.66% from last year's 69,470 MT. Withdrawals recorded for this year wa s at 41,611.61 MT which is 34% lower than last year's 62,649.77 MT. Monitoring fee collected was P25,676,826.00. Dependence on the use of im ported sugar was lessened a bit since Food Processors were also encouraged to use local sugar.

• **"D" to "E" WITHDRAWAL for the year** was at 7,074.75 MT that gave the agency P3,340,025.00 as monitoring fee.

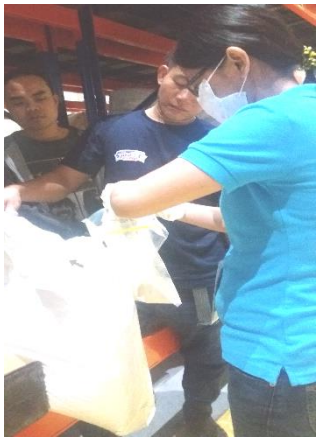
- **SUGAR STOCK INVENTORY** Monitoring Teams were deployed early this year for the conduct of the year-end inventory at food processors' warehouses located in Luzon and Mindanao areas to check the remaining stocks of imported sugar by doing the actual physical counting of stocks and see if it reflects the same with the SRA count. In most cases, manufacturing plants were in operation during the conduct of the activity. Majority of food processors have the same physical count of imported sugar that reflected in the ledger copy while there are also

instances of deficiencies and absence of ledger in the warehouse to account the sugar inventory due to the improper turn-over of documents. Food Processors having this kind of problem complied by submitting their internal inventory as a proof of their imported and local sugar stocks and utilization.

The Sugar Monitoring team were also deployed in different areas in Metro Manila and Luzon from time to time to see to it that the volume imported was used

in the processing and manufacture of their products for export and not diverted into the domestic market.

- **PREMIX SAMPLING** Coordinated, witnessed the collection of samples of eleven (11) premix sampling covering mostly whey products and food supplements for laboratory analysis to check the presence of sucrose. Majority of the samples were not detected with sucrose content but there were also some products detected with above 65% sucrose content. The rest of the samples have lower percentage content of sucrose.



Prior to the withdrawal of products from the Bureau of Customs (BOC), importers paid for clearance and monitoring fees of its products containing 65% by dry weight of sugar. There were 4,090 Premix Commodity Clearances processed composed of baking products, beverage concentrate, flavorings, sweetener, vitamin mineral premix, candies, various syrups, whipping cream, etc. giving the agency P17,940,639.01 as monitoring fee.

- **SUGAR PRODUCTION MONITORING** For Crop Year 2016-2017, "B" sugar was allocated 92% to Domestic Market and 8% to US Market. However, it was amended to 94% "B" sugar and 6% "A" during the early part of January. This was done for the purpose of maintaining a comfortable buffer stock or carry –over volume of "B" sugar during the end of the milling season and start of the Crop Year for stable supply and prices. By the end of Crop Year (CY) 2016-2017, sugar production posted at 2.5MT, an 11.66% increase from the same period last CY's 2,238,872 MT. One of the reasons that can be attributed to higher production could be the 20.40% increase in tons cane milled at 28,005,461 MT against last Crop Year's 23,254,083. Other reasons could be proper farming practices and favorable weather conditions.

On the other hand, sugar production for Crop Year 2017-2018 as of December 31, 2017 posted at 620,553 MT which is higher than the same period last year which was only 600,316 MT. While refined sugar production was 4,251,823 LKg bags; a 25% higher from last year's 3,400,631LKg bags. On the other hand, raw sugar withdrawal the same period was 683,746 MT while refined sugar withdrawal was at 6,302,888 LKg bags or 28% higher from last year's 4,929,898 LKg bags.

Raw Sugar Balance by the end of the year was at 434,577 MT covering Crop Year 2017-2018 while withdrawal posted at 638,746 MT. Refined Sugar Stock Balance of the same period was at 4,024,059 LKg bags which is lower than last year's 4,573,318 LKg bags.

- **PHYSICAL SUGAR STOCK INVENTORY**. The SRED also conducted and verified physical sugar stock inventory in the mills and refineries and reconciling the same with the quedans that are still outstanding. For this year, 10 mills and 6 refineries in the Luzon/Mindanao area were inventoried for physical sugar and molasses stock. Prior to the start of the milling season and as part of requirements of SRA, mill scales in mill districts covering those in Porac, Pampanga, Tarlac, Balayan, Batangas, Maramag and Quezon, Bukidnon were calibrated with the presence of mill, planter and SRA representatives. Calibration is done as an assurance of integrity and accuracy of the mill scales.

For this year, 66 weighing scales in Mill Districts were calibrated with the presence of representatives from SRA and mill in which all representatives attested their signatures on the SRA Seal which were affixed on each of the weighing scales for security purposes.

- **SUGA RPRICES MONITORING** Millsite prices of "B" sugar in January initially averaged at P1,529.26 compared to the same period last year's price of P1,836.84. By the end of December, millsite price of "B" spiralled down to P1,319.16 as compared to P1,525.27 millsite price last year.

The prevailing wholesale price of refined sugar was monitored at P2,300 beginning January compared to P2,580 in the same period last year. The wholesale price of refined sugar did not shoot up towards the end of the year since the prevailing price was only P1,950.00. On the other hand, the prevailing retail price of refined sugar was at P56/kilo up to the month of April. By May towards the end of the year, the retail price of sugar remained at P53/kilo. This price drop is economically favourable to consumers. The Philippine average millsite price of Molasses during the first month of the year was P9,125.21 per MT which was higher than the same period in the previous year's P8,806.72 per MT. By the end of the year, there was a price drop at P4,629.32 since the milling season had just started and this price drop was probably due to the law of supply and demand and other market factors affecting the said price.

- **TRADER APPLICANTS** Monitoring and inspection activities of new traders were strictly implemented to operate as traders upon completion of valid requirements.

For Crop Year 2016-2017, 140 Domestic Sugar Traders have registered, 23 as International Sugar Traders while three (3) upgraded their license as International Sugar Traders. On the other hand, 27 registered as High Fructose Corn Syrup, 58 Domestic Molasses, 17 International Molasses and 5 as Muscovado Traders. Total collection for the said Crop Year was P4,299,510.00.

Following Calendar Year 2017, 62 new trader applicants were inspected and approved. 161 Domestic Sugar, 33 International Sugar, 71 HFCS, 97 Domestic Molasses, 25 International Molasses and 12 Muscovado were given Certificate of Registration to operate as Trader. Total collections for the year was P6,657,000.00.

OTHER REGULATORY SERVICES

Also processed and issued the following applications during the year with corresponding fees are the following:

27 mills and **12** refineries have registered for Crop Year 2017-2018 as of December 31, 2017 (P143,350.00)
46 Certificates of Quota Eligibility (CQE) to Traders
78 Certificates of Origin (Total Earnings P2,702,860.80)
379 Food Processors with issued Imported Sugar Clearance (P30,620,069.22) (CBW/Imported Sugar Monitoring Fee 17,595,006.70)
706 High Fructose Corn Syrup (Crystalline Fructose and HFCS P7,323,225.03)
4,090 Premix Commodity Clearance (P17,940,639.01)
538 Certificate of Exchange Authority (Regular Swapping) issued in the total volume of 377,839.31 MT (P11,485,179.45)
3,142 Quedan Reclassification of "D" to "E" issued in the total quantity of 210,817.99 Lkg (P632,550.36)
78 Verified quedans and processed Advance Swapping of "B" to "D" (P1,447,854.80)

4571 Verified quedans and processed advanced swapping of "B" to "A" (P2,609,202.40)
1,108 Replenishment of "A" to "B" Quedan verified and processed (P307,414.30)
112 Certificates of Sugar Requirements of Food Processors (P343,000.00)
59 Imported Molasses Clearance issued with a volume of 296,675.43 MT (P132,553,828.75)
143 Export Clearance Muscovado issued in the total quantity of 51,975MT (49,500MT Molasses and 2,475 Muscovado) (P1,513,836 total clearance fee)
379 imported sugar clearances issued (P25,676,826)
287 shipping permit issued
1,707 Sugar Released Order
P64,163,118.22 sugar liens total collection

- **MANPOWER DEVELOPMENT** The RD also participated in several trainings as part of the strengthening and improvement of their capabilities. A total of 19 seminars/workshops were participated in by RD personnel. Among these are: Acted as Resource Speaker on Basic Procedures, Rules and Regulations for Zamboanga, DTI and Zubic; SRA GAD Activity on Women's Month, Philippine Rapid Alert System for Food and Feed Fundamental Training Users and Managers; Disaster Risk Management Program; Use of Harmonized Gender and Development Guidelines on SRA's Banner Projects; Orientation in Rules on Administrative Cases in Civil Service; Sexual Harassment; Effective Presentation of Statistic Report, Gender and Sensitivity Training and Health and Wellness; Outreac Program for the Sugar Industry (OPSI), Regulation Officers' Conference; National Quality Infrastructure; Statistics for Policy Makers; ICT for Dev't. Essentials for Government Managers; Communicating Statistics Using Infographics, Sexual Orientation, Gender Identity and Expression, Training Workshop on Basic Forecasting, Write Right Workshop, National Convention for Mechanical Engineers, and Acted As Resource Speaker for Gender Sensitivity Training, Violence Against Women and Children (VAWC) and Child Labor.

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REGULATION DEPARTMENT - VISAYAS

Executive Summary

The Regulation Department covered 17 raw sugar mills, 7 refineries, 5 bio-ethanol plants, 5 Cebu-based CBWs, 2 bulk terminal loading ports for international shipments, all ports where sugar are loaded for inter-island shipping, all international/domestic sugar and molasses traders operating and transacting in the Visayas.

It is composed of 2 divisions: Sugar Regulation & Enforcement Division and the Licensing and Monitoring Division. However, it also performs Sugar Transaction functions as an extension of the Division in the head office. The following are the accomplishments per division:

A. SUGAR REGULATION & ENFORCEMENT DIVISION

Table I.

	2017	2016	
		Production	**%Inc(Dec)**
Raw sugar (MT)	1,756,744.500	1,508,589.413	16.45
Refined Sugar (LKg)	12,327,794.36	11,118,827.070	10.87
Molasses (MT)	910,259.500	711,409.109	27.95
		Withdrawals	
Raw sugar (MT)	1,794,711.450	1,538,570.782	16.65

Refined Sugar (LKg)	12,643,285.04	11,117,156.270	13.73
Molasses (MT)	891,383.110	530,394.951	68.06
		Stock Balance	
Raw sugar (MT)	434,049.180	197,456.241	119.82
Refined Sugar (LKg)	2,482,569.11	3,008,604.280	(17.48)
Molasses (MT)	243,087.030	91,176.206	166.61

There was an increase in the production of raw sugar, refined sugar and molasses. Production for raw sugar was up by 16.45%, refined sugar up by 10.87% and an increase in the production of molasses by 27.95%. Production for Crop Year 2016-2017 was the highest for the last ten years, and the third highest production since the Post-War Era. This can be attributed to good weather conditions as well as in the adoption of new farm technologies in sugarcane production.

The other activities and accomplishments of SRED can be described by the table below:

Table II.

	2017	**2016**	**%Inc (Dec)**
Raw Sugar Quedans	441,669	315,567	39.96
Refined Sugar Quedans	1,557	1,592	(2.20)
Molasses Certificates	375,389	217,056	72.95
Raw SRO	4,345	3,978	9.22
Refined SRO	937	871	7.58
Scales Calibrated	115	108	6.48
SMS Reports	6,343	6,057	4.72
Samples Collected:			
Sugar	554	1,392	(60.20)
Molasses	25	39	(35.90)
Warehouses:			
Inventoried	167	458	(63.54)
Inspection Done	1,063	1,420	(25.14)
Molasses Tanks:			
Inventoried	116	264	(56.06)
Inspection Done	636	703	(9.53)

The increase in the number of raw sugar quedans was due to the amendments in Sugar Order No. 1 for Crop Year 2016-2017 (Sugar Order Nos. 1-A and 1-B), providing allocation for "A" and "D" sugar. In addition, Crop Year 2017-2018, provided for allocation for 3 classes of sugar as well: 10% - "A"; 80% - "B" and 10% - "D". The decrease of 2.20% in the number of refined sugar quedans was due to lesser withdrawals of refined sugar in the latter part of the year. It was claimed that lesser withdrawals was due to the increase of usage of high fructose corn syrup. The increase of 72.95% in the number of molasses certificates was due to the practice of some mills to issue more certificates as planters requested that they be issued individual molasses certificates.

Unlike the previous Crop Year, wherein 2 inventories (end of milling and year-end) were conducted, there was only one inventory (year-end) conducted this year. This is the reason why there was a decrease in the number of warehouses and molasses tanks inventoried and inspected.

Income Generated

There was an increase of 4.26% in the income generated for 2017 compared to the previous year. This was due to the increase in production as well as the Department's efficiency in its collection. The details are as follows:

Table III

Account Title	**2017**	**2016**
Stabilization Fee	27,321,754.88	24,786,878.04
Special Milling Fee	2,732,577.63	2,479,260.33

Milling Permit Fee	13,824,812.98	12,545,318.98
Mon. Fee, Raw to Refine	23,909,566.73	24,621,627.23
Mon. Fee, Raw	69,030,336.43	62,640,290.13
Mon. Fee, Bioethanol	3,809,812.00	7,780,884.93
Mon. Imported Sugar	0	30,000.00
Total	**140,628,860.65**	**134,884,259.64**

SRED-VISAYAS MILESTONES/HIGHLIGHTS

1. Verified and collected a total of Php140,628,860.65 as payment for sugar liens, and raw and refined sugar monitoring fees.
2. Full collection of BRDE Liens from SCBI, Kooll Company, ROXOL Bioenergy Corporation, URC-Ursumco and Leyte Agri, in the amount of Php6,194,192.40.
3. Attendance of Regulation personnel to the National Conference of the Regulation Department held in Microtel, UP Ayala Land, Quezon City. The conference provided the Regulation Department Personnel with updates on recent developments in the sugar industry. The Speakers in the conference also discussed the Anti-Agricultural Smuggling Act of 2016 and the Customs Modernization and Tariff Act which informed them of not only agricultural smuggling but also of other pertinent information on the exporting and/or importing of sugar.
4. Conduct of workshop/seminar re: Occupational Safety & Health which discussed the different hazards in the workplace and how to address them. A seminar on Introduction to Bio-ethanol from Sugarcane/Molasses was also conducted which discussed the process of manufacturing bioethanol from sugarcane/molasses as well as the importance of waste management in bioethanol plants.
5. Attendance of 12 personnel (10 organic and 2 job orders) to RD&E's OPSI Seminars for 2017 which provided valuable learnings on sugarcane culture, farming practice and personnel growth which adequately armed our Regulation Officers in the dispense of their duties and responsibilities as frontliners of the sugar industry.

B. LICENSING & MONITORING DIVISION

LMD-Visayas collected Php38,389,406.80 as shipping permit fees from the 25,211,875.24 Lkg.-bags covering 18,936 shipping permits issued, higher than the income generated in 2016 as Memorandum Circular No. 11-A was implemented effective January 19, 2017. The Memo provides that SRA will be charging a shipping permit fee of Php1.50/Lkg., from the previous Php1.00/Lkg fee.

The inter-island shipments had 29 destinations and were issued permits by the Bacolod City Office and satellite offices in Cebu, Iloilo, Dumaguete and Ormoc Cities. Table IV tells us that the most number of shipping permits were issued by the SRA-Bacolod office.

Table IV.

SHIPPING PERMIT ISSUANCE		**2017**	**2016**	**% Inc (Dec)**
a.	Negros Occidental	14,894	13,629	9.28
b.	Cebu	781	888	(12.05)
c.	Panay	1,859	1,783	4.26
d.	Dumaguete	1,686	1,524	10.63
e.	Leyte	35	110	(68.18)
	Total	**18,936**	**17,934**	**5.59**

There was a 5.59% increase in the number of shipping permit issuances from the Visayas. This was despite a decrease of 12.05% in the shipping permit issuance of the Cebu Office, and decrease of 68.18% in the issuance of SRA-Leyte. The sugar shipments were in the following forms:

Table V.

Kinds of Sugar Shipped (Lkg bags)	**2017**	**2016**	**% Inc (Dec)**
Raw	13,892,729.81	13,233,866.70	4.98
Refined	11,206,667.98	9,977,771.00	12.32

Others	112,477.45	99,887.31	12.60
Total	**25,211,875.24**	**23,311,525.01**	**8.15**

The 18,936 shipping permits processed for the year covered a total of 25,211,875.24 Lkg-bags, 8.15% higher than the volume issued with permits last 2016.

The destinations, vis-à-vis the volumes were as follows:

Table VI. RAW SUGAR
SUMMARY OF SUGAR SHIPPED PER DESTINATION
FISCAL YEAR 2017

Destination	Total Quantity Raw Sugar	Percentage
RAW		%
Manila	8,426,032.75	60.65
Batangas	1,808,142.00	13.02
Cebu	1,095,363.21	7.88
Pasacao	762,938.00	5.49
Iloilo	516,420.95	3.72
Zamboanga	311,911.00	2.25
Legaspi	230,144.00	1.66
Bacolod	196,391.90	1.41
CDO	106,980.00	0.77
Palawan	90,094.00	0.65
Samar	80,100.00	0.58
Sorsogon	57,000.00	0.41
Dapitan	56,350.00	0.41
Mindoro	43,000.00	0.31
Albay	32,500.00	0.23
Ozamis	28,500.00	0.21
Iligan	18,100.00	0.13
Negros	15,732.00	0.11
Davao	5,980.00	0.04
GenSan	4,800.00	0.03
Masbate	2,550.00	0.02
Cotabato	1,600.00	0.01
Romblon	1,000.00	0.007
Dipolog	700.00	0.005
Leyte	400.00	0.002
	13,892,729.81	100.00

Table VII.
REFINED SUGAR SUMMARY OF SUGAR SHIPPED PER DESTINATION
FISCAL YEAR 2017

Destination	Total Quantity Refined Sugar Shipped (in	Percentage
Manila	7,861,407.32	70.15
Cebu	1,359,442.00	12.13
Batangas	805,216.66	7.18
Iloilo	550,046.00	4.91
CDO	447,046.00	3.99
Pasacao	70,800.00	0.63
Zamboanga	56,200.00	0.5
Davao	20,410.00	0.18
Legaspi	8,000.00	0.071
Dapitan	7,600.00	0.07
Samar	7,000.00	0.06
Ozamis	6,200.00	0.06
Sorsogon	3,500.00	0.03
Albay	2,000.00	0.02
Iligan	1,100.00	0.01
Tacloban	500.00	0.004
Dipolog	200.00	0.002
	11,206,667.98	**100.00**

Table VIII. MUSCOVADO SUGAR

SUMMARY OF SUGAR SHIPPED PER DESTINATION
FISCAL YEAR 2017

Destination	Total Quantity Muscovado Sugar Shipped (in Lkg. Bags)	Percentage
Batangas	27,839.88	24.76
Manila	27,228.24	24.22
Cebu	20,035.09	17.81
Iloilo	9,427.10	8.39
CDO	5,550.04	4.94
Zamboanga	5,102.00	4.55
Ozamis	4,605.00	4.11
Tagbilaran	2,920.00	2.6
Dipolog	1,947.50	1.73
Iligan	1,704.00	1.51
Mindoro	1,669.60	1.49
Dumaguete	1,408.00	1.26
Surigao	775.00	0.6
Leyte	755.00	0.67
Butuan	741.00	0.66
Ormoc	670.00	0.6
Bacolod	100.00	0.1
	112,477.45	**100.00**

For 2017, LMD-Visayas generated Php 40,863,713.38, 52.13% higher compared with 2016 revenues. 93.95% of the revenues were from the issuance of shipping permits:

Table IX.

Accounts	2017	2016	% Inc (Dec)
Milling License Fee	43,300.00	44,650.00	(3.02)
Registration Fee-Traders	2,287,500.00	2,070,893.83	17.34
Shipping Permit Fees	38,389,406.80	24,612,842.46	54.44
Clearance Fee-Export of Sugar	19,506.58	21,050.00	(12.08)
Registration Fee-Muscovado Converter	120,000.00	108,000.00	11.00
Registration Fee-Warehouse	4,000.00	4,000.00	0
Total	**40,863,713.38**	**26,861,436.29**	**52.13**

Table X. OTHER LMD ACTIVIES

Other LMD Activities	**2017**	**2016**	**% Inc (Dec)**
Shipping Permits Issued	18,936	17,934	5.59
Volume Covered, Lkg	25,211,875.24	23,311,525.01	8.15
Traders Registered	176	162	8.64
CBWs	5	5	0
Imported Sugar Inspected/Released,Lkg	78,000	304,000	(74.34)

Of the 176 traders registered, 111 were purely for domestic sugar trading and 6 were domestic and international, 41 were molasses traders and 18 were for muscovado trading. For registration of traders, LMD-Visayas collected a total of Php2,407,500.00 as fees.

Highlights of LMD- Visayas' Actvities for FISCAL YEAR 2017:

1. Processed / Facilitated issuance of 176 licenses to various traders (sugar, molasses and muscovado) amounting to Php2,407,500.00.

Issued 18,936 shipping permits to various shippers/traders amounting to Php38,389,406.80.

2. Monitored sugar exports at different loading ports:
   "A" Sugar 152,931.727 MT
   "D" Sugar 121,995.701 MT
3. Sealed and Monitored 203,613.04 (Raw) Lkg. Bags and 4,180.00 Lkg. Bags (Refined) "D" Sugar Shipments

Sealed and Monitored 45,720.00 Lkg. Bags "E" Sugar Shipments

4. Monitored/Inspected 78,000.00 Lkg. Bags imported sugar in CBWs.
5. Verified export documents of CBWs with documents issued by Bureau of Customs.
6. Monitored 148,964.724 MT Molasses import shipments and 46,616.564 MT local molasses at bulk terminals
7. Monitored sugar and molasses prices in Visayas area.
8. Inspected 13 Office/Warehouses of Trader Applicants.
9. Facilitated processing of milling permits of 7 sugar mills and refining permits of 2 refineries.
10. Conferred with CBW Processing Plants representatives regarding submission of utilization reports, warehouse stock inventory ledgers and other documents pertaining to their product for export.
11. Monitored/inspected imported sugar arrivals and releases for CBWs.
12. Facilitated the processing of ID cards of Liaison Officers for various Visayas-based stakeholders.

C. SUGAR TRANSACTIONS

The income generated performing Sugar Transactions totaled 682,402.93 Php, a big part of which were made from applications for Regular Swapping. The details are shown in Table XI.

Table XI. Income from Sugar Transactions

Account Title	2017	2016
Reinstatement-Homeless Quedan	150.00	173.80
CEA Amendments	-	-
Regular Swapping	613,597.13	5,064.72
Advance Swapping	-	-
Reclassification	-	-
Revalidation fee on sugar	1,155.00	365.00
Fines & Penalties-Stop Lift Order	-	3,548.10
Change of Ownership	67,500	-
Subtotal	**P682,402.93**	**P9,151.62**

For 2017, a total of 161 applications for various transactions were accommodated and completed by the Sugar Transaction Division. The increase is attributed to the exportation of "A" and "D" sugar to the US and World Market, respectively. The 47 Regular Swapping transactions translated to the 49 Certificates of Exchange Authorities issued to various traders and stakeholders.

Table X

	2017		2016	
	No. of Transactions	Lkg Bags Covered	No. of Transactions	Lkg Bags Covered
Reinstatement of Homeless Quedans	1	10	-	-
Revalidation of Quedans	20	37,613.71	5	8285.2
Regular Swapping	47	413,158.06	1	3376.48

Certificate of Exchange Authorities Issued	49		1	
Verification of "A" Quedans	9	2,891.58	-	-
Verification of "D" Quedans	63	312,053.67	-	-
Cancellation of Verification of "D" Quedans	20	49,522.13	-	-
Change of Ownership	1	15,000	-	-

A total of 3,739 "D" Quedans were submitted for verification when Sugar Order 5 and 5-A, s. 2016-2017 was released. Likewise, 1,474 pieces of "A" Quedans were received for verification upon the release of Sugar Order 6 s. 2016-2017.

Table XV. Personnel complement of the Regulation Department– Visayas as of Dec. 31, 2017:

Name	Position	Division/Office	Station
Bacolod Office			
Wilfredo Monares	OIC-Manager III/Chief SPRO-LMD/Supv.SPRO	Regulation	Bacolod Office
Ma. Rosario R. Sola	OIC-Chief SPRO/Supv. SPRO	SRED	Bacolod Office
Merlene M. Lobrido	SPRO III	SRED & BISCOM	Bacolod Office
Chrisgel L. Aungon	Clerk III	SRED	Bacolod Office
Marichu J. Claver	SPRO II	LMD	Bacolod Office
Myra Ann F. Magsipoc	Clerk III	LMD	Bacolod Office
North & Central Negros			
Locelle T. Roquillas	SPRO II	SRED	HPCO / SCBI
Consolacion Q. Herrera	Sr. SPRO	SRED	Lopez
Jose Wilson V. Lamig	Sr. SPRO	SRED	SCI & OPTION
Jose Genaro B. Parroco	SPRO III	SRED	VMC
Maricris A. Rojo	SPRO III	SRED	FFHC/Kooll Co.
South Negros			
Helen H. Donesa	Sr. SPRO	SRED	CACI/RBE
Romeo S. Ombi-on	SPRO III	SRED	BISCOM
Joenel N. Elbanbuena	SPRO III	SRED	SONEDCO
Francisco C. Banlaygas	SPRO III	SRED	CAB
Cecil P. Tuazon	Sr. SPRO	SRED	URC-TOLONG
Paterno C. Tabaniera, Jr.	SPRO III	LMD	Dumaguete Office
Elias R. Pangantihon	SPRO III	SRED	URSUMCO/URC
Panay			
Aniano C. Chavez	SPRO III	SRED	CASA
Ivy C. Cababasay	SPRO III	SRED	URC-Passi
Jerry C. Celo	SPRO II	SRED	CSC
Milagros C. Sira	SPRO II	LMD	Panay Office
Cebu			
Berwin Buenconsejo	SPRO II	SRED	BOMEDCO

Roy Ronel R. Era	Sr. SPRO	LMD	Cebu Office
Leyte			
Vacant	SPRO III	SRED	

Table XVI. Job Order Personnel

Name	Place of Assignment/Division
1. Arlaine Michelle M. Arevalo	SRED-Leyte
2. Dareen D. Banaglorioso	SRED-Bacolod
3. Kherly Mae S. Baterna	SRA- Dumaguete
4. Raphael John P. Bautista	LMD- Cebu
5. Ted Freilan N. Bantad	LMD-Bacolod
6. Natasha Kim N. Goco	LMD-Bacolod
7. Jean Arlene A. Ledesma	SRED- Bacolod
8. Doroteo S. Liba	LMD-Bacolod
9. Glenn Paul G. Libosada	LMD-Bacolod
10. Maria Faith C. Moreño	LMD-Bacolod
11. Mark Anthony L. Nelmar	LMD-Bacolod
12. Sharmaine C. Pineda	LMD-Bacolod
13. Mae Lann G. Tayona	SRA - Iloilo
14. Regina T. Valencia	LMD-Bacolod

Regulation Officers' National Conference

Regulation Department Personnel were able to attend the Regulation Department's National Conference held last August 29 – 31, 2017 in Microtel, Quezon City where various industry updates were discussed.

Attendance in Various Seminars

Seminars conducted by the SRA-GAD on: (1) Administrative Cases in the Civil Service Sexual Harassment in the Workplace & Magna Carta of Women; (2) Gender and Development in the Workplace were attended by Regulation Department personnel and enhanced their knowledge on various gender and development issues.

Collaboration with RDE and other GAs

Some personnel of the Regulation Department were asked to assist in the Mill District Development Council Summit held last July 25-26, 2017. They were also to assist in the Sugarcane Industry Forum with DA Secretary Manny Piñol. The RD-Visayas Department Manager and OIC- Division Chiefs also attended the Sugar and More Summit organized by the Negros Occidental Provincial Government.

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RESEARCH, DEVELOPMENT & EXTENSION DEPARTMENT

LAREC Annual Report

Highlights of Accomplishment

PTCM implemented 38 R and D projects of which 18 were completed, 16 were on going and 4 were new/laid-out.

- In the Preliminary Yield Test of 2012 series, out of 30 test clones, six are recommended to undergo further testing in the ecological test or National Cooperative Test.
- On disease screening for smut, 30 test clones from Phil 2011 series were rated very highly susceptible to very highly resistant.
- On disease screening for downy mildew, out of 12 clones from Phil 2010 series, 11 were very highly resistant and one is highly resistant.
- On disease screening for downy mildew, all ten clones of Phil 2011 series were rated very highly resistant
  .In the Performance of Selected Phil 2009 Series of Sugarcane Varieties in Four Mill Districts in Luzon (Ecological Test of Phil 2009 series), Phil 2009-1867 is recommended for further evaluation by the Variety Committee.
- In Performance of Selected Phil 2010 Series of Sugarcane Varieties in Four Mill Districts in Luzon (Ecological Test of Phil 2010 series), Phil 2010-0107 is recommended for further evaluation by the Variety Committee.
- On the Ratoon Performance of Recommended Phil 2007 series varieties, Phil 07-0221 has an average return on investment (ROI) of 1.33, Phil 07-0243 has 1.38 and Phil 7544 has 1.36. Phil 07-0221 and Phil 07-0243 can still be maintained up to the third ratoon.
- On the Performance of newly released HYVs in commercial production, in the plant and ratoon cane, Phil 2000-1419 had a return on investment (ROI) of 0.66 and 0.53, respectively, Phil 2000-2155 with 0.61 and 0.64, and Phil 99-1793 with 0.60 for both plant and ratoon
- In the Evaluation of Selected HYVs for early milling at Pensumil Mill District, Phil 93-1601 had the lowest reduction from plant to ratoon in TC/Ha, sugar rendement (LKg/TC) and sugar yield (LKg/Ha). Its sugar yield was comparable with Phil 2000-2569.
- In the Evaluation of Selected HYVs for early milling at Carsumco Mill District, Phil 2003-0021 increased in tonnage and sugar yield from plant to ratoon. In sucrose content Phil 99-1793 increased. Phil 2000-1419 had the highest decrease in sugar rendement and sugar yield.
- On the Yield performance of selected sugarcane Varieties under Waterlogged conditions, Phil 7464 gave the highest TC/Ha comparable with nine other varieties. Phil 01-0295, Phil 74-64 and Phil 04-1011 produced significantly the highest sugar yield.
- On cane and sugar yields of Phil varieties under chicken manure compost fertilization, in Set 1, in sugar yield, the test series varieties and Phil 7544 were comparable but significantly lower than Phil 8013 in the plant crop. In the ratoon crop, the test series varieties were generally significantly lower compared with Phil 7544 and Phil 8013. In set 2, Phil 08-0909, Phil 7544 and Phil 8013 were higher compared with the other varieties in the plant crop. In the ratoon crop, Phil 08-1123 was highest but comparable with Phil 08-0161, Phil 08-1253, Phil 7544 and Phil 8013.
- On the Effect of Method of Cutting and delay in Planting on Germination of Three HYVs, cutting methods did not affect percent canepoint germination. Highest percent germination was observed on Phil 99-1793. Highly significant reduction on germination was observed when planting was delayed for seven up to 10 days after cane point preparation.
- On the Ratoon Performance of Recommended Phil 2007 series varieties, Phil 07-0221 has an average return on investment (ROI) of 1.33, Phil 07-0243 has 1.38 and Phil 7544 has 1.36. Phil 07-0221 and Phil 07-0243 can still be maintained up to the third ratoon.

On the Performance of HYVs for Wet season Planting, Phil 75-44, Phil 93-1601, Phil 97-3933, Phil 99-1793, Phil 2000-1419, Phil 2000-2155, Phil 2000-2569, Phil 2003-0021 and Phil 2004-0081 can be planted during the rainy season under LAREC conditions.

On Sugarcane Production With Chicken Manure Compost Fertilization the application of chicken manure compost did not influence the growth parameters to include percent germination of canepoints, number of tillers/plot, plant height at 7 MAP, number of millable stalks/plot, stalk length and stalk diameter as well as the cane yield per ha (TC/Ha), sugar recovery per ton cane (LKg/TC) and sugar yield per ha (LKg/Ha).

On the Effects of different planting patterns and densities of planting on canepoint production of Phil 99-1793 the practice of single row planting at one meter furrow distance regardless of density gave significantly the highest canepoint production in the plant and ratoon cane. Also, the use of 4.0 and 4.5 lacsas of canepoints gave the highest production in the plant and ratoon cane, respectively

- On the Efficacy of GRO Plant Booster on the growth and yield of sugarcane, the product did not show effectiveness as supplemental fertilizer for either RR-CF or 1/2RR-CF in sugar production.
- On the Efficacy of Hyper Plus on the growth and yield of sugarcane, 1/2 RR-CF + 1/2 RR-HP was comparable with RR-CF in sugar yield. Reducing RR-CF to 1/2 together with 1/2 RR-HP as supplement is as effective as RR-CF.

OTHER RELATED RD ACTIVITIES

Soils Laboratory analyzed 716 soil samples, 24 from sugarcane planters, 570 from Block farm planters, 102 from government & private entities and 20 from researchers; analyzed 779 cane juice samples, 172 from government & private entities and 607 from SRA researchers.

Maintained 78 released Phil, VMC and PSR varieties and 323 preserved insect pests and natural enemies

- Presented the following eight technical papers at the SRA National In House Review, La Granja Agricultural Research and Extension Center, La Carlota City, July 31- August 3, 2017

1. *Performance of Selected Phil 2009 Series of Sugarcane Varieties in Four Mill Districts in Luzon (Ecological Test of Phil 2009 series varieties - Best Paper Award)*
2. *Performance of Selected Phil 2010 Series of Sugarcane Varieties in Four Mill Districts in Luzon (Ecological Test of Phil 2010 series varieties)*
3. *Performance of newly released HYVs in semi commercial production*
4. *Evaluation of Selected HYVs for early milling at Pensumil Mill District (Best Paper award)*
5. *Evaluation of Selected HYVs for early milling at Carsumco Mill District*
6. *Yield performance of selected sugarcane varieties under waterlogged conditions*
7. *Effect of method of cutting and delay in planting on germination of three HYVs*
8. *Evaluation of selected varieties for early milling at PENSUMIL Mill District*

PTCM staff were resource speakers to 9 OPSI trainings/seminars; attended 17 scientific fora/ trainings/seminars/workshops; attended to 16 inter agency meetings, evaluations and consultations; rendered technical assistance/services to 2 collaborative projects/studies, 2 bio efficacy tests and in the processing of 61 Land Use Reclassification (LUR) applications.

Three personnel of FBSS are actively participating as Technical Working Group members in various technical committees to include Farm Mechanization and FMR under SIDA, Technical Working Group on Farm Machinery and Equipment relative to Agricultural Projects, and Civil Works of the Bids and Awards Committee. Same personnel are involved in the inspection and monitoring (I/M) of Farm to Mill Roads (FMR's), farm machinery, irrigation facilities and Automated Weather Stations.

Two personnel of FBSS are involved in two (2) on-going PCAARRD-funded collaborative projects.

One personnel of FBSS is currently the project head on technical operations of the SRA yield estimation system for sugarcane.

I. RESEARCH AND DEVELOPMENT PROJECTS

Breakdown of the **38 R & D projects implemented** in 2017 is as follows:

Status	Number of Projects	Status	Number of Projects	Status	Number of Projects
Completed	**18**	On-going	**16**	New/Laid-out	**4**
VIPM	6	VIPM	1	VIPM	3
PTCM	12	PTCM	15	PTCM	1

Completed Projects/Studies (18)

A. Variety Improvement and Pest Management (6)

1. Preliminary yield test of Phil 2012 Series

N. Guiyab, V. Serrano, A. Casupanan, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Thirty test clones from 2011 row test series were entered in the preliminary yield test at LAREC using RCBD to compare their agronomic performance with two check varieties, Phil 8013 and Phil 7544.

Based on tonnage and sugar yield, six clones were found to be either significantly higher, comparable or significantly lower with the check variety Phil 8013 and Phil 7544. The clones also passed the selection criteria for disease resistance to smut and downy mildew.

The clones which are recommended to undergo National Cooperative Testing are Phil 2012-465, Phil 2012-1019, Phil 2012-11, Phil 2012 475, Phil 2012-1263 and Phil 2012-609.

2. Screening of Phil 2011 series for resistance to smut

A. Casupanan, N. Guiyab, V. Serrano, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Thirty clones of the 2011 from LGAREC were plant and ratooned and tested for their reaction to sugarcane smut.

Rating of the thirty clones of 2011 series were as follows: five very highly resistant, namely, Phil 11-0131, Phil 11-0899, Phil 11-1371, Phil 11-1013 and Phil 11-1077; five highly resistant, Phil 11-0227, Phil 11-1367, Phil11-1693, Phil 11-0965 and Phil 11-1121; eleven intermediate resistant, Phil 11-0237, Phil 11-0745, Phil 11-0733, Phil 11-1725, Phil 11-1719, Phil 11-1585, Phil 11-0449, Phil 11-0813, Phil 11-0827, Phil11-1097, Phil 11-1711; six intermediate average, Phil 11- 0133, Phil 11-0365, Phil 11—1683, Phil 11-1075, Phil 11-1631, Phil 11-1051, one susceptible, Phil 11-0169, one highly susceptible, Phil 11-1057 and one rated very highly susceptible which is Phil 11-1657.

All clones of 2011 series tested in plant and ratoon cane were rated very highly resistant to very highly susceptble.

3. Screening of Phil 2011 series for resistance to downy mildew.

A.Casupanan, N. Guiyab, V. Serrano, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Ten clones of Phil 2011 series from LGAREC were screened and evaluated for resistance to sugarcane downy mildew in the plant cane.

Based on the results all ten clones of Phil 2011 series were rated very highly resistant. These clones are Phil 11-0365, Phil 11-1367, Phil 11-1725, Phil 11-1683, Phil 11-449, Phil 11-827, Phil 11-1097, Phil 11-1075, Phil 11-1051 and Phil 11-1077.

4. Screening of Phil 2010 series for resistance to downy mildew.

A.Casupanan, N. Guiyab, V. Serrano, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Twelve clones of Phil 2010 series from LGARECwere screened and evaluated for resistance to sugarcane downy mildew in the plant and ratoon canes.

Among the twelve clones of 2010 series, eleven were rated very highly resistant, namely, Phil 10-0427, Phil 10-0131, Phil 10-0645, Phil 10-0077, Phil 10-1051, Phil 10-0545, Phil 10-0317, Phil 0141, Phil 10-0085, Phil 10-0149 and Phil 10-0183. One clone, Phil 10-0107 was rated highly resistant.

5. Performance of selected Phil 2009 series in four mill districts in Luzon

V. Serrano, N. Guiyab, P. Macamos A. Casupanan, R. Sarol, B. Manlapaz, J. Agsaoay, J. Mora

Ten promising Phil 2009 series sugarcane varieties were planted to evaluate their yield performance in the mill districts of Pampanga, Balayan, Pensumil and Carsumco in Luzon.

Among the test varieties, Phil 2009-1867 showed the best yield performance against the check varieties. In tonnage (TC/Ha). It was comparable to both check varieties in Pampanga and Carsumco and one of the check varieties in Balayan and Pensumil. It gave significantly higher sucrose content (LKg/TC) than Phil 75-44 in Pampanga and sugar yield (LKg/Ha) than Phil 66-07 in Pensumil. It was comparable in LKg/TC to both check varieties in Balayan and Pensumil and comparable in sugar yield to both check varieties in three mill districts. In three yield parameters, it has the fewest losses over the check varieties than the other test varieties.

Phil 2009-1867 has a potential yield of 178.52 TC/Ha and 2.01 LKg/TC. It is very highly resistant to both smut and downy mildew and did not flower in the four mill districts.

6. Performance of selected Phil 2010 series in four mill districts in Luzon

V. Serrano, N. Guiyab, P. Macamos A. Casupanan, R. Sarol, B. Manlapaz, J. Agsaoay, J. Mora

Ten promising Phil 2010 series sugarcane varieties were planted to evaluate their yield performance in the mill districts of Pampanga, Balayan, Pensumil and Carsumco in Luzon.

Among the test varieties, Phil 2010-0107 showed the best yield performance against the check varieties. In tonnage (TC/Ha), it was comparable to both check varieties in the four mill districts. It produced significantly higher sucrose content (LKg/TC) and sugar yield (LKg/Ha) than VMC 84-524 in Carsumco. It produced the highest mean tonnage, sucrose content and sugar yield across locations.

Phil 2010-0107 has a potential yield of 143.67 TC/Ha and 2.21 LKg/TC. It is intermediate resistant to smut, highly resistant to downy mildew and very sparse flowerer.

B. Production Technology and Crop Management (12)

1. Ratoon Performance of Recommended Phil 2007 series varieties

A.Casupanan, N. Guiyab, V. Serrano, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Two selected varieties from 2007 series, Phil 07-0221 and Phil 07 -0243 and standard check variety Phil 7544 were observed in the ratoon crop to determine their ratooning capacity.

In TC/ha, of the Phil 07-0221, there was an increase in first and second ratoon. Phil 07-0243 and Phil 7544 increased in first ratoon but decreased in second ratoon. On the third ratoon all varieties decreased.

In LKG/TC, all varieties have same trend in sucrose content during plant cane, second and third ratoon but in first ratoon all the varieties decreased.

In Lkg/Ha, Phil 07-0221 and Phil 7544 increased in the first and second ratoon while Phil 07-0243 decreased in the first ratoon but increased in the second ratoon. All varieties the decreased in the third ratoon.

In the first, second and third ratoon, Phil 07-0221 had an average return on investment (ROI) of 1.33, Phil 07-0423 with 1.38 and Phil 7544 with 1.36. Phil 07-0221 and Phil 07-0423 can still be maintained up to the third ratoon.

2. Performance of newly released HYVs in semi commercial production

N. Guiyab, V. Serrano, P. Macamos, A. Casupanan, B. Manlapaz, R. Sarol, J. Agsaoay, J. Mora

Phil 2000-1419 and Phil 2000-2155 were planted in 26 rows x 30 meters plots to test their yield performance in semi-commercial-scale production in the plant and ratoon cane. Phil 99-1973, a commercial variety, was also observed.

Cane yield (TC/Ha) and sugar yield (LKg/Ha) decreased from plant to ratoon cane. Phil 2000-1419 has a high decrease of 31.15 TC/Ha and 23.20 Lkg/Ha, respectively, while Phil 2000-2155 gave a decrease of 4.65 TC/Ha and 6.21 Lkg/Ha. Sugar content of Phil 2000-2155 increased from plant to ratoon while Phil 2000-1419 and Phil 99-1793 both decreased.

Phil 2000-1419 has a return of investment (ROI) of 0.64 and 0.53 in the plant and ratoon cane, respectively, Phil 2000-2155 has 0.61 and 0.64, while Phil 99-1793 had 0.60 for both plant and ratoon. On the average, Phil 2000-2155 gave the highest ROI.

3. Evaluation of selected HYVs for early milling at Pensumil Mill District

P. R. Macamos Jr. , A.M. Casupanan, N.C. Guiyab, V.A. Serrano and L. C. Olalia

Nine selected High Yielding Varieties (HYV's) and a local variety, Phil 6607, were entered in the evaluation using Randomized Complete Block Design (RCBD) to identify which of these sugarcane varieties give satisfactory cane and sugar yield during early milling season and under natural climatic condition in PENSUMIL Mill District.

Phil 00-2569 maintained having the highest cane tonnage and sugar yield in the crop cycle. Although Phil 04-0081 was comparable with Phil 00-2569 in TC/ha and LKG/ha in the plant cane, its yield parameters decreased abruptly in the first ratoon.

Phil 93-1601 gave the lowest reduction from plant cane to first ratoon in cane yield (TC/ha), sugar rendement (LKG/ha) and sugar yield (LKG/ha). It obtained the second highest LKG/TC in the plant cane and ranked first in the first ratoon. Its sugar yield in the first ratoon was still comparable with Phil 00-2569.

Phil 00-2569 and Phil 93-1601 are recommended for early milling and variety diversification in PENSUMIL Mill District.

4. Growth and Yield Performance of Ten High Yielding Varieties of Sugarcane for Early Milling at Carsumco Mill District

A. M. Casupanan, N.C. Guiyab, P. R. Macamos, Jr, V. A. Serrano, B. G. Manlapaz, R. J. Sarol and J.Z. Agsaoay Jr.

The study determined the growth and yield performance often HYVs for early milling at Carsumco Mill District.

Planting in November for early milling influenced some growth parameters which affected the TC/Ha and LKg/ha yield parameters. In both plant and ratoon canes, the Lkg/TC of the varieties were comparable.

Phil 00-2569, Phil 04-0081 and Phil 99-1793 produced higher TC/Ha which also gave higher LKg/Ha in the plant cane. The LKg/Ha of the varieties were comparable in the ratoon cane.

5. Yield performance of selected sugarcane varieties under waterlogged

B.G.Manlapaz, V.A.Serrano, N.Guiyab, A.M.Casupanan,L.B.Yarte,R. J. Sarol, J.Z. Agsaoay

Fifteen selected sugarcane varieties were planted to determine the effects of natural waterlogged condition on their growth and yield response at SRA-LAREC.

The varieties were significantly different in number of millable stalks, cane tonnage (TC/Ha) and sugar yield (LKg/Ha). Among the test varieties, Phil 04-1011 had the most number of millable stalks per plot followedby Phil 80-13, Phil 00-2569, Phil 04-0081, Phil 74-64 and Phil 01-0295. The mean length and diameter of millable stalks of the test varieties were not significantly different under natural waterlogged condition.

In sucrose content the mean of the test varieties were not significantly different. Phil 7464 gave the highest TC/Ha comparable with nine other varieties. Phil 01-0295, Phil 74-64 and Phil 04-1011 produced significantly higher sugar yield.

Based on the results of the study none of the test varieties can be considered tolerant or resistant to waterlogged conditions.

6. Cane and sugar yields of Phil varieties under chicken manure compost fertilization

B. G. Manlapaz, M.M. Guevara, V. A. Serrano, N. Guiyab, A. M. Casupanan, L. B. Yarte, R. J. Sarol, J. Z. Agsaoay

The cane and sugar yields of 10 each of selected Phil series 2002, 2005 and 2006 varieties (Set 1) and selected Phil series 2008 varieties (Set 2) including Phil 7544 and Phil 8013 for each set were tested under chicken manure compost fertilization in the plant and ratoon crops.

In the Set 1 test, Phil 8013 generally performed better in both TC/Ha and LKg/Ha in the plant and ratoon crops while Phil 7544 showed better performance in the ratoon crop. The other varieties which showed potential to produce high LKg/Ha in the ratoon crop are Phil 02-421 and Phil 05-2525. Compost fertilization did not influence the LKg/TC of the varieties.

In the Set 2 test, Phil 8013 and Phil 7544 consistently gave better cane and sugar yields in the plant and ratoon crops. Other varieties with potential to produce high LKg/Ha in the plant and ratoon crops are Phil 08-0909, Phil 08-1123 and Phil 08-1253.

For the two sets of tests, Phil 8013 consistently gave better TC/Ha, LKg/TC and LKg/Ha.

7. Effect of Method of Cutting and delay in Planting on Germination of Three HYVs

A.M. Casupanan, V.A. Serrano, N.C. Guiyab, B.G. Manlapaz, J.M.Mora, R.J.Sarol, and J.Z. Agsaoay Jr.

The study determined the influence of slanting and perpendicular methods of cutting canepoints, and length of delay (0, 3,7,10 days) in the planting of Phil 00-2569, Phil 00-2155, and Phil 99-1793.

Cutting methods did not affect percent canepoint germination (%). High mean percent germination (95.84%) was observed with no delay (0 day) in planting canepoints after cutting and was even higher (98.49%) up to 3 days of delay. The highest percent canepoint germination was observed from Phil 99-1793 among the three varieties tested (92.21%).

Cane yield (TC/Ha) was also not affected by the cutting methods and the highest mean cane yield was observed from a 3-day delay of planting after cutting (115.64 TC/Ha). Among the three varieties, Phil 00-2569 gave the highest mean cane yield of 203.89 TC/Ha.

Sucrose content (Lkg/TC) and sugar yield (Lkg/Ha) were both not affected by the cutting method. Highest mean sucrose content (2.17 Lkg/TC) and sugar yield (250.46 Lkg/Ha) was observed from a 3-day delay of planting after cutting, and the Phil 99-1793 variety gave the highest mean sucrose content with 2.07 Lkg/TC while Phil 00-2569 has the highest mean sugar yield of 239.67 Lkg/Ha, among the three varieties tested.

The effect of cutting methods statistically has no significant effect on all parameters observed. Delaying the number of days of delay of planting after cutting from 0-day to a 3-day delay can give higher % germination, TC/Ha, Lkg/TC, and TC/Ha while the effect of variety on the parameters tested are variety-specific.

8. Performance of Selected HYVs in Wet Season Planting at Pampanga Mill District

Serrano, M.V, N. Guiyab, J. Agsaoay, R. Sarol, P. Macamos, A. Casupanan, and B. Manlapaz

Ten high yielding varieties were planted at the Luzon Agricultural Research and Extension Center using randomized complete block design to determine their adaptability to wet season planting.

Results showed that among the varieties, Phil 75-44, Phil 93-1601, Phil 97-3933, Phil 99-1793, Phil 2000-1419, Phil 2000-2155, Phil 2000-2569, Phil 2003-0021 and Phil 2004-0081 with the exception of Phil 03-1727 can be planted during the wet season under LAREC conditions. The varieties generally exhibited high mean tonnage and average sucrose content.

9. Effects of different patterns and densities of planting on canepoint production of Phil 99-1793

P. R. Macamos Jr , N.C. Guiyab, A.M. Casupanan, V.A. Serrano and L. C. Olalia

The experiment was conducted at the Luzon Agricultural Research and Extension Center (LAREC) to find out the best combination of planting patterns and densities forcanepoint propagation of Phil 99-1793.

Planting pattern and density significantly affected the germination, tiller count and number of millable stalks of Phil 99-1793 in the plant cane. The height of the variety was not significantly affected.

The interaction did not significantly affect the stool count in the ratoon crop but significantly affected the number of millable stalks.

In the plant cane and ratoon crop, planting pattern and density did not significantly affect the canepoint production of Phil 99-1793.

On the average, Return on Investment (ROI) was highest with single row planting in 1 meter furrow distance at planting density of 4.5 lacsa per hectare.

10. Sugarcane Production With Chicken Manure Compost Fertilization

A. Casupanan, M.M. Guevarra

The study determined the effects of levels of chicken manure compost fertilization on the growth and cane and sugar yields of Phil 99-1793. The compost test levels were equivalent to 0 (without compost) and 70%, 85%, 100% and 115% of the recommended nitrogen fertilization based on soil analysis of the experimental area.

In the plant cane, the application of chicken manure compost did not influence the growth parameters to include percent germination of canepoints, number of tillers/plot, plant height at 7 MAP, number of millable stalks/plot, stalk length and stalk diameter.

The insignificant influence on all the growth parameters of the application of manure composts were also observed on cane yield per ha (TC/Ha), sugar recovery per ton cane (LKg/TC) and sugar yield per ha (LKg/Ha).

The test was done in the plant crop where the long term effects of manure compost application in improving the physical and chemical properties of the sandy loam soil of the experimental area to produce significant influence may not have been fully realized.

11. Efficacy of GRO Plant Booster on the Growth and Yield of Sugarcane (FPA-Bio efficacy Test)

B. Manlapaz and V. Serrano

The efficacy trial was laid-out in the experimental farm of the Sugar Regulatory Administration – Luzon Agricultural Research and Extension Center (SRA-LAREC) in Paguiruan, Floridablanca, and Pampanga based on the approved Experimental Unit Permit (EUP) from the Fertilizer and Pesticide Authority (FPA).

The study determined the effects of GRO Plant Booster on the growth and yield of sugarcane for purposes of product registration for label expansion for sugarcane.

The Recommended Rate of GRO Plant Booster (RR-GRO) or 1.5RR-GRO each applied alone or in combination with the Recommended Rate of Chemical Fertilizer (RR-CF) did not influence the growth and yield parameters.

Application of either RR-GRO or 1.5 RR-GRO in combination with ½RR-CF had the same effects as RR-CF on plant height at 7 months after planting (MAP). Combining ½ RR-CF with 1.5 RR-GRO gave comparable effects on length of millable stalks and cane yield (TC/Ha) with RR-CF.

The nine treatments were comparable on tiller count, plant height at 5 MAP, millable stalk diameter, number of millable stalks and LKg/TC.

On sugar yield (LKg/Ha), GRO Plant Booster did not show effect at RR or 1.5RR or in combinations with RR-CF or ½ RR-CF.

GRO Plant Booster did not show effectiveness as supplemental fertilizer for either RR-CF or ½ RR-CF in sugar production.

12. Efficacy of Hyfer Plus (Growth Enhancer) foliar fertilizer on growth and yield of sugarcane (FPA-Bioefficacy Test)

B. Manlapaz and V. Serrano

The efficacy trial was planted in the experimental farm of the Sugar Regulatory Administration - Luzon Agricultural Research and Extension Center (SRA-LAREC) in Paguiruan, Floridablanca, Pampanga based on the approved Experimental Unit Permit (EUP) from the Fertilizer and Pesticide Authority (FPA).

The study determined the effects of Hyper Plus (Growth enhancer) on the growth and yield of sugarcane for purposes of product registration for label expansion for sugarcane.

Application of one half of the recommended rate of chemical fertilizer (1/2 RR-CF) in combination with Hyper Plus in full dose (RR-HP) or one half of recommended rate (1/2 RR-HP) had the same effects with the recommended rate of chemical fertilizer (RR-CF) in increasing the millable stalk length and caneyield per hectare TC/Ha.

Hyper plus foliar fertilizer is significantly effective in improving sucrose content (LKg/TC) than the recommended rate of chemical fertilizer (RR-CF). On sugar yield (LKg/Ha), application of one half recommended rate of chemical fertilizer (1/2 RR-CF) together with the Hyper plus in full (RR-HP) or 1/2 of the recommended rate of Hyper plus (1/2 RR-HP) also appeared as good as the influence of recommended rate of chemical fertilizer (RR-CF).

With the above mentioned results on the comparative performance of the application of Hyper Plus at full (RR-HP) or one half of recommended rates (1/2 RR-HP) in combination with one half of recommended rate of chemical fertilizer (1/2 RR- CF), and the comparable effects of said treatments with recommended rate of chemical fertilizer (RR-CF) on some growth and yield parameters, Hyper Plus has the potential for use as supplemental fertilizer in sugarcane production.

C. FBSS Completed

1. Evaluation of released 2007 and 2008 series varieties under water logged condition

P. Macamos, Jr., L. C. Olalia and A. Bacani

Two 2007 and one 2008 series varieties were laid out and observed under waterlogged condition. Agronomic data are collected for statistical analysis and interpretation

2. Evaluation of released 2007 and 2008 series varieties under drought condition

P. Macamos, Jr., L. C. Olalia and A. Bacani

Two 2007 and one 2008 series varieties were laid out and observed under drought condition. Agronomic data are collected for statistical analysis and interpretation

PTCM On -Going Projects/Continuing (16)

A. Variety Improvement and Pest Management (1)

1. Screening of Phil 2012 series for resistance to smut.

A. Casupanan, N. Guiyab, P. Macamos, V. Serrano, B. Manlapaz, R. Sarol, J. Agsaoay and M.Guevarra

Thirty clones from Phil 2011 series and two check varieties Phil 7544 and Phil 8013 were planted using RCBD with three replications. Data on plant cane were consolidated while data collection on ratoon cane is still on-going.

B. Production Technology and Crop Management (15)

1. Ratoon performance of selected Phil 2008 series

A. Casupanan, N. Guiyab, V. Serrano P. Macamos, B. Manlapaz, R. Sarol, J. Agsaoay

The experiment is in the third ratoon. Agronomic data are being gathered and consolidated. Care and maintenance activities were undertaken. Harvesting will be done January 2018.

2. Ratoon performance of selected Phil 2009 series

J. Agsaoay, N. Guiyab, V. Serrano A. Casupanan, B. Manlapaz, R. Sarol

The second ratoon of Phil 2009 series ecological test is being maintained to observe the performance of the recommended varieties as part of its package of technology upon its release. Agronomic data are being collected and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in February 2018.

3. Ratoon performance of selected Phil 2010 series

J. Agsaoay, N. Guiyab, V. Serrano A. Casupanan, B. Manlapaz, R. Sarol and P. Macamos

The first ratoon of Phil 2010 series ecological test is being maintained to observe the performance of the varieties as part of its package of technology upon its release. Agronomic data are being collected and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in February 2018.

4. Yield performance of Phil 2007 recommended varieties at different levels of nitrogen fertilization

J. Agsaoay, R. Sarol, B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan

Two recommended varieties Phil 2007-0221 and Phil 2007-0243 were planted to determine their cane and sugar yield when fertilized at different levels of nitrogen. Levels of fertilization used were the recommended rate based on soil analysis, 50% below the recommended rate, 50% above and zero N fertilization. Agronomic data are being gathered and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in January 2018

5. Yield performance of Phil 2008 recommended variety at different levels of nitrogen fertilization

R. Sarol, J. Agsaoy, N. Guiyab, B. Manlapaz, V. Serrano, A. Casupanan

Phil 2008-0909, a recommended variety from the ecological test was planted to determine its cane and sugar yield when fertilized with different levels of nitrogen. Levels of fertilization used were the recommended rate based on soil analysis, 50% below the recommended rate, 50% above and zero N fertilization.Agronomic data are being gathered and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in January 2018.

6. Yield performance of Phil 2007 recommended varieties at different levels of potassium fertilization

J. Agsaoay, R. Sarol, B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan

Two recommended varieties Phil 2007-0221 and Phil 2007-0243 were planted to determine their cane and sugar yield when fertilized with different levels of potassium. Levels of fertilization used were the recommended rate based on soil analysis, 50% below the recommended rate, 50% above and zero K fertilization. Agronomic data are being gathered and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in January 2018.

7. Yield performance of Phil 2008 recommended variety at different levels of potassium fertilization

R. Sarol, J. Agsaoy, N. Guiyab, B. Manlapaz, V. Serrano, A. Casupanan

Phil 2008-0909, a recommended variety from the ecological test was planted to determine its cane and sugar yield when fertilized with different levels of potassium. Levels of fertilization used were the recommended rate based on soil analysis, 50% below the recommended rate, 50% above and zero K

fertilization. Agronomic data are being gathered and consolidated. Care and maintenance activities were undertaken. Harvesting will be done in January 2018.

8. Yield performance of Phil 2007 series varieties at different season of planting under Larec condition

B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan, J. Agsaoay, R. Sarol

Two Phil 2007 series recommended varieties were planted using factorial in randomized complete block design to determine their cane and sugar yield when planted during the early, mid and late season planting. Care and maintenance activities are undertaken. Harvesting started in November and will end in February 2018.

9. Yield performance of Phil 2008 variety at different season of planting under Larec condition

B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan, J. Agsaoay, R. Saro

Phil 2008-0909, a recommended variety from the ecological test was planted using randomized complete block design to determine its cane and sugar yield when planted during the early, mid and late season planting. Agronomic data are being gathered and consolidated. Care and maintenance activities are undertaken. Harvesting started in November and will end in February 2018.

10. Yield performance of Phil 2007 series varieties at different ages of harvest under Larec condition

B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan, J. Agsaoay, R. Sarol

Two Phil 2007 series recommended varieties were planted using factorial in randomized complete block design to determine their cane and sugar yield when harvested at 11, 12 and 13 months after planting. Care and maintenance activities are undertaken. Harvesting started in November and will end in March 2018.

11. Yield performance of Phil 2008 variety at different ages of harvest under Larec condition

B. Manlapaz, V. Serrano, N. Guiyab, A. Casupanan, J. Agsaoay, R. Sarol

Phil 2008-0909, a recommended variety from the ecological test was planted using randomized complete block design to determine its cane and sugar yield when harvested at 11, 12 and 13 months after planting. Care and maintenance activities are undertaken. Harvesting started in November and will end in March 2018.

12. Performance of HYVs under sandy soil condition

R. Sarol, J. Agsaoy, N. Guiyab, B. Manlapaz, V. Serrano, A. Casupanan

Ten high yielding varieties were planted in RCBD to determine their performance under sandy soil conditions at LAREC. Agro- climatic data affecting the performance of the varieties are being gathered and consolidated. Care and maintenance activities are undertaken. Harvesting will be done in January 2018.

13. Comparative performance of selected HYVs in the ratoon crop

J. Agsaoay, V. Serrano, N. Guiyab, B. Manlapaz, A. Casupanan, R. Sarol and P. Macamos

Ten selected high yielding varieties were laid out in RCBD at LAREC to compare their yield performance up to the third ratoon crop. The experiment is in the second ratoon. Agronomic data are being collected and consolidated. Care and maintenance are undertaken. The experiment will be harvested in February 2018.

14. Effects of plant residue removal on sugarcane production and soil fertility(cooperative project/study with JIRCAS)

B. Manlapaz

The objective of this study is to investigate the removal of plant residue from the field on sugarcane production and soil fertility. The experiment is in the second ratoon. Data are being gathered and consolidated by the Japanese researchers. Care and maintenance activities were undertaken. Harvesting will be done in January 2018.

15. Effects of fermentation residue on sugarcane production and soil fertility (cooperative project /study with JIRCAS)

B. Manlapaz

The objective of this study is to investigate the effect of application of fermentation residue from ethanol manufacturing plant on sugarcane production and soil fertility. The experiment is in the first ratoon. Data are being gathered and consolidated by the Japanese researchers. Care and maintenance activities were undertaken. Harvesting will be done in January 2018.

FBSS On -going projects/Continuing (1)

1. Effect of drip irrigation frequency on the growth and yield of sugarcane

L. C. Olalia ,P. Macamos, Jr., and A. Bacani

The objective of the study is to establish the best irrigation frequency for the growth and yield of Phil 99-1793. Root mass will also be observe to relate its viability for the next ratoon phase. Harvest will be done in December 2018.

2. SIDA RDE 2016 "Assessment of Sugarcane High Yielding Varieties (HYV) and Germplasm Collection for Drought & Water Logging Tolerance" (Collaborative study with UPLB)

L.Olalia

Ten HYVs will be tested for drought condition. Aside from the final yield, the drought effect on tillering and grand growth phase will be observed with the use of leaf porometer, SPAD chlorophyll meter and a drone equipped with thermal camera.

New/Laid – out (4)

A. Variety Improvement and Pest Management (3)

1. Preliminary yield test of 2013 Series.

N. Guiyab, V. Serrano, A. Casupanan, B. Manlapaz, P. Macamos, R. Sarol, and J. Agsaoay

Thirty promising clones from the Phil 2013 Row Test series selected by LGAREC and two check varieties were planted in April 2017 to compare their yield performance with the control varieties Phil 75-44 and Phil 80-13. Agronomic data are being collected and consolidated. Care and maintenance are undertaken. The experiment will be harvested in March 2018.

2. Screening of Phil 2013 series for resistance to smut.

A. Casupanan, V. Serrano, N. Guiyab, P. Macamos R. Sarol, J. Agsaoay, and M. Guevarra,

Thirty clones from Phil 2013 series from LAGAREC were planted in April 2017 to test their resistance to smut disease. Bi-weekly infections were gathered and recorded. Care and maintenance activities are undertaken. Harvesting will be done in March 2017.

3. Screening of Phil 2012 series for resistance to downy mildew.

A. Casupanan, N. Guiyab, P. Macamos, V. Serrano R. Sarol, J. Agsaoay, and M. Guevarra

Ten test clones from Phil 2012 series and one check variety Phil 7544 were planted in July 2017 to test their resistance to downy mildew. The plants are given proper care and maintenance. Continuous

observation and data recording of disease occurrence are on-going. Harvesting will be done in March 2017.

B. Production Technology and Crop Management (1)

1. Yield performance of Phil 2007 series varieties at different densities of planting

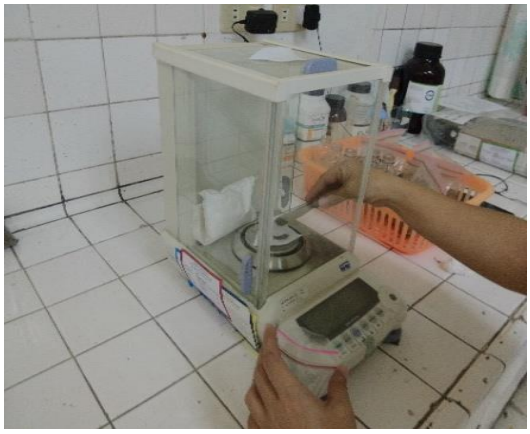
N. Guiyab, V. Serrano, B. Manlapaz, A. Casupanan, R. Sarol, J. Agsaoay, J. Mora

Two recommended varieties Phil 2007-0221 and Phil 2007-0243 were planted to determine the appropriate planting density to obtain potential yields. Treatments employed the use of 35, 40, 45 and 50 laksas per hectare. Agronomic data are being gathered and consolidated. Care and maintenance activities are undertaken. The varieties will be harvested in February 2018.

II. PRODUCTION SUPPORT SERVICES

1. Laboratory Services

Seven hundred sixteen (716) soil samples from 24 sugarcane planters, 570 Block farm planters, 102 from government and private entities and 20 from SRA researchers were analyzed for N (based on organic matter content of the soil), P, K, Ca, Mg and pH including 35 special analyses(% moisture) in the Soils Laboratory as basis for the fertilization and recommendation. One hundred seventy-two (172) juice samples from private and government clientele and 607 from SRA researchers were also analyzed.



2. Variety Garden and Collection and preservation of insect pest and natural enemies

A total of 78 released Phil, VMC and PSR varieties are being maintained in the variety garden while 323 preserved insect pests and natural enemies are preserved in the Crop Protection Laboratory.

Variety Garden/Germplasm Bank

Seventy-eight (78) released varieties of SRA and VMC/PSR are planted and maintained at the LAREC Variety Garden.

	Varieties		Parentage		Varieties		Parentage
1	Phil	50-01	- PR 902 x Badila	10	Phil	72-70	- F 156 x CAC57-11
2	Phil	50-06	- N: Co 330 x Alunan	11	Phil	74-64	- Co 440 x Phil 5460
3	Phil	56-226	- POJ 2878 x CP 36-105	12	Phil	75-44	- F 156 x Phil 56-226

4	Phil	58-260	- Q 47 x POJ 3016	13	Phil	77-79	- LGN 69 x Comus
5	Phil	62-120	- Q 61 x NCo 330	14	Phil	78-1440	- Phil 7522 x Phil 7536
6	Phil	65-53	- Phil 5460 x NCo3	15	Phil	80-13	- CAC 71-312 x Phil 64-2227
7	Phil	66-07	- Phil 5660 x Co 440	16	Phil	80-93	- Phil 6243 x Phil 7327
8	Phil	67-23	- NCo 310 x CP 36-105	17	Phil	83-61	- Q 54 x LAREDO 52-604
9	Phil	72-28	- CAC 58360 x Phil 5460	18	Phil	84-77	- Mexico 57-473 x Phil 55-220

	Varieties		**Parentage**		**Varieties**		**Parentage**
19	Phil	85-83	- Phil 80-5667 x NCo 330	42	Phil	97-0693	- Phil 86-120-1119 x Phil 91-110-0807
20	Phil	87-15	- Phil 79-3385 x CP 50-28	43	Phil	97-1123	- Phil 88-626-1691 x Phil 91-110-0807
21	Phil	87-27	-Phil 83-4669 x Phil 82-2551	44	Phil	97-2041	- Phil 90-0343 x Phil 92-3-0023
22	Phil	88-29	- Phil 80-0685 x Phil 6317	45	Phil	97-3501	- Q 102 x Phil 84-438-5799
23	Phil	88-35	- Phil 78-3881 x Phil 79-1497	46	Phil	97-3933	- Phil 91-54-0479 x Phil 8715
24	Phil	88-39	- VMC 71-39 x Phil 66-07	47	Phil	98-0255	- Phil 92-0751 x Phil 88-620-1413
25	Phil	89-43	- Q 102 x Phil 7115	48	Phil	99-0925	- Phil 92-29-0535 x Phil 91-182-1217
26	Phil	90-0345	- Phil 7957 x Phil 79-3032	49	Phil	99-1793	- Phil 93-236-3301 x Phil 84-77
27	Phil	90-1237	- Phil 83-933-5029 x Q 102 TC	50	Phil	99-2641	- Phil 83-129-3401 x Phil 80-13
28	Phil	91-1091	- Phil 86-1119 x Phil 81-3415	51	Phil	99-1427	- Phil 81-341-3415 x Phil 88-620-1413
29	Phil	92-0051	- CP 5028 x Phil 80-2287	52	Phil	00-2569	- Phil 83-129-3401 x VMC 90-239
30	Phil	92-0577	- Phil 79-0019 x Co 467	53	Phil	00-0791	- Phil 85-23-4345 x Phil 89-43
31	Phil	92-0751	- Phil 79-001 x Phil 64-2227	54	PSR	00-343	- VMC 84-947 x Polycross
32	Phil	93-1601	- Phil 90-850343 x Phil 80-13	55	PSR	00-34	- VMC 84-194 x Phil 89-43
33	Phil	93-2349	- Q 102 x Phil 84-77	56	PSR	00-161	- VMC 86-550 x VMC 87-599
34	Phil	93-3155	- Phil 89-127-0815 x Phil 87-07	57	Phil	00-1893	- Phil 93-300-1027 x Phil 92-32-0577
35	Phil	93-3727	- LAREDO 52-604 x Phil 80-4-0213	58	Phil	00-1491	- Phil 92-440-075 x Phil 83-333-4097
36	Phil	93-3849	- Phil 89-660-1511 x Phil 84-77	59	Phil	00-1419	- Phil 88-121-0363 x Phil 92-1043

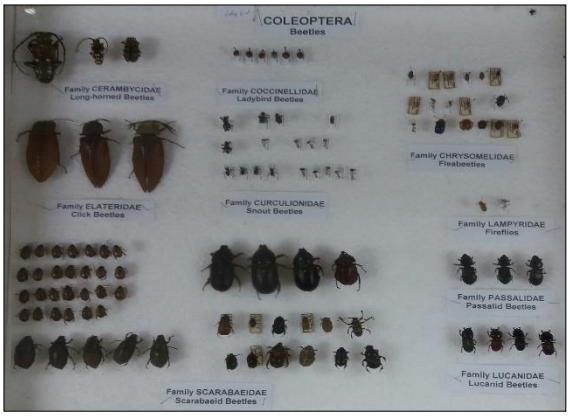
37	Phil	94-0913	- Phil 81-341-3415 x Phil 86-626-1691	60	Phil	00-0881	- Phil 93-65-0775 x Phil 84-53-2401
38	Phil	71-39	- Phil 58260 x F 157	61	Phil	00-2417	- Phil 8717 x Phil 90-1187-1237
39	Phil	84-524	- VMC 68-368 x Phil 56226	62	Phil	00-2155	- Akoki Green x VMC 90-239
40	Phil	86-550	- Phil 56-226 x ?	63	Phil	01-0295	- VMC 90-239 x Phil 88-620-1413
41	Phil	87-559	- VMC 76-505 x Phil 55-220	64	Phil	02-0359	- Phil 93-3849 x VMC 87-599

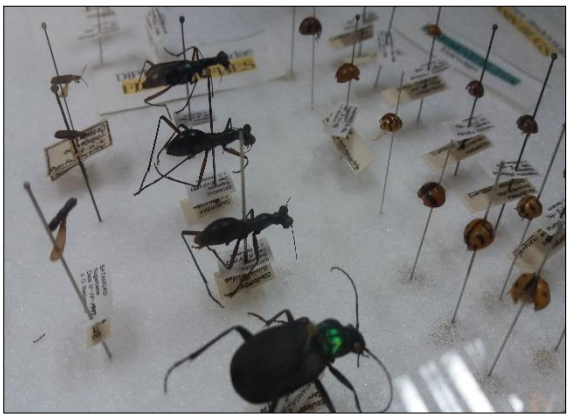
	Varieties		**Parentage**		**Varieties**		**Parentage**
65	Phil	02-0421	- Q102 x Phil 92-44-0751	72	Phil	05-1197	- VMC 90-239 x Phil 94-0913)
66	Phil	03-0021	- Phil 93-34-0385 x Phil 92-41-0727	73	Phil	05-0055	-Phil 93-34-0385 x Phil 00-156-1161
67	Phil	03-1389	- Phil 89-39-0455 x Phil 88-620-1413	74	Phil	05-0483	- Phil 79-57-1915 x Phil 97-0693
68	Phil	03-1727	- Phil 93-4027 x Phil 92-190-2349	75	Phil	05-1763	-Phil 8829 x Phil 99-0383
69	Phil	04-0081	-Phil 8717 x Phil 90-1187-1237	76	Phil	05-0645	- Phil 78-86-3981 x Phil 93-65-0775
70	Phil	04-0827	- Phil 8717 x Phil 90-1187-1237	77	Phil	06-1899	-Phil 92-0051 x Phil 93-2349
71	Phil	04-1011	- Phil 8717 x Phil 90-1187-1237	78	Phil	06-2289	-Phil 98-258-3403 x Phil 8477

3. Collection and preservation of insect pest and natural enemies

I. Insect Pests

Order Coleoptera		**No. of Specimens**
1. Scarabaedae		
a. Leucopholis irrorata	adult	165
	grub	3
b. Holotrichia vidua	adult	32
c. Anomala anogutata	adult	23
2. Elateridae		
a. Melanotus sp.	adult	3
3. Lucanidae		4
4. Chrysomellidae		4
5. Dynastidae		5
6. Coccinellidae		6
7. Curculionidae		2





Order Lepidoptera		No. of Specimens
1. Crambidae	adult	13
2. Schoenobidae	adult	3
3. Noctuidae	adult	18
4. Pieredae		13
	Total	**294**

II. Natural Enemies

Order Coleoptera	No. of Specimens
1. Coccinellidae	
a. Monchilus sexmaculatus	11
b. Micraspis crocea	2
c. Harmonia octomaculata	2
d. Aulacophora similis	4
2. Carabidae	
a. Carabus sp.	4
3. Lampyridae	2
4. Curculionidae	
a. Metapocyrtus sp.	4
Total	29
Grand Total	**323**

4. HYV propagation and canepoint propagation

A total of 290.60 lacsas of HYV three-eye canepoints were distributed to sugarcane farmers in Pampanga, Tarlac, Bataan, Cagayan, Cotabato, Bukidnon and Batangas.

Canepoints Distributed to Sugarcane Planters/Cooperatives/MDDC/Block Farms

LIST OF BENEFICIARIES FOR HYV PROPAGATION

A. First Quarter, 2017

Name of Planter	Location of Farm	Number of Canepoints Availed	Date Availed
1.Nestor Sarmiento	Porac,Pamp.	8.8 Laksas	Jan. 9, 2017
2.Orlando Cruz	Fblanca,Pamp.	6.6 Laksas	Jan. 11, 2017
3.Jovito Mendoza	Fblanca,Pamp.	7.2 Laksas	Jan. 13,2017
4.Reynaldo Ponio	Fblanca,Pamp.	3.66 Laksas	Jan. 13,2017
5.Orlando Cruz	Fblanca,Pamp.	3.608 Laksas	Jan. 16,2017
6.Rowel Gomez	Porac,Pamp.	21.25 Laksas	Jan.20,2017
7.Jaime Cruz	Fblanca,Pamp.	6.72 Laksas	Jan. 20,2017
8.Rodolfo medina	Fblanca,Pamp.	1.66 Laksas	Jan.23,2017
9.Jaime Cruz	Fblanca,Pamp.	2.88 Laksas	Jan. 24,2017
10.Jovito Mendoza	Fblanca,Pamp.	2.76 Laksas	Jan. 24, 2017
11.Marlon Gamboa	Tarlac City	7.79 Laksas	Jan. 25,2017
12.Rodolfo Medina	Fblanca,Pamp.	2.2 Laksas	Jan. 27,2017
13.Carlito Gomez	Porac,Pamp.	6.0 Laksas	Jan. 27,2017
14.Geminie Manalastas	Porac, pamp.	6.624 Laksas	Jan. 28,2017
15.Jovito Mendoza	Fblanca,Pamp.	3.29 Laksas	Feb. 1, 2017
16.John Buan	Arayat,Pamp.	3.0 Laksas	Feb.1,2017
17.Geminie Manalastas	Porac,Pamp.	6.956 Laksas	Feb.4,2017
18.Gilbert Reyes	Guagua,Pamp.	4.761 Laksas	Feb.6,2017
19.Lukban,Multi Purpose Coop.	Balayan,Batangas	9.2 Laksas	Feb.7,2017
20.Gilbert Reyes	Guagua,Pamp.	4.025 Laksas	Feb.8,2017
21.Narciso Santos	Fblanca,Pamp.	2.736 Laksas	Feb.10,2017
22.Geminie Manalastas	Porac,Pamp.	8.319 Laksas	Feb.11,2017
23.Joel Bautista	Arayat,Pamp.	3.0 Laksas	Feb.13,2017
24.Gilbert Reyes	Guagua,Pamp.	3.772 Laksas	Feb.13,2017
25.Geminie Manlastas	Porac,Pamp.	2.115 Laksas	Feb.18,2017

Name of Planter	Location of Farm	Number of Canepoints Availed	Date Availed
26.Gilbert Reyes	Guagua,Pamp.	3.45 Laksas	Feb.24,2017
27.Joselito Jimenez	Mexico,Pamp.	1.0 Laksas	March 1,2017
28.Ariel Tuazon	Mexico,Pamp.	3.0 Laksas	March 1,2017
29.Antonio Dizon	Porac,Pamp.	3.25 Laksas	March 1,2017
30.Geminie Manlastas	Porac,Pamp.	2.14 Laksas	March 3,2017
31.Eugene Ponio	Guagua,pamp.	5.0 Laksas	March 6,2017
32.Archie Temporaza	Olongapo City	0.6 Laksa	March 16,2017
33.Lyndelle Agro Industrial	Dinalupihan,Bataan	7.0 Laksas	March 16,2017
		TOTAL = 164.37 Laksas	

B. Second Quarter, 2017

Name of Planter	Location of Farm	Number of Canepoints Availed	Date Availed
1.Geminie Manalastas	Pampanga		May 2017
2.Herminio Pangilinan	Pampanga		May 2017
3.Mel Villanueva	Pampanga	**Total: 5.7 laksa**	May 2017

C. Third Quarter, 2017 (None for the quarter)

D. Fourth Quarter, 2017

Name of Planter	Location of Farm	Number of Canepoints Availed	Date Availed
1.Archie Tempuraza	Olongapo		October 2017
2.Richard Torno	Pampanga		October 2017
3.Arthur Tolentino	Pampanga		Oct-Dec
4.Renato Lipana	Pampanga		Nov, 2017
5.Riza Florendo	Cotabato		October 2017
6.Nestor Bautista	Cagayan		October 2017
7.Edgar Cantomayor	Cotabato		October 2017
8.jose Angelo Raiz	Tarlac		October 2017
9.Margie Villadolid	Bukidnon		October 2017
10.Madcandalan Tomado	Mindanao		October 2017
11.Zayda Atayde	Bukidnon		October 2017
12.Ricardo Martinez	Pampanga		October 2017
13.Rolando Miguel	Cagayan		October 2017
14.Anacleto Soriano	Tarlac		October 2017
15.Fernando Corpuz	CADP, Batangas	**Total: 120.53 laksa**	Nov 2017

OTHER RELATED R & D ACTIVITIES

I. Technical assistance/service to industry clientele (inquiries on sugarcane production, soil sampling, new HYVs; farm survey, other agencies)

Technical services/assistance rendered to:

a. Collaborative projects

JIRCAS – collaborative project on sustainable agriculture (2 studies)
1. Effects of plant residue removal on sugarcane production and soil fertility
2. Effects of fermentation residue on sugarcane production and soil fertility

b. Efficacy trials

1. MJ Multilines, Inc – Efficacy of Hyfer Plus (Growth Enhancer) foliar fertilizer on growth and yield of sugarcane
2. Intellegrow Agri Product Trading – Efficacy of GRO Plant Booster on the Growth and Yield of Sugarcane

c. Archibald Temporaza, Olongapo City, March 10, 2017 (on sugarcane juice and other by-products)

d. Land Use Reclassification (LUR) applicants (61)

	Name of Applicants
Pampanga (4)	i. Carlo Catacutan ii. Dennis G, Faustino iii. Goldenpine Realty &Devt. Inc. iv. Pacific Pabahay Homes, Inc.
Cagayan (2)	i. Manuel N. Mamba ii. Bernardo Carag
Batangas(34)	i. Manuel N. Mamba ii. Philtown Properties, Inc. iii. Marina Mojares iv. RFM-Science Park of the Phil Inc. v. Emiliano Medrana vi. Adelaida Manito, et al. vii. Ricarda Medel viii. Amelia M. Lantin

	ix. Lourdes Araneta x. Rosana Rabuco xi. Sheena Marie Rabuco xii. Elmer Laurel xiii. SPS Apollo Medrana xiv. NilaMedrana xv. Remedios Perez xvi. RFM-Science Park of the Phil. Inc. xvii. Eugenio Rivera xviii. Pedro Marquinez Sr. xix. Agricultural Company (PMAC), Inc. xx. Mr. Gabriel B. Rosales, et al. xxi. Mr. Gabriel B. Rosales, et al. xxii. Bernard Ashley L. Africa, et al. xxiii. Nativeland Development Corporation xxiv. Antipaz Ada xxv. Maria C. Catibog xxvi. Roman E. Ada xxvii. Tereso E. Caringal xxviii. Juan Lopez xxix. Pedro Catibog xxx. Bibiana Ada xxxi. Anatalio U. Gonzales xxxii. Maria Lourdes L. Araneta xxxiii. Roman Bathan xxxiv. Solar PH
Camarines Sur (3)	i. Felipe France ii. Guillermo Belano iii. Lourdes Anonas
Nueva Ecija (1)	David Padolina et al.
Cotabato(4)	Ma. Suraldina Lucero Feliza Fontanilla Dolores Bolio iv. Berniza Amelyn Bolio
Camarines Sur (3)	Felipe France Guillermo Belano Lourdes Anonas
Nueva Ecija (1)	David Padolina et al.
Cotabato(4)	Ma. Suraldina Lucero Feliza Fontanilla Dolores Bolio Berniza Amelyn Bolio
Bukidnon(4)	Rosario F. Varias James Uy Tan Anatloia Belisario JK Laviña and Son's Realty Corporation
Davao(3)	Fe Raquiza et al. Emie C. Uy St. Benedict Hospital of Davao Del Sur
General Santos(4)	James Y. Tan Jonathan M. Sy Christopher C. Go Rodrigo Tan,
Tarlac(2)	Andrea Vallente Erwin J. Geron

e. OPSI trainings as resource speaker

1. SRA-LAREC- Pampanga, March 9-10, 2016 - (A. Casupanan, B. Manlapaz, V. Serrano)

2. SRA-LAREC- Pampanga, February 27-March 1, 2017 - (A. Casupanan, B. Manlapaz, V. Serrano)
3. GFI, San Mariano, Isabela, May 28-June 3, 2016 - (N. Guiyab, B. Manlapaz)
4. SRA-LAREC- Pampanga, June 22-23,2017- - (A. Casupanan, B. Manlapaz, N. Guiyab)
5. Guihing, Digos City, Davao, July 10-14, 2017- (R. Sarol, J. Agsaoay Jr.)
6. Tarlac Mill District, July 4, 2017 – (N. Guiyab, V. Serrano)
7. Matalam, Cotabato City, September 6-9, 2017- (R. Sarol, J. Agsaoay)
8. SRA LAREC- Pampanga, September 20, 2017 – (B. Manlapaz, N. Guiyab, A. Casupanan)
9. SRA LAREC- Pampanga, September 28-29, 2017 – (B. Manlapaz, N. Guiyab, A. Casupanan)

f. Inter-agency linkages

1. Gawad Saka Post Evaluation 2016, UPLB, January 8-9, 2017 - (B. Manlapaz)
2. Presentation of Top 3 finalists to the board of judges for the National Search of
3. Attended GAWAD SAKA 2017 National Technical Committee Evaluation- SRA, Quezon City, June 19, 2017 - (B. Manlapaz)
4. Attended meeting regarding TR for Sugarcane Production NC II TESDA, Taguig City- June 20, 2017 - (B. Manlapaz)
5. GAWAD Saka 2017, Diliman Quezon City, October 6, 2017 –(B. Manlapaz)
6. Newly Designated SRA Representatives to the National Technical Committee on land Use Matters (NTECLUM) and Authorized Approving Officers of Inspection Reports - Diliman Quezon City, October 10, 2017 – (B. Manlapaz)
7. Provided planting materials of 58 HYV's to UPLB-IPB as per approved request – November 24, 2017
8. Gawad Saka "Search for Outstanding Sugarcane Farmer" – (B. Manlapaz)
   July 11-14, 2017 - Capiz and Ilo-Ilo
   August 2-4, 2017 - Bacolod City
   August 9-11, 2017 - Cagayan Province
   August 22-25, 2017 - Bukidnon
   August 29-31, 2017 - Ormoc City
   September 6-7, 2017 – Quezon City
9. National Review and Calibration of DA-BAR's Climate Change R&D Program, Philippine Carabao Center, Science City of Muňoz, Nueva Ecija- September 4-8, 2017- (V. Serrano)
10. NSIC Sugarcane Technical Working Group meeting,LGAREC, La Carlota City- September 13-15, 2017- (V. Serrano)
11. Consultation workshop on the National Soil and Water Resources Research and Development , Diliman, Quezon City - October 12, 2017 – (B. Manlapaz)

g. FBSS Technical services rendered to:

a. Collaborative projects
   1. PCAARRD-MIRDC-SRA Project 4 " Design and Development of Sugarcane Harvesting Equipment for Small-scale Sugarcane Farms- Field Testing :2
b. OPSI trainings as resource speaker
   1. Outreach Program of the Sugarcane Industry, March 9-10, 2017 SRA-LAREC, Pampanga- (L. Olalia)
   2. Outreach Program of the Sugarcane Industry, February 27-March 1, 2017 SRA-LAREC, Pampanga- (L. Olalia)

II. HYV PROPAGATION-CANE PRODUCTION

Gross canes milled at Sweet Crystals Incorporated Sugar Milling Company was 1,550.035 tonnes which produced net LKG sugar share for SRA of 1,576.19 and net kilos of 34,106.83molasses. The income generated from the sales of sugar was PhP 2,434,067.32.

III. Workshops/seminars/ training/conferences/Conventions attended

1. SRA 2017 Strategic Planning Conference, SRA, Q.C., January 7-8, 2017, SRA-QC – (V. Serrano)
2. Technical Training on SRA-Yield Estimation System for Sugarcane Operation, SRA-LAREC, Pampanga, February 13-18, 2017 - (J. Agsaoay, R. Sarol)

3. Seminar on Agricultural Technologies, Instruments and Tools for Use in Agriculture and Related Fields, PCARRD, Los Baños Laguna, February 22, 2017, – (B. Manlapaz)
4. 2017 Women's Month Celebration :"We Make Change Work for Women", SRA-QC, March 6-7, 2017 – (A. Casupanan, L. Yarte, V. Serrano, N. Guiyab, B. Manlapaz)
5. 49th Anniversary and Annual Scientific Conference of the Pest and Management Council of the Philippines, Boracay, Aklan - May 9- 13, 2017- (A. Casupanan)
6. Orientation on Rules on Administrative Cases in the Civil Service and Sexual Harassment, SRA,Quezon City - May 22, 2017, (PTCM Staff)
7. 32nd Philippine Chemistry Congress, Puerto Princesa, Palawan, May 31-June 2, 2017- (L. Yarte)
8. Gender and Sensitivity Training in the Workplace, June 30, 2017, SRA, Quezon City (PTCM Staff)
9. In House Review, Presentation of completed projects and On-going Projects, La Granja Agricultural Research and Extension Center, July 31- August 3, 2017- (PTCM Technical Staff)
10. PHILSUTECH "Resiliency in the Midst of Challenges Affecting the Sugarcane Industry", Waterfront Hotel, Lahug, Cebu City, August 15-18, 2017- (PTCM Research Staff)
11. Short Course on Cropping Systems models and its application for climate Impact Assessment, SEARCA, Los, Banos, Laguna, September 4-8, 2017- (J.Mora)
12. Labcon 2017: Unifying Technologies Beyond Borders, SEDA Hotel, Vertis North, Quezon City, September 27, 2017- (L. Yarte and J. Mora)
13. PIPAC Seminar workshop on safety in the laboratory - De Manila University Campus, Quezon City , November 9-10, 2017 – (R. Sarol)
14. Assessors training - San Fernando, Pampanga, November 11-15, 2017 –(B. Manlapaz)
15. Seminar for Economic and other factors in the adoption of Biotechnology Crops in the Philippines - UP Diliman, Quezon City, November 21, 2017- (V. Serrano, B. Manlapaz, R. Sarol, J. Mora)
16. Workshop on "Guidelines on the issuance of Certificate for land use Reclassification" – Angeles Pampanga, November 27-29, 2017 – (B. Manlapaz)
17. 1st national Conference on Chemical Laboratories, Century Park Hotel,Manila - November 28-29, 2017 – (V. Serrano, A. Casupanan, R. Sarol)

Farm and Building Support Services (FBSS)

1. 2017 Womens Month Celebration :"We Make Change Work for Women", March 6-7, 2017, SRA-QC – (P. Macamos, A. Bacani, P. Bacani, Constatino, E. Serrano, V. Manalo, J. Cosio, J. Cruz, J. Tolentino)
2. Seminar on Agricultural Technologies, Instruments and Tools for Use in Agriculture and Related Fields, February 22, 2017, PCARRD, Los Baños Laguna (L. Olalai, P. Macamos)
3. Technical Training on SRA-Yield Estimation System for Sugarcane Operation, February 13-18, 2017, SRA-LAREC, Pampanga- (L. Olalia)
4. Hands-on training on AFMECH Database, February 2, 2017, PhilMech, CLSU, Nueva Ecija P. Macamos, A. Bacani
5. National Consultation on the Draft Guideline on DA Procurement of Agricultural and Fisheries Machinery and Equipment, February 22-24, 2017,FPA Convention Hall, Quezon City, , P. Macamos
6. National Consultation on the Draft Guidelines for the Registration of Ownership of Agricultural and Fisheries Machinery and Equipment, March24, 2017, BSWM, Quezon City, P. Macamos
7. PCAARRD Seminar Optimizing Production thru SMART Technologies, February 22, 2017, Los Banos, Laguna, (L. Olalai, P. Macamos)
8. Meeting with Dr. Blanco on DRRM proposal for sugarcane, April 7, 2017, SRA Quezon City, (L. Olalia)
9. Writeshop on SRA DRRMP, April 17-19, 2017, San Mateo, Rizal (L. Olalia, A. Bacani)
10. Meeting with field officer and research personnel of CAT, April 21, 2017, Tarlac City (L. Olalia)
11. Meetung with GFI management, conduct rapid field assessment, May2-6, 2017,San Mariano, Isabela (L. Olalia)
12. BAC Meeting on procurement of tractor and fertilizer, May 16, 2016, SRA Quezon City (L. Olalia, P. Macamos, Jr.)
13. BAC and TWG meeting, May 18, 2017, SRA Quezon City (L. Olalia, P. Macamos, Jr., A. Bacani)
14. Orientation of Civil Service Commission code of conduct and type of harrassments, May 22, 2017, SRA Quezon City (LAREC personnel).
15. Meeting with ESD, May 23, 2017, SRA Quezon City (L. Olalia, P. Macamos, Jr)

16. Meeting with BAC on tractor and fertilizer, May 24, 2017, SRA, Quezon City (P. macamos, Jr.)
17. Meeting with BAC on FMR, May 31, 2017, SRA Quezon City (A. Bacani)
18. Climate Outlook Forum, May 31, 2017, Diliman, Quezon City (L. Olalia)
19. Asset Management and Disposal Committee meeting, June 02, 2017, SRA Quezon City (A. Bacani)
20. Ceremonial signing of the DRRMP for sugar industry, June 8, 2017, SRA Quezon City (L. Olalia)
21. Farmers and fisherfolks forum, June 20, 2017, Mariveles, Bataan (L. Olalia)
22. MDDC summit, June 23, 2017, Global City, M. M. (A. bacani)
23. Agricultural machinery operation training, June 26-28, 2017, PSAU, Pampanga (L. Olalia)
24. Meeting on retrofitting of main and annex buildings, Jyne 27, 2017, SRA Quezon City (A. Bacani)
25. Reproductive health right and tribute to fathers, June 30, 2017, SRA Quezon City (LAREC personnel)
26. Meeting/workshop for the updating of RDE agenda, June 30, 2017, Tarlac City (L. Olalia, V. Serrnao)
27. In House Review, Presentation of completed projects and On-going Projects, La Granja Agricultural Research and Extension Center- July 31- August 3, 2017 (PTCM and FBSS Technical Staff)
28. Specialized training course on testing and evaluation of agricultural and fisheries machinery, Los banos, Laguna, August 8-11, 2017 (P. Macamos, Jr.)
29. PHILSUTECH "Resiliency in the Midst of Challenges Affecting the Sugarcane Industry", Waterfront Hotel, Lahug, Cebu City- August 15-18, 2017- (PTCM and FBSS Research Staff)
30. Makina Expo, Iloilo City, September 7-9, 2017, (L.C. Olalia and P. Macamos, Jr.)
31. Public Bidding for the supply and delivery of various farm tractors and implements, SRA, Quezon City,September 13, 2017 (P. Macamos, Jr.)
32. 67th Philippine Society of Agricultural Engineers (PSAE) Annual national Convention, April 23-29, 2017, Legazpi City (L. Olalia, P. Macamos, Jr.)
33. National forum on Agricultural and Biosystems Engineering- Manila-November 8-9, 2017, L. Olalia, P. Macamos, Jr.

FBSS Inspection/TWG meetings/Project coordination meeting

1. Evaluation and Ratification of 2017 SIDA-RDE Project, February 10,2017, SRA-QC- (P. Macamos))
2. DRRM Project Team Meeting, January 26, 2017,SRA, QC, (L. Olalia
3. Visayas DRRM Project Team Meeting and FGD, Februar 7, 2017, Bacolod City (L. Olalia
4. Attend AWS inauguration and stakeholder's meeting, February 15, 2017, Cebu and Ormoc, (L. Olalai)
5. Observation of the sickle sword type harvester and the cane grabber/loader, February 1, 2017, Tarlac, (L. Olalia, P. Macamos, A. Bacani)
6. BAC pre-procurement meeting on farm machinery and irrigation-SRA, Quezon City-October 4, 2017-L. Olalia, P. Macamos, Jr., A. Bacani
7. TWG Meeting of SIDA infrastructure program committee- SRA, Quezon City- October 23, 2017-A. Bacani
8. Pre-bid Conference on tractors-SRA, Quezon City-October 24, 2017- P. Macamos, Jr.
9. Bidding of tractor, implements, harvesters and grabber-loader, SRA, Quezon City- November 6,7 & 9, 2017- P. Macamos, Jr.
10. TWG Meeting of SIDA infrastructure program committee- SRA, Quezon City- November 9-10, 2017-A. Bacani
11. Meeting on repair of SRA Social Hall-SRA, Quezon City-November 21, 2017-A. Bacani
12. TWG Meeting of SIDA infrastructure program committee- SRA, Quezon City- November 23, 2017-A. Bacani
13. Post-qualification Evaluation of harvesters and tractors-Metro Manila-November 27 & 28, 2017- P. Macamos, Jr.
14. Writeshop for the revision of PAES 421:2009-FMR-Cebu City-November 26-30, 2017, A. Bacani
15. Bidding on waste disposal-SRA, Quezon City-December 6, 2017-A. Meeting of SIDA infrastructure program committee- SRA, Quezon City- November 9-10, 2017-A. Bacani
16. TWG Meeting of SIDA infrastructure program committee- SRA, Bacolod City- December 7-8, 2017-A. Bacani
17. Bidding for farm implements-SRA, Bacolod-December 6-7, 2017-P. Macamos, Jr.
18. Bidding for tractors-SRA, Bacolod-December 14-15, 2017-P. Macamos, Jr.

PTCM PERSONNEL (10)		FBSS PERSONNEL (10)	
Ma. Vina A. Serrano	- Sr. Science Research Specialist	Laverne C. Olalia	- Agriculturist II (OIC)
Benjamin G. Manlapaz	- Sr. Science Research Specialist	Ador S. Bacani	- Engineer II
Leonila B. Yarte	- Chemist III	Patricio R. Macamos, Jr.	- Science Research Specialist II
Agnes M. Casupanan	- Science Research Specialist II	Eller P. Serrano	- Labor Foreman II
Nestor C. Guiyab	- Science Research Specialist II	Alvin M. Mangila	- Electrician II
Maribel P. Serrano	- Laboratory Technician I	Priscilla A. Bacani	- Property Custodian
Nida B. Mangila	- Science Aide	Victor N. Manalo	- Driver II
Johnny Agsaoay	- Science Research Specialist (JO)	Jesus S. Tolentino, Jr.	-Driver II
Rachel Sarol	- Science Research Specialist (JO)	Jaime M. Cruz	- Heavy Equipment Operator II
Jessica Mae Mora	- Science Research Specialist (JO)	Joel B. Cosio	- Heavy Equipment Operator II
		Joseline S. Constantino	- Secretary II

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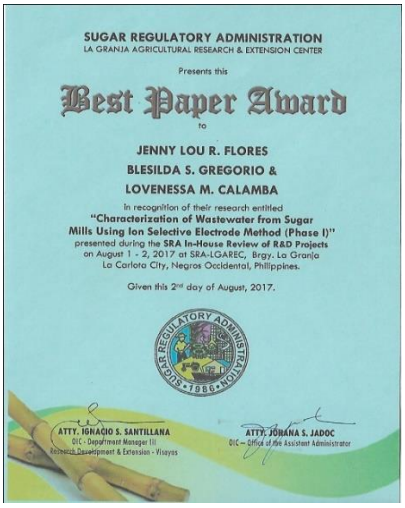
Environmental Laboratory - Quezon City

Blesilda S. Gregorio

The SRA Environmental Laboratory was created to provide assistance to the sugar industry's capacity building for environmental monitoring and evaluating performance with respect to compliance with DENR implemented regulations.

ACCOMPLISHMENTS

Last 15th January 2017, the laboratory has been granted recognition after having been assessed and found to comply with the documentation, analytical performance and other technical requirements of DAO 63 series of 1998, Guidelines for the Designation of DENR Recognized Laboratories. The scope of recognition covers BOD_5, Chemical Oxygen Demand, Color, Dissolved Oxygen, Oil & Grease, pH, Temperature, and Total Suspended Solids for water and wastewater; and NOx, Particulates, and Sulfur Oxides as SO_2 for Stationary Source Emission. The laboratory has analysed a total of 124 water and wastewater samples amounting to 109,700.00 and 223 air emission samples amounting to 138,650.00 and has issued 56 certificates in total.


SUGAR REGULATORY ADMINISTRATION
LA GRANJA AGRICULTURAL RESEARCH & EXTENSION CENTER

Presents this

Best Paper Award

to

JENNY LOU R. FLORES
BLESILDA S. GREGORIO &
LOVENESSA M. CALAMBA

In recognition of their research entitled
"Characterization of Wastewater from Sugar Mills Using Ion Selective Electrode Method (Phase I)"
presented during the SRA In-House Review of R&D Projects
on August 1 - 2, 2017 at SRA-LGAREC, Brgy. La Granja
La Carlota City, Negros Occidental, Philippines.

Given this 2nd day of August, 2017.

ATTY. IGNACIO S. SANTILLANA
OIC - Department Manager III
Research Development & Extension - Visayas

ATTY. JOHANA S. JADOC
OIC — Office of the Assistant Administrator

The laboratory also presented its completed project entitled "Characterization of Wastewater from Sugar Mills Using Ion Selective Electrode Method" during the SRA In-House Review of RDE Projects held last August 1-2, 2017 at the SRA-LAGAREC, La Granja, La Carlotta City, Negros Occidental wherein the team was awarded Best Technical Paper. The project aims to assist the sugar industry in the safe re-use of wastewater for irrigation and other agricultural practices as part of its sustainability measures by characterizing wastewater using Ion Selective Electrode Method, which is recently gaining popularity because of method simplicity and cost efficiency.

Yearly, the laboratory participates on the annual proficiency testing provided by Environmental Research Associates (ERA), wherein this proficiency testing scheme is designed to evaluate laboratory performance against other participating laboratories throughout the world on the same set of environmental parameters. This year, again, the laboratory has been recognized by ERA as a Laboratory of Excellence for achieving 100% acceptable data in the recently held proficiency testing last October 2017 which included 702 participating laboratories.


Laboratory of Excellence

Sugar Regulatory(N026)

This laboratory has been recognized by ERA as a
Laboratory of Excellence for achieving 100% acceptable data in the

October 2017 WP ERA Proficiency Testing Round 273

which included 702 participating laboratories. This achievement is a demonstration of
the superior quality of this laboratory in evaluation of the analyte(s) listed below.

BOD
n-Hexane Extractable Material(O&G)(Grav)
Total Solids at 105°C

COD
Total Dissolved Solids at 180°C
Total Suspended Solids

ERA
A Waters Company

David Kilhefner, Quality Officer

ENVIRONMENTAL RECOGNIZED LABORATORY SUSTAINABILITY AND MAINTENANCE

As part of their continual improvement, Environmental Laboratory staff were sent to participate in various trainings locally and abroad to further increase their awareness and knowledge as well as to become competitive in their respective field of expertise. A total of 14 trainings and seminars were attended by the staff. In addition, the laboratory staff also shared their knowledge by welcoming five on-the-job trainees for 200 hours as part of the laboratory's social responsibility in training the future workforce of the field.


Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City

This

CERTIFICATE OF RECOGNITION
C.R. No. 055/2017

is hereby granted to

Laboratory Services
Sugar Regulatory Administration - Q.C.
Laboratory Services Department, Ground Floor, Annex Building
Sugar Center, Sugar Regulatory Administration, North Avenue, Diliman, Quezon City

after having been assessed and found to comply with the documentation, analytical performance and other technical requirements of Administrative Order No. 63, Series of 1998, Guidelines for the Designation of DENR Recognized Environmental Laboratories.

This certificate is valid for three years from date of issue unless otherwise revoked or cancelled.

In testimony whereof, I have hereunto signed this Certificate and issued the same this thirtieth day of January, year two thousand and seventeen at Quezon City, Philippines.

REGINA PAZ P. LOPEZ
Secretary

Scope of Recognition*
Water and Wastewater
BOD5
Chemical Oxygen Demand
Color
Dissolved Oxygen
Oil and Grease
pH
Temperature
Total Suspended Solids

Stationary Source Emissions
NOx
Particulates
Sulfur Oxides as SOx

*Exclusive of sampling

DENR Recognized Signatories
Blesilda S. Gregorio
Jenny Lou D. Ragasa

ELR Laboratory Code No. NCR - 26

In order to maintain excellence, the laboratory ensures that its quality assurance program is well sustained and followed. This year, two equipment were externally calibrated and three were verified. The laboratory also performed chemical inventory at the end of every year and follows a "first in first out" basis.

WASTE MANAGEMENT PROGRAM

The Environmental Laboratory Section is continuously generating chemical wastes from different wastewater and air analysis submitted by sugar mills and outside clients. Thus, the Laboratory is expected to sustain its chemical waste management program. Since 2007 SRA Environmental Laboratory has been a DENR-registered hazardous waste generator, in compliance with the requirement of RA 6969 (Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990.) This year, it has continually implemented its safety guidelines regarding waste collection and storage such as proper identification of chemical wastes and ensures safe storage until it is due for disposal by accredited waste treaters. The Pollution Control Officer designated by the laboratory is actively participating in seminars conducted by DENR annually and submits SMR files to DENR-EMB quarterly.

LABORATORY SERVICES

Jean Nanette C. Sumagasay

Sugar Reference Service. A total of 219 raw sugar samples were received and analyzed; 196 of which were weekly composite from sugar mills which were analyzed for polarization, moisture, ash, whole raw color, affined raw color, grain size and sulfur dioxide. Of the 196 weekly composite samples, 59% of these samples have one or more parameters that failed to pass the Standard for Raw Sugar (PNS/ BAFPS 81:2010). Provision of analytical results on the mills' raw sugar polarization and color for Bureau of Internal Revenue was also done in compliance to BIR Revenue Resolution No. 8 of 2015.

Twenty five (25) molasses and 12 other sugar product samples were submitted and analyzed. A total of 240 samples for Sugar Reference Service generated Php 783,525.00 SRA revenue.

<<Laboratory Analysis of Raw Sugar

Integrated Laboratory Services. A total of eighty two (82) refined sugar samples were received and analyzed; 55 of which were biweekly composite from refineries. 98% of the 55 biweekly white sugar composite samples submitted by the refineries, passed the quality requirements of the Standard (PNS/BAFPS:2010) for the routinely analyzed parameters such as polarization, moisture content, ash, color and reducing sugars. Only one of the biweekly composite samples submitted failed to pass the quality requirement of the White Sugar Standard in moisture for standard grade white sugar.

Twenty six (26) of these were samples analyzed in support for regulations. Assistance was extended to Regulations Department for the analyses of some beverages, ice cream, coffee mixes and etc., which were analyzed for its sucrose and other sugar content.

A total of 82 refined sugar samples and 37 other agro-industrial samples for Integrated Laboratory Services generated Php 458,425 SRA revenue.

Premixes and Other Food Concentrates. Twenty nine (29) dry mixes, concentrates and other food products were sampled and analyzed. Of the 29 samples, 20.69% had over 65% sucrose content, 41.38% had below 65% sucrose content while the sucrose content of the rest were not detectable (37.93%). As continuing compliance to Sugar Order No. 6, Series of 2010-2011 and to ensure integrity of samples from shipments, sampling of these commodities were still done by the Laboratory.

A total of 29 samples for Premix Commodity Services generated Php 87,000 as SRA revenue for the year.

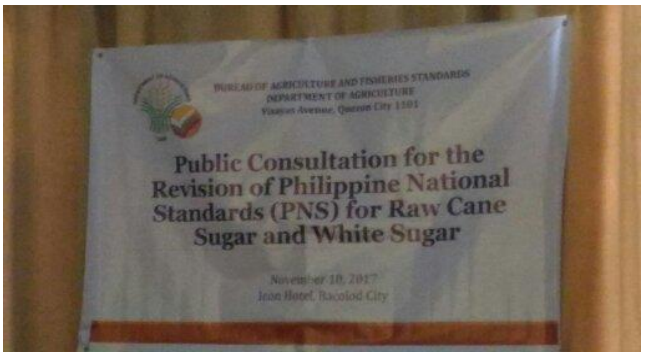
Profiling of Philippine White Sugar. Fifty five (55) white sugar samples from Luzon and Mindanao Refineries were analyzed for this project. Additional samples will be analyzed in the next crop year including those samples from Visayas.

Comparative Study of Raw Sugar Color Using Three ICUMSA Methods. The current specifications for raw sugar color in the Philippine National Standard for Raw Sugar (PNS/BAFPS 81:2010) uses the ICUMSA Modified Method 4 as the official method of analysis. While these are based on raw sugar specified methods in the US Sugar Contract, the said method is no longer as an official ICUMSA method. It is necessary to establish specifications using the current ICUMSA official methods of analysis. To be able to establish the equivalent or required specification it is necessary to conduct a comparative study of the current method used for color determination and the official ICUMSA method. It is also the objective of this study to determine the correlation between color values obtained using the three different methods. Twenty five (25) samples have already been analyzed to compare the methods.

Determination of Stability of Raw Sugar in Storage. This study is being done in cooperation with the Quality Assurance Committee, PSMA and five sugar mills to determine the stability of raw sugar. Samples of raw sugar were stored and will be kept for a two-year period. The initial % polarization, moisture, % invert sugar, % ash, color values were determined on the raw sugar used for the stability test.

Raw sugar were then stored in different locations of warehouse and analyzed for parameters mentioned above and sampled every quarter thereafter up to the 24th month. Assessment of warehouse ambient temperature and humidity will also be done. Observation of deviations from normal warehouse conditions will also be recorded. Results of changes in sugar quality based on the parameters analyzed will be evaluated after a two year period.The study is ongoing and is on its second year now.

Refinery and Mill Laboratory Audit and Harmonization. This project aims to harmonize laboratory procedures and methods of the sugar industry laboratories. Initial takeoff of this project would include alignment of procedures and methods of the two SRA Sugar Laboratories. A meeting was already conducted between the two laboratories to compare its methods and its equipment. Next step would be actual simultaneous hands on analysis to ensure uniformity of methods. This was temporarily shelved pending the filling up of some Chemist positions in Bacolod which were left vacant by early retirement of some lab personnel.



Revision of Philippine National Standard On Raw Cane and White Sugar. The Philippine National Standard for the Specification of Raw and White Sugar was revised in 2010 to aid in boosting the local sugar industry and ensure that locally produced and traded sugars meet the current international standards for safety and quality. Six years later, the need to update the standards, particularly on the methods for analysis, was seen. A Technical Working Group for the revision of said standards was created through DA Special Order No. 239 Series of 2017 with representation from the Bureau of Agriculture and Fisheries Standards (BAFS) and SRA and also the private sector as represented by PSMA and PASRI. A series of meetings were conducted to come up with draft standards after which three public consultations were conducted to draw inputs and comments for the improvement of the draft standard. These were conducted in Cebu City, Metro Manila and in Bacolod City. The final draft has been deliberated by the TWG and now awaits final approval.

<<Public Consultation on Revision of Sugar Standards in Bacolod City

The Public Consultations were attended by various sugar industry stakeholders.>>

Environmental Laboratory Services. Seventy nine (79) wastewater and two hundred sixty eight (268) air particulate samples were received and analyzed by the Environmental Laboratory.

This generated Php 248,350 as SRA revenue for the Environmental Laboratory Services.

Enviromental Laboratory Recognition Sustainability and Maintenance. The Laboratory has been granted the renewal of its Certificate as EMB-DENR Recognized Laboratory last January 15, 2017.

Extension Support Services.

2.2.1 Knowledge / Expertise Sharing

- Seminars, Trainings, Techno-fora conducted

  - Industrial and Laboratory Calibration, held in Bacolod City, in coordination with PSMA and Philsutech on January 11-13, 2017
  - Laboratory on the Job Training Program at the Environmental Lab of five (5) PUP and TUP students on April 10-May 29,2017

- Technology Dissemination as Resource Person (8)
  - Orientation Meeting on DA Regulatory Functions (Laboratory)
  - Orientation Training on DA Quarantine Inspection Facilities and Other Regulatory Laboratories(Batch 5) on August 3, 2017

- Presentation of the Draft Philippine Standard for Raw and White Sugar at the Plenary Session of the 64th Philippine Sugar Technologist Association Annual Convention, August 16, 2017, Waterfront Hotel, Cebu City
- Public Consultation for the Adoption of Various Codex General Standards as Philippine National Standards on September 27-28,2017
- SRA In House Review of RDE projects on "Qualitative & Quantitative Analysis and Characterization of Wastewater from Sugar Mills using SIE Method" on August 2017
- Public Consultation on the Revision of Philippine National Standards on Raw and White Sugar at University Hotel, Up Campus, Diliman on October 6, 2017 and at the Bell (Icon) Hotel, Bacolod City on November 10,2017
- SRA Laboratory Services at DA Laboratory Services Focal Group Planning Workshop on Nov. 21, 2017

Orientation on DA Quarantine Inspection and Regulatory Laboratories participated by various DA Agencies and DA SPS Focal Persons at the SRA Sugar Laboratory

- Technical Assistance through Referrals and Consultations (Special Assignments and Intervening Activities)**.** Technical Assistance through Referrals and Consultations were done in 60 occasions and as a continuing member of twenty nine (29) Technical Working Groups (TWG) and/or Committees:

- Quality Assurance Committee
- ICUMSA (International Commission on Uniform Methods of Sugar Analysis) National Committee
- Department of Agriculture Sanitary and Phytosanitary (SPS) Focal Group
- National CODEX Organization Technical Committee
- Department of Agriculture Codex Body
- CODEX National Subcommittee on Sugars
- TWG on the Revision of Philippine National Standard on Raw and White Sugar
- TWGs for the Adoption of Various Codex General Standards as Philippine National Standard:
  - *Principles for Traceability/Product Tracing as a Tool within Food Inspection and Certification System*
  - *Principles and Guidelines of National Food Control System*
  - *General Guidelines for Sampling*
  - *General Principles on Food Hygiene*
  - *Principles and Guidelines for Conduct of Microbiological Risk Assessment*
  - *Risk Analysis for Food Safety applications by Governments*

- TWG on Development of Regulatory Impact Analysis Guidelines
- TWG for the Validation and Impact Evaluation of Standards and Code of Practice Developed by BAFS
- TWG on the Development of Guidelines on the Creation of the Department of Agriculture Pool of Experts Pool of Experts
- TWG on the Development of Guidelines on Good Regulatory Practice
- TWG on the National Quality Seal
- DA Food Safety Subgroup
- DA Pool of Experts Steering Committee
- Philippine Rapid Alert System for Food and Feeds
- TWG on RDE Committee -SIDA
- TWG on the Adoption of Codex Alimentarius General Standard for Contaminants and Toxin in Food and Feeds as Philippine National Standard (PNS)
- DA EU-TRTA Project on Evaluation of Laboratories of DA and Proposed Laboratory Policy
- Laboratory Services Work Stream Working Group
- HFCS TWG

On these 60 occasions, technical assistance were requested by 3 government agency (Bureau of Agricultural Fisheries Product Standards, Department of Agriculture-SPS Focal Group, DA/ DOH-National Codex Organization), DA Office of the Assistant Secretary fo Regulations and 2 technical association of the sugar industry (PSMA and PASRI).

Topics covered were the following:

- Quality Assurance Committee Projects
- SPS Focal Group(Sanitary and Phytosanitary Measures)
- Revision Of PNS for Raw and White Sugar
- General Principles on Food Hygiene
- General Guidelines for Sampling
- National Food Control System
- Traceability
- Micrbiological Risk Assessment
- Risk Analysis for Food Safety
- Codex Subcommittee on Sugar for the Elaboration of Codex Standard on Non centrifuged Dehydrated Sugar Cane Juice (Panela/Muscovado)
- Regulatory Impact Analysis Guidelines
- Validation and Impact Evaluation of Standards and Code of Practice Developed by BAFS
- Good Regulatory Practice
- Creation of DA Pool of Experts
- Food Safety
- Rapid Alert System for Food and Feeds
- National Codex Manual of Procedures
- General Standard for Toxin and Contaminants
- Laboratory Services
- Codex Standards

Resource person at the Plenary Session of the 64th Philsutech Annual Convention

<u>Production Support Services</u>. Sugar Laboratory Services – A total of 751 samples were received and analyzed. These were submitted by 12 sugar mills, 7 refineries and several other laboratory users which include traders, industry associations and others, generating total revenue of Php 1,577,300 in the form of analytical fees.

<u>Capability Building and Equipment Acquisition.</u>

1) Acquisition of twenty (20) laboratory and office equipment.

2.) Laboratory personnel attended eight (8) training courses and thirty nine (39) seminars/symposium/conferences which include three (3) international conference/consultative and training workshops which were:

- Effective Participation in Codex Alimentarius Activities, an initiative of the European Union through the Better Training for Safer Food held in Bangkok, Thailand October 9-11, 2017

- Principles and Operation of UV-Vis Spectroscopy for UV-1800 held in Shimadzu Asia Pacific Pte. Ltd., Singapore on October 12 , 2017

- Food Testing Proficiency Testing Workshop held in JinJiang Fu Yuan Hotel, Beijing, China on October 18-19, 2017.

Philippine Delegation to the Food Testing Proficiency Testing Workshop in Beijing,China

TECHNICAL SERVICES SECTION

Rosaline R. Agosto

THE YEAR'S HIGHLIGHTS

Technical Services Section (TSS) under the Research, Development and Extension Department (RD&E) continues to evaluate the performance of sugar factories through technical audits which include capacity assessments, process performance, energy efficiency levels and environmental compliance to industry standards. Impact assessments are conducted later determining the outcome as well as effects or relevance of the adoption of recommendations of the audit to the clientele.

Technical personnel were deployed to perform industrial investigations, observations, monitoring, measurements and audits. Technical services conducted were mostly technical inquiries, planter's milling concerns, and data/information dissemination rendered to millers, planters, industrial sector, the academe and other researchers. The section is also equipped with publications that embodied important data on production and performance statistics of all sugar mills and refineries in the country. Among its completed publications include the Annual Synopsis of Philippine Raw Sugar Factories' Production and Performance Data C.Y. 2015-2016 and the Annual Compendium of Philippine Sugar Refineries F.Y. 2016.

To further strengthen the section's capability in mill audits and leadership, several seminars and workshops were attended. A total of 14 seminars/workshops and two administrative reviews were participated by the staff as part of honing the personnel capabilities. The section participated as well several meetings which are mostly project-related. Technical and administrative reports were also submitted as required.

The projects and functions of the section are discussed in detailed following this summary.

A. PERSONNEL COMPLEMENT

Technical Services Section

1. Ma. Alicia L. Sabordo - Senior Science Research Specialist
2. Rosaline R. Agosto - Engineer III

3. Rogelio T. Genzola - Engineer III
4. Carolina L. Pedalizo - Engineer II
5. Ma. Theresa J. Villamor - Engineer II
6. Rosalina B. Tan - Engineer II
7. Dyna R. Tienda - Science Research Specialist II

Detailed to the Office of the Department Manager

8. Emilia R. Chu - Engineer III

Detailed to the Environmental Laboratory

9. Ma. Belina N. Plaza - Senior Science Research Specialist
10. Catherine Mercado - Science Research Specialist
11. Ruel A. Del Rosario - Science Research Specialist

Detailed to the Sugar Laboratory

12. Lourdes R. Fragante - Senior Science Research Specialist

Detailed to the Extension Section

13. Evelyn Estanislao - Senior Science Research Specialist

Detailed to LAGAREC, SRA-Bacolod

14. Leonida D. Banjao - Science Research Specialist II

There are 14 personnel in the Technical Services Section by the start of the year. Unfortunately, the workforce was trimmed down to 13 at the end of the first quarter after the sudden death of Ms. Sabordo. Despite losing the head of the section, the personnel still managed to conduct its functions with urgency and excellence.

B. DEVELOPMENTAL/RESEARCH PROJECTS

B.1. Completed Projects

a. Annual Synopsis of Philippine Raw Sugar Factories' Production and Performance Data C.Y. 2015-2016
b. Annual Compendium of Philippine Sugar Refineries F.Y. 2016
c. Philippine Sugar Milling Hardware: 2016 Survey
d. Philippine Sugar Refining Hardware: 2017 Survey

B.2. Continuing/On-Going Studies/Projects

1. ***Capacity and Efficiency Appraisal of Sugar Mills*** - a technical audit that gives a clear scenario of the plant's equipment and efficiency profile. This enables authorities to draw conclusions as to where improvements and/or rectifications should be applied. The program is now on its sixth year with 19 assessed sugar mills at the end of the year. For this year, five sugar mills were audited as follows:

    a. Central Azucarera de Tarlac - January 23-30
    b. Crystal Sugar Company Incorporated - February 19-28
    c. Bogo-Medellin Milling Co., Inc. - March 12-21
    d. Peñafrancia Sugar Mill, Inc. - April 2-11
    e. Central Azucarera de la Carlota, Inc. - December 3-12

    BOMEDCO was audited upon request of Bogo-Medellin Sugarcane Planters Association, Inc. Complaints on fluctuating analysis on Lkg/TC determination and a sugar distribution factor less than 1.00 were taken actions by the Audit Team. Several installed equipment are found operating

inefficiently that have brought about low recoveries as low as 50%. The mill was then enjoined to rehabilitate wearing equipment and adopt advanced technology to improve its performance.

In terms of capacity, most of these sugar centrals have their clarifiers close to the level of its rated capacity. Corrective actions should be done as this might brought some operational difficulties during instances of low purity canes or material handled.

General recommendations for all these audited mills include (1) implementation or strengthening of cane campaign specifically aiming for better cane quality and adapting new HYV sugarcane; (2) further improvement of the rotary vacuum filter operations by adopting standard operating parameters; and (3) upholding good housekeeping practice for the entire factory.

Impact assessments to previously audited mills were also conducted to determine the extent on how the Capacity and Efficiency Appraisal had benefited the sugar mills. The following mills are surveyed in this regard before the year ends:

a. Central Azucarera Don Pedro, Inc. - October 12
b. Victorias Milling Company, Inc. - November 8-10
c. Hawaiian-Philippine Company, Inc. - November 16-27
d. Lopez Sugar Corporation - November 28-29
e. Busco Sugar Milling Company, Inc. - December 19-21

2. ***Environmental Monitoring of Sugar Mills by the Special Action Group for Environment (SAGE)*** **-** The SAGE-QC team conducted a series of environmental monitoring to the following eight sugar mills:

f. Central Azucarera de Tarlac - January 9-13, March 1-4, - December 18-23
g. Central Azucarera Don Pedro, Inc. - January 16-21, May 2-7, - May16-18, August 9-11
h. Cagayan Robina Sugar Milling Co. - March 14-17
i. Peñafrancia Sugar Mill, Inc. - March 20-25, March 29-30, - April 27-30
j. Central Azucarera de San Antonio - May 30 - June 2
k. Central Azucarera de la Carlota, Inc. - July 30 - August 2
l. Roxol Bioenergy Corporation - August 3-5
m. Southern Negros Development Corporation - November 6-9

There were four Luzon sugar mills monitored for air emission and wastewater samplings. Monitoring was done in 15 occasions with a total of 19 smokestacks served with three runs per stack. Thirteen out of 19 sampled smokestacks passed the DENR standard limit of 150 mg/Nm for stationary emission source equipment. For those who failed to meet the limit, they were committed to improve their air pollution control devices (APCD) to comply with the standards.

Aside from the regular particulate matter (PM) sampling, the SAGE-QC Team also conducted nitrogen oxide (NOx), sulfur dioxide (SO_2), and carbon monoxide (CO) samplings upon request of the three remaining sugar mills and bioethanol plant. The Team administered as well its first official ambient air sampling at PENSUMIL.

All collected samples, either air or wastewater, were analyzed in SRA's DENR-recognized Environmental Laboratory.

3. ***Energy Efficiency and Conservation Project*** – a technical assessment which identifies where and how much a facility uses energy. It involves promotion of energy efficiency and the advancement of commercial cogeneration in the sugar mills. It specifically optimizes the use of sugarcane biomass *i.e.* bagasse and sugarcane field trash for commercial cogeneration through sale/export of power produced by the mills. The project is now on its Phase 3 where the actual assessment is done catering the following sugar mills for this year:

n. URC-Tolong - February 6-14
o. Sweet Crytals Integrated Sugar Milling Co. - March 6-10
p. Crystal Sugar Company, Inc. - April 19-26

URC-Tolong so far has the lowest steam consumption among the mills assessed. SCISMC, on the other hand, still has an ample space to handle process material for heating and further boiling based on the existing boiling house setup. Optimizing the milling capacity of CSCI will mean additional benefits for the company through exporting power to the grid.

General recommendations for all these assessed mills include (a) maintain bagasse moisture to at most 51%; (b) avoid steam leakages through proper insulation; and (c) closely monitor combustion fuel with at most 7% O_2 content and 50% excess air.

4. ***Technical Publications*** - provides valuable reference for the sugar planters and millers. The publications contain production and performance statistics as well as equipment specifications of all sugar factories and refineries. Table 1 shows the number of complimentary copies distributed to SRA clients.

Table 1. Publications distributed by the section.

PUBLICATION	No. of Copies Distributed
Annual Synopsis of Philippine Raw Sugar Factories' Production & Performance Data	
C.Y. 2015 - 2016	58
C.Y. 2014 - 2015	5
C.Y. 2013 – 2014	1
C.Y. 2012 – 2013	1
C.Y. 2011 – 2012	1
C.Y. 2010 – 2011	1
C.Y. 2009 - 2010	1
Annual Compendium of Philippine Sugar Refineries 2016	27
Philippine Sugar Milling Hardware: 2016 Survey	56
Philippine Sugar Refining Hardware: 2017 Survey	27

The Annual Synopsis and Compendium were completed in the third quarter. Both the Milling and Refining Hardware were done shortly after the synopsis was published. Sugar mills and refineries, as well as other SRA clients, were given complimentary copies for their reference.

5. ***Capability Building and Enhancement of Skills*** – The workforce of the section participated on several trainings and seminars to enhance their competency. Listed below are the seminars and trainings attended.

Table 2. Competency Seminars attended by the personnel.

TRAINING / SEMINAR	DATE
Industrial and Laboratory Calibration Seminar	January 11-13
Hands-on Training on Ambient Air Monitoring Sampler	February 6
Philippine Bionenergy Summit 2017	March 9-10
Harmonics One-on-One Lecture (c/o AVESCO)	March 13
Orientation in Rules on Administrative Cases in the Civil Service and Sexual Harrassment	May 22
OPSI Seminar on Sugarcane Growing for SRA Personnel	June 22-23
Extension Training on Sugar Technology: Energy Efficiency on Steam System Optimization	July 3-5
CSI's 21st International Sugar Technical Conference 2017	July 5-6
Sugar Technology Training on Quality Systems: Cane Quality and Sugar Losses	July 11-13
RDE Pre-In-House Review	July 20
RDE In-House Review	August 2
64th PHILSUTECH Annual Convention	August 14-18
OPSI Seminar on Sugarcane Growing for SRA Personnel	September 28-29

Extension Training on Sugar Technology: Juice Extraction / Milling Operation	November 20-24

Other than competency seminars, gender sensitivity trainings were also participated by the section to keep the harmony within the workforce. These trainings as facilitated by the gender and development committee of SRA are as follows:

Table 3. Gender sensitivity trainings attended by the personnel.

TRAINING / SEMINAR	DATE
Gender Sensitivity Training in the Workplace	June 30
Gender and Nutrition	July 17

C. TECHNICAL SERVICES RENDERED

Apart from projects/studies and ministerial functions, the TSS's other main function is to render technical services. This year, the TSS rendered 186 services to 33 individual sectors. These are broken down into:

C.1.	**Services**	**186**
Operational Process		1
Technical Survey/Evaluation		1
Technical Inquiry		6
Technical Data Dissemination		178
C.2.	**Sectors Served**	**33**
	Mills/Refineries/Distilleries	28
	SRA Offices	3
	Industrial Users/Suppliers	1
	Academe	1

D. PUBLICATIONS/MEETINGS/CONFERENCES/SEMINARS/TRAININGS ATTENDED AND TRAVELS CONDUCTED

D.1 Publications

Four publications were published by the section. Two publications are released annually while the other two is after the completion of the 5-year duration of the survey.

1. Annual Synopsis of Philippine Raw Sugar Factories' Production and Performance Data C.Y. 2015-2016
2. Annual Compendium of Philippine Sugar Refineries F.Y. 2016
3. Philippine Sugar Milling Hardware: 2016 Survey
4. Philippine Sugar Refining Hardware: 2017 Survey

D.2 Travels

The TSS personal undertook a total of 28 project-related travels and 13 travels under seminars/trainings.

D.3 Meetings

There were 23 project-related meetings, two administrative and staff meetings, and one collaborative meeting with other clients totaling to 26 meetings.

D.4 Seminars/Trainings/Conferences

The TSS officers and staff participated in 16 seminar/workshops: 2 administrative and 14 technical in nature.

D.5 Reports/Communications

Before conducting assessment/audit to sugar mills (equipment, efficiency, energy audits and environmental monitoring), communications were sent to mill concerned. Technical reports were also submitted after the conduct of activities. Activity reports were submitted as well after attending seminars and training programs.

E. CROP YEAR 2015-2016 HIGHLIGHTS

A decline of canes milled shown in Figure 1 is indeed prevalent in the last four years as cane supply falls short due to conversion and commercialization of agricultural lands. Negros mills greatly felt this conversion having hectares of sugarcane plantation morphed into solar power sources via installation of new technologies. Despite this situation and the repercussions of previous super typhoons, a total of 27 sugar factories continued its operation for the crop year 2015-2016.

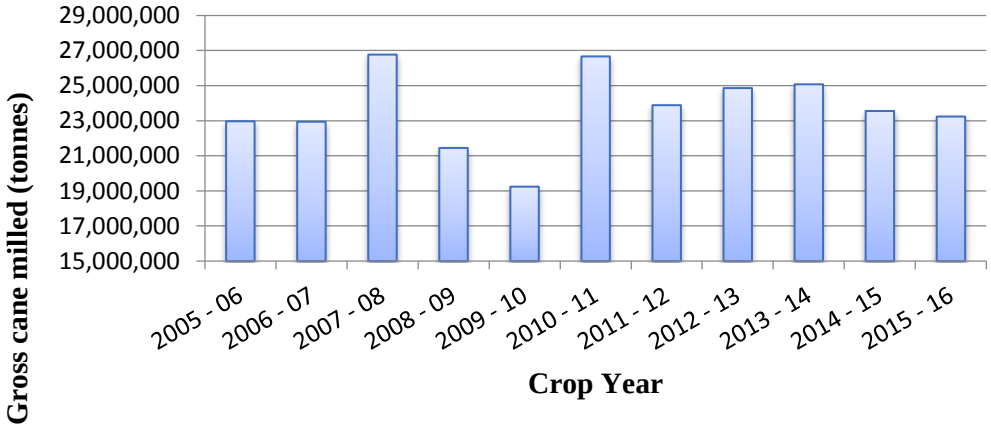


Figure 1. Amount of canes milled for 10 consecutive years.

E.1. PRODUCTION

The total sugar manufactured for this crop year summed up to 2,238,872 tonnes. This crop year figure is 1.86M Lkg-bags less than the previous crop year. More than half of the 27 operating mill resulted to negative variance in their sugar production. VMC marked the biggest loss at 1 M Lkg-bags while all the rest accumulated losses to less than half a million Lkg-bags. Sugar mills at Panay and Eastern Visayas increased their sugar production recovering from the loss brought by Typhoon Yolanda.

E.2. PERFORMANCE

The pol extraction peaked up to 96.94% as performed by CASA. The highest whole reduced extraction (WRE) was attained by the industry in this crop year through CASA achieving 97.81%. Other factory performance indicators are given in Table 4. Overall recovery and boiling house recovery for top performing mills obtained values at around 85% and 91% respectively. Crystal toppled all mills in terms of capacity utilization at 83.66% followed by VMC at 74.79% and Lopez at 73.62%.

Table 4. Top performing mills for crop year 2015-2016.

Rank	Pol Extraction	Boiling House Recovery	Overall Recovery	Capacity Utilization
1st	CASA	Sagay	CASA	CSCI
2nd	HPCo	FFHC	Sagay	VMC
3rd	CACI	SONEDCO	FFHC	Lopez
4th	CSCI	Capiz	BISCOM	BUSCO
5th	HISUMCO	BISCOM	HISUMCO	BISCOM

E.3. TIME ACCOUNT

Four mills namely, FFHC, VMC, Lopez, Sagay and La Carlota commenced this crop year on September 1, 2015 and concluded by FFHC on August 31, 2016. Most mills in Negros began operating in September while others were in November and December. Davao, URC-CARSUMCO, and PENSUMIL still milled for a short period of time starting and ending their operations on the early months of 2016.

COMPARATIVE RESUME

Crop Year 2014-2015 and 2015-2016

		2014-2015	2015-2016
Cane Milled			
	Gross Tonnes	23,553,092.987	23,237,870.684
	% Pol	11.62	11.53
	%Fiber	13.80	13.83
	% Trash	2.27	2.46
	% Burnt	15.26	18.80
	% Purity, First Express Juice	82.15	80.87
Raw Sugar			
	Due Cane		
	Tonnes	2,309,552.40	2,249,122.068
	Equivalent 50-kg Bags	46,191,048.00	44,982,441.360
	Manufactured		
	Tonnes	2,331,662.805	2,238,872.707
	Equivalent 50-kg Bags	46,633,256.10	44,777,454.140
	% Pol	98.17	98.11
	% Moisture	0.40	0.43
By-Products			
	Bagasse, Tonnes	6,967,071.392	6,915,348.241
	Filter Cake, Tonnes	876,610.944	829,344.519
	Final Molasses, Tonnes Due Cane	869,607.991	959,817.192
Yield Ratios			
	Lkg/TC (50-Kg Bags per Tonne Cane)	1.98	1.93
	TC/TS (Tonnes Cane per Tonne Sugar)	9.88	10.08
	Liters Molasses per Tonne Cane	25.35	28.48

Liters Molasses per Tonne Sugar	258.48	294.21
Factory Data		
No. of Operating Mills	27	27
Total Capacity, Tonnes Cane per Day	199,500	200,200
Milling Plant		
% Pol Extraction	94.39	94.37
% Reduced Extraction	94.92	94.91
% Milling Loss	4.73	4.69
% Capacity Utilization	58.98	59.49
Boiling House		
% Actual Boiling House Recovery	88.31	87.29
% Reduced Boiling House Recovery, ESG	90.88	90.87
Overall Recovery		
% Actual Overall Recovery	83.35	82.38
% Reduced Overall Recovery, ESG	86.26	86.24
Pol Loss in Pol in % Cane		
Bagasse	5.61	5.63
Filter Cake	0.63	0.64
Final Molasses	9.37	10.48
Undetermined	1.04	0.87
Total	16.65	17.62
Time Account		
Total Hours Actual Grinding	77,701.76	78,774.66
Total Time Elapsed, Hours	117,672.38	120,928.36
% Overall Time Efficiency	66.03	65.14
Average Hours Grinding per Day	15.85	15.63
Tonnes Cane Milled per Hour Actual Grinding	303.12	294.99
% Mechanical Time Efficiency	92.45	92.30
Total Hours Delay	39,970.62	42,153.70
Agricultural Parameters		
Area Cropped, Hectares	416,893.43	413,435.21
TC/Ha (Tonnes Cane per Hectare)	56.50	56.21
Lkg/Ha (50-kg Bags of Sugar per Hectare	110.80	108.80

F. PERSONNEL IN ACTION

CAPACITY AND PERFORMANCE AUDIT

Capacity & Performance Audit at Crystal Sugar Corp.

Capacity & Performance Audit at Bogo-Medellin Milling Co., Inc.

Capacity & Performance Audit at Central Azucarera de Tarlac

ENVIRONMENTAL MONITORING OF SUGAR MILLS

Diesel Generator Sampling at Sweet Crystals Integrated Sugar Mill Inc.

Ambient Sampling at Central Azucarera de Tarlac

ENERGY EFFICIENCY AND CONSERVATION PROJECT

Energy Audit at URC-Tolong

Energy Audit at Sweet Crystals Integrated

CAPABILITY ENHANCEMENT

Extension Training on Sugar Technology: Energy Efficiency on Steam System Optimization
July 3-5, 2017, Nature's Village, Talisay, Negros Occidental

Sugar Technology Extension Training on Quality Systems: Cane Quality and Sugar Losses
July 11-13, Nature's Village, Talisay, Negros Occidental

Extension Training on Sugar Technology: Juice Extraction/Milling Operation
November 20-24, 2017, Nature's Village, Talisay, Negros Occidental

Extension Services Division- Visayas

HIGHLIGHTS OF ACCOMPLISHMENT

INTRODUCTION

The Extension and Technical Services Division, being part of an agency that caters the growing needs of our clientele, the sugarcane farmers and the agrarian reform beneficiaries in the Visayas, has many visions towards profitability in Sugarcane Farming. It is in the forefront in providing technical knowledge and skills to the sugarcane industry.

Through the discovery and development on new products from sugarcane, such as, biofuels, muscovado sugar and energy, it is expected to have a significant increase in area planted to sugarcane. Consequently, the number of sugarcane planters will also increase due to Comprehensive Agrarian Reform Program (CARP) of the Department of Agrarian Reform. The new small sugarcane planters, specifically the Agrarian Reform Beneficiaries (ARBs) require most of the needed technical assistance in order to improve productivity, increase their income and improve their lives. Due to these recent developments, the area coverage and the number of clientele to be served by the office will generally increase.

The Extension office did not only extended its effort to its clientele but to its organization as well. Client focused services included the following:

- Establishment, operationalization and provision of interventions to SRA Initiated and SIDA Block Farms. This includes profiling and orientation of potential block farms; assessment evaluation; facilitate papers for validation and approval for SRA accreditation; on-site sugarcane farm management seminar; GPS survey and mapping, soil sampling and analysis; assistance in the preparation of the farm plan and budget; and provision of start-up capital and facilitate livelihood proposals and projects.
- Performed technology transfer of mature technologies from the research stations to sugarcane farms through trainings and seminars, farm visits, consultation and assistance to sugarcane planters in different Mill Districts.
- Facilitated the construction of farm to mill roads, irrigation systems and transport facilities for sugarcane and it's by- products.
- Establishment of HYV nursery and demo farms both in block farms and Mill District Development Councils (MDDCs)
- Assisted in the provision of new high yielding varieties (HYVs) to sugarcane planters.
- Soil health assessment and collection of soil samples for laboratory analysis.
- Strengthened the communication program through reproduction and distribution of informative and educational materials such as komiks, brochures, and sugarcane farm management manual.
- Capability building for farmers in farm, financial and human resource management.

Moreover, the organization- focused services included:

- Crop estimation project
- Collaborative projects and services with the TESDA, DOLE, SUCs, MDDC and SIFI.
- Retooling and skills enhancement training for Junior Agriculturist, Mill District Officer and Technical staff.
- Special Assignments
- Development of Databank and File Management System

With the effort, hard work and persistence of the personnel and staff in order to provide this services, the Extension Services Division of the Visayas presents the accomplishment for Crop Year 2016-2017.

For CY 2016-2017 the total area harvested was approximately 273,185.64 ha. The average farm productivity in the region was 65.90 TC/ha.; 120.82 Lkg/ha.; and 1.83 Lkg/TC.

- ***Block Farming Project***

  Block Farming is the consolidation of small farms into one large farm with an aggregate area of not less than 30 hectares with fields situated within two (2) kilometers radius in order to take advantage of the economies of scale. The activities are aligned and implemented to ensure efficient use of farm inputs (farm machineries and fertilizer). The main goal of this project is to increase farm productivity at lesser production cost.

For this year, every mill district generated additional Block Farms through their efforts to produce scientific agricultural entrepreneurs that would compete for the Sugar Industry for the next crop years. This potential Block Farms undergone validation to be accredited and qualify for the project. A total of 104 block farms orientation were conducted covering 14 mill districts.

	Name of Block Farm	***Location***
1	Had. Bagacay Farm Workers Association	Brgy. Aranda, Hinigaran Negros Occidental
2	Had. Antolonga Agrarian Reform Beneficiaries Association	Brgy. Tinongan, Isabela Negros Occidental
3	Had. Nalipay Agrarian Reform Beneficiaries Association	Brgy. 5, Isabela, Negros Occidental
4	Brgy. Sebucawan Agrarian Reform Farmers and Workers Association	Brgy. Sebucawan, Isabela Negros Occidental
5	Brgy. Riverside Agrarian Reform Farmers Asociation	Brgy. Riverside, Isabela Negros Occidental
6	Ma-ao Irrigators Association Incorporated	Brgy. Ma-ao, Bago City, Negros Occidental
7	Buenavista Bago City Irrigators Association Inc.	Brgy. Ma-ao, Bago City, Negros Occidental
8	Binubuhan progressive Farmers and Farm Workers Association	Brgy. Binubuhan, Bago City, Negros Occidental
9	New Namangka Farmers Association	Brgy. New Namangka, Mabinay Negros Oriental
10	Bulod Aktibong Bukidnon Livelihood Organization	Brgy. Pantao, Mabinay, Negros Oriental
11	Butong Agrarian Reform Beneficiaries Association	Brgy. Butong, Manjuyod, Negros Oriental
12	Barras Farmers Family Association	Brgy. Barras, Mabinay Negros Oriental
13	Brgy. Magsaysay Farmers Association	Brgy. Magsaysay, Cadiz City
14	Candelaria Navidad Sugarcane Farmers Association	Brgy. Magsaysay, Cadiz City
15	Laguda Integrated Farm Development Association	Brgy. 10, Victorias, Negros Occidental
16	Bagonbon Agrarian Reform Cooperative	Bagonbon, Calatrava, Negros Occidental
17	Malanog, Menchaca, Dolis Farmers Association (MMDFA)	Brgy. Malanog, Calatrava Negros Occidental
18	Hibaiyo Small Planters Association	Brgy. Hibaiyo, Guihulngan, Negros Oriental
19	Camindangan Integrated Sugarcane Planters Ass'n (CISPA)	Brgy. Camindangan, Sipalay, Negros Occidental
20	Camindangan Planters & Farm Workers Association (BCARBA)	Brgy. Camindangan, Sipalay, Negros Occidental
21	Bajay-Patol Agrarian Reform Cooperative/ re-orientation	Brgy. Caliling, Sipalay, Negros Occidental
22	Tabugon Agrarian Reform Beneficiaries Farmers Association	Brgy. Tabugon, Kabankalan City, Negros Occidental
23	Brgy. Camindangan ARBs Association (BCARBA)	Brgy. Camindangan, Sipalay, Negros Occidental
24	Asia Small Farmer and Fishers Association (ASFFA)	Brgy. Asya, Hinobaan, negros Occidental
25	Tagoc Agrarian Reform Cooperative	Brgy. Tagoc, Kabankalan City, Negros Occidental

26	South Negros Forest Occupancy & Farmers Association (SONFOFA)	Kabankalan City, Negros Occidental
27	Bantayan & Adjacent Barangay Small Farmers Association (BABSFA)	Brgy. Bantayan, Kabankalan City Negros Occidental
28	Mulawin-Lanatan ARB	Brgy. 1, Sagay City, Negros Occidental
29	Paghidaet sa Kalambuan	Brgy. Bug-ang, Toboso, Negros Occidental
30	Pasto ARC	Brgy. Magticol, Toboso, Negros Occidental
31	Codcod Multi-purpose Cooperative,	Brgy. Codcod, San Carlos City Negros Occidental
32	Prosperidad Agrarian Reform Beneficiaries Association,	Brgy. Prosperidad, San Carlos Negros Occidental
33	Malanog Rice Farmers Association,	Brgy. Malanog, Calatrava Negros Occidental
34	Malanog Menchaca Dolis Farmers Association,	Brgy. Dolis, Calatrava Negros Occidental
35	Nagkahiusang Mangunguma sa Barangay Arebasore,	Brgy. Arebasore, Mabinay Negros Oriental
36	Brgy. Inapoy Fram Family Association,	Brgy. Inapoy, Kabankalan Negros Occidental
37	Banban Farm Family Association,	Brgy. Banban, Mabinay Negros Oriental
38	Uswag Mangunguma sa Samac,	Brgy. Samac, Mabinay Negros Oriental
39	Bagtic Mampalasan United Farmers Association,	Brgy. Bagtic, Mabinay Negros Oriental
40	Community Manage Saving and Credit Association,	Brgy. Bagtic, Mabinay Negros Oriental
41	Uwayon Agrarian Reform Beneficiaries Association,	Brgy. Tara, Mabinay Negros Oriental
42	Campo Aling-Mayaposi Farmers Association,	Brgy. Mayaposi, Mabinay Negros Oriental
43	Naga Small Planters Association,	Brgy. Sta. Aguida, Pamplona Negros Oriental
44	Dalicanan Farmers Association,	Brgy. Dalicanan Passi City Iloilo
45	Agsirab Farmers Development Cooperative,	Brgy. Agsirab, Dumarao, Capiz
46	Marcelo Small Farmers Association,	Brgy. Marcelo, Calatrava Negros Occidental
47	First District Upper Ministerial Association for Spiritual and Economic Endeavor,	Brgy. Marcelo, Calatrava Negros Occidental
48	Southern Negros Forest Occupancy Farmers Association,	Brgy. Talacdan, Cauayan Negros Occidental
49	Magdalena Agrarian Reform Beneficiaries Farm Workers Association,	Katilingban, Talisay Negros Occidental
50	Malasaga Hiyang-hiyang Sugarcane Farmers Association,	Katilingban, Talisay Negros Occidental
51	Villasol Integrated Farmers Association,	Brgy. Villasol, Bayawan City, Negros Occidental
52	Candugay Datag Farmers Association,	Brgy. Datag, Siaton Negros Oriental
53	Sitio Sinto Onse Sugarcane Farmers Association,	Brgy. Canhabagat, Medellin Cebu

54	Sitio Looc Sugarcane Farmers Association,	Brgy. Canhabagat, Medellin Cebu
55	Nagkahiusang Mag-uuma ug Mamumuo Para sa Repormang Agraryo (NAMMPRA),	Brgy. Canhabagat, Medellin Cebu
56	Dolores Sugarcane Farmers Association,	Brgy. Dolores Ormoc City
57	Quezon Jr. United Farmers Association ,	Brgy. Quezon Jr. , Ormoc City
58	Asosasyon sang Mamumugon sa Nolan	Brgy. Mansalanao, La Castellana, Negros Occidental
59	United Farm Workers Association of Cambuktot, Nolan,	Brgy. Mansalanao, La Castellana Negros Occidental
60	Cambagtig Agrarian Reform Beneficiaries Assn,	Brgy. Mansalanao, La Castellana Negros Occidental
61	Integrated Sugar and Rice Farmers and Workers Assn,	Brgy. Cabacungan, La Castellana Negros Occidental
62	Brgy. Burgos Small Farmers, Brgy. Antipolo,	Pontevedra Negros Occidental
63	Sugarcane Workers of Tabucol,	Brgy. Burgos Pontevedra Negros Occidental
64	Sta. Rita Farmers Multi-purpose Cooperative,	Brgy. Dulao, Bago City Negros Occidental
65	Ulo Tuburan Farmers and Farm Workers Association (UTFFWA),	Sitio Ulo Tuburan, Brgy. Buenavista, Himamaylan City
66	Colihao Farmers Association (COFA), Sitio Paloypoy,	Brgy.Buenavista, Himamaylan City
67	PMMP, Sitio Paloypoy, Brgy.Buenavista,	Himamaylan City
68	Had. Feria Farm Worker Union,	Brgy. Himaya, Hinigaran
69	Pangabuhian Amligan Teknolohiya Agrikultura Gamiton (PATAG),	Brgy. Quiwi, Hinigaran
70	Lublub ARB's Farm Workers Association (LAFWA),	Brgy. Cambugsa, Hinigaran
71	Prosperidad Farmers Beneficiaries Association (PROFABA),	Payao, Binalbagan Negrios Occidental
72	PFPC-ARB Cooperative,	Brgy.Mabini, Cadiz City
73	Gracia Small Farmers Association,	Brgy. Magsaysay, Cadiz City
74	Sumalidsid Small Farmers Association,	Brgy.Magsaysay, Cadiz City
75	Had.Sol Small farmers Association,	Brgy.Magsaysay, Cadiz City
76	Manuela Farmers Association,	Brgy.Caduhaan, Cadiz City
77	Sitio Bandol Farmers Association,	Sitio Bandol, Brgy. Maaslob, Calatrava Negros Occidental
78	Panalaan Farmers Ass'n. (PFA),	Brgy. Panalaan, Bais City, Neg. Or.
79	Simborio Agrarian Reform Beneficiaries Association,	Brgy. Simborio, Pamplona Neg. Or.
80	Mansangaban Small Planters Association,	Bais City Neg. Or.
81	Binubuhan Progressive ARB Association,	Brgy. Binubuhan, Bago City Negros Occidental

82	Had. Salamanca Agrarian Reform Beneficiaries Association,	Brgy. San Miguel, La Carlota City Negros Occidental
83	Gatuslao Integrated Farmers Association,	Brgy. Gatuslao, Candoni Negros Occidental
84	Had. Progreso Agrarian Reform Cooperative,	Had. Progreso, Brgy. Capitan Ramon, Silay City
85	Had. Pula Agrarian Reform Cooperative,	Had. Pula, Brgy. Capitan Ramon, Silay City
86	Lopez Jaena Agrarian Reform Beneficiaries Association,	Brgy. Lopez Jaena, Murcia
87	Bandol Farmers Association,	Brgy. Maaslob, Calatrava Neg. Or.
88	Sta. Rita Farmers Multi-purpose Cooperative,	Brgy. Dulao, Bago City Negros Occidental
89	Ani-e Small Farmers Association,	Brgy. Ani-e, Calatrava Neg. Or.
90	Nakalang Farm Workers Association,	Brgy. Ilijan Bago City, Neg. Occ.
91	Minapasuk Upland Farmers Association,	Brgy. Minapasuk, Calatrava Neg. Occ.
92	San Isidro- Agrarian Reform Cooperative,	San Isidro Toboso, Neg. Occ.
93	Lagaan Farmers Association (LAFA)	Brgy. Lagaan, Calatrava, Negros Occidental
94	Paghumayan Small Farmers Association(PSFA)	Brgy. Paghumayan, Calatrava, Negros Oriental
95	Balea Integrated Rural Development Cooperative (BIRD Coop)	Brgy. Lagaan, Calatrava, Negros Occidental
96	Tigbon Small Farmers Association (TSFA)	Tigbon, Calatrava, Negros Occidental
97	Hda. Emma Agrarian Reform Beneficiaries Assn	Brgy. Tortosa, Manapla, Negros Occidental
98	Brgy. Robles Farmers Association	Brgy. Robles, La Castellana, Negros Occidental
99	Brgy. Mahalang Agrarian Reform Farmers Assn	Brgy. Mahalang, Himamaylan City Negros Occidental
100	Iling-iling Farmers Assn	Brgy. Iling-iling, Brgy. Cabadiangan, Himamaylan City Negros Occidental
101	Bato Farmers Assn	Sitio Bato, Brgy. Odiong, Moises Padilla, Negros Occidental
102	Had. Naval Farmworkers Assn	Brgy. Talaban, Himamaylan City, Negros Occidental
103	Had. Bagacay Workers Carper Beneficiaries Assn	Brgy. Aranda, Hinigaran Negros Occidental
104	Had. Progreso Agrarian Reform Cooperative	Had. Progreso, Isabela, Negros Occidental

SIDA Block Farms

In pursuit of the implementation of the SIDA Block Farming Project for GAA 2016, the Extension Services Division has identified 37 block farms to avail the project:

Name of Block Farm			Location	2016-2017 Productivity		2017-2018 Productivity		Remarks
Central Negros				**TC/Ha**	**Lkg/TC**	**TC/Ha**	**Lkg/ TC**	
1	BISCOM	United Fishermen Multi-purpose Cooperative **(UFIMCO)**	Pta. Talaban, Himamaylan City Neg. Occ	54.81	1.70	49.60	1.65	Partial Production for 12.707 hectares; on going harvest for 19.945 has.
2	BISCOM	Brgy. Buenavista-Agrarian Reform Beneficiaries Association **(BB-ARBA)**	Brgy. Buenavista, Himamaylan City, Neg. Occ.	47.00	1.80	51.00	1.67	Partial Production data.
3	La Carlota	Dama Farm Workers Agrarian Reform Beneficiaries Ass'n **(DAFWARBA)**	Had Dama, Brgy. Cabacungan, La Castellana, Negros Occidental	65.00	1.75	82.00	1.90	Partial Production data.
4	Ma-ao	Nakalang Padilla Farm Workers Association **(NAPFWA)**	Had. Nakalang, Brgy. Ilijan, Bago City, Neg. Occ.	52.00	1.84	55.00	1.90	Total Production.
South Negros								
5	Bais-URSUMCO	Polo Plantation Agrarian Reform Beneficiaries Cooperative **(POPARBECO)**	Polo, Tanjay City, Negros Oriental	38.02	1.46			Harvesting started last November 2017 but operation was stopped due to unfavorable weather condition and scarcity of laborer; Harvesting will resume on January 2018
6	Bais-URSUMCO	Bahay Malaumon Farmers Association **(BMFA)**	Brgy. Luyang, Mabinay, Neg. Or.	31.16	1.90			Schedule of harvesting on March 2018, inaccessible road condition.
7	Bais-URSUMCO	Danawan Agrarian Reform Beneficiaries Association **(DARBA)**	Sitio, Danawan, Brgy. Tara, Mabinay, Negros Oriental	45.57	1.90			Schedule of harvesting on March 2018, unfavorable weather condition and

								inaccessible road.
8	Bais-URSUMCO	Campanun-an Agrarian Reform Beneficiaries Association **(CAMARBA)**	Campanun-an, Mabinay, Neg. Oriental	44.89	1.98			Schedule of harvesting on January 2018, unfavorable weather condition.
9	Bais-URSUMCO	Bulod Aktibong Bukidnon Livelihood Organization **(BABLO)**	Brgy. Pantao, Mabinay Negros Oriental	35.49	1.95			Schedule of harvesting on March 2018 due to unfavorable weather condition.
10	Bais-URSUMCO	New Namangka Farmers Association **(NNFA)**	Brgy. New Namangka, Mabinay Negros Oriental	44.42	1.74	45.70	1.63	Partial Production data for 2017-2018 of 8.6460 hectares.
11	Dacongcogon	Magballo Agrarian Reform Beneficiaries and Farmers Association **(MARBFA)**	Magballo, Kabankalan City, Neg. Occ.	47.62	1.77	41.87	1.77	Partial Production for 6.4608 hectares; Delayed Harvesting due to unfavorable weather condition.
12	Dacongcogon	Tabugon Agrarian Reform Beneficiaries Farmers Association **(TARBEFA)**	Brgy. Tabugon, Kabankalan City Negros Occidental	42.38	1.66	43.64	1.74	Partial Production data.
13	SONEDCO	Pinggot Farmers Association **(PIFA)**	Brgy. Pinggot, Ilog, Neg. Occ.	27.19	1.85			Schedule of harvesting on March 2018.
14	SONEDCO	Inayawan Small Sugarcane Farmers Association **(ISSFA)**	Brgy. Inayawan, Cauayan, Neg. Occ	47.13	1.88	53.31	1.71	Partial production data of 8 fields with 6.037 has.; on going harvesting.
15	SONEDCO	Casoy Lubi Apitong Agrarian Reform Beneficiaries Ass'n **(CLAARBA)**	Brgy. Tabugon, Kabankalan City Negros Occidental	61.36	1.78	42.00	1.80	Partial production data of 1 field with 0.60 has.; on going harvesting.
16	SONEDCO	Bajay-Patol Agrarian Reform Cooperative **(BPARC)**	Brgy. Caliling, Cauayan Negros Occidental	37.00	1.90	42.81	1.72	Partial production data of 3 fields with 0.69 has.; on going harvesting.
17	Dacongcogon	Bantayan Farmers Agrarian	Prk. 7, Brgy. Bantayan,	46.67	1.80	43.12	1.75	Partial production data of 12

		Reform Beneficiaries Ass'n **(BFARBA)**	Kabankalan City, Neg. Occ.					fields; on going harvesting.
18	Dacongcogon	Mataba Womens Association **(MATABAWA)**	Brgy. Magballo, Kabankalan City, Negros Oriental	40.00	1.80	44.90	1.65	Partial production data of 5 fields; on going harvesting.
19	Tolong	Bolbog Small Farmers Beneficiaries Ass'n **(BOSFARBA)**	Bolbog, Narra, Bayawan City, Negros Oriental	38.74	1.87			Schedule of harvesting on March 2018 due to unfavorable weather condition.
20	Tolong	Mangulod Farmers Multi-purpose Cooperative **(MAFARMPUCO)**	Mangulod, Sta. Catalina, Negros Oriental	47.00	2.07	52.01	1.73	Partial Production for 1 field with 2.98 hectares; Delayed Harvesting due to unfavorable weather condition.
21	Tolong	Maninihon Omod-Catmon Posi-on Farmers Multi-Purpose Cooperative **(MOCPFAMCO)**	Sitio Catmon, Brgy. Maninihon, Bayawan City, Negros Oriental	45.33	1.85			Schedule of harvesting on February 2018, unfavorable weather condition.
North Negros								
22	HPCo	Sitio Calaptan Sta. Ana and Ascalon Farmers Association **(SCSAFA)**	Sitio Calaptan, Brgy. San Isidro E.B Magalona, Neg.Occ	33.55	1.59	40.50	1.71	Partial Data: Delayed Harvesting due to scarcity of laborer, unfavorable weather condition, and inaccessible road network.
23	HPCo	Had. Angeles Agrarian Reform Beneficiaries Association **(HAARBA)**	Patag Duitay, Brgy. Guimbalaon, Silay City, Neg. Occ.	28.25	1.72			No available area for harvesting for CY 2017-2018;
24	FF/ Bac-Mur	Had. Esmeralda 2 Rice Farmers Association **(HES2RIFA)**	Brgy. San Fernando, Talisay City, Neg. Occ.	62.47	1.82	64.13	1.74	Partial Data: Delayed Harvesting due to scarcity of laborer and unfavorable weather condition.

25	Victorias	Had. Candelaria Farmers Association **(HCAFA)**	Had. Candelaria, Brgy. Purisima, Manapla, Neg. Occ.	67.90	1.80	69.94	1.85	Partial Production of 20.2629 has. Delayed Harvesting due to insufficient availability of manpower in the area.
26	Sagay-Danao	Hagnaya Agrarian Reform Cooperative **(HARC)**	Had. Hagnaya, Brgy. Tabun-ac, Toboso, Neg. Occ.	54.05	1.69	53.17	1.72	Partial Production for 20 fields with 10 hectares ; Delayed Harvesting due to unfavorable weather condition and inaccessible road.
27	Sagay-Danao	Minapasuk Upland Farmers Agri-ventures Marketing Cooperative **(MUFAMCO)**	Brgy. Minapasuk, Calatrava, Neg. Occ.	39.00	1.90	23.49	1.80	Partial Production for 3 fields with 8.83 hectares; Delayed Harvesting due to unfavorable weather condition.
28	Lopez	LGEI Farmers Association Incorporated **(LIFA)**	Brgy. Malubon, Sagay City, Neg. Occ	41.87	1.67	55.28	1.78	Partial data of 7 fields with 9.581 has; Harvesting on going.
29	Lopez	Talusan Agrarian Reform Beneficiaries Association Inc. **(TARBA)**	Purok Kulo, Brgy. Bulanon, Sagay City	53.27	1.88	52.25	1.80	Partial Production of 2017-2018; Delayed Harvesting due to lack of manpower.
30	San Carlos	Agpangi Bagacay Cabungahan Agrarian Reform Cooperative **(ABACA ARCo)**	Brgy. Agpangi, Calatrava, Negros Occidental	48.89	1.69	58.65	1.58	Partial Production of 5.8792 hectares; Delayed Harvesting due to unfavorable weather condition.
31	San Carlos	Bagonbon Agrarian Reform Cooperative	Brgy. Bagonbon, San Carlos City Negros Occidental	40.26	1.64	51.33	1.69	Partial Production of 7 fields with 4.90 hectares; Delayed Harvesting due to unfavorable

								weather condition.
Panay								
32	Monomer	Parian Planters Marketing Cooperative **(PPMC)**	Brgy. Parian, Sigma, Capiz	42.63	1.56			Schedule of harvesting on March 2018.
33	Passi	Aglalana Green Farmers Association **(AGFA)**	Brgy. Aglalana, Passi City, Iloilo City	43.52	1.60	47.50	1.55	Partial production data of 2 fields with 0.98 has. Harvesting was stop due to unfavorable weather condition.
Eastern Visayas								
34	Bogo-Medellin	San Jose Agrarian Reform Beneficiaries Multi-purpose Coop. **(SJARBAMPC)**	Caputatan Sur, Medellin, Cebu	22.07	1.32			Schedule of harvesting on March 2018.
35	Bogo-Medellin	Canhabagat Agrarian Reform Beneficiaries Multi-purpose Coop. **(CARBMPC)**	Brgy. Canhabagat, Medellin, Cebu	41.80	1.21	97.05	1.20	Partial Production data.
36	Bogo-Medellin	Caputatan Norte Sugarcane Farmers Association	Brgy. Caputatan Norte, Medellin Cebu	47.72	1.51	68.76	1.20	Partial Production data.
37	Ormoc	Catmon Small Farmers Association **(CSFA)**	Purok 2, Brgy. Catmon, Ormoc City	35.00	1.72	29.71	1.73	Partial roduction for .41 has.

SIDA GAA 2016 Block Farming Project on its first year of implementation had already brought an impact to the block farms though interventions given and technical assistance.

- **LIST OF BLOCK FARM FOR GAA 2017**

MILL DISTRICT		NAME OF BLOCK FARM	LOCATION	STATUS	AREA GPS (Ha)
1	La Carlota	Asosasyon sang Mamumugon sang Nolan	Brgy. Mansalanao, La Castellana Negros Occidental	accredited	33.3268
2	BISCOM	Hda. Nalipay Agrarian Reform Beneficiaries Association	Brgy. 5, Isabela Negros Occidental	accredited	33.0205
3	BISCOM	Prosperidad Farmers Beneficiaries Association	Brgy. Payao, Binalbagan Negros Occidental	accredited	on-going
4	Ma-ao	Sta. Rita Farmers Multi-purpose Cooperative	Brgy. Dulao, Bago City Negros Occidental	accredited	41.3656

5	Ma-ao	Binubuhan Progressive Farmers and Farm Workers Association	Brgy. Binubuhan, Bago City Negros Occidental	accredited	35.7202
6	Ma-ao	Nakalang Farm Workers Association	Brgy. Ilijan, Bago City Negros Occidental	accredited	30.4436
7	FF/ Bac-Mur	Magdalena Agrarian Reform Beneficiaries and Sugarcane Workers	Katilingban, Talisay Negros Occidental	accredited	34.7965
8	FF/ Bac-Mur	Malasaga Hiyang-hiyang Sugarcane Farmers Association,	Katilingban, Talisay Negros Occidental	accredited	34.6468
9	FF/ Bac-Mur	Had. Nacab Agrarian Reform Cooperative	Hda. Nacab, Brgy. Bubog, Talisay City, Neg. Occ.	for replacement	for area re-validation
10	Victorias	Brgy. Magsaysay Farmers Association	Brgy. Magsaysay, Cadiz City Negros Occidental	accredited	32.1339
11	Victorias	Tres Andanas Small Farmers Association	Brgy. Magsaysay, Cadiz City Negros Occidental	accredited	36.0659
12	Victorias	Jerusalem Integrated Farmers Association	Brgy. Magsaysay, Cadiz City Negros Occidental	accredited	42.5349
13	Victorias	Gracia Farmers Association	Brgy. Magsaysay, Cadiz City Negros Occidental	accredited	33.5605
14	Victorias	PFPC Agrarian Reform Cooperative	Central Lopez, Brgy. Paraiso, Sagay City Negros Occidental	accredited	35.3320
15	Sagay-Danao	Pasto Agrarian Reform Cooperative	Brgy. Magticol, Toboso Negros Occidental	accredited	63.2820
16	San Carlos	Codcod Multi-purpose Cooperative	Brgy. Codcod, San Carlos City Negros Occidental	accredited	45.7791
17	San Carlos	Prosperidad Agrarian Reform Beneficiaries Association	Brgy. Prosperidad, San Carlos City Negros Occidental	accredited	32.7520
18	San Carlos	Malanog Rice Farmers Association	Brgy. Malanog, Calatrava Neg. Occ.	accredited	34.9028
19	San Carlos	Malanog Menchaca Dolis Farmers Association,	Brgy. Dolis, Calatrava Negros Occidental	accredited	45.7791
20	SONEDCO/ Dacongcogon	Brgy. Camindangan ARBs Association	Brgy. Camindangan, Sipalay Negros Occidental	accredited	42.7165
21	SONEDCO/ Dacongcogon	Ga-id Mambugsay ISF Project Minority Association	Sitio Gaid, Brgy. Mambugsay, Cauayan Negros Occidental	accredited	35.0621
22	SONEDCO/ Dacongcogon	Tagoc Agrarian Reform Cooperative	Brgy. Tagoc, Kabankalan City Negros Occidental	accredited	37.0920
23	SONEDCO/ Dacongcogon	Asia Small Farmers & Fishers Association	Brgy. Asia, Hinoba-an, Negros Occidental	accredited	36.2426
24	SONEDCO/ Dacongcogon	Brgy. Tabu Agrarian Reform Beneficiaries Association	Brgy. Tabu, Ilog Negros Occidental	accredited	35.6095
25	SONEDCO/ Dacongcogon	Gatuslao Integrated Farmers Association	Brgy. Gatuslao, Candoni Negros Occidental	accredited	38.0243
26	Bais-URSUMCO	Naga Small Planters Association	Brgy. Sta. Aguida, Pamplona Negros Oriental	accredited	on-going

27	Bais-URSUMCO	Uswag Mag-uuma sa Samac	Brgy. Samac, Mabinay Negros Oriental	accredited	31.3764
28	Bais - URSUMCO	Bagtic Mampalasan United Farmers Association	Brgy. Bagtic, Mabinay Negros Oriental	accredited	on-going
29	Tolong	Candugay Datag Farmers Association	Brgy. Datag, Siaton, Negros Oriental	accredited	32.2316
30	Iloilo	Dalicanan Farmers Association	Brgy. Dalicanan Passi City Iloilo	accredited	38.1372
31	Capiz	Agsirab Farmers Development Cooperative	Brgy. Agsirab, Dumarao Capiz	accredited	on-going
32	Ormoc	Dolores Sugarcane Farmers Association	Brgy. Dolores Ormoc City	accredited	on-going
33	Bogo Medellin	Sitio Sinto Onse Sugarcane Farmers Association	Sitio Sinto Onse, Brgy. Canhabagat, Medellin Cebu	accredited	on-going
34	Bogo Medellin	Sitio Looc Sugarcane Farmers Association	Sitio Looc, Brgy. Canhabagat, Medellin Cebu	accredited	on-going
35	Bogo Medellin	Nagkahiusang Mag-uuma ug Mamumuo Para sa Repormang Agraryo (NAMMPRA)	Sitio Acacia, Brgy. Canhabagat, Medellin Cebu	accredited	on-going

Block Farm Interventions

The main goal of block farming project is to increase the production of small farmers at lower cost of inputs thus various activities and interventions were conducted. As part of SRA's intervention to block farms the following were conducted:

Name of Block Farm			***Area Planted (ha) (New Plant)***	***Variety Used***	***Area Applied by Fertilizer***	***Area Applied by Lime***	***HYV Nursery***	
Central Negros							***Area Planted (ha)***	***Variety Used***
1	BISCOM	United Fishermen Multi-purpose Cooperative **(UFIMCO)**	3.6400	Phil 2000-0791	19.1550	3.7100	1	Phil 2000-0791
2	BISCOM	Brgy. Buenavista-Agrarian Reform Beneficiaries Association **(BB-ARBA)**	4.4200	Phil 2004-1011	10.6100	-	1	Phil 2004-1011
3	La Carlota	Dama Farm Workers Agrarian Reform Beneficiaries Ass'n **(DAFWARBA)**	7.9900	Phil 2004-1011	11.9300	7.9900	1	Phil 99-1793
4	Ma-ao	Nakalang Padilla Farm Workers Association **(NAPFWA)**	34.4990	Phil 99-1793	26.4600	26.4600	1	Phil 99-1793
South Negros								
5	Bais-URSUMCO	Polo Plantation Agrarian Reform Beneficiaries Cooperative **(POPARBECO)**	3.4880	Phil 8727	-	7.4363	to be established	

6	Bais-URSUMCO	Bahay Malaumon Farmers Association **(BMFA)**	1.6394	Phil 88-354	1.6394	-	to be established	
7	Bais-URSUMCO	Danawan Agrarian Reform Beneficiaries Association **(DARBA)**	3.0760	PS 862/VMC 84-947	32.1665	-	to be established	
8	Bais-URSUMCO	Campanun-an Agrarian Reform Beneficiaries Association **(CAMARBA)**	4.8160	VMC 88-354	14.4654	-	to be established	
9	Bais-URSUMCO	Bulod Aktibong Bukidnon Livelihood Organization **(BABLO)**	2.4132	VMC 88-354	2.4132	-	to be established	
10	Bais-URSUMCO	New Namangka Farmers Association **(NNFA)**	0.8108	VMC 88-354/VMC 71-239	8.8345	-	to be established	
11	Dacong cogon	Magballo Agrarian Reform Beneficiaries and Farmers Association **(MARBFA)**	6.6909	Phil 99-1793/ Phil 2004-1011/VMC 84-524/VMC 88-354	4.5588	2.3981	to be established	
12	Dacong cogon	Tabugon Agrarian Reform Beneficiaries Farmers Association **(TARBEFA)**	24.5974	VMC 84-524/ VMC 88-354	1.8502	-	to be established	
13	SONEDCO	Pinggot Farmers Association **(PIFA)**	3.5600	VMC 88-354/ Phil 99-1793	5.5402	-	1	Phil 99-1793
14	SONEDCO	Inayawan Small Sugarcane Farmers Association **(ISSFA)**	14.2621	VMC 84-524/VMC 84-947	6.9850	0.7910	1	Phil 2004-1011
15	SONEDCO	Casoy Lubi Apitong Agrarian Reform Beneficiaries Ass'n **(CLAARBA)**	32.5709	VMC 84-524/VMC88-354/Phil 2004-1011	14.5316	-	1	Phil 2004-1011
16	SONEDCO	Bajay-Patol Agrarian Reform Cooperative **(BPARC)**	6.7963	VMC 84-524/ VMC 84-947	8.0547	0.9948	to be established	
17	Dacong cogon	Bantayan Farmers Agrarian Reform Beneficiaries Ass'n **(BFARBA)**	3.2729	VMC 88-354/VMC 84-524	6.7582	-	to be established	
18	Dacong cogon	Mataba Womens Association **(MATABAWA)**	5.4699	VMC 84-524/ VMC 88-354/ Phil 99-1793	15.2219	2.8600	to be established	
19	Tolong	Bolbog Small Farmers Beneficiaries Ass'n **(BOSFARBA)**	12.5176	VMC 88-354/Phil 99-1793	-	4.3205	1	Phil 99-1793
20	Tolong	Mangulod Farmers Multi-purpose Cooperative **(MAFARMPUCO)**	6.3840	Phil 80-13/Phil 99-1793/VMC 84-524	11.7000	7.0000	1	Phil 99-1793
21	Tolong	Maninihon Omod-Catmon Posi-on Farmers Multi-	2.3197	VMC 84-524/Phil 99-1793	-	-	1	Phil 2004-1011

		Purpose Cooperative **(MOCPFAMCO)**						
North Negros								
22	HPCo	Sitio Calaptan Sta. Ana and Ascalon Farmers Association **(SCSAFA)**	3.5000	Phil 99-1793/VMC 84-947	5.8700	5.9000	1	Phil 99-1793
23	HPCo	Had. Angeles Agrarian Reform Beneficiaries Association **(HAARBA)**	-	-	-	-	1	Phil 99-1793
24	FF/ Bac-Mur	Had. Esmeralda 2 Rice Farmers Association **(HES2RIFA)**	5.8147	VMC 86-550/VMC 84-524	-	4.0666	1	Phil 99-1793
25	Victorias	Had. Candelaria Farmers Association **(HCAFA)**	13.8738	VMC 86-550/VMC 84-524/VMC 84-947/Phil 99-1793	20.2629	5.1132	1	Phil 99-1793
26	Sagay-Danao	Hagnaya Agrarian Reform Cooperative **(HARC)**	17.0000	VMC 84-524	17.0000	-	to be established	
27	Sagay-Danao	Minapasuk Upland Farmers Agri-ventures Marketing Cooperative **(MUFAMCO)**	1.8300	VMC 84-524	16.1840	1.9310	to be established	
28	Lopez	LGEI Farmers Association Incorporated **(LIFA)**	9.3410	VMC 86-599/VMC 84-524	16.1840	1.9310	1	Phil 99-1793
29	Lopez	Talusan Agrarian Reform Beneficiaries Association Inc. **(TARBA)**	15.0000	VMC 84-947	0.0000	-	to be established	
30	San Carlos	Agpangi Bagacay Cabungahan Agrarian Reform Cooperative **(ABACA ARCo)**	1.8063	VMC 84-947	1.6029	-	to be established	
31	San Carlos	Bagonbon Agrarian Reform Cooperative	-	-	10.4800	-	to be established	
Panay								
32	Monomer	Parian Planters Marketing Cooperative **(PPMC)**	2.5700	Phil 8839	-	-	to be established	
33	Passi	Aglalana Green Farmers Association **(AGFA)**	-	-	-	-	to be established	
Eastern Visayas								
34	Bogo-Medellin	San Jose Agrarian Reform Beneficiaries Multi-purpose Coop. **(SJARBAMPC)**	21.0400	VMC 84-947	23.0788	-	to be established	
35	Bogo-Medellin	Canhabagat Agrarian Reform Beneficiaries Multi-purpose Coop. **(CARBMPC)**	15.3000	Phil 2004-1011/ VMC 84-947	9.0000	-	1	Phil 2004-1011
36	Bogo-Medellin	Caputatan Norte Sugarcane Farmers Association	8.5569	VMC 84-947/PS 862	32.1665	-	1	Phil 2004-1011

37	Ormoc	Catmon Small Farmers Association **(CSFA)**	1.2900	VMC 86-550	-	-	to be established	
	TOTAL		292.0876		346.6490	81.9077		

➢ PROVISION OF START-UP CAPITAL

Mill District		Name of Block Farm	Amount Released
1	BISCOM	United Fishermen Multi-purpose Cooperative **(UFIMCO)**	427,402.30
2	BISCOM	Brgy. Buenavista- Agrarian Reform Beneficiaries Association **(BB-ARBA)**	470,590.64
3	La Carlota	Dama Farm Workers Agrarian Reform Beneficiaries Ass'n **(DAFWARBA)**	405,573.40
4	Ma-ao	Nakalang Padilla Farm Workers Association **(NAPFWA)**	410,309.00
South Negros			
5	Bais-URSUMCO	Polo Plantation Agrarian Reform Beneficiaries Cooperative **(POPARBECO)**	628,680.01
6	Bais-URSUMCO	Bahay Malaumon Farmers Association **(BMFA)**	674,604.00
7	Bais-URSUMCO	Danawan Agrarian Reform Beneficiaries Association **(DARBA)**	550,813.44
8	Bais-URSUMCO	Campanun-an Agrarian Reform Beneficiaries Association **(CAMARBA)**	558,967.86
9	Bais-URSUMCO	Bulod Aktibong Bukidnon Livelihood Organization **(BABLO)**	493,150.81
10	Bais-URSUMCO	New Namangka Farmers Association **(NNFA)**	543,287.16
11	Dacongcogon	Magballo Agrarian Reform Beneficiaries and Farmers Association **(MARBFA)**	457,332.60
12	Dacongcogon	Tabugon Agrarian Reform Beneficiaries Farmers Association **(TARBEFA)**	267,513.41
13	SONEDCO	Pinggot Farmers Association **(PIFA)**	514,499.92
14	SONEDCO	Inayawan Small Sugarcane Farmers Association **(ISSFA)**	636,865.25
15	SONEDCO	Casoy Lubi Apitong Agrarian Reform Beneficiaries Ass'n **(CLAARBA)**	610,728.15
16	SONEDCO	Bajay-Patol Agrarian Reform Cooperative **(BPARC)**	670,051.56
17	Dacongcogon	Bantayan Farmers Agrarian Reform Beneficiaries Ass'n **(BFARBA)**	275,599.12
18	Dacongcogon	Mataba Womens Association **(MATABAWA)**	479,635.25
19	Tolong	Bolbog Small Farmers Beneficiaries Ass'n **(BOSFARBA)**	363,207.52
20	Tolong	Mangulod Farmers Multi-purpose Cooperative **(MAFARMPUCO)**	382,316.60
21	Tolong	Maninihon Omod-Catmon Posi-on Farmers Multi-Purpose Cooperative **(MOCPFAMCO)**	223,389.62
North Negros			
22	HPCo	Sitio Calaptan Sta. Ana and Ascalon Farmers Association **(SCSAFA)**	508,324.56

23	HPCo	Had. Angeles Agrarian Reform Beneficiaries Association **(HAARBA)**	494,445.03
24	FF/ Bac-Mur	Had. Esmeralda 2 Rice Farmers Association **(HES2RIFA)**	440,924.58
25	Victorias	Had. Candelaria Farmers Association **(HCAFA)**	624,984.41
26	Sagay-Danao	Hagnaya Agrarian Reform Cooperative **(HARC)**	299,763.10
27	Sagay-Danao	Minapasuk Upland Farmers Agri-ventures Marketing Cooperative **(MUFAMCO)**	339,588.50
28	Lopez	LGEI Farmers Association Incorporated **(LIFA)**	165,087.96
29	Lopez	Talusan Agrarian Reform Beneficiaries Association Inc. **(TARBA)**	179,903.97
30	San Carlos	Agpangi Bagacay Cabungahan Agrarian Reform Cooperative **(ABACA ARCo)**	213,559.93
31	San Carlos	Bagonbon Agrarian Reform Cooperative	227,285.54
Panay			
32	Monomer	Parian Planters Marketing Cooperative **(PPMC)**	89,025.86
33	Passi	Aglalana Green Farmers Association **(AGFA)**	241,032.48
Eastern Visayas			
34	Bogo-Medellin	San Jose Agrarian Reform Beneficiaries Multi-purpose Coop. **(SJARBAMPC)**	653,307.69
35	Bogo-Medellin	Canhabagat Agrarian Reform Beneficiaries Multi-purpose Coop. **(CARBMPC)**	612,136.00
36	Bogo-Medellin	Caputatan Norte Sugarcane Farmers Association	302,192.69
37	Ormoc	Catmon Small Farmers Association **(CSFA)**	127,323.80
	TOTAL		**15,563,403.72**

- **Survey of possible source of irrigation**

One of the interventions of SRA through SIDA Block Farm Program is the acquisition of irrigation equipment and accessories which are given to respective recipient. Thus, under GAA 2016 block farm 37 block farms across Visayas region were surveyed for this project.

SONEDCO/DACONGCOGON Mill District

1. Bajay Patol Farmers Agrarian Reform Cooperative.
   The water source came from a low discharge spring and we have identified four (4) locations. Moreover, the mode of irrigation that can be implemented is either through single or double pumping since the area has higher elevation
2. Pinggot Farmers Association
   The source also came from three (3) slow discharge creeks, and were all stable for pumping. The mode of irrigation can also be done by either single or double pumping.
3. Inayawan Small Sugarcane Farmers Association.
   The source came from low discharge spring. The mode of irrigation can be done by single and double pumping and followed by gravity distribution.
4. Tabugon Agrarian Reform Beneficiaries Farmers Association.
   The source of water is from underground water. Under this condition, there is a need to construct a shallow tube well near the HYV nursery.

5. Magballo Agrarian Reform Beneficiaries Farmers Association
   The source is stable for pumping since it came from mature river which is the Hilabangan River. The mode of irrigation can be done by single and double pumping.
6. Mataba Womens Association
   The source is from the low discharge spring. However, this creek reached the highest level of the bank during rainy season and decreases during dry season (just to wet the human foot crossing to it). The mode of pumping can be done by either single and double irrigation then gravity distribution.
7. Bantayan Farmers Agrarian Reform Beneficiaries Association
   The source came from a low discharge creek which increases only during rainy season and decreases during dry season. Furthermore, there is also a potential for a shallow tube well. The mode of pumping is single and double pumping.
8. Casoy Lubi Apitong Agrarian Reform Beneficiaries Association
   The source came from a slow discharge spring. Therefore, there is need to construct a simple water impounding before pumping.

BISCOM

9. Brgy. Buenavista Reform Beneficiaries Association
   The source is very stable for pumping since it came from mature river . the mode of irrigation is single and double pumping.
10. United Fishermen Multipurpose Cooperative.
    With respect to the location of HYV nursery and techno demo, the water source will pass through several obstructions like house and roads. Thus, water right of way must be negotiated between farmers and affected residents. On the other hand, the other lot can be irrigated from a low discharge spring. A single and double pumping should be done here.

BAIS-URSUMCO

11. New Namangka Farmers Association
    The source is from a youthful river connected to Ilog-Hilabangan River, however, the elevation is much higher that it requires higher motor to drive the pump. On the other hand, the low discharge creek can be of good source for pimping. A single and double pumping can be implemented.
12. Bulod Aktibong Bukidnon Livelihood Organization
    The source is from a youthful river connected to Ilog-Hilabangan River and a creek. A single and double pumping can be implemented here.
13. Bahay Malaumon Farmers Association
    The source is from high discharge canal which is very stable for pumping.

14. Campanun-an Agrarian Reform Beneficiaries Association
    The source is from a youthful river connected to Ilog Hilabangan River. A single and double irrigation can be implemented here.
15. Danawan Agrarian Reform Beneficiaries Association
    The source came from a mature river connected to Ilog Hilabangan River. A single and double irrigation can be implemented here.
16. Polo Plantation Agrarian Reform Beneficiaries Cooperative
    The source came from low discharge creek, but can be good source for pumping. Moreover, there is also a need to construct alternative simple water impounding before pumping. This is in preparation for a long drought.

TOLONG

17. Bolbog Small Farmers Beneficiaries Association
    The source came from low discharge spring, thus, a simple water impounding must be constructed prior to pumping.
18. Mangulod Farmers Multipurpose Cooperative
    The source came from youthful river. A single and double pumping must be implemented here.

MAAO

19. Nakalang Padilla Workers Association.
    The source came from a low discharge creek. Moreover, the aid foundation has constructed a water impounding project from that said source. With that, it can be used for irrigation. A single and double pumping can be implemented then gravity distribution.

LA CARLOTA

20. DAMA Farm Workers Agrarian reform beneficiaries association
    The irrigation of the farm was under the supervision of the netafim.

FFBAC/MUR

21. Hda. Esmeralda 2 Rice Farmers Association.
    The source came from the youthful river which is very stable for pumping. A single and double pumping can be implemented here.

HPCO

22. So. Calaptan Sta. Ana and Ascalon Farmers Association
    The source came from a mature river. A single and double pumping can be used here.
23. Hda. Angeles Agrarian Reform Beneficiaries Association
    The source came from low discharge spring. On the other, the creek is not viable as source due to its elevation but with the use of double pumping it can be a good source.

LOPEZ

24. Talusan Agrarian Reform Beneficiaries Farmers Association
    We can extract water from underground as a source of irrigation water. There is a need to construct a shallow tube well.
25. Leonor Gonzaga Estate Inc. Farmers Association
    The source came from youthful river however it is not viable for pumping due to its elevation. Thus, in order to irrigate the field there is a need to construct a shallow tube well.

VICTORIAS

26. Hda. Candelaria Farmers Association
    The source of water is mature river which is very stable for pumping. A single and double pumping can be used.

SAGAY-DANAO

27. Hagnaya Agrarian Reform Cooperative
    The source came from a low discharge creek and mature river. a single and double pumping can be used here.

SAN CARLOS

28. Agpangi Bagacay Cabungahan Agrarian Reform Cooperative
    The source came from high discharge spring. A single and double pumping can be used.

CAPIZ

29. Parian Planters Multipurpose Coooperative
    The source is several kilometres from the nursery and techno demo. Thus, there is a need to construct a shallow tube well.

PASSI

30. Aglalana Green Farmers Association
    The source came from youthful river (aglalana river) and spring. A single a double pumping can be used here.
31. Maninihon Omod Catmon Posion Farmers Multipurpose Cooperative, Brgy. Maninihon Bayawan Negros Occidental.
    The source is stable for continuous pumping. A single and double pumping can be used.
32. Bagonbon Agrarian Reform Cooperative, Brgy. Bagonbon San Carlos City
    The source is also viable for pumping. A single and double pumping can be used.
33. Minapasok Upland Farmers Agri-Ventures Marketing Cooperative, Brgy. Minapasok, Calatrava
    The source is also viable for pumping. A single and double pumping can be used.
34. San Jose ARBC, Caputatan Sur, Medelin Cebu
    The source is also viable for pumping. A single and double pumping can be used.
35. Canhabagat Agrarian Reform Beneficiaries Multipurpose Cooperative, Brgy. Canhabagat, Medelin Cebu
    The source is also viable for pumping. A single and double pumping can be used.
36. Caputatan Norte Sugarcane Farmers Association, Brgy. Caputatan Norte, Medelin Cebu
    The source is also viable for pumping. A single and double pumping can be used.

37. Catmon Small Farmers Association, Purok 2, Brgy. Catmon, Ormoc City
The source is also viable for pumping. A single and double pumping can be used.

Irrigation Equipment with accessories per block farm
SIDA BLOCK FARM GAA 2016-VISAYAS

	Name of Block Farm	Irrigation Equipment with accessories
1	Agpangi ARBC, Brgy. Agpangi Calatrava, Negros Occidental C/O: Anecito L. Amoy/ 09173013360- Chairman	2-Units- centrifugal pump,10 hp diesel engine driven, Accessories: 1 roll x 30m, 3"-PE suction hose 8-rolls x 100m-3" duct hose 30-length x 20'- 3"-black hose 8-pieces-3"-PVC tee 2-pieces- 90 degrees 3"-PVC elbow 8-pieces- 3"-PVC ball valve 1 – litre vulcaseal 3'' foot valve- 2 pcs
2	HAGNAYA ARBC, Sitio, Hagnaya, Brgy. Tabun-Ac, Toboso, Negros Occ. C/O: Artemio Canete/09486709273- Chairman	2-Units- centrifugal pump,10 hp diesel engine driven, Accessories: 1-Roll x 30m, 3"-PE suction hose 8-rolls x 100m-3" duct hose hose 30-length x 20'- 3"-black hose 4-pieces-3"-PVC tee 2-pieces- 90 degrees 3"-PVC elbow 4-pieces- 3"-PVC ball valve 1 – litre vulcaseal 3'' foot valve- 2 pcs
3	TALUSAN ARBC, Purok Kulo, Brgy. Bulanon, Sagay City C/O: Esrael Morales/ 09479870959- Farm manager	2O-FEET STW 2-Units- centrifugal pump,10 hp diesel engine driven, 40-feet 3"-suction hose 6-rolls, 3"- duct hose 20 bags, 40 kgs-portland cement 3'' foot valve- 2 pcs *Labor: Farmer's Equity
4	LEONOR GONZAGA FA, Brgy. Malobo Sagay City, Negros Occidental C/O: Delia Encabo/ 09394854087	20-FEET STW 2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet – 3" suction hose 7-rolls, 3" duct hose 20- bags- 40 kgs. Portland cement 3'' foot valve- 2 pcs *Labor: Farmer's Equity
5	NAKALANG FWA, Hda. Nakalang, Brgy. Ilijan, Bago City C/O: Sandrico Cornelio/ 09100314053-Chairman	2-unit centrifugal pump, 12 hp diesel engine driven 1-roll x 30m, 3" –suction hose 2-roll 60m, 2"- black hose 8-roll x 100m, 2"- duct hose 4-pcs, 2" pvc tee 2- pcs,3x2 pvc reducer 2-pcs, 2" pvc ball valve 2-pcs, 2" 90° pvc elbow 1-liter vulcaseal 3'' foot valve- 2 pcs
6	Bajay Patol ARBC, Brgy. Caliling, Cauayan, Negros Occidental c/o: gina fe Chavez/09956046547-chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 40 Feet, 3" suction hose 10 rolls x 100m, 3" duct hose 3'' foot valve- 2 pcs
7	Pinggot Farmers Association, Brgy. Pinggot, Ilog, Negros Occidental C/O: Danilo Castillo/ 09078578502-Chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 2-rolls x 60m, 2"- black hose 2-length 20', 3" black hose 2-pcs. 3x2 pvc reducer 10 rolls x 100m, 2"-duct hose 4-pcs, pvc tee 1-liter vulcaseal 3'' foot valve- 2 pcs
8	Inayawan Small Farmers Association,Brgy. Inayawan, Cauayan Negros Occidental C/O: Ian K. Dignadice/09494411528-Chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet, 3"-suction hose 8-rollsx 100m-3" duct hose 30-lengthx 20'- 3"-black hose 4-pieces-3"-PVC tee 2-pieces- 90 degrees 3"-PVC elbow 4-pieces- 3"-PVC ball valve 1 – litre vulcaseal 3'' foot valve- 2 pcs
9	Tabugon ARBC, brgy. Tabugon, Kabankalan city, Negros Occidental c/o: Rolando Estomago Sr. / 09496877896-chairman	20-FEET STW 2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet – 3" suction hose

		7-rolls, 3" duct hose 20- bags- 40 kgs. Portland cement 3'' foot valve- 2pcs
10	Magballo ARBC, Brgy. Magballo, Kabankalan City c/o: Erlinda Reopay/ 09324853831	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rollsx 100m, 3"- duct hose 5-lengthx 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve -2 pcs
11	Mataba Womens Association, Brgy. Magballo, Kabankalan City, Negros Occidental c/o: Agnes Casuyon/09506604834	2-Units- centrifugal pump,10 hp diesel engine driven, 20 feet suction hose 2-rolls x 60m, 2"-black hose 2-lengthx 20', 3" black hose 2-pcs. 3x2 pvc reducer (ordinary) 10-rollsx 100m, 2"-duct hose 4-pcs, pvc tee 1-liter vulcaseal 3" foot valve – 2 pcs
12	Bantayan Farmers ARBC, Bry. Banatayn Negros Occidental. c/o: Reno Toledano/09497576630	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rollsx 100m, 3"- duct hose 5-length, 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 4" foot valve- 2 pcs 5-pcs, 3"-pvc ball valve
13	CASOY Lubi Apitong ARBC, Brgy. Tabugon, Kabanklan City Negros Occidental C/O: Melanie Guilaran/ 0910666992	2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet, 3"-suction hose 1-lengthx 20', 3"-black hose 2 pcs, 3x2 pvc reducer 2-rollsx 60m, 2"- black hose 4 pcs, 2"- pvc tee 8 rollsx 100m, 2" duct hose 1 liter vulcaseal 3" foot valve - 2 pcs
14	Brgy. Buenavista Agrarian Reform Beneficiaries Asstn, Brgy. Buenavista Himamaylan City C/O: Philip Tituag/09129645682- Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs 4x3 pvc reducer 20 lengthx 20', 3" black hose 4 pcs, 3" pvc tee 8 rollsx 100m, 3" duct hose 1 liter vulcaseal 4" foot valve -2 pcs
15	United Fishermen Multi-Purpose Cooperative, Pta. Talaban, Himamaylan City c/o: Ronald Villacarlos/ 09308675786-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rollsx 100m, 3"- duct hose 5-lengthx 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4'' foot valve – 2 pcs
16	New Namangka Farmers Association, Brgy. Namangka, Mabinay, Negros Oriental c/o: Jocelyn Buganas/ 09059273502-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve- 2 pcs
17	Bulod Aktibongbukidnon Livelihood Organization, Brgy. Pantao, Mabinay Negros Oriental c/o: Everlita Alcorin/ 09068041094- chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer) 10-rolls x 100m, 3"- duct hose 5-length 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal

		2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve 2 pcs
18	Bahay Malaumon Farmers Association, Brgy. Luyang Mabinay, Negros Oriental C/O: Mary Dolie Cabilao- 09062965979	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-lengthx 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve 2 pcs
19	Campanun-An ARB, Campanun-An, Mabinay Negros Oriental C/O: Eva Ruado/ 09361409539- Chairman	2-Units- centrifugal pump,14hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve – 2 pcs
20	Danawan Agrarian Reform, Sitio, Danawan, Brgy. Tara, Mabinay, Negros Oriental c/o: Gregorie I. Cadorna/09950815860-Farm Manager	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve- 2 pcs.
21	Polo plantation ARB, Polo, Tanjay, Negros Oriental c/o: Genaro C. Duran/ 09197992642-chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet, 3"-suction hose 1-length x 20', 3"-black hose 2 pcs, 3x2 pvc reducer 2-rolls x 60m, 2"-] black hose 4 pcs, 2"- pvc tee 8 rolls, 2" duct hose 1 liter vulcaseal 3" foot valve 2 pcs
22	Bolbog small farmers Beneficiares Association, Bolbog Narra, Bayawan City, Negros Oriental c/0: Feleciano Briones/ 09123692207-chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet, 3"-suction hose 1-length x 20' , 3"-black hose 2 pcs, 3x2 pvc reducer 2-rolls x 60m, 2"- black hose 4 pcs, 2"- pvc tee 10 rolls x 100m, 2" duct hose 1 liter vulcaseal 3" foot valve- 2 pcs
23	Mangulod Farmers Multipurpose Cooperative, Mangulod Sta. Catalina, Bayawan Negros Orinetal c/o: Edgardo Artajo/ 09059566765-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve- 2 pcs
24	Hda. Esmeralda 2 Rice Farmers Association, Brgy. San Fernando, Talisay City C/O: Marivic Demaruel/09505759058-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m , 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve-2 pcs
25	Sitio, Calaptan, And Sta. Ana Ascalon And Farmers Association, Brgy. San Isidro EB Magalona C/O: Reynaldo Demecino/09093693027-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer(ordinary) 10-rolls x 100m, 3"- duct hose 5-lengthx 20', 3"- black hose

		5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve-2pcs
26	Had. Angeles Agrarian Reform Beneficiares, Patag Diutay, Brgy. Guimbalaon, Silay City, Negros Occidental c/o: Jolie Celeste/09184200593-farm manager	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer(ordinary) 10-rolls x 100m, 3"- duct hose 5-lengtx 20'h, 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve- 2pcs
27	Had. Candelaria, Farmers Association, Brgy. Purisima, Manapla, Negros Occidental C/O: Corazon Dumasig/09486973607-Farm Manager	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 3"-suction hose 1-length x 20', 3"-black hose 2 pcs, 3x2 pvc reducer 2-rolls x 60m, 2"- black hose 4 pcs, 2"- pvc tee 10 rolls x 100m, 2" -duct hose 1 liter vulcaseal 4" Foot valve- 2 pcs
28	Parian Planters Marketing Cooperative, Brgy. Parian, Sigma Cpaiz C/O: John Valdez/09504547729	20-FEET STW 2-Units- centrifugal pump,10 hp diesel engine driven, 40 feet – 3" suction hose 7-rolls x 100m, 3" duct hose 20- bags- 40 kgs. Portland cement 3" footvalve- 2 pcs
29	Aglalana Green Farmers Association, Brgy. Aglalana, Passi City C/O: Armando Parcon/ 09307989926	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 2 pcs, 4x3 pvc reducer 10-rolls x 100m, 3"- duct hose 5-length x 20', 3"- black hose 5-pcs, 3"-pvc tee 1-liter vulcaseal 2-pcs, 90 degrees, pvc elbow 5-pcs, 3"-pvc ball valve 4" foot valve-2pcs
30	Bagonbon Agrarian Reform Cooperative, Brgy. Bagonbon Sancarlos City C/O: Welfredo Lariosa/09334020698-Farm Manager	2-Units- centrifugal pump,10 hp diesel engine driven, 10 rolls x 100m, 2" Duct Hose 40 feet, 3" suction hose 2 length 20', 3" Black hose 2 pcs, 3 x 2 pvc reducer 1 liter vulcaseal 3" foot valve- 2 pcs
31	Minapasok Upland Farmers Agri-Ventures Marketing Cooperative, Brgy. Minapasok, Calatrava C/O: Anicar Reyes/ 09151763272- Chairman	2-Units- centrifugal pump,12 hp diesel engine driven, 40 feet, 3" suction hose 10 rolls x 100m, 3" duct Hose 3" foot valve- 2 pcs
32	San Jose ARBC, Caputatan Sur, Medelin Cebu C/O: Amar Y. Flores/ 09778335113/ chairman	2-Units- centrifugal pump,12 hp diesel engine driven, 40 feet, 3" suction hose 10 rolls x 100m, 3" duct Hose 3" foot valve – 2 pcs
33	Maninihon Omod Catmon Posion Farmers Multipurpose Cooperative, Brgy. Maninihon Bayawan Negros Occidental C/O: Roly Balbuena/ 09167222322-Chairman	2-Units- centrifugal pump,10 hp diesel engine driven, 40 ft, 3" suction hose 7 length x 20'- 3" black hose 2 rolls x 60m- 2"- black hose 10 rolls x 100m- 2"- duct hose 4-pcs, 3 x 2 PVC reducer 3" foot valve- 2 pcs
34	Canhabagat Agrarian Reform Beneficiaries Multipurpose Cooperative, Brgy. Canhabagat, Medelin Cebu C/O: Dr. Anthony Elano/ 09088802970-Chairman	2-Units- centrifugal pump,12 hp diesel engine driven, 40 feet, 3" suction hose 10 rolls, 3" duct Hose 3" foot valve- 2 pcs
35	Caputatan Norte Sugarcane Farmers Assn. Brgy. Caputatan Norte, Medelin Cebu C/O: Gloria Pardo/09422883009-Chairman	2-Units- centrifugal pump,12 hp diesel engine driven, 40 feet, 3" suction hose 10 rolls x 100m, 3" duct Hose 3" suction hose 3" foot valve- 2 pcs
36	Catmon Small Farmers Association, Purok 2, Brgy. Catmon, Ormoc City C/O: Pepita Tallada/09213477709-Chairman	2-Units- centrifugal pump,14 hp diesel engine driven, 40 feet, 4" suction hose 4 pcs. 4 x 3 pvc reducer 10-rolls x 100m, 3"- duct hose 4" foot valve – 2 pcs

The Dama Farm Workers Agrarian Reform Beneficiaries (DAFWARBA) was the pilot block farm for drip irrigation model funded by SIDA Project.

Detailed Specifications of Irrigations Equipment

Item	Specifications	Quantity/description
1	- 80 – 100 GPM - 3'' X 3'' (SUCTION X DISCHARGE) - 1500 RPM - Air- cooled, single cylinder engine - Total dynamic head = 300/330 feet. - Mounted on steel chassis with towing hitch - Hand- cracked starting system	**30 UNITS centrifugal pump, *10 HP diesel engine driven***
2	- 120-150 GPM - 4'' X 4'' (SUCTION X DISCHARGE) - 1500 RPM - Air-cooled, single cylinder engine - Total dynamic head = 300/330 feet - Mounted on steel chassis with towing hitch. - Hand cracked starting system	**32 UNITS CENTRIFUGAL PUMP, *14 HP diesel engine driven***
3	- 90 – 100 GPM - 3'' X 3'' (SUCTION X DISCHARGE) - 1500 RPM - Air-cooled, single cylinder - Total dynamic head = 300/330 feet - Mounted on steel chassis with towing hitch - Hand cracked starting system	**10 UNITS CENTRIFUGAL PUMP, *12 HP diesel engine driven***
4	4" P.E suction hose	6-rolls X 30m
5	3" P.E suction hose	10 rolls x 30m
6	2"- duct hose	84 rolls x 100m
7	2" black hose	16 rolls x 60m
8	3" black hose	192 length x 20'
9	3" duct hose	239 rolls x 100m
10	3 x 2 pvc reducer	18 pcs.
11	4 x 3 pvc reducer	30 pcs
12	2" pvc tee	28 pcs
13	3" pvc tee	85 pcs.
14	3" pvc ball valve	81 pcs
15	3" 90° pvc elbow	32 pcs
16	2" 90° pvc elbow	2 pcs
17	2" pvc ball valve	2 pcs
18	vulcaseal	25 liters
19	40-kg portland cement	80 bags
20	3'' foot valve	40 pcs
21	4'' foot valve	32 pcs

- ***Soil Sampling and Analysis***

  Soil Fertility Profile of SIDA block farms were facilitated by the technical personnel assigned. Soil Analysis Result is a very useful tool as it will be the basis for fertilizer and lime application. A total of **521** samples were analyzed from January to December 2017 which benefited **35** Block Farms and **426** planters. This covered an area of **582.205** hectares.

  Below is the Summary of Soil Analysis Report gathered from SRA Bacolod and La Granja Agricultural Research and Extension Center (LGAREC) Soil Laboratory:

Name of Block Farm	January-June	July-December
United Fishermen Multi-purpose Cooperative **(UFIMCO)**	4	
Brgy. Buenavista- Agrarian Reform Beneficiaries Association **(BB-ARBA)**	9	
Dama Farm Workers Agrarian Reform Beneficiaries Ass'n **(DAFWARBA)**	12	2
Nakalang Padilla Farm Workers Association **(NAPFWA)**	14	
Polo Plantation Agrarian Reform Beneficiaries Cooperative **(POPARBECO)**	7	
Bahay Malaumon Farmers Association **(BMFA)**	7	
Danawan Agrarian Reform Beneficiaries Association **(DARBA)**	5	
Campanun-an Agrarian Reform Beneficiaries Association **(CAMARBA)**	11	
Bulod Aktibong Bukidnon Livelihood Organization **(BABLO)**	20	
New Namangka Farmers Association **(NNFA)**	13	
Magballo Agrarian Reform Beneficiaries and Farmers Association **(MARBFA)**	12	
Tabugon Agrarian Reform Beneficiaries Farmers Association **(TARBEFA)**	19	
Pinggot Farmers Association **(PIFA)**	16	
Inayawan Small Sugarcane Farmers Association **(ISSFA)**	22	2
Casoy Lubi Apitong Agrarian Reform Beneficiaries Ass'n **(CLAARBA)**	18	
Bajay-Patol Agrarian Reform Cooperative **(BPARC)**	6	2
Bantayan Farmers Agrarian Reform Beneficiaries Ass'n **(BFARBA)**	32	
Mataba Womens Association **(MATABAWA)**	14	
Bolbog Small Farmers Beneficiaries Ass'n **(BOSFARBA)**	23	
Mangulod Farmers Multi-purpose Cooperative **(MAFARMPUCO)**	6	4
Maninihon Omod-Catmon Posi-on Farmers Multi-Purpose Cooperative **(MOCPFAMCO)**	24	5
Sitio Calaptan Sta. Ana and Ascalon Farmers Association **(SCSAFA)**	12	
Had. Angeles Agrarian Reform Beneficiaries Association **(HAARBA)**	0	
Had. Esmeralda 2 Rice Farmers Association **(HES2RIFA)**	14	11
Had. Candelaria Farmers Association **(HCAFA)**	6	-
Hagnaya Agrarian Reform Cooperative **(HARC)**	13	-
Minapasuk Upland Farmers Agri-ventures Marketing Cooperative **(MUFAMCO)**	6	4
LGEI Farmers Association Incorporated **(LIFA)**	5	2
Agpangi Bagacay Cabungahan Agrarian Reform Cooperative **(ABACA ARCo)**	7	3

Bagonbon Agrarian Reform Cooperative **(BARC)**	6	2
Parian Planters Marketing Cooperative **(PPMC)**	46	
Aglalana Green Farmers Association **(AGFA)**	18	11
Canhabagat Agrarian Reform Beneficiaries Multi-purpose Coop. **(CARBMPC)**	2	3
Caputatan Norte Sugarcane Farmers Association **(CANOSFA)**	9	5
Catmon Small Farmers Association **(CSFA)**	27	
	465	**56**

The Extension and Technical Services Division is widely campaigning the practice of Soil Analysis to educate every planter in the mill district to know the fertility status of the soil in their farm.

As a result of soil analysis intervention, some block farms reported an increase in their production.

- ***GPS Survey and Mapping***

  To gather accurate data on areas to be enrolled to block farming, the extension division conducted area calculation and mapping to the individual farms of each members of the block farms. The digitized maps of SIDA Block Farm for GAA 2016 were already finished, the priority now is to fast track GPS mapping of block farms proposed for SIDA GAA 2017 and GAA 2018.

  To date, 44 block farms were mapped of which 33 were identified under SIDA Block Farms for GAA 2017. The total area of **1,511.7332** hectares were GPS surveyed from January to December 2017.

- ***Preparation of Block Farm Documentary Requirements for Start-up Capital***

  Part of the intervention to SIDA block farms was support for farm operations, labor and agricultural inputs (canepoints, etc). The start-up capital can only be received by the block farm provided that they have complied the needed attachments/documents.

  Attachments and supporting documents for start-up capital included Job Request, Job Order, Purchase Request, Request for Quotation, Purchase Order, Voucher, Award Notice Abstract, Certificate of Job Accomplishment and Disbursement voucher.

- ***Provision of HYV Planting Materials***

  The provision of HYV planting materials will gradually replace the old varieties and improve the production of sugarcane small planters specifically block farms. SRA High Yielding Varieties were allocated to various block farm to establish nurseries that will facilitate the cane point dispersal to other members and their neighbouring planters in the district.

  A total of ninety two (92) lacsas were distributed to eleven (11) SIDA Block Farms for GAA 2016. Continuous monitoring of distributed HYVs to block farms are done by the assigned technical personnel.

DATE	NAME OF PLANTER	VARIETY	NO. OF LACSAS	ADDRESS
11-Jan-17	Maritta Segovia/CLAARBA	Phil 2004-1011	5.00	Purok Casoy, Tabugon, Kabankalan City
13-Jan-17	Delia Encabo/LGEI	Phil 2004-1011	5.00	Had. Hermenia, Brgy. Malubon, Sagay City
26-Jan-17	DAFWARBA	Phil 2004-1011	5.00	Brgy. Cabacungan, La Castellana, Negros Occidental
7-Feb-17	Reno Toledano/BFARBA	Phil 2004-0827	5.00	Brgy. Bantayan, Kabankalan City, Negros Occidental
9-Feb-17	Agnes Casuyon/ MATABAWA	Phil 2004-0827	5.00	Brgy. Magballo, Kabankalan City, Negros Occidental

10-Oct-17	United Fisherman Multipurpose Cooperative	Phil 99-1793	5.00	Brgy. Carabalan, Himamaylan City
		Phil 2004-1011	5.00	Brgy. Carabalan, Himamaylan City
13-Oct-17	United Fisherman Multipurpose Cooperative	Phil 2000-0791	8.00	Brgy. Carabalan, Himamaylan City
7-Nov-17	Dama Farm Workers Agrarian Reform Beneficiaries Association	Phil 99-1793	5.00	Brgy. Cabacungan, La Castellana
7-Nov-07	Inayawan Small Sugarcane Farmers Association	Phil 99-1793	9.00	Brgy. Brgy. Inayawan, Cauayan
		Phil 2000-0791	5.00	Brgy. Inayawan, Cauayan
20-Nov-17	Bajay Patol Agrarian Reform Cooperative	Phil 99-1793	5.00	Brgy. Caliling, Cauayan
24-Nov-17	Pinggot Farmers Association	Phil 2004-1011	10.00	Brgy. Pinggot, Ilog
18-Dec-17	Magballo Agrarian Reform Beneficiaries and Farmers Association	Phil 2004-1011	10.00	Magballo, Kabankalan City, Neg. Occ.
29-Dec-17	Brgy. Buenavista ARB Association	Phil 2004-1011	5.00	Brgy. Buenavista, Himamaylan City.

- ***Performs Technology Transfer to Farmers Field***
  Extension Services Divisions defines extension works as "*delivering technologies in the doorstep of its clientele*". For the past years, the division has been rendering technical assistance to the farmers of the district through consultations and farm visits.

- ***Soil Rehabilitation and Liming for Acidic Soil***
  Four Hundred Eighty (480) bags of Agricultural Lime to every block farm to improve the soil pH.

  The 37 SIDA Block Farms for GAA 2016 also received one hundred eighty (180) bags of UREA (46-00-00), 180 bags of Di-ammonium Phosphate (18-46-00) and 180 bags muriate of potash (00-00-60) respectively as part of the agricultural input support. Delivered fertilizers and agricultural lime to block farms was secured by having the chairman signed the acknowledge receipt and the establishment of a storage facility to safe keep all the inputs. 37 Knapsack Srayers with 16 liters capacity was already delivered to the Block Farms.

- ***Bio-organic Fertilizer on -site production***
  The SIDA block farms will also undergo a training on the production of Bio-organic Fertilizer. 154 bags of rock Phosphate was delivered to be used as one of the materials for the production of Bio—Organic Fertilizer. Other materials for Bio-organic Fertilizer Production such drum, spade, wheel barrow and garden hose was also delivered to the block farms.

- ***5 Hectares HYV Nursery***
  To supplement the unavailability of new High Yielding Varieties in the district and to address the problem in the decrease in production due to the continuous planting of old and deteriorated varieties, the office together with 5 MDDCs established 5 hectares HYV Nursery.

  The 5 hectares HYV Nursery were established in 5 Mill District Development Councils namely: Lopez MDDC, Bogo MDDC, Ormoc MDDC, First-Farmers and Iloilo MDDC with a total of 602.99 lacsas produced and distributed to 71 beneficiaries.

MILL DISTRICT	AREA INVOLVED (HA)	NAME OF RECEPIENT	VARIETY	VOLUME (LACSA)
FIRST FARMERS	1.31	Had. San Isidro/ Mr. Francisco Villanueva	Phil 99-1793	8
		Carlos Balces	Phil 99-1794	8
	2.31	LDL Agro. Dev. Corp/ Mr. Lindidi de Leon	PSR 04-1011	5
		Mr. Gallego	PSR 04-1011	1
		Mr. Carlos Balces	PSR 04-1011	9.7
		MDDC Nursery use	PSR 04-1011	4
	1.57	Mr. Gerardo Lopez	PSR 04-172	3.5
	2.21	Buddy Montinola	Phil 2004-1011	10
	1.57	Ed Ronnie Siasat	PSR 2004-172	11
	3.9	Gerry Ledesma	PSR 2004-172	3.9
	1.51	Buddy Montinola	PSR 2004-1011	33
	0.75	SRA Block Farm	Phil 99-1793	5
		Steve Lizares		5
subtotal				**107.1**
ILOILO		Wilmer Acabal	Phil 99-1793	5
		Lydia Soberano	Phil 99-1794	4
		Reynaldo Severo	Phil 99-1795	7
		Leonilo Palmares	Phil 99-1796	10
		Dengel Palmares	Phil 03-1389	2.3
			Phil 99-1793	19.7
		Salve Valenzuela	Phil 03-1389	1.5
		IMDDCFI	Phil 03-1389	6
		Joemarie Aguilar	Phil 03-1389	5
		Renan Enriquez	Phil 04-1011	2
subtotal				**62.5**
ORMOC-HIDECO		LAICC	VMC 86-550	4.4
		PAL	VMC 86-550	20.7
		Roy Bernard Fiel	VMC 86-550	12.3
		CMC	VMC 86-550	13.8
		Grace Caparaso	VMC 86-550	5
subtotal				**56.2**
BOGO-MEDELLIN		Boy Inot	Phil 2004-1011	3.7
		Boy Faciol	Phil 2004-1011	6.97
		Rene Co	PSR 136	4
		Teresita Diaz	Phil 2004-1011	15
		Roberto Aton	Phil 2004-1011	5
		Alex Luna	PSR 105	42.07
		Pedro Inot	Phil 2004-1011	11.76
		Arnulfo Inot	Phil 2004-1011	3.6
		Jovito Sarsalejo	PSR 136	6
		Sozimo Manzo	Phil 2004-1011	6.2
		Amelia Pinote	Phil 2004-1011	4.1
		Totong Manso	PSR 136	10.2
		Earl Fernan	PSR 105	5
		Rogelio Tero	PSR 105	3

		Simplicio Jagdon	PSR 105	4.5
		Ponciano Demiar	PSR 105	12.5
		MEM Farm	PSR 105	18
		Ben Ramos	PSR 105	15
		Miranda Farms	PSR 136	22.3
subtotal				**198.9**
LOPEZ		Leni Cabo	Phil 99-1793	4
		Tessie Singbenco	Phil 99-1793	5
		Carmen Tolentino	Phil 99-1793	5
		Jun Jun Gonzaga	Phil 99-1793	5
		Freddie Zayco	Phil 99-1793	5
		Teresa Consing	Phil 99-1793	5
		Yolanda Gargar	Phil 99-1793	5
		Joemarie Lopez	Phil 99-1793	3
		LMDDC Nursery	Phil 99-1793	7
		Paolo Severino	Phil 2005-0645	5
		Celwin Javelosa	Phil 2005-0645	3
		Jose Ma. Taleon III	Phil 2005-0645	3
		Jun Jun Gonzaga	Phil 2005-0645	6.1
		Joemarie Garcia	Phil 2005-0645	5
		Dante Ramos	Phil 2005-0645	5
		IFARM/ Joselito Lopez	Phil 2005-0645	5
		Sageplas Planters	Phil 2005-0645	1.9
		Theresa Yared	Phil 2005-0645	6
		Monica Concepcion Jesena	Phil 2005-0645	5
		Joemarie Lopez	Phil 2005-0645	6
		LMDDC Nursery	Phil 2005-0645	18.29
		Ronald Zayco	Phil 99-1793	10
		Maymay Escario	Phil 99-1793	14
		Luis Yee	Phil 99-1793	5
		Jun Jun Gonzaga	Phil 99-1793	36
subtotal				**178.29**
TOTAL				***602.99***

- ***Techno Demo Farm/ Adaptability Trial***

  Techno demo farms will be established per block farm and there will be four treatments, Treatment 1 will be the farmer's practice in fertilizers rate, Treatment 2 is the application of fertilizer based on soil analysis, Treatment 3 application of 75% fertilizer rate based on soil analysis + Organic Fertilizer + BMO and Treatment 4 is fertilizer rate based on soil analysis + intercropping of legume. This will show the members of the block farm as to which practice will yield more and adapt the said practice.

  These techno demos will also test and introduce new high yielding varieties with the main aim of increasing productivity and profitability of the block farms.

- ***Reproduction and Distribution of IEC Materials***

  Strengthens the communication program through reproduction and distribution of komiks, brochures, and sugarcane farm management manual.

No. of IEC Materials Distributed	11,225
No. of Recipients	3,382

- ***Capability Building Seminars for Sugarcane Planters***

  Low productivity in sugarcane farming can be greatly attributed to the farmers' limited technical knowledge in managing their crop from land preparation to harvesting/milling and ratooning. Their lack of access to information can be traced mainly to unavailability of training opportunities due to budget constraints, distance from service providers. The conduct of various on-site Sugarcane Farm Management Seminars can greatly help in educating the planters on the proper technologies and management of sugarcane.

  Under the Sugarcane Industry Development Act Capability Building Program for sugarcane planters, 47 Batches of Sugarcane Farm Management Seminars was conducted with 1,926 participants and 47 batches for the Farm Planning and Budgeting Seminar with 1,927participants.

  The implementation of the Block Farming Project includes capacitating the management team of every Block Farms in handling/managing the operations thus there is also the conduct of the Sugarcane Farm Management Seminar for new block farms. For 2017 there were five (5) block farms who have undergone the seminar with 206 participants. Twenty two (22) Block farms have undergone 2nd Level Sugarcane Farm Management Seminar with 983 participants. The 2nd level sugarcane farm management seminar module includes the review of the proper cultural practices on sugarcanes from land preparation to harvesting and ratoon management, Organic Farming, the use of BMO, Variety Programming and the establishment of demo-farm.

- ***Assessment/ Action Planning Workshop and Seminar for Technical Personnel and Assistants***

  On the implementation of the Sugarcane industry Development Act of 2016, it is a must to assess the performance and output of every Technical Personnel and Technical Assistant in their respective block farm assignment. This activity aims to validate the activities done by the technical Personnel in their area of assignment and determine their role and contribution in the success of the project.

  For this year, a 3-day Assessment of SIDA Technical Personnel and Technical Assistant was conducted last February 22-24, 2017 and Assessment of SRA Implementation of SIDA Funded Projects on May 4-5, 2017. Also, Technical Personnel, Junior Agriculturist and ATTP assigned in SONEDCO/Dacongcogon, Bais-URSUMCO and Tolong Personnel conducted a separate reporting of accomplishments last September 22, 2017. A year-end Assessment for Technical Personnel was also conducted last December 4-7, 2017 at SRA LGAREC, La Granja, La Carlota City, Negros Occidental.

- ***Conducted and facilitated "Second Level Seminar and Livelihood Training/ for Block Farm Chairmen and Managers.***

  The implementation of the Block Farming Project under the Sugarcane Industry Development Act also included capacitating the management team of every Block Farms in handling/managing the operations. Assessment of SRA Implementation of SIDA Funded Projects on May 2-3, 2017 aims to develop and enhance the Bookkeeping and Managerial Skills of every block farm chairmen and farm managers.

  Update on the DOLE – DILEEP (DOLE Integrated Livelihood and Emergency Program) 3 Block Farms (Brgy. Bagonbon, San Carlos City; Brgy. San Isidro, EB Magalona; and Brgy. Buenavista, Himamaylan City) have already submitted a proposal to the Regional Project Management Team. The result of the proposal will be forwarded to the Regional Office 6.

  Last December 28, 2017, 18 SIDA Block Farms for GAA 2016 undergone livelihood training on Swine Fattening and Free Range Chicken by the Provincial Veterinary Office - Province of Negros Occidental facilitated by SR

- ***Crop Estimation Project***

  The Crop Estimation project aims to provide accurate data and the status of the productivity of Sugarcane in the Philippines. The SRA YESS or Yield Estimation System for Sugarcane project under the Crop Estimation has been created to support this aim. The YESS has been processing remotely-sensed maps, gathers field data or validation, and many other activities has been conducted that is beneficial to the sugarcane industry.

And the following table represents the all activities the Crop Estimate team has accomplished in the year 2017.

1. Additional Digitized Sugarcane Areas

Summary of Digitized Sugarcane in 2017					
MILL DISTRICT	AREA FROM DISTRICT OFFICE	NO. OF LOTS	TOTAL DIGITIZED AREA 2016	ADDT'L DIGITIZED 2017	TOTAL DIGITIZED AREA
SAGAY DANAO - LOPEZ	30183.00	29,599	24,711.90	201.77	24,913.67
VICTORIAS	31166.00	23,306	31,334.69	1,051.45	32,386.14
SAN CARLOS	11193.78	15,148	12,017.30	223.46	12,240.76
LA CARLOTA-MAAO	29434.66	32,695	30,844.14	1,018.55	31,862.69
BACMUR FFHC	21000.00	22,351	25,514.66	1,187.19	26,701.85
HPCO	13470.00	10,595	16,018.39	1,337.03	17,355.42
SONEDCO-DACONGCOGON	23110.00	70,300	18,352.78	2,207.37	20,560.15
BAIS - URSUMCO	26836.17	69,104	24,228.78	307.37	24,536.15
TOLONG	9965.00	25,405	18,941.40	760.59	19,701.98
BISCOM	30278.43	33,018	25,202.27	1,951.02	27,153.30
PASSI SANTOS LOPEZ	18936.00	43,196	31,995.16	81.41	32,076.56
CAPIZ MONOMER	10775.39	12,048	10,433.08	563.95	10,997.03
BOGO -MEDELLIN	6500.00	4,245	6,614.67	585.10	7,199.77
ORMOC	6258.00	3,238	6,443.22	521.51	6,964.73
				11,997.77	
The total area for additional digitized for Visayas is 11,997.77 hectares.					

The YESS Team has digitized 11,997.77 hectares for the 14 Mill Districts in 2017. (Refer to the table 1.1) It is in addition to the area of sugarcane digitized in the year 2016 and still for validation.

2. AUTOMATIC WEATHER STATION

26 units installed to 14 Mill Districts

LIST OF AWS INSTALLED

Visayas	
ORMOC	Hisumco Compound, Kananga, Leyte
ILOILO	Barotoc Nuevo, Iloilo
ILOILO	Iloilo MDDC Compound, Passi City
LOPEZ	Lopez Mill District MDDC
SAGAY	Sagay Mill District
BOGO	Bogo-Medellin MDDC, Bogo, Cebu
BISCOM	Binalbagan, Negros Occ.
BISCOM	Himamaylan, Negros Occ.
BISCOM	Isabela, Negross Occ.
CAPIZ	Sigma, Capiz
FIRST FARMER BACOLOD-MURCIA	Vista Allegre, Bacolod City
MA-AO	Ma-ao Mill District
SONEDCO-DACONGCOGON	CPSU, Kabankalan City
TOLONG	Urc Compound, Bayawan City,
LA CARLOTA	Motorpool, La Castellana LGU
LA CARLOTA	La Carlota MDDC
VICTORIAS	Philsurin/Victorias MDDC
VICTORIAS	Had. Candelaria, Victorias City
VICTORIAS	Had. Luisita, Cadiz City
SAGAY	Option Muscovado Mill, Poblacion II, Sagay
LOPEZ	Lopez Transloading,Crossing Vito, Sagay
SAN CARLOS	Rampuco Block Farm, Canlaon City

CAPIZ	CSU, President Roxas, Capiz
SONEDCO	Kabankalan, Negros Occ.
ORMOC	Quezon Jr, Ormoc City
ORMOC	Lemon,Capookan, Leyte

3. SAMPLE FARMS

SUMMARY OF VALIDATED SAMPLING SITES 2017			
MILL DISTRICT	NO OF SAMPLE FARMS 2017		TOTAL
	JANUARY	FEBRUARY	
BACMUR	64	56	120
TOLONG	60	33	93
BOGO-MEDELLIN	80	53	133
SAN CARLOS	25	22	47
ORMOC	35	36	71
HPCO	26	21	47
BISCOM	65	60	125
SAGAY DANAO - LOPEZ	55	0	55
CAPIZ MONOMER	72	9	81
SONEDCO -DACONGCOGON	65	57	122
ILOILO	39	0	39
LA CARLOTA - MAAO	70	66	136
VICTORIAS	13	0	13
BAIS	41	0	41
	710	413	1123

Hired 14 Field Surveyors to do sampling sites validation and they have gathered 1,123 sampling sites total for the month of January until February 2017.

4. FARM SURVEYORS

SURVEYORS	DECEMBER 1-31, 2017	
	VALIDATED	OTHER CROPS
LOPEZ, RAFFY L.	132.1	
BUAYABAN, KEN A.	83.63	
GARCILLAN, JOEMAR B.	84.9	
GAWAN, JEOFREY G.	77.75	
GEOLINGO, LEONARD G.	80.15	
LASARA, RAYMART B.	82.6	
SANOPAO, JOMEL M.	75.15	
VILLAVICENCIO, EDDIE Q.	83.9	
TOTAL	700.18	

In December, 8 Farm Surveyors were hired again to do the sugarcane farm validation at Iloilo Mill District and 700.18 hectares were already validated. They were to validate the remaining sugarcane fields in Panay Mill District.

5. YIELD MAPS

- YIELD MAPS IN 2017
  88 available and process per MILL DISTRICT
- SOIL SERIES MAP 2017
  14 maps available per Mill District
- SOIL TEXTURE MAP 2017
  14 maps available per Mill District
- SOIL EROSION MAP 2017
  14 maps available per Mill District
- SLOPE MAP 2017
  14 maps available per Mill District
- ELEVATIONMAP 2017
  14 maps available per Mill District

➢ ***Retooling and skills enhancement training for Junior Agriculturist, Mill District Officer and Technical staff.***

On February 13-17, 2017, Extension Workers participated in the YESS Training at SRA LAREC, Pampanga and was attended by 2 Junior Agriculturists and 6 Mill District Officers. A Crop Modelling Training in partnership with Japan International Research Center for Agricultural Sciences (JIRCAS) was conducted last October 24-26, 2017 and was attended by Researchers and Extension Workers from RD & E Visayas.

Updating of new technologies to enhance their skills and capability as extension workers. Assessing their actual accomplishments for rating and recommendations.

➢ ***Development of Databank and File Management System***

The Databank & File Management system incorporates all the data of the block farm from documents and the entire profile of the members and its area being enrolled. Every block farm has its own specific page wherein all the data being submitted to the office are manually encoded and uploaded to the program for future use.

To date, the soil analysis report is still updating for the purpose of monitoring the status and fertility of the soil if the soil rehabilitation program of the SIDA Block Farming Project contributed on making the yield of the sugarcane increase. The program is running on local network and still updating for other functions that may be applicable to the program in the future.

➢ ***Technical Development and Training Unit***

The Technical Development and Training Unit is directly under the Extension Services. The unit is tasked to plan, implement and coordinate all trainings and packaging of matured technologies of RDE. TDTU also coordinated the sugarcane related trainings of SRA, LGAREC. It also caters the On the Job Trainings and Summer Farm Practice of the students coming from various Agricultural schools in the region. It also accommodates visitors and field trips from the Academe, GOs, NGOs and private individuals and institutions. In addition the following are the TDTU accomplishment for this year:

- Facilitated/conducted three (3) batches of 3-day live-in OPSI Sugarcane Farm Management Training with 102 participants.
- Assisted in the conduct of OPSI on Wheels in:
  - MDDC, BISCOM Mill District with 80 participants
  - Ormoc, Lopez and Sagay Mill Districts with 412 participant.
- Assisted in the conduct of SRA-TESDA Capability Building for TESDA National Lead Assessors and MDOs from Luzon, Visayas and Panay with 50 participants.
- Facilitated and conducted of (2) batches of On-the-Job Training for: 4 Agricultural Engineering and 41 Sugar Technology students from Central Philippines State University (CPSU-Kabankalan City) and 1 batch of Summer Farm Practice for Agricultural students from; La Carlota City College; University of Negros Occidental Recoletos; Central

Philippine University (Iloilo); Capiz State University (CAPSU-Dumarao); Northern Iloilo Polythechnic State College (NIPSC) with 93 students.

- Delivered lectures during the conduct of trainings for the following:
  - 3-day live-in OPSI Sugarcane Farm Management trainings in SRA, LGAREC
  - OPSI on wheels in various mill districts
  - On the Job Trainings and Summer Farm Practice for Agriculture/ Agricultural Engineering and Sugar Technology students coming from various Agricultural Schools in the region.
  - Delivered lecture related to Sugarcane production and SIDA Block Farm as per invitation of the clientele during Assembly and Technical Fora in the Region.
- Facilitated the reproduction of the following Informative materials:

  OSI Sugarcane Production Manual:
  - 200 copies English Manual
  - 2,000 copies Ilonggo (Talamdan sa Pagpanguma Sang Tubo

  OPSI Komiks : 1,000 copies – Ilonggo and 1,000 copies Cebuano Komiks
  - 7,025 copies of various Brochures, Leaflets and Variety Gallery Booklet
  - Reproduction of various government forms - 15,000 copies

- SRA Balay OPSI catered 2,500 attendees while the OPSI Dormitory accommodated 500 guest in 20 different occasions throughout the year.
- Facilitated the set-up/putting up of SRA Booth and exhibit materials as per invitation from various Agricultural Fair in the nearby locality. And entertained visitors about the queries related to sugarcane farming in order to increase sugarcane production. Distributed various Informative materials and sugarcane planting materials (Micro plantlets and cane points if available).

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INTERNAL AUDIT DEPARTMENT

For CY 2017, the Internal Audit Department came in strong in supporting the mission and vision of SRA aligned with the agency's strategic priorities.

I. TECHNICAL ASSISTANCE/ SUPPORT TO THE SUGAR BOARD

1. Compliance of SRA to various regulatory requirements by government institutions such as the GCG, GPPB, COA, DBM,CSC

a) Government Quality Management Committee (GQMC) and IATF on SRA compliance to GCG requirement on agency implementation/establishment of Quality Management System (QMS)
b) Complied with the submission to DBM/GQMC the certified true copy of the SRA ISO Certificate 9001:2008 QMS (submitted on June 2017-6 month earlier prior to deadline – December 2017)
c) Posting of SRA ISO Certificate 9001:2008 QMS to SRA Official Website/ Transparency Seal in coordination with MIS
d) Complied and responded to COA Agency Level Control Checklist for audit year 2017 applicable to IAD
e) Submission to the requirements of Performance Evaluation System (PES) for 2018 based on IAD target indicators and measures

2. Policy Review / Enforcement of Regulatory Rules and other relevant technical assistance to Top Management

a) IAD position on Excise Tax on Sugar Sweetened Beverages (SBBs)

Issued position paper on Excise Tax on Sugar Sweetened Beverages (SBBs) in coordination with Regulation Department. Presented the Pros and Cons on the tax imposition and

highlighted three (3) key points to consider (tax rate, basis of tax rate and Fund/tax allocation) as part of IAD policy review.

b) Proposed Sugarcane Industry Plan for the Municipality of Northern Samar

Provided inputs in the finalization of proposal for the establishment of Sugarcane Industry in the Municipality of Northern Samar. In this endeavour, SRA is not only concerned to increase yield in production, but also with exploring the new or additional production area to sustain cane supply for new mill district. Thus, the request of the Municipality of San Roque, Northern Samar is a welcome development as SRA will not only able to comply with its mandate, but as well open new doors for livelihood opportunities to the emerging sugar communities.

c) Manual of Rules and Procedures on the Regulation of the High Fructose Corn Syrup and Pure/Crystalline Fructose (Imported)

Proposed scheme for allocating fructose per licensed consignee/importer through IAD drafted Manual of Rules and Procedures on the Regulation of the High Fructose Corn Syrup (HFCS) and Pure/Crystalline Fructose in coordination with Regulation Department. The drafted manual aims to be a handy reference material for management's decision making and serves as guide for stakeholders/importers on their fructose transactions with SRA and Bureau Of Custom (BOC).

d) Draft of Systems and Procedures for Regulation of Locally Produced the High Fructose Corn Syrup (HFCS)

e) Review Committee Head for the SRA Book of Penalties

IAD Manager acted as the Review Committee Head for the SRA Book of Penalties which spearheaded the conduct of review of the existing SRA Book of Penalties to conform with the existing regulatory issuances of SRA and recommends to the Sugar Board for any amendments and revisions in the previous regulatory policies and issuances.

f) Proposal to Lift SRA's Moratorium on the Approval of Application for Registration as Molasses-based Bioethanol Producer

The proposal provided an analyses depicting the reversal in trends in production and prices of molasses. In general, the production and price of molasses are directly associated with the level of sugar production and sugar prices. Thus, recommending to lift SRA's Moratorium on the approval of application for registration as molasses-based bioethanol producer.

g) SRA Merit Selection Plan (MSP)

As member of the SRA Merit Selection Plan Committee, IAD assisted the committee in the conduct of review and drafting of 2017 SRA Merit Selection Plan in accordance with pertinent CSC provision and other related rules and regulations.

h) Gender And Development (GAD)

IAD as member of the Technical Working Group (TWG) for the SRA Gender And Development (GAD) will assist SRA in the review and monitoring of GAD related activities.

i) SRA Placement Committee

Appointed by the Administrator as one of the members of the SRA Placement. The following activities were undertaken:

1. Prepared progress reports on the implementation of SRA Organizational Strengthening endorsed to Top Management and to the Secretary of Department of Agriculture

2. Series of meetings attended as part of the selection processes and placement of personnel

j) Assisted the Top Management by providing opinion and comments on the Application of some Sugar Mills/entities for their Board Of Investment (BOI) registrations under the Investment Priorities Plan (IPP)

k) Validation Report on SUDEMUPCO Remittance on loan deduction by SRA due the cooperative

A validation report was issued by IAD, providing recommendation on the legal opinion on the request of SUDEMUPCO for the remittance of loan deduction by SRA due the cooperative.

3. Signs and approves licenses, certificates and clearances and other related documents duly processed and issued the by Regulation Department (per SRA AO no.1, s. of 2017). A total of 1,269 licenses/certificates and clearances were approved and signed.

II. ESTABLISHMENT, IMPLEMENTATION AND MAINTAINING OF A QUALITY MANAGEMENT SYSTEM (QMS) ALIGNED WITH ISO 9001:2008 STANDARDS

As the over-all project coordinator/implementing department of the established SRA QMS, IAD spearheaded the accomplishment of the following activities to ensure the continual implementation of a Quality Management System within the organization:

- **Designation of the following Officers and Employees of Internal Audit Department :**
  - ⇒ Manager III of IAD as Quality Management Representative
  - ⇒ Internal Auditor II as Document Controller
  - ⇒ Four (4) of the Internal Auditors are SRA QMS IQA Auditors
  - ⇒ Internal Auditor III as coordinator and facilitator of various QMS Related Activities

Results/Accomplishments:

- Ensured that established SRA QMS are maintained, implemented, objectives and goals are monitored, evaluated and measured by all Department Managers and Process Owners for effectiveness.
  1. Summarized and analyzed result of Department Monthly Process Performance Report
  2. Consolidated SRA-QMS Monthly Process Performance Report (January-December 2017)
  3. Submission of SRA QMS Process Performance Report to Administrator/Deputy Administrator/QMR
  4. Compliance to the submission of SRA-QMS Monthly Process Performance Report
- Ensured that documents and records required by the QMS are controlled following the requirement of ISO 9001:2008.
- Updated manuals /processed controlled document for revisions and approval-earlier/within required timeframe
- Coordinate with process owners for all related changes, revision and document updating
- Conducted Internal Quality Audit Activities during IQA (April 2017/November 2017); provided findings and recommendation on the result of the audit for assigned areas with identified non-conformities and needing improvements.

- **1st and 2nd SRA QMS Management Review Meeting**

  - Organized and facilitated the conduct of 1st and 2nd SRA QMS Management Review Meetings for 2017 scheduled last July 14, 2017 and December 18, 2017 respectively, attended by SRA Top Management, Department Heads, Process Owners, Internal Quality Auditors and Compliance Officers.
  - The SRA QMS Management Review serves as venue for the organization to review and evaluate the effectiveness of SRA established Management System and ensure that all levels of management, affecting the management system, are made aware of

the changes, revision and updates and further discuss the opportunities that would improvement the services and operations of all concerned areas.

❖ **1ST Surveillance Audit of TUV Rheinland Philippines– February 2017**

- Facilitated and organized the QMS audit engagement and activities with the Certifying Body-TUV Rheinland Philippines (schedule & compliance to documentary requirements) pertaining to the conduct of 1st Surveillance Audit involving review of system documentation and process implementation covered by the scope of audit. Communicated with the Process Owners all relevant information needed for compliance to ensure that the implementation of QMS are in accordance with the requirements of ISO 9001:2008 standards in preparation prior to the actual conduct of 1st surveillance by TUV Rheinland.
- Approved and accepted the Corrective Actions & Root Cause Analysis Report submitted by SRA in response to the identified Non-conformities by TUV Rheinland Philippines in the process area of AFD. IAD reviewed the CA/RCA prepared by concerned Process Owner prior to submission.
- Audit Result: Passed the Surveillance Audit
- SRA being compliant to ISO 9001:2008 requirements has maintained the ISO Certificate as confirmed by TUV Rheinland Philippines covering scope for the Provision of Services for Sugar Industry-Planning and Policy Formulation, Regulatory Services, Research Development and Extension Services with the validity from April 24, 2016 until September 19, 2018.

❖ **Transitioning of SRA Current Quality Management System to ISO 9001:2015 Standards**

In response to the latest version of ISO 9001:2015, SRA commits to continually bring forth service quality, client satisfaction and improvement in its operations. Through IAD, QMS transition initiatives were already initiated to ensure that all activities for the SRA QMS migration are already in place by 1st semester of 2018. The IAD were able to seek approval from the Top Management for the budget, target timeline of QMS activities from Term of References (TOR) for procurement/hiring of management consultancy firm for series of trainings and tentative training schedules. IAD initiated for the approval of the SRA deferment request of surveillance upgrade audit to TUV Rheinland Philippines from February 2018 to July 2018.

❖ **Consolidated monthly performance reports and Measurement, Analysis and Improvements (MAI) status of all Process Areas/ Departments**

Processed, reviewed and consolidated the process performance of each department and interpreting the result thereof for top management review.

❖ **Processed Customer Satisfaction Survey for 2017 (Internal)**

Processed customer feedback forms from both external and internal clients. An over-all VERY SATISFACTORY rating result for CY 2017 was recorded. Result of Internal CS Survey was communicated to all level of management. Details were as follows:

Period	Total No. of Respondents	Rating	Remarks
1st Semester 2017	*752*	*4.69*	*VS*
2nd Semester 2017	*1,003*	*4.60*	*VS*

III. AUDIT ENGAGEMENTS

❖ **Audit of Supplies and Equipment Issuance and Utilization to SRA Officer and Employees.**

1. **Audit conducted and provided recommendations in achieving the following objectives**:

- Reviewed and assessed the control effectiveness and operational efficiency on the issuance and utilization of supplies and equipment
- Determined the degree of compliance with the established policies, systems and procedures
- Determined whether Internal Controls are in place to monitor the fundamental nature of issued equipment.
- Audit execution/exit conference and report consolidation
- Audit Findings and Recommendations issued: preventive and corrective actions for operational deficiency
- Issued audit rejoinder as basis in monitoring the compliance of concerned areas on action plans.
- Submission of final comment/action plan by department as response to the audit result
- Final Audit Report submitted to Top Management and concerned Department.
- Memorandum issued to all Department and areas concerned reiterating IAD on the compliance to audit recommendations on issuance of supplies and equipment utilization.

2. Issued memorandum addressed to All SRA Quezon City Officers and Employees reiterated the Existing Controls on Issuances of Supplies and Equipment Utilization

Existing guidelines were reiterated and issued for ensured compliance to existing rules and regulations for strengthened SRA controls and continence covering property accountability of SRA officers and employees.

❖ **Drafted Proposal for the Audit of Custom Bonded Warehouses (CBWs)/ Food Processor Imports/Liquidations as part of the Top Management directives as the priority audit to be conducted by IAD. The audit aims to achieve the following objectives:**

1. To ensure the authenticity of declaration by the CBWs and measure the efficiency of the Regulation Department in their functional duty

2. To identify the weak areas in the enforcement of SRA regulatory policies relative to Importation and Liquidations of CBWs/Food Processors

3. To review, assess and evaluate the management controls and operational activities /established system and procedures in the enforcement of all regulatory policies covering the process/system to be audited.

❖ **Drafting of Audit Proposal for the Operations Audit of Block Farms with three (3) or more years in Operation**

IAD proposed an Operations Audit of Block Farms which have operated for at least three (3) years or more to examine how effectively this program was implemented and whether there are gaps between planned and realized outcomes. The audit shall be conducted by the IAD Audit Team in coordination with RDE and PPD personnel involved in the implementation of Block Farm Projects. The specific objectives of the audit is to determine whether the overall goals and long range objectives of Block Farm projects have been achieved according to design and plans and to establish and assess the performance and compliance of these block farms to the project initiatives.

❖ **Process/System Audit:**

a) Audit Findings/Observation- Result of Plant inspection/sugar stock inventory by SRA to CBW/Food Processor's Operation

Luzon and Mindanao based food processors were monitored prior to their application for renewal of allocation. IAD assessed and reviewed the controls and compliance of CBW/Food Processor's operations as well as observed the performance of the Regulations Officers as members of the monitoring team. Audit Report was submitted to the Top Management and

forwarded to concerned department. A total of 40 CBW/Food Processors were monitored. The following are the highlights of the findings:

- Findings: 1. Failure of BG Fruits & Nuts Mfg. Co. (Mindanao Based CBW/Food Processor) to present during the actual warehouse/plant visit the required accredited/controlled SRA Warehouse Sugar Stock Inventory Ledger for 2016. This is a recurrence of the same findings/observation from last year Plant Visit conducted

- Findings: 2. Failure to closely monitor by the LMD-Regulation Department the compliance and the status of action taken by the food processor of the prior years findings which resulted to the recurrence of the findings.

- Findings 3. No further reports or letter was shown as evidence confirming whether the justifications of the BG Fruits dated November 2, 2016 were acceptable to SRA or whether there had been recommended sanctions/penalties to these violations, if any.

- Findings 4. Despite the reported inconsistencies and failure in submission of Monthly Sugar Utilization for 2015 and late submission of Liquidation based on the SRA letter dated October 6, 2016, BG Fruits was still able to secure from SRA an approval for an allocation of 50MT in November 2016.

- There were noted and observable positive findings to the performance of some Regulation Officers assigned in the fielding monitoring during annual plant inspections and sugar stock inventory. Noted positive findings includes the familiarity of the Regulation Officers with the process and SRA policies relative to the field monitoring activities and displayed good communication approach/ skills in dealing with the clients.

b) Inspection conduct at SunWorld Industrial Group Corporation (SIGC)

Assisted the Regulation Department-Licensing and Monitoring Division in the conduct of ocular inspection of SunWorld Industrial Group Corporation (SIGC), a food manufacturing company which intends to manufacture High Fructose Corn Syrup (HFCS) upon approval by SRA. Initial recommendation by the Inspection Team is to deferred the SIGC request pending the resolution of all issues identified and absence of guidelines covering HFCS matters.

❖ **Process Audit & Review upon Instruction of Top Management: Findings, Observations and Recommendation (Documents submitted by RDE for the 40 units Automatic Weather Station AWS)**

Upon instruction and as endorsed by Top Management, IAD conducted process audit and initial review of the supporting documents and Post Inspection Report for 40 units Automatic Weather Station (AWS) submitted by RDE requesting for the payment to East Asia Company. An evaluation report was submitted highlighting the observations/findings on the following areas:

1. *Completeness of MOA executed between SRA and MDDC*
2. *Acknowledgment and confirmation on the receipt and existence of units operating in the MDDC by the SRA MDO/SRA representative and approved beneficiaries*
3. *Validation through documentary evidences (pictures/images/reports) showing generated reports as confirmation to the operational performance by the AWS installed on site.*
4. *Confirmation of property accountability for the distributed AWS equipment to identified beneficiaries/MDDCs if in accordance with existing government rules and regulation*

Result of the findings/recommendations by IAD are subject to final pre-audit and review by the Accounting Division subject to usual government accounting and auditing rules and regulations prior to payment and final settlement.

❖ **Continuing System/Process Audit Activities-Audit of SRA Liens Collection / Remittance CY 2016-2017 based on Annex A :**

The audit of SRA liens collection and remittance is a continuing activity of IAD on Annex A which summarizes the up-dated status of liens collection and remittances for the total raw and refines sugar withdrawn based on the SMS reported. Audit observations were reported to the concerned process area for consideration and review.

❖ **Process Audit & Review : Audit observation of the issued Purchase Request No. 17-02-210 dated February 23, 2017 by RDE- Luzon & Mindanao for the procurement of various fertilizers for 25 SIDA Block Farms amounting to Php 14.2M**

IAD conducted process audit/review and reported an audit findings/observations taken from the issued Purchase Request No. 17-02-210 by RDE showing incomplete information that were considered to be inconsistent with the established controls under usual government accounting and audit rules and regulations. IAD provided audit recommendation to concerned process areas in order to strengthen their controls in complying with the requirements.

❖ **Audit of Leave Credits (Total : 23 employees)**

Continuing audit of time card/leave credits of all SRA personnel to determine the correctness, validity and accuracy of claims and data presented based on the employees daily time records and the actual earned leave of employees posted on the leave credit ledgers and determine the consistency in the application of pertinent rules and regulations.

IV. CONDUCT VERIFICATION AUDITS

• Inspected supplies and materials purchased or repairs made were delivered in accordance with approved documents *Actual inspection of supplies, materials and equipment conducted, including items purchased through Petty Cash, etc. to ascertain conformance with the specifications, acceptability to end-user and reasonable cost upon request from the Property and Procurement Section/Requesting Party (End-User)*	***797*** *transactions*
• Conducted pre-repair inspection of equipment / vehicle *Conducted pre repair and post repair inspection of office equipment/laboratory equipment/vehicle and other SRA properties to determine the need and existence of the repair upon request from the Property / Transport /Requesting Party.*	***74*** *transactions*
• Reviewed RIS/PR/JR/ submitted by various offices to determine the necessity/urgency and frequency of request, as per approved Project Procurement Management Plan (PPMP) and budget division approval *Purchase Request (PRs), Job Request (JRs) and Request and Issue Slip (RIS) are reviewed to ascertain the needs/necessity of the requests upon receipt from Property/Requisitioner*	***1,389*** *transactions*

V. MONITORING AND EVALUATION ACTIVITIES

1. Continuing Monitoring of CBW/Food Processor's Operation **40** CBWs/food processors monitored

Luzon and Mindanao based food processors were monitored prior to their application for renewal of allocation. IAD assessed and reviewed the controls and compliance of CBW/Food Processor's operations as well as observed the performance of the Regulations Officers as members of the monitoring team.

2. Monitoring Activities- 2017 Annual Physical Inventory of SRA Property, Plant and Equipment (PPEs)

Perform monitoring activities as observer in the 2017 Actual/Physical Inventory of Property Plant and Equipment (PPEs) conducted by SRA. IAD assessed and observed the controls and procedure in the conduct of annual physical inventory of SRA PPEs as well as observed the performance of the concerned personnel involved in the inventory process.

VI. AS BIDS AND AWARDS COMMITTEE (BAC) SECRETARIAT

- Served as the main administrative support for the BAC
- Managed, organized and made all necessary arrangements for BAC Meetings and conferences
- Prepared minutes of meetings and resolutions of the BAC
- Managed the procurement processes involving preparation and distribution of bidding documents, posting of bid opportunities, public bidding activities and notice of awards/proceed
- Reviewed and consolidated SRA's Project Procurement Management Plan (PPMP) for CY 2017 into Annual Procurement Plan (APP) for Capital Outlay and Maintenance and Other Operating Expenses (MOOE)-for Corporate and SIDA Fund
- Preparation and Submission of Procurement Monitoring Report (inclusion on Public Bidding related transactions) and Agency Procurement Compliance and Performance Indicators (APCPI)
- Prepared BAC related communications
- Preparation of Bidding Documents and conduct of Pre-Procurement Meetings, Pre-Bid Conference and Public Bidding for the following projects :

    1. Supply and Delivery of (32) units Desktop Computers (Public Bidding Scheduled on Jan. 5, 2017)
    2. Supply and Delivery of Four (4) Units Branded 3D Laser Scanner for 3D Documentation and Surveying (Original Equipment Manufacturer –OEM Certification)(For rebidding-June 5, 2017)
    3. Various Fertilizer for 25 Block Farms (initial drafting of Bid documents)

- Assisted in the procurement activities for the following projects:
    1. Contract of Manpower Services (LAREC)
    2. Contract for the provisions of Cellular Phone Lines for FY 2018
    3. Supply and Delivery of Various Fertilizer for 25 Block Farms in Luzon and Mindanao
    4. Supply and Delivery of 17 units Fertilizer Applicator (Re-bidding)
    5. Contract of Service for the Supply of Janitorial Services CY 2018-2020
    6. Contract of Service for the Supply of Security Services CY 2018-2020
    7. Supply and Delivery of One(1) Plant Growth Cabinet (Re-bidding)
    8. Supply and Delivery of Agricultural Lime for (16) Block Farms located in Luzon and Mindanao
    9. Procurement of Services for the Conduct of SRA's Client Satisfaction Survey
    10. Supply and Delivery of (1) unit Microbalance for Allied Materials and Environmental Laboratory
    11. Supply and Delivery of Various Brand New Tractor-Driven Whole Stalk Sugarcane Harvester and Loader
    12. Supply and Delivery of Two (2) units Brand New Tractors and (1) unit Brand New Trailing Harrow
    13. Supply and Delivery of Solar Power Pump System for SRA LAREC

14. Supply and Delivery of High Pressure Irrigation Piping System for SRA LAREC
15. Supply and Delivery of Various Brand New Service Motor Vehicle
16. Supply and Delivery of Various Brand New Computers and Laptops

VII. TRAININGS ATTENDED (CAPACITY BUILDING AND PERSONNEL DEVELOPMENT)

The IAD personnel attended the following trainings:

Title	Dates	No. of IAD Personnel	Conducted by
Leadership Course on Risk Management	February 22-23, 2017	2	DA-OSEC
OPSI Training Seminar on Sugarcane Growing	March 9-10, 2017	1	SRA-RDE/LAREC
4th Forum for Heads of IAD/IAS	April 27, 2017	1	AGIA-ADB
GAD Trainings-We make change work for women	March 6-8, 2017	7	SRA-GAD
Seminar-Workshop for Internal Auditors of Department of Agriculture and its attached agencies/bureaus	May 16-19, 2017	2	DA-IAS/DSWD
Orientation in Rules on Admin. Cases in the Civil Service and Sexual Harassment	May 22, 2017	7	SRA-GAD/CSC
GST on Gender and Nutrition	July 17, 2017	7	SRA/LAREC
Basic Internal Control Concepts and Internal Auditing Principles and Practices	July 19-21, 2017/ Nov. 6-8, 2017	3	AGIA
Impact Evaluation of Projects	July 24-28, 2017	4	PSRTI
SRA MDDC SUMMIT	July 25-26, 2017	1	SRA/BACOLOD
Strategic Planning for Internal Auditors	August 9-11, 2017	3	AGIA
Risk Assessment for Internal Auditors	Aug.23-25, 2017	2	AGIA
Operations and Management Audit	Sept. 6-8, 2017	2	AGIA
Introductory course to Info System Audit	Sept. 27-29, 2017	2	AGIA
OPSI Seminar on Sugarcane Growing for SRA Personnel	Sept. 28-29, 2017	1	RDE-SRA/LAREC
SRA Budget Review of Proposed Programs and Budget for 2018-19	Oct.11-12, 2017	2	SRA QC

VIII. CLIENT SATISFACTION SURVEY PROJECT

1. SRA Client Satisfaction Survey conducted by KANTAR TNS Philippines

- The Internal Audit Department performed the following activities to attain targets:
  - Coordinated with all SRA departments/divisions to come up with the target respondents for the conduct of client satisfaction survey.
  - Conducted confirmatory market research/benchmarking to arrive at a prevailing/market cost for the project.
  - Prepared and finalized the requirement and Terms of Reference (TOR) duly approved by the Administrator for Public Bidding
  - Assisted the TWG in the post-evaluation of KANTAR TNS (as the LCRB)
  - Coordinated and communicate the implementation of the project through issuance of general memorandum addressed to stakeholders/target respondents
  - Preparation of various request/communications for meetings and other related activities in the course of project implementation (review of Questionnaire/TOR/MOA)
  - scheduling of field briefing and final report presentation by Kantar TNS to SRA.

- Kantar Philippines, Inc. (Formerly: Taylor Nelson Sofres Philippines, Inc. by virtue of approved amendments of company's SEC Registration) has accomplished 100% of the services rendered for the conduct of SRA Client Satisfaction Survey for CY 2016.
- Final Report of KANTAR TNS Philippines reveals that SRA attained an excellent mark of CSAT Score of 4.6

2. For 2017 Client Satisfaction Survey Project

- Established target respondents for the conduct of Clients Satisfaction Survey for CY 2017 through confirmation and coordination with all SRA department/division
- Prepared and finalized Term of Reference (TOR) for approval as basis for the procurement of services for the conduct of Clients Satisfaction Survey for CY 2017
- Endorsement of procurement documents to the Bids and Awards Committee (BAC) for the procurement activities and awarding of project to the winning bidder
- Ensured that the implementation and other activities related to the project were communicated to all SRA Department and all concerned stakeholders

IX. Other Activities and Intervening Activities Performed

- Preparation of budgetary requirement and project/activities of IAD for 2017 duly approved by Department Manager. This also includes PPMP (MOOE/Capital Outlay/CUS) preparation.
- Compliance to other requirements.

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LEGAL DEPARTMENT

The Legal Department serves as the consulting body of the Sugar Regulatory Administration (**SRA**) and its employees, on legal matters and issues, either official and/or personal.

The Legal Department is routinarily tasked to draft and review contracts, such as Deed of Absolute Sales, Deed of Donations, Memorandum of Agreement and the likes, executed between SRA, as represented by its Administrator or any authorized signatory, and a representative of the Lessees and other contracting parties. It is also in charge with the notarization of the said documents after signing.

It is the task of the Legal Department to conduct Administrative Investigation on all matters arising from complaints in violation of its issuances, such as sugar orders, memorandum circulars and to conduct investigations to its erring employee.

2017
Accomplishment Report
By Major Final Outputs

The legal mandate of SRA is embodied in Executive Order No. 18 dated May 28, 1986 creating the Sugar Regulatory Administration. It states that the policy of the State is to promote the growth & development of the sugar industry through greater participation of the private sector and to improve the working conditions of the laborers.

Further, Republic Act 9367 s. 2006 (Biofuels Act of 2006) mandated SRA, as member of the National Biofuels Board (NBB), to develop and implement policies supporting the Philippine Biofuels Program and ensure security of domestic sugar supply.

For the year in review, the Sugar Regulatory Administration presents its accomplishments in the following fields:

SRA POLICIES & INDUSTRY UPDATES

CIRCULARS, ADMINISTRATIVE ORDERS, POLICIES ON SUGAR ISSUED

Sugar policies are promulgated and published in the SRA website to serve as guide for industry stakeholders and researchers on industry regulations and programs. **76** major guidelines were issued.

Sugar Orders	*11*
Circular Letters	*47*
Memo Circulars	*16*
Memo Orders	*2*
Total policies issued	***76***

Information System/Database Maintained

One (1) information system, is maintained along with six (6) databases under this system.

Systems developed and maintained	
Name	**Data Base**
1. Human Resource System	*MASTER*
2. Property Inventory System	*PROP*
3. Payroll System	*PAYDBF*
4. Remittance System	*REMIT*
5. Policy Loan Certification System (PLR)	*PLR*
6. Journal of Disbursement System (JDDO)	*JDDO*
7. NGAS System	*NGAS*
8. Licensing and Registration	*LICENSE*
9. Due Cane System	*DUECANE*
10. Sugar Swapping System	*SWAPPING*
11. Sugar Loading System	*LOAD*
12. Sugar Verification System	*VERI*

ICT Facilities

There are **140** ICT facilities, in the form of desktops, being maintained by the Management Information Systems (MIS) of the Planning and Policy Department (PPD).

Website Hits

Website visits recorded as of December 2017 amounted to **60,107.** SRA's website is constantly updated to give its clients/researchers/stakeholders a comprehensive, up-to-date industry data and other relevant information.

Webpages Uploaded/Updated

Webpages uploaded numbered **705** and total updated is 166. The set target for webpages uploaded is surpassed due to additional GCG additional requirements in the Transparency Seal and Corporate Governance Scorecard. The website updates content is being manned by the MIS of PPD.

TECHNICAL SUPPORT SERVICES

VARIETY SOURCING, DEVELOPMENT, PROPAGATION AND DISTRIBUTION

- **CANEPOINTS and PLANTLETS**
  The total number of canepoints pieces distributed for this year was **16,792,080**. These canepoints came from SRA's two research stations LAREC in Pampanga and LGAREC in Negros Occidental. Aside from these stations high yielding varieties (HYVs) are also being propagated and distributed at the mill district's nurseries funded by the SRA. These HYV's had undergone series of field trials at the research stations before release for commercial use. As for the Plantlets, only LGAREC continuously propagate and distribute them.

  - ***LAREC** distributed **1,588,600** pieces.*
  - ***LGAREC** distributed **2,906,000** pieces.*
  - ***SRA funded HYV nurseries**, distributed **6,029,500** pieces.*
  - ***Plantlets** distributed were **339,380** pieces.*

- **PLANTING MATERIALS BENEFICIARIES**
  Number of farmers/planters that procured said planting materials was **181,** from the research stations and SRA funded HYV nurseries.

Source of planting materials	Number of beneficiaries
LAREC *canepoints*	34
LGAREC *canepoints*	16
Plantlets	24
LUZON/MINDANAO SRA funded HYV nurseries *canepoints*	77
VISAYAS SRA funded HVY nurseries *canepoints*	30
TOTAL	**181**

INTEGRATED PEST MANAGEMENT

BIOLOGICAL AGENTS DISTRIBUTED

For biological agents for the control of borer, the Trichogramma laboratory in LGAREC produced **30,500** strips were purchased by **68** clients. Production of *T. strips* depends on the number of requests by clients. Only LGAREC produce the Trichogramma strips.

SOIL IMPROVEMENT THROUGH PROPER FERTILIZATION

SOIL ANALYSIS

As the Soils Laboratories of SRA continuously cater to the analytical needs of sugarcane farmers, analysed **2,292** soil samples assisting **1,239** farmers/planters. A vast number of soil samples were analysed this semester due to the Block Farm Project. Soil analysis is conducted to recognize the specific needs of the soil specifically in terms of proper fertilizer application before planting.

SRA FUNDED HIGH YIELDING VARIETY NURSERIES

The objective of establishing these HYV nurseries is to give the planters/farmers easy access to laboratory and field tested, high yielding varieties for adoption to help the farmers increase their farm's productivity and income. For this semester no new nursery was established in the mill district. Maintained SRA funded nurseries are four **(4)** in Luzon/Mindanao and **four (4)** in Visayas.

LOCATION OF HYV NURSERIES	
LUZON/MINDANAO	**VISAYAS**
PENSUMIL	LOPEZ
DON PEDRO	FIRST FARMERS/BACOLOD MURCIA
DAVAO	ORMOC
COTABATO	BOGO-MEDELLIN

EXTENSION SUPPORT SERVICES

CAPABILITY BUILDING SEMINARS FOR SUGARCANE FARMERS

Training is a valuable tool in enhancing the knowledge and skills of sugarcane farmers. Improvement in farm productivity can be credited through acquiring technical knowledge in managing their crop from land preparation to harvesting/milling and ratooning. The SRA, through its Extension and Services unit of the RDE oversees the conduct of trainings for the sugarcane planters.

Over all a total of 341 trainings were conducted for Luzon/Mindanao and Visayas regions participated in by 10,321 farmers and extension workers. Trainings/seminars focused on Sugarcane Management, Farm Planning and Budgeting, and Soil Sample Collection.

SRA SCHOLARSHIP PROGRAMS

- **SRA FUNDED SCHOLARS**

SRA's Scholarship Program commenced in SY 2014-2015. With the objective of providing the industry with highly qualified technical and extension men and women through Undergraduate and Post-Graduate studies as well as specialized courses in the fields of Chemical Engineering-Sugar Technology, Agriculture, Agricultural Engineering, Chemistry and Agricultural Extension. For SY 2017-2018, SRA is supporting and sponsoring **seven (7)** scholars. Two (2) in University of the Philippines Los Baños and five (5) in Central Philippines State University, Negros Occidental.

UPLB	CPSU
Alviar, Aldrin John N.	*Cuizon, Rommel Jon L*
Lapitan, Steffanie C.	*Macainan, Iris S.*
	Melizo, Alcane G.
	Miravalles, Cris Austin T.
	Valdevieso, Rinzo D.

Earlier in the year the following SRA scholars from CPSU graduated with honors. One (1) Magna Cum Laude, one (1) Cum Laude and another Best in Thesis.

1. *Alimpuyos, Andy C.*
2. *Moreno, Maria Faith C.*
3. *Pedrosa, Ceres June L.*

- **SIDA SCHOLARSHIP**

The SIDA Act of 2015 provides that "all stakeholders in the sugarcane industry shall contribute to the development of human resource industry. Hence, the Scholarship Program under the SIDA shall include the underprivileged but deserving college and post-graduate students taking up courses in relevant fields of discipline in State Universities. It will also include scholarships for vocational courses and skills development for farmers and farm technicians and skilled workers in sugar refineries and biomass power plants."


Admin Serafica with SIDA-funded Scholars during the Capiz State University Turn over Ceremony

Thus far, there are 496 approved scholars from CHED, 336 from TESDA and 48 from SRA.

No. of CHED Scholars by Region per Mill District as of January 2018

Region	Mill Districts	No. of Scholars
II	Carsumco + Isabela (1), Cagayan	28
III	Tarlac	14
III	Pampanga	30
IV A & B/NCR	Batangas-Don Pedro + Cavite +QC	24
V	Pensumil, Bicol	26
VI	Iloilo, Panay	33
VI	Capiz, Iloilo, Panay	17
VI	San Carlos, Negros Occidental	17
VI	Victorias, Negros Occidental	12
VI	Dacong-cogon-Sonedco, Negros Occidental	55
VI	Sagay-Danao, Negros Occidental	26
VI	HPCO, Negros Occidental	11
VI	Ma-ao, Negros Occidental	12
VI	Lopez, Negros Occidental	2
VI	La Carlota, Negros Occidental	17
VI	Isabela,Negros Occidental	1
VI	Biscom, Negros Occidental	18
VI	Bacolod-Murcia, Negros Occidental	4
VII	Bogo-Medellin, Cebu	11
VII	Bais-Ursumco, Negros Oriental	2
VII	Tolong + Mabinay + Bayawan, Negros Oriental	14
VIII	Ormoc-Hideco	16
X	Bukidnon, Mindanao	48
XI	Davao	30
XII	Cotabato	29

Note: 448 for CHED scholars and 48 for SRA scholars.

No. of TESDA Scholars by Region

Region	Province	Qualification	Slot	Start of Training	End of Training	No. of Graduates	Remarks
III	PAMPANGA	Service Engine Mechanical Components (Leading to Automotive Servicing NCII)	11	7/17/2017	8/20/2017	11	
		Shielded Metal Arc Welding NC I	10	4/24/2017	6/4/2017	9	
			21			20	
III	Tarlac	Service Engine Mechanical Components (Leading to Automotive Servicing NC II)	20	7/25/2016	8/16/2016	20	
		Sercice Automotive Electrical (leading to Automotive Servicing)NC II	20	12/12/2016	1/19/2017	20	
		Shielded Metal Arc Welding (SMAW) NC I	14	12/21/2016	1/24/2017	14	
			54			54	
VI	Capiz	Service Ignition System (Leading to Automotive Servicing NC II)	24	7/31/2017	8/21/2017	22	2 Dropouts
		Service Engine Mechanical Component (Leading to Automotive Servicing NC II)	23	4/18/2017	5/21/2017	10	
		Service Engine Mechanical Component (Leading to Automotive Servicing NC II)	24	6/14/2017	8/7/2017	12	2 Dropouts
		Process Food by Sugar Concentration (Leading to Food Processing NC II)	10	4/24/2017	7/21/2017	10	
			81			54	
VII	Cebu	Shielded Metal Arc Welding NC I	15	March 27, 2017	May 9, 2017	15	Implemented. Allowance and toolkits were already distributed last September 9, 2017.
			15			15	

X	Bukidnon	Perform Diesel/Gas Engine Tune Up (Leading to Automotive Servicing NC I)	25	10-04-17	10-19-17	25	
		Service Automotive Battery (Leading to Automotive Servicing NC I)	26	10-04-17	10-14-17	26	
		Test and Repair Wiring/Lighting System Servicing (leading to Automotive Servicing NC I)	25	10-09-17	10-21-17	25	
		Perform Underchassis Preventive Maintenance (Leading to Automotive Servicing NC I)	30	10-16-17	10-26-17	30	
		Service Engine Mechanical Components (Leading to Automotive Servicing NCII)	30	11-06-17	11-18-17	30	
		Service Automotive Electrical (Leading to Automotive Servicing NC II)	30	09-04-17	10-03-17	30	
		Shielded Metal Arc Welding (SMAW) NC I	30	08-07-17	09-12-17	30	
			196			196	
		TOTAL				**339**	

SRA INITIATED BLOCK FARMS (ACCREDITED)

Block Farming is the consolidation of small farms into one large farm with an aggregate area of not less than 30 hectares with fields situated within two (2) kilometers radius in order to take advantage of the economies of scale. The activities are aligned and implemented to ensure efficient use of farm inputs (farm machineries and fertilizer). The main goal of this project is to increase farm productivity at lesser production cost.

Adm Serafica with a local sugarcane block farmer

For CY 2017 there were 45 block farms Accredited in Visayas with a total area of 1607.6889 hectares and 1,384 enrollees. For Luzon and Mindanao there were 21 block farms were accredited with a total area of 944.61 hectares and with 520 enrollees. Accredited block farms and its enrollees under the program will have a better opportunity to access interventions provided by SRA under the SIDA with the primary aim of improving productivity and efficiency of small farms that will further translate to increased cane yield and increased income.

RESEARCH AND DEVELOPMENT

PRODUCTION RELATED R&D ACTIVITIES

The Research and Laboratory Divisions of the Research, Development and Extension Departments from Luzon/Mindanao and Visayas undertakes research and development on sugarcane farming. The RDE generates, verifies and recommends effective technologies that will increase the yield and profitability of sugarcane farmers.

As of the year, LAREC and LGAREC completed a total of **38** research projects, 41 on-going researches and two (2) new laid-out projects. Title of their completed researches are as follows:

LUZON AGRICULTURAL RESEARCH CENTER COMPLETED PROJECTS (17)	
1	*Efficacy of Hyper Plus (Growth Enhancer) Foliar Fertilizer on Growth and Yield of Sugarcane*
2	*Ecological Test of Phil 2009 series*
3	*Ecological Test of*
4	*2012 Preliminary Yield Test*
5	*Screening of Phil 2010 series to Downy Mildew*
6	*Efficacy of GRO Plant Booster on the Growth and Yield of Sugarcane*
7	*Performance of Newly Released HYVs in Commercial Production*
8	*Evaluation of Selected HYVs for Early Milling at Pensumil Mill District*
9	*Evaluation of Selected HYVs for Early Milling at Carsumco Mill District*
10	*Yield performance of selected sugarcane varieties under waterlogged conditions*
11	*Performance of Variety Selections in organically fertilized soil*
12	*Effect of method of cutting and delay in planting on germination of three HYVs*
13	*Ratoon Performance of Recommended Phil 2007 series varieties.*
14	*Screening of Phil 2011 series for resistance to downy mildew*
15	*Performance of Selected HYVs in Wet Season Planting*
16	*Effect of planting density and planting pattern on cutback production of Phil 99-1793*
17	*Sugarcane production with chicken manure compost fertilization (previously entitled, "Muscovado production from compost and chemically fertilized sugarcane")*

LA GRANJA AGRICULTURAL RESEARCH CENTER COMPLETED PROJECTS (20)	
1	*Row Test, Phil 2014 Series*
2	*Smut Resistance Test 2012 Series Ratoon*
3	*Yellow Spot Resistance Test, Phil 2012 Series*
4	*Leaf Scorch Resistance Test, Phil 2012 Series*
5	*Single Seedling Plot Test, Phil 2015 Series*
6	*Response of Phil 2005-0645 to varying levels of NPK Fertilization in Guimbalaon Sandy Loam*
7	*Ratoon Performance of Phil 2003-1389, Phil 2004-0827 and Phil 2004-1011*
8	*Response of Micropropagated Plantlets to Different Soil Texture at Varying Levels of Fertilization*
9	*Yield Performance of Phil 2000, Phil 2004 and Phil 2005 series in Early and Late Planting*
10	*Vermicompost as Fertilizer Supplement for Sugarcane*
11	*Multiplication II, Phil 2013 Series*
12	*Preliminary Test Yield Test, Phil 2012 Series*
13	*Smut Resistance Trial, Phil 2014 Series (Row Test)*
14	*Ecologic Test, Phil 2009 Series*
15	*Pollination, Sowing and Seedling Care, Phil 2016 series*
16	*Multiplication I, Phil 2014 Series*

17	*Downy Mildew Resistance Test, Phil 2013 Series (Plant Cane and Ratoon)*
18	*Sugarcane Disease Garden as Source of Inocula for Resistance Trials*
19	*Mass Production of Trichogramma as a Potential Biological Control Agent against Stem Borers*
20	*Germplasm Collection, Characterization and Maintenance*

AGRICULTURAL & FISHERY REGULATION SERVICES

REGULATORY DOCUMENTS ISSUED IN ACCORDANCE WITH SRA SUGAR POLICIES

CERTIFICATES

Total certificates issued, signed and released for the year is **4,279.** A marked increase from its target was noted due to the increase in number of applications for conversion brought about by the revised policy on sugar classification.

CLEARANCES

Total clearances checked, verified and released for the year numbered **5,226**. An increase in import clearances was noted due to pre-mix clearances issued.

LICENSES

Mills and Refineries - 41 licenses were issued and released for all mills and refineries.

Registration of Bioethanol Producers - The sugarcane industry is also an important player in the production of bioethanol. From January to December 2017 there were 13 registered bioethanol producers. Of these, 10 are operating bioethanol distilleries and 6 power generating plants.

Operating Bioethanol Distilleries and Power Plants for 2017

1. Asian Alcohol Corporation (AAC)	*8. Cavite Biofuels Producers, Inc.*
2. Kooll Company, Incorporated	*9. San Carlos Bioenergy*
3. Roxol Bioenergy Corp.	*10. Universal Robina Corp.*
4. Pro-Green Agrecor, Inc.	*11. Victoria's Milling Corp.*
5. Absolut Distillers, Inc.	*12. Balayan Distillery, Inc.*
6. Green Future Innovations, Inc.	*13. Far East Alcohol*
7. Leyte Agri Corp.	-

Bioethanol Production - For the year 2017 bioethanol produced was 234,648,880 liters.

Bio-ethanol Reference Price Index for CY 2017

Monthly Average	(Php/liter)
January	*56.01*
February	*54.70*
March	*51.61*
April	*48.69*
May	*47.44*
June	*50.14*
July	*51.36*
August	*51.53**
September	*48.77*
October	*47.52*
November	*42.48*
December	*43.89*
**On the general agreement between the bioethanol producers and petroleum companies that when there's no bidding at the millsites, the price of the preceding period will be adopted.*	

SHIPPING PERMITS
For the coastwise movement of sugar, a total of **18,843** shipping permits checked, verified were issued. Breakdown of it were **18,673** permits were issued by RD Visayas and **170** permits were issued by RD Luzon/Mindanao. Increase of shipping permits was noted due to increase in volume of trans-shipped sugar.

ATTESTATIONS/VERIFICATION OF SUGAR QUEDANS
Quedan permits for raw and refined sugar, molasses storage certificates, reinstatement of homeless quedans, and Sugar Release Orders attested numbered **979,584**. Increase was due to individual issuance of molasses certificates and the effectivity of Sugar Order No. 1-B, ordering the amendment on the allocation of sugar production distribution.

ENVIRONMENTAL MONITORING OF SUGAR MILLS

Sugar mills monitored
26 mills were monitored for environmental compliance by the SRA's SAGE Teams in Luzon/Mindanao and Visayas.

Air samples analyzed
Air samples were collected by the SAGE Teams of Luzon/Mindanao and Visayas. Total number of air samples analysed by the SRA Environmental laboratories were **340**.

Wastewater samples analyzed
A total of **73** wastewater samples from sugar mills in the Luzon/Mindanao and Visayas area were collected and analysed.

All monitored sugar mills are furnished with the Environmental Monitoring Report that contains the results of the air and wastewater samplings. While certificates are issued for air and water samples analysed.

SUGAR QUALITY ASSURANCE

Product Standards implemented
There are **two (2) product standards** enforced, the Philippine National Standard for Raw Sugar ((BAFPS PNS 81:2010) and the Philippine National Standard for Refined Sugar (BAFPS PNS 82:2010).

Prepared by:
The Various Units of SRA

and

Consolidated by:
PLANNING & POLICY DEPARTMENT
CY 2017