SUGAR REGULATORY ADMINISTRATION

LA GRANJA AGRICULTURAL RESEARCH AND EXTENSION CENTER

SRA-LGAREC

2022 Annual Accomplishment Report

RESEARCH DEVELOPMENT AND EXTENSION – VISAYAS

LA GRANJA AGRICULTURAL RESEARCH AND EXTENSION CENTER

Brgy. La Granja, La Carlota City, Negros Occidental, Philippines

2022 ANNUAL ACCOMPLISHMENT REPORT

AGRICULTURAL RESEARCH DIVISION

Production Technology Crop Management Section
Variety Improvement and Pest Management Section
Soils Laboratory
Agro-Based Laboratory - Bacolod

AGRICULTURAL SUPPORT SERVICES DIVISION

Farm Services Unit
Support Services Unit
Trichogramma Laboratory

EXTENSION SERVICES DIVISION – VISAYAS

Adopt A Small Sugarcane Farming Family
Accelerated Development of Sugarcane HYV - Seed Farm Program
Capability Building of Sugarcane Farmers, Workers and SRE RDE Personnel
Technology Packaging
Beneficial Microorganisms (BMO) Production
SIDA Funded Projects

Department/Division: RD&E / Production Technology and Crop Management (PTCM)

Year: 2022

A. Program/Project: Agronomic Studies

Approved Budget: **Php: 341,000.00**

- Variety by Season of Planting
- Variety by Age of Harvest
- Variety x fertilizer
- Furrow Distance x Planting Density
- Tolerance of varieties to natural waterlogged condition
- Ratoon Performance of New HYV's
- Assessment of Selected SRA HYV's to Drought Tolerance

I. Highlights of Accomplishment

One of the mandates of the Production Technology and Crop Management (PTCM) Unit is to conduct agronomic tests on the promising varieties released by the Variety Improvement and Pest Management (VIPM) Unit of the Sugar Regulatory Administration. The yield potential of every variety is expressed by breaking barriers that limits yield. Undoubtedly, there are many factors that affect sugarcane growth and yield expression and one of the most important is the proper cultural management practices employed. Thus, several agronomic tests are being conducted every year.

Variety by Season of Planting, on the growth and yield performance of Phil 2008-1009, Phil 2009-1567, Phil 2010-0149 series planted at early, middle and late planting season, significant differences were observed among varieties in terms of stalk length and diameter. Longer stalks were observed on Phil 8013 having an average of 326.16 cm. Shortest stalks were obtained from Phil 2010-0149 having 263.62 cm. The Phil 2008-1009 got the biggest stalk having 2.84 cm while Phil 2009-1567 had the smallest with 2.26 cm.

Significant differences were observed among seasons of planting in growth parameters. Early planting got longer stalks comparable with middle planting having 333.64 cm and 320.72 cm respectively. Stalk diameter was significantly higher in early planted canes.

Variety and season of planting significantly influenced TC/Ha, LKg/TC and LKg/Ha. The variety Phil 2008-1009 got higher TC/Ha in all seasons of planting with 135.22 TC/Ha, 141.46 TC/Ha and 65.65 TC/Ha respectively. In terms of the LKg/TC, Phil 8013 had consistently higher sugar rendement in early, middle and late planting while Phil 2008-1009 had the lowest with a mean average of 1.80 LKg/TC. On sugar yield, Phil 8013 (245.72 LKg/Ha), Phil 2009-1567 (246.94 LKg/Ha) and Phil 2010-0149 (220.68 LKg/Ha) got higher LKg/Ha in early planting. Phil 8013

sustained its higher yield (400 LKg/Ha) in middle planting. All varieties were comparable in late planting season. Highest mean sugar yield (314.01 LKg/Ha) was obtained from middle planting.

Variety by Age of Harvest, on the yield performance of Phil Phil 2009-0919, Phil 2009-1567 and Phil 2010-0149 harvested at 10, 11 and 12 months after planting, Results showed that cultivars considerably varied in terms of sugarcane tonnage and sugar output, regardless of age. The maximum tonnage (109.95 TC/ha) and sugar yield (234.52 LKg/Ha) were achieved by Phil 2009-0919.

Sugar rendement varied according to harvest age and variety. The highest average LKg/TC was obtained from 12 months old cane (2.36 LKg/TC). Among the varieties, Phil 2010-0149 obtained the highest (2.38 LKg/TC) datum.

Variety by Fertilizer: treatments were consist of four levels of fertilization for each set: 0, 75, 150, and 225 kg N/Ha; 0, 75, 150, and 225 kg P2O5/Ha; and 0, 60, 120, and 180 kg K2O/Ha, respectively. Results showed that the cane and sugar yields of Phil 2009–0919 were not significantly influenced by nitrogen fertilization. Although not significant, the highest cane yield of the plant was 98.41 TC/Ha, obtained at 225 kg N/Ha. Similarly, at 225 kg N/ha, the highest sugar yield of 230.40 LKg/ha was observed. Phil 2009–0919 plant cane was not significantly influenced by varying phosphorus fertilization rates. The cane yield of the plant ranged from 86.48 to 94.27 TC/Ha, while the sugar yield ranged from 209.04 to 242.36 LKg/Ha.

As with phosphorus fertilization, potassium fertilization had no effect on Phil 2009-0919. Cane and sugar yields were comparable regardless of potassium rates. Phil 2009-0919 yielded 75.04-99.52 TC/ha and 195.23-252.00 LKg/ha. Sugar rendement (LKg/TC) in Phil 2009-0919 was unaffected by N, P, and K fertilization rates. LKg/TC of Phil 2009–0919 ranges from 2.29–2.57. The highest net benefit from nitrogen fertilization of Phil 2009-0919 grown in Guimbalaon sandy clay loam soil was obtained at 225 kg N/ha. On the other hand, Phil 2009–0919 plant cane obtained the highest net benefits from phosphorus fertilization at 0 kg P_2O_5/ha and potassium fertilization at 120 kg K_2O/ha.

Furrow Distance by Planting Density: Different furrow distance and planting density had no significant effect on sugar yield in Phil 2009-0919**.** Sugar rendement varies between 2.19 and 2.35 LKg/TC. Cane yield (TC/Ha) and sugar yield (LKg/Ha) differed significantly at different furrow distance. Significantly higher tonnage was observed on canes planted at 1.3 meter furrow distance (103.80 TC/Ha), while significantly lower tonnage was observed on 1.5 meters (89.36 TC/Ha, comparable with 1.8 meter furrow distance (78.90 TC/Ha). Sugar yield was highest at 1.3 meter furrow distance (234.63 LKg/Ha), comparable to 1.5 meter (203.66 LKg/Ha), and lowest on canes planted at wider furrow distance (179.21 LKg/Ha).

No Significant interaction was observed on furrow spacing and planting density. Based on the results of the study, Phil 2009-0919 is best suited at 1.3 meter furrow distance. Using Phil 2009-0919, planting at a wider furrow distance of 1.5 to 1.8 meters could give lower yield results.

Tolerance of varieties to natural waterlogged condition, results showed significant differences

in terms of cane tonnage when waterlogged stress was imposed at tillering stage. Phil 2011-1683, Phil 2011-0899 and Phil 2011-1121 obtained significantly higher tonnage with 115.33 TC/Ha, 100.43 TC/HA and 94.27 TC/Ha respectively. Significantly lower tonnage was observed on Phil 2011-0237 (72.99 TC/Ha).

Imposing waterlogged stress at the stalk elongation stage had a significant impact on cane tonnage. Significantly comparable tonnage were observed on Phil 2011-1683 (118.76 TC/Ha), Phil 2011-0899 (118.09 TC/Ha) and Phil 2011-0237 (103.32 TC/Ha) respectively. Phil 2011-1121 obtained significantly lowest tonnage of 75.39 TC/Ha.

The results of the study suggest that Phil 2011 series had different responses in waterlogged conditions imposed at two different growth stages. Phil 2011-1683, Phil 2011-0899 and Phil 2011-1121 can tolerate waterlogged condition when imposed at tillering stage while Phil 2011-1683, Phil 2011-0899 and Phil 2011-0217 are best suited in waterlogged condition imposed at stalk elongation stage.

Ratoon Performance of New High-Yielding Varieties: The experiment was already in its first ratoon and in the early stage of stalk elongation. Agronomic data such as number of internodes, plant height and tiller at 3 & 6 MAP (months after planting) were already consolidated and statistically analyzed. Data on cane yield, sugar rendement and sugar yield were already consolidated and will be analyzed statistically using Statistical Tool for Agricultural Research (STAR).

Assessment of Selected SRA HYV's to Drought Tolerance. This study aims to assess the resiliency of selected sugarcane high yielding varieties to drought condition. The experiment was laid out in the 4th quarter of 2021 but later abandoned due to force majeure (Typhoon Odette). The experiment will be relaid once the repair of the greenhouse is complete.

II. Best Practice/s Applied

- Standard cultural practices recommended by SRA were employed throughout the conduct of various studies.
- Use of digital and modern devices in measuring the physiological attributes of sugarcane crops under agronomic studies.
- Agronomic and harvest data gathered were examined using thorough statistical procedures.
- All agronomic studies were properly conducted according to the planned schedule of activities.
- Daily monitoring of field activities.

III. Photo Documentation

IV. Sustainability Plan

Proper coordination with the Variety Improvement and Pest Management (VIPM) and Farm Services unit that the newly released variety will be propagated immediately to ensure that the conduct of agronomic trials will not be delayed. The results of agronomic trials will be forwarded to extension services for dissemination to sugarcane industry stakeholders.

B. On-going/Program/Project: Fallowing: Its Effect on Sugarcane Yield & Economic Feasibility

Approved budget: Php 53,000.00

I. Highlights of Accomplishment

The experiment was conducted to evaluate the effect of fallowing on the yields of Phil 2006 - 1899 and Phil 99-1793 and to determine which fallowing scheme can increase yield. The experiment was already in its third ratoon, all agronomic and harvest data were consolidated and analyzed using Statistical Tool for Agricultural Research (STAR). The incorporation of mungbean as fallow-plant was imposed after the harvesting of the plant cane. Fresh and dried weight of the harvested mungbean was collected for economic analysis.

II. Best Practice/s Applied

- Standard cultural practices recommended by SRA were employed throughout the study.
- Agronomic and harvest data gathered were examined using thorough statistical procedures.
- Protocols were properly implemented according to the planned schedule of activities.
- Daily monitoring of field activities.

III. Photo Documentation



IV. Sustainability Plan

Proper observation of the research protocol will be observed throughout the study. The result will be thoroughly evaluated and disseminated to stakeholders in the sugarcane industry.

C. On-going/Program/Project: <u>Residual Effect of Miudpress on Growth & Yield of Sugarcane</u>

Approved budget: Php 53,000.00

I. Highlights of Accomplishment

II.

The study aims to integrate and re-evaluate the use of organic fertilizer (in this case, mudpress) on sugarcane productivity. This will give the farmers another approach, knowing that the resources needed in implementing such system in their fields are available within their reach. Furthermore, the researchers of this study aim to reduce the application of NPK Recommended Rate as part of avoiding the use of synthetic fertilizers thus promoting labor- and cost-intensive farming systems. The study is now in its second ratoon, agronomic and harvest data in the first ratoon were already consolidated and analyzed. Soil sampling was done at 3 and 6 MAP (months after planting) to determine the optimum nutrient uptakes of the crop. The study will be terminated after the third ratoon crop.

II. Best Practice/s Applied

- Standard cultural practices recommended by SRA were employed throughout the conduct of various studies.
- Agronomic and harvest data gathered were examined using thorough statistical procedures.
- Protocols were properly implemented according to the planned schedule of activities.
- Daily monitoring of field activities.

III. Photo Documentation

IV. Sustainability Plan

Proper observation of the research protocol will be observed throughout the study. After the completion of the study, the result will be thoroughly evaluated and will be disseminated to the

sugarcane industry stakeholders. This will help to lower their production costs due to the spiraling prices of chemical fertilizers.

D. Program/Project: Sugarcane-Rice Intercropping

Approved budget: Php 11,000.00(for harvesting)

I. Highlights of Accomplishment

The study **w**as focused on evaluating the suitability of sugarcane and upland – rice intercropping and its economic feasibility. The experiment was laid out in the 1st quarter of 2021 but abandoned 10 months later due to force majeure (severe damage by typhoon Odette).

II. Best Practice/s Applied

- Standard cultural practices recommended by SRA were employed throughout the study.
- Agronomic and harvest data gathered were examined using thorough statistical procedures.
- Protocols were properly implemented according to the planned schedule of activities.
- Daily monitoring of field activities.

III. Photo Documentation

IV. Sustainability Plan

The study should be re-laid out to properly evaluate the suitability of sugarcane-rice intercropping system. To include other crops as sugarcane intercrop so that it will be evaluated and could give additional income to sugarcane farmers.

E. Program/Project: Yield Comparison of Plantlets & One-eye Cuttings

Approved budget: Php 48,000.00

I. Highlights of Accomplishment

The experiment was conducted to determine the yield comparison of plantlets and one-eye cuttings at different levels of fertilization. The experiment was already in its first ratoon, all agronomic and harvest data were consolidated and analyzed using Statistical Tool for Agricultural Research (STAR).

II. Best Practice/s Applied

- Standard cultural practices recommended by SRA were employed throughout the study.
- Agronomic and harvest data gathered were examined using thorough statistical procedures.
- Protocols were properly implemented according to the planned schedule of activities.
- Daily monitoring of field activities.

III. Photo Documentation

IV. Sustainability Plan

Proper observation of the research protocol will be observed throughout the study. The researcher will propose a study that will make use of micropropagated plantlets and other related studies. The result will be thoroughly evaluated and disseminated to stakeholders in the sugarcane industry.

F. Program/Project: Micropropagation of SRA High Yielding Varieties
Approved budget: Php 1,630,000.00

I. Highlights of Accomplishment

- A total of 44,920 hardened micropropagated plantlets were released and distributed to 74 different recipients/mill districts.

Table 1. Micro-propagated Plantlets Distribution & Recipients

Variety	January 1 - December 31, 2022	
	Distributed (pieces)	Recipients
Phil 2010-0149	5,700	3
Phil 2006-2289	22,500	22
Phil 99-1793	11,090	19
Phil 2009-1969	4,900	27
Phil 2011-0899	400	1
Phil 2011-1683	150	1
Phil 2011-0237	180	1
Total	**44,920**	**74**

Table 2. 2022 MICROPROPAGATION PROJECT (Jan-Dec)

Variety & Month Released	Recipient	Number of Plantlets Released	Address
January			
Phil 99-1793	Jorjelyn E. Aungon	1,000	Kabankalan City, Negros Occ.
Phil 2006-2289	Jorjelyn E. Ayungon	1,000	Kabankalan City, Negros Occ.
Phil2010-0149	Jorjelyn E. Ayungon	1,000	Kabankalan City, Negros Occ.
	Total	3,000	
February			
Phil 99-1793	Lopez MDDC	4,000	Sagay City, Negros Occ.

Phil 2006-2289	Paul Azcona	7,000	Kabankalan City, Negros Occ.
Phil 2006-2289	Exequiel Marañon	3,000	Brgy. Cabahug, Cadiz City
Phil 2009-1969	Lopez MDDC	600	Sagay City, Negros Occ.
Phil 2009-0919	Lopez MDDC	400	Sagay City, Negros Occ.
Phil2010-0149	Terence Uygongco	4,000	Capiz, Iloilo
	Total	19,000	
March			
Phil 99-1793	Ariel Batuigan(PCIC)	100	Brgy II, Isabela, Negros OCC>
	Ejay Badoles	250	CPSU, Kabankalan City
Phil 2006-2289	Demi John V. Ayroso(PCIC)	100	Calinog, Iloilo
	Total	450	
April			
Phil 99-1793	CAHUFWAS Block Farm	1000	Isabela
Phil 2006-2289	Clarence Ortiz	5000	Himamaylan
Phil 2010-0149	Jocelyn Noble	700	Hinigaran
	Total	6700	
May			
Phil 99-1793	CMU	1000	Bukidnon
Phil 99-1793	United Ilijan Block Farm	650	Bago City
Phil 2011-1683/0237	PTCM (SRA-LGAREC)	330	SRA-LGAREC
	Total	1980	
June			
	NO RECIPIENTS		
July			
	NO RECIPIENTS		
August			
Phil 99-1793	PHILSUTECH Participants(12)	1,040	Bacolod
Phil 2006-2289	PHILSUTECH Participants(15)	1,950	Bacolod
Phil 2009-1969	PHILSUTECH Participants(23)	1,300	Bacolod
	Total	4,290	
September			
Phil 99-1793	Sheryl Guillen	750	Kabankalan City
Phil 2006-2289	Sheryl Guillen	250	Kabankalan City
	Total	1000	

October			
Phil 2009-1969	Dax Manayon	500	Isabela
Phil 99-1793	Dax Manayon	500	Isabela
Phil 2006-2289	Stanley Lucasan	3000	Kabankalan City
	Total	4,000	
November			
Phil 99-1793	Jocelyn Tupas	800	Isabela
Phil 2006-2289	Jocelyn Tupas	1,200	Isabela
	Total	2,000	
December			
Phil 2009-1969	Ma. Rodelia Evelyn Espiritu	2000	Dumaguete City
Phil 2009-1969	Avelino Dingson	500	Binalbagan
	Total	2500	
GRAND TOTAL		**44,920**	

II. Best Practice/s Applied

- Standard laboratory practices recommended by SRA were employed in the entire duration of the project.
- Proper implementation of protocols on sterilization of explants, glassware and media as well as decontamination of used culture media.
- Adapting proper nursery management to reduce the mortality rate during potting out, hardening and transplanting of sugarcane seedlings.
- Proper disposal of used plastic bags and diseased plantlets to avoid harboring of pest and diseased/pathogens.
- Roguing of defective or diseased parts/plantlets

III. Photo Documentation

IV. Sustainability Plan

The sugarcane industry stakeholders will be able to avail the planting materials of newly released varieties of SRA through micropropagation technology. The distribution of plantlets should be properly planned, with a focus on small-scale sugarcane farmers.

G. Program/Project: Beneficial Microorganism (BMO) Mass Production

Approved budget: Php 430,568.00

I. Highlights of Accomplishment

A total of 16,454.02 gallons were produced and distributed to 246 beneficiaries at different mill districts. The highest distribution was recorded in La Carlota Mill District with a total of 5, 830.93 gallons.

Table 3. BMO Distribution per Mill District

MILL DISTRICT	January - December 2022	
	Volume	No. of Beneficiaries
La Carlota	5,830.93	110
Biscom	4,818.13	43
Kabankalan	722.57	12
Bacolod Murcia	705.42	8
AHSSI-HPCO-Silay-Talisay	565.32	21
Victorias	1,010.85	15
Lopez	290.61	6
Sagay-Danao	227.21	8
San Carlos	496.69	5
Bais-Ursumco	31.70	5
Bogo/Ormoc	840.16	4
Batangas MDDC/SRA-LAREC	211.36	1
Davao	158.82	4
SRA-BUSCO, BUKIDNON	375.16	2
PANAY/CAPIZ/PASSI	169.09	2
TOTAL	**16,454.02**	**246**

Table 4. Beneficial Micro-organism(BMO) Distribution (Jan-Dec)

Name of Recipients	Address	Number of Gallons
1.Beverly M. Mañara	Brgy. Alegria, Murcia	1.58
2.Ben Sombilona	Hda.Bucruz, La Carlota City	79.26
3.Nicolas Kramer	Hda. España, Isabela, Negroa Occ.	163.8
4. Marcos Escalante	Hda. Lourdes Manapla	52.84
5. John Kenneth Fernandez	Bago City	42.27
6. Francisco Manalo	Hda. Agho, La Castellana	42.27
7. Carlos Dormido Jr.	Ma-ao, Bago City	15.85
8. Benjamin Duran	La Castellana	63.40

9. Meil Gargar	Brgy. Cabahug, Cadiz City	137.38
10. Eric Montinola	Hda. Alicante, Isabela, Negroa Occ.	52.84
11. Alfredo Barcelona	Escalante City	52.84
Total		**704.33**
February		
1. BASFA Block Farm	Calatrava	105.68
2. Parick Zayco	Ma-ao, Bago City	68.69
3. Farm Services	SRA, LGAREC	26.41
4. Phillip Gary Balandra	Pontevedra	31.7
5. Carlo Magno	San Enrique, Negros Occ.	21.14
6. Joey Ledesma	(AHSSI), E.B. Magalona, Negros Occ.	52.84
7. Raymond Montinola	AHSSI, Silay City	26.42
8. MMDFA Block Farm(Regie V. Duran)	Calatrava, Negros Occ.	132.1
9. Dino Gutierez	Kabankalan City, Negros Occ.	190.22
10.Ricardo Garcia (Canes and Stables)	Ayungon, La Carlota	190.22
11. BACHFAS Block Farm	Brgy, Cansalungon, Isabela, Negros Occ.	132.1
12. Meil Gargar	Brgy. Cabahug, Cadiz City	184.97
Total		**1,162.49**
March		
1. Rose Marie Guanzon	Hda. Corazon, Antipolo, Pontevedra	22.19
2. Eric Montinola	Hda. Alicante, Isabela, Negroa Occ.	211.36
3. Capiz Sugar Central, Inc.	President Roxas, Capiz City	42.27
4.Hiyang Hiyang Block Farm	Talisay City, Negros Occ.	42.27
5.BACHFA Block Farm	Isabela. Negros Occ.	68.69
6.BAFA Block Farm	Talisay City, Negros Occ.	79.26
7.Bogo/Ormoc MDDC	Leyte,	105.68
8. Adopt a Small Sugarcane Farm	Brgy. Inolingan, Moises Padilla	73.97
9.Nilo Dingcong	Miranda,Pontevedra	26.42
10.Vicente Baladhay	Brgy. Sag ang, Canlaon 2, La Castellana	31.7
11.Alfredo Barcelona	Escalante City	52.84
12. Helen Tranpanco	Sitio Bugkos, La Granja, La Carlota City	10.56
13. Sagay Sugar Central(Patricia Cooper)	Sagay City	10.56

14. Nick Kramer	Hda. España, Isabela, Negroa Occ.	105.68
15. Sheila Ordinario	San Carlos MDDC, San Carlos City	52.84
16. Francisco Dueñas	Brgy. Nagasi, La Carlota City	15.85
17. CALIFA Block Farm	Brgy. Sag ang, La Castellana	79.26
18. Violeta Integrated Farmers Asso.	Hda. Violeta, Kapitan Ramon, Silay City	10.56
19. Jann Carlo Bustamante	Brgy. Mabini, Pontevedra	10.56
20. Joselito Fuentes	Sagay City	52.84
21. Eduardo Deocadez	Victorias MDDC, Victorias City	14.8
22. Sheila Paltiguera	Hda. Carmel, Brgy. Magsaysay, Cadiz City	31.7
23. Jose Huelar	RHI, San Carlos City	5.28
24. Pamela Lintoco	Hda. De Fuego 2, Brgy. Bagtic Silay City	5.28
Total		**1,162.42**
April		
1. Lolita Dayo	Bago City	28.00
2. Emilda Aculit	Bago City	28.00
3. Joerie Granflor	Bago City	28.00
4. BISCFA	Moises Padilla	184.94
5. Batangas MDDC	Batangas	105.68
6. SRA LAREC	SRA LGAREC	52.84
7. CAHUFWAS Block Farm	Isabela	211.36
8. Meil Gargar	Cadiz City	137.38
9. Farm Services	SRA LGAREC	15.85
10.Sorayda Gidayawan	Silay City	10.56
11. BUSCO	Bukidnon	158.52
12. SRA Busco Bukidnon	Bukidnon	5.28
13. Davao MDDC	Davao	158.82
14. Efraim Alayon	Bukidnon	52.84
15. Crystal Sugar Company	Maramag Bukidnon	158.52
16. Grix Rafols	La Carlota City	15.85
17. Hda. San Jose II workers ass.	Silay City	10.57
Total		**1,362.71**
May		
1. Carlos Dormido Jr.	Ma-ao, Bago City	21.14
2. Janet Alayon	Silay City	10.56
3. Ormoc MDDC	Ormoc City	52.84
4. HISUMCO	Ormoc City	475.56
5. Montelo Farmer's Ass'n	Pinggot, Ilog	52.84
6. Razel Nobleza	Silay City	10.56
7. Eric Montinola	Isabela	121.53

8. Jean Beunaventura	Bago City	52.84
9. Jerr Alvarez	Bago City	52.84
10. Errol Gatumbato	Kabankalan City	63.40
11. Joseph Vincent Acuña	Bacolod City	158.52
12. Daniel Diamante	La Castellana	52.84
13. Lucille Sy	Pontevedra	26.42
14. Marilou Montano	Talisay City	10.57
15. Alfredo Barcelona	Escalante	52.84
16. Virgilio Gasacao	Kabankalan City	52.84
17. Freddie Alvarez	Bago City	26.42
18. Errol Himalay	Bago City	26.42
19. Armando Suriaga	Bago City	26.42
20. Mario De Los Reyes	Ma-ao, Bago City	26.42
21. Florencia Blanca	Ma-ao, Bago City	26.42
22. Maricel Dequiña	Bago City	26.42
23. Benjie Salvador	Ma-ao, Bago City	26.42
24. NAJABA Block Farm	Bago City	52.84
25. Ma. Leni Etorma	Bago City	26.42
26. DSPA Block Farm	Hinigaran	105.68
27. Nilda Kagakit	Ma-ao, Bago City	26.42
28. Progreso Agrarian Reform Coop.	Silay City	10.57
Total		**1,727.85**
June		
1. Mary Grace Mana-ay	Bago City	26.42
2. Lea Dohinog	Bago City	26.42
3. Rene Verdad	La Carlota City	52.84
4. Dione Abaday	Pontevedra	52.84
5. Ormoc MDDC	Leyte	52.84
6. Arnaldo Castillo	Talisay	10.56
7. Biscom	Binalbagan	10.56
8. Lougil Estember	Pontevedra	105.68
9. Meil Gargar	Cadiz	10.56
10. Ferdinand Emmanuel Gayoles	Bago	52.84
11. Grix Rafols	La Carlota	52.84
12. Alfredo Malacapay	Kabankalan	21.14
13. Ralph Jalandoon	Pontevedra	105.68
14. Joselito Fuentes	Sagay	52.84
15. Joseildo Dayoha Sr.	Negros Oriental	26.42
16. SCBI	San Carlos/Calatrava	26.42
17. Lopez MDDC	Sagay	31.70

18. BUCFA Block Farm	Sagay	21.14
19. EARBA Block Farm	Murcia	132.10
20. CAPDI	Batangas	52.84
21. Gerry Ledesma	La Carlota	105.68
22. Nick Kramer	Negros Occidental	184.94
23. Ceasar Caduhada	Canlaon	31.70
24. Ben Rodriguez	La Carlota	52.84
25. Nestor Emmanuel Jalandoni	Neg. Occidental	96.98
26. DSPA Block Farm	Hinigaran	79.30
27. Al Montero	Hinigaran	0.32
28. Philip Gary Balandra	Pontevedra	5.28
29. DAFWARBA Block Farm	La Castellana	132.10
30. Jhon Jong	Hinigaran	79.26
31. Rafael Abello	Hinigaran	105.68
Total		**1,878.02**
July		
1. Farm Servicecs	SRA LGAREC	15.85
2. Carlos Dormido	Bago City	21.14
3. Elena Libertad	Don Salvador Benedicto	15.85
4. Joaquin Anilada	Binalbagan	26.42
5. Jonathan Salvan	Binalbagan	26.42
6. PASON Incorporated	Binalbagan	105.68
7. LABHID Farmers Ass'n	Himamaylan	158.52
8. Rene Silos	Himamaylan	105.68
9. Panay Area Block Farm	Panay	126.82
10. Camandag Rice & Sugar Farmers Ass'n,	La Castellana	105.56
11. Jose Manuel Mapa	Silay City	63.40
12. BCARBA Block Farm	Isabela	158.52
13. Daniel Hilado	Murcia	79.26
14. Normel Fajarito	Hinigaran	21.14
15. Julian Geolingo	Lopez-Sagay	121.53
16. Roberto Tiansay	Bago City	5.28
17. Joey Ledesma	E.B Magalona	68.69
Total		**1,225.76**
August		
1. Al Montero	Pontevedra	5.33
2. Meil Gargar	Cadiz	105.68
3. Marlyn Dela Cruz	Isabela, Negros Occidental	10.57
4. Rosemarie Tingal	Isabela, Negros Occidental	21.14
5. Brgy. Robles Small Farmers	La Castellana	105.68
6. Canes and Stables	La Carlota	72.26

7. Sugar Industry Foundation Inc.	Talisay, Negros Occidental	5.28
8. ISARFAWA	Antipolo, Pontevedra	105.68
9. BAARBA	Isabela, Negros Occidental	105.68
10. BAFARFA	Kabankalan City	79.26
11. Lougel Jhon Estember	La Carlota City	79.26
12. Jose A. Barros	Murcia, Negros Occidental	105.68
13. PROFABA	Payao, Binalbagan	105.68
14. Farm Services	SRA-LGAREC	15.85
15. Tagoc Agrarian Reform Coop.	Kabankalan City	42.27
16. Dave Jereza	La Carlota City	21.13
17. Jesus Daguna	Mabinay	5.28
18. TAFWA Block Farm	Hinigaran	52.84
19. Gerry Ledesma	La Carlota City	105.68
20. BAFA Block Farm	Moises Padilla	105.68
21. Saturnino Tuya Jr.	Moises Padilla	105.68
22. Fernando Manuel Larañaga	Cebu	132.10
23.Rolly Valencia	Himamaylan	42.27
24. Jose Maria Valmayor	San Carlos	105.68
25. Ferdinand Emmanuel Gayoles	Ma-ao, Bago City	15.85
26.Benjamin Duran	La Castellana	31.70
Total		**1,689.19**
September		
1. Sagay MDDC	Sagay City	15.85
2. Farm Services	SRA-LGAREC	15.85
3. CANDUMARAO Cluster Association	Hinigaran	211.36
4. Freddie Villanueva	Pontevedra	10.57
5. Farncis Milabo	Bago City	15.85
6. Carlos Dormido	Bago City	15.85
7. Grix Rafols	La Carlota	58.12
8. Josie Barros	Murcia	105.68
9. Isidro Bello	Isabela	15.85
10. Bernardino Yulo	Isabela, Negros Occ.	200.79
11. Hilbert Samillano, Murcia	Murcia	10.57
12. Danilo Meguiso, La Castellana	La Castellana	10.57
13. Dahryl Albañez, Isabela	Isabela	79.26
14. Jose Maria Ledesma, Talisay	Talisay	52.84
15. SRA-Farm Services	SRA LGAREC	15.85

16. Sheryl Guillen, Kabankalan	Kabankalan City	3.96
17. Melvin Evangelista, Cadiz	Cadiz City	132.10
18. PAHURPAS Block Farm	Binalbagan	132.10
Total		**1,103.02**
October		
1. Sta. Barbara Farmers Association	Cadiz City	8.81
2. Hda.Alberto Farmers Association	Cadiz City	8.81
3. Gracia Farmers Association	Cadiz City	8.81
4. Alex Malicse	Pontevedra	15.85
5. BACFA	Isabela	132.10
6. AMHUFAS	Binalbagan	132.10
7. Payao Hugpong Farmers Assosciation	Binalbagan	132.10
8. URC-SURE	La Carlota City	15.85
9. Freddie Villamor	Pontevedra	10.57
10. Lolita Betongga	Isabela, Negros Occidental	132.10
11. Vincent Navarra	San Enrique	15.85
12. Ma. Elena Camat	Pontevedra	15.85
13. Natural Park Farmer Association	San Carlos City	52.84
14. Dr. Cesero Mesiyas	Pontevedra	26.42
15. Dharyll Albañez	Isabela, Negros Occidental	290.62
16. Dax Mansayon	Hda. Salud, Isabela	158.52
17. Vicente Baladhay Jr.	La Castellana	21.14
18. Federico Montinola	Isabela, Negros Occidental	52.84
19. John Paul Gamboa	Silay City	31.70
20. Jose Barros	Murcia	105.68
Total		**1368.56**
November		
1. La Carlota MDDC	La Carlota City	26.42
2. Lucille Sy	Pontevedra	21.14
3. Joey Ledesma	E.B Magalona	15.85
4. CPSU	Moises Padilla	31.70
5. Melanie Gepielago	Murcia	7.93
6. Randy Gane	Himamaylan	52.84
7. Glenn Ramos	Kabankalan City	105.68
8. CPSU Moises Padilla	PACOMA, Isabela	31.70
9. Jocelyn Joy Gomez	Bago City	26.42
10. Pablito Legaspi	La Castellana	13.21
11. Benjamin Loro	La Castellana	13.21

12. Sugar Industry Foundation Inc.	Talisay City	5.28
13. Darwen Vergara	Pontevedra	10.56
14. Tugas Takas ARB Association	Hinigaran	158.52
15. CPSU Moises Padilla	La Castellana	31.70
16. Jhon Jong	Hinigaran	79.26
17. Elesio Tagnia	La Castellana	528.40
18. Danilo Meguiso	La Castellana	10.56
19. Farm Services	SRA-LGAREC	57.43
20. Aoril Joy Pido	Moises Padilla	26.42
21. Fermina Swissa	Bago City	169.08
22. Francis Leo Hilario	Moises Padilla	105.68
23.Ricky Gadayan	Victorias City	13.21
24. Edgar Alamon	Kabankalan City	52.84
25. LQRIFA	Moises Padilla	158.52
26. Maria Sa-onoy	Moises Padilla	31.70
Total		**1785.26**
December		
1. Maria Sa-onoy	Moises Padilla	31.70
2. Melanie Gepielago	Bago City	10.57
3. Joey Ledesma	Silay City	31.70
4. Lopez MDDC	Cadiz City	31.70
5. Inayawan Small Sugarcane Farmer's Association	Cauayan	5.28
6. Railside	Isabela, Negros Occidental	158.52
7. Roger Espada	Hinigaran	158.52
8. Melvin Ibañez	La Carlota City	79.26
9. Farm Services	SRA-LGAREC	15.85
10. Rodelo Erbito	Sagay City	52.84
11. Palayog Farmer Worker Association	Hinigaran	163.80
12. CARBA Block Farm	Hinigaran	179.65
13. Stanley Lucasan	Kabankalan City	52.84
14. Leyte Cane Planter Association	Leyte	21.14
15. Miel Gargar	Cadiz City	132.10
16. Vland Group	La Castellana	158.94
Total		**1284.41**
GRAND TOTAL		**16454.02**

II. Best Practice/s Applied

- Standard laboratory practices recommended by SRA were employed in the entire duration of the project.
- Proper implementation of protocols on sterilization of glassware and media as well as decontamination of used culture media.
- Conducts training/demo on BMO production to different MDDC's.

III. Photo Documentation

IV. Sustainability Plan

Provision of beneficial micro-organisms(BMO) will be available, which will enhance the planter's soil conditions a nd will aid in lessening the application of inorganic fertilizers. Results of studies related to the use BMO will be disseminated to sugarcane industry stakeholders. More trainings/seminars will be conducted at different planters association and MDDC's.

H. Program/Project: PTCM Section Head Operation

Approved budget: Php 1,392,136.00

I. Highlights of Accomplishment

The Production Technology & Crop Management Unit (PTCM) is responsible in formulating and conducting researches on cultural management practices to increase and sustain productivity such as, efficiency in lime and fertilizer usage in relation to soil types climatic conditions, macro and micro nutrient elements and cost reduction practices; weed control and management and other cultural practices. Production Technology and Crop Management (PTCM) Unit is also mandated to conduct agronomic tests on the promising varieties released by the Variety Improvement and Pest Management (VIPM). In coordination with Support services, PTCM is tasked to implement the micropropagation technology that utilizes the rapid multiplication of newly released varieties of sugarcane and production/distribution of Beneficial Micro-organisms (BMO).

PTCM unit consists of four (4) technical and six (6) non-technical personnel. Technical personnel were assigned to conduct agronomic and other relevant research. They also served as resource speakers on sugarcane cultural management, miropropagation and BMO production.

The PTCM staff acted as resource speakers in the following seminars/symposiums

- Acted as resource speakers during OPSI Virtual Seminar on Methods of rapid HYVs propagation; Beneficial Micro-organism(BMO) and Sugarcane Cultural Management Practices.
- Acted as resource speakers during OPSI On-Site Seminar on Methods of rapid HYVs propagation; Beneficial Micro-organism(BMO) and Sugarcane Cultural Management Practices.
- Attended 2022 Philsutech Annual Convention.
- Attended 2022 RDE National In-House Review
- Attended 32nd WESVAARRDEC Regional Symposium on Research and Development Highlights.

II. Best Practice/s Applied

- Implementation of standard protocols in the conduct of Agronomic and other related research.
- Proper implementation of protocols in BMO and Micropropagation laboratory.
- Conducts training/demo on Micropropagation, BMO production and Sugarcane Cultural Management Practices to different MDDC's.

III. Photo Documentation

IV. Sustainability Plan

Technical personnel will continue to attend training and symposiums for research and innovation. Review the previous research and laboratory protocols to ensure that it is still on the right track. Conducts training and seminars on micropropagation, BMO and sugarcane cultural management practices for small-scale sugarcane farmers. Publishing of relevant results of agronomic trials and other research for information dissemination.

Department/Division: Research, Development and Extension- Variety Improvement and Pest Management Section

Year: 2022

A. PROGRAM/PROJECT: Pollination, Sowing and Seedling Care, Phil 2021 Series

Approved Budget: 1,063.612

I. Highlights of Accomplishment

During the 2021 breeding season, flowering of parental clones and varieties was late but of long duration with peak of full emergence observed on first week of November 2021.

Pollination work started October 19 and ended November 28, 2021, utilized 87 female and 48 male selected parents. A total of 260 arrows from 203 biparental cross combinations were pollinated. From these, 259 arrows from 203 biparental crosses were harvested.

The sowing of fuzz in 203 seed boxes from November 26 to December 12, 2021 resulted in the germination of seedlings in 203 biparental crosses consisting of 259 arrows. Medium to very good germination was observed in 33% percent of the crosses. Overcrowded seedlings in 67 parental crosses were pricked in 443 seed boxes.

Seedlings in 646 seed boxes were given proper care and management like regular watering, fertilization, spraying of insecticides and fungicides, trimming of leaves, weeding and cultivation prior to transplanting in June 2022.

Sugar Regulatory Administration's mission is "to provide Research, Development and Extension Services to ensure sufficient supply of sugarcane for a diversified, sustainable and competitive industry that improves productivity and profitability of sugarcane farmers and processing industries, and processing industries, and provides decent income for workers towards enhancing the quality of life of Filipinos." Breeding of high yielding varieties is a valuable program for the realization of the agency's mission. This project is Stage II of the SRA Sugarcane Variety Improvement Program (SVIP) which utilizes sugarcane parent materials during the pollination period and is the most critical stage in the production of future high yielding varieties of sugarcane.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)

- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Harvesting of arrows and tapping of male flowers.

IV. Sustainability Plan

Improvement of usual protocols is being implemented. The personnel involved continue to study researches and propose for projects that will ensure the parentals that will be used would be the best combinations for better seedlings, thus better, if not best varieties for release to farmers in the future. Introgression is a project that is being looked into for improvement of the genetic base of sugarcane varieties.

B. PROGRAM/PROJECT: Single Seedling Plot Test, PHIL 2020 Series

Approved Budget: 923,336

I. Highlights of Accomplishment

The 2020 hybridization work which produced a total of 66,488 seedlings from 172 bi-parental crosses were transplanted from June 16-25, 2021. From these, 41,924 seedlings from 170 bi-parental crosses survived in the field with a survival rate 63.05%.

Sugar Regulatory Administration's mission is "to provide Research, Development and Extension Services to ensure sufficient supply of sugarcane for a diversified, sustainable and competitive industry that improves productivity and profitability of sugarcane farmers and

processing industries, and processing industries, and provides decent income for workers towards enhancing the quality of life of Filipinos." Breeding of high yielding varieties is a valuable program for the realization of the agency's mission. This project is Stage III of the SVIP where seedlings from the Pollination, Sowing and Seedling Care Project are transplanted in the field, provided with proper cultural practices, and subjected to selection.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Data collection (brix reading and diameter measurement).

IV. Sustainability Plan

Seedlings produced every year for crosses performed should undergo this stage. Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This will ensure clones forwarded to the Row Test are the best among the thousands of clones planted.

C. PROGRAM/PROJECT: <u>Row Test, PHIL 2019 Series</u>

Approved Budget: 280,000

I. Highlights of Accomplishment

Row Test, Phil 2019 Series was conducted in April 2021 to March 2022 as the 4th stage of the Breeding Program of SRA-LGAREC where 927 clones were selected from the 225 bi-parental crosses in Phil 2019 Series Single Seedling Plot Test. From these, 348 clones with good agronomic characteristics based on brix reading, average tiller per stool, average diameter, weight per stalk and flowering observation were selected for the next stage of the Breeding Program, the Multiplication and Disease Screening Stage.

This is Stage IV of the SVIP where the first single-eye seed piece planting of clones selected from the Single Seedling Plot Test. Selection of promising clones is based on the agronomic and morphological characteristics as well as disease reaction of the plants. This accomplishment helps in achieving the production and development of improved sugarcane varieties that meet clients' expectations and are adapted to the ever-changing climate condition.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Field lay-out and planting

IV. Sustainability Plan

Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This will ensure clones to be forwarded to the Multiplication I are the best among the hundreds of clones planted.

D. PROGRAM/PROJECT: Multiplication I, Phil 2019 Series

Approved Budget: 141,000

I. Highlights of Accomplishment

Three hundred forty-eight Phil 2019 Series clones selected from Row Test, Phil 2019 Series were multiplied (Multiplication I) and simultaneously tested for smut. Multiplication I was laid out and planted in January 2022. Care and maintenance of sugarcane plants were done based on SRA cultural practices. One hundred eighty clones were selected for Multiplication II and Downy Mildew screening in September 2022 based on their agronomic and morphological characteristics.

This accomplishment helps in achieving the production and development of improved sugarcane varieties resistant to diseases that meet clients' expectations and are adapted to the ever-changing climate condition.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Selection of clones

IV. Sustainability Plan

Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This project will be validated in the laboratory using markers for Smut disease resistance or susceptibility.

E. PROGRAM/PROJECT: Multiplication II, Phil 2018 series

Approved Budget: 210,000

I. Highlights of Accomplishment

One hundred ninety-seven clones were selected from first Multiplication Stage of Sugarcane Variety Improvement Program based on the result of Smut Resistance Trial Phil 2018 series. Selected clones were propagated and screened in Downy Mildew Disease to evaluate the resistance of clones. Thirty clones were selected for Preliminary Yield Test and tested for Leaf Scorch, Yellow Spot Screening and Smut verification.

This accomplishment helps in achieving the production and development of improved sugarcane varieties resistant to diseases that meet clients' expectations and are adapted to the ever-changing climate condition.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time

- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Harvesting

IV. Sustainability Plan of the PAP

Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This project will be validated in the laboratory using markers for Downy Mildew disease resistance or susceptibility.

F. PROGRAM/PROJECT: <u>Preliminary Yield Test, Phil 2016 Series</u>

Approved Budget: 160,000

I. Highlights of Accomplishment

The Preliminary Yield Test of Phil 2016 series was conducted at SRA, La Granja Agricultural Research and Extension Center, La Carlota City to determine the yield and agronomic performance of sugarcane clones under representative environmental conditions and to select and recommend promising clones/varieties for ecological testing. There were 30 entries selected from Phil 2016 Series Multiplication II with Phil 8013 and VMC 86-550 as control varieties. Preliminary Yield Test is the Stage VI of the on-going Sugarcane Variety Improvement of SRA.

The yield performance of Phil 2016 series clones showed there were nine clones that stood out with high tonnage over the control variety VMC 86-550. Two clones were significantly higher in sucrose content compared to Phil 8013. Four clones were significantly higher in LKg/Ha compared to control variety VMC 86-550 while the remaining clones were statistically comparable, if not, lower to one or both controls.

Ten promising clones were selected and recommended for further evaluation in the Ecological Test namely; Phil 2016-145-1281, Phil 2016-115-1121, Phil 2016-99-0773, Phil 2016-114-1085, Phil 2016-85-0647, Phil 2016-82-0619, Phil 2016-78-0573, Phil 2016-75-0469, Phil 2016-99-0781 and Phil 2016-52-0373.

This accomplishment helps in achieving the production and development of improved sugarcane varieties resistant to diseases, high tonnage, high sucrose and high yielding that meet clients' expectations.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Data collection and putting of sample tags

IV. Sustainability Plan of the PAP

Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This project will be validated in the laboratory using markers for high sucrose and other agronomic traits once markers for such traits are established.

G. PROGRAM/PROJECT: Preliminary Yield Test, Phil 2017 Series

Approved Budget:

I. Highlights of Accomplishment

To assess the yield and agronomic performance of sugarcane clones under typical environmental conditions and to identify and suggest promising clones/varieties for ecological testing, the Preliminary Yield Test of Phil 2017 series was carried out at SRA, La Granja Agricultural Research and Extension Center, La Carlota City. With Phil 8013 and VMC 86550 serving as the control variety, 30 entries from Phil 2017 Series Multiplication II were chosen. The ongoing Sugarcane Variety Improvement of SRA is in Stage VI, the Preliminary Yield Test.

The yield performance of Phil 2017 series clones showed that there were two clones showed significantly higher in tonnage yield compared to both controls. These varieties were Phil 17-96-1743 and Phil 17-51-0951 with a tonnage mean of 101.52 TC/Ha and 108.59 TC/Ha, respectively. Eighteen (18) clones showed statistically comparable than Phil 8013 and eleven clones to control variety VMC 86-550 in sucrose content. In sugar yield, Phil 17-56-1179 was the only test clone surpassed VMC 86-550 with a mean of 221.84 LKg/Ha. Fifteen clones were statistically comparable while the rest of the clones were significantly lower to VMC 86-550.

Ten promising clones were selected and recommended for further evaluation in the Ecological Test namely; Phil 2017-59-1331, Phil 2017-64-1397, Phil 2017-54-1065, Phil 2017-34-0539, Phil 2017-56-1179, Phil 2017-124-2093, Phil 2017-106-1921, Phil 2017-96-1743, Phil 2017-43-0849 and Phil 2017-51-0951.

This accomplishment helps in achieving the production and development of improved sugarcane varieties resistant to diseases, high tonnage, high sucrose and high yielding that meet clients' expectations.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time

- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Data collection (Counting of millable stalks and measuring plant height).

IV. Sustainability Plan of the PAP

Researchers of this project make sure protocols are properly observed. Criteria for selection of clones is strictly implemented. This project will be validated in the laboratory using markers for high sucrose and other agronomic traits once markers for such traits are established.

H. PROGRAM/PROJECT: Propagation of High Yielding Varieties (HYVs)

Approved Budget:

Propagation I	-	353,792
Propagation II	-	115,000
Propagation III	-	135,000

I. Highlights of Accomplishment

*** Propagation I, PHIL 2018 Series**

Thirty promising Phil 2018 Series clones were planted and maintained in SRA-LGAREC from April 2022 to October 2022 in preparation for Propagation II. The canepoints to be

produced will be further propagated to increase number of planting materials needed for the Ecological Test in different locations nationwide.

*** Propagation II, PHIL 2017 series**

Thirty promising Phil 2017 Series clones/varieties were propagated in SRA-LGAREC from November 2021 to May 2022. These were cutbacked and the canepoints produced were further propagated to increase number of planting materials. Ratoon of these clones/varieties were also maintained and cultured to facilitate additional supply of planting materials.

*** Propagation II, PHIL 2016 Series**

Thirty promising Phil 2016 Series clones/varieties were propagated in SRA-LGAREC from November 2021 to May 2022. These were cutbacked and the canepoints produced were further propagated to increase number of planting materials. Ten of these varieties will be propagated for the Ecological Test in different locations. Ratoons of these clones/varieties were also maintained and cultured to facilitate additional supply of planting materials.

*** Propagation III, PHIL 2015 Series**

Ten selected varieties of Phil 2015 Series were planted and propagated in SRA-LGAREC from May 2021 to January 2022 as Propagation III, the source of planting materials for the National Cooperative Test/Ecological Test in different locations nationwide. These varieties were: Phil 2015-31-0095, Phil 2015-56-0445, Phil 2015-107-0943, Phil 2015-107-0953, Phil 2015-92-1083, Phil 2015-64-0631, Phil 2015-56-0433, Phil 2015-66-0675, Phil 2015-80-0821 and Phil 2015-103-0867.

*** Propagation III, PHIL 2014 Series**

Ten selected varieties of PHIL 2014 Series were planted and propagated in SRA-LGAREC from May 2021 to January 2022 as Propagation III, the source of planting materials for the National Cooperative Test/Ecological Test in different locations nationwide. These varieties were: Phil 2014-01-0013, Phil 2014-89-0727, Phil 2014-14-0085, Phil 2014-90-0747, Phil 2014-82-0679, Phil 2014-55-0417, Phil 2014-59-0451, Phil 2014-53-0405, Phil 2014-19-0125 and Phil 2014-41-0267.

This accomplishment helps in achieving the production and development of improved sugarcane varieties that meet clients' expectations and are adapted to the ever-changing climate condition. Aside from providing cane points for NCT projects, propagated clones are also utilized as male parentals in the Pollination, Sowing and Seedling Project.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Preparation of cane points (cutback).

IV. Sustainability Plan of the PAP

Researchers of this project make sure protocols are properly observed. Clones for propagation will be also screened in the laboratory. Flowering clones will be used as male parentals.

I. PROGRAM/PROJECT: <u>Smut Resistance Tests</u>

Approved Budget: 170,000

I. Highlights of Accomplishment

*** PHIL 2016 Series (PYT Stage, Plant Cane & Ratoon)**

Thirty clones were selected out of 200 clones from Multiplication II Phil 2016 series. These clones including VMC 86-550 and Phil 8839 as control variety were inoculated with smut spores to test their resistance to the disease. These were incubated for two days and planted in field in 5 meters long and replicated four times in each clone.

Collection of data was done one month after planting and bi-monthly until 6 months, same with the ratoon.

In plant cane, results showed that 13 clones were very highly resistant, 11 highly resistant, 2 resistant, 2 intermediate resistant, 1 intermediate average and 1 susceptible to the disease. While in ratoon cane, 13 were very highly resistant, 8 highly resistant, 1 resistant, 2 intermediate resistant, 4 intermediate average, 1 intermediate susceptible and 1 highly susceptible. Only resistant clones will be selected for Ecological Testing.

*** PHIL 2017 Series (PYT Stage, Plant Cane & Ratoon)**

Thirty clones were selected out of 197 clones from Multiplication II Phil 2017 series. These clones including VMC 86-550 and Phil 8839 as control variety were inoculated with smut spores to test their resistance to the disease. These were incubated for two days and planted in field in 5 meters long and replicated four times in each clone.

Collection of data was done one month after planting and bi-monthly until 6 months, same with the ratoon.

In plant cane, results showed that 30 clones were very highly resistant while in ratoon cane, 25 were very highly resistant, 3 highly resistant, 1 resistant and 1 intermediate average. Only resistant clones will be selected for Ecological Testing.

*** PHIL 2019 Series at Row Test**

Three hundred forty-eight clones and two check varieties were inoculated with smut spores to test their resistance to the disease. These clones were incubated for two days and planted in plastic bags at 20 replicates for each clone.

Collection of data was done one month after planting and bi-monthly thereafter until six months.

Results showed that 270 clones were very highly resistant, 2 highly resistant, 11 resistant, 25 intermediate resistant, 7 intermediate average, 9 intermediate susceptible, 11 susceptible, 3 highly susceptible and 10 very highly susceptible to the disease. Only resistant clones will be propagated in Multiplication II and further tested to downy disease.

Disease screening tests/trials are very important in the production of improved and better yielding varieties.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Preparation of canepoints (left) and scraping of smut inoculom (right).

IV. Sustainability Plan of the PAP

Researchers should review and improve protocols if necessary. Disease Resistance Trial results will be validated in the laboratory thru PCR (Polymerase Chain Reaction).

J. PROGRAM/PROJECT: Downy Mildew Resistance Test, PHIL 2018 Series (Plant Cane & Ratoon)

Approved Budget: 158,000

I. Highlights of Accomplishment

One hundred ninety seven selected clones of Phil 2018 series were tested against downy mildew of sugarcane. The experiment was laid-out in randomized complete block design with four replications, under La Granja conditions. VMC 86-550 was used as spreader rows, were also laid-out in between test clones to ensure natural infection. Determination of the disease rating was done by phenotypic screening. Rating of downy mildew was scored based on International Rating Scale.

In plant cane, the reactions of the test clones to the disease are as follows; six (6) clones were very highly resistant, twenty-one (21) highly resistant, seventeen (17) resistant, thirty (30) intermediate resistant, thirty-one (31) intermediate average, fourteen (14) intermediate susceptible, twenty-four (24) susceptible, seventeen (17) high susceptible and thirty-seven (37) very highly susceptible. While in ratoon cane, sixteen (16) clones were very highly resistant, ten (10) highly resistant, twenty-one (21) resistant, twenty-six (26) intermediate resistant), nineteen (19 intermediate average, twenty (20) intermediate susceptible, thirteen (13) susceptible, twenty-one (21) highly susceptible and fifty-one (51) very highly susceptible. VMC 86-550, used as spreader row consistently got a rating of 9 which is very highly susceptible. Clones with ratings 1-4 were recommended for further testing.

Disease screening tests/trials are very important in the production of improved and better yielding varieties.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Data collection (Infection count)

IV. Sustainability Plan of the PAP

Researchers should review and improve protocols if necessary. Disease Resistance Trial results will be validated in the laboratory thru PCR (Polymerase Chain Reaction).

K. PROGRAM/PROJECT: Yellow Spot Resistance Test, PHIL 2016 and 2017 Series

Approved Budget: 95,000

I. Highlights of Accomplishment

Thirty clones of the Phil 2016 series were rated for resistance to yellow spot disease. The trial was conducted from February 2021 to February 2022. Natural method of infection was employed by planting diseased clones in between 2 rows of test clones. Two (2) clones were found very highly resistant, eight (8) highly resistant, six (6) resistant, nine (9) intermediate resistant, two (2) intermediate average and three (3) susceptible to the disease.

Thirty clones of the Phil 2017 series were rated for resistance to yellow spot disease. The trial was conducted from April 2021 to April 2022. Natural method of infection was employed by planting diseased clones in between 2 rows of test clones. One (1) clone was found very highly resistant, six (6) highly resistant, eight (8) resistant, five (5) intermediate resistant, four (4) intermediate average, one (1) intermediate susceptible, three (3) susceptible and two (2) very highly susceptible to the disease.

Disease screening tests/trials are very important in the production of improved and better yielding varieties.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

IV. Sustainability Plan of the PAP

Researchers should review and improve protocols if necessary. Disease Resistance Trial results

will be validated in the laboratory thru PCR (Polymerase Chain Reaction).

L. PROGRAM/PROJECT: Leaf Scorch Resistance Test, PHIL 2016 and 2017 Series

Approved Budget: 99,000

I. Highlights of Accomplishment

Thirty clones of the Phil 2016 series were rated for resistance to leaf scorch of sugarcane. The test was conducted from February 2021 to February 2022. The method of infection employed was a combination of artificial and natural means. Disease reaction of the test clones was assessed 10 months after planting. Twelve (12) clones were resistant, eleven (11) were intermediate resistant, four (4) intermediate average and three (3) intermediate susceptible.

Disease screening tests/trials are very important in the production of improved and better yielding varieties.

II. Best Practice/s Applied

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

IV. Sustainability Plan of the PAP

Researchers should review and improve protocols if necessary. Disease Resistance Trial results will be validated in the laboratory thru PCR (Polymerase Chain Reaction).

M. PROGRAM/PROJECT: Ecological Test, Phil 2012 Series

Approved Budget: 1,380,000

I. Highlights of Accomplishment

The study evaluated the plant crop performance of ten selected Phil 2007 and Phil 2012 series sugarcane varieties planted in La Carlota, BISCOM, SONEDCO, Victorias and Sagay Mill Districts from December 2020 to January 2022.

Highest variety mean tonnage was obtained by Phil 2012-0455 with a mean of 121.57 TC/Ha while the highest potential tonnage yield in all locations was observed in La Carlota Mill District on Phil 2012-1373 with 159.36 TC/Ha.

Phil 2007-0563 got the highest variety mean sucrose content with 2.40 Lkg/TC. Three varieties significantly highest in sucrose content compared to the control variety VMC 84-524 in SONEDCO MD namely; Phil 2007-0243, Phil 2007-0563 and Phil 2007-0359. Sweetest canes were observed in SONEDCO MD.

Highest variety mean sugar yield was obtained by control variety Phil 8013 with 260.79 Lkg/Ha. Highest sugar yield was obtained by La Carlota MD compared to other locations with 293.74 Lkg/Ha.

In Gain-Even-Loss Tally, Phil 2007-0359 gained over VMC 84-524 in one location in terms of LKg/TC and gave even scores to all location in TC/Ha and LKg/Ha. Phil 2012-0475 gave even scores to both controls in TC/Ha, LKg/TC and LKg/Ha. Phil 2012-1263 got loss scores to Phil 8013 in one location in LKg/TC but gave even scores to both controls in TC/Ha and LKG/Ha in all locations. Phil 2012-0483 got also loss scores compared to both controls in one location in LKg/TC but gave even scores to both controls in TC/Ha and LKg/Ha. These four varieties were medium to high in tonnage and sucrose content; sparse to very sparse flowering.

Sugar Regulatory Administration's mission is "to provide Research, Development and Extension Services to ensure sufficient supply of sugarcane for a diversified, sustainable and competitive industry that improves productivity and profitability of sugarcane farmers and processing industries, and processing industries, and provides decent income for workers towards enhancing the quality of life of Filipinos." Breeding of high yielding varieties is a valuable program for the realization of the agency's mission. This project is the last stage of the SRA Sugarcane Variety Improvement Program (SVIP) which screens the best clones among 10 entries that were tested in different locations. This ensures the consistency of the performance of varieties grown in different topographic and climatic conditions, thus, resulting to recommending the best variety/varieties to be released to farmers.

II. Best Practice/s (if applicable)

- Planning/scheduling of activities for the year for each project ahead of time

- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Data Collection and Monitoring

Characterization of Varieties

Harvesting

IV. Sustainability Plan of the PAP

Researchers ensure proper protocols on screening of potential varieties will be implemented. Validation in the laboratory will also be employed thru markers for diversity and diseases. This will be done across NCT/Ecotest varieties per site.

N. PROGRAM/PROJECT: Flower Induction Nursery

Approved Budget: 310,284

I. Highlights of Accomplishment

The goal of the project is to get potential varieties to flower so that they can be used as parentals in breeding. Last December 2021, 44 potential varieties from the germplasm were ratooned in a humid and elevated place in Canla-on City.

Fifteen varieties flowered out of the 44 selections, namely: Phil 90-60-0557, Phil 90-61-0567, Phil 91-8-0085, Phil 91-8-0661, VMC 84-947, VMC 86-550, Phil 99-1793, VMC 71-39, Phil 8361, Phil 97-3501, Phil 97-617-3161, Phil 03-1389, Phil 07-0359, Phil 07-0563 and Phil 08-1009.

All varieties maintained were marcotted on the 2nd week of August 2022. Marcotted plants with flowers were used in pollination last October-November 2022.

This project will augment the needed parent materials for the Pollination, Sowing and Seedling Care Project. We can look forward to better combinations in the crosses, which later on will result to better performing varieties.

II. Best Practice/s

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Marcotting

Harvesting of flowers

IV. Sustainability Plan of the PAP

More priority parentals will be planted in the Flower Induction Nursery. Additional sites for the Flower Induction Nursery are also considered to induce flowering of other potential parental varieties

0. **PROGRAM/PROJECT: <u>Sugarcane Disease Garden as Source of Inocula for Resistance Trials</u>**

Approved Budget: 1,307,480

I. Highlights of Accomplishment

Seven varieties namely: Phil 6111, Phil 7464, Phil 7779, Phil 8839, Phil 8013, Phil 56226, VMC 86550 and mixed clones were ratooned last January 2022 to December 2022 to augment inocula for disease resistance studies. These varieties served as resistant and susceptible checks for resistance trials to smut, downy mildew, yellow spot, and leaf scorch.

Disease screening tests/trials are very important in the production of improved and better yielding varieties. This project is the provides the needed inocula for all the resistance trial tests.

II. Best Practice/s

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation

Field monitoring

IV. Sustainability Plan of the PAP

Researchers will perform in vitro cultures of the inocula for further identification (strains, etc) and will conduct genetic material extraction. These will then be sent to sequencing facility. Results will be useful in diagnosis and treatment of diseases in the future.

P. **PROGRAM/PROJECT: <u>Germplasm Collection, Characterization and Maintenance</u>**

Approved Budget: 707,336

I. Highlights of Accomplishment

Thirty new Ecotest entries and 10 accessions from UPLB Institute of Plant Breeding were added in the Germplasm Collection for the year 2022. Eight hundred varieties/clones were characterized agronomically. Brix reading, flowering and stalk diameter were gathered to primarily provide information for selection of parent materials.

Broadening of genetic bases of sugarcane will improve sugarcane varieties. With this, a collection of diverse accessions for future crosses will be useful.

II. Best Practice/s

- Planning/scheduling of activities for the year for each project ahead of time
- Daily monitoring of field activities (reporting of packiao team leaders to Science Aides, then Science Aides to technical personnel regarding progress of activities)
- Establishing good working relationship among technical and non-technical personnel including field packiaos

III. Photo Documentation


Data collection (characterization of leaf length and width measurement).

IV. Sustainability Plan of the PAP

Researchers are planning propose a project that will conduct collections from different parts of the Philippines. Revival of variety exchange with other countries is also being considered.

A. ON-GOING PROGRAM/PROJECT: Pollination, Sowing and Seedling Care, PHIL 2022 Series

Approved Budget: 1,063,612

The crossing program for 2022 has the primary objective of producing high yielding and disease resistant varieties that could adapt to specific and wider ecologic zones of the country. As a secondary objective, the program aims to select parent materials with good combining ability, resistance to diseases and with good agronomic characteristics.

Five hundred parent materials were ratooned in a 3.16 hectare crossing block area from November 2021 to February 2022. Two thousand five hundred stalks from 200 selected female parents were marcotted on the 3rd week of August 2022. Pollination work started on the 2nd week of October and ended on December 2022. Accordingly, sowing of fuzz started on the 3rd week of November and ended on December of 2022. Seedling care will continue until the transplanting of seedlings on May to June 2023.

Collection and preparation of flowers for pollination.

B. ONGOING PROGRAM/PROJECT: Single Seedling Plot Test, PHIL 2021 Series

Approved Budget: 923,336

The 73,408 seedlings from 203 bi-parental crosses produced in the 2021 crossing program

were transplanted in a 5.56 hectare-area from June 11 to July 10, 2022. Seedlings were transplanted singly along the furrows on holes previously made at a distance of one meter between furrows and 30 centimeters between seedlings. Three-eye cuttings of Phil 56-226 were planted every 20 seedlings to serve as control variety during selection work. Survival count one month after transplanting showed 43,426 seedlings survived in the field with a survival rate of 59.60%. Selection of promising clones will be done on March to April 2023.

C. ONGOING PROGRAM/PROJECT: Row Test, Phil 2020 Series

The field test was planted in April 2021 using 667 clones selected from the Single Seedling Plot Test, Phil 2020 Series. Selection of promising clones shall be in January of next year.

D. ONGOING PROGRAM/PROJECT: Multiplication II, Phil 2019 series

Approved Budget: 210,000

Multiplication II was planted in August 2022. Downy Mildew resistant clones shall be selected and passed as entries for the Preliminary Yield Test of LGAREC & LAREC and First Propagation preparatory to the National Cooperative Test. Cutbacking shall be done in March of next year. Sufficient canepoints shall be provided for leaf scorch and yellow spot screening and smut verification

E. ONGOING PROGRAM/PROJECT: Preliminary Yield Test, Phil 2018 series

Approved Budget: 160,000

Thirty selected Phil 2018 Series clones from Multiplication II were planted as entries in the Preliminary Yield Test. Agronomic data (stool count, tiller count and plant height) were gathered last December 2022. Only 10 varieties will be selected and tested for Ecological Test.

F. ONGOING PROGRAM/PROJECT: Propagation III, Phil 2016 series

Approved Budget: 135,000

Ten promising clones were propagated and maintained in preparation for Ecological Test

G. ONGOING PROGRAM/PROJECT: Smut Resistance Test, Phil 2018 series

Approved Budget: 170,000


Data collection (Infection count)-Plantcane

H. ONGOING PROGRAM/PROJECT: Downy Mildew Resistance Test, Phil 2019 series

Approved Budget: 158,000

The study composed of 180 Phil 2019 series clones was laid-out in August 2022 and maintained in the field. Monthly disease ratings are taken until February 2023.


Field lay-out and planting

I. ONGOING PROGRAM/PROJECT: Yellow Spot Resistance Trial, Phil 2018 series

Approved Budget: 95,000

Thirty entries clones for Preliminary Yield Test Phil 2018 series were tested in Yellow Spot screening.

Field monitoring and application of trichogramma

J. ONGOING PROGRAM/PROJECT: Leaf Scorch Resistance Trial, Phil 2018 series

Approved Budget: 99,000

Thirty entries clones for Preliminary Yield Test Phil 2018 series were tested in Leaf Scorch screening.

Field monitoring

K. ONGOING PROGRAM/PROJECT: Ecological Test, Phil 2013 series

Approved Budget: 1,380,000

The project aims to evaluate the adaptability of new varieties selected from the Preliminary Yield Test in a given location with specific climatic/soil/pathogen. In addition, the project will determine the yield performance of the ten varieties in the plant in comparison with the standard and local check varieties in 5 locations.

As of December, one site was laid-out and the remaining four sites will be laid-out in January 2023.

Field lay-out

J. ONGOING PROGRAM/PROJECT: Assessment of Genetic Diversity of Sugar Regulatory Administration Varieties

Approved Budget: 37,000

DNA isolation of 200 accessions and varieties in the Germplasm collection and molecular screening across genotypes using diversity and fungal disease resistance markers was done in 2021. These needed to be replicated then scored to ensure accuracy of results using the several synthesized primers which arrived third week of December 2021. Unfortunately, stocks of 200 DNA samples got degraded after the onslaught of typhoon Odette (power outage for 3 weeks). These samples cannot be used as templates for amplification and finger printing. This year, DNA extraction of 50 varieties/accessions (10 in 5 locations) started in May 2022. Quality, purity and concentration were checked prior to amplification using ESTA 15, ESTA 16, ESTA 34, ESTA 58, ESTB 94 SOMS 124 &148, ESTA 48 and ESTB 41 primers. Optimization of other primers for PCR will start in December. Currently, the genome laboratory has 109 diversity primers. Fingerprinting and diversity analysis will be performed next year.

K. **ONGOING PROGRAM/PROJECT: Morpho-agronomic Characterization of SRA Plant Genetic Resources for Construction of Dichotomous Key**

Approved Budget: 298,860

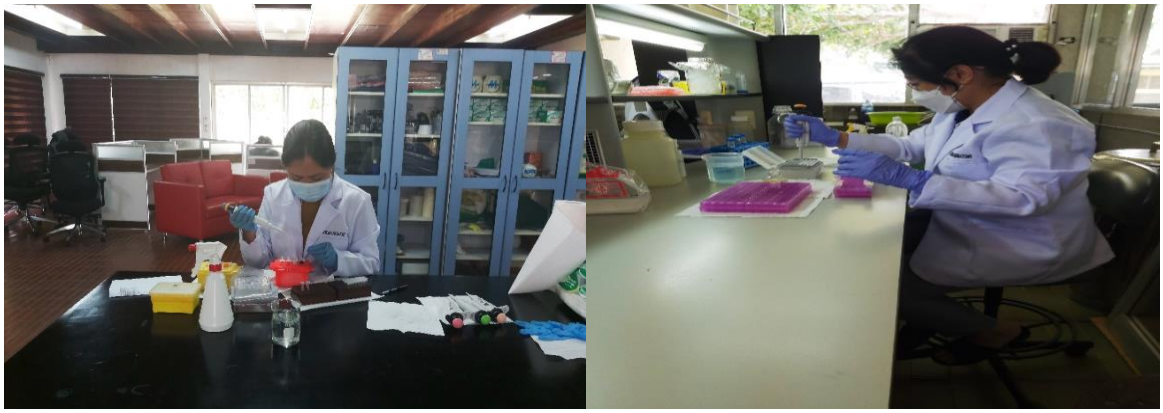
Fifty-two morpho-agronomic traits of 352 varieties/accessions were gathered from September 11 to October 11, 2022. Data collection will continue next year for the remaining accessions/varieties. The traits included the following:

A. Stool Conformation (Plant habit, tillering habit, density, leaf carriage, trashiness)
B. Leaf Blade (Color, Texture, Erectness, Length and width of 10 samples, Leaf Margin Pubescence, Midrib color)
C. Leaf Sheath (Waxiness, Primary Color, Secondary Color, Presence or absence of Prickle or Trichomes, Quality and Persistence of Prickle or Trichomes)
D. Auricle (Outer and Inner Auricle Shape)
E. Dewlap (Waxiness, Primary Color, Shape, Presence or absence of dewlap margin undulation)
F. Ligule (Shape, Hairiness)
G. Stalk (Waxiness, Color of Exposed Internode, Color of Unexposed Internode, Presence of Stripes of cane, Splits / Growth Cracks, Corky Cracks, Corky Patch, Internode Shape, Alignment, Node Swelling, Growth ring width, Rows of Root Primordia, Leaf Scar Prominence, Root band Shape, Pithiness
H. Bud (Shape, Prominence, Length and Width of 10 buds, Bud groove/Furrow position, Bud Hair (hair group 9), Bud Tip Position, Bud Base Position)

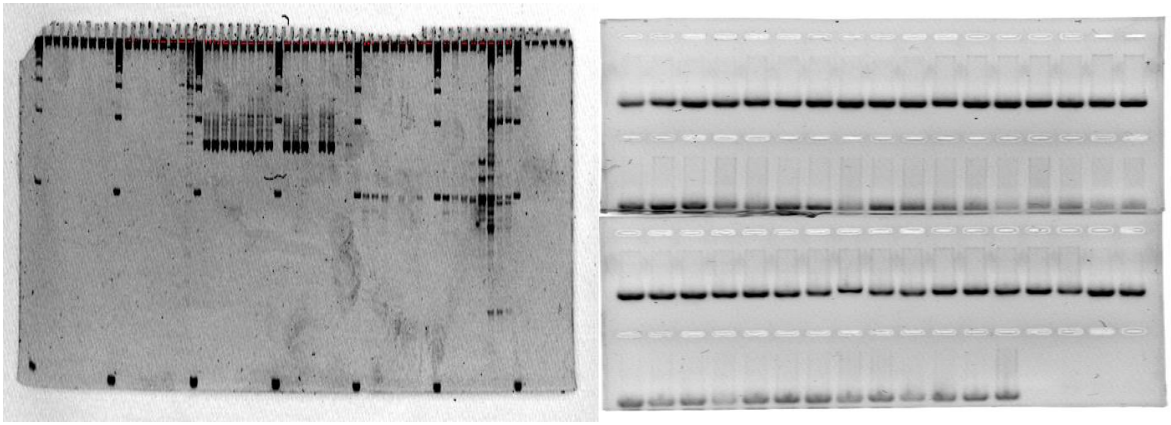
L. ONGOING PROGRAM/PROJECT: Molecular Characterization of SRA Germplasm Accessions

Approved Budget: 345,000

This project is the laboratory counterpart of the morpho-agronomic characterization project. Accessions needed to be fingerprinted. To achieve this, atleast 10 to 20 diversity primers are needed to be utilized in the amplification of the samples. The primers arrived third week of December 2021. Four hundred DNA samples extracted got degraded after the onslaught of typhoon Odette (power outage for 3 weeks). This year optimization of diversity primers is being done as well as DNA re-extraction of several accessions is being performed. Amplification and fingerprinting will be completed in 2023.



Ms. Dynah Fatima Discaya conducts Polymerase Chase reaction (PCR) and DNA extraction.



Results of PAGE (SOMS 124-148 primers) (left) and Agarose Gel Electrophoresis (right).

M. ONGOING PROGRAM/PROJECT: Genomics Assisted Discovery of Genes and Molecular Markers for Important Traits in Selected Sugarcane HYVs

Approved Budget: 663,336

Procurement of key reagents for the project except the adaptor ligation kit was completed in October 2022 and two Genome laboratory technical personnel resigned. Project will start in January 2023 with DNA extraction of Phil 2006-2289 and Phil 99-1793, DNA library construction and sequencing for marker development.

N. ONGOING PROGRAM/PROJECT: Molecular Screening of Putative Mutants for Desired Agronomic Traits and Sucrose Content

Approved Budget: 190,284

Procurement of mutagenic reagents were completed this year. Existing mutant sugarcane plants from SIDA-funded PNRI project has not gone through selection for molecular screening. Putative mutants were replanted in December 2022 for dissociation of chimeras.

O. ONGOING PROGRAM/PROJECT: Isolation and characterization of Gluconacetobacter diazotrophiccus from ten SRA HYVs

Samples of young shoots with healthy roots and young buds were taken from second ratooned crossing block at seven months old of ten SRA high yielding varieties cultivated at La Granja conditions. The varieties were selected based on their robust growth characteristics as recommended by the principal breeder. The plant samples were carefully washed with tap water until the plant were free from the attached soil. After cleaning the samples, roots and young buds

were carefully separated and were surfaces sterilized using 70% ethanol and 3% sodium hypochlorite. One gram of each sample was macerated with 5% sterile sucrose solution. The juice of the macerated samples was serially diluted in tubes containing 9ml sterile 5% solution up to 10^{-3}.

The diluted plant suspensions were inoculated on N-free LGI semi solid medium pH 5.5-6.0 for growth enrichment of the G. *diazotrophicus*. The tubes were incubated 6-7 days at 28-30^{o}C. Each sample showing an enriched growth forming subsurface yellow pellicle was sub-cultured three times every 5 days for further enrichment and purification. The cultured were then streaked in PDPA and LGI agar medium and were incubated for 5-7 days at 30% for separate colonies from roots. The isolates were backed up in the test tube slants containing potato dextrose peptone agar and coded accordingly.

Catalase Reaction Test

Bacterial cells were smeared on a glass slide followed by addition of a drop 3% hydrogen peroxide. A positive reaction to this test determines if the hydrogen peroxide is toxic to the bacteria and determines if the bacteria contain the enzyme catalase which converts hydrogen peroxide to oxygen and water as shown by a production of bubbles or gas. According to james et al., (2000), *Gluconoacetobacter diazotrophicus* is a catalase test positive bacterium. Table 3 shows the reaction of the different isolates from hydrogen peroxide. Isolate that showed negative reaction will be discarded.

The transfer, isolation and characterization of these bacteria were halted because of the high percent contamination due to the high relative humidity and the mold growth on the ceiling of the laboratory. Some of the isolates were saved and some of it were totally antagonized by the contaminants. The selected colonies will be subjected to visual characterization and series of the test and biochemical assays to further characterize and confirm their identity. It is also recommended to conduct molecular identification to ensure that the isolated bacteria are G.

Department/Division: Soils Laboratory, SRA-LGAREC, RD&E - VISAYAS **A.**
Year: 2022

PROGRAM/PROJECT: Documentation of soils laboratory Projects; Soils and juice analysis

Approved Budget: 2,870,744

I. Highlights of Accomplishment

A total of **2,814** samples were received and analyzed for Crop Year 2022. These samples encompassed of soil, sugarcane stalks, and special samples like sugarcane leaves, water, BMO, and soils from our very own field research and collaborative projects with Japan International Research Center for Agricultural Sciences (JIRCAS) and different mill districts. Among the total samples, **1030 were soil**, **1359 were sugarcane stalks** and **425 were special**. All these were from the private planters and experimental units of SRA respectively. Samples receive and analyzed by the laboratory helped planters, farmers, fertilizer formulators, researchers and other walk-in clients to achieve maximum profitability through accurate and timely laboratory services. Through soil analysis clients will have the Realtime fertility status of their soil, thus by knowing this a proper fertility management tailored for the sugarcane crop planters will not over or under fertilize their fields thus achieving maximum gain by significantly reducing inputs. See Table 1 for the summary of samples submitted and analyzed.

For the number of soil samples, 37% of the total samples received and analyzed is from the soil samples; 683 were from private planters representing 66.31% of the total, and the rest of 33.69% were from the experiments of SRA. The analyzed samples decreased from the previous crop year of soil submitted by both private planters and researchers which was 1,196. This can be primarily attributed to the significant decrease of research samples analyzed from 70.2% of the previous crop year. the decrease of research samples analyzed was since four research projects of the unit were terminated early this year.

For the sugarcane juice (stalks) analyzed, 48% of the total samples received and analyzed is from the sugarcane juice samples; 1076 samples were from the experimental fields of SRA representing 88.49% of the total, while the rest were from the private planters and researchers. This number increased from 72.2% of the previous crop year respectively.

For the number of special samples collected/analyzed, 15% of the total samples received and analyzed is from the various special samples; from 289 of crop year 2021 it increased to 425; this can be attributed to the influx research samples, in addition, the laboratory has catered to the quantitative and qualitative test for the BMO of various mill districts Refer to Figure 2

For quality assurance, the Soils laboratory is continuously audited by certifying agencies to make sure that results are reliable and accurate. Relative to this, we have participated in the proficiency testing (PT) schemes of various laboratories like Food and Fertilizer Technology Center, Taiwan Agricultural Research Institute (FFTC-TARI), Taiwan, Global Soil Laboratory Network (GLOSOLAN) through Food and Agriculture Organization (FAO) of the United Nations, and Bureau of Soil and Water Management (BSWM). These activities are vital for the accuracy and precision of the analysis that our laboratory is performing and an important requirement to secure a license to operate (LTO) from the certifying agencies like BSWM and Professional Regulation Commission (PRC). Results of these PT schemes have shown that our laboratory passed and gained satisfactory results, thus affirming our capability to give out correct results (Refer to Figure 3)

Table 1. Summary of Samples Analyzed per quarter for Crop Year 2022

Performance Indicator	Physical Targets					Accomplishments				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
ANALYSIS										
1. No. of samples Analysed	250	250	250	250	**1000**	310	332	188	200	**1,030**
2. No. of Planters Served	20	20	20	20	**80**	128	124	83	58	**387**
3. No. of Sugarcane stalks analysed (maturity Testing)	200	200	200	200	**800**	318	684	110	245	**1,359**
4. No. of recipients (stalks)	5	5	5	5	**20**	6	18	5	3	**32**
5. No. of Special samples analysed (Leaf, water, and others)	20	20	20	20	**80**	206	20	150	49	**425**
6. No. of recipients (special)	2	2	2	2	**8**	2	4	6	8	**20**

Table 2. Crop year 2022 Monthly Breakdown of Samples and Analyzed

Month 2022	SOIL ANALYSIS			JUICE ANALYSIS			Special Samples	Grand Total
	Private	Research	Sub Total	Private	Research	Subtotal		
January	95	30	125	-	111	111	78	**314**
February	69	2	71	21	48	69	64	**204**
March	78	36	114	66	72	138	64	**316**
April	85	54	139	91	158	249	6	**394**
May	60	87	147	60	55	115	9	**271**
June	45	1	46	36	284	320	5	**371**
July	98	36	134	-	31	31	7	**172**
August	15	-	15	-	33	33	93	**141**
September	39	-	39	4	44	48	50	**137**
October	14	-	14	-	54	54	27	**95**
November	34	2	36		102	102	14	**152**
December	50	100	150	5	84	89	8	**247**
Total	**682**	**348**	**1,030**	**283**	**1,076**	**1,359**	**425**	**2,814**

I. Soil Analysis

For the Month of JANUARY 2022

Name	Hda./Address	No. of Samples
A. Planter		
1. Nestor Coloso	Ilog, Negros Occidental	6
2. Mark Vargas	Cauayan	7
3. Monticon	Bugahin, isabela	4
4. Doming M. Sit	Camandag, La Castellana	1
5.Pedro R. Armon	Camandag, La Castellana	1
6. Cristina Pelayo	Camandag, La Castellana	1
7. Ma.Socorro Japson	Camandag, La Castellana	1
8. Roberto S. Mission	Camandag, La Castellana	1
9. Hermilo Palmares	Camandag, La Castellana	1
10.Fatima Mission	C amandag,La Castellana	1
11.Hermi Ortegue	Camandag, La Castellana	1
12.Noralyn Estives	Brgy. Balabag, La Carlota	1
13.Mario G. Gomez	Brgy. Tapi, Kabankalan	3
14.Onyo Eraga	Brgy. Gomez Pontevedra	1
15.Esmeralda Dindo	Brgy. Gomez, Pontevedra	1
16.Angelo Alocilja	Brgy. DSB, Pontevedra	1
17.Jorjelyn Ayungon	Brgy. Camp Clark, Isabela	1
18.Juan Carlos Torre	Tipolo, Sag-ang	11
19.Mario Malunes	Brgy. Gatuslao, Candoni	1
20.Alan Nagum	Sipalay	1
21.Jerlyn Grace Sabico	Dancalan, Ilog	1
22.Antonio Talacadao	Tabu, Ilog	1
23.Melanie Tablason	Brgy. Bantayan, Kabankalan	1
24.Leila Nemenzo	Tabu, Ilog	1
25.Rebmark Tulbo	Brgy. Oringao, Kabankalan	1
26.Pacito c. Tulbo	Brgy. Oringao, Kabankalan	1
27.Jhonrey Lacason	Brgy. Oringao, Kabankalan	1
28.Karl Albanez Pavillar	Tabu, Ilog	1
29.Fransico S. Traza Jr.	Talacdan, Cauayan	1

30.Chlia Fe D. Roquero	Bantayan, Kabankalan	1
31.Ricky Talunda	Brgy. Tagoc, Kabankalan	1
32.Romeo Sayun	Brgy. Tagoc, Kabankalan	1
33.Herman Domingo	Brgy. Tagoc, Kabankalan	1
34.Tarco	Brgy. Tagoc, Kabankalan	1
35.Samauel Panaligan	Brgy. Tagoc Kabankalan	1
36.Jomila Moyong	Brgy. Himaya, Hinigaran	1
37.Samson J. Flores	Quintin Remo, Moises Padilla	3
38. Urc Sunedco Milling	Camugao, Kabankalan	1
39. District Cane	Camugao, Kabankalan	1
40. Stable Farm	Camugao, Kabankalan	1
41. Ninita Zerna	Pinalayaan, Pamplona	2
42. Keilana Resource Dept. Corp	Manggoto, Pamploma	2
43.Lili Perales	Pagtic, Tambulan, Tayasan	1
44. Janeth Rebusas	Magsusuhog, Pamploma	1
45. Rose Marie Gemira	Balayong, Pamploma	1
46. Miguel Angel Diaz Teves	Sta. Rita, Tanjay	1
47. Keilana Resource Dept Corp.	Mangoto, Pamploma	1
48. Micheal Vesintino	Sebucauan	8
49.Rose Marie Guanzon	Brgy. Antipolo, Pontevedra	1
50.April Cornelio	Bagacay, Hinigaran	1
51. Elsie Salinio	Sitio. Cuyaoyao, Moises Padilla	1
52. Edgar Malayas	Brgy . Biao, Binalbagan	1
53. Salvacion Guanzon	Brgy. Santo, Binalbagan	1
54. DEFWARBA	Brgy. Cabacungan, La Castellana	3
55. Jayvon Dwight B. Sena	Cauyan, Neg. Occ	1
56. Angel Tonsay	Had. Nahilao La Castellana	1
	Subtotal	**95**
B. Research		
1. Soils Laboratory	La Granja, La Carlota	27
2. VIPM	Hda. Angelita, La Castellana	1
3. Andy Alimpulos	Tampalon Kabankalan	1
4. Rosenie Entima	Hda. Bagacay, Hinigaran	1
	Subtotal	**30**

For the Month of FEBRUARY 2022

Name	Hda/Address	No. of Samples
A. Planter		
1. Melvin Bianco	Brgy. DSB Pontevedra	1
2. Efren A. Ramos JR.	La Castellana	1
3. Jor jelyn E. Alingon	Brgy. CabCab , Isabela	1
4.Jean P. Cacho	Brgy. Talacdan, Cauyan City	1
5.Domingo A. Canaway Jr.	Brgy. Tabu-Ilog Neg. Occ	1
6.Norberto Geronca	HAD. Nalipay Isabela , Neg Occ.	1
7. Michael Enegrio	HAD. Nalipay isabela Neg Occ	1
8. Alfredo Sevilla	HAD. Nalipay Isabela Neg Occ	1
9. Marife I. Olpos	Ursunico	1
10. Recarte De-Guit	Ursunico	1
11. Irien N. Patorio	CPSU kabankalan	1
12. Roma Mae A. Deniega	CPSU Kabankalan	1
13.Catherine De Tomas	Brgy. Alalingan, Bacolod City	1
14. Jeann Mea Escobar	HAD. Ruiz. Cabonbon, Himamaylan	2
15. Richilda Pun-an	Inolingan, Moises Padilla	1
16. Rodito Balasabas	Brgy. Banogbanay, ISABELA	1
17. Ryan Sarinong	Mambusao , Capiz	18
18. Noe Leonora	Brgy. Pantique, Hinigaran	5
19. DAFWARBA	Brgy. Cabacungan, La Castellana	2
20. Norene G. Dandoy	Brgy. Baga as, Hinigaran	1
21. Pinky Sequehod	Kabankalan	1
22. Lovely Ortega	Himaymaylan	1
23.Ruthchel Camot	Brgy. Mandiao , Bayawan City	1
24. Renadine Teodoro	Himamaylan	1
25. NAPFWA	Brgy. Ilijan, Bago City	9
26.UPLB CAIS- LGRTS	La Carlota City	1
27. AMANO	Brgy. Mansalanao, La Castellana	1
28.Henry Tam	Brgy. San Miguel, Tanjay City	2
29. Jamie Ramirez	Brgy. Tan- aw, Kabankalan	1
30. Josue Ramirez	Brgy, Tan- aw, Kabankalan	1
31. Noel Beker	Brgy. Tan –aw, Kabankalan	2
32. Dophe Gomez/Prince Grace s. enmacino	Magtu, Mabinay, neg Occ	1
33. Donald Seron/John Bent Morino	Brgy. Camingawan, Kabankalan City	1

34. Beverlyn Frondoza/Jona Cordero	Brgy. Tampalom, Kabankalan City	1
35. Abigail S. Sibuan/Joshua Gellecano	Hgtu, Mabinay	1
36. Keilan Resource Dept Corp.		1
37. Ray Mathew Soliguen	Prk. Malinong, brgy. Miranda	1
	Subtotal	**69**
B. Research		
1.Rosenie Entima	Hda. Candelaria, Manapla	1
2. Joemar Benidicto	Sagay	1
	Subtotal	**2**

For the Month of MARCH 2022

Name	Hda/Address	No. of Samples
A. Planter		
1. Ma. Snooky Francisco	Brgy. Inolingan, Moises Padilla	1
2. Fe Salino	Brgy. Inolingan, Moises Padilla	1
3. Jestone C. Esoy	Brgy. Salon , Kabankalan	1
4.Ned Damon damon	Alijis, Bacolod City	1
5. Erol Antonio	Brgy. Antipolo, Pontevedra	1
6. BB-ARBA BF	Brgy. Buenavista, Himamaylan	21
7. Roselyn V. Macapobres	Brgy. Prosperidad , San carlos	1
8. Ebenezer L. Macapobres	Brgy. Prosperidad, San carlos	2
9. Gregorio Macapobres	Brgy. Prosperidad , San Carlos	1
10. Edmond Delos Santos	Brgy. La Granja	2
11.Jever Amallo	Biskon Mill District	1
12. Rosalie Amallo	Biskon Mill District	1
13. Sunny C. Quiritan	Biskon Mill District	1
14. Henry Tan	Mag-alayan , Pampalona Neg Occ	1
15.DAFWARBA	Brgy. Cabacungan, La Castellana	2
16. Emelito Guanga	Brgy. Old Escalante	2
17.Jason Ryan Ligason	La Castellana	6
18. Rosebell Villanueva	Mobong, Tagaytay, Bindoy	1
19. Rodrigo S. Villanueva	Upper Tinaogan, Bindoy	1
20. Regie Tano	Iniwasan, Pamploma	1
21. Rodel Villanueva	Upper, Tinaoga, Bindoy	1
22. Evelyn Amorganda	Mato Bato, Bindoy	1
23. Marbith Callora Carinal	Balao, Nabilog, Tayasan	1

24. Wiljun Cabrera	Tambulan, Tayasan	1
25. Ryan Sarimong	Mambusao, Capiz	12
26. Ritchel M. Napallatan	Brgy. Manghanoy, La Castellana	1
27. Elvie V. Gulpang	Brgy. Gen Luna	2
28. Dominador Obas	Magtical, Toboso, Neg. Occ.	1
29. Claudine M. Capistrano	CPSU- Main	1
30. Dayme Pajora	Brgy. Bato, Hinigaran Neg Occ.	1
31. Rodel D. Tubianosa	Had. Nato La Castellana	1
32. Ofelia Carreso	Sitio. Jalando-on , Hinigaran	1
33. Elena Encaja	Brgy. Magbalo, Kabankalan	3
34. Ronnie Bantaycan	Brgy. Magballo, Kabankalan	1
35. Marvin Andalajoa	Brgy. Balitoc, Ilog	1
	Subtotal	**78**
B. Research		
1. Teresita Bañas	La Granja, La Carlota City	1
2. Glosolan		10
3. Soils Laboratory	Alijis, Bacolod City	1
4. Soils Laboratory	La Granja, La Carlota City	24
	Subtotal	**36**

For the Month of APRIL 2022

Name	Hda./Address	No. of Samples
B. Planter		
1. Elvie Gulpany	Hda. Vicenta	1
2. Emelito Guanga	Escalante, Negros Occidental	1
3. CADARBA block farm	Brgy. Rafael Borera, Sagay City	5
4. Universal Rabina Corp.	RSB, La Carlota City	2
5. Estela Cabucos	Caputatan Norte, Medellin, Cebu	1
6. Rosario Mag-aso	Brgy. Quezon San Carlos City	1
7. Florintina Delarna	Brgy. Quezon San Carlos City	1
8. Christian Comonas	Brgy. Quezon San Carlos City	1
9. Moises Mag-aso	Brgy. Quezon San Carlos City	1
10. Denna Lyn Baltazar	Kanashigi Farm , Haguimit LCC	1
11. Zenon H. Geanga	Brgy. Cambaog, Hinigiran	3

12. John Mari Paul S. Jungco	Brgy. San Miguel	1
13. Charley Magne Multo	Polo Tanjay	2
14. Edwin Callet	Balao, Kimbulan, Tayasan	1
15. Larry Tionco	Kilaban, Tayasan	1
16. NAPA	Tinaogan, Bindoy	1
17. Jay Dawn Balasabas	Tara, Mabinay	1
18. Caselyn Joy C. Dy	San Antonio Himamaylan	1
19. Edchel O. Lambot	CPSU Kabankalan	19
20. Agusto Obsioma	Brgy. Locotan, Kabankalan	1
21. Alcamer Obsioma	Bryg. Locotan, Kabankalan	1
22. Aramis Jose Obsioma	Brgy. Locotan, Kabankalan	1
23. Daisy Blanco	Bryg. Locotan, Kabankalan	1
25. Eden Muyco	Brgy. Locotan, Kabankalan	1
26. Dolores Dolar	Brgy. Locotan, Kabankalan	1
27. Edgar Dolar	Brgy. Locotan, Kabankalan	2
28. Francis Sison	Bryg. Locotan, Kabankalan	1
29. Jim Osorio	Brgy. Locotan, Kabankalan	1
30. Jimson Osorio	Bryg. Locotan, Kabankalan	1
31. Johnny Mamar	Brgy. Locotan, Kabankalan	1
32. Jose Heramil	Bryg. Locotan, Kabankalan	1
33. Lida Obsioma	Brgy. Locotan, Kabankalan	1
34. Lino Recomono	Bryg. Locotan, Kabankalan	1
35. Lito Dela Crus	Bryg. Locotan, Kabankalan	1
36. Mary Jane Naype	Brgy. Locotan, Kabankalan	1
37. Marylou Muyco	Brgy. Locotan, Kabankalan	1
38. Noli Dulo	Brgy. Locotan, Kabankalan	1
39. Perpetua Bautista	Brgy. Locotan, Kabankalan	1
40. Raymund Muyco	Brgy. Locotan, Kabankalan	1
41. Renald Palangga	Brgy. Locotan, Kabankalan	1
42. Ruben Moreno	Brgy. Locotan, Kabankalan	1
43. Wenefredo Castro	Bryg. Locotan, Kabankalan	1
44. Romeo Villarojo	Brgy. Tan -awan, Kabankalan	1
45. Leonisia Navas	Brgy. Tan -awan, Kabankalan	1
46. Domingo Navas	Brgy. Tan -awan, Kabankalan	2
47. Rodora Molina	Brgy. Tan -awan, Kabankalan	1
48. SCSAFA	Brgy. San Isidro, E.B. Magalona	4

49. Anna Mae P. Guilaran	Prk. Kawayan, Brgy. Bacong, Bago City	1
50. Edreson Gemotra	CPSU, Kabankalan City	6
	Subtotal	**85**
B. Research		
1. PTCM	SRA-LGAREC, Lot 7	54
	Subtotal	**54**

For the Month of MAY 2022

Name	Hda/Address	No. of Samples
B. Planter		
1. Bryan Brett Bawa	So. Napac-an, Brgy. Nangka, Bayawan	1
2. Jesselyn Elegido	Brgy. Villasol, Bayawan City	1
3. Inocencio Billones	Brgy. Villasol, Bayawan City	1
4. Leopoldo Cosico	Brgy. Mabini, Cadiz City	2
5. Ryan T. Sarimong	Mambusao, Capiz	12
6. Henry Guanzon	Himaya, Hinigaran	1
7. Alfe B. Dullaco		1
8. Restituto N. Alvarez Jr.	Hda. Elisaldi, Bago City	1
9. PARBA BF	Brgy. Pilar, Hinigaran	1
10. Maghat Bukidnon Asossayon Sang Paloypoy	So. Locot, Brgy. Buenavista	1
11. Velco Agri Corp.	Negros Oriental	1
12. Cabusog Catalino	Tara, Mabinay, Negros Oriental	1
13. Joel Balansag	Manipis, Tanjay, Negros Oriental	1
14. Joel Balansag	Manipis, Tanjay, Negros Oriental	1
15. Velco Agri Corp.		1
16. George Pepino	Ma-ao, Bago City	3
17. Velco Agri Corp.		2
18. Romeo Calisporo		1
19. Dioscoro Andrino	Brgy. Pilar, Hinigaran	2
20. Gina/Jonel Revias	Brgy. Pilar, Hinigaran	2
21. Alvin Geniga	Brgy. Pilar, Hinigaran	2
22. Rene Escultor	Brgy. Pilar, Hinigaran	2
23. Gomercindo Dionisio	Brgy. Pilar, Hinigaran	2
24. Dionesio Revias	Brgy. Pilar, Hinigaran	2
25. Lilia Guanzon	Brgy. Pilar, Hinigaran	1

26. Guia Gonzales	Brgy. Pilar, Hinigaran	1
27. Freddie Secapore	Brgy. Pilar, Hinigaran	1
28. Ramy Grande	Brgy. Pilar, Hinigaran	1
29. Joseph Antes	Brgy. Pilar, Hinigaran	1
30. ILIFAS BF	So. Iling-iling, Brgy. Cabadiangan, Himamaylan	2
31. Chlia Mae Roquero	Brgy. Tampalon, Kabankalan City	1
32. Ma. Rosario Benita Ortiz	Canlaon City, Negros Oriental	7
	Subtotal	**60**
B. Research		
1. Soils Laboratory (Pesticide Residue)	SRA-LGAREC Lot 19, La Carlota City	12
2. Soils Laboratory (P-Validation)	SRA-LGAREC-Lot 19, La Carlota City	27
3. Soils Laboratory (Micronutrient)	SRA-LGAREC-Lot 19, La Carlota City	48
	Subtotal	**87**

For the Month of JUNE 2022

Name	Hda/Address	No. of Samples
B. Planter		
1. Godie Columna	Brgy. Pinaguinpinan, Kabankalan City	1
2. Julio Maque	Brgy. Pinaguinpinan, Kabankalan City	1
3. Francisco Zaragoza	Brgy. Pinaguinpinan, Kabankalan City	1
4. Armando T. Gabiota	Brgy. Pinaguinpinan, Kabankalan City	1
5. Joebert Malba	Brgy. Pinaguinpinan, Kabankalan City	1
6. Jesus Dormido	Brgy. Pinaguinpinan, Kabankalan City	2
7. Emilita Gabaya	Brgy. Pinaguinpinan, Kabankalan City	1
8. Florisa S. Casipong	Brgy. Dawis, Bayawan City	1
9. Josephine V. Moreno	Brgy. Dawis, Bayawan City	1
10. Johnrey L. Livestre	Brgy. Dawis, Bayawan City	1
11. Ebert Maglikiang	Brgy. Dawis, Bayawan City	1
12. Nemrod E. Gonzaga	Brgy. Dawis, Bayawan City	1

13. Chendy V. Moreno	Brgy. Dawis, Bayawan City	1
14. Eufemia P. Gagang	Brgy. Dawis, Bayawan City	1
15. Andres Cord B. Moreno	Brgy. Dawis, Bayawan City	1
16. Cherilyn M. Ermita	Brgy. Dawis, Bayawan City	1
17. Joselyn V. Palomar	Brgy. Dawis, Bayawan City	1
18. Mildred A. Balasabas	Brgy. Dawis, Bayawan City	1
19. Lemuel G. Garsula	Brgy. Dawis, Bayawan City	1
20. Felipe E. Ganza	Brgy. Dawis, Bayawan City	1
21. Roger E, Ignacio	Brgy. Dawis, Bayawan City	1
22. Jeriel S. Entrina	Brgy. Dawis, Bayawan City	1
23. Odita G. Abuda	Brgy. Dawis, Bayawan City	1
24. Jessa Mae B. Entrina	Brgy. Dawis, Bayawan City	1
25. Lolita G. Garsula	Brgy. Dawis, Bayawan City	1
26. Hoñe B. Moreno	Brgy. Dawis, Bayawan City	1
27. Rene Silos	Hda. Silos, Brgy. Talaban, Himamaylan City	1
28. Rafael Abello	Had. Progreso, Isabela	1
29. Rosini Dautil	Brgy. Cabcab, Isabela	1
30. Benjamin Maramara	Brgy. Quezon, San Carlos City	1
31. Rosario Mag-aso	Brgy. Quezon, San Carlos City	1
32. Roy Amolo	Brgy. Quezon, San Carlos City	1
33. Julita Toledo	Brgy. Quezon, San Carlos City	1
34. Ma. Junyden Sescia	Brgy. Quezon, San Carlos City	1
35. Josephine Panase	Brgy. Quezon, San Carlos City	3
36. Joel Mag-aso	Brgy. Quezon, San Carlos City	1
37. Baldomar Raul	Cabangahan, Abis, Mabinay	1
38. Baldomar Rony	Cabangahan, Abis, Mabinay	1
39. Gemera Rose Marie	Abante, pamplona	1
40. Nilva Torres	Magsusunog, Pamplona	1
41. Teves Jose Ramon	Cambalud, Pamplona	1
42. Vailoces Momar	Matobato, Bindoy	1
	Subtotal	**45**
B. Research		
1. Agri. Support Services Division	SRA-LGAREC-Lot 12	1
	Subtotal	**1**

For the Month of JULY 2022

Name	Hda./Address	No. of Samples
C. Planter		
1. Joemar Bernardino	Brgy. Quezon, San Carlos City	1
2. Patricio Filipinas	Brgy. Quezon, San Carlos City	1
3. Julita Toledo	Brgy. Quezon, San Carlos City	1
4. Eilen Juanites	Brgy. Quintin Remo, Moises Padilla	1
5. PROFABA	Brgy. Payao, Binalbagan	7
6. Atty. Danilo Tabat	Tabu, Ilog	1
7. Raymond Mabayag	Mambugsay, Cauayan	1
8. MINABA ARCC	Brgy. Tampalon, Kabankalan City	1
9. Jaime Callao	Pinalubongan, Tayasan	1
10. Jimmy Calomba	Pinalubongan, Tayasan	1
11. Susan Ong	Sibulan, Negros Oriental	10
12. Criselda Lapera	Brgy. Santol, Binalbagan	2
13. Laura Bertolano	Brgy. Santol, Binalbagan	1
14. Perlita Cañete	Brgy. Santol, Binalbagan	2
15. Shirley Gagnao	Brgy. Santol, Binalbagan	1
16. Jonas Lapera	Brgy. Santol, Binalbagan	1
17. Rogan Cañete	Brgy. Santol, Binalbagan	1
18. Marianito Magbanua Jr.	Brgy. Santol, Binalbagan	1
19. Clarita Andaya	Brgy. Santol, Binalbagan	2
20. Carmelita Claveria	Brgy. Santol, Binalbagan	1
21. Dante Carmelino	Brgy. Santol, Binalbagan	1
22. Nilo Piduhan	Brgy. Santol, Binalbagan	2
23. Fe Noquina	Brgy. Santol, Binalbagan	1
24. Mildred Gudaca	Brgy. Santol, Binalbagan	1
25. Democrito	Brgy. Santol, Binalbagan	3
26. Felix Damerez	Brgy. Santol, Binalbagan	2
27. Esperidion Ferfas	Brgy. Santol, Binalbagan	2
28. Janna Cañete	Brgy. Santol, Binalbagan	2
29. Jeasselina Edianel	Brgy. Santol, Binalbagan	2
30. Rogelio Servano	Brgy. Santol, Binalbagan	2

31. Jovemer Cañete	Brgy. Santol, Binalbagan	1
32. Carla Marie Pactoran	Brgy. Santol, Binalbagan	1
33. Sylvia Geronaga	Brgy. Santol, Binalbagan	1
34. Charlie Servano	Brgy. Santol, Binalbagan	2
35. Hernanie Aguilar	Brgy. Santol, Binalbagan	2
36. Jessica Saquital	Brgy. Santol, Binalbagan	1
37. Enrique Librosa Dr.	Brgy. Santol, Binalbagan	1
38. Romulo Claveria	Brgy. Santol, Binalbagan	1
39. Raymundo Dalumpines	Brgy. Santol, Binalbagan	3
40. Jose Servano	Brgy. Santol, Binalbagan	2
41. Leocadio Geronaga	Brgy. Santol, Binalbagan	1
42. Wilson Pactoran	Brgy. Santol, Binalbagan	1
43. Julius A. Cangmaong	CTU-TC, Cebu	1
44. Marlynda Abinto	Caputatan Norte, Medellin, Cebu	1
45. Felomina Balansag	La Paz, Bogo City	1
46. Alberto Cabucos	La Paz, Bogo City	1
47. Loreta Lagdoce	Brgy. Ma-ao, Bago City	1
48. Beatrice Sumaragao	Brgy. Ma-ao, Bago City	1
49. Jimmy Tagalog	Brgy. Ma-ao, Bago City	1
50. Babillas Ylagan	Brgy. Ma-ao, Bago City	1
51. Eduardo De la Cruz Sr.	Brgy. Ma-ao, Bago City	3
52. Reymundo Alagos	Brgy. Ma-ao, Bago City	1
53. Nilda Kagakit	Brgy. Ma-ao, Bago City	1
54. Edwin Bandoja	Brgy. Ma-ao, Bago City	1
55. Analyn Lagoyo	Brgy. Ma-ao, Bago City	1
56. Laura Compra	Brgy. Ma-ao, Bago City	1
57. Renato Lastinosa	Brgy. Bacong, Bago City	1
58. Dadito Magmar	Brgy. Bacong, Bago City	1
59. Romeo Lastinosa	Brgy. Bacong, Bago City	1
60. Nenita Magbanua	Brgy. Bacong, Bago City	1
61. Rene Ojedo	Brgy. Bacong, Bago City	1
62. Jerry Mojara	Brgy. Salong, Kabankalan City	1
63. Henry Tan	Pamplona, Neg. Occ	2
64. Sharon Pernia	Brgy. Robles, Neg. Occ.	1
	Subtotal	**98**

B. Research		
1. Soils Lab (Soil Bioremediation)	SRA-LGAREC, Lot 14	24
2. Soils Lab (Pesticide Residue)	SRA-LGAREC, Lot 19	12
	Subtotal	**36**

For the Month of AUGUST 2022

Name	Hda/Address	No. of Samples
C. Planter		
1. Remando Paglumotan	Bayawan City, Negros Oriental	1
2. Inocencio Billones	Bayawan City, Negros Oriental	1
3. MONTICON	Had. Alicante, Isabela	2
4. Jomila Moyong	Brgy. Himaya, Hinigaran	1
5. DJ Ian Segunla	Antipolo, Pontevedra	1
6. Emme Tanda	Brgy. Mambogaton, Himamaylan	2
7. Eco Farm	Brgy. Gatuslao, Candoni	5
8. La Granja Farm School	Brgy. La Granja, La Carlota	1
9. Radan R. Cagalawan	Brgy. Ayungon, La Carlota	1
	Subtotal	**15**
B. Research		
-	-	-
	Subtotal	**-**

For the Month of SEPTEMBER 2022

Name	Hda/Address	No. of Samples
C. Planter		
1. Melvin Ibanez	Had. Paz. La Carlota City	27
2. Mae Anne Rafols	Had. Felicidad, La Carlota City	1
3. Carlos M. Lanuza	Hda. Balabag, JL, Brgy. Balabag	5
4. Rodante Senarosa	So. Ipil-ipil, Brgy. Ma-ao, Bago City	1
5. Roberto Saga	Magsusunog, Pamplona	1
6. TARI	Taiwan	2
7. Joana Colmenares	Ma ao, Bago City	1

8. Herman Manong	Ma ao, Bago City	1
	Subtotal	**39**
B. Research		
-	-	-
	Subtotal	**-**

For the Month of OCTOBER 2022

Name	Hda/Address	No. of Samples
A. Planter		
1.Ben Rodriguez	Brgy. Sagasa Bago City	1
2. Ben Rodriguez	Brgy. Don George Bago City	1
3. Armando Armonio	Brgy. Camandag	1
4. Francis Armonio	La Castellana	1
5. Rosalinda Valenzuela	La Castellana	1
6. Agnes Laniog	La Castellana	1
7. Susan Mission	La Castellana	1
8. Letecia Bangeles	La Castellana	1
9. John Regalado	Cansilayan Murcia	2
10. Dennis Sellado	Brgy. Camalobalo Hinigaran	1
11. Ricardo P. Campos	Brgy. Camalobalo Hinigaran	1
12. Cesar Laurencio	Hda. Berta 2, Balabag	1
13. Jesson A. Sevelo	So. Hiniwaran, Moises Padilla	1

For the Month of NOVEMBER 2022

Name	Hda./Address	No. of Samples
A. Planter		
1. Manalo Abesit	Brgy. Pandan, Pontevedra	3
2. Martin Jalandoni	Maja Grande Brgy. Robles, La Castella	1
3. Martin Jalandoni	MTJ Farm Alegria Haguimit	1
4. Martin Jalandoni	Hda. Carvina 3 Isabela	1
5. Martin Jalandoni	Hda. Alegria Haguimit	1
6. Martin Jalandoni	Hda. Palencia Brgy. San Miguel LCC	1

7. Jose Nordy Arevalo	Hda. Salamanca	1
8. Argeline Lubay	Cubay La Carlota	1
9. Ma. Cecilia Farm Workers Assoc.	Brgy. Crossing Magallon	1
10. Dama Farm Workers	Hda. Dama, Cabacungan	1
11. Reform Benefeciaries	La Castellana	1
12. Jayson Tumbay	La Carlota City	2
13. Mellisa Jane C. Sison	La Carlota City	1
14. Martin Jalandoni	Hda. Palencia Brgy. San Miguel LCC	1
15. Martin Jalandoni	Hda. Alegria Haguimit	2
16. Martin Jalandoni	Hda. Grande Brgy. Robles La Castella	1
17. Martin Jalandoni	Hda. Carvina 3 Isabela	1
18. UPLBCAFS / LGRTS	Brgy. La Granja, La Carlota	1
19. Azcona, Pablo Luis	Hilamonan Kabankalan City	7
20. HANARBA	Hda. Nalipay Brgy. V Isabela	2
21. Alfredo Sevilla	Hda. Nalipay Brgy. V Isabela	1
22. Salvacion Yangyang	Hda. Nalipay Brgy. V Isabela	1
23. Gangoso, Luzviminda	Hda. Nalipay Brgy. V Isabela	1
B. **Research**		
1. BSWM-PT Sample		2

For the Month of DECEMBER 2022

Name	Hda./Address	No. of Samples
A. Planter		
1. Alfonso Miguel Siason	Hda. Concordia, Brgy. Binalbagan	11
2. Leonida Rato	Brgy. Manghanoy, Sitio Sambag	1
3. Leah A. Dela Paz	San Isidro Pont. Negros	1
4. Atty. Alfonso Miguel Siason	Brgy. Sibucao, San Enrique	7
5. Elsa Zafra	Prk. Bagong Silang Ma-ao Bago City	7
6. Jasper Neil D. Parcon	Brgy. Talacdan , Cauyan	1
7. VIPM	Bais	1
8. Amano	Sitio Nolan Brgy. Mansalanao, La castellana	2
9. Ma. Cecilia Farm Workers Assoc.	Brgy. Crossing, Magallon	1

10. Estela Agrarian Reform Cop.	Hda. Estela A. Brgy. San Miguel La Carlota	3
11. Mark Serios	Camingawan, Kabankalan	2
12. Paul Azcona	Hda. San Lucas , Kabankalan City	2
13. Neda Ueralio	Brgy. Malingin , Bago City	1
14. Uswaldo Lipalam	Brgy. Binalbagan, Bogo City	1
15. Leonico Alagase	Brgy. La Paz , Bogo City	1
16. Dionisio Lirasan	Brgy. La Paz , Bogo City	2
17. Eloisa Lambuyog	Brgy. Binalbagan, Bogo City	1
18. Macario Ypil	Brgy. Binalbagan, Bogo City	3
19. Maximo Batuigas	Hda. Iling-iling , Brgy. Cabandongan, Himamaylan	1
20. Rolando Gambalan	Hda. Iling-iling , Brgy. Cabandongan, Himamaylan	1
	Sub-Total	50
B. **Research**		
1. JIRCAS	Multiple locations	100
	total	150

II. Other Sugarcane By-Products

For the Month of January 2022

Name	Sample	No. of Samples
A. Private		0
	Subtotal	0
B. Research		
1. Rosenie Entima	Sugarcane Stalks, La Castellana	48
2. Rosenie Entitma	Sugarcane Stalks, Sagay	48
3. JIRCAS	Sugarcane Stalks, La Granja	3
4. Teresita B. Bañas	Sugarcane Stalks, La Granja	12
	Sub Total	**111**

For the Month of February 2022

Name	Sample	No. of Samples
A. Private		
1. Project-SARAI 1.2	Sugarcane Stalks	21
	Subtotal	**21**
B. Research		
1. Rosenie Entima	Sugarcane Stalks, Manapla	**48**
	Subtotal	**48**

For the Month of March 2022

Name	Sample	No. of Samples
A. Private		
1. Carlos Jadeniano	Sugarcane Stalks, Talisay	20
2. Project SARAI	Sugarcane Stalks	46
	Subtotal	**66**
B. Research		
1. Rosenie Entima	Sugarcane Stalks, La Granja	**72**
	Subtotal	**72**
	Grand Total	**318**

For the Month of April 2022

Name	Sample	No. of Samples
B. Private		
1. Project SARAI	Sugarcane juice	71
2. Carlos C. Jardeniano	Sugarcane juice	20
	Subtotal	**91**
B. Research		
5. Rosenie G. Entima	Sugarcane juice, SRA-LGAREC	56
6. Soils Laboratory (Micronutrient)	Sugarcane juice, SRA-LGAREC	48
7. Soils Laboratory (P-Validation)	Sugarcane juice, SRA-LGAREC	27
8. Teresita Bañas	Sugarcane juice, SRA-LGAREC	27
	Sub Total	**158**

For the Month of May 2022

Name	Sample	No. of Samples
A. Private		
1. Carlos Jardeniano	Sugarcane juice	40
2. Carlos Jardeniano	Sugarcane juice, Maao	20
	Subtotal	**60**
B. Research		
1. JIRCAS	Sugarcane juice, SRA-LGAREC	12
2. Atty. Ignacio S. Santillana	Sugarcane juice, SRA-LGAREC	7
3. Jhon Abrien Soliza	Sugarcane juice, SRA-LGAREC	24
4. Jayno C. Ramos	Sugarcane juice, SRA-LGAREC	12
	Subtotal	**55**

For the Month of June 2022

Name	Sample	No. of Samples
A. Private		
1. Edchel O. Lambot	Sugarcane juice, CPSU-Kabankalan	18
2. Rustum G. Flores/Aries T. Villanueva	Sugarcane juice, Himamaylan City	18
	Subtotal	**36**
B. Research		
1. Ma. Theresa D. Alejandrino	Sugarcane juice, SRA-LGAREC	129
2. Rosenie G. Entima	Sugarcane juice, SRA-LGAREC	128
3. JIRCAS	Sugarcane juice, SRA-LGAREC	3
4. PTCM	Sugarcane juice, SRA-LGAREC	24
	Subtotal	**284**
	Grand Total	**684**

For the Month of JULY 2022

Name	Sample	No. of Samples
C. Private		-
1.		
	Subtotal	-

B. Research		
1. Farm Services	Sugarcane juice, SRA-LGAREC	4
2. JIRCAS-SRA	Sugarcane juice, SRA-LGAREC	15
3. Teresita B. Bañas	Sugarcane juice, SRA-LGAREC	12
	Sub Total	**31**

For the Month of AUGUST 2022

Name	Sample	No. of Samples
A. Private		
-	-	-
	Subtotal	**-**
B. Research		
1. Teresita B. Bañas	Sugarcane juice, SRA-LGAREC	6
2. JIRCAS-SRA	Sugarcane juice, JIRCAS-SRA	3
3. Ma. Theresa D. Alejandrino		24
	Subtotal	**33**

For the Month of SEPTEMBER 2022

Name	Sample	No. of Samples
A. Private		
Carlos Jardeniano	-	4
	Subtotal	**4**
B. Research		
1. Teresita B. Bañas	Sugarcane juice, SRA-LGAREC	44
	Subtotal	
	Grand Total	**46**

For the Month of October 2022

Name	Sample	No. of Samples
D. Private		
	Subtotal	0
B. Research		
9. Rosenie G. Entima	Sugarcane juice, SRA-LGAREC	48
10. Teresita B. Bañas	Sugarcane juice, SRA-LGAREC	6
	Sub Total	**54**

For the Month of November 2022

Name	Sample	No. of Samples
A. Private		
	Subtotal	
B. Research		
1. Rosenie G. Entima	Sugarcane juice, SRA-LGAREC	96
2. Teresita B. Bañas	Sugarcane juice, SRA-LGAREC	6
	Sub Total	
	Total	**102**

For the Month of December 2022

Name	Sample	No. of Samples
A. Private		
1. John Louie T. Sabio	Sugarcane stalk	5
	Subtotal	**5**
B. Research		
1. Rosenie Entima	Sugarcane stalk	84
	Subtotal	**84**
	Total	**89**

III. Special Analysis

For the Month of January 2022

Name	Sample	No. of Samples
A. Research		
1. JIRCAS-SRA	Sugarcane juice	**3**
2. Soils Laboratory	Sugarcane leaves	48
3. Soils Laboratory	Sugarcane leaves	**27**
	Subtotal	**78**

For the Month of February 2022

Name	Sample	No. of Samples
B. Research		
1. JIRCAS-SRA	Sugarcane Fibre	**64**
	Subtotal	**64**

For the Month of March 2022

Name	Sample	No. of Samples
C. Research		
1. JIRCAS-SRA	Sugarcane Fibre	**64**
	Subtotal	**64**
	Total	**206**

For the Month of April 2022

Name	Sample	No. of Samples
D. Research		
1. JIRCAS-SRA	Sugarcane fiber	3
2. JIRCAS-SRA	Sugarcane fiber	3
	Subtotal	**6**

For the Month of May 2022

Name	Sample	No. of Samples
E. Research		
1. JIRCAS-SRA	Sugarcane fiber	**9**
	Subtotal	**9**

For the Month of June 2022

Name	Sample	No. of Samples
F. Research		
1. JIRCAS-SRA	Sugarcane leaf	**5**
	Subtotal	**5**
	Total	**20**

For the Month of July 2022

Name	Sample	No. of Samples
G. Research		
1. monticon	BMO	3
2. J. Ledesma	BMO	2
3. URSOMCO	BMO	2
	Subtotal	**7**

For the Month of August 2022

Name	Sample	No. of Samples
H. Research		
1. JIRCAS-SRA	Sugarcane juice	**15**
2. JIRCAS-SRA	Sugarcane fiber	**45**
3. JIRCAS-SRA	Sugarcane stalks	**15**
4. JIRCAS-SRA	Sugarcane leaves	**15**
5. KABANKALAN BLOCKFARM	BMO	**3**
	Subtotal	**93**

For the Month of September 2022

Name	Sample	No. of Samples
I. Research		
1. JIRCAS-SRA	Sugarcane fiber	**45**
2. KABANKALAN BLOCKFARM	BMO	**3**
3. FFTC TARI	PLANT TISSUE	**1**

4. BUKIDNON	BMO	**1**
	Subtotal	**50**
	Total	**150**

For the Month of October 2022

Name	Sample	No. of Samples
J. Research		
1. JIRCAS-SRA-NSC	Sugarcane fiber	18
2. JIRCAS-SRA-NSC	Sugarcane stalks	3
3. JIRCAS-SRA-NSC	Sugarcane leaves	3
4. CADPI	BMO	1
5. MONTINOLA	BMO	2
	Subtotal	**27**

For the Month of November 2022

Name	Sample	No. of Samples
K. Research		
1. MTD	BMO	12
2. HAGCARBA	BMO	2
	Subtotal	**14**

For the Month of December 2022

Name	Sample	No. of Samples
L. Research		
1. La Carlota mddc	BMO	**2**
2. LAREC	BMO	4
3. SAGAY MDDC	BMO	2
	Subtotal	**8**
	Total	

II. Best Practice/s (if applicable)

- Timely analysis of the samples this ensures that our clients get the results in preparation for their planting.
- Communicating with the clients to remind them to take the results via email or in person. This ensures that our commitment to serve them.
- Good record keeping tracking of the requested items.
- Continuous field visits and lectures on soil fertility management, proper soil sampling, and proper BMO preparation to name a few. These activities ensures that planters and stakeholders are properly trained and informed of the correct and efficient way to manage the fertilizer application thru our soil test. Also, this activity gives our client updated and informative knowledge to the importance of our services in connection to their profitability thereby increasing the clients coming to our laboratory.

III. Photo Documentation

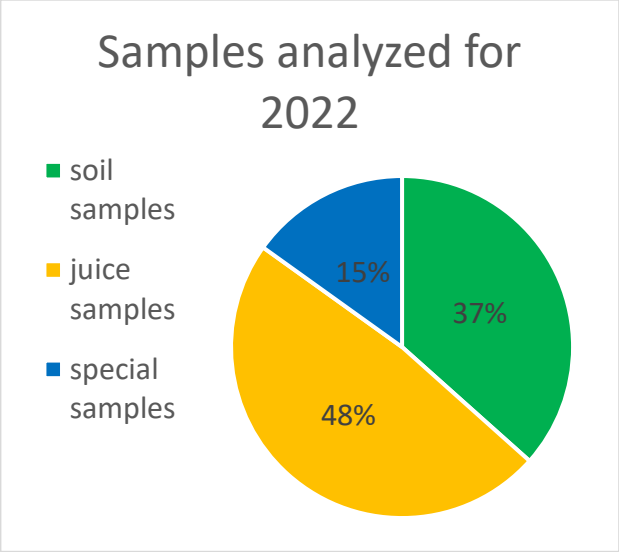


Figure 1. distribution of samples received for crop year 2022

Figure 2. Quantitative and Qualitative analysis of BMO

Figure 3. PT samples from FAO and FFTC- TARI, (Rightmost) certificate of participation from FFTC-TARI

IV. Sustainability Plan of the PAP

The project will bank on its goal to deliver timely and accurate laboratory services thru soil analyses, sugarcane juice maturity testing and other agro-based materials analyses referred by planters, farmers, fertilizer formulators, researchers, and other walk-in clients as its sustainability mechanism.

The following support actions and mechanism will be implemented to ensure that the project achievements are sustained:

(1) massive information drive on soil fertility management clients is made aware of the importance of our services to their gains, thus increasing the flow of samples receive and analyzed by the laboratory. We are, likewise, actively involved in the transfer and dissemination of our specialized field of expertise through our Outreach Programs for the Sugar Industry (OPSI) to students, researchers, farmers, and other entities in the sugar industry. We were active in providing online and onsite lectures on (1) Soils Sampling and fertilization; (2) Liming of Sugarcane crops; and (3) Soil fertility as well as the farmers who visit the Soils laboratory-LGAREC for fertilizer computations, and some field visit especially in this challenging and critical times wherein fertilizer prices are constantly increasing, and our soil is gradually declining in fertility.

(2) securing licenses to operate with ease that our laboratories conforms to different regulatory buddies. Our laboratory has since then work on securing licenses and as of the moment we have secured license to operate(LTO) as a chemical laboratory from professional regulation commission(PRC) to date we are still working on securing additional license required by Bureau of Soil and Water Management (BSWM). In addition to this the laboratory also needs to secure permits from Philippine national police (PNP) and Philippine Drug Enforcement Agency (PDEA) to secure necessary chemicals so that the laboratory will not have hindrance in procuring certain chemicals needed for some analysis that our clients and researchers needs. Also, these permits, and licenses is vital for securing an ISO certificate so that the laboratory will be at par to the international standards.

(3) continuous trainings and seminars are highly necessary for the technical staff to be updated on the latest trends and techniques in analyzing the samples in a much sustainable and environment friendly way.

(4) laboratory equipment and maintenance, this ensures that equipment is functioning well and calibrated thus reducing errors in analysis and cost by buying new one.

Department/Division: Soils Laboratory, SRA-LGAREC, RD&E - VISAYAS
Year: 2022 **A.**

PROGRAM/PROJECT: Research/Collaborative projects

Approved Budget: 92,000

I. Highlights of Accomplishment

A. Research Activities

For Crop Year 2022, the Soils Laboratory section has terminated four (4) field experiments. This researches are entitled; **1.) Micronutrient Sufficiency level in Sugarcane crop; (2) Phosphorus Method Field Validation; (3) Pesticides Residues assessment; and (4) Bioremediation and P-speciation in sugarcane respectively.**

All of these experiments were sampled, analyzed, and monitored for both leaves and soil every 3 months from planting to assess the response of treatments to its nutrient uptake and soil chemical properties. Also, growth parameters were measured and recorded every three months as well, to monitor the growth response relative to age and treatments for each respective research. All this research has been harvested and terminated last March 2022. Refer to Figure 1 and 2 below.

The Soils Laboratory section have presented two (3) research projects was presented in Philsutech convention, Philippine Chemistry congress, DOST scholars conference, and 13th international symposium on southeast Asian water environment ; **(1) Soils Fertility Status of Sugarcane Cultivated Areas in the Philippines; and (2) Combined Effect of Azospirillum spp. Arbuscular Mycorrhizal Fungi and Sugar Press Mud to the Growth and Nutrient Uptake of Water-Stressed Sugarcane Plant; (3) Ground Nitrate Concentration on Intensive Sugarcane Growing Areas in Negros Island Philippines all are presented by Ms. Virgie P. Celestial.** In addition, Jayno Ramos and Jhon Abrien Soliza presented four finished project for the concluded SRA-RDE national in-house review 2022 entitled **(1)Assessment Of Pesticide Residue On Soil, Run-Off, Plant Tissue And Juice Of Selected Philippine High Yielding Varieties Of Sugarcanes; (2) Yield Response Of Phil 2004-1011 As Influenced By Varying Levels Of Soil Micronutrients' Boron, Zinc, Copper And Molybdenum; (3) Soil Bioremediation And Phosphorus Speciation Applied With Different Organic Amendments; (4) Available Phosphorus Extraction Method Field Validation For Sugarcane Crop.** Also, for research 1 and 4 Mr. Ramos and Soliza have won 1st place and best paper, respectively**.** All these papers are all equally important and valuable for the stakeholders. (Refer to Figure 3, 4, and 5)

B. Collaborative Research Projects

We are continually working with our JIRCAS counterparts on three (3) projects namely; **(1) Development of Soil Carbon Storage; and (2) Development of Deep Planting Technology in the Philippines; and (3) Development of Sugarcane Production System which can Produce the Highest Annual Yield.** The third batch of soil sample collection was actualized last February 14-March 3, 2022 as part of the "Development of Soil Carbon Storage" research project. Soil samples were collected from various sampling sites composed of sugarcane, forest and home garden areas in Negros Occidental. It was then sent to JIRCAS research station in Tsukuba, Japan for analysis upon collection. Refer to figure 6

For February 21, 2022, the SRA-LGAREC Soils Laboratory personnel conducted the harvesting, yield parameter data collection, fiber content, sucrose, fructose and glucose analysis for Treatments T1 (12 MAP-Dry Season), T3 (8 MAP-Dry Season), T4 (6 MAP-Dry Season) & T8 (6 MAP-Wet Season) on "Development of Sugarcane Production System which can Produce the Highest Annual Yield" research project.

Further, the field lay-out of "Development of Deep Planting Technology in the Philippines" research experiment was also started last March 18, 2022 in two different sites in Negros Occidental with varying soil fertility level. Monthly monitoring of the plant growth was also conducted through collection of growth parameter data such as plant height, tiller count and SPAD index. Refer to (Figure 7).

Furthermore, another set of harvesting was done last August to measure the yield parameters such as; fiber content, sucrose, fructose and glucose analysis for treatments T2 (10 MAP-Dry Season), T4 (6 MAP-Dry Season), T5 (12 MAP-Wet Season), T7 (8 MAP-Wet Season) & T8 (6 MAP-Wet Season) on the third project mention above.

Table 1. Soils Laboratory Research Activities

Project Name	Micronutrient Sufficiency Determination	Phosphorus Method Field Validation	Pesticide Residue Assessment	Soil Bioremediation
Test Site	***LGAREC, LOT 19***	***LGAREC, LOT 19***	***LGAREC, LOT 19***	***LGAREC, Lot 14***
January	Conduct Brix Monitoring	Conduct Brix Monitoring	Sample Tagging	Sample Tagging
February	Harvesting, Data gathering and Sampling	Harvesting, Data gathering and Sampling	Conduct Brix Monitoring	Conduct Brix Monitoring
March	Analyzed soil samples	Analyzed soil samples	Harvesting, Data gathering and Sampling	Harvesting, Data gathering and Sampling
April	Encoding of data	Encoding of data	Analyzed soil samples	Analyzed soil samples
May	-	-	Encoding of data	Encoding of data
June	Terminated From this point	Terminated From this point	Terminated From this point	Terminated From this point

Table 2. Soils Laboratory Collaborative Research Activities with JIRCAS

Date	Research Project/ Program	Activity
February 14-March 3, 2022	Development of Soil Management Technique to Improve the Soil Carbon Storage	-Collection of soil samples at various sampling sites in Negros Occidental, composed of sugarcane fields, forest and home garden areas.
February 21, 2022	Development of Sugarcane Cultivation System which can Produce the Highest Annual Yield	-Harvesting of sugarcane stalks from Treatments T1 (12 MAP-Dry Season), T3 (8 MAP-Dry Season), T4 (6 MAP-Dry Season) & T8 (6 MAP-Wet Season) -Collection of yield parameter data such as plot weight, stalk weight, stalk diameter and number of internodes -Analysis of percent fiber, sucrose, fructose and glucose content of sugarcane stalk samples
March 18-March 27, 2022	Development of Deep Planting Technology in the Philippines	-Conducted field lay-out and planting on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
June 2022	Development of Deep Planting Technology in the Philippines	-Collected growth parameter data (3 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
July 2022	Development of Deep Planting Technology in the Philippines	-Collected growth parameter data (4 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
August 2022	Development of Sugarcane Cultivation System which can Produce the Highest Annual Yield	-Harvesting of sugarcane stalks from Treatments T2 (10 MAP-Dry Season), T4 (6 MAP-Dry Season), T4 (6 MAP-Dry Season), T5 (12 MAP-Wet Season) & T8 (6 MAP-Wet Season) -Collection of yield parameter data such as plot weight, stalk weight, stalk diameter and number of internodes -Analysis of percent fiber, sucrose, fructose and glucose content of

		sugarcane stalk samples
September 2022	Deep Planting Technology	-Collected growth parameter data (6 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
October 2022	Deep Planting Technology	-Collected growth parameter data (7 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
	Development of Sugarcane Cultivation System which can Produce the Highest Annual Yield	-Harvesting of sugarcane stalks from Treatment 8 -Collection of yield parameter data such as plot weight, stalk weight, stalk diameter and number of internodes
November 2022	Deep Planting Technology	-Collected growth parameter data (8 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)
		-Field visit together with JIRCAS research team on all on-going collaborative projects and other probable research areas in Negros.
December 2022	Deep Planting Technology	-Collected growth parameter data (9 MAP) on Alijis, Bacolod City (Low Soil Fertility) and SRA-LGAREC (Standard Soil Fertility)

II. Best Practice/s (if applicable)

- Timely analysis of the samples this ensures that results is ready in preparation for the analysis of data for presentation.
- Good record keeping and tracking of the requested items and job request to ensure continuous pay out for our workers on field.
- Continuous field visits and monitoring of research fields to ensure that all activities are done timely and fields are will taken care of.
- Training and seminars are also vital in updating our knowledge in research
- Good coordination between departments to ensure smooth flow of work
- Constant meeting and update with our JIRCAS collaborative partners.

III. Photo Documentation

A. Research Activities

Figure 1. Research field activities such as harvesting, stalk sampling,

Figure 2. Sampling and data gathering activities

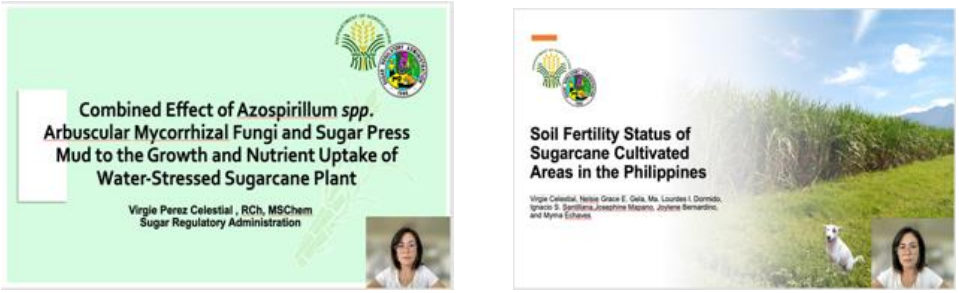


Figure 3. Reseacrhes Presented in 36 th Philippine chemistry Congress, Philsutech convention, and DOST scholars conference.

Figure 4. Reseacrhes Presented in 36 th Philippine chemistry Congress, Philsutech convention, and DOST scholars conference.

Figure 5. SRA-RDE inhouse review 1st place and best paper award for the soils lab-LGAREC team

B. Collaborative Research Projects

Figure 6. Soil collection for the collaborative research of SRA and JIRCAS

Figure 7. Field lay-out of "Development of Deep Planting Technology in the

IV. Sustainability Plan of the PAP

The research projects of the soils lab was terminated and presented for year 2022, All these papers are all equally important and valuable for the stakeholders and promotes sustainability in farming cultures, while JIRCAS collaborative projects are still on-going and vastly depends on the funds from the proposed projects of JIRCAS collaborators.

RESEARCH DEVELOPMENT AND EXTENSION
AGRICULTURAL SUPPORT SERVICES DIVISION

Year: 2022

A. PROGRAMS/RPOJECTS:

1. FARM SERVICES UNIT

1.a. *Propagation of New and Prevailing HYVs including One Eye Cutting Nursery*
1.b. Budget: Php6,327,848.00

2. SUPPORT SERVICES DIVISION

2.a. *Provision of Support Services for the LGAREC Station*
2.b. Budget: Php7,444,780.00

3. TRICHOGRAMMA LABORATORY

3.a. *Mass Production of Trichogramma Strips for the Control of Borers*
3.b. Budget: 699,308.00

I. HIGHLIGHTS OF ACCOMPLISHMENTS

A. FARM SERVICES UNIT

One of the important functions of the unit is the propagation and distribution of Sugar Regulatory Administration's sugarcane New High Yielding Varieties(HYV's); sales and distributions of sugarcane canepoints to sugarcane planters, MDDC's, SUC's, sugarcane farmer associations, block farms, individual/group of sugarcane researchers and also provision of planting materials to SRA-LGAREC research units.

For fiscal year 2022, the sales and distributions of HVY's exceeded the target by about 255.54%, from 280 lacsa target to 715.52 lacsa actual released with 152 recipients. The massive releases of HYV were due to the clients increased demand and satisfactory feedback of SRA produced varieties which help sugarcane planters increase their production and income. Among HYV's, Phil 2006-2289 gain the highest demand which reached up to 75.56% of the total released as shown in the table below.

On the other hand, sugarcane planters took the lead for all recipients of HYVs (84.21%), followed by block farms/MDDCs/sugarcane farmers association (11.18%) and researchers/SUCs (4.61%).

Aside from sales and distributions of sugarcane HYVs, the unit also has provided support services to LGAREC research units; area allocations, field operations/land preparations, irrigation and drainage and other support operations.

PRODUCTION AND DISTRIBUTION OF HYV

VARIETY	TOTAL PRODUCTION (LACSA)	TOTAL DISTRIBUTION (LACSA)	NO. OF BENEFICIARIES	VARIETY SHARE ON DISTRIBUTION
PHIL 2009-0919	5.32	5.32	4	0.74%
PHIL 2009-1969	74.6	71	18	9.92%
PHIL 2006-2289	551.14	540.64	101	75.56%
PHIL 2006-1899	0.12	0.12	1	0.02%
PHIL 2004-0827	0.06	0.06	1	0.01%
PHIL 2004-1011	0.16	0.16	1	0.02%
PHIL 2000-0791	1.3	1.3	1	0.18%
PHIL 99-1793	96.5	96.5	22	13.49%
PHIL 97-3933	0.1	0.1	1	0.01%
PHIL 8013	0.32	0.32	2	0.04%
TOTAL	**729.62**	**715.52**	**152**	100%

HYV CANEPOINTS RECIPIENT DISTRIBUTION

RECIPIENTS		TOTAL NUMBER of TAKERS	TOTAL NUMBER OF LACSA	PERCENT SHARE OF TAKERS
Sugarcane Planters	MALE	103	549.16	67.76%
	FEMALE	25	63.58	
Block Farms/MDDC/Sugarcane Planter Associations/Organizations		17	75.84	11.18%
Researchers/SUC's		7	26.94	4.61%
TOTAL		152	715.52	100.00%

B. SUPPORT SERVICES UNIT

The unit is responsible for the provision of support services to different research units of SRA-LGAREC Station. These support services which help LGAREC researchers and personnel did their specific operations include;

a. Tractor services for field operations(land preparations, inter-row cultivations, hauling of researchers cane samples and planting materials, hauling of agricultural supplies)
b. Transportation services to researchers and other LGAREC personnel to different specific locations
c. Support labor services and other services: maintenance of buildings and grounds, repair and maintenance of electrical power system, irrigation and domestic water facilities, repair and maintenance of service vehicles, tractors and implements.

Table below shows some important accomplishments of the unit for SRA-LGAREC field operations.

IRRIGATION SERVICES AND OPERATION

DIVISION/UNIT	NO. OF HECTARES IRRIGATED
RESEARCH DIVISION	11.891 Ha
FARM SERVICES	13.987 Ha
TOTAL	**25.878 Ha**

TRACTOR SERVICES AND OPERATIONS

DIVISION/UNIT	LAND PREPARATIONS / CLEARING OPERATIONS	INTER-ROW CULTIVATIONS (RATOONER / ROTAVATOR)
RESEARCH DIVISION	28.531 Ha	
FARM SERVICES	16.177 Ha	22.309 ha
TOTAL	**44.708 Ha**	**22.309 Ha**

This table shows the list of service vehicles used by LGAREC Station in different field operations. Service vehicles for the transportation of researchers and LGAREC personnel. Trucks were used in hauling agricultural supplies, delivery of harvested canes, hauling mud press and mill ashes and delivery and hauling of researchers planting materials and cane samples respectively.

VEHICLES	YEARS IN SERVICE	STATUS/REMARKS
1. NISSAN NAVARA	15 years	Operational; for replacement of brake system and PMS
2. HYUNDAI H-100	5 years	Operational; aircon for check-up
3. FUSO DUMP TRUCK	18 years	Operational; minor repair done on brakes
4. ISUZU ALUMINUM VAN	2 years	Operational
5. TOYOTA VAN	2 years	Operational
6. TOYOTA REVO SJF-356	19 years	Operational; for wash-over, minor problem on steering
7. NISSAN VAN NV350	7 years	Operational
8. CANTER DUMPTRUCK	10 years	Operational; minor repair done on clutch

This table shows the list of tractors and implements which notably did field operations for research and propagation field.

TRACTORS AND IMPLEMENTS

TRACTOR/IMPLEMENT	ACTIVITIES DONE/STATUS/REMARKS
1. FORD TRACTOR 6600	For repair; hydraulic cylinder
2. JOHN DEERE 6605 #1	Non-Operational; for overhauling
3. JOHN DEERE 6605 #2	Operational; for injection pump calibration
4. JOHN DEERE 3036EN	Operational; with rotavator for cultivation
5. JOHN DEERE 3036E	Operational; with sickle sword for harvesting
6. JOHN DEERE 3036E	Operational; with sickle sword for harvesting
7. FORD COUNTY(Dozer)	Operational
8. ROTAVATOR	Operational
9. DISC HARROW(FORD TRACTOR)	Non-Operational; disc shaft was fractured and for repair
10. DISC HARROW(John Deere 6605)	Operational
11. FURROWER(4units)	Operational
12. DISC PLOW	Operational
13. CHISEL IMPLEMENT	Operational
14. INTER-ROW IMPLEMENT	Operational
15. Cane Grabber1	Operational
16. Cane Grabber2	Operational
17. Moldboard Plow	Non-operational; under repair

A. TRICHOGRAMMA LABORATORY

The mass production of *Trichogramma* as a potential biological control agent against sugarcane stem borers of the Sugar Regulatory Administration, La Granja Agricultural Research and Extension Center gave a significant impact to the sugarcane planters as well as to rice, corn, and vegetable farmers in Negros and other part of Visayas for the past years.

The increasing demand of sugarcane planters/farmers is an evidence of its significance to the farmers as their biological control agent for stem borers. *Trichogramma* is an egg parasitoid that kills the pest before it can cause any damage to the plant.

TRICHOGRAMMA STRIPS PRODUCTION AND DISTRIBUTION

ITEM	TOTAL PRODUCTION (NO. OF STRIPS)	TOTAL DISTRIBUTION (NO. OF STRIPS)	NO. OF BENEFICIARIES	REMARKS
TRICHO STRIPS	33,804	26,287	113	7,517 strips were used as starter

TRICHOGRAMMA STRIPS RECIPIENT DISTRIBUTION

RECIPIENTS		TOTAL NUMBER	TOTAL NUMBER OF STRIPS TAKEN	PERCENT SHARE OF TAKERS
Sugarcane Planters	MALE	78	9,761	69.03%
	FEMALE	2	104	1.77%
Block Farms/MDDC/Sugarcane Planter Associations/Organizations		11	12,336	9.73%
Researchers/SUC's		22	4,086	19.47%
TOTAL		113	26,287	100.00%

II. PHOTO DOCUMENTATIONS

HYV FIELD PHOTOS

PHIL 2006-2289

PHIL 2006-2289

CUTBACKED PHIL 2006-2289 READY TO RELEASE

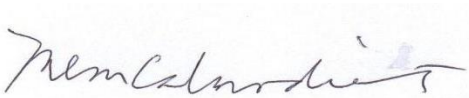
PHIL 2006-2289

VARIOUS ACTIVITIES OF TRICHOGRAMMA LABORATORY

III. SUSTAINABILITY PLAN OF THE PAP

The division shall continue and improve the productivity of the projects to support and provide the necessities of sugarcane planters, researchers, research units, and other clienteles of LGAREC Station.

Prepared and submitted by,



MA. LOURDES C. ALMODIENTE, Dr. Dev.
OIC-Agricultural Support Services Divisio

Division/Unit: Agro-Based Laboratory Unit-Visayas

Year: 2022

PROGRAM/PROJECT:

1. Soil, Fertilizer, Plant Tissues and other Special Analysis

Budget: Php 4,130,000.00

1.a. Preparation of Cultures of Microorganism for Sugarcane Production.

Budget: Php 78,000.00

1.b. P.D. 1435 Issuance of LTO-SL

Budget: Php 150,000.00

2. Determination of sufficiency level of Micronutrient for Sugarcane Soils.

Budget: Php 70,000.00

3. Comparison of Soil Phosphorus Analytical methods for Sugarcane Soils.

Budget: Php 70,000.00

I. Highlights OF ACCOMPLISHMENT

1. Soil, Fertilizer, Plant Tissues and other Special Analysis

The Agro-Based Laboratory Unit delivered a high quality and timely laboratory services to Stakeholders of Negros and Panay Areas through: Conducting chemical analysis of soil Recommending fertilizer doses based on the results of analysis. Conducting proximate analysis of various agro-based materials (Lime, Rockphosphate, Dolomite, Commercial and Organic fertilizer, feeds, Plant Tissues, etc.) Extending technical assistance to planters and formulators on problem related to results interpretation, fertilizer scheme, etc. Maintaining culture of beneficial microorganism in agriculture and formulate suitable carriers for these Microorganism. Beneficial Microorganism were made available to sugar farmers for free.

The laboratory received and analyzed a total of **2748** samples for the year 2022. There were **1,875** soil samples which were submitted by **543** planters and **873** special sample submitted by **159** planters, researchers and agricultural product suppliers. Also, a total of **1518** determination were conducted for Total Nitrogen (N), Phosphorus (P), Potassium (K), Calcium (Ca), Magnesium (Mg), Calcium Carbonate ($CaCO_3$), Silica as (SiO_2), Cupper (Cu), Iron (Fe), Lead (Pb), Zinc (Zn), Arsenic (As), Mercury (Hg), Cadmium (Cd), Aluminum as (Al_2O_3) and Manganese (Mn). In addition, the trace elements were conducted using X-Ray Flourescence Spectrophotometer.

Summary of sample analyzed and clients served for year 2022

Sample Type	No. of sample analyzed	No. of client served
Soil Sample	1875	543
Special Sample	873	149
Total	**2748**	**702**

Soil analysis is the valuable tool for sugar farming. Proper soil test will help ensure the application of enough fertilizer to meet the requirement of the crop while taking advantage of the nutrients already present in the soil. With proper fertilization production increases, higher sugar yield means higher returns.

1.a. Preparation of Cultures of Microorganism for Sugarcane Production

The Laboratory maintain the following cultures of Beneficial Microorganism for agricultures: Acetobacter, Azotobacter, Azospirillum. Trichoderma and others indigenous microorganism. And prepare **92** litter of pure culture. These were made available to planters for free. By maintaining this Beneficial Microorganism, help in the mass production conducted by the researchers in LGAREC, available for distribution to stakeholders.

1.b. P.D. 1435 Issuance of LTO-SL (License to Operate Soil Laboratory)

The Agro-Based Laboratory participated in three (PT) Proficiency Testing provider. The proficiency testing is one of the requirements of the Laboratory for LTO_SL application as per P.D. 1435:

1. GLOSOLAN Global Soil Laboratory Network, United nation. Conducted last March 2022
2. FFTC-TARI Taiwan Agricultural Research Institute Proficiency Testing for soil and plant tissues conducted last August 2022; 3. PHIL NASOLAN Philippine National Soil Network soil proficiency testing cycle-01 conducted last November 2022.

The Agro-Based Laboratory given a satisfactory rating with a Z-score of ≤ 2. For Organic Carbon, Phosphorus, Nitrogen, Calcium, Magnesium and pH. (Z-score indicate less than 2 satisfactory, between 2 & 3 questionable and greater than 3 is unsatisfactory). The certificate of License to Operate Soils Laboratory (LTO-SL) is important and valuable to all Soils Laboratory in the Philippines to continue its operation.

2. Determination of Sufficiency Level of Micro-nutrient for Sugarcane Soils

3. Comparison of Soil Phosphorus Analytical Methods for Sugarcane Soils

This two (2) projects; 1) Determination of Sufficiency Level of Micro-nutrient for Sugarcane Soils; 2) Comparison of Soil Phosphorus Analytical Methods for Sugarcane Soils, were terminated March 2022, these were the collaborative research of Agro-Based Laboratory and Soils Laboratory LGAREC. These were re-titled to;

1. Yield Response of Phil 2004- 2011 as Influenced by Varying Levels of Soil Micro-nutrient' Boron, Zinc, Copper and Molybdenum;
2. Available Phosphorus Extraction Method Field Validation for Sugarcane Crop. These were

presented in the 2022 RDE-NATIONAL IN-HOUSE Review in Pampanga by Mr. Jayno Ramos and Jhon Abrien Soliza of Soils Laboratory LGAREC and have won 1st place and best paper respectively. All these papers are all equally important and valuable for all Stakeholders. The detailed Summary of the research activity for 2022, were included in the Soils Laboratory LGAREC 2022 Annual Narrative Report.

II. Best Practices

A. Timely delivery of quality services

- The analysis result should be ready before the given date. Extending assistance to client for their soil fertility concerns and students for their research and on the job training.

III. Photo Documentation

The Lab……. that's where the action is.

IV. SUSTAINABILITY PLAN OF THE PAP

1. Soil, Fertilizer, Plant Tissues and other Special Analysis

Proper soil management that meet the needs of the present without compromising the ability of future generation to meet their own needs for soil. This make soil sustainable.

Recommendation:

Regular soil analysis every 2-3 years to monitor the deficiency of soil fertility and its pH level and proper fertilization as recommended according to soil test.

Prepared by:

NELSIE GRACE E. GELA OIC-Agro-Based Laboratory

Department: Research Development and Extension (RDE)

Division/ Unit: Extension Services Division - Visayas

CORPORATE AND SIDA FUNDED PROJECTS

Year: 2022

I. Highlights of Accomplishment

This annual report presents the accomplishments of Extension Services Division - Visayas for Year 2022.

MANPOWER COMPLEMENT

The Extension Services Division Visayas has a total of 163 personnel complement, with 4 Agriculturists assigned in different mill districts. Contract of Service personnel is composed of 67 Project Development Officers, 18 Project Evaluation Officers, 19 Agriculturists I, 20 Farm Surveyors and 35 office-based personnel, all under job order basis.

On the other hand, the division has provided the necessary technical assistance to sugarcane planters in 16 mill districts in the whole Visayas.

For Crop Year 2021-2022, the total area planted for sugarcane in the Visayas is **272,106.26** hectares with a final monitored production in total tonnage of **21,439,625.18** and a total LKg of **37,355,567.30**. The total sugar produce is **1,867,778.37** metric tons. Visayas average production for Crop Year 2021-2022 is **54.33** TC/Ha with **1.74** LKg/TC and an average of **94.66** LKg/Ha.

Mill District	Area Planted (Has)	Area Harvested (Has)	Final Production CY 2021-2022			Average Production		
			Tons Cane	LKg	Sugar MT	TC/HA	LKG/HA	LKG/TC
LA CARLOTA	18,568.29	18,568.29	1,169,802.27	2,047,153.97	102,357.70	63.00	110.25	1.75
MA-AO	11,965.37	11,965.37	720,224.97	1,282,000.45	64,100.02	60.19	107.14	1.78
BAC-MUR-FFHC	20,390.00	20,390.00	1,243,790.00	2,176,632.50	108,831.63	61.00	106.75	1.75
HPCO	13,085.00	13,085.00	881,013.05	1,673,833.20	83,691.66	67.33	127.92	1.90
VICTORIAS	29,737.00	29,737.00	2,022,116.00	3,437,597.20	171,879.86	68.00	115.60	1.70
LOPEZ	14,545.91	14,545.91	892,391.58	1,597,380.93	79,869.05	61.35	109.82	1.79
SAGAY	16,528.98	16,528.98	939,672.51	1,475,285.85	73,764.29	56.85	89.25	1.57
SAN CARLOS	7,573.28	7,573.28	431,676.96	742,484.37	37,124.22	57.00	98.04	1.72
BISCOM	30,278.43	30,278.43	1,796,271.75	3,148,480.20	157,424.01	59.33	103.98	1.75
SONEDCO/ DACONGCOGON	26,151.00	26,106.88	1,431,962.37	2,606,171.51	130,308.58	54.85	99.83	1.82
TOLONG	13,068.00	13,068.00	666,480.69	1,185,750.35	59,287.52	51.00	90.74	1.78
BAIS-URSUMCO	26,800.00	26,800.00	1,432,440.42	2,703,750.47	135,187.52	53.45	100.89	1.89
ILOILO	20,440.00	20,440.00	987,252.00	1,628,965.80	81,448.29	48.30	79.70	1.65
CAPIZ	11,885.00	11,885.00	546,710.00	885,670.20	44,283.51	46.00	74.52	1.62
BOGO-MEDELLIN	5,090.00	4,961.75	153,672.55	197,724.14	9,886.21	30.97	39.85	1.29
ORMOC-HISUMCO	6,000.00	5,689.00	265,576.94	464,279.46	23,213.97	46.68	81.61	1.75
VISAYAS	**272,106.26**	**271,622.89**	**15,581,054.06**	**27,253,160.60**	**1,362,658.04**	**54.33**	**94.66**	**1.74**

For Ethanol

Mill District	Area Planted (Has)	Area Harvested (Has)	Tons Cane	TC/Ha	Liter Ethanol	Liters/ Ha	Liters/TC
San Carlos	5,172.41	4,290.00	244,530.00	57.00	13,938,210.00	57.00	57.00

This year, we are all challenge to maximize our effort to provide the best services that we can give to help our frontliners in the field of Agriculture, our sugarcane farmers, as we arise from the previous adversities due to the pandemic, the soaring in prices of agricultural inputs and declining of production brought by natural calamities.

CROP ESTIMATION PROJECT

The Crop Estimation project aims to provide accurate data that shows 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 all activities the Crop Estimate team has accomplished in the year 2022.

1. AREA PROFILING

MILL DISTRICT	Vacant area/ converted to other crops (ha)	SOCIALIZED CREDIT APPLICANTS ASSISTED
LA CARLOTA		82
MAAO		126
FFHC-BAC MUR	100.4600	36
HPCO	6.0000	138
LOPEZ	111.1400	44
VICTORIAS	5.0000	39
SAN CARLOS	1. 50	40
SAGAY/DANAO		38
BAIS-URSUMCO		90
SONEDCO	28.0000	102
TOLONG	5.0000	20
BISCOM		110
ILOILO	256.0000	47
CAPIZ	664.0000	38
BOGO- MEDELLIN	473.1900	21
ORMOC	10.0000	24
TOTAL	**1658.7900**	**995**

Farms surveyors has surveyed **1,658.7900** hectares of vacant areas and converted to other crops.

2. FARM MECHANIZATION SURVEY

MILL DISTRICT	NO. OF FARM SURVEYED	NO. OF TRACTORS SURVEYED	NO. OF HAULING TRUCKS SURVEYED	NO. OF IMPLEMENTS SURVEYED
LA CARLOTA	51	23	127	55
MA-AO	10	8	16	27
BACMUR				
HPCO	44	107	111	159
LOPEZ	35	76	125	174
VICTORIAS	1387	122	42	262
SAN CARLOS	63	27	52	99
SAGAY-DANAO	53	30	70	169
BAIS-URSUMCO	54	42	96	97
SONEDCO	246	43	236	124
TOLONG	738	55	470	136
BISCOM	86	236	133	539

ILOILO	35	23	45	42
CAPIZ	74	90	55	253
BOGO-MEDELLIN	33	110	129	83
ORMOC	57	123	154	288
TOTAL	**2961**	**1115**	**1861**	**2529**

3. AUTOMATIC WEATHER STATION

26 Units were installed to Fifteen (15) Mill Districts of Visayas Region. To date, there are twelve (12) Online Sites, Eight (8) units were pulled-out due to unserviceable data loggers, Five (5) Offline Sites--2 Sites for relocation, and One (1) unlocated AWS unit.

4. FARM SURVEYORS

	MILL DISTRICT	NAME OF SURVEYOR
1	Lopez	Abarquez, Mark R.
2	Tolong	Abordo, Twelve Bert A.
3	Capiz/Monomer/Antique MD	Balsote, Roderic D.
4	Ormoc-Hisumco	Ylanan, Marjun G.
5	Sagay-Danao	Cuizon, Robinson S. Jr.
6	Victorias	Abian, Giveson L.
7	San Carlos	Duran, Regie V.
8	Bogo Medellin MD	Gallarde, Jessha Marie P.
9	Sonedco/Dacongcogon	Garcia, Stephen John R.
10	La Carlota	Garcillan, Joemar B.
11	FFHC/Bac-Mur MD	Lopez, Raffy L.
12	BAIS URSUMCO	Pasco, Carlo Jay T.
13	Ma-ao	Pernia, Vince Dominick T.
14	BISCOM	Rubiato, Crister F.
15	HPCO	Salgon, Norberto L. Jr.
16	Iloilo/Santos Lopez/Antique MD	Santillana, Roman L. Jr.
17	Sonedco/Dacongcogon	Villavicencio, Eddie Q. Jr.

17 Farm Surveyors were assigned at each district of Visayas as of December 2022. They perform all field activities under the Crop Estimation Project.

COB 2022 Form A

Programs / Activities / Projects (PAP)	Brief Description	Performance Indicator	Physical Target	Physical Accomplishment
Extension Services Division				
A. ADOPT A SMALL SUGARCANE FARMING FAMILY	This is a refocused program to mitigate the impact of COVID-19 pandemic to small sugarcane farming families. Target beneficiaries are 20 small sugarcane farming families in every mill district. One hectare of sugarcane plantation will be funded by SRA at Php85,000.	No. of Famers/Beneficiaries	224	209
IMPLEMENTATION OF SUGAR BOARD DIRECTIVE ON PRIORITY PROJECTS				
1. Development/propagation/distribution of good sugarcane genomics.	Sugarcane productivity improvement through the distribution of good quality and best performing sugarcane varieties in the Visayas mill districts. - this will be implemented as a multi-year project	Hectarage of Established Seed Farms	100	56.21
B. MILL DISTRICT OPERATION, PROJECT MONITORING AND SUPERVISION	Maintenance of office rentals for Extension Visayas Mill District Offices	No. of Mill District Offices	13	13
TECHNOLOGY DEVELOPMENT & TRAINING UNIT				
C. OPSI TRAININGS	On-site Sugarcane Farm Management Seminar, Farm Planning and Budgetting, BMO Production Training, Farm Tour for various stakeholders and other related courses.	No. of Trainings/ Seminars conducted	4	93
D. TECHNOLOGY PACKAGING	Packaging of matured technologies and info dissemination to stakeholders	No. of Innovative Materials Distributed	4000	20,582

I. ADOPT A SMALL SUGARCANE FARMING FAMILY

Each ASSFF beneficiary with one (1) hectare sugarcane plantation was funded by SRA at Php 85,000.00 and was assisted/provided with technical assistance on how to manage the farm efficiently. This project was initiated to mitigate the impact of COVID-19 pandemic as well as to improve farm productivity and income sustainability to the small sugarcane farming families within the 16 mill districts in the Visayas.

As of December 31, 2022, a total 209 hectares/beneficiaries of the Adopt a Small Sugarcane Farming Family of ESD Visayas Mill Districts were already established to which 83 hectares/beneficiaries were already harvested.

AREA ESTABLISHED (HECTARES/BENEFICIARIES):

MILL DISTRICT	AS OF DECEMBER 31, 2022
LA CARLOTA	14
MAAO	14
BISCOM	13
HPCO	14
FFHC/BAC-MUR	14
VICTORIAS	14
LOPEZ	14
SAGAY DANAO	14
SAN CARLOS	12
SONEDCO/DACONGCOGON	13
TOLONG	14
BAIS URSUMCO	13
BOGO MEDELLIN	13
ORMOC-HISUMCO	12
ILOILO	14
CAPIZ	7
TOTAL	**209**

AREA HARVESTED (HECTARES/BENEFICIARIES)

MILL DISTRICT	AS OF DECEMBER 31, 2022
LA CARLOTA	6
MAAO	7
BISCOM	1
HPCO	8
FFHC/BAC-MUR	14
VICTORIAS	13
LOPEZ	10
SAGAY DANAO	3
SAN CARLOS	
SONEDCO/DACONGCOGON	4

TOLONG	9
BAIS URSUMCO	8
BOGO MEDELLIN	
ORMOC-HISUMCO	
ILOILO	
CAPIZ	
TOTAL	**83**

As of December 31, 2022 total 209 hectares/beneficiaries of the Adopt a Small Sugarcane Farming Family of ESD Visayas Mill Districts were already established. Total of 83 hectares/beneficiaries have already harvested as seen on the next table.

AREA HARVESTED: ADOPT A SMALL SUGARCANE FARMING FAMILY

SEQ	NAME	ADDRESS	AREA PLANTED (HAS)	DATE PLANTED	VARIETY PLANTED	DATE HARVESTED	BASELINE			WITH SRA INTERVENTION		INCREASED IN PRODUCTION
							CROP YEAR	TC/HA	LK/TC	TONS CANE/ HA	LKG/ TC	
HPCO MILL DISTRICT												
1	Rosalinda M. Dela Cruz	Had. Pula, Brgy. Kapitan Ramon, Silay City	1.0000	December 05, 2021	PHIL 83-331	October 11, 2022	2021-2022	57.00	1.55	62.761	1.600	5.761
2	Liza O. Miasis	Had. Pula, Brgy. Kapitan Ramon, Silay City	1.0000	November 10, 2021	PHIL 83-331	October 24, 2022	2021-2022	55.00	1.56	73.221	1.778	18.221
3	Ernesto T. Martisano	Had. Pula, Brgy. Kapitan Ramon, Silay City	1.0000	December 09, 2021	PHIL 83-331	October 30, 2022	2021-2022	56.00	1.50	77.636	1.745	21.636
4	Alexander D. De Asis	Had. Balili, Brgy. Gahit, Silay City	1.0000	November 20, 2021	VMC-84-524	September 9, 2022	2021-2022	62.00	1.69	69.000	1.740	7.000
5	Rosalie G. Tuting	Had. Balili, Brgy. Gahit, Silay City	1.0000	October 18, 2021	VMC-84-524	September 6, 2022	2021-2022	59.00	1.60	62.000	1.640	3.000
6	Loida C. Bangcaya	Had. Pula, Brgy. Kapitan Ramon, Silay City	1.0000	December 16, 2021	VMC 84-947	October 16, 2022	2021-2022	52.00	1.60	54.645	1.865	2.645
BISCOM MILL DISTRICT												
7	Alfredo A. Saonoy	Sitio Loblob, Magallon Cadre, Moise Padilla	1.0000	October 18-22, 2021	Phil 2006-2289	October 10, 2022	2021-2022	42.00	1.80	61.230	1.750	19.230
BAIS URSUMCO MILL DISTRICT												
8	Lourdes B. Garsola	Brgy. Cambanjao, Bais City	1.0000	May 20, 2021	VMC 84-524	February 25, 2022	2021-2022	42.33	1.42	61.682	1.605	19.352
9	Daniel E. Epetito	Mabala-as, Pandanon, Mabinay	1.0000	March 20, 2022	VMC 84-524	November 23, 2022	2020-2021	VACANT				
10	Edwin B. Amante	Brgy. Cambanjao, Bais City	1.0000	May 10, 2021	VMC 84-524	March 4, 2022	2020-2021	43.34	1.72	61.997	2.251	18.657
11	Virgiel A. Tresquio	Brgy. Cambanjao, Bais City	1.0000	May 17, 2021	VMC 84-524	February 21, 2022	2020-2021	41.36	1.61	57.018	1.908	15.658
12	Ma. Josephina A. Tugdang	Zulueta St., Brgy. Suba, Manjuyod	1.0000	May 25, 2021	Phil 99-1793	April 20,2022	2020-2021	VACANT		70.824	2.080	
13	Bernardo M. Bacolod	Sitio Biasong, Brgy. Cambanjao, Bais City	1.0000	June 16, 2021	VMC 84-524	March 15, 2022	2020-2021	38.62	1.63	52.125	1.877	13.505
14	Cresenciano S. Arapoc	Brgy. Cambanjao, Bais City	1.0000	May 05, 2022	VMC 84-524	February 13, 2022	2020-2021	44.21	1.71	59.785	2.240	15.575
15	Sergio D. Fernandez	Proper, Brgy. Cambanjao, Bais City	1.0000	May 26, 2021	VMC 84-524	March 2, 2022	2020-2021	45.38	1.76	63.366	2.010	17.986
VICTORIAS MILL DISTRICT												
16	Merlinda D. Roces	Had. Hermenia, Brgy. Purisima, Manapla	1.0000	April 15, 2021	Phil 99-1793	March 2,2022	2020-2021	40.00	1.85	48.000	1.920	8.000
17	Ines Y. Pamposa	Had. Candelaria, Brgy. Purisima, Manapla	1.0000	February 20, 2021	Phil 99-1793	February 10, 2022	2020-2021	36.00	1.80	45.110	1.900	9.110
18	Reynold R. Fernandez	Had. Anecita, Brgy. San Pablo, Manapla	1.0000	November 15,2021	Phil 99-1793	October 5, 2022	2020-2021	40.00	1.60	63.000	1.720	23.000
19	Danilo C. Genaro	Had. Candelaria, Brgy.	1.0000	January	Phil 99-1793	December	2020-2021	45.00	1.70	56.000	1.560	11.000

		Purisima, Manapla		24,2021		10,2022						
20	Alejandro B. Balboa	Had. Inson, Brgy. Andres Bonifacio, Cadiz City	1.0000	October 12,2021	VMC 84-947	November 8, 2022	2020-2021	45.00	1.65	58.000	1.700	13.000
21	Joevel M. Pabuaya	Sitio Lacson, Brgy. Magsaysay, Cadiz City	1.0000	June 13,2021	Phil 83-331	November 10, 2022	2020-2021	VACANT		50.000	1.640	
22	Edilberto S. Bardoquillo	Purok Demokrasya, Brgy. Jerusalem, Cadiz City	1.0000	November 19,2021	VMC 84-947	November 25,2022	2020-2021	VACANT		62.000	1.710	
23	Gerry E. Barreto	Had. San Antonio, Brgy. XIV, Manapla	1.0000	August 01, 2021	VMC 84-524	November 26,2022	2020-2021	VACANT		53.000	1.670	
24	Hadjie C. Padrona	Had. Rita, Brgy. San Pablo, Victorias City	1.0000	January 23, 2021	VMC 84-947	December 5,2022	2020-2021	30.00	1.70	40.000	1.800	10.000
25	Joelinda N. Legarda	Had. San Jose, Victorias City	1.0000	November 4,2021	VMC 84-947	October 30, 2022	2020-2021	37.00	1.75	55.000	1.700	18.000
26	Salve T. Dionesio	Had. Amelita, Brgy. Daga, Cadiz City	1.0000	August 16,202	VMC 84-524	November 20, 2022	2020-2021	VACANT		58.000	1.740	
27	Florentino D. Cataluna	Brgy. Caduhaan, Cadiz City	1.0000	April 14,2021	Phil 99-1793	February 2,2022	2020-2021	45.00	1.92	55.000	1.900	10.000
28	Bimbo S. Villaruz, Sr.	Sitio Sanga, Brgy. Mabini Cadiz City	1.0000	April 22,2021	VMC 84-947	February 5,2022	2020-2021	36.00	1.80	46.000	1.800	10.000
MA-AO MILL DISTRICT												
29	Jojen L. Flores	Purok Surgom II, Brgy. Bacong, Bago City	1.0000	September 09, 2021	Phil 2006-2289	August 29, 2022	2020-2021	47.00	1.72	63.210	1.770	16.210
30	Lea M. Dohinog	Igtalinga, Brgy. Bacong, Bago City	1.0000	October 18-21, 2021	Phil 2006-2289	September 21, 2022	2020-2021	32.00	1.79	62.310	1.840	30.310
31	Mario M. Delos Reyes	Kalubihan, Brgy. Ma-ao, Bago City	1.0000	November 30, 2021	VMC 84-524	October 1-5, 2022	2020-2021	40.00	2.10	63.050	2.100	23.050
32	Ma. Leni E. Etorma	Kalubihan, Brgy. Ma-ao, Bago City	1.0000	November 30, 2021	VMC 84-524	September 6, 2022	2020-2021	35.00	2.00	31.21 - partial	1.740	
33	Emilda E. Aculit	Orchids, Brgy. Binubuhan, Bago City	1.0000	October 15-16, 2021	Phil 2006-2289	October 2-10, 2022	2020-2021	55.00	1.90	61.130	1.930	6.130
34	Jen L. Buenaventura	Purok Surgom II, Brgy. Bacong, Bago City	1.0000	September 10, 2021	Phil 2006-2289	September 26, 2022	2020-2021	49.00	1.75	77.880	1.847	28.880
35	Lolita n. Dayo	Orchids, Brgy. Binubuhan, Bago City	1.0000	October 04, 2021	Phil 2006-2289	September 6, 2022	2020-2021	51.00	1.73	35.46 - partial	1.750	
LA CARLOTA MILL DISTRICT												
36	Hermilo A. Palmares	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	October 22, 2021	Phil 2006-2289	November 2022	2020-2021	52.00	1.69	52.316	1.781	0.316
37	Domingo M. Sit	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	October 27, 2021	Phil 2006-2289	September 25, 2022	2020-2021	56.00	1.72	65.710	1.996	9.710
38	Cristina T. Pelayo	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	October 30, 2021	VMC 84-524	November 2022	2020-2021	51.00	1.74	58.114	1.675	7.114
39	Ma. Socorro P. Japson	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	November 25, 2021	VMC 84-524	November 2022	2020-2021	51.00	1.77	49.660	1.722	
40	Pedro R. Armonio	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	December 14, 2021	Phil 99-1793	November 2022	2020-2021	59.00	1.79	67.210	1.968	8.210
41	Roberto S. Mission	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	November 21,2021	Phil 2006-2289	November 2022	2020-2021	58.00	1.81	72.310	2.132	14.310
42	Hermie M. Ortegue	Sitio Agho, Brgy. Camandag, La Castellana	1.0000	November 24, 2021	VMC 84-524	December 2022	2020-2021	56.00	1.77			
43	Jimmy Mameng	Pontevedra, Negros Occidental	1.0000	November 12, 2021	Phil 2006-2289	November 2022	2020-2021	54.00	1.79			
SONEDCO/DACONGCOGON MILL DISTRICT												
44	Reneboy D. Amacna	Cantanghap, Brgy. Oringao, Kabankalan City	1.0000	November 2021	VMC 88-354	September 9, 2022	2021-2022	55	1.68	77.760	1.800	22.760
45	Ramel G. Abadilla	Brgy. Bantayan, Kabankalan City	1.0000	November 2021	VMC 84-524	September - October 2022	2021-2022	58	1.81	75.820	1.728	17.820
46	Jose G. Titong	Brgy. Da-an Banwa, Kabankalan City	1.0000	November 29, 2021	Phil 2006-2289	October 2022	2021-2022	51	1.80	55.868	1.890	4.868
47	Raconlon R. Semillano	Purok Acacia, Brgy. Tagoc, Kabankalan City	1.0000	November 13, 2021	Phil 99-1793	September 20-25, 2022	2021-2022	60	1.76	83.790	1.770	23.790
SAGAY DANAO MILL DISTRICT												
48	Raul Araneta	Sagay City, Negros Occidental	1.0000	April 01, 2021	Phil 99-1793	January - February 2022	CY 2020-2021	57.00	1.50	60.230	1.510	3.230
49	Lyne D. Sotes	Daisy, Brgy. Puey, Sagay City	1.0000	June 25, 2021	VMC 88-354	February 06-17, 2022	CY 2020-2021	46.00	1.50	58.430	1.600	12.430
50	Santiago A.	Bagong Silang, Brgy.	1.0000	July 16, 2021	VMC 88-354	June 9-11,	CY 2020-	46.00	1.40	57.482	1.441	11.482

	Corsonada	Bug-ang, Toboso				2022	2021					
LOPEZ MILL DISTRICT												
51	Delia B. Caro	Bagong Buhay, Brgy. Rizal, Sagay City	1.0000	December 13, 2021	PHIL 99-1793	May 01, 2022	CY 2020-2021	48.00	1.50	59.800	1.580	11.800
52	Ma. Beberlie P. Mentino	Purok Rosas, Brgy. Malubon, Sagay City	1.0000	June 10, 2021	PHIL 99-1793	May 15, 2022	CY 2020-2021	45.00	1.65	62.070	1.670	17.070
53	Virginia P. Orot	Purok Ipil-ipil, Brgy. Malubon, Sagay City	1.0000	June 13, 2021	PHIL 99-1793	May 01, 2022	CY 2020-2021	44.00	1.70	56.880	1.688	12.880
54	Ruby M. Martinez	Mabinuligon, Brgy. Lopez Jaena, Sagay City	1.0000	May 29, 2021	PHIL 99-1793	December 04, 2022	CY 2020-2021	50.00	1.53	65.800	1.680	15.800
55	Susana G. Escamilla	Had. Cornell 2, Brgy. Cabahug, Cadiz City	1.0000	June 13, 2021	PHIL 99-1793	June 12, 2022	CY 2020-2021	50.00	1.50	59.120	1.501	9.120
56	Dolores A. Adrias	Had. Faraon, Brgy. Cabahug, Cadiz City	1.0000	June 13, 2021	PHIL 99-1793	August 01, 2022	CY 2020-2021	45.00	1.25	61.530	1.900	16.530
57	Lucia Batan	Mabinuligon, Brgy. Lopez Jaena, Sagay City	1.0000	December 29, 2021	VMC 84-947	October 14, 2022	CY 2020-2021	45.00	1.75	68.130	1.600	23.130
58	Evelyn F. Padayogdog	Had. Fe, Esacalante City	1.0000	December 08, 2021	VMC 84-947	November 17, 2022	CY 2020-2021	50.00	1.65	59.590	1.650	9.590
59	Leonilo Uychiat	Had. Fe, Esacalante City	1.0000	November 20, 2021	VMC 84-524	August 18, 2022	CY 2020-2021	53.00	1.70	71.000	1.610	18.000
60	Juan Jereos	Brgy. Rafael Barrera, Sagay City	1.0000	January 14, 2022	PHIL 99-1793	August 23, 2022	CY 2020-2021	47.00	1.70	65.530	1.590	18.530
TOLONG MILL DISTRICT												
61	Cecilia A. Abuzo	Brgy. Narra, Bayawan City	1.0000	August 15, 2021	Phil 74-64	March 21, 2022	2020-2021	40.00	1.70	45.79	1.77	5.790
62	Antonio A. Cueco	Brgy. Narra, Bayawan City	1.0000	September 24, 2021	VMC 88-354	April 20, 2022	2020-2021	47.00	1.80	54.29	1.78	7.290
63	Gerlie K. Maglinao	Brgy. Obat, Santa Catalina	1.0000	July 18, 2021	Phil 8013	February 18, 2022	2020-2021	35.00	1.60	40.10	1.77	5.100
64	Remegia A. Saraña	Brgy. Kabulacan, Sta. Catalina	1.0000	June 05, 2021	Phil 99-1793	February 26, 2022	2020-2021	40.00	1.60	46.61	1.99	6.610
65	Epifanio Tayab	Brgy. Narra, Bayawan City	1.0000	June 2, 2021	VMC 88-354	February 5, 2022	2020-2021	38.00	1.75	43.57	1.69	5.570
66	Rodolfo G. Tayab	Brgy. Narra, Bayawan City	1.0000	June 9, 2021	VMC 88-354	February 17, 2022	2020-2021	38.00	1.80	43.52	1.91	5.520
67	Ricardo T. Taub	Brgy. Maninihon, Bayawan City	1.0000	June 20, 2021	VMC 88-354	February 9, 2022	2020-2021	40.00	1.70	42.93	1.81	2.930
68	Danny L. Encabo	Brgy. Kalumboyan, Bayawan City	1.0000	January 10, 2022	Phil 99-1793	November 5, 2022	2020-2021	48.00	1.85	41.54	1.95	-6.464
69	Norabeth D. Pacaña	Brgy. Maninihon, Bayawan City	1.0000	May 5, 2021	Phil 99-1793	February 15, 2022	2020-2021	45.00	1.80	52.84	1.90	7.840
FFHC/BAC-MUR MILL DISTRICT												
70	Luvizminda Pelaez	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	VMC 947	December 20, 2021	2020-2021	45.40	1.72	62.45	1.75	17.050
71	Alan S. Evia	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	January 30, 2021	VMC 947	January 04, 2022	2020-2021	47.30	1.75	59.50	1.79	12.200
72	Veronica C. Costanilla	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	January 30, 2021	VMC 947	January 02, 2022	2020-2021	38.90	1.80	61.50	1.80	22.600
73	Sherlita L. Camay	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	January 30, 2021	VMC 947	January 04, 2022	2020-2021	40.90	1.78	57.60	1.81	16.700
74	Romil S. Collamar	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	March 1, 2021	PSR 254	December 10, 2022	2020-2021	41.97	1.65	65.29	1.70	23.320
75	Aurelia M. Ibanez	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	March 1, 2021	VMC 947	January 06, 2022	2020-2021	46.70	1.50	58.75	1.73	12.050
76	Conchita S. Collamar	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	March 1, 2021	PSR 254	January 02, 2022	2020-2021	39.80	1.55	59.60	1.75	19.800
77	Magdalena C. Manlangit	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	PSR 254	January 02, 2022	2020-2021	42.80	1.60	60.95	1.77	18.150
78	Regina I. Olasca	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	PSR 254	November 02, 2021	2020-2021	45.85	1.62	50.60	1.78	4.750
79	Carmen S. Evia	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	PSR 254	January 02, 2022	2020-2021	39.60	1.75	63.40	1.79	23.800
80	Norma V. Clarin	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	VMC 947	November 02, 2021	2020-2021	42.50	1.70	50.68	1.72	8.180
81	Arlyn B. Gregorio	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	March 1, 2021	VMC 947	November 02, 2021	2020-2021	30.35	1.69	63.20	1.74	32.850
82	Anabelle S. Costanilla	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	February 15, 2021	VMC 947	January 10, 2022	2020-2021	51.90	1.60	65.10	1.78	13.200
83	Jose Rojun S. Collamar	Purok Laroca, Brgy. Sta. Rosa, Murcia	1.0000	January 30, 2021	VMC 947	December 05, 2021	2020-2021	41.30	1.70	52.90	1.82	11.600

II. ACCELERATED DEVELOPMENT OF SUGARCANE HYV - SEED FARM PROGRAM

Sugarcane productivity improvement through the distribution of good quality and best performing sugarcane varieties in the Visayas mill districts – this project will be implemented as a multi-year project.

This program provided farm support to project cooperators of the development of sugarcane seed farm in the maximum amount of **Php85, 000.00** per hectare.

To date, a total **56.2100** hectares seed farms planted with SRA high yielding varieties were already established. On-going monitoring and supervision of various farm operations for 15 cooperators was implemented and facilitated by SRA personnel in every mill districts. A total of **1,005.9600** lacsas canepoints produced and distributed to 153 beneficiaries. Expansion area for sugarcane high yielding varieties seed farm program was already **251.2900** hectares.

AREA ESTABLISHED (HECTARES)

MILL DISTRICT	AS OF DECEMBER 2022
LA CARLOTA	**5.00**
MAAO	**5.10**
BISCOM	**6.00**
HPCO	**1.00**
FFHC/BAC-MUR	
VICTORIAS	**10.00**
LOPEZ	**5.11**
SAGAY DANAO	**5.00**
SAN CARLOS	
SONEDCO/DACONGCOGON	**8.00**
TOLONG	**3.00**
BAIS URSUMCO	**5.00**
ORMOC-HISUMCO	**3.00**
ILOILO	
CAPIZ	
TOTAL	**56.21**

CANE POINTS BENEFICIARIES (LACSA):

MILL DISTRICT	LACSA PRODUCED	BENEFICIARIES
LA CARLOTA	**132.820**	**12**
MAAO	**71.500**	**20**
BISCOM	**177.000**	**55**
HPCO		
FFHC/BAC-MUR		
VICTORIAS		

LOPEZ	**139.500**	**16**
SAGAY DANAO	**188.640**	**16**
SAN CARLOS		
SONEDCO/DACONGCOGON	**124.500**	**13**
TOLONG		
BAIS URSUMCO	**172.000**	**21**
ORMOC-HISUMCO		
ILOILO		
CAPIZ		
TOTAL	**1005.960**	**153**

III. CAPABILITY BUILDING OF SUGARCANE FARMERS, WORKERS AND SRA RDE PERSONNEL

This project aims to provide interventions to enhance basic knowledge of sugarcane farmers and become more efficient and competitive agri-entrepreneurs. Train farmers to effectively implement the acquired technologies learned and help increase productivity and income.

Also, through capability building activities and continuous improvement of personnel resource capabilities, efficient response to the current and strategic needs of the sugar industry, development and technology advancements for global competitiveness will be attained.

For 2022, a total of **72** trainings/seminars on Sugarcane Farm Management, Farm Planning and Budgetting, Training on Beneficial Microorganisms (BMO) Production, Training and Demonstration for Tractor Operators, GAD Training and Virtual Stakeholders' Consultation were conducted with active participation from **2,817** sugar industry stakeholders.

Mill District	NO.	Trainings	Date Conducted	Number of Participants
MAAO	1	Farm Tractor Training for GAA 2018 Block Farms	11-Feb-22	19
TOLONG	2	Sugarcane Farm Management Seminar, Sitio Datag, Brgy. Maglinao, Basay, Negros Oriental	20-Feb-22	20
SAN CARLOS	3	Simple Bookkeeping Seminar, San Carlos Mill District Office, San Carlos City	10-Mar-22	28
HPCO	4	Sugarcane Farm Management Seminar, Had. Dalinson, Alacaygan, E.B Magalona	17-Mar-22	18
HPCO	5	Sugarcane Farm Management Seminar, Had. Violeta, Kapitan	24-Mar-22	26
LGAREC	6	Orientation & Farm Demonstration of Sugarcane Grabbers and Wholestalk cutter, SRA LGAREC, La Granja, La Carlota City, Negros Occidental	30-Mar-22	100
SONEDCO	7	Farm Tractor Training for GAA 2018 Block Farm from Sonedco Mill District	31-Mar-22	30

LGAREC	8	Orientation & Farm Demonstration of Sugarcane Grabbers and Wholestalk cutter, SRA LGAREC, La Granja, La Carlota City, Negros Occidental	31-Mar-22	110
ILOILO	9	Orientation & Farm Demonstration of Farm Tractor and Sugarcane Grabbers for AGFA, DFA and ILOILO MDDC	Mar-22	22
HPCO	10	Sugarcane Farm Management Seminar, Had. San Vicente I, Brgy. Kapitan Ramon, Silay City	May 5, 2022	25
HPCO	11	Sugarcane Farm Management Seminar, Had. Editha, Brgy. Guimbala-on, Silay City	May 12, 2022	25
Bais URSUMCO	12	Sugarcane Farm Management Seminar, Bagtic Farmers Association, Pinalubngan, Tayasan, Neg. Oriental	May 24-25, 2022	37
HPCO	13	Sugarcane Farm Management Seminar, Had. Progreso, Brgy. Kapitan Ramon, Silay City	May 26, 2022	25
LOPEZ	14	Seminar on Sugarcane Trash Farming at Brgy. Jonob-jonob, Escalante City	July 6, 2022	15
LOPEZ	15	Seminar on Sugarcane Trash Farming at Brgy. Had Fe, Escalante City	July 8, 2022	18
LOPEZ	16	Seminar on Sugarcane Trash Farming at Brgy. Lopez Jaena, Sagay City	July 6, 2022	18
LOPEZ	17	Cultural Management Seminar at Gen Luna, Sagay City	July 15, 2022	15
LOPEZ	18	Financial Literacy Training at Lopez Jeana, Sagay City	July 20, 2022	15
LOPEZ	19	Cultural Management Seminar at Brgy. Cervantes, Escalante City	July 25, 2022	15
SAGAY DANAO	20	Variety Programming/ Propagation of High Yielding Varieties	July 29, 2022	20
BISCOM	21	OPSI Training at Barangay Montilla Agrarian Reform Organic Farmers Association	October 12, 2022	26
BISCOM	22	OPSI Training at Brgy. Cabcab, Isabela	October 13, 2022	192
ORMOC	23	OPSI Training at Canlosong Hugpong Farmers Association	November 17, 2022	39
BOGO-MEDELLIN	24	OPSI Seminar for CHED Scholars at CTU Tuburan Campus	December 7, 2022	45
ORMOC-HISUMCO	25	OPSI Seminar for Scholars	November 21, 2022	19
ORMOC	26	Sugarcane Farm Management Seminar	October 13, 2022	18
LGAREC	27	Workshop Planning and Assessment for ESD Visayas COS Personnel	Dec 14-15, 2022	140
LA CARLOTA	28	Training on BMO Application, Sitio Colonia Agrarian Reform Beneficiaries Assn and Had Agho Camandag Agrarian Reform Beneficiaries Association, La Castellana	Feb-22	20
SAN CARLOS	29	Training on BMO Application from San Carlos Mill District	30-Mar-22	30

SAN CARLOS	30	Training on BMO Production, Brgy. Maaslob, Calatrava, Negros Occidental	June 10, 2022	32
CAPIZ	31	Training on BMO Application	Feb-22	20
BACMUR	32	Training on BMO Production, Had. Virgen 2, Brgy. E. Lizares, Talisay City, Negros Occidental	May 19, 2022	12
BISCOM	33	Training on BMO Production, BISCOM Compound, Binalbagan, Negros Occidental	June 2, 2022	22
SRA LGAREC	34	Training of Trainors on BMO Production at Balay OPSI	July 7, 2022	72
LA CARLOTA	35	Training on BMO production for Block farm at Brgy. Robles, La Castellana	July 12, 2022	40
LA CARLOTA	36	Training on BMO production for Block farm at Brgy. RSB, La Carlota City	July 13, 2022	43
BISCOM	37	Training on BMO production for Block farm, associations, private planters at Had. Nalipay Brgy 5, Isabela	July 14-15, 2022	90
BISCOM	38	Training on BMO production for farm laborers at Had. España, Brgy. Amin, Isabela	September 21, 2022	6
MA-AO	39	Training on BMO production for Block farms at Brgy. Ma-ao, Bago City	July 12, 2022	36
MA-AO	40	Training on BMO production for associations/MDDC	July 13, 2022	42
MA-AO	41	Training on BMO production at Don Jorge Araneta Agrarian Refrom Beneficiaries Assn	July 22, 2022	70
SONEDCO	42	Training on BMO production for Block farms at Brgy. Pinggot, Ilog	July 19, 2022	60
	43	Training on BMO production for Planters associations/SUC/Sugar Mill at Brgy. 1, Kabankalan City	July 20, 2022	42
	44	Training on BMO production for SONEDCO MDDC/ARB Associations at Brgy. 1, Kabankalan City	July 21, 2022	45
BAIS-URSUMCO	45	Training on BMO production for Block Farms at Vista Real Mabinay, Negros Oriental	July 19, 2022	69
	46	Training on BMO production for Block Farms at AABT Compound, Calasga-an, Bais City	July 20, 2022	35
TOLONG	47	Training on BMO production for Block Farms at Tompuco Function Hall, Brgy. Villareal, Bayawan City	July 21, 2022	22
	48	Training on BMO production for private planters at Tompuco Function Hall, Brgy. Villareal, Bayawan City	July 22, 2022	33
FF/BACMUR	49	Training on BMO production for Block Farms at C-PRIME Farmers Hall, Brgy. Salvacion, Murcia	July 18, 2022	30
FF/BACMUR	50	Training on BMO production for MDDC and other associations.	July 19, 2022	42
HPCO	51	Training on BMO production for Block Farms at Brgy. Pasil, EB Magalona	July 19, 2022	18
	52	Training on BMO production for private planters at Brgy. Hawaiian, Silay City	July 20, 2022	52

VICTORIAS	53	Training on BMO production for Block Farms at Centro San Pablo, Victorias City	July 20, 2022	48
	54	Training on BMO production for Block Farms at Centro San Pablo, Victorias City	July 21, 2022	42
LOPEZ/SAGAY	55	Training on BMO production for Block Farms at Brgy. Cabahug, Cadiz City	July 21, 2022	39
	56	Training on BMO production for private planters/associations at rgy. Cabahug, Cadiz City	July 22, 2022	42
SAN CARLOS	57	Training on BMO production for Block Farms at San Carlos Mill District Office	July 27, 2022	53
	58	Training on BMO production for Block Farms at San Carlos Mill District Office	July 28, 2022	42
CAPIZ	59	Training on BMO production for Block farm, associations, private planters/MDDC/SUC	July 22, 2022	15
ILOILO	60	Training on BMO production for Block farm, associations, private planters/MDDC/SUC	July 20-21, 2022	24
BOGO - MEDELLIN	61	Training on BMO production for Block Farms at BMSPAI Function Hall Bomedco Compound, Brgy. Luya-a, Medellin, Cebu	July 26, 2022	30
	62	Training on BMO production for Block farm, associations, private planters/MDDC at BMSPAI Function Hall Bomedco Compound, Brgy. Luya-a, Medellin, Cebu	July 27, 2022	31
ORMOC-HISUMCO	63	Training on BMO production for Block Farms at Brgy. San Pablo, Ormoc City	July 20, 2022	28
	64	Training on BMO production for Block farm, associations, private planters/MDDC at Brgy. San Pablo, Ormoc City	July 21, 2022	33
MA-AO	65	Training on BMO Production at Humayan Small Planters Association	October 4, 2022	31
MA-AO	66	Training on BMO Production at Mailum Planters Association	October 6, 2022	16
MA-AO	67	Training on BMO Production at Nakalang Farm Workers Associatio	October 25, 2022	42
BISCOM	68	Training on BMO Production and OPSI Training at CPSU-Moises Padilla Campus	November 3-4, 2022	55
BISCOM	69	Training on BMO Production and OPSI Training at CPSU-Moises Padilla Campus	November 10-11, 2022	55
LA CARLOTA	70	Training on BMO Production and OPSI Training for La Castellana Small Planters	November 17-18, 2022	60
BISCOM	71	Training on BMO Production and OPSI Training at Canlosong Hugpong Farmers Association	November 21, 2022	34
BISCOM	72	Training on BMO Production and OPSI Training at Canlosong Hugpong Farmers Association	November 21, 2022	34
TOTAL				**2817**

IV. TECHNOLOGY PACKAGING

The Technical Development and Training Unit under the Extension Services was tasked to plan, implement and coordinate all trainings and packaging of matured technologies of RDE Visayas for reproduction and dissemination to the stakeholders. Through this information dissemination campaign, updates on the latest technologies developed by SRA through the Research Development and Extension (RDE) will be more recognizable by our sugar industry stakeholders.

For this year, a total of **20,582** informative, educational and communication (IEC) materials was reproduced at SRA – LGAREC and distributed which included the following: Talamdan sa Pagpanguma sang Tubo (Hiligaynon translated), Cost of Production Survey & Customers Feedback, Soil Sampling Brochures, BMO Production Brochures, OPSI KOMIKS (Hiligaynon and Cebuano translated), Scholarship Forms, Socialized Credit Application forms, Mga Aprobado nga Pama-agi sa Pagtanum sang Tubo, Brochures of Sugarcane Pest and Diseases, Micropropagation Pamphlets, and SRA High Yielding Varieties Pamphlets.

V. BENEFICIAL MICROORGANISMS (BMO) PRODUCTION

The soaring price of fertilizer is a continuous threat to our sugarcane growers because high production comes with responsibility for fertilizing the crops. With this existing issue, the Sugar Regulatory Administration (SRA) is finding ways to come up with an alternative solution that would benefit our sugarcane farmers while considering the environmental approach. The Sugar Regulatory Administration (SRA) conducts studies on beneficial microorganisms (BMO), a technology that was validated through several efficacy trials conducted solely on sugarcane. Acetobacter, Azotobacter, and Azospirillum are nitrogen-fixing bacteria found in sugarcane and extracted to create BMO. This helps accelerate the decomposition of organic wastes and residues while suppressing the growth of soil-borne pathogens. These also improve the soil's physical, chemical, and biological environments and promote plant germination, photosynthetic capacity, fruition, and ripening.

To bring the technology to farmers, the SRA Extension Services Division-Visayas conducted the Training of Trainers on BMO Production on July 7, 2022, at Balay OPSI, La Granja, La Carlota City. The training was conducted by the SRA Agricultural Research Services Division and attended by a total of 72 SRA Extension Services Division-Visayas personnel. As a result of the trainers training on BMO production, the SRA Extension Services Division-Visayas set in motion the intervention. As of December 2022, **1,703** participants have attended the **44** BMO Production trainings conducted at different block farms and mill districts by SRA Extension Services Division-Visayas.

On top of that, La Carlota MDDC also initiated their project on mass production of BMO through the collaboration with SRA Extension Services Division – Visayas, AALCPI and the sugar mill – URC SURE. This project aim to establish pilot farms for BMO demostration and application as a strategy to fastrack the adoption as well as to provide production data from a commercial size that will serve as a additional reference in introducing the BMO technology. To date, La Carlota MDDC produced an average of 600 to 800 liters a week to provide for the weekly target area for application. This project has a target of 330 hectares for application which includes small farms, big farms low land and upland area.

SIDA FUNDED PROJECTS

VI. BLOCK FARMING PROGRAM

The Block Farming Program, now in its seventh year of implementation, is still on track to achieve its original goal of converting consolidated farms owned by small farmers Agrarian Reform beneficiaries into agribusiness centers through professionalized farm management and mechanized farming, as well as logistical, financial, technical, and production support services.

From GAA 2016 to GAA 2022, the block farming program benefited 13,570 household beneficiaries with an expenditure incurred of Php 704,818,200.

SUMMARY OF SIDA FUNDED BLOCK FARMS – VISAYAS

	GAA 2016	GAA 2017	GAA 2018	GAA 2019	GAA 2022	TOTAL
No. of Block Farms Accredited	37	35	25	30	20	147
No. of Block Farms Validated	37	35	25	30	20	147
No. of Beneficiaries	939	989	639	728	836	4,131
Area Involved (has)	**1,250.78**	**1,145.31**	**822.758**	**1,016.81**	**699.74**	**4,935.40**
No. of Household	**3,254**	**3,225**	**2,260**	**2,488**	**2,343**	**13,570**

Cumulative Accomplishment

Block Farm Program is being implemented by the SRA Extension Services Division of the Research, Development, and Extension Department of Visayas. The cumulative physical accomplishment of the program from 2016 to 2022, as of December 30, 2022 are the following:

GAA	START-UP CAPITAL ALLOCATED	START-UP CAPITAL UTILIZATION as of December 2022	% UTILIZATION
2016	46,238,910.00	45,661,969.43	98.75 %
2017	51,922,500.00	48,541,068.49	93.49 %
2018	37,500,000.00	35,123,788.88	93.66 %
2019	49,500,000.00	46,020,147.41	92.97 %
2022	28,135,971.42	7,428,032.79	26.40 %

TOTAL	**213,297,381.42**	**182,775,007.00**	**81.05 %**

GAA	HYV NUSERY BUDGET ALLOCATED	BUDGET UTILIZATION as of December 2022	% UTILIZATION
2016	2,789,400.00	2,589,020.18	92.82
2017	5,030,200.00	4,296,760.00	85.42
2018	3,459,575.00	3,199,348.25	92.48
2019	3,905,760.00	3,592,664.00	91.98
2022	3,400,000.00	986,200.00	29.01
TOTAL	18,584,935.00	14,663,992.43	78.90

GAA	TECHNO DEMO BUDGET ALLOCATED	BUDGET UTILIZATION as of December 2022	% UTILIZATION
2016	**2,858,250.00**	**2,044,156.43**	**71.52%**

Block Farm Interventions	Indicator	Extension Services Division Visayas (Implementing Unit)
		Quantitative Accomplishment
1. Organization of Block Farms	No. of Block Farms Accredited	147
	No. of Enrollees	4,131
	Area Covered (in Hectares)	4,935.40
2. Capacity-building of Block Farms	No. of trainings or seminars conducted	443
	No. of participants or attendees	11,072
3. Provision of Start-up Capital to Block Farms	Amount of start-up capital provided to Block Farms for purchase of farm inputs, establishment of HYV nursery and techno-demo farms (in Philippine Pesos)	198,496,955.86

4. Provision of Farm Mechanization to Block Farms	No. of Tractors delivered	82
	No. of Tractor with Sugarcane Wholestalk Cutter delivered	35
	No. of Farm Implements delivered	223
	No. of STWs Irrigation Sets delivered	123
	No. of Sugarcane Grabber/Loader delivered	44
	No. of Sugarcane Cutter/ Harvester delivered	35
	No. of Hauling Trucks delivered	-
	No. of Power Knapsack Sprayer delivered	-
	No. of Hand-operated Knapsack Sprayer delivered	127
5. Provision of Soil Rehabilitation to Block Farms	No. of Bags of Soil Lime distributed	71,210
	No. of Bags of Organic Fertilizers distributed	-
6. Provision of Livelihood to Block Farms	No. of Food Houses established	90

**based on fund utilized reported by Extension Services - Visayas*

a. SIDA Block Farming Program – Establishment of Food House

LIVELIHOOD PROGRAM TO SUGARCANE BLOCK FARMS

Livelihood Program focused on community and enterprise development of smallholder farmers engaged in sugarcane block farming while promoting sustainable agricultural practices through the establishment of a food house during the covid-19 pandemic.

This is an incredible opportunity to have a greater impact on the Block Farm beneficiaries' transformation into Agri-entrepreneurs.

Food House Farming Enterprise is being streamlined to aid in the promotion of adaptive technologies to secure food for the family, mitigate the effects of changing climate on food security, and develop a diversified agriculture-based livelihood.

Each block farm from GAA 2017, GAA 2018, and GAA 2019 received a **Php 50,000.00** grant for the establishment of a food house, as well as the following supplies and materials:

- 25m UV Plastic
- 8 kls Assorted Nails
- 5 kls Tire Wires
- 4 pcs Feeding Through
- 4 pcs Waterer
- 10 bags Bio organic Fertilizer
- 15 pcs Seedling Tray 104 Holes
- 30 pcs Seedling Tray 35 Holes
- 6 bundles Polypropylene Seedling Bag
- 2 pcs Spade
- 2 pcs Garden Hoe
- 2 pcs Garden Rake
- 1 roll Garden Hose – 100m
- 2 pcs 5L Plastic Watering Can
- 1 unit 16 L Knapsack Sprayer
- 5 kilos Foliar Fertilizer
- Vegetable Seeds (31 packs ASSORTED

GAA	No. of Block Farms Beneficiaries	Delivered as of 31 December 2022	Remarks
GAA 2017	35	35	Accomplished Delivered as of May 2022
GAA 2018	25	25	Accomplished Delivered as of May 2022
GAA 2019	30	30	Accomplished Delivered as of May 2022
TOTAL	**90**	**90**	

A total of 88 **food houses** were delivered for different mill districts under **Extension Services Division – Visayas.** For food houses established and monitored last year was mostly affected by Typhoon Odette which landfall last December 2021. For the 4th quarter of this year, food houses were re-established, on-going harvesting, others are still looking for new sites due to water logging and income increase has been reported for this quarter (4th quarter) recorded a **Php 22,060.00** total proceeds as of December 2022. Continuous monitoring and technical assistance for the block farm beneficiaries of the SRA SIDA block farms are being observed.

b. SIDA FUNDED FARM MECHANIZATION SUPPORT

Farm mechanization is one of the changes in technology that the industry needs to do in order to enhance sugarcane production and generate more revenue of sugarcane farmers/planters and achieve self-sufficiency. For optimal planting, cultivation, care & maintenance, harvesting, and handling of sugarcane, the Sugarcane Farm Mechanization Program should be encouraged. Farmers can experience reduced operating expenses, minimal postharvest losses, higher-quality goods, and enhanced profitability as a result of these innovative agricultural technologies.

The Sugar Regulatory Administration, through the Extension Services Division Visayas, distributed Farm Machineries and Equipment to beneficiaries of the SIDA Block Farming Program and various mills district recipients in order to promote economic growth and adoption of

modern, appropriate, cost-effective, and environmentally-safe agricultural machineries and equipment, as well as to strengthen the support services provided for our farmers' stakeholders.

Status of Farm Mechanization Support for SIDA Block Farms of GAA 2016, GAA 2017, GAA 2018 & GAA 2019 as of **December 2022**

GAA	EQUIPMENT	NO. OF UNITS	APPROVED BUDGET	NO. OF UNITS DELIVERED	DATE DELIVERED	ACCOMPLISHMENT (%)
SIDA 2016	Moldboard plough	37	37,000,000.00	37	September 2020 - October 2020	100%
	Furrower	37		37		100%
	Hydraulic Harrow	37		37		100%
	Fertilizer Applicator	37	8,140,000.00	37	August 2020 - September 2020	100%
	Irrigation Facilities / Equipments (11 hp pump and engine set with complete accessories)	37	3,700,000.00	37	Aug-19	100%
	Farm Tractors 90 HP (Massey Ferguson 290T)	37	74,000,000.00	37	Jun-21	100%
Sub-Total:		**222**	**122,840,000.00**	**222**		**100%**
SIDA 2017	Irrigation Facilities / Equipment (14 hp pump and engine set with complete accessories)	31	3,100,000.00	31	Aug-19	100%
	Sugarcane Grabber	14	35,000,000.00	14	Dec-20	100%
	Brand new tractor with compatible sugarcane whole stalk cutter	35	52,500,000.00	35	Nov 2021	100%
Sub-Total:		**90**	**90,600,000.00**	**90**		**100%**

GAA	EQUIPMENT	NO. OF UNITS	APPROVED BUDGET	NO. OF UNITS DELIVERED	DATE DELIVERED	ACCOMPLISHMENT (%)

SIDA 2018	Moldboard plough	25	25,000,000.00	25	May-21	100%
	Furrower	25		25		
	Hydraulic Harrow	25		25		
	Irrigation Facilities / Equipments (12 hp pump and engine set with complete accessories)	25	3,750,000.00	25	Jan-20	100%
	Farm Tractors 90HP (Filholland)	25	50,000,000.00	25	December 2021	100%
Sub-Total:		**125**	**78,750,000.00**	**125**		**100%**
SIDA 2019	Irrigation Facilities / Equipments (12 hp pump and engine set with complete accessories)	30	4,500,000.00	30	Mar-20	100%
	Sugarcane Grabber / Loaders	30	75,000,000.00	30	May 2021 – July 2021	100%
Sub-Total:		**60**	**79,500,000.00**	**60**		
SIDA 2022	Farm Tractors 90HP (Filholland)	20	40,0000.00	20	November 2022	100%
Grand Total:		**517**	**411,690,000.00**	**517**	**August 2019 – November 2022**	**100%**

Last October of this year, 2022, six (6) units of 90 HP farm tractors were distributed to cluster block farms of GAA 2017, while two (2) 36 HP whole stalk cutters were distributed to GAA 2017 block farms. This November, another twenty (20) units of the 90 HP farmtractors were delivered to 20 block farms of GAA 2022.

b.1 Farm Mechanization Income and Operation

Sugarcane Grabber Income and Operation

GAA	MILL DISTRICT	BLOCK FARM	GROSS INCOME (Php)	AREA SERVED (Ha.)	TONNAGE
2017	SONEDCO	Tagoc Agrarian Reform Cooperative	79,000.00		30.00
	Victorias	PFPC Agrarian Reform Cooperative	213,630.84		1,780.26
	FF/ Bac-Mur	Sta. Rosa Small Farmers Association	56,760.00		473.00
	FF/ Bac-Mur	Malasaga Hiyang-hiyang Irrigators Association	56,760.00		473.00
	SONEDCO/ Dacongcogon	Brgy. Tabu Agrarian Reform Beneficiaries Association	53,750.00	12.00	
	BISCOM	Had. Bagacay Workers Carper Beneficiaries Association	216,000.00		400.00

	Sagay-Danao	Pasto Agrarian Reform Cooperative	325,000.00		
	San Carlos	Malanog Menchaca Dolis Farmers Association,	50,000.00		
TOTAL			**1,050,900.84**	**12.00**	**3,156.26**
	MA-AO	Fermina Small Water Irrigation System Association	35,130.00		189.85
	Victorias	Sta. Barbara Farmers Association	474,400.80	42.74	3,941.12
	Victorias	Had. Alberto Farmers Association	294,957.00		1,966.38
	SONEDCO-Dacongcogon	Balicotoc Agrarian Reform Beneficiaries Association	41,000.00	43.00	
	FF-BAC MUR	Entorilan ARB Association Inc.	120,000.00		
	Bogo-Medellin	Had. Filomena Agrarian Reform Beneficiaries Association	7,400.00		
	BISCOM	Duran Small Farmers Association	60,000.00		
2019	Bais URSUMCO	Lower Owayon Agrarian Reform Beneficiaries Association	12,800.00	7.00	500.00
	BOGO-MEDELLIN	Panugnawan Agrarian Reform Beneficiaries Association	2,000.00		
	CAPIZ	Bingawan Sugarcane Planters Farmers Association	7,995.00		
	SONEDCO-Dacongcogon	Bakyas Farmers Farmworkers Association	23,500.00		
	San Carlos	San Joaquin Farmers Association	8,400.00		
	San Carlos	Lagaan Farmers Association	100,000.00		
	San Carlos	Bagawines, Ulay, Cabulihan Farmers Workers Association	2,400.00		
	ORMOC	Kadaohan Block Farming Association	625.00	0.25	
TOTAL			**1,190,607.80**	**92.99**	**6,597.35**
GRAND TOTAL			**2,241,508.64**	**104.99**	**9,753.61**

From January to December 2022, the sugarcane grabber recorded an income of **Php 6,315,042.28** with tonnage of **24,673.98** from SIDA GAA 2017 and 2019 Block Farms as monitored and reported monthly.

Farm Tractor Income and Operation

GAA	MILL DISTRICT	BLOCK FARM	GROSS INCOME (Php)	AREA SERVED (Ha.)
2016	LOPEZ	LGEI Farmers Association Incorporated	41,400.00	4.60
	SONEDCO	Mataba Womens Association	20,400.00	1.36
	ORMOC	Catmon Small Farmers Association	7,675.60	1.92
	LA CARLOTA	Dama Farm Workers Agrarian Reform Beneficiaries Ass'n	58,660.00	4.19
	ILOILO	Aglalana Green Farmers Association	24,000.00	3.00
	SAN CARLOS	Agpangi Bagacay Cabungahan Agrarian Reform Cooperative	36,000.00	9.00
	SONEDCO	Magballo Agrarian Reform Beneficiaries and Farmers Association	44,500.00	3.10
	SONEDCO	Pinggot Farmers Association	78,480.00	8.37
	VICTORIAS	Had. Candelaria Farmers Association	65,250.00	4.50
	MA-AO	Nakalang Padilla Farm Workers Association	32,900.00	2.35
	SONEDCO	Bantayan Farmers Agrarian Reform Beneficiaries Association	107,710.00	9.47
	SONEDCO	Casoy Lubi Apitong Agrarian Reform Beneficiaries Association	214,760.00	19.87
	FF/BAC-MUR	Had. Esmeralda 2 Rice Farmers Association	46,500.00	3.10
	SAGAY-DANAO	Minapasuk Upland Farmers Agri-ventures Marketing Cooperative	112,215.00	13.42
	LOPEZ	Talusan Agrarian Reform Beneficiaries Association Inc.	39,510.00	9.30
	Bogo-Medellin	Caputatan Norte Sugarcane Farmers Association	35,000.00	2.50
	Bais-URSUMCO	New Namangka Farmers Association	60,905.00	10.91
	Bais-URSUMCO	Bulod Aktibong Bukidnon Livelihood Organization	36,138.24	5.44
	San Carlos	Bagonbon Agrarian Reform Cooperative	40,000.00	4.10
TOTAL			**1,102,003.84**	**120.50**
2017	BISCOM	Had. Bagacay Workers Carper Beneficiaries Association	22,900.00	11.45
	Victorias	Gracia Farmers Association	8,000.00	2.00
	SONEDCO/ Dacongcogon	Brgy. Tabu Agrarian Reform Beneficiaries Association	69,850.00	10.50
	SONEDCO/ Dacongcogon	Ga-id Mambugsay ISF Project Minority Association	10,810.00	1.00
	San Carlos	Malanog Rice Farmers Association	27,728.80	2.84
TOTAL			**139,288.80**	**27.79**
2018	Ormoc	Quezon Jr. United Farmers Association	15,326.30	4.16
	Ormoc	Sumangga Sugarcane Farmers Association	2,788.00	0.70
	BAIS-URSUMCO	Sab-ahan Tribu Bukidnon Association	15,912.00	
	BAIS	Brgy. Inapoy Farm Family Association	3,669.60	0.92
	VICTORIAS	Had. Ogie Sugar Farm Workers Multi-purpose	32,700.00	2.18

		Cooperative		
	SONEDCO/ Dacongcogon	Brgy. Alim Farmers Poultry and Livestock Raisers	5,600.00	0.70
	Victorias	Minuro Agrarian Reform Beneficiaries Cooperative	96,300.00	6.42
	SONEDCO	Farmers Association of Tabionan	120,245.05	10.95
	SONEDCO/ Dacongcogon	Tan-Awan Farmers for Sustainable Agriculture Association	84,495.00	7.42
	First Farmers/ Bac-Mur	Hda. Sto. Niño Farmers Association	120,000.00	5.20
	SAN CARLOS	Agpangi Bagacay Cabungahan Agrarian Reform Cooperative	18,000.00	4.50
	Ma-ao	Nakalang Padilla Farm Workers Association	9,750.00	0.65
	Ma-ao	Sitio Mambahao Farmworkers Association	27,000.00	2.00
	BAIS	Brgy. Tara Farm Family Association	6,135.60	9.76
	SAGAY-DANAO	First District Upper Ministerial Association for Spriritual and Economic Endeavor	76,300.00	13.20
	First Farmers/ Bac-Mur	Balogo Farmers Association	33,900.00	3.26
	HPCo	Hda. Paho Farmers Association	47,458.98	5.26
	HPCo	Had. Angeles Agrarian Reform Beneficiaries Association	17,755.00	1.59
	San Carlos	Paghumayan Small Farmers Association	84,166.40	5.26
	ILOILO	Agtabo Farmers Association	54,000.90	5.60
	CAPIZ	Progressive Women Agrarian Reform Cooperative	33,750.00	6.64
	San Carlos	Natural Park Farmers Association	32,000.00	2.00
TOTAL			**937,252.83**	**98.36**
2019	BAIS	Maasin Planters Association	9,910.40	2.48
TOTAL			**9,910.40**	**2.48**
GRAND TOTAL			**2,188,455.87**	**249.12**

For 4th Quarter, the **90HP Farm Tractors of SIDA GAA 2016 & 2018 Block farms** reported an income of **Php 2,188,455.87** with an area served of **249.12** hectares and as of December 2022 recorded an income of **Php 8,033,729.56** with an area served of **658.1761** hectares, these block farms were monitored and reported to ESD Visayas monthly.

Report on **Pump Irrigation as of December 2022** reported an income of **P19, 264.50** with an area served of **17.54 hectares** while the **35HP Farm Tractor for SIDA GAA 2017 Block Farms** (with sickle sword cutter) reported an income for tractor alone of **P107, 880.00** with total area served of **15.14 ha** as of December 2022.

c. Establishment of Nurseries or Distribution of High Yielding Varieties (HYVs)

GAA	BLOCK FARM	LOCATION	Variety Planted	Date of Cutback	No. of Lacsa Produced	Area	Expansion Area
2016	Mangulod Farmers Multi Purpose Cooperative	Mangulod, Sta. Catalina, Negros Oriental	Phil 99-1793	Jan 2022	10.00	0.4000	2.0000
	Agpangi, Bagacay, Cabungahan Agrarian Reform Cooperative	Brgy. Agpangi, Calatrava, Negros Occidental	Phil 2006-2289	Jan 2022	10.00	0.4300	2.0000
	Polo Plantation Agrarian Reform Beneficiaries Cooperative	Brgy. Polo, Tanjay City, Negros Oriental	Phil 99-1793	March 2022	10.00	1.3028	2.0000
	Catmon Small Farmers Association	Purok 2, Brgy. Catmon, Ormoc City, Leyte	Phil 99-1793	April 2022	13.50	2.0000	3.1250
	Talusan Agrarian Reform Beneficiaries Association Inc.	Purok Kulo, Brgy. Bulanon, Sagay City Neg. Occ.	Phil99-1793	May 25, 2022	16.30	1.0000	4.0750
	Mangulod Farmers Multi-Purpose Cooperative	Sitio Mangulod, Brgy. San Jose, Sta. Catalina, Negros Oriental	Phil 99-1793	July 2022	2.00	1.0000	0.5000
	NAKALANG PADILLA FARM WORKERS ASSOCIATION	Prk. Malunggay, Brgy. Ilijan, Bago City, Negros Ocidental	Phil 99-1793	September 10, 2022	8.50	1.7000	1.7000
	Talusan Agrarian Reform Beneficiaries Association Inc.	Purok Kulo, Brgy. Bulanon, Sagay City Neg. Occ.	Phil99-1793	Dec 2022	8.00	1.0000	2.0000
	Leonor Gonzaga Estate Inc. Farmers Association (LGEIFA)	Brgy. Malubon, Sagay City, Negros Occidental	Phil99-1793	Dec 2022	8.00	1.0000	2.0000
2017	Pasto Agrarian Reform Cooperative	Brgy. Magticol, Toboso, Negros Occidental	Phil 99-1793	Jan 2022	5.19	1.0380	1.0000
	Malanog Menchaca Dolis Farmers Association	Brgy. Dolis, Calatrava, Negros Occidental	Phil 99-1793	Jan 2022	23.00	1.0000	4.6000
	Bagtic Mampalasan United Farmers Association	Brgy. Bagtic, Mabinay, Negros Occidental	Phil 99-1793	Jan 2022	42.00	2.2500	5.0000
	Uswag Mag-uuma sa Samac	Brgy. Samac, Mabinay, Negros Oriental	Phil 99-1793	March 2022	14.80	1.0000	2.0000

	Dolores Sugarcane Farmers Association	Brgy. Dolores, Ormoc City, Leyte	Phil 2006-2289	March 2022	12.00	2.0000	3.1000
	Had. Bagacay Workers Carper Beneficiaries Association	Brgy. Aranda, Hinigaran, Negros Occidental	Phil 99-1793	March 2022	15.00	2.0000	3.0000
	Prosperidad Agrarian Reform Beneficiaries Association	Brgy. Prosperidad, San Carlos City, Negros Occidental	Phil 2006-2289	May 2022	51.00	1.4483	14.7500
	Tagoc Agrarian Reform Cooperative	Brgy. Tagoc, Kabankalan City ,Negros Occidental	Phil 99-1793	Apr-22	56.30	9.1500	14.0750
	Brgy. Tabu Agrarian Reform Beneficiaries Association	Brgy. Tabu, Ilog, Negros Occidental	Phil 99-1793	Apr-22	10.00	1.0000	2.5000
	Prosperidad Agrarian Reform Beneficiaries Association	Brgy. Prosperidad, San Carlos City, Negros Occidental	Phil 99-1973	18-May-22	27.20	1.0000	6.8000
	TAGOC AGRARIAN REFORM COOPERATIVE	Brgy. Tagoc, Kabankalan City, Negros Occidental	Phil 99-1793	July 2022	8.80	5.0000	2.1000
	Binubuhan Progressive Farmers and Farmworkers Association	Brgy. Binubuhan, Bago City, Negros Occidental	Phil 99-1793	July-Sept 2022	9.50	1.1000	3.0500
	Asosasyon sang Mamumugon sang Nolan	Brgy. Mansalanao, La Castellana, Negros Occidental	Phil 99-1793,Phil 2006-2289	Dec-22	9.30	2.0000	2.3250
	Had. Bagacay Workers Carper Beneficiaries Association	Brgy. Aranda, Hinigaran, Negros Occidental	Phil 99-1793	Dec-22	8.00	2.0000	2.0000
2018	Agtabo Farmers Association	Brgy. Agtabo, Passi City, Iloilo	Phil 99-1793			0.6502	
	First District Upper Ministerial Association for Spiritual and Economic Endeavor	Brgy. Marcelo, Calatrava, Negros Occidental	Phil 99-1793	Jan 2022	5.00	1.0000	1.0000
	Common Small Farmers Agrarian Reform Beneficiaries Association	Sitio Common Basak, Bais City, Negros Oriental	Phil 99-1793	Feb 2022	35.00	2.1000	7.0000
	Natural Park Farmers Association	Sitio Iliranan, Brgy. Codcod, San Carlos City, Negros Occidental	Phil 2006-2289	March 2022	1.20	0.5530	0.2400

	Balogo Farmers Association	Brgy. Concepcion, Talisay City, Neg. Occ.	PHIL 83-331	Apr-22	3.20	2.0000	0.8000
	Natural Park Farmersc Association	Brgy.Codcod, San Carlos City,Negros Occidental	Phil 99-1793	11-May-22	2.10	1.0000	0.5250
	Bagtic Mampalasan United Farmers Association	Brgy. Bagtic, Mabinay, Negros Oriental	Phil99-1793	May 2022	28.00	2.1750	7.0000
	SITIO MAMBAHAO FARMWORKERS ASSOCIATION	Sitio Mambajao, Brgy. Bacong, Bago City, Negros Occidental	Phil 99-1793	August 15, 2022	10.00	1.70	1.2200
	Brgy. Alim Farmers Poultry and Livestocks Raiser Association	Barangay Alim, Hinoba-an, Negros Occidental	Phil 99-1793	Sept 2022	7.00	2.0000	1.2863
	Sitio Nolan Farmers and Farmworkers Association	Brgy. Mansalanao, La Castellana, Neg. Occ.	PHIL 99-1793 AND PHIL 2006-2289	November 2022	8.00	2.0000	2.0000
	Minuro Agrarian Reform Beneficiaries Cooperative	Brgy. 10, Victorias City, Negros Occidental	Phil 99-1793	December 2022	18.78	2.0000	4.6950
2019	Brgy. Ani-e Small Farmers Association	Brgy. Ani-e, Calatrava, Negros Occidental	Phil 99-1793	Feb 16 2022	33.00	1.6600	5.0000
	Kahugpungang Panginabuhian Mag-uuma sa La Paz	Sitio Bahi, Brgy. Lapaz, Bogo City, Cebu	Phil 99-1793	Feb 2022	15.15	2.0000	3.2750
	Fermina Small Water Irrigation System Association	Purok Ipil-ipil, Brgy. Ma-ao, Bago City, Negros Occidental	Phil 2006-2289	Feb 2022	22.50	2.0000	5.0000
	Kaisahan sang Mangunguma sa Programa sang CARP	Brgy. Libertad, Banate, Iloilo	Phil 2004-1011	March 2022		2.0000	
	Bingawan Sugarcane Planters Farmers Association	Brgy. Poblacion, Bingawan, Iloilo	Phil 99-1793	March 2022		2.0000	
	Christian Farmers Association of Samac	Brgy. Samac, Mabinay, Negros Oriental	Phil 99-1793	March 2022	8.50	2.0000	0.7000
	Anonang Norte Farmers Association		Phil 99-1793	March 10, 2022	15.00	2.0000	1.0000
	Bagawines, Ulay, Cabulihan	Brgy. Bagawines,	Phil 2006-	March 28,	51.50	1.0000	10.6250

	Farmers Workers Association	Vallehermoso, Negros Oriental	2289	2022			
	San Joaquin Farmers Association	Sitio Igmamatay, Brgy. Codcod. San Carlos City, Negros Occidental	Phil 2006-2289	April 14,2022	26.91	1.0000	6.7275
	Anonang Norte Farmers Association	Brgy. Anonang Norte, Bogo, Cebu	Phil 99-1793	April 20,2022	27.70	2.0000	6.9250
	Sta. Barbara Farmers Association	Had. Sta. Barbara, Brgy. Burgos, Cadiz City, Negros Occidental	Phil 99-1793	April 22, 2022	27.00	2.0000	6.7500
	Kadaohan Block Farming Association	Brgy. Kadaohan, Ormoc City	Phil 99-1793	May 19, 2022	5.00	1.0000	1.2500
	San Joaquin Farmers Association	Sitio Igmamatay, Brgy. Codcod. San Carlos City, Negros Occidental	Phi 99-1793	May 29, 2022	27.50	1.0000	6.8750
	Bugtong-Tangco-Tabangka Indigenous Planters Association	Sitio Bugtong, Brgy. Tan-awan, Kabankalan City, Negros Ocidental	Phil 99-1793	Apr-22	22.00	0.7000	5.5000
	Bagawines, Ulay, Cabulihan Farmers Workers Association	Brgy. Bagawines, Vallehermoso, Negros Oriental	Phil 99-1793	June 06, 2022	25.15	1.0000	6.2875
	Barangay Ani-e Small Farmers Association	Brgy. Ani-e, Calatrava, Negros Occidental	Phil 99-1793	June 19, 2022	5.00	1.0000	1.2500
	Mandana-Madalag-Pansil-Pandan-Indigenous Planters Association	So. Pandan, Brgy. Tan-awan, Kabankalan City, Negros Occidental	PHIL 99-1793	July 2022	1.20	0.2000	
	HAD. FELOMINA AGRARIAN REFORM BENEFICIARY ASSOCIATION	Purok Mahugany, Brgy. Binabag, Bogo City, Cebu	PHIL 99-1793	August 8, 2022	7.00	1.00	2.0000
	Kahugpungang Panginabuhian Mag-uuma sa La Paz	Sitio Bahi, Brgy. Lapaz, Bogo City, Cebu	Phil 99-1793	Aug-Sept 2022	6.00	2.0000	1.9000
	Fermina Small Water Irrigation System Association	Purok Ipil-ipil, Brgy. Ma-ao, Bago City, Negros Occidental	Phil 99-1793	Sept 2022	10.00	2.0000	2.0000

	Mandayao Gomez Farm Workers Association	Brgy. Sag-ang, La Castellana, Neg. Occ	Phil 99-1793	October 2022	9.50	2.0000	1.5400
TOTAL					**842.2800**	**90.5573**	**186.0713**

As reported from January to December 2022, the Block Farm HYV Nurseries produced a total of **842.28 lacsas** from **90.5573 hectares cutback area** planted to **186.0713 hectares expansion areas.**

d. TRAININGS AND SEMINARS

Conducted OPSI TRAINING and INCEPTION MEETING for SIDA GAA 2022

Mill District		Trainings	Date Conducted	Number of Participants
LA CARLOTA	1	Cabungbungan Lingahob Farmers Association	August 12, 2022	36
LA CARLOTA	2	Had Agho Camandag Agrarian Reform Beneficiaries Association	August 11, 2022	52
MA-AO	3	Mercedes Farmers Irrigators Association Inc	August 16, 2022	37
SONEDCO	4	Mahayag Small Farmers Association	August 18, 2022	39
VICTORIAS	5	Cotcot Upland Farmer and Farmer Workers Association	August 18, 2022	32
SONEDCO	6	Locotan Banman Sugarcane Farmers Association	August 19, 2022	32
SAGAY DANAO	7	Kilusang Pagbabago Minautok Upland Farmers Association	August 19, 2022	21
SONEDCO	8	Malabago Diversified Farmers Association	August 20, 2022	35
BISCOM	9	Mangahoy-kahoy Farmers Association	August 30, 2022	44
HPCO	10	Nacayao Small Farmers Association	August 30, 2022	36
ILOILO	11	Agutayan Cubay Agrarian Reform Cooperative	August 30, 2022	32
BISCOM	12	Pilar Agrarian Reform Beneficiaries Association	August 31, 2022	42
SAGAY DANAO	13	Pakigdaet sa Kalamboa-an	August 31, 2022	97
SAN CARLOS	14	Brgy Quezon ARB Association	September 5, 2022	22
TOLONG	15	Villasol Small Sugarcane Farmers Association	September 6, 2022	15
LOPEZ	16	Caridad Delapas Agrarian Reform Beneficiaries Association	September 6, 2022	64
BAIS-URSUMCO	17	Bagtic Farmers Association	September 15, 2022	44

SAN CARLOS	18	Brgy. Macasilao Integrated Small Farmers Association	September 15, 2022	56
BAIS-URSUMCO	19	Bugnay Farm Family Association	September 16, 2022	35
VICTORIAS	20	Myrianne Farmers Development Association	September 16, 2022	30
TOTAL				**801**

The interventions and activities provided to the Block Farms identified by the Block Farm Committee have produced positive results in terms of yield of Block Farms:

REGION	TC/HA			LKG/HA		
	CY 2016-2017	CY 2020-2021	% OF INCREASE	CY 2016-2017	CY 2020-2021	% OF INCREASE
Visayas	45.55	58.33	**28.1**	79.19	99.89	**26.1**

Baseline: CY 2016-2017

SUMMARY (VISAYAS) BLOCK FARMING PROJECT, CROP YEAR 2021-2022 PRODUCTION								
SIDA GAA	Plant cane				Ratoon cane			
	Area planted (has.)	GROSS SALE	TOTAL COST OF PRODUCTION	TOTAL NET INCOME	Area planted (has.)	GROSS SALE	TOTAL COST OF PRODUCTION	TOTAL NET INCOME
2016	210.9425	43,245,179.52	20,173,164.53	23,072,014.99	797.2427	140,848,768.71	51,221,279.69	89,627,489.02
2017	244.3564	49,148,566.89	22,913,619.06	26,234,947.83	709.5219	134,943,418.42	46,549,733.83	88,393,684.59
2018	154.9837	31,708,596.40	14,734,193.20	16,974,403.20	580.0372	102,388,978.47	35,674,047.46	66,714,931.01
2019	241.5289	45,641,541.05	22,413,133.01	23,228,408.04	645.7178	106,602,268.29	39,817,337.43	66,784,930.86
ALL GAA	851.8115	169,743,883.86	80,234,109.80	89,509,774.06	2,732.5196	484,783,433.89	173,262,398.41	311,521,035.48
NATIONAL AVERAGE (INCOME PER HECTARE) ALL BLOCK FARMS / ALL GAA	Plant cane_AVERAGE		105,081.67					
	Ratoon cane_AVERAGE		114,005.05					
	OVER-ALL		109,543.36					

GAA	Cost of Production		Average Cost of Production	Net Income		Average Net Income
	New Plant	Ratoon		New Plant	Ratoon	
2016	86,340.58	59,666.76	73,003.67	86,966.06	89,144.88	88,055.47
2017	88,620.26	57,782.43	73,201.35	83,077.59	99,346.09	91,211.84
2018	86,266.91	60,426.14	73,346.53	72,749.21	90,864.48	81,806.85
2019	81,256.39	54,565.46	67,910.93	73,890.66	85,353.26	79,621.96
AVERAGE	**85,621.04**	**58,110.20**	**71,865.62**	**79,170.88**	**91,177.18**	**85,174.03**
Net Income 70% sharing scheme				**55,419.62**	**63,824.02**	**59,621.82**

2022 GAA Physical Accomplishment

1. Establishment of Block Farms – there is a total of 20 organized Block Farms under 2022 GAA which are eligible to receive interventions and funding:

REGION	NO. OF BLOCK FARMS	TOTAL ENROLLEES	AREA (HA.)	HOUSEHOLD BENEFICIARIES
Visayas	20	836	699.7400	2,343

2. Provision of Start-up Capital

Based on the reports from Extension Services, budget allocated for the start-up capital *(e. Start-up capital includes the budget for land preparation, purchase of cane points or planting materials, cover various labor expenses for farm operations from planting to cultivation and for the purchase of fertilizers)* and the implementation period for the 20 SIDA Block Farms – Visayas as follows:

REGION	PROVISION OF START-UP CAPITAL (in Php)	TARGET IMPLEMENTATION PERIOD
VISAYAS	33,000,000.00	November 2022-April 2023

3. Provision of Farm Mechanization

For the farm mechanization support, a total of Php 65,600,000.00 is allocated for the purchase of various farm machineries and equipment to be distributed to 20 SIDA Block Farms Visayas and vehicles for the capacity-building / program supervision of SRA. Allocation for the purchase and distribution of farm machineries and equipment as follows:

REGION	PROVISION OF FARM MACHINERY AND EQUIPMENT (in Php)
VISAYAS	65,600,000.00

The following are the proposed farm machineries and equipment proposed including the status of procurement as of December. 30, 2022:

Implementing Unit	Machinery, Equipment, Vehicle	No. of Units	Unit Cost (in Php)	Total Cost (in PhP)	Status	Purpose
Visayas	90hp Farm Tractor	20	2,000,000	40,000,000	100% delivered	Farm Mechanization Support
	Farm implements (Moulbard-4 shank, Harrower, 18-22 disc and Furrower 6-shank	20	1,000,000	20,000,000	For Farm implements: Bid-opening is scheduled on October 11, 2022.	Farm Mechanization Support
	Irrigation Facilities/Equipment with complete accessories	20	150,000	3,000,000	Pre-bid Conference was done last September 26, 2022 and the Bid-opening is scheduled on October 11, 2022.	Farm Mechanization Support
	Motorcycles	5	120,000.00	600,000	For issuance of notice of award to the winning bidder	Program Supervision and Monitoring

Among the items for procurement under the farm mechanization component of Block Farm, the hauling trucks is still in the pre-procurement activities. The BAC should prioritize and hasten the procurement activity of this item or target the issuance of notice of award in December 2022.

4. Provision of Livelihood Projects

The establishment of a food house as livelihood program for Block Farms promotes good agricultural practices for crop production and animal raising. The main purpose of this livelihood is for food security and alternative source of income for the Block Farm members. The Food House project is integrated to Block Farms under 2022 GAA to promote adaptive technologies for family food security, cushion the impacts of the changing climate to food security and establish a diversified agriculture-based livelihood. Procurement is still on-going as of December 30, 2022.

REGION	PROVISION FOR ESTABLISHMENT OF FOOD HOUSE (Php)	PARTICULARS	STATUS
VISAYAS	949,000.00	Establishment of Food House – supplies and materials (Php 722,000.00)	For issuance of Notice of Award – NOA to the winning bidder/suppliers
		Establishment of Beneficial Micro-Organism production Site – supplies and materials (Php 227,000.00)	On-going delivery of raw materials

VII. RAPID PROPAGATION OF SUGARCANE HIGH YIELDING VARIETIES as of DECEMBER 2022

One of the components of the Sugarcane Industry Development Act of 2015 is the RD & E Projects, under this is the establishment of nurseries or the Rapid Propagation of Sugarcane High Yielding Varieties to different milling districts in Visayas.The main objective of this project is to establish a nursery to every milling district for easy access of small sugarcane planters/farmers to new high yielding varieties. Rapid Propagation of Sugarcane High Yielding Varieties for Extension Services Division – Visayas was allotted to different milling districts, provision/interventions under this project included fertilizers, planting materials, land preparation and cultivation, etc.

- **PROJECT COMPONENTS/COOPERATORS:**

Area per mill district as per SRA Board Resolution No. 2017-326 was divided to different co-operators such as MDDC's, SUC's Planters Associations, LGU.s etc. Bais Ursumco and HPCo Mill Districts waived their rights not to avail of the said project due to various reasons (availability of area, etc.), thus the area allotted to the two districts was given to Ormoc –Hisumco, Lopez and FFHC/Bac-Mur Mill Districts as per SRA Board Resolution no. 2019-186 dated October 7, 2019.

MILL DISTRICT	PROJECT PROPONENT	FUND ALLOCATION	ALLOCATION (HECTARES)
SAGAY-DANAO MILL DISTRICT	Sagay Danao Mill District Development Council Foundation, Inc.	1,283,175.00	15.00
	Northern Negros College of Science & Technology - NONESCOST	443,513.00	5.00
LOPEZ MILL DISTRICT	Lopez Mill District Development Council Foundation, Inc.	1,409,478.00	16.00
	Lopez Mill District Development Council Foundation, Inc**. (Additional Nursery as per SRA Board Resolution No. 2019-186)**	1,747,991.20	16.00
SAN CARLOS MILL DISTRICT	San Carlos Mill District	1,159,272.00	15.00

TOLONG MILL DISTRICT	Southern Negros Mill District Development Council Foundation Inc. (SNMDDCFI)	1,182,988.00	15.00
BISCOM MILL DISTRICT	Planters Association of Southern Negros (PASON)	1,766,079.75	21.00
	Central Philippine State University (CPSU) - Moises Padilla	85,428.00	1.00
	Independent Planters of Biscom Inc. (IPOBI)	427,140.00	5.00
	Negros COFA - Confederation of Farmers Association	531,340.00	6.22
	Bato Farmers Association (BAFA)	170,856.00	2.00
	Central Philippine State University (Hinigaran Campus)	85,428.00	1.00
MA-AO MILL DISTRICT	Maao Mill District Development Council Foundation, Inc.	1,130,378.00	13.00
LA CARLOTA MILL DISTRICT	La Carlota Mill District Development Council Foundation, Inc.	1,917,863.00	22.00
SONEDCO/DACONGCOGON MILL DISTRICT	Central Philippine State University (CPSU) - Main Campus, Kabankalan City	2,532,917.00	30.00
FFHC/BAC-MUR MILL DISTRICT'	Bacolod Murcia/First Farmers Mill District Development Council Foundation, Inc.	2,188,241.10	26.00
	Bacolod Murcia/First Farmers Mill District Development Council Foundation, Inc. (Additional Nursery as per SRA Board Resolution No. 2019-186)	1,283,175.00	15.00
VICTORIAS MILL DISTRICT	Victorias Mill District Development Foundation, Inc.	3,188,567.00	37.00
	Iloilo MDDC	**1,221,620.40**	**14.30**
	WVSU Calinog Campus	256,284.00	3.00
	ISCOF San Enrique	256,284.00	3.00
	ISCOF Dingle	341,712.00	4.00
	Badiangan LGU	153,770.40	1.80
	Antique-Tobias Fornier LGU	268,284.00	3.00
	Antique SU-Hamtic Campus	85,428.00	1.00
	Binggawan LGU	85,428.00	1.00
	Pilar Planters Association	**85,428.00**	**1.00**
	Capiz State University	427,140.00	5.00
BOGO MEDELLIN/DURANO MILL DISTRICT	Bogo Medellin/Durano Mill District Development Foundation, Inc. (CTU - Tuburan Campus)	678,330.00	9.00
ORMOC-HISUMCO MILL DISTRICT	Ormoc-Hisumco Mill District Development Council Foundation, Inc.	704,221.00	9.00
	Leyte Cane Planters Association, Inc. (Additional Nursery as per SRA Board Resolution No. 2019-186)	1,140,928.80	13.00
TOTAL		**28,238,688.65**	**329.32**
NOTE:	**Total budget allocated for ESD Visyas**		**Php28,291,559.00**
	Fund allocation was based on the project proposal submitted		

- **CASH TRANSFER OF FUNDS:**

One of the provisions of the Rapid Propagation of Sugarcane HYV is the cash transfer of fund. Cash transfer included the funds for land preparation, canepoints, pakiao labor, etc. See table for the list of proponents under the cash transfer provision:

PROJECT POPONENT/COOPERATOR	MILL DISTRICT	AMOUNT OF CASH TRANSFER	DATE TRANSFERRED	REMARKS
1. Ormoc-Hisumco Mill District Development Council	Ormoc-Hisumco Mill District	Php608,281.00	March 2019	With liquidation report forwarded to SIDA One-Stop Shop Office for audit.
2. Northen Negros College of Science and Technology (NONESCOST)	Sagay-Danao Mill District	Php377,725.00	March 2019	With liquidation report c/o SRA Bacolod SIDA-One-Stop Shop Office.
3. Planter's Association of Southern Negros, Inc.	Biscom Mill District	Php1,472,079.14	September 2020	With liquidation report forwarded to SIDA One-Stop Shop Office for audit.
4. Leyte Cane Planter's Association, Inc.	Ormoc-Hisumco Mill District	Php986,928.80	November 2020	With liquidation report forwarded to SIDA One-Stop Shop Office for audit.
5. Iloilo Mill District Development Council Inc.	Iloilo Mill District	Php1,221,620.40	December 2021	Released to Iloilo MDDC, subject for submission of liquidation report.
6. Pilar Planters Association	Capiz Mill District	Php85,428.00	December 2021	Released to Iloilo MDDC, subject for submission of liquidation report.
7. Central Philippine State University – Main Campus	Sonedco/Dacongcogon Mill District	Php601,349.00	November 2022	Released to CPSU last December 2022, subject for liquidation
8. Cebu Technological University	Bogo Medellin Mill District	Php552,330.00	Cheque was issued last December 2022 and scheduled for release to CTU Tuburan Campus on January 2023.	
TOTAL		**Php5,905,741.34**		

- **FUND UTILIZATION:**

As of December 31, 2022 total of **Php23,560,260.48 (83.27%)** already utilized including farm labor, land preparation canepoints and fertilizers procured through competitive bidding.

MILL DISTRICT	BUDGET	CANEPOINTS/LABOR OPERATIONS	FERTILIZER	TOTAL EXPENDITURE
La Carlota	1,917,863.00	1,638,166.00	308,000.00	1,946,166.00
Ma-ao	1,130,378.00	556,335.00	182,000.00	738,335.00
FFHC/Bac-Mur	3,471,438.00	2,448,841.65	574,000.00	3,022,841.65
Victorias	3,188,567.00	2,002,978.00	518,000.00	2,520,978.00
Lopez	3,157,469.20	2,709,469.39	448,000.00	3,157,469.39
San Carlos	1,159,272.00		182,000.00	182,000.00
Sagay / Danao	1,726,688.00	1,450,900.00	280,000.00	1,473,725.00
BISCOM	3,135,647.00	2,176,076.34	504,000.00	2,680,076.34
Sonedco / Dacongcogon	2,532,917.00	1,684,349.34	420,000.00	1,503,000.00
Tolong/Southern Negros	1,182,988.00	953,504.49	210,000.00	1,163,504.49
Iloilo / Santos - Lopez	1,960,945.00	1,072,672.47	422,800.00	1,644,420.40
Capiz / Monomer	1,203,907.00	85,428.00	98,000.00	183,428.00
Bogo - Medellin	678,330.00	552330	126,000.00	126,000.00
Ormoc - Kananga	1,845,149.80	1,595,209.80	308,000.00	1,903,209.80
c/o SRA LGAREC			53,200.00	
TOTAL	**28,291,559.00**	**18,926,260.48**	**4,634,000.00**	**23,560,260.48**

- **FERTILIZER/S:**

Total of **3,310** bags of fertilizers amounting to **Php4,634,000.00** was procured and distributed to project proponents.

PROPONENT	No. of Bags (Based on Area Allocation)		TOTAL NO. OF BAGS	46-0-0	18-46-0	TOTAL	DELIVERY PLACE/ADRESS
	46-0-0	18-46-0		1,140.00	1,660.00		
LA CARLOTA MDDC	110	110	220	125,400.00	182,600.00	308,000.00	AALCPI Compound, Brgy RSB, La Carlota City
MA-AO MDDC	65	65	130	74,100.00	107,900.00	182,000.00	SRA Compound, LGAREC
BISCOM MDDC							
IPOBI	25	25	50	28,500.00	41,500.00	70,000.00	Had. Manucao, Brgy. Bato, Hinigaran, Negros Occidental
PASON	105	105	210	119,700.00	174,300.00	294,000.00	SRA Compound, LGAREC
BAFA	10	10	20	11,400.00	16,600.00	28,000.00	Bato Farmers Association, Odioing, Moises Padilla
CPSU Moises Padilla	5	5	10	5,700.00	8,300.00	14,000.00	CPSU - Moises Padilla Campus
CPSU Hinigaran	5	5	10	5,700.00	8,300.00	14,000.00	SRA Compound, LGAREC
COFA	30	30	60	34,200.00	49,800.00	84,000.00	Negros COFA, Binalbagan, Negros Occidental
FFHC/BAC-MUR MDDC	205	205	410	233,700.00	340,300.00	574,000.00	First Farmers Association Corner Filipina St., Talisay
VICTORIAS MDDC	185	185	370	210,900.00	307,100.00	518,000.00	MDDC, Mill Site, Victorias City
SAGAY-DANAO MDDC						-	
NONESCOST	25	25	50	28,500.00	41,500.00	70,000.00	Brgy. Poblacion 1, Sagay City
Sagay Danao MDDC	75	75	150	85,500.00	124,500.00	210,000.00	Brgy. Bato, Sagay City
LOPEZ MDDC	160	160	320	182,400.00	265,600.00	448,000.00	Brgy. Cabahug, Cadiz City
SAN CARLOS MDDC	65	65	130	74,100.00	107,900.00	182,000.00	SRA Compound, LGAREC
SONEDCO/DACONGCOGON							
Central Philippine State University - Kabankalan Campus	120	120	240	136,800.00	199,200.00	336,000.00	CPSU Main Campus, Camingawan, Kabankalan City
Sonedco/Dacongcogon MDDCFI	30	30	60	34,200.00	49,800.00	84,000.00	
TOLONG MDDC/SOUTHERN NEGROS MDDC	75	75	150	85,500.00	124,500.00	210,000.00	MDDC Office, TUPA Bldg, Sta. Catalina, Neg. Oriental
ILOILO MDDC/CAPIZ						-	
Iloilo MDDC	72	72	144	82,080.00	119,520.00	201,600.00	Brgy. Imbang Grande, Passi City
WVSU Calinog Campus	15	15	30	17,100.00	24,900.00	42,000.00	WVSU Calinog Campus, Poblacion Calinog, Iloilo
ISCOF San Enrique	15	15	30	17,100.00	24,900.00	42,000.00	ISCOF San Enrique Campus

ISCOF Dingle	20	20	40	22,800.00	33,200.00	56,000.00	ISCOF Dingle Campus
Badiangan LGU	9	9	18	10,260.00	14,940.00	25,200.00	Brgy. Imbang Grande, Passi City (Iloilo MDDC)
Antique-Tobias Fornier LGU	15	15	30	17,100.00	24,900.00	42,000.00	LGU-Tobias Fornier ,Antique
Antique SU-Hamtic Campus	5	5	10	5,700.00	8,300.00	14,000.00	Antique SU-Hamtic Campus,
Binggawan LGU	5	5	10	5,700.00	8,300.00	14,000.00	Brgy. Imbang Grande, Passi City (Iloilo MDDC)
Pilar Planters Association	5	5	10	5,700.00	8,300.00	14,000.00	Capiz Sugar Central Compound, Poblacion Pres. Roxas Capiz
CAPSU	25	25	50	28,500.00	41,500.00	70,000.00	CAPSU Pontevedra Campus, Brgy. Bailan, Pontevedra Capiz
BOGO MEDELLIN MDDC	45	45	90	51,300.00	74,700.00	126,000.00	CTU Tuburan Campus
ORMOC-HISUMCO MDDC Brgy. Benolho, Albuera, Leyte Brgy. Boroc, Ormoc Sumanga	110	110	220	125,400.00	182,600.00	308,000.00	Ormoc MDDC Compund, HISUMCO Compund, Monetebello, Kananga, Leyte
SRA LGAREC	19	19	38	21,660.00	31,540.00	53,200.00	SRA Compound, LGAREC
TOTAL	**1655**	**1655**	**3310**			**4,634,000.00**	

CUTBACK/CANEPOINT BENEFICIARIES (OCTOBER - DECEMBER 2022):

For CY 2022 (January – December) a total of **851.0515** canepoints/planting materials produced through cutback and distributed to beneficiaries **133** beneficiaries (see table below).

Name of Farmers/Takers		Varietie/s Purchased	Date Cutback (Month)	Volume (lacsa)	Plantation Address
FIRST QUARTER:					
NONESCOST					
1	NONESCOST	PHIL 99-1793	JANUARY 20-24, 2022	4.7000	BRGY. POBLACION I, SAGAY CITY
2	RENATO VILLACARLOS	PHIL 99-1793	JANUARY 20-24, 2022	6.0000	BRGY. LANGUB, ESCALANTE CITY
3	RAFAEL MASCULINO	PHIL 99-1793	JANUARY 20-24, 2022	8.0000	BRGY. CABAHUG, CADIZ CITY
4	TED DELA TORRE	PHIL 99-1793	JANUARY 20-24, 2022	6.0000	BRGY. SUBA, CALATRAVA
5	NONESCOST	PHIL 99-1793	FEBRUARY 4, 2022	7.0000	BRGY. POBLACION I, SAGAY CITY
6	REY HERIOS	PHIL 99-1793	FEBRUARY 4, 2022	10.0000	BRGY. CADUHAAN, CADIZ CITY
MA-AO MDDC					
7	MR. JOSE LUIS TONGOY	PHIL2006-2289	JANUARY 16, 2022	46.0000	BRGY. DULAO, BAGO CITY
8	MR. FERDINAND EMMANUEL GAYOLES	PHIL2006-2289	FEBRUARY 22, 2022	19.0000	BRGY. DULAO, BAGO CITY
SONEDCO/DACONGCOGON					
9	GLEN LEONARDIA	PHIL 99-1793	JANUARY 2022	20.0000	ISABELA, NEGROS OCCIDENTAL
10	MAY2 DECENAL	PHIL 99-1793	JANUARY 2022	6.0000	BRGY. CAMINGAWAN, KABANKALAN CITY
11	MIKE OCSIMA	PHIL 99-1793	JANUARY 2022	2.0000	BRGY. ORINGAO, KABANKALAN CITY
12	CPSU - MAIN CAMPUS	PHIL 99-1793	JANUARY 2022	37.0000	BRGY. CAMINGAWAN, KABANKALAN

					CITY
13	GLEN LEONARDIA	PHIL 99-1793	FEBRUARY 2022	20.0000	ISABELA, NEGROS OCCIDENTAL
14	CPSU - MAIN CAMPUS	PHIL 99-1793	FEBRUARY 2022	5.0000	BRGY. CAMINGAWAN, KABANKALAN CITY
15	CELEDONIA SIPLAO	PHIL 99-1793	FEBRUARY 2022	2.0000	BRGY. CAMINGAWAN, KABANKALAN CITY
16	CPSU - MAIN CAMPUS	PHIL 99-1793	FEBRUARY 2022	11.0000	BRGY. CAMINGAWAN, KABANKALAN CITY
LOPEZ					
17	ELVIE TINGSON	PHIL 99-1793	JANUARY 27, 2022	4.0300	BRGY. MAGSAYSAY, CADIZ CITY
18	JOSE PERNAS	PHIL 99-1793	JANUARY 27, 2022	30.0000	BRGY. POBLACION 2, SAGAY CITY
19	JOSE PERNAS	PSR 02-247	FEBRUARY 8, 2022	12.9300	BRGY. POBLACION 2, SAGAY CITY
20	LOPEZ MDDC	PHIL 99-1793	FEBRUARY 16, 2022	8.0000	BRGY. MAGSAYSAY, CADIZ CITY
21	LOPEZ MDDC	PHIL 99-1793	MARCH 20, 2022	5.0000	BRGY. LOPEZ JAENA, SAGAY CITY
22	LOPEZ MDDC	PHIL 99-1793	MARCH 22, 2022	7.0000	BRGY. MAGSAYSAY, CADIZ CITY
ORMOC-HISUMCO					
23	MERLINDA NUEVO	PHIL2006-2289	JANUARY 2022	4.0000	HIBUNAWON, ORMOC CITY
24	ORMOC-KANANGA MDDCFI	PHIL2006-2289	JANUARY 2022	5.0000	NAGHALIN, KANANGA
25	CHULIANTE MKTG	PHIL2006-2289	FEBRUARY 2022	3.2000	BOROC, ORMOC CITY
26	IAL ENTERPRISES	PHIL2006-2289	FEBRUARY 2022	15.0000	DONGHOL, ORMOC CITY
27	IMA PARAC	PHIL2006-2289	MARCH 2022	5.0000	BENOLHO
28	IAL ENTERPRISES	PHIL2006-2289	MARCH 2022	3.2000	CABULIHAN, ORMOC CITY
BISCOM					
29	ROBERT BERNARD TAN	PHIL2006-2289	FEBRUARY 2022	15.2000	BRGY. NABALIAN, HIMAMAYLAN
30	ADRIANNE CAMPOS	PHIL2006-2289	MARCH 2022	10.1000	BRGY. CANSALUNGON, ISABELA
31	FRANKLIN FUENTEVILLA	PHIL2006-2289	MARCH 2022	15.1000	BRGY. MAMBAGATON, HIMAMAYLAN
TOTAL CANE POINTS PRODUCED (FIRST QUARTER)				**352.4600**	
SECOND QUARTER					
ORMOC-HISUMCO					
32	BAPMPC	PHIL2006-2289	MAY 2022	3.5000	BOROC, ORMOC CITY
33	GODFREY CAPANAS	PHIL2006-2289	MAY 2022	2.1000	MABICA, KANANGA
34	ORMOC-KANANGA MDDCFI	PHIL2006-2289	MAY 2022	2.8600	BOROC, ORMOC CITY
35	GODFREY CAPANAS	VMC 86-550	JUNE 2022	4.4000	MABICA, KANANGA
36	GIL GANTUANGCO	VMC 86-550	JUNE 2022	17.8000	VALENCIA, ORMOC
BISCOM					
37	PASON	PHIL2006-2289	APRIL 2022	13.0000	GUINTUBHAN, ISABELA
LCPAI - ORMOC					
38	HR SERAFICA PLANTATION	PHIL2006-2289	APRIL 21-22, 2022	9.3565	ORMOC CITY
39	JAIME SALOMON	PHIL2006-2289	JUNE 4, 2022	4.0000	ORMOC CITY
40	ERSI FARM	PHIL2006-2289	JUNE 4, 2022	5.0000	ORMOC CITY
41	HR SERAFICA PLANTATION	PHIL2006-2289	JUNE 11, 2022	6.0000	ORMOC CITY
42	HR SERAFICA PLANTATION	PHIL2006-2289	JUNE 28, 2022	10.0000	ORMOC CITY
FFHC/BAC-MUR					
43	GERARDO LOPEZ	PSR 07-195	APRIL 17, 2022	6.40	TANZA
44	JEROME RAMOS	Phil 2006-2289	APRIL 22, 2022	5.00	ESMERALDA 1
45	HERMONT SUGAR PLANTATION	Phil 2006-2289	APRIL 23, 2022	5.00	INGRID HERNANDEZ
46	JOSE MA. LEDESMA	Phil 2006-2289	APRIL 26, 2022	3.72	ROSARIO
47	JOSE MA. LEDESMA III	Phil 2006-2289	APRIL 26, 2022	2.69	LEDESMA
48	JOSE MA. LEDESMA	Phil 2006-2289	APRIL 27, 2022	1.28	ROSARIO

49	JOSE MA. LEDESMA III	Phil 2006-2289	APRIL 27, 2023	2.31	LEDESMA
50	ELE/DONNA ECHAUS	PSR 07-195	APRIL 28, 2022	5.80	PUYAS
51	ELE/DONNA ECHAUS	PSR 07-195	MAY 2, 2022	6.04	PUYAS
52	ROBERTO GONZAGA	PSR 07 -195	MAY 3, 2022	5.00	LUISA CARMEN
53	ELE/DONNA ECHAUS	PSR 07-195	MAY 5, 2022	4.24	PUYAS
54	FRANCISCO VILLANUEVA	Phil 2006-2289	MAY 6, 2022	5.76	SAN ISIDRO
55	ELE/DONNA ECHAUS	PSR 07-195	MAY 10, 2022	1.92	PUYAS
56	FRANCISCO VILLANUEVA/VILAYA	PSR 07-195	MAY 12, 2022	2.35	SAN ISIDRO
57	FRANCISCO VILLANUEVA/VILAYA	PSR 07 -195	MAY 12, 2022	2.65	SAN ISIDRO
58	ED RONNIE SIASAT	PSR 07 -195	MAY 13, 2022	5.00	E R S
59	BONIFACIO PENA	Phil 2006-2289	MAY 13, 2022	5.00	ARGENTINA ASTRO
60	ELE/DONNA ECHAUS	Phil 2006-2289	MAY 17, 2022	5.33	PUYAS
61	FRANCISCO VILLANUEVA/VILAYA	PSR 07 -195	MAY 24, 2022	5.00	SAN ISIDRO
62	RUEL TRECHO	Phil 2006-2289	MAY 26, 2022	5.00	ALUSIMAN
63	GERARDO LOPEZ	Phil 2006-2289	MAY 31, 2022	1.50	TANZA
64	GERARDO LOPEZ	VMC 84-524	MAY 31, 2022	6.00	MASIN
65	JOSE MARIA LEDESMA	Phil 2006-2289	JUNE 1, 2022	8.00	CONSITA
66	FRANCISCO CUENCA	Phil 2006-2289	JUNE 6, 2022	2.00	ANITA
67	BONIFACIO PENA	Phil 2006-2289	JUNE 8, 2022	5.54	ARGENTINA
68	JOSE MA LEDESMA	VMC 84-524	JUNE 9, 2022	2.50	MASIN
69	FRANCISCO VILLANUEVA	VMC 84-524	JUNE 15, 2022	5.00	ALISBOG
70	JOSE MA LEDESMA	VMC 84-524	JUNE 17, 2022	3.00	ASTRO
71	FRANCISCO VILLANUEVA	VMC 84-524	JUNE 21, 2022	5.90	ALISBOG
72	FRANCISCO VILLANUEVA	Phil 2006-2289	JUNE 20, 2022	3.15	VILAYA
73	BONIFACIO PENA	Phil 2006-2289	JUNE 23, 2022	5.25	ARGENTINA ASTRO
TOTAL CANE POINTS PRODUCED (SECOND QUARTER)				**211.3465**	
THIRD QUARTER					
NONESCOST					
74	RENE DECHINO	PHIL 99-1793	SEPTEMBER 19, 2022	5.0000	BRGY. LOPEZ JAENA, SAGAY CITY
75	LYDIA GAMBITO	PHIL 99-1793	SEPTEMBER 19, 2022	6.2300	BRGY. MINAPASUK, CALATRAVA
LCPAI - ORMOC					
76	MVT	PHIL2006-2289	JULY 2022	18.5000	KANANGA, LEYTE
77	PAPHI	PHIL2006-2289	AUGUST 2022	25.2550	MONTERICO, ORMOC CITY, LEYTE
78	LCPAI	PHIL2006-2289	AUGUST 2022	3.0900	DOLORES, ORMOC CITY, LEYTE
79	VSU - VILLABA SCHOLAR (THESIS)	PHIL2006-2289	AUGUST 2022	0.1400	VILLABA, LEYTE
80	PAPHI	PHIL2006-2289	SEPTEMBER 2022	15.7600	MONTERICO, ORMOC CITY, LEYTE
81	LCPAI	PHIL2006-2289	SEPTEMBER 2022	4.6500	DOLORES, ORMOC CITY, LEYTE
ORMOC-HISUMCO					
82	ENRIQUE AVILES	PHIL2006-2289	SEPTEMBER 2022	5.3000	DAYHAGAN, ORMOC CITY
83	BAPMPC	PHIL2006-2289	SEPTEMBER 2022	5.0000	BOROC, ORMOC CITY
84	BAPMPC	PHIL2006-2289	SEPTEMBER 2022	4.0000	BOROC, ORMOC CITY
85	ENRIQUE AVILES	PHIL2006-2289	SEPTEMBER 2022	4.7000	DAYHAGAN, ORMOC CITY
86	ORMOC-KANANGA MDDCFI	PHIL2006-2289	SEPTEMBER 2022	3.1000	ALTA VISTA, ORMOC CITY
FFHC/BAC-MUR					
87	FRANCISCO VILLANUEVA	VMC 84-524	JULY 4, 2022	5.50	ROSARIO NORTE
88	FRANCISCO VILLANUEVA/VILAYA	PSR 07 -195	JULY 18, 2022	5.00	SAN ISIDRO
89	FRANCISCO VILLANUEVA/VILAYA	PSR 07 -195	JULY 18, 2022	2.06	SAN ISIDRO

90	FRANCISCO VILLANUEVA	Phil 2006-2289	JULY 18, 2022	2.94	VILAYA
BISCOM					
91	PASON	PHIL2006-2289	SEPTEMBER 8, 2022	40.4000	BRGY. NABALIAN, HIMAMAYLAN
TOTAL CANE POINTS PRODUCED (THIRD QUARTER)				**156.6250**	
FOURTH QUARTER					
FFHC/BAC-MUR					
92	GERARDO L. LEDESMA	PSR 07-195	OCTOBER 26, 2022	4.05	LUISA CARMEN
93	GERARDO L. LEDESMA	PSR 07-195	OCTOBER 26, 2022	5.00	DOS MARIAS
94	GERARDO L. LEDESMA	PSR 07-195	OCTOBER 26, 2022	5.67	DOS MARIAS
95	E.L.E/RALLY ECHAUS	PSR 07-195	OCTOBER 26, 2022	5.69	PUYAS
96	E.L.E/RALLY ECHAUS	PSR 07-195	OCTOBER 26, 2022	4.31	BAGACAY
97	BONIFACIO PENA	PHIL 2006-2289	OCTOBER 28, 2022	3.51	ASTRO
98	BONIFACIO PENA	PHIL 2006-2289	OCTOBER 28, 2022	6.45	ASTRO
99	GERARDO LOPEZ	PHIL 2006-2289	OCTOBER 28, 2022	0.10	TANZA
100	GLOMAR FARMS INC.	PHIL 2006-2289	OCTOBER 28, 2022	4.07	OLIVA 2
101	GLOMAR FARMS INC.	PHIL 2006-2289	OCTOBER 28, 2022	4.91	OLIVA 2
102	GLOMAR FARMS INC.	PHIL 2006-2289	OCTOBER 28, 2022	4.77	OLIVA 2
103	GLOMAR FARMS INC.	PHIL 2006-2289	OCTOBER 28, 2022	5.06	OLIVA 2
104	L.N. AGUSTIN FARM INC.	PHIL 2006-2289	OCTOBER 29, 2022	2.48	GEORGINA
105	L.N. AGUSTIN FARM INC.	PHIL 2006-2289	OCTOBER 29, 2022	2.52	GEORGINA
106	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 4, 2022	1.69	ASTRO
107	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 5, 2022	0.80	ASTRO
108	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 9, 2022	8.00	ASTRO
109	GERARDO LOPEZ	PHIL 2006-2289	NOVEMBER 9, 2022	1.50	TANZA
110	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 10, 2022	5.00	ASTRO
111	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 11, 2022	6.02	ASTRO
112	BONIFACIO PEÑA	PHIL 2006-2289	NOVEMBER 12, 2022	3.74	ASTRO
113	CARLOS BALCELLS	PHIL 2006-2289	NOVEMBER 12, 2022	2.83	CLAPAROLS
114	CARLOS BALCELLS	PSR 07-195	NOVEMBER 12, 2022	1.15	CLAPAROLS
ORMOC-HISUMCO					
115	BAPMPC	Phil 2006-2289	OCTOBER 2022	1.5000	BOROC, ORMOC CITY
116	ENRIQUE AVILES	Phil 2006-2289	OCTOBER 2022	2.4000	DAYHAGAN, ORMOC CITY
117	EDWARD VELASQUEZ	Phil 2006-2289	OCTOBER 2022	3.5000	BENOLHO, ALBUERA
NONESCOST					
118	CARLO VALENCIA	PHIL 99-1793	NOVEMBER 2022	1.2000	BRGY. POBLACION II, SAGAY CITY
119	JESSA MAE BARCELONA	PHIL 99-1793	NOVEMBER 2022	2.0000	BRGY. POBLACION II, SAGAY CITY

120	CESAR BERJAMIN	PHIL 99-1793	NOVEMBER 2022	2.0000	BRGY. POBLACION II, SAGAY CITY
121	ELIEZA PERMENDOSA	PHIL 99-1793	NOVEMBER 2022	2.0000	BRGY. POBLACION II, SAGAY CITY
122	ARIEL CERVANTES	PHIL 99-1793	NOVEMBER 2022	2.0000	BRGY. POBLACION II, SAGAY CITY
123	JOHNREY PIALAGO	PHIL 99-1793	NOVEMBER 2022	1.6000	BRGY. POBLACION II, SAGAY CITY
124	EDUARDO CAUNTOY	PHIL 99-1793	NOVEMBER 2022	2.0000	BRGY. RIZAL, SAGAY CITY
125	RONIE SABIDALAS	PHIL 99-1793	NOVEMBER 2022	3.6000	BRGY. RIZAL, SAGAY CITY
SONEDCO/DACONGCOGON					
126	RODRIGO JALAPA	PHIL 99-1793	NOVEMBER 2022	1.0000	CAMINGAWAN, KABANKALAN
127	VICTORINO OGANAYON	PHIL 99-1793	NOVEMBER 2022	2.0000	CAMINGAWAN, KABANKALAN
128	MICHEAL PILLONE	PHIL 99-1793	NOVEMBER 2022	1.0000	CAMINGAWAN, KABANKALAN
129	RODRIGO VILLARMINO	PHIL 99-1793	NOVEMBER 2022	1.0000	CAMINGAWAN, KABANKALAN
130	NONOY FERNANDO	PHIL 99-1793	NOVEMBER 2022	2.0000	INAPOY, KABANKALAN
131	JOEMARIE TRASONA	PHIL 99-1793	NOVEMBER 2022	5.0000	PINAGUINPINAN, KABANKALAN
132	E.U. BAYLES	PHIL 99-1793	NOVEMBER 2022	3.0000	TAMPALON, KABANKALAN
133	SAMUEL ABADA	PHIL 99-1793	NOVEMBER 2022	2.5000	MABINAY
TOTAL CANE POINTS PRODUCED (FOURTH QUARTER)				**130.6200**	

Summary per Quarter (Cutback and Canepoints Beneficiaries)

1ST	Canepoints	352.4600
	Beneficiaries	31
2ND	Canepoints	211.3465
	Beneficiaries	42
3RD	Canepoints	156.6250
	Beneficiaries	18
4TH	Canepoints	130.6200
	Beneficiaries	42
TOTAL	**Canepoints**	**851.0515**
	Beneficiaries	**133**

VIII. ACCELERATED TECHNOLOGY TRANSFER PROGRAM - ATTP JANUARY – DECEMBER 2022

The Sugar Regulatory Administration through the Extension Services Division - Visayas continues its support to the sugarcane farmers especially to its SIDA Block Farms. For the project titled “Accelerated Technology Transfer Program” as per approved GAA 2016 Re-budgeted to FY 2022 and with the amendments of Project Procurement Management Plan from PPE – Personal Protective Equipment, Food Packs and Hygiene Kits to various supplies and materials for the mass production of beneficial micro-organism for the establishment of BMO Production sites to qualified block farms, planters associations, SUC’s, ARBO’s, LGU’s and MDDC’s to different milling districts in the Visayas.

Beneficial Micro-Organism or commonly known as BMO, a sugarcane specific, molasses-based nitrogen fixing foliar fertilizers is one of SRA’s technology in sugarcane farming. Due to the increasing prices of chemical fertilizers the BMO can reduce nitrogen demand by at least 25 to 30 % of chemical fertilizers.

Currently, SRA- LGAREC is the only production site which accommodate bulk requests and numerous reservations. Thus, to augment and to cater all the requests Extension Services Division – Visayas will established Mass Production and Distribution of BMO to different milling districts funded by the Sugarcane Industry Development Act (SIDA).

SUPPLIES AND MATERIALS FOR BMO PRODUCTION SITES:

Table below are the lists supplies and materials that will be distributed to 200 productions sites of different milling districts in the Visayas.

DESCRIPTION	UNIT COST	QUANTITY/SIZE		AMOUNT
BMO Production:				
Plastic Container, 100li, capacity	2,000.00	800	pc	1,600,000.00
Plastic Container, 20li, capacity	180.00	4400	pc	792,000.00
Plastic Container, 6li, capacity	60.00	3400	pc	204,000.00
Graduated Cylinders, 100ml capacity	200.00	410	pc	82,000.00
Weighing Scale, 500g capacity	150.00	210	pc	31,500.00
Knapsack Sprayer, plastic	1,500.00	205	pc	307,500.00
TOTAL				**3,017,000.00**

TRAINING ON BMO PRODUCTION:

Trainer's training on BMO Production was conducted last July 7, 2022 with resource speakers from Research and Laboratory Division headed by **ATTY. IGNACIO S. SANTILLANA**, Deputy Administrator II for RDE and OIC, Office of the Administrator, **MS. MA. LOURDES I. DORMIDO**, OIC, Manager III and **MS. MA. THERESA D. ALEJANDRINO**, SRS II of PTCM Unit, it will be attended by MDO/APP's, Agriculturists and Block Farm Personnel.

On-site trainings to block farms and selected planter's associations, SUC's, ARBO's, LGU's and MDDC's was simultaneously conducted to **29** sites/locations and attended by **1196** participants. The training includes the Organic Farming, Uses and Importance of BMO and the actual demonstration on how to prepare BMO, where different block farm members, planter's associations, SUC's, MDDC's and LGU's were trained on how to produce the so called BMO or the Beneficial Micro-Organism.

Table below are the list of BMO Trainings conducted by Extension Services Division through the Accelerated Technology Transfer Program,

BMO Training (On-site Training for BMO Mass Production)

Mill District	No.	Trainings	Date Conducted	Number of Participants
SRA LGAREC	1	Training of Trainors on BMO Production at Balay OPSI	July 7, 2022	72
LA CARLOTA	2	Training on BMO production for Block farm at Brgy. Robles, La Castellana	July 12, 2022	40
LA CARLOTA	3	Training on BMO production for Block farm at Brgy. RSB, La Carlota City	July 13, 2022	43
BISCOM	4	Training on BMO production for Block Farm, associations, private planters at Had. Nalipay Brgy 5, Isabela	July 14-15, 2022	90
MA-AO	5	Training on BMO production for Block farms at Brgy. Ma-ao, Bago City	July 12, 2022	36
MA-AO	6	Training on BMO production for associations/MDDC	July 13, 2022	42
MA-AO	7	Training on BMO production at Don Jorge Araneta Agrarian Refrom Beneficiaries Assn	July 22, 2022	70
SONEDCO	8	Training on BMO production for Block farms at Brgy. Pinggot, Ilog	July 19, 2022	60
	9	Training on BMO production for Planters associations/SUC/Sugar Mill at Brgy. 1, Kabankalan City	July 20, 2022	42
	10	Training on BMO production for SONEDCO MDDC/ARB Associations at Brgy. 1, Kabankalan City	July 21, 2022	45

BAIS-URSUMCO	11	Training on BMO production for Block Farms at Vista Real Mabinay, Negros Oriental	July 19, 2022	69
	12	Training on BMO production for Block Farms at AABT Compound, Calasga-an, Bais City	July 20, 2022	35
TOLONG	13	Training on BMO production for Block Farms at Tompuco Function Hall, Brgy. Villareal, Bayawan City	July 21, 2022	22
	14	Training on BMO production for private planters at Tompuco Function Hall, Brgy. Villareal, Bayawan City	July 22, 2022	33
FF/BACMUR	15	Training on BMO production for Block Farms at C-PRIME Farmers Hall, Brgy. Salvacion, Murcia	July 18, 2022	30
FF/BACMUR	16	Training on BMO production for MDDC and other associations.	July 19, 2022	42
HPCO	17	Training on BMO production for Block Farms at Brgy. Pasil, EB Magalona	July 19, 2022	18
	18	Training on BMO production for private planters at Brgy. Hawaiian, Silay City	July 20, 2022	52
VICTORIAS	19	Training on BMO production for Block Farms at Centro San Pablo, Victorias City	July 20, 2022	48
	20	Training on BMO production for Block Farms at Centro San Pablo, Victorias City	July 21, 2022	42
LOPEZ/SAGAY	21	Training on BMO production for Block Farms at Brgy. Cabahug, Cadiz City	July 21, 2022	39
	22	Training on BMO production for private planters/associations at rgy. Cabahug, Cadiz City	July 22, 2022	42
SAN CARLOS	23	Training on BMO production for Block Farms at San Carlos Mill District Office	July 27, 2022	53
	24	Training on BMO production for Block Farms at San Carlos Mill District Office	July 28, 2022	42
CAPIZ	25	Training on BMO production for Block farm, associations, private planters/MDDC/SUC	July 22, 2022	15
ILOILO	26	Training on BMO production for Block farm, associations, private planters/MDDC/SUC	July 20-21, 2022	24
BOGO - MEDELLIN	27	Training on BMO production for Block Farms at BMSPAI Function Hall Bomedco Compound, Brgy. Luya-a, Medellin, Cebu	July 26, 2022	30
	28	Training on BMO production for Block farm, associations, private planters/MDDC at BMSPAI Function Hall Bomedco Compound, Brgy. Luya-a, Medellin, Cebu	July 27, 2022	31
ORMOC-HISUMCO	29	Training on BMO production for Block Farms at Brgy. San Pablo, Ormoc City	July 20, 2022	28
	30	Training on BMO production for Block farm, associations, private planters/MDDC at Brgy. San Pablo, Ormoc City	July 21, 2022	33
TOTAL				**1268**

Graduated Cylinders and Digital Weighing Scales was delivered last second week of December 2022 as per **PO No. 2022-08-386** amounting to **Php190,748.00.** While request for plastic containers were already process and RBAC is waiting for the signed Notice to Proceed. Delivery of the said request will be done on upon approval of the NTP and processing of required documents.

DOCUMENTATIONS:

CONDUCT OF BMO TRAININGS

Delivered Digital Weighing Scale and Graduated Cylinders (plastic) materials to be used in the establishment of BMO

IX. QUICK RESPONSE TO SUGARCANE PESTS AND DISEASES INFESTATIONS
JANUARY – DECEMBER 2022

One of the proponent of the Sugarcane Industry Development Act of 2015 is the RD & E Projects, under this proponent is the provision of chemicals for the Quick Response to Sugarcane Pests & Diseases Infestations to different Mill District Development Councils in the Visayas.
The Sugar Regulatory Administration through the SIDA RD & E Projects implements its Quick Response to Sugarcane Pests & Diseases Infestations through purchasing of chemicals for distribution to different MDDCs/Planters Associations and Block Farms in the Visayas.
The first batch of delivery of the requested chemicals was charged to SIDA RDE Re-budgeted to FY 2021 was done last March 4, 2022 as per PO No. 2021-10-330, by Model Agro Sales amounting to Php2,654,600.00 at the Extension Services Division Office – Visayas, SRA – LGAREC.

Quantity	Chemicals
600 kilos	Ratbait powder, ***Coumatetralyl, Racumin***
600 kilos	Ratbait blocks, ***Flocoumafen, Storm***
500 litres	Pesticides, ***Chlorpyrifos***
250 bag	Pesticides, ***Carbufuran, Furamax 3G***
350 bottle	Pesticides, ***Chlorantraniliprole, Prevathon 5SC***

CHEMICAL ALLOCATIONS PER MILL DISTRICT (PO NO. 2021-10-330)

Mill District	Area	Allocation by Mill District (%)	Quantity per Pesticide					TOTAL	Price per Pesticide					TOTAL
			Racumin (kg)	Storm (kg)	Dage 30 EC (L)	Furamax 3G (bags)	Prevathon (bottles)		Racumin	Storm	Dage 30 EC	Furamax 3G	Prevathon	
									₱1,287.00	₱1,599.00	₱598.00	₱130.00	₱1,690.00	
LA CARLOTA	18,568.2900	7	42	42	35	17	24	**160**	54,054.00	67,158.00	20,930.00	2,210.00	40,560.00	**184,912.00**
MA-AO	11,965.3700	4	24	24	20	10	14	**92**	30,888.00	38,376.00	11,960.00	1,300.00	23,660.00	**106,184.00**
BACMUR/FFHC	20,390.0000	7	42	42	35	17	24	**160**	54,054.00	67,158.00	20,930.00	2,210.00	40,560.00	**184,912.00**
HPCO	13,085.0000	5	30	30	25	12	17	**114**	38,610.00	47,970.00	14,950.00	1,560.00	28,730.00	**131,820.00**
VICTORIAS	29,737.0000	11	66	66	55	27	38	**252**	84,942.00	105,534.00	32,890.00	3,510.00	64,220.00	**291,096.00**
LOPEZ	14,545.9100	5	30	30	25	12	17	**114**	38,610.00	47,970.00	14,950.00	1,560.00	28,730.00	**131,820.00**
SAGAY	16,528.9800	6	36	36	30	15	21	**138**	46,332.00	57,564.00	17,940.00	1,950.00	35,490.00	**159,276.00**
SAN CARLOS	12,745.6900	5	30	30	25	12	17	**114**	38,610.00	47,970.00	14,950.00	1,560.00	28,730.00	**131,820.00**
BISCOM	30,278.4300	11	66	66	55	27	38	**252**	84,942.00	105,534.00	32,890.00	3,510.00	64,220.00	**291,096.00**
SONEDCO/DACONGCOGON	26,151.0000	9	54	54	45	22	32	**207**	69,498.00	86,346.00	26,910.00	2,860.00	54,080.00	**239,694.00**
TOLONG	13,068.0000	5	30	30	25	12	17	**114**	38,610.00	47,970.00	14,950.00	1,560.00	28,730.00	**131,820.00**
BAIS-URSUMCO	26,800.0000	10	60	60	50	25	35	**230**	77,220.00	95,940.00	29,900.00	3,250.00	59,150.00	**265,460.00**
ILOILO	20,440.0000	7	42	42	35	17	24	**160**	54,054.00	67,158.00	20,930.00	2,210.00	40,560.00	**184,912.00**
CAPIZ	11,885.0000	4	24	24	20	10	14	**92**	30,888.00	38,376.00	11,960.00	1,300.00	23,660.00	**106,184.00**
BOGO-MEDELLIN	5,090.0000	2	12	12	10	7	9	**50**	15,444.00	19,188.00	5,980.00	910.00	15,210.00	**56,732.00**
ORMOC-HISUMCO	6,000.0000	2	12	12	10	8	9	**51.00**	15,444.00	19,188.00	5,980.00	1,040.00	15,210.00	**56,862.00**
TOTAL:	**277,278.6700**	**100**	**600**	**600**	**500**	**250**	**350**	**2,300**	**772,200.00**	**959,400.00**	**299,000.00**	**32,500.00**	**591,500.00**	**2,654,600.00**

Second batch delivery of chemicals charged to SIDA RDE Re-budgeted to FY 2022 was done last **December 9, 2022** by Model Agro Sales as per **PO No. 2022-11-570** amounting to **Php2,570,798.00** at Extension Services Division – SRA LGAREC.

Quantity	Chemicals
1,520 kilos	Ratbait, blocks, *Flocoumafen*
500 kilos	Pesticides, liquid, *Chlorphyrifus*
350 kilos	Pesticides, liquid, *Carbufuran*
400 bot	Pesticides, liquid, *Chlorantaniliprole*

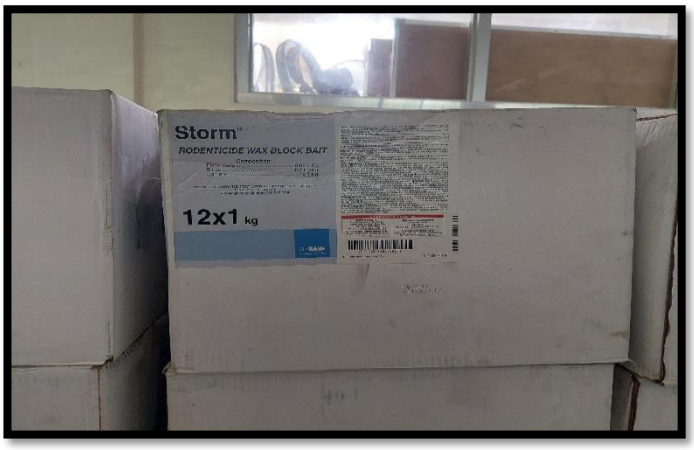
CHEMICAL ALLOCATIONS PER MILL DISTRICT (PO NO. 2021-10-330)

Mill District	Area	Allocation by Mill District (%)	Quantity per Pesticide				TOTAL	Price per Pesticide				TOTAL
			Storm (kg)	Dage (kg)	Leadforce (kg)	Prevathon (bottles)		Storm	Dage	Leadforce	Prevathon	
								₱1,062.50	₱510.00	₱112.28	₱1,653.75	
LA CARLOTA	18,568.2900	7	106	35	24	28	**193**	112,625.00	17,850.00	2,694.72	46,305.00	**179,474.72**
MA-AO	11,965.3700	4	60	20	14	16	**110**	63,750.00	10,200.00	1,571.92	26,460.00	**101,981.92**
BACMUR/FFHC	20,390.0000	7	106	35	24	28	**193**	112,625.00	17,850.00	2,694.72	46,305.00	**179,474.72**
HPCO	13,085.0000	5	76	25	17	20	**138**	80,750.00	12,750.00	1,908.76	33,075.00	**128,483.76**
VICTORIAS	29,737.0000	11	167	55	38	44	**304**	177,437.50	28,050.00	4,266.64	72,765.00	**282,519.14**
LOPEZ	14,545.9100	5	76	25	17	20	**138**	80,750.00	12,750.00	1,908.76	33,075.00	**128,483.76**
SAGAY	16,528.9800	6	90	30	21	24	**165**	95,625.00	15,300.00	2,357.88	39,690.00	**152,972.88**
SAN CARLOS	12,745.6900	5	76	25	17	20	**138**	80,750.00	12,750.00	1,908.76	33,075.00	**128,483.76**
BISCOM	30,278.4300	11	167	55	38	44	**304**	177,437.50	28,050.00	4,266.64	72,765.00	**282,519.14**
SONEDCO/DACONGCOGON	26,151.0000	9	136	45	32	36	**249**	144,500.00	22,950.00	3,592.96	59,535.00	**230,577.96**
TOLONG	13,068.0000	5	76	25	17	20	**138**	80,750.00	12,750.00	1,908.76	33,075.00	**128,483.76**
BAIS-URSUMCO	26,800.0000	10	152	50	35	40	**277**	161,500.00	25,500.00	3,929.80	66,150.00	**257,079.80**
ILOILO	20,440.0000	7	106	35	24	28	**193**	112,625.00	17,850.00	2,694.72	46,305.00	**179,474.72**
CAPIZ	11,885.0000	4	60	20	14	16	**110**	63,750.00	10,200.00	1,571.92	26,460.00	**101,981.92**
BOGO-MEDELLIN	5,090.0000	2	33	10	9	8	**60**	35,062.50	5,100.00	1,010.52	13,230.00	**54,403.02**
ORMOC-HISUMCO	6,000.0000	2	33	10	9	8	**60.00**	35,062.50	5,100.00	1,010.52	13,230.00	**54,403.02**
TOTAL:	**277,278.6700**	**100**	**1520**	**500**	**350**	**400**	**2,770**	**1,615,000.00**	**255,000.00**	**39,298.00**	**661,500.00**	**2,570,798.00**

Total budget allocated for the Quick Response to Sugarcane Pests and Diseases Infestations amounting to **Php 5,225,398.00.** Chemicals will be distributed to different mill district offices for distribution to sugarcane farmers/clientele of the said districts. Chemical allocations based on the actual area planted with sugarcane. Distribution will be scheduled on January 2023 upon approval of the Memorandum of Agreement between Sugar Regulatory Administration and MDDC's.

DOCUMENTATIONS:

CHEMICALS DELIVERED LAST DECEMBER 9, 2022 as per PO No. 2022- 0 8-398:



CHEMICALS DELIVERED LAST MARCH 4, 2022 as per PO No. 2021-10-330:

X. Water Management and Irrigation of Sugarcane Farms (Block Farm Beneficiaries)

It has always been a great challenge in the Philippine Sugarcane Industry on how to improve and increase farm productivity. Different strategies and projects have been implemented to alleviate such problems. Through the Sugar Industry Development Act of 2015, the effort of reaching the goal of increasing farm productivity is almost at hand. From year 2020 up to present, amidst the threat of pandemic, SRA has developed strategies to help the farmers. Through the priority project funded by the SRA corporate budget, a total of **Php 2,800,000.00** was allotted for the Water Management and Irrigation of Sugarcane Farms in the Visayas.

A total of **54 block farms** beneficiaries were identified after a thorough validation and on-site inspection of available water source to benefit such project. This is to ensure that the irrigation facility to be given shall benefit the farmers to maximize its purpose.

Sets of rain gun irrigation system with complete accessories will be given to the 54 block farm beneficiaries in the different mill districts in the Visayas. To date, **fifty (54) sets of Rain Gun Irrigation System** was already distributed to different block farms in the Visayas. Distribution of Rain Gun was accomplished as of 1st quarter of 2022, with total service area of **658.00 hectares**.

To achieve the goal set for the farmers, dedication and commitment is encouraged. The urge to help the farmers irrigate their lands is what gives impact in uplifting the sugarcane industry from low farm productivity. Water has always been an essential component for efficient farm production and through the rain gun irrigation system, installation of appropriate irrigation facility among farmers can be done for a sustainable sugarcane industry.

For SIDA GAA 2022, Water Management and Irrigation Validation were also accomplished as of December 2022. Out of 20 Block Farms for SIDA GAA 2022 19 block farms were validated and identify water sources (See tables below).

	MILL DISTRICT	NAME OF ASSOCIATION	SOURCE OF WATER	COORDINATES	Elevation of Water Source to Nursery
1	Bais Mill District	Bugnay Farm Family Association	River	N 09˚43.128' E 122˚53.350'	5m
2	Maao Mill District	Mercedes Farmers Irrigators Association Inc.	Creek	Latitude : 10.481478 Longtitude : 123.027767	15m
3	Sonedco	Mahayag Small Farmers Association	Creek	Latitude : 9.9343929 Longtitude :122.7375022	5m
4	Sonedco	Locotan Banman Sugarcane Farmers Association	Creek	N 09˚42'45.29" E 122˚45'10.84"	6m
5	Sonedco	Malabago Diversified Farmers Association	Creek	N 09˚46'38.63" E 122˚51'09.97"	2m
6	La Carlota	Cabungbungan Lingahob Farmers Association	River	N 10˚1022'56.74" E 123˚04'53.17"	15m
7	La Carlota	Had. Ahgo Camandag	River	N 10°19'29.16" E	5m

		Agrarian Reform Beneficiaries Association		123°03'15.17"	
8	Biscom	Mangahoy Kahoy Farmers Association	Creek	N 10°07'25.85" E 123°00'05.49"	3m
9	Biscom	Pilar Agrarian Reform Beneficiaries Association	Shallow Tube Well	N 10°14'51.55" E 122°52'28.71"	1m
10	Tolong	Villasol Small Sugarcane Farmers Association	Creek	N 09°36'04.49" E 122°46'22.97"	5m
11	HPCO	Nacayao Small Farmers Association	Creek	N 10°45'59.60" E 123°07'39.76"	15m
12	Victorias	Cot-Cot Upland Farmer and Farm Workwers Association	River	N 10°50'52.40" E 123°16'34.34"	3m
13	Victorias	Myrianne Farmers Development Association	Creek	N 10°52'38.83" E 123°09'34.88"	3m
14	Lopez	Caridad Delapaz Agrarian Reform Beneficiaries Association	Shallow Tube Well	N 10°53'00.60" E 123°26'53.90"	1m
15	Sagay Danao	Kilusang Pagbabago Mina-utok Upland Farmers Association	Creek	N 10°41'00.88" E 123°21'30.10"	3m
16		Paghidaet sa Kalamboan	Shallow Tube Well	N 10°43'08.67" E 123°21'39.10"	1m
17	Ilollo	Agutayan Cubay Agrarian Reform Cooperative	Creek	11.08319˚N 122.71444˚ E	2m
			River	11.08397˚N 122.71153˚E	3m
18	San Carlos	Barangay Quezon Agrarian Reform Beneficiaries Association	Creek	N 1O˚26'19.33" E 123˚15'28.85"	2m
19		Barangay Macasilao Integrated Small Farmers Association	River	N 10˚40'30.61" E 123˚25'37.59"	5m
				N 10˚40'34.30" E 123˚25'25.98"	5m

DOCUMENTATIONS

Farm to Mill Road Project

IMG 1 - Prk 4. Juaton to Sitio Guinowanan, Dolores, Ormoc City, Completed

IMG 2 - Brgy. Donghol to Brgy. Mahayag, Ormoc City, Ongoing

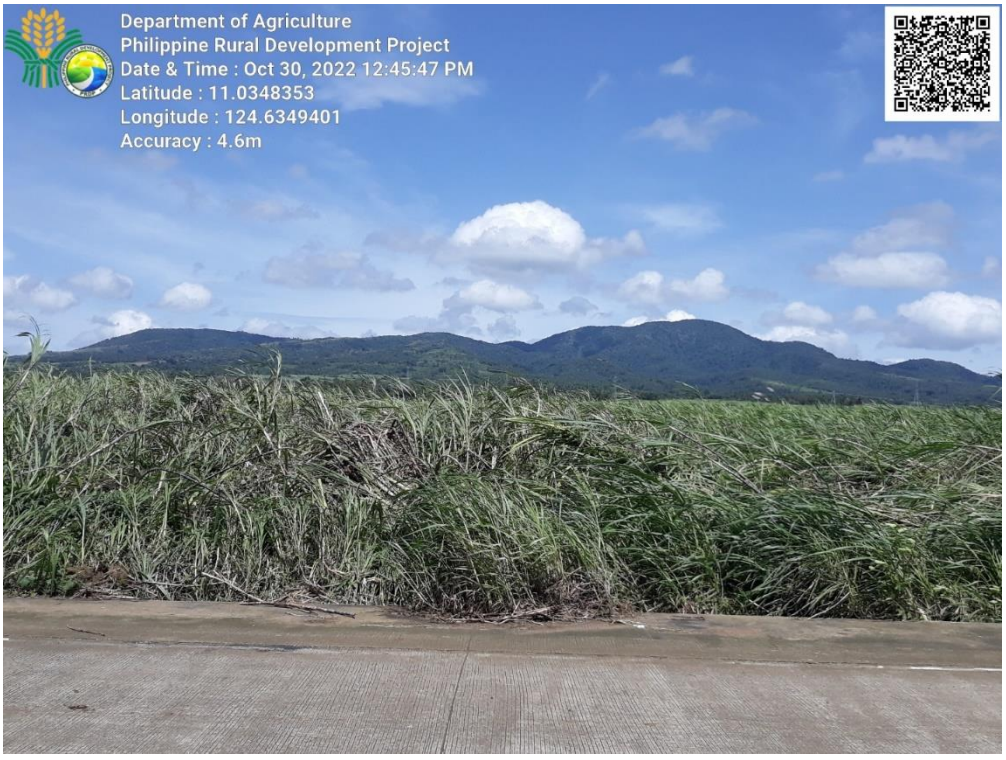
Trainings and Seminar

IMG 3 - OPSI Sugarcane Farm Management Seminar, Nov 16-17, 2022

IMG 4 - BMO Training

IMG 5 - BMO Training in Myrianne Farmers Development Assn. on July 21, 2022

Crop Estimate



IMG 6 - Crop Damage Assessment, Typhoon Paen

Farm Mechanization

IMG 7 - Farm Mechanization Survey

IMG 8 – Tractor delivery at MYFDA Block Farm on Nov. 22, 2022

SIDA Programs

IMG 9 - Block Farm Orientation at Salome Farmers Assn. for GAA 2024 on Aug. 4, 2022

IMG 10 - Block Farm Orientation at Bagong Integrated Farmers Assn. for GAA 2024 on Aug. 24, 2022,

IMG 11 - GPS field survey of the MYFDA Block Farm on March 21, 2022

IMG 12 - GPS field survey of the Bagong Integrated Farmers Assn. for GAA 2024 on Nov. 11, 2022

IMG 13 - Soil Sampling at MYFDA Block Farm on Aug. 19, 2022

IMG 14 - Soil sampling at QUEUFA Block Farm on Nov. 24, 2022

IMG 15 - Food House Proj. at CSFA Block Farm, Farm Monitoring

Priority Projects

IMG 16 - Maria Cadiz of ASSFF beneficiary, Farm Monitoring

IMG 17 - Norma Arante of ASSFF beneficiary, Farm Monitoring

IMG 18 - Leyte Cane Planters Association of Rapid Propagation of HYV Proj., Farm Monitoring

IMG 19 - Ormoc-Kananga MDDC FI of Rapid Propagation of HYV Proj., Farm Monitoring

Delivery of 1-unit 90HP New Holland Farm Tractor to Pilar Agrarian Reform Beneficiaries Association (Top Picture) at Purok Silverio, Brgy. Pilar, Hinigaran and another 1-unit to Mangahoycahoy Farmers Association (MAFA), Sitio Mangahoycahoy, Brgy. Santol, Binalbagan Neg. Occ.

Delivery of 1-unit John Deere tractor with compatible whole-stalk cutter to Christian Farmers Association of Samac (CFAS) Block Farm located in Bry. Samac, Mabinay Negros Oriental last October 20, 2022.

Delivery of New Holland tractor last November 18, 2022 for LUCBAN-SFA Blockfarm located in Barangay Locotan, Kabankalan City Negros Occidental

Delivery of Farm Implements; Unit Heavy Duty of Moldboard Plough, Furrower and Hydraulic Harrower on November 02, 2022 at So. Calagmacan, Barangay Camindangan, Sipalay City Negros Occidental for Cluster block farms GAA -2017 BCARBAS/ BTARBA/GMIPMA

Delivery of New Holland tractor last November 18, 2022 for LUCBAN-SFA Blockfarm located in Barangay Locotan, Kabankalan City Negros Occidental

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