2016 ANNUAL REPORT

RICE, OUR LIFE,
OUR HISTORY

GUYANA RICE DEVELOPMENT BOARD

Rice, Our Life, Our History

GUYANA RICE DEVELOPMENT BOARD

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CORPORATE OBJECTIVES

The GRDB was established in 1995, in pursuance of the Guyana Rice Development Board Act No. 15 of 1994. The three entities that were controlling the state's interests in the industry prior to the formation of GRDB were dissolved. The roles of these entities – the Guyana Rice Export Board (GREB), Guyana Rice Milling & Marketing Authority (GRMMA) and the National Padi & Rice Grading Centre (NPRGC) have been combined and are now performed by GRDB.

The main objectives of the GRDB include.

- To develop the rice industry in Guyana and to promote the expansion of the export trade in the said industry;
- To establish facilities for the conduct of research, relating to rice and extending to rice farmers through an established system, the benefits derived from such research;
- To engage in such promotional and developmental activities which the Board deems necessary for the purpose of developing the rice industry.

VISION STATEMENT

"An integrated, sustainable and profitable industry producing and marketing rice for the benefit of all Guyanese."

MISSION STATEMENT

"To efficiently utilise the resources of Guyana to produce and market high quality rice and rice by-products, including value-added products, for local and international markets, while providing employment and foreign exchange earnings."


PLEASE CHECK WITH
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CHAIRMAN'S STATEMENT | CLAUDE E. HOUSTY

Claude E. Housty - **Chairman**

The rice industry in Guyana encountered several challenges in 2016. The year saw a reduction in paddy production as well as in the export of paddy, rice and rice by-products when compared with 2015. This was a direct result of fewer farmers cultivating their lands primarily because of lower world market prices for products exported.

At the end of 2016, Guyana produced 534,449 metric tonnes of rice. A total of four hundred and ninety nine thousand, one hundred and ninety two metric tonnes was exported; the third highest export volume recorded in the country. The European Union continues to be the largest importer of Guyana's rice accounting for 52 % of the total, followed by Latin America with 31% and CARICOM with 17%.

The Guyana Rice Development Board (GRDB) through the Government continues to seek markets for the sector.

GRDB continues to encourage the private sector to produce value-added products. For the period under review, value-added production was done on a small scale. Rice by-products are very marketable, and Guyana is a source of quality rice to facilitate the production of by-products. With this in mind, GRDB hosted "An Evening of Rice", an event which showcased the extent of the availability of locally produced value-added products.

Research continued in a number of areas, namely, yield and variety trials, strain purification, aromatic varieties as well as varieties that withstand salinity. New technology continued to be transferred to farmers through our extension department.

The GRDB's Central Laboratory, which is ISO17025 accredited, participated in several rounds of proficiency testing on cargo rice and paddy with Riz Lab of France.

The GRDB will continue to carry out its mandate to develop the rice sector.

Claude E. Housty
Chairman

GENERAL MANAGER'S STATEMENT | ALLISON PETERS

Allison Peters
General Manager (Ag)

Despite the challenges associated with unfavorable weather, low and fluctuating world market prices, increasing input costs and the incidence of pests and diseases, Guyana continued to produce high quality rice and rice products.

At the end of 2016, a total of five hundred and thirty four thousand, four hundred and forty nine (534,449) metric tonnes of rice was produced of which four hundred and ninety nine thousand, one hundred and ninety two (499,192) metric tonnes was exported. Of the quantity exported, two hundred and fifty-nine thousand, eight hundred twenty-five (259,825) tonnes representing 52% were shipped to the European Union, the largest importer of Guyana's rice for the year in review. One hundred fifty-five, six hundred thirty (155,630) tonnes representing 31% were shipped to Latin America whilst eighty two thousand, five hundred twenty-six (82,526) tonnes representing 17% were shipped to CARICOM.

GRDB conducted a number of research to release new high performance and salt resistant varieties and a new aromatic variety. A technical manual for the rice milling industry was compiled which will provide basic technical specification and information on rice processing, which will greatly benefit the sector.

GRDB continued to promote the production and use of value added products. Emphasis was placed on rice flour and its potential market. The event an Evening of Rice was hosted by GRDB at the Umana Yana to highlight value added products; this event showcased the locally produced value added products and the possible products that can be produced.

GRDB fulfilled its mandate for the year as it continued to meet the sector needs through training, transfer of technology from its research arm to farmers, etc. Fifty five mills were licenced for the period to facilitate the intake and milling of paddy.

The GRDB's website (www.grdb.gy) was re-launched in October. This website hosts relevant information that all stakeholders can access on rice production and marketing.

For the period, nine staff members were granted scholarship, while eleven were trained in various courses.

Guyana Rice Development Board will continue to provide services in research, extension and marketing to ensure that the rice industry continues to grow and contribute to the development of agriculture in Guyana.

Allison Peters
General Manager (Ag)

THE FUNCTIONS OF THE GUYANA RICE DEVELOPMENT BOARD

INTRODUCTION

The Guyana Rice Development Board (Board/GRDB) was established by Act Number 15 of 1994. The functions of the Board are as follows:

a) To develop the rice industry in Guyana and to promote the expansion of the export trade in the industry;
b) To establish facilities for the conduct of research, and to conduct research relating to rice and extend to rice farmers through an established system, the benefits derived from such research;
c) To engage in such promotional and developmental activities which the Board deems necessary for the purpose of developing the rice industry.

By virtue of Part 2 Section 4 of the Act, the Board of Directors shall comprise of no more than thirteen members, with three (3) members representing the Guyana Rice Producers Association (GRPA), two (2) members representing the Guyana Rice Exporters and Millers Association (GREMA), and one (1) member representing consumers.

Organisational Structure

The Board provides its functions through the following structure:

- Marketing
- Logistics
- Research
- Plant Breeding
- Agronomy
- Pathology
- Entomology
- Seed Production
- Extension
- Quality Control
- Post Harvest
- Human Resource Management
- Finance
- Internal Audit
- Administration
- Information Technology
- Procurement

THE FUNCTIONS OF THE GUYANA RICE DEVELOPMENT BOARD

MARKETING

Comprising of a marketing assistant, a research assistant, a customs clerk, a marketing clerk, a typist/clerk and a confidential secretary, this Department is solely responsible for the preparation of all relevant customs documentation for the exportation of rice and rice products from Guyana.

SHIPPING AND LOGISTICS

The Shipping and Logistics Unit's main objective is to aid in the facilitation of commodity trade with government to government contracts.

RESEARCH

This component of the Board's activities form an integral part of its operations. Based at the Rice Research Station (RRS), Burma, Mahaicony, this unit is where new varieties are developed to enable farmers' access to plants that are more conducive to providing a better quality and higher volume of grain, as well as greater resistance to pests, diseases and weather fluctuations. Research at the Station is done in the Plant Breeding, Entomology, Agronomy and Plant Pathology Departments. The Research section and Seed Production of the RRS are headed by a chief scientist, who oversees the operations of the Station, with support from research scientists, research assistants, research technicians and labourers.

EXTENSION

The Extension Department focuses on four (4) areas: data collection, marketing seed paddy, transfer of technology from research to the farmer and support of other special activities. Extension Officers are based in all regions and regularly meet with farmers; thus, this component of the Board serves as an advisory body to assist the farmers in the acquisition of inputs, and retooling with new technology available. Additionally, it disseminates pertinent data to stakeholders countrywide, that could lead to improved and more productive husbandry practices.

QUALITY CONTROL

Quality Control is responsible for ensuring that the quality of rice produced and/or sold by rice millers and exporters meet the requisite specifications. It is headed by the Quality Control Manager, who is supported by regional supervisors, grading officers, technical assistants, research assistants and a confidential secretary. These Officers are tasked with ensuring that rice leaving Guyana is of the prescribed quality as per contract requirements and international standards. The department also ensures that the rice sold locally and is safe for human consumption.

POST HARVEST

This Department comprises of a Post Harvest Researcher who conducts research in two areas: post-harvest processes associated with rice production and manufacturing value-added products that can be made from rice and its by-products.

HUMAN RESOURCE

The staff composition of this Department includes the Human Resource Officer and a human resource assistant, who are responsible for the welfare of all employees (training, etc) and also for the recruiting of suitable applicants for employment.

FINANCE

This Department manages the financial aspect of the Board and comprises the following staff:- the accountant, two (2) assistant accountants, a senior accounts clerk, two (2) junior accounts clerks, a data entry clerk, a cashier and a secretary.

INTERNAL AUDIT

Maintains the requisite operational procedures and ensure that prescribed standards are upheld, this Department has an internal auditor and audit clerk, who audit the daily transactions of the Board.

THE FUNCTIONS OF THE GUYANA RICE DEVELOPMENT BOARD (CONT'D)

ADMINISTRATION

The Administration Department is responsible for the day-to-day activities of the Board, which include dealing with legal matters.

The staff is comprised of the General Manager, the Deputy General Manager, an occupational health and safety officer, an administrative co-ordinator, two (2) confidential secretaries, one (1) procurement officer, a project assistant/clerk, an office assistant, two office attendants and two drivers.

INFORMATION TECHNOLOGY

The Information Technology Department is responsible for managing and maintaining all technological and communications devices at all of the Board's locations; maintaining the network and internet equipment, servers, printers; installing and keeping abreast with new software and custom applications. This Department consists of an IT officer and an IT technician.

PROCUREMENT UNIT

The Procurement Unit is responsible for the Board's procurement policies and procedures to ensure timely, efficient and economic procurement, within the guidelines of good business practices and the Procurement ACT of 2003.

All Departments of the Board work together in adjunctive and collaborative endeavours, and so complement each other in facilitation and operational initiatives to achieve the mission and vision of the Organization.

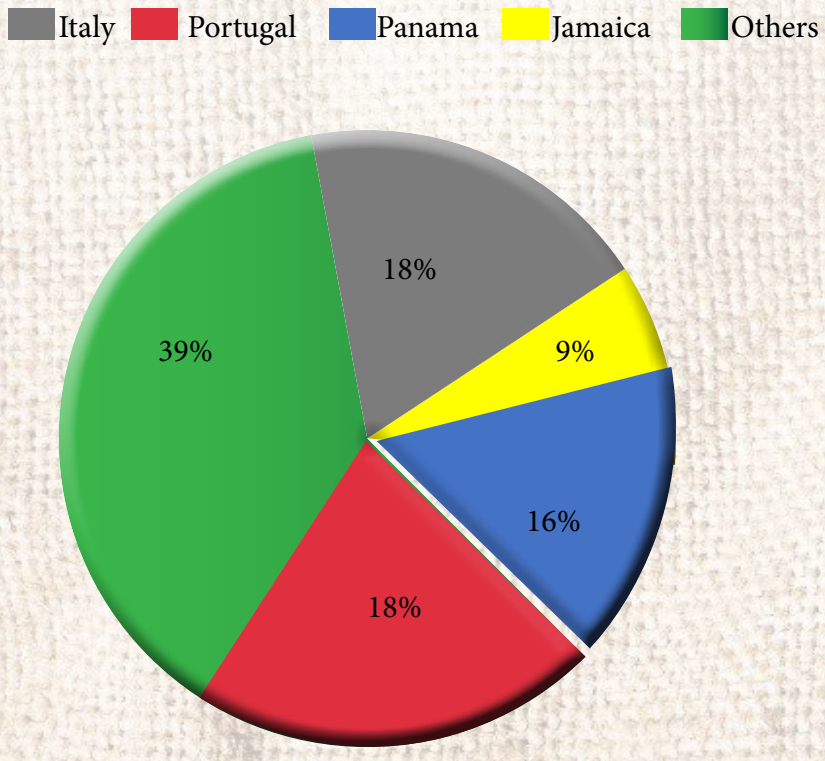
MARKETING

The rice industry has seen a shortfall in exports for 2016, in addition to the decrease in market prices for rice internationally. Exports for 2016 totalled 499,192 metric tonnes compared to 537,334 metric tonnes for 2015. This represents a 7% decrease in exports when compared to 2015. Five years prior to 2016, exports surpassed its previous records in volume and value, except for 2015 where there was a reduction in the value of rice exported. The decline in rice exports for 2016 can be attributed to the low rice production, which was caused by bad weather conditions, including floods and extended dry periods.

Guyana continues to benefit from its major markets, i.e. Latin America, European Union and Caricom. European Union accounted for 52% of total exports from Guyana, while Latin America accounted for 31% and Caricom 17%.

Latin America was the leading trade block for Guyana's rice for over four years, with Venezuela being the largest importer with approximately 70% of Guyana's rice. The Venezuela Market came to an end in 2015, after the contracts were withdrawn by Venezuela, due to the economic and political crises in that country, together with the border dispute between Guyana and Venezuela. However, rice is still being exported to Venezuela, but in smaller quantities. European Union saw an increase of 12% of imports for Guyana's rice when compared to 2015, whilst the Caricom Region saw a decline in imports by 4% and Latin America declined by 27%. Italy, Portugal, Panama, and Jamaica were the four leading importers for Guyana's rice for 2016, with Italy and Portugal importing 18% each of total quantity of rice exported, followed by Panama with 16% and Jamaica 9%. See pie chart below.

PIE CHART SHOWING PERCENTAGES OF IMPORTS BY COUNTRY:



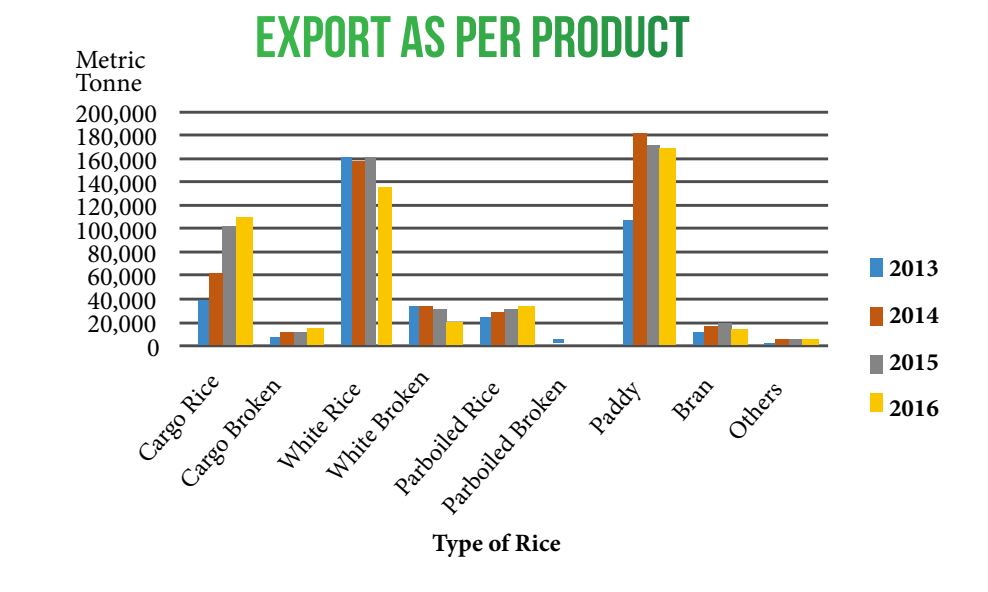
MARKETING (CONT'D)

Globally, prices were lower for rice and rice products. The export value experienced similar results; the export value for 2016 totalled US$178,800,529 compared to US$220,768,341 for 2015. This represents a decrease of 19% in value when compared to 2015. In examining the prices for the main rice types exported in 2016, namely White rice, Cargo rice, Parboiled rice and Paddy, a decline of 2%, 9%, 3% and 13% was observed respectively, when compared to 2015.

In addition, the value of rice and its by-products exported for 2016, declined for all other trading blocs, except the European Union, when compared to 2015. Latin America has shown the greatest decline of 41%, while the Caricom Region showed a decline of 5%. There was an increase in the value of exports to the European Union by 4%. This was due to a larger volume of rice exported there, when compared to 2015.

PRODUCT	2013	2014	2015	2016
Cargo Rice	39,001	63,207	102,795	110,675
Cargo Broken	5,424	11,406	13,557	15,360
White Rice	164,020	160,683	162,686	134,599
White Broken	34,762	33,688	31,881	18,775
Parboiled Rice	25,178	28,516	30,741	32,565
Parboiled Broken	5,197	1,553	1,205	604
Paddy	107,575	181,364	171,796	168,820
Bran	10,986	15,684	17,968	13,149
Others	2,846	5,107	4,705	4,645

From the table above, Paddy continued to be the largest product exported for the period under review, representing 34% of the total, followed by white rice 27%, cargo rice 22% and parboiled rice 7%.



SHIPPING AND LOGISTICS UNIT (SLU)

INTRODUCTION

Apart from its regulatory and developmental functions, the GRDB enters into contracts with government agencies of other countries for the supply of rice and fertilizer and thus, the creation of the Shipping and Logistics Unit (SLU) became necessary and important for the organization.

This report gives an outline of the objectives and accomplishments of the work programme of the SLU for the calendar year 2016. It also highlights all activities and events the Unit was involved in during 2016.

OBJECTIVES OF THE SHIPPING & LOGISTICS UNIT

a) Planning, managing and controlling the flow of goods and services, information, real-time data and human resources from the point of origin to the point of destination.

b) Adapting to newer technologies to improve port loading and discharge of cargo to meet the requirements of diverse export destinations.

c) Maintaining good working relationships with all parties involved.

1. SHIPPING & LOGISTICS PROGRAMME OF WORK

1. Negotiating with local and international counterparts

- Evaluating the performance and progress of consignments, through visits/meetings with shipping agents (local and international) and wharf managers (local and international).
- Liaising with the Marketing Department to en sure all documents of consignments are in good and proper order to permit sailing of vessels.
- Liaising with the Quality Control Department to ensure material handling, warehousing, information, transportation, packaging and inventory are in order and adequate stock is in supply to complete speedy completion of vessel loading.

SHIPPING AND LOGISTICS UNIT (SLU) (CONT'D)

2. ADAPTING TO NEWER TECHNOLOGIES TO IMPROVE PORT LOADING AND DISCHARGE OF CARGO TO MEET REQUIREMENTS OF DIVERSE EXPORT DESTINATIONS

- Tracking vessel arrival and delivery of goods.
- Planning, managing, controlling and coordinating to ensure that the goods arrive and reach the right place, at the right time, for the right cost and in a food condition.

3. MAINTAINING GOOD WORKING RELATIONSHIPS WITH ALL PARTIES INVOLVED

- Creating and maintaining customer support.
- Maintaining coordination with vendors and customers, service providers and transport carriers.
- Assisting in the timely supply and payment of goods.
- Serving as a middleman between the organization, vendors and carriers for tracking down the geographical location of the goods, thereby providing customer support.
- Ensuring that no fraud is committed.

4. WHITE RICE SHIPMENTS TO PANAMA – 2016

GRDB entered into government contracts in Panama with the Instituto de Mercadeo Agropecuaria (IMA). It is a Panamanian government agency with functions similar to that of the GRDB. For the calendar year 2016, negotiations between government officials from these institutions resulted in the supply of five white rice contracts totalling thirty nine thousand two hundred and fifty (39,250) metric tonnes. This amount was 1.5 times more than the contracted amount in 2015.

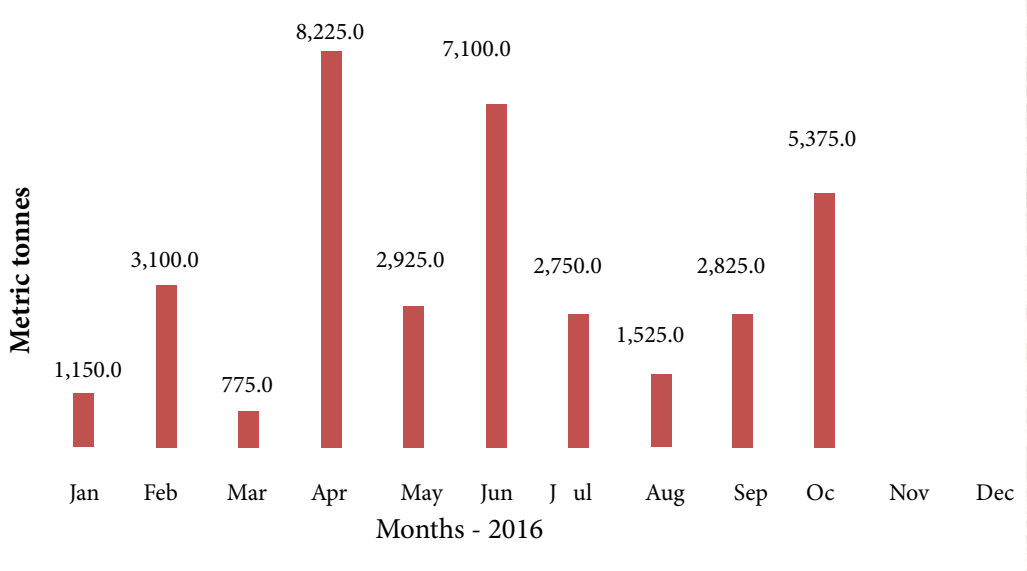
Fig. 1.1: Negotiating 2nd 2016 contract with Panama — Mr. Marco Mastellari, Legal Advisor, IMA (right/back), Mr. Robert Valenzuela, GRDB agent in Panama (right/front), Mr. Nizam Hassan, General Manager, GRDB (left/back) and Mr. Colin Watson, Shipping & Logistics Officer, GRDB (left/front)

SHIPPING AND LOGISTICS UNIT (SLU) (CONT'D)

4.1 SHIPPING SUMMARY

Shipments began in January 2016, and at December 31st, 2016, there was a 91.8% completion of the five contracts. The pending amounts were scheduled to be delivered in early 2017.

Figure 1.2 Total rice shipped to Panama during the respective months in 2016.



For the month of January, white rice shipments to Panama amounted to one thousand, one hundred and fifty (1,150) metric tonnes. More rice could have been shipped during this month had there been an uninterrupted shipping schedule; nevertheless, triple the amount was shipped in the month of February with three thousand, four hundred (3,400) metric tonnes being exported, which brought the first 2016 contract to a closure. Negotiations for a second contract were already completed at the end of the first contract.

Shipments for March to May 2016 resulted in the completion of the second contract, with export reaching its highest for the year in April and an overall low in March. Rice exports in May were two thousand, nine hundred and twenty five (2,925) metric tonnes.

Due to some major setbacks regarding the maintenance of the planned shipping schedule to Panama, a second shipping line was selected to complement the vessel fleet and maintain the Board's commitment to IMA. In the month of June a third contract was signed. This supply was delivered over the period June to August 2016. As seen in the fig 1.2 above, rice exports to IMA were at a high in June with seven thousand, one hundred (7,100) metric tonnes which fell to two thousand, seven hundred and fifty (2,750) metric tonnes in July and to one thousand, five hundred and twenty five (1,525) metric tonnes in August, which ended the third contact. The declining trend observed in the delivery of this contract was primarily due to IMA's lower demand for rice during this period. However, in spite of our suppliers having larger available rice stock during this period and also the fact that the negotiated shipping schedule was for a larger volume, this contract's delivery was executed smoothly because of good coordination with shipping lines and other operations and rice stakeholders.

SHIPPING AND LOGISTICS UNIT (SLU) (CONT'D)

4.1 SHIPPING SUMMARY CONT'D

Two contracts for the supply of eleven thousand, four hundred (11,400) metric tonnes were signed in September. Shipments for that month concluded with two thousand, eight hundred and twenty five (2,825) metric tonnes and increased to five thousand, three hundred and seventy five (5,375) metric tonnes in October. At the end of 2016 a balance of three thousand, two hundred (3,200) metric tonnes of rice was due to be shipped for the completion of the existing 2016 contact.

5. SHIPPING LINES

White rice shipments to Panama were done by the Compagnie Maritime d'Affrètement Compagnie Générale Maritime (CMA CGM) and Sealand/Maersk shipping lines. Both lines offered competitive rates during 2016.

6. ADHOC ACTIVITIES – 2016

In collaboration with other departments of the Board, the Unit had active participation in coordinating the activities and events stated below:

1. GUYEXPO 2016 – "50 Years: Guyana Means Business Promoting Enterprise, Driving Productivity," held at the Sophia Exhibition Centre (May 11th, 2016).
2. An Evening of Rice – a cocktail reception and exhibition celebrating the versatility of rice, held at the Umana Yana (November 17th, 2016).
3. Exchange visit by IMA's Officials – visit to rice mills, packaging and wharf facilities (March 9th -12th, 2016).

7. CHALLENGES

The challenges faced by the Unit continue to present major setbacks in the Unit's full achievement of its set objectives and these in turn affect the Board as a whole.

Amongst those challenges are the poor commitments from shipping lines to fulfill the established shipping schedules. These threatened the organisation's performance in meeting its target supply of rice to its customers.

SHIPPING AND LOGISTICS UNIT (SLU) (CONT'D)

Fig.3 Officials from IMA inspect rice quality at packaging facility at Tecnomills Guyana Inc.

Fig. 4 Munesherwers Wharf, containers being prepared to ship to Panama.

Fig. 5 Tecnomills packaging facility – containers ready to ship.

Fig. 6 Ministry of Agriculture, courtesy call with Officials from IMA

RESEARCH

PLANT BREEDING

I. PERFORMANCE OF NEW RICE VARIETIES

Six (6) rice varieties were released during the period 2009 to 2015. The most recent, GRDB 14, was released along with its production package in first crop 2015. This variety is rapidly gaining acceptance by farmers and was cultivated on a total of twenty four thousand, nine hundred and eighty one (24,981) acres for the first and second crops of 2016. Other high yielding varieties such as GRDB 10, GRDB 11, GRDB 12 and GRDB 13 occupied approximately 50.8% of the total acreage cultivated in Guyana with GRDB 10 being the most dominant variety (second crop 2016).

II. ADVANCED YIELD TRIALS (AYT)

Four (4) trials were conducted in different locations viz. Rice Research Station (RRS), Black Bush Polder, West Demerara and Anna Regina over the past two seasons. Nineteen (19) elite lines/strains were evaluated along with two (2) checks (GRDB 10 and GRDB 14) in both the first and second seasons, in a Randomized Block Design with three replications. Three strains (G14-10, FG12-49 and FG12-259) recorded similar and in some locations significantly higher yields than the checked varieties with good agronomic and morphological characteristics and excellent milling and cooking qualities. These three (3) strains have been identified as 'candidate varieties'. It is recommended that these strains (G14-10, FG12-49 and FG12-259) be tested on semi-commercial plots at RRS to further evaluate their performance in first crop 2017, before promoting any for On Farm Testing.

III. ADVANCE YIELD TRAILS (SCENTED)

In 2016, the Plant Breeding Department continued to focus on the testing for aroma as it seeks to release its second aromatic variety in the near future. During the second crop 2016, nineteen (19) scented strains were studied. Trials were conducted at the Rice Research Station and Black Bush Polder in order to determine the average yield and agronomic traits of strains which were found to possess aroma. Of the nineteen (19) strains studied, two (2) recorded yields between 5-6 t/ha. It is recommended that all nineteen (19) scented strains be subjected to further testing in 2017.

IV. OBSERVATIONAL YIELD TRIAL (OYT)

At the RRS, sixty-five (65) strains were studied along with three (3) checks (GRDB 10, GRDB 12 and GRDB 14) in both the first and second crop in an augmented design for initial assessment of yield potential and other important characters. After testing in the second crop, eight (8) strains were promoted to AYT for testing and twenty-four (24) were eliminated from the programme; thirty-three (33) strains were carried over for testing in 2017. In addition, thirty-two (32) lines were selected from the observational and pedigree nursery for testing in OYT. During the first crop, six (6) high yielding strains (FG12-05, FG12-248, G13-101, G13-104, G14-10, G13-103) with good agronomic traits were promoted for further testing in the Advanced Yield Trials. All other entries will be studied for at least another season along with new entries during 2017.

V. OBSERVATIONAL NURSERY

During the second crop of 2016, one thousand and thirty-two (1,032) lines were evaluated in the observational nursery at the Rice Research Station (488 FLAR lines and 524 International Rice Research Institute lines). All International Rice Research Institute (IRRI) lines and fifty-six (56) FLAR lines were also evaluated under upland conditions in a disease (blast) "hot spot" location at No. 27 Village, Berbice. Twenty (20) FLAR lines were promoted to OYT for further testing and all FLAR and IRRI lines will remain under evaluation in the observational nursery in 2017.

RESEARCH CONT'D

PLANT BREEDING CONT'D

VI. VARIABILITY AND GERMPLASM

Sixty-seven (67) crosses were made to create variability in 2016 (36 in the first crop and 31 in the second crop). Hybridization was aimed at creating variability for increasing yield potential, salt tolerance, aroma, and submergence tolerance. The crosses made in the first crop were successfully raised in the second crop of 2016. Those made in the second crop will be raised in the first crop of 2017.

During the second crop of 2016, a total of four thousand, four hundred and fifty five (4,455) progenies (F3 – F13 generation) were studied and three thousand, three hundred and seventy three (3,373) single plant selections were taken, which will be further evaluated in the first crop of 2017. Twelve (12) strains were bulked and promoted for initial yield testing in spring 2017.

VII. STRAIN PURIFICATION

One hundred and sixty (160) strains were purified during the first and second crops of 2016. The lines were grown in progeny rows (5-25 per strain) for the purpose of purification.

VIII. MAINTENANCE BREEDING AND SEED PRODUCTION

More than twelve thousand (12,000) progenies of all the varieties were grown and studied during the two seasons. The genetic purity of each variety was maintained and more than twelve thousand (12,000) selections were made. More than three thousand (3,000) kg of pre-basic seed (for all the varieties) were produced over the two seasons of 2016.

Approximately one hundred and six (106) tonnes of basic seed were produced from 9 varieties (Rustic, GRDB 10, GRDB 12, Aromatic, GRDB 14, G98-22-4, G98-196, 98-30-3, G98-135), over the two seasons, at the Rice Research Station. The generated seed was supplied to the Seed Production Unit of the Rice Research Station and to seed growers in the various regions for multiplication. A total of fifty three thousand, seven hundred and eighty one (53,781) kg (986 bags) basic seed were sold to farmers during the two seasons of 2016.

AGRONOMY

I. EVALUATION OF BREEDING LINES FOR THEIR TOLERANCE TO SALINITY

Two hundred and nineteen (219) lines, including the commercial varieties, were evaluated for their tolerance to salinity under screen house conditions. Twenty five (25) seeds from each line were sown in 1,000 ppm (parts per million), NaCl (salt) solution on germination paper in petri dishes. The germination percentage ranged from 52 to 100 percent. The pre-germinated seeds were transplanted into concrete bins and the salt was added. At eight (8) days after transplanting (DAT) there was a fast and constant yellowing (chlorosis) of the leaves which is a common sign of salt toxicity. At fifteen (15) DAT, there was one hundred percent (100%) casualty among the seedlings.

II. DATE OF SOWING STUDY

This experiment was conducted at the Rice Research Station experimental area, in strips, with the aim of determining what effect, if any, different sowing intervals had on the yield of rice. Three (3) sowing dates were used to conduct this trial at seven (7) day intervals. Results showed that sowing dates out of the normal cropping period had difficulties with water availability which ultimately affected the yield.

RESEARCH

AGRONOMY CONT'D

III. EVALUATION OF DIFFERENT LEVELS AND SPLIT APPLICATION OF POTASSIUM ON YIELD OF GRDB 14

This trial was established at the Rice Research Station, Burma, with four levels of potassium (40, 50, 60, 74 kg ha-1) applied at twenty one (21) days after sowing (DAS) and at forty two (42) DAS. It was observed that the highest grain yield was recorded with the application of 50 kg ha-1. This trial will require another season of evaluation before any recommendations can be made.

IV. RESPONSE OF BREEDING LINES TO VARYING LEVELS OF NITROGEN

Two (2) trials were conducted during the second crop of 2016 at the Rice Research Station, Burma and the sub-station at Black Bush Polder. The aim of the trial was to establish breeding line (FG 12-49, FG 12-259 and G 14-10) performance under different nitrogen levels (75, 100, 115 and 125 Kg N ha-1). Preliminary analysis on yield showed that there were no significant differences among yields from the increase in nitrogen. This is, however, the first round of evaluation; as such, further assessment will be carried out in 2017.

V. PERFORMANCE OF BREEDING LINES TO VARYING SEEDING DENSITIES.

This experiment was conducted at the Rice Research Station, Burma, where four (4) seeding densities: 80,100, 120, and 140 lbs per acre, along with three (3) advanced breeding lines (FG 12-49, FG 12-259 and G 14-10), and along with GRDB 14 as the test entry, were used for this evaluation. No significant differences in yield were found at the different seeding densities. This trial will be re-evaluated in 2017 as this concluded the first round of assessment.

VI. NATIONAL RED RICE MANAGEMENT PROGRAMME

The Red Rice Management Project was conceived with the aim of reducing the infestation levels and spread of red rice in the country. Surveys were done in Regions 2 and 6 to ascertain the difficulties faced by the farmers regarding red rice and the infestation levels. Collections of the different red rice samples were done in the major rice growing regions to identify the different variants.

Samples collected from the different regions are being grown to conduct morphological characterisation. A comprehensive literature review on diversity, spread, impact of weedy rice and its management, is being done as new technology becomes available. Training was done with all extension staff in the rice growing regions, along with farmers, on how to manage red rice throughout the growing season.

Planned public awareness is targeted for 2017. The use of videos and posters will be utilised to spread the information. There is currently a video being produced but it requires additional footage, that would be available as the crop progresses.

RESEARCH
PLANT PATHOLOGY

I. SCREENING OF BREEDING LINES FOR RESISTANCE AGAINST BLAST DISEASE (PYRICULARIA GRISEA (COOKE) SACC.)

The blast resistant status of five thousand, seven hundred and twenty three (5,723) lines were ascertained through multi-location testing utilising the Upland Blast Nursery (UBN) technique. The blast disease scores ranged from Highly Resistant (HR) to Highly Susceptible (HS) (score of 1 to 9). Susceptible to highly susceptible reaction (score 6 to 9) was consistently observed for the check over all locations and seasons during 2016. Most of the lines studied indicated moderate to highly resistant reaction.

II. SEED HEALTH TESTING

Analysis and identification of fungal microorganisms in seed paddy were conducted using standard protocol set out by International Seed Testing Association (ISTA). Fifteen (15) samples were processed with infestation levels ranging from 4% to 48%. Predominatly four (4) fungal micro-organisms viz. Aspergillus sp., Bipolaris oryzae, Curvalaria sp., Alternaria sp. were detected and identified from seed health testing analysis conducted.

III. EVALUATION OF FUNGICIDES AS SEED TREATMENT

Preliminary results from studies using fungicides as seed treatment indicated that Carbendazim, Manzate, Fugi-one, at their recommended rates 150 ml, 200 g and 150 ml respectively, were statistically better in treating seeds that have been infected with various fungal micro-organisms. This resulted in better germination and seedling vigour and could be recommended for treating seeds that are infected with fungal micro-organisms in the event healthy seeds are not available.

IV. MONITORING THE INCIDENCE OF RICE DISEASES ON ADVANCED BREEDING LINES AND CURRENT VARIETIES, (SEED PLOTS ON-STATION AND FARMERS' FIELDS ACROSS THE COUNTRY)

The disease severity levels of Pyricularia grisea, Bipolaris oryzae, Rhizoctonia solani and Sarocladium oryzae on eighteen (18) advanced breeding lines and twelve (12) current varieties were established during 2016. In general low disease incidence was recorded for the four (4) major rice diseases on the advanced breeding lines and current varieties on-station and within the 'hot spot' location at Onverwagt, West Coast Berbice. The disease incidence scores recorded generally ranged within 0 to 5 for the four (4) major diseases. Similar trends were observed within Seed Production area at RRS and across the rice growing regions monitored. However, slightly higher levels were observed in the second crop 2016 as compared to the first crop 2016.

V. LABORATORY CULTURE AND DIAGNOSIS OF RICE DISEASES

During 2016, rice plant samples collected and received from farmer's fields with signs and symptoms of abnormalities were processed and analysed. In general, diagnosis revealed that blast (Pyricularia grisea), brown spots (Bipolaris oryzae), sheath blight (Rhizoctonia solani) and sheath rot (Sarocladium oryzae) were most predominant among the pathogens that were identified, along with few other minor pathogens such as Ustilaginoidea virens, Aspergillus sp., Curvularia sp. and Alternaria sp. which were also recorded. In few cases no sign of micro-organisms were observed which seems to suggest that the abnormal symptom was not due to a pathological effect, but could have been due to some other reason.

RESEARCH

PLANT PATHOLOGY CONT'D

VI. INVESTIGATING THE INCIDENCE OF 'BLACK-TIP' ON GRAINS OF GRDB-10

Random samples were collected across the rice growing regions during 2016, and analysed. Analysis confirmed the incidence of 'Black-Tip' on grains of GRDB-10 to be prevalent and distributed within Regions 2, 3, 4, 5 and 6. Analysis also confirmed that in most cases slightly higher percentages of black tip incidences were recorded on variety GRDB 10, while only few cases with very low percent incidence were observed on the other checked varieties.

In addition, laboratory analysis of samples found Curvularia sp. to be predominant on few grains that showed signs and symptoms of black tip; while a small percent revealed a low incidence of other unconfirmed species of micro-organisms. Molecular analysis conducted by the Centre for Agriculture and Bioscience International (CABI) in the United Kingdom confirmed the presence of Curvularia. The ITS regions of the Ribosomal DNA (rDNA) was 100% matched against published strains of Curvularia lunata. Further research work will be conducted in 2017 to confirm the causal agent.

VII. STUDYING NEW MANAGEMENT STRATEGIES FOR RICE BLAST AND SHEATH BLIGHT DISEASE

In several separate trials conducted, many different strategies for the management of blast and sheath blight disease were executed under in vitro and field conditions. Promising bio-control agent, plant products, new molecules and resistant and/or tolerant entries to blast and sheath blight disease were identified and selected for further testing and confirmational studies in 2017.

ENTOMOLOGY

I. PADDY BUG STUDIES

a) Several trips were made inland, across the savannahs and much beyond the rice cultivated areas in Region 2, to search for the nesting haven of the paddy bug, Oebalus poecilus. The islands of Wakenaam and Leguan were also scouted with the same objective. While adult paddy bugs were picked up in grassy areas, there were no signs of nesting in those areas. During interviews, residents living across the savannahs in Region 2 claimed that they were familiar with the bug because they swarm their cassava fields but do not stay there for more than a few days. This behaviour of the bugs suggested that the cassava fields served as a transit point as the bugs were heading north towards rice fields. Findings on Wakenaam and Leguan presented a different scenario. It is likely that the bugs migrate to these islands when the rice crop is in the susceptible stage. Further investigations are being pursued to find the bug's haven and to better understand their migration patterns.

b) More than twelve (12) insecticides containing the active ingredients Acetamiprid, Thiamethoxam, Lambdacyhalthrin, Fipronil, Fenitrothion, hydrocarbyl, cinimon oil, and clove oil were screened under laboratory and field conditions in an effort to find alternatives for the overused Imidacloprid. All the insecticides evaluated were effective in killing the bug based on contact and residual testing.

c) The search for a host plant resistant against the paddy bug continued where seventy-seven (77) advanced breeding lines were screened under field conditions. All the lines were susceptible to the bugs.

ENTOMOLOGY CON'T

II. STORAGE PESTS

a) Cultures of Sitophilus oryzae were maintained and these insects were used for conducting the various experiments viz. host preference of the weevil using eleven (11) varieties in three (3) forms of medium (paddy, polished rice and cargo rice) under the choice and no-choice methods. Other experiments included the evaluation of four (4) insecticides using different types of surface materials that are commonly found at rice storage bonds. These experiments will be concluded in 2017.

III. TRAINING

The Department conducted training in Regions 2, 3, 5 and 6 on the identification of pests that affect stored paddy, rice and rice by-products to trainees of the Licensed Grading Officer Course, which was facilitated through the Guyana Rice Development Board, Quality Control Department.

RESEARCH

SEED PRODUCTION

The main objective of the Seed Production Department is to produce sufficient quantity of high quality seed for farmers. During the year 2016, one thousand, four hundred and sixty six point two three (1,466.23) metric tonnes (23,083 bags @ 140 lbs/bag) of seed were produced; this consisted of seven (7) commercial varieties during the first crop and six varieties in the second crop (see table below). The seed yields were 5t/ha (31.87 bags/ac) and 4.9 t/ha (31.14 bags/ac) respectively for first and second crops 2016. These seeds produced were distributed to farmers across the country.

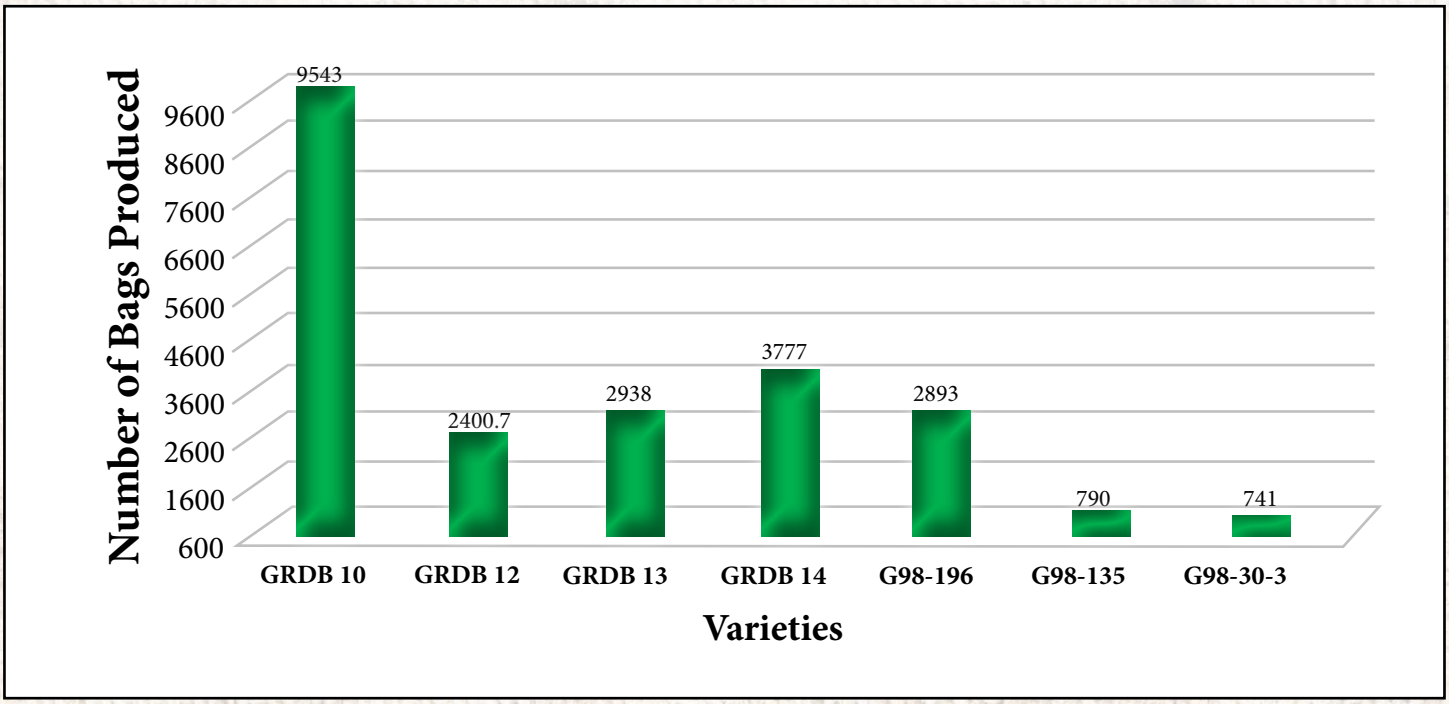
	Varieties	First Crop 2016		Second Crop, 2016		Grand Total		Percentage
		Tonnes	Bags	Tonnes	Bags	Tonnes	Bags	
1	GRDB 10	286.99	4,518	319.19	5,025	606.18	9,543	41.34
2	GRDB 12	80.59	1,269	71.91	1,132	152.49	2,401	10.40
3	GRDB 13	39.76	626	146.86	2,312	186.62	2,938	12.73
4	GRDB 14	113.96	1,794	125.96	1,983	239.92	3,777	16.36
5	G98-196	80.86	1,273	102.90	1,620	183.77	2,893	12.53
6	G98-135	27.50	433	22.68	357	50.18	790	3.42
7	G98-30-3	47.07	741	0.00	-	47.07	741	3.21
Total		**676.73**	**10,654**	**789.50**	**12,429**	**1466.23**	**23,083**	**100.00**

GRDB 10 accounted for the most seeds produced during 2016 (41.34%); this was followed by GRDB 14 which was approximately sixteen percent (16%). Twelve point seven three percent (12.73%) of the total seeds produced were from the variety GRDB 13, twelve point five three percent (12.53%) were from G98-196, and ten point four percent (10.4%) of the seeds were from GRDB 12. The lowest percentage of seeds were produced from the varieties: G98-30-3 and G98-135 (3.21% and 3.42% respectively).

RESEARCH

SEED PRODUCTION CON'T

Graph below showing the different varieties of seeds produced for 2016 at BRRS



Based on the graph above, seeds of variety GRDB 10 were the most dominant produced, followed by GRDB 14, GRDB 13, G987-196 and GRDB 12. Varieties G98 30-3 and G98-135 produced less than one thousand bags of seeds for the calendar year. It was recommended to discontinue the production of certified 1 and 2 seeds of G98 30-3 and G98-135 at RRS. Small quantities of basic seed will be available for farmers and seed growers.

EXTENSION DEPARTMENT

The Extension Department continued to evolve and included more stakeholders in the production process as it sought to adopt a more pluralistic approach, in transforming the lives of farmers and other stakeholders in the agricultural innovation system. Extensive and sustained efforts in the areas of seed production and marketing, technology transfer, data collection and special activities aimed at strengthening the capabilities of farmers to become better and more efficient producers of rice, were the key areas of focus. Network building among farmers through farmer field schools, field days and other supporting activities have been strong points of the extension programme throughout the year.

SEED QUALITY ASSURANCE AND MARKETING

a) Marketing of seed produced at Rice Research Station

Seeds produced by the Rice Research Station and approved for sale, were distributed by the Extension Department to reputable seed farmers and also to growers contracted to the Rice Producers' Association (RPA). Towards this end, a total of twelve thousand, one hundred and thirty four (12,134) bags of seeds were uplifted by farmers in the various rice growing areas, for further multiplication. The table below shows that variety GRDB 10 was the most dominant variety distributed, amounting to four thousand five hundred and ninety seven (4,597) bags or 37.9% of the total.

Table 4

Regions	GRDB #10		GRDB #12	GRDB #14		G98-135	G98-30-3	IR-22	GRDB 13	196		Total
	C1	C11	C11	C1	C11	C11	C1	C11	C1	C1	C11	
2	381	68	85	54	46	21	45	0	0	97	0	797
3	412	665	28	15	0	92	27	0	80	48	75	1442
4	46	390	26	2	38	63	152	0	0	16	89	822
5	366	1817	679	1376	635	427	1080	130	51	183	534	7278
6	169	283	396	175	13	175	94	13	249	6	222	1795
Total	**1374**	**3223**	**1214**	**1622**	**732**	**778**	**1398**	**143**	**380**	**350**	**920**	**12134**

Region 5 uplifted the highest amount of seven thousand, two hundred and seventy eight (7,278) bags or 59.98 % of the total, while the lowest amount of seven hundred and ninety seven (797) bags or 6.5% of the total was obtained by Region 2.

EXTENSION DEPARTMENT

SEED QUALITY ASSURANCE AND MARKETING CONT'D

b.) Monitoring the Performance of Seed from Research Station, Burma

The division routinely makes checks on farmers' fields sown with seeds purchased from the Rice Research Station, to ascertain performance in terms of germination and establishment during the early stages of growth. Towards this end, approximately eight thousand six hundred and ten (8,610) acres were inspected.

c) Monitoring of Seed Fields at the Rice Research Station, Burma

At the Rice Research Station, seed fields amounting to three hundred and forty nine (349) acres were inspected during the various growth stages of the crop. The outcome of the inspections was used as a guide in taking the necessary corrective actions to bring the fields in conformity with the production of certified one (C1) class of seed.

d) Monitoring/Certification of Farmers' Seed Production

Farmers' fields, grown with seeds supplied by the Rice Research Station, are routinely inspected so as to ensure the intended certified two (C11) seeds are produced after multiplication. Approximately fifteen thousand, (15,000) acres met the requirements for seed as a result of this exercise.

TECHNOLOGY APPLICATION

a) Developing Competency of Extension Staff

Extension Officers are on a regular basis exposed to training that enhances their capacity and effectiveness in the delivery of the service to farmers. Live in-service programmes that officers participated in during the year included:

a. Theoretical and practical aspects of field inspection and seed certification.
b. Management of rice pests.
c. General management practices in rice production.
d. Fundamentals of extension.
e. Safe use of pesticides.
f. Extension training on attitude and behavior of Officers; role of Extension Agents.

b) Technology Transfer

Empowerment of farmers on the benefits of improved technologies continued to receive intense focus during the year. Focus groups in the form of Farmers' Field Schools (FFS) continued to be the main strategy to train farmers. This participatory and informal approach has proven to be very effective in building human capital and improving the decision–making capacity of farmers. Fifty (50) FFS groups were established with seven hundred and sixty two (762) farmers participating in the sessions.

Table 5

Region#	# of Schools	# of Participants
2	10	149
3	10	171
4	2	39
5	14	207
6	14	196
Total	**50**	**762**

Regional field days/exchange visits held towards the end of farmers' field school programmes complement trainings at the sessions. The occasion provides for participants to observe innovative technologies demonstrated in a farmer's field, through the collaborative effort of the

EXTENSION DEPARTMENT

TECHNOLOGY APPLICATION CONT'D

farmer and the Extension Department. Also, it provides an excellent opportunity for the farmers from the various regions to interact with each other and share their knowledge and experiences, as well as the opportunity for the creation of a network of exchange of information among them. A total of five hundred and sixty five (565) farmers participated in the three (3) field days that were held. The balanced nutrition programme aimed at improving farmers' yields also continued.

Three hundred and four (304) paddy bug and three hundred and forty six (346) red rice demonstrations were held to enhance the skills of farmers in the management of paddy bug and red rice respectively.

Monitoring of blast nurseries and other on-farm programmes (AYT trials and promising lines) in farmers' fields continued with the involvement of research, extension and collaborating farmers.

Other activities which complemented the field programmes included: - end of season review (8).

INFOMERCIAL/DISTRIBUTION OF BROCHURES

A number of brochures on the various agronomic practices was produced and distributed to farmers.

DATA COLLECTION

Data collected was based on crop production, namely harvesting and sowing, also on pest and disease levels, drainage and irrigation status, fertilizer use and costs, and prices for paddy.

The Department prepared and submitted three hundred and ninety two (392) paddy bug reports, two hundred and sixty (260) weekly and sixty (60) monthly reports. Specific reports on schoonord grass infestation levels (2) and cost of production (2) were also compiled.

A register of all farmers and their respective acreages sown was completed for both crops in the year.

SPECIAL ACTIVITIES

These were special activities that the Department was called upon to perform from time to time. They were complementary in nature and support regular extension activities.

Exhibitions included: Essequibo Night, MMA Open Day, Berbice EXPO and GUYEXPO.

The Minister of Agriculture and other senior Government functionaries made periodic visits or outreaches to the regions to meet with farmers where issues/concerns such as drainage and irrigation (D&I), flooding, accessibility of dams, cattle damage, payment by millers, etc were addressed.

The Guyana Rice Development Board (GRDB) participated in meetings held with mainly Neighbourhood Democratic Councils, Regional Democratic Councils, National Drainage and Irrigation Authority and Water Users Associations (WUAs) to plan and monitor (D&I) work programmes.

Investigations were in the areas of damages to structures, flooding and siltation of outfalls, and breaches of sea defense and canal dams, salinity testing, disease outbreaks and red rice infestation.

Government support to farmers in the form of NPK fertilizers at reduced prices ($5,500.00 per bag) was supplied to farmers during the first crop and second crop 2016, to offset some of their costs.
Extension played a substantial role in executing and facilitating these activities.

QUALITY CONTROL DEPARTMENT

INTRODUCTION

The Department functions as mandated by the Guyana Rice Development Board (GRDB) Act of 1994, and the Rice Factories Act of 1998. It is responsible for the grading and certification of paddy, rice and its by-products intended for trade in or out of Guyana.

Five regional Quality Control Laboratories are operational at the regional offices of GRDB:

Region 2	Anna Regina, Essequibo Coast
Region 3	Crane, West Coast Demerara
Region 4	Georgetown – Central Laboratory
Region 5	Burma, East Coast Demerara
Region 6	No 56 Sub-Office, Berbice

The workload of the Department shifts to accommodate the exports and paddy harvested during any given year; this year was no exception.

This year also saw an increase in white rice export to Panama from 2015, a market that began in the latter half of 2014.

MILL LICENSING

i. This year there was a reduction of mills licensed from fifty eight (58) to fifty three (53).

ii. These fifty three (53) mills accounted for a total of 291 metric tonnes per hour of milling capacity.

The distribution of milling capacity of mills is captured in Table 6 below.

Table 6: Distribution of milling capacity available countrywide.

Regions	2	3	4 & 5	6	9	Total
No. of Licensed Mills	13	12	13	14	1	53
Milling Capacity (mt/h)	66	44.5	130.5	49.5	0.5	291 mt/h

Table 7: Types of mills operating countrywide.

Mill Type	Number in Operation
Buying Centers	3
Toll Mills	20
Milling Capacity Below 5 mt	26
Milling Capacity 5mt and above	24

N.B

- Toll mills are mills which mill paddy on behalf of farmers for a fee.
- Buying Centers purchase paddy only.

QUALITY CONTROL DEPARTMENT

LICENSED GRADERS:-

i. In accordance with the Rice Factories Act, GRDB issued sixty six (66) persons licenses to grade paddy and rice. These persons were trained by GRDB and operate at various mills across the country. A Grader's License is issued biennially.

TRAINING

ii. Stakeholder Training

The annual training course in Rice and Paddy Grading and Quality Management was held in July 2016. Forty three (43) persons were trained as highlighted in Table 8 .

Table 8 Training schedule - Rice and Paddy Grading and Quality Management.

Date	Region	Venue	Persons trained
July 5th – 7th , 2016	2	GRDB Office, Anna Regina	7
July 12th – 14th , 2016	3	GRDB Office, Crane WCD	7
July 19th – 21st , 2016	4 & 5	BURMA Rice Research Station	19
July 26th – 28th , 2016	6	GRDB Office, #56 village, Berbice	10

At the end of each grading course, a one day farmers' training was held in all the regions. The training was aimed at providing farmers with the requisite knowledge that would allow them to determine the quality and quantity of paddy sold to the mill. To this end, they were trained to grade paddy and do the moisture and dockage deductions. Forty three farmers attended this training.

iii. Staff Training

Staff of the Department was trained "in house" as well as externally during the reporting period.

Training was done in:-

(i) Quality System Procedures.
(ii) Sampling, Inspection and Fumigation Process.
(iii) Rice and Paddy Grading and Quality Management.
(iv) Understanding the Requirements of ISO 9001:2005 Standard (Quality Management System - Requirement)
(v) Capacity Building Workshop – Team building for enhanced internal customer cohesion.

QUALITY CONTROL DEPARTMENT CONT'D

TRAINING CONT'D

iv. Staff/Offices

The Quality Control Department is located in all the Regional offices of the Guyana Rice Development Board (GRDB), .i.e. Regions 2, 3, 4, 5 and 6.

All offices are managed by Regional Superintendents or Supervisors.

Table 9 below depicts the staff complement of the Department in the regions:

Regions	Regional Superintendent	Regional Supervisors	Research Assistants	Grading Officers	Technical Assistant	Total
2	1	-	-	5	3	9
3	1	-	-	3	1	5
4	-	1	3	11	2	17
5	-	2	-	4	3	9
6	1	-	-	6	1	8
Total:	**3**	**3**	**3**	**29**	**10**	**48**

v. Data Collection

As part of its mandate, the Department collects and makes available relevant data to management in the rice industry. The following reports were submitted for the period:

a) 24 stock reports – fortnightly.
b) 11 marketing surveillance reports – monthly.
c) 52 updates on payment by millers to farmers – weekly.
d) Paddy intake at mills by grades – weekly.
e) Preparation, certification and fumigation of paddy, rice and by products for sale locally and export.

vi. Review of Central Laboratory Activities

Two Internal Audits were conducted by the Guyana National Bureau of Standards (GNBS) in March and December in keeping with the Department's work plan. Audits are conducted to ensure conformance to the GYS170 and ISO17025 Standard. Results from these audits revealed that the system was effectively implemented in the area audited.

One (1) External Audit was done in September and October. This audit was also conducted by the Guyana National Bureau of Standards (GNBS) to ensure the laboratory's conformity to the GYS 170 standard.

Management Review meeting was held on November 29, 2016. The review sought to verify the status and adequacy of the Quality System in relation to quality policies, objectives, requirements of ISO/IEC17025 Standard and to introduce necessary changes or improvements to the existing Quality System.

The laboratory participated in three (3) rounds of proficiency testing on cargo rice and paddy with Riz Lab – France.

The Central Laboratory facilitated its first surveillance assessment after accreditation to the ISO/IEC:17025 Standard "General Requirements for the competence of testing and calibration laboratories" in 2014. This surveillance was conducted by Jamaica National Agency for Accreditation (JANAAC). Results of the assessment revealed conformance of the laboratory's system to the relative standard.

POST HARVEST/ VALUE ADDED

INTRODUCTION

In 2016 the Post-Harvest Department continued to execute its functions in the fields of post-harvest and value added research, and management of the #56 Seed programme. Research embarked on in 2016 were aimed at addressing the processing goals set out in GRDB's 2020 Strategic plan. This report highlights the work of the Department for 2016.

POST-HARVEST

THE INFLUENCE OF MOISTURE CONTENT ON HEAD RICE YIELD OF LOCAL VARIETIES

Moisture content (MC) of the grain and the variety of rice are two essential factors for the production of high quality rice and are important determinants of the milling quality. Grains harvested at very high moisture contents may possess immature grains while those harvested at very low moisture content may have rapid moisture absorption by the kernels which results in fissuring. During 2016, the Post-harvest Department evaluated ten (10) varieties (G98-135, G98-196, G98-22-4, G98-30-3, GRDB 9, GRDB 10, GRDB 11, GRDB 12, GRDB 13, GRDB 14) in a randomized complete block design to determine the correct moisture content at which they should be harvested. This study will continue in 2017.

INFLUENCE OF STORAGE DURATION ON THE QUALITY AND COOKING ASPECTS OF LOCAL RICE VARIETIES

Stored rice undergoes a number of physical, chemical and biological changes which usually impact milling, cooking and eating qualities. In the second crop of 2016, nine (9) varieties (G98-135, G98-196, G98-30-3, GRDB 9, GRDB 10, GRDB 11, GRDB 12, GRDB 13, GRDB 14) were grown in a controlled environment at the Rice Research Station. Harvested samples were dried to a fixed moisture content and stored for various durations ranging from 0 to 12 months. The milling and cooking qualities of the samples were evaluated after the various storage durations to determine the effects of aging on the varieties. This study will continue in 2017.

AN INVESTIGATION ON THE NUTRIENT CONTENT OF LOCAL RICE VARIETIES GROWN IN GUYANA

Quality of rice does not only include the physical characteristics but also the chemical and cooking attributes of the grain. Therefore, when selecting a particular variety, there is the need to consider the nutrition value obtainable from that variety. For the many rice varieties currently produced in Guyana, no nutritional analyses have been done to date. This project aimed at comparatively analyzing the ten (10) rice varieties (G98-135, G98-196, G98-22-4, G98-30-3, GRDB 9, GRDB 10, GRDB 11, GRDB 12, GRDB 13, GRDB 14) cultivated in Guyana for proximate chemical components such as protein, crude fiber, crude fat, crude ash, total carbohydrates, energy and water. It also aimed at determining the nutrient levels for vitamins and mineral elements. This study will continue in 2017.

INVESTIGATING THE PROCESS OF PARBOILING RICE IN SMALL AND LARGE MILLS ACROSS GUYANA

Parboiling can be defined as a hydrothermal process that involves the pregelatinization of the rice grain within its hull. The rice attracts a higher price and in recent years, more mills have been investing in parboiling facilities. During 2016 the Post-Harvest Department initiated a study to investigate the parboiling practices used by large and small mills in Guyana, paying particular attention to the odour of rice produced. A questionnaire was developed and parboil millers across the country were interviewed, and samples were also collected for odour analysis. The aim of the study is to correlate parboiling practices with odour from rice produced. This study will continue in 2017.

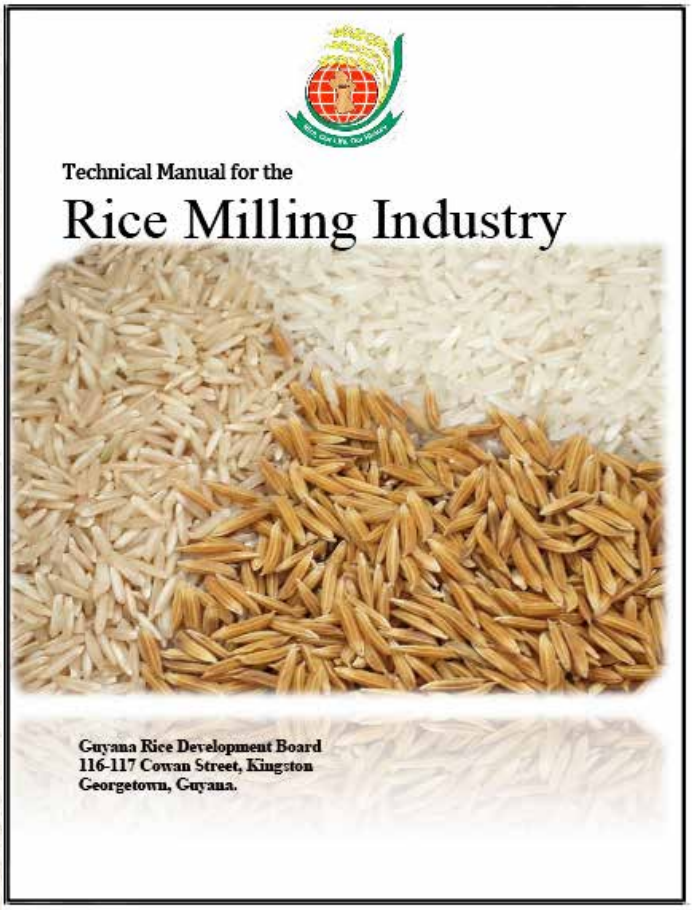
POST HARVEST/ VALUE ADDED

INVESTIGATION OF THE PERCENTAGE OF DOCKAGE METHOD OBTAINED FROM TWO DIFFERENT SAMPLING TYPES

Dockage is defined as "all materials other than paddy and includes straws, hulls, weeds, seeds and stones" and is one of the two factors that determines quantity of paddy delivered to a mill. Paddy delivered to the mill in trucks or trailers is sampled with a long trier (probe) before weighing; however in recent years, some mills began taking a sample at the hopper for dockage determination, claiming the trier sample cannot capture the true dockage. In 2016 the Post-Harvest Department initiated a study to examine these claims by collecting samples from 10 mills across the country using both methods. The study will continue during 2017.

TECHNICAL MANUAL FOR RICE MILLING INDUSTRY

The Post-Harvest Department compiled a Technical Manual for the rice milling industry geared at providing basic technical specification of rice processing equipment, illustrations and information on their operation.



VALUE ADDED

In 2016, the Department began to focus on rice flour as a value added product and raw material for other products. The Department also conducted research on markets available for rice flour and commenced research on rice flour blends. Products made from rice flour were also displayed at various exhibitions held during Agriculture Month 2016.

GRDB'S EVENING OF RICE

As part of an effort to stimulate interest in value added rice, the GRDB hosted an 'Evening of Rice' in November 2016 at the Yumana Yana, Georgetown. The event was a cocktail reception/exhibition to showcase the versatility of rice. The exhibition consisted of rice dishes prepared by Carnegie School of Home Economics, local and imported value added products, picture slide shows about opportunities in value added and services of GRDB. Guests were served locally made rice wine and they sampled rice dishes prepared. The event was attended by approximately 120 persons, including the Hon. Prime Minister, acting in the capacity of President, and the Hon. Minister of Agriculture.

POST HARVEST/ VALUE ADDED

#56 SEED FACILITY

The #56 seed facility improved its performance in 2016 by making available high quality seeds to farmers in Region 6 and also provided the service of drying and cleaning farmers' paddy. In 2016 first crop a total of 1,218 bags of seeds were processed by the facility, 577 being from contracted growers and 641 bags being farmers' paddy that was dried and cleaned.
In the 2016 second crop, the facility processed a total of 2,245 bags of seed, representing an 84% increase in paddy processed, when compared to the first crop. 1,351 bags were processed from contracted seed growers while 894 bags were processed for farmers at a cost of $500/bag. Thus, the total amount of seed processed for 2016 was 3,460 bags compared to 721 bags in 2015 when the facility commenced operation.

TRAINING

In 2016, the Postharvest Department participated in a training course on Rice and Paddy Grading and Quality Management, held in Regions # 2, 3, 4, 5, and 6. The training targeted rice farmers, millers, new staff of the Guyana Rice Development Board and any person interested in obtaining their Grader's License. The Department was tasked with highlighting the importance of food safety in rice mills, discussing various food hazards, and elaborating on food safety systems that can be used to improve food (rice) quality.

Fig. 7 Seed Farmer Delivering Seed at the #56 Seed Facility

OTHER ACTIVITIES

The Head of Department was assigned to coordinate Agriculture Month Activities of the GRDB in 2016.

ADMINISTRATIVE DEPARTMENT

1. For the period of January 01 – December 31, 2016, the following persons were appointed to the Board of Directors, namely:-

Table 10 List of Members of the Board of Directors January 2016

(A)

#	Name	Designation
1	Mr. Claude E. Housty	Chairman
2	Mr. Leekha Rambrich	Member
3	Mr. Nizam Hassan	Ex-Officio Member
4	Mr. George Seales	Member
5	Mr. Jinnah Rahman	Member
6	Mr. John Tracey	Member
7	Dr. Oudho Homenauth	Member
8	Dr. Peter De Groot	Member
9	Mr. Ricky Roopchand	Member
10	Mr. Ragindra Persaud	Member
11	Mr. Naith Ram	Member
12	Ms. Rajdai Jagarnauth	Member
13	Mr. Cecil Seepersaud	Member
14	Ms. Allison Peters	Secretary

Mr. Ricky Roopchand resigned from being a member of the Board of Directors on February 5th, 2010.

ADMINISTRATIVE DEPARTMENT CONT'D

Table 11 July – December 2016

(B)

#	Name	Designation
1	Mr. Claude E. Housty	Chairman
2	Mr. Leekha Rambrich	Vice Chairman
3	Mr. Nizam Hassan	Ex-Officio Member
4	Mr. John Tracey	Member
5	Dr. Oudho Homenauth	Member
6	Dr. Leslie Munroe	Member
7	Mr. Cecil Seepersaud	Member
8	Mr. George Seales	Member
9	Mr. Ragindra Persaud	Member
10	Mr. Nazir Hakh	Member
11	Mr. Naith Ram	Member
12	Ms. Rajdai Jagarnauth	Member
13	Ms. Cindy Sauers	Member
14	Mrs. Candelle Walcott-Bostwick	Member
15	Ms. Marcia Morrison	Member
16	Ms. Allison Peters	Secretary

There were eleven (11) statutory meetings and one (1) special meeting of the Board of Directors.
Section 8 (1) of the Act provides for the appointment of the Sub-Committees to assist with the functions of the Board of Directors. Accordingly, four (4) Sub-Committees were appointed, namely:-

a. Finance and Administration
b. Marketing and Quality Control
c. Research and Extension
d. Procurement

Sub-Committee members of the various Sub-Committees are as follows:

List of Finance and Administration Sub-Committee Members
Table 12 January – September 2016

(A)

#	Name	Designation
1	Mr. Cecil Seepersaud	Chairman
2	Mr. Claude E. Housty	Member
3	Mr. George Seales	Member
4	Mr. Errol Chester	Member
5	Mr. John Tracey	Member
6	Ms. Rajdai Jagernauth	Member
7	Ms. Marcia Morrison	Member
8	Ms. Nashree Singh	Secretary

ADMINISTRATIVE DEPARTMENT CONT'D

Table 13 October – December 2016

#	Name	Designation
1	Mr. Cecil Seepersaud	Chairman
2	Mr. Claude E. Housty	Member
3	Mr. George Seales	Member
4	Mr. Errol Chester	Member
5	Mr. John Tracey	Member
6	Marcia Morrison	Member
7	Ms. Rajdai Jagernauth	Member
8	Ms. Janesa Marcus	Secretary

There were nine (9) meetings of the Finance and Administration Sub-committee.

(B)

List of Marketing and Quality Control Sub-Committee Members
Table 14

#	Name	Designation
1	Mr. Claude E. Housty	Chairman
2	Dr. Peter DeGroot	Member
3	Mr. Ragindra Persaud	Member
4	Mr. Jinnah Rahman	Member
5	Mr. Madanlall Ramraj	Member
6	Ms. Allison Peters	Member
7	Mr. Nizam Hassan	Secretary

There were two (2) meetings of the Marketing and Quality Control Sub-committee members.

ADMINISTRATIVE DEPARTMENT CONT'D

(C) **List of Research and Extension Sub-committee Members**
Table 15 January – September 2016

#	Name	Designation
1	Dr. Oudho Homenauth	Chairman
2	Mr. Naith Ram	Member
3	Dr. Mahendra Persaud	Member
4	Dr. Viviane Baharally	Member
5	Mr. Kuldip Ragnauth	Member
6	Mr. Dhirendranath Singh	Member
7	Mr. Rajendra Persaud	Member
8	Mr. Leekha Rambrich	Member
9	Mr. Naitram Persaud	Invitee
10	Ms. Shanna Crawford	Secretary

Table 16 October - November, 2016

#	Name	Designation
1	Dr. Oudho Homenauth	Chairman
2	Mr. Naith Ram	Member
3	Dr. Mahendra Persaud	Member
4	Dr. Viviane Baharally	Member
5	Mr. Kuldip Ragnauth	Member
6	Mr. Dhirendranath Singh	Member
7	Mr. Rajendra Persaud	Member
8	Mr. Leekha Rambrich	Member
9	Dr. Leslie Munroe	Member
10	Mr. Naitram Persaud	Invitee
11	Dr. Ghansham Payman	Invitee
12	Ms. Shanna Crawford	Secretary

Dr. Leslie Munroe was nominated to serve as a member of the sub-committee in September, 2016

ADMINISTRATIVE DEPARTMENT CONT'D

(D)

Table 17 December 2016		
#	Name	Designation
1	Dr. Oudho Homenauth	Chairman
2	Mr. Naith Ram	Member
3	Dr. Mahendra Persaud	Member
4	Dr. Viviane Baharally	Member
5	Mr. Kuldip Ragnauth	Member
6	Mr. Dhirendranath Singh	Member
7	Mr. Ragindra Persaud	Member
8	Mr. Leekha Rambrich	Member
9	Dr. Leslie Munroe	Member
10	Mr. Naitram Persaud	Member
11	Dr. Ghansham Payman	Member
12	Mr. Rajendra Persaud	Member
13	Ms. Shanna Crawford	Secretary

Mr. Naitram Persaud and Dr. Ghansham Payman were confirmed as members of the sub-committee, while Mr. Ragindra Persaud joined as a member in December, 2016.
There were five (5) meetings of the Research and Extension Sub-Committee members.

List of Procurement Sub-Committee Members
Table 18 January – March, 2016

(E)

#	Name	Designation
1	Mr. John Tracey	Chairperson
2	Mr. Naith Ram	Member
3	Mr. Ricky Roopchand	Member
4	Mr. Nizam Hassan	Member
5	Mrs. Thakurdai Gopaul	Secretary

Mr. Ricky Roopchand resigned from being a member of the sub-committee in March, 2016.
There were six (6) meetings of the Procurement Sub-Committee members.

ACTIVITIES

Participants of the Grader's License Course

ACTIVITIES

Farmers being trained to grade paddy

Staff of GRDB Attended National Tree Planting Day at Iwokrama International Center Region 8.

Mini Exhibition and Award Ceremony Region 2

The exhibition was aimed at showcasing the GRDB's services. Certificates were distributed to farmers who collaborated with GRDB on Field Trials. Approximately 116 students from 7 Secondary school in the Region attended the event. 6 schools also had displays at the exhibition relating to rice.

ACTIVITIES

Mini Exhibition/Awards Ceremony Region 3

Mini Exhibition/Awards Ceremony Region 6

Rice Dishes and Beverage at World Food Day

ACTIVITIES

Staff of Post-Harvest Unit interacting with Hon. Prime Minster in GRDB's Booth at World Food Day

MoA Agri Games – The Winning team GRDB!! Winners (Agri games cricket)

ACTIVITIES

SCENES FROM EVENING OF RICE

Food and beverages on Display at Evening of Rice

ACTIVITIES

SCENES FROM EVENING OF RICE

Guests

Audit Office of Guyana
P.O. Box 1002, 63 High Street, Kingston, Georgetown, Guyana
Tel: 592-225-7592, Fax: 592-226-7257, http://www.audit.org.gy

AG: 266/2018

24 December 2018

REPORT OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GUYANA RICE DEVELOPMENT BOARD FOR THE YEAR ENDED 31 DECEMBER 2016

Adverse Opinion

Chartered Accountants TSD Lal and Company have audited on my behalf the financial statements of Guyana Rice Development Board, which comprise the statement of financial position as at 31 December 2016, the statement of profit and loss and other comprehensive income, statement of changes in equity and the statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information as set out on pages 2 to 22.

In my opinion, because of the significance of the effects of the matters described in the Basis for Adverse Opinion paragraphs, the financial statements do not present fairly, the financial position of the Guyana Rice Development Board as at 31 December 2016, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Adverse Opinion

Included in Government and related entities' liabilities balance of $2,792,201,451 is a balance of $689,481,371 which I was unable to verify due to the absence of supporting documentation and confirmation. I am therefore uncertain whether the balance of $2,792,201,451 for Government and related entities is fairly stated as at 31 December 2016.

Included in Government and related entities' assets balance of $3,262,996,934 is a balance of $505,217,000 which represents fertilizers sold by the Guyana Rice Development Board to Guyana Sugar Corporation. To date, this amount has not been settled nor was any provision made. I am therefore uncertain whether the balance of $3,262,996,934 for Government and related entities is fairly stated as at 31 December 2016.

I conducted my audit in accordance with International Standards on Auditing (ISAs) issued by the International Federation of Accountants (IFAC), the International Standards of Supreme Audit Institutions (ISSAIs) and the Audit Act 2004. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Company in accordance with the ethical requirements that are relevant to my audit of the financial statements in Guyana, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my adverse opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and ISSAIs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs and ISSAIs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report on Other Legal and Regulatory Requirements

The financial statements did not comply with the requirements of Section 33 (1) of the Guyana Rice Development Board Act No. 15 of 1994 which states that the board shall keep accounts of its transactions to the satisfaction of the Minister and the accounts shall be audited annually by the Auditor General not later than six months after the end of each financial year. This was not done as the audit was not completed within the stipulated time.

D. SHARMA
AUDITOR GENERAL

AUDIT OFFICE
63 HIGH STREET
KINGSTON
GEORGETOWN
GUYANA

INDEPENDENT AUDITOR'S REPORT
TO THE AUDITOR GENERAL
ON THE FINANCIAL STATEMENTS
OF THE GUYANA RICE DEVELOPMENT BOARD
FOR THE YEAR ENDED 31 DECEMBER 2016

Report on the Audit of Financial Statements

Adverse Opinion

We have audited the accompanying financial statements of Guyana Rice Development Board which comprise the statement of financial position as at 31 December 2016, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes as set out on pages 2 to 22.

In our opinion, because of the significance of the effects of the matters described in the *Basis for Adverse Opinion* paragraph, the accompanying financial statements do not give a true and fair view, the financial position of the Guyana Rice Development Board as at 31 December 2016, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Adverse Opinion

- Included in Government and related entities liabilities balance of $2,792,201,451 is a balance $689,481,371 which we were unable to verify due to the absence of supporting documentation and confirmation. We are therefore uncertain whether the balance of $2,792,201,451 for Government and related entities are fairly stated as at 31 December, 2016.

- Included Government and related entities asset balance of $3,262,996,934 is a balance of $505,217,000 which represents fertilizers sold by the Guyana Rice Development Board to Guyana Sugar Corporation. To date, this amount has not been settled nor was any provision made. We are therefore uncertain whether the balance of $3,262,996,934 for Government and related entities are fairly stated as at 31 December, 2016.

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company and Subsidiary in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Guyana, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our adverse opinion.

Responsibilities of Those Charged with Governance for the Financial Statements

The Directors/Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Directors/Management is responsible for overseeing the financial reporting process.

In preparing the financial statements, the Directors/Management are responsible for assessing the Company's ability to continue as going concern, disclosing, as applicable, matters related to going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

The objectives of our audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an Auditor's report that includes that opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the planning and performance of the audit. We also:-

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omission, misrepresentations, or the override of internal controls,
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal controls,
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our Auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also require to provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonable be thought to bear on our independence, and where applicable, related safeguards.

Report on Other Legal and Regulatory Requirements

The financial statements did not comply with the requirements of Section 33(1) of the Guyana Rice Development Board Act No.15 which states that the board shall keep accounts of its transactions to the satisfaction of the Minister and the accounts shall be audited annually by the Auditor General not later than six months after the end of each financial year. This was not done as the audit was not completed within the stipulated time.

TSD Lal & Co.

TSD LAL & CO.
Chartered Accountants

Date: November 14, 2018
77 Brickdam,
Stabroek, Georgetown,
Guyana.

GUYANA RICE DEVELOPMENT BOARD

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2016

	Notes	2016 G$	2015 G$
Sales commission		655,103,255	716,886,270
Other income	5(a)	167,299,721	135,882,114
		822,402,976	852,768,384
Cost of sales	5(b)	17,496,760	-
Gross profit		804,906,216	852,768,384
Administrative, finance and audit	8	138,959,195	152,281,219
Grading, marketing, research and extension	8	548,113,915	476,652,897
Other operating expenses	8	89,302,832	155,495,487
		776,375,942	784,429,603
Profit for the year	6	28,530,274	68,338,781

"The accompanying notes form an integral part of these financial statements"

GUYANA RICE DEVELOPMENT BOARD

STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2016

	Note	Capital Contribution G$	Government Grants G$	Accumulated Earnings G$	Total G$
Balance at 1 January 2015		202,798,444	41,674,236	358,835,993	603,308,673
Changes in equity 2015					
Profit for the year		-	-	68,338,781	68,338,781
Balance at 31 December 2015		202,798,444	41,674,236	427,174,774	671,647,454
Changes in equity 2016					
Adjustment for the year	12	6,900,191	-	1,388	6,901,579
Profit for the year		-	-	28,530,274	28,530,274
Balance at 31 December 2016		209,698,635	41,674,236	455,706,436	707,079,307

"The accompanying notes form an integral part of these financial statements"

GUYANA RICE DEVELOPMENT BOARD

STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2016

	Notes	2016 G$	2015 G$
ASSETS			
Non current assets			
Property, plant and equipment	9	127,644,168	130,061,652
Current assets			
Inventory	10	288,344,714	9,975,132
Receivables	11	260,580,656	231,852,399
Government of Guyana and related entities	11	3,262,996,934	979,814,712
Cash on hand and at bank	7	1,314,440,024	2,217,439,405
Total current assets		5,126,362,328	3,439,081,648
TOTAL ASSETS		5,254,006,496	3,569,143,300
EQUITY AND LIABILITIES			
Capital and reserves			
Capital Contribution	12	209,698,635	202,798,444
Government of Guyana - Grant		41,674,236	41,674,236
Accumulated earnings		455,706,436	427,174,774
Shareholders' fund		707,079,307	671,647,454
Current liabilities			
Government of Guyana and related entities	13	2,792,201,451	2,889,909,614
Trade payables	13	1,754,429,415	7,298,152
Bank overdraft		296,323	288,080
Total current liabilities		4,546,927,189	2,897,495,846
TOTAL EQUITY AND LIABILITIES		5,254,006,496	3,569,143,300

These financial statements were approved by the Board of Directors on ...14th Nov, 2018....

On behalf of the board:

..... Director

..... Director

"The accompanying notes form an integral part of these financial statements"

GUYANA RICE DEVELOPMENT BOARD

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2016

	2016 G$	2015 G$
Operating activities		
Profit before taxation	28,530,274	68,338,781
Adjustments for -		
Depreciation	16,817,813	10,619,946
Operating profit before working capital changes in:	45,348,087	78,958,727
Increase in inventory	(278,369,582)	(6,499,902)
(Increase)/decrease in receivables	(28,728,257)	74,102,595
Increase/(decrease) in Government of Guyana and related entities balance	(2,380,890,385)	734,996,568
Increase/(decrease) in trade payables	1,747,131,263	4,940,419
Cash generated (used in)/from operations	(895,508,874)	886,498,407
Investing activities		
Purchase of property, plant and equipment	(14,400,329)	(49,285,790)
Increase in capital contribution	6,901,579	-
Net cash used in investing activities	(7,498,750)	(49,285,790)
Net increase/(decrease) in cash and cash equivalents	(903,007,624)	837,212,617
Cash and cash equivalents at beginning of period	2,217,151,325	1,379,938,708
Cash and cash equivalents at end of period	1,314,143,701	2,217,151,325
Cash and cash equivalents consist of:		
Bank overdraft (secured)	(296,323)	(288,080)
Cash on hand and at bank	1,314,440,024	2,217,439,405
	1,314,143,701	2,217,151,325

"The accompanying notes form an integral part of these financial statements"

GUYANA RICE DEVELOPMENT BOARD

NOTES ON THE ACCOUNTS

1. Incorporation and activities

a) Incorporation

The Board is a state owned enterprise incorporated under ACT No. 15 of 1994: Guyana Rice Development Board Act 1994.

b) Principal Activity

The principal activity of the Board is to facilitate the export of rice from Guyana.

2. New and amended standards and interpretations

Amendments effective for the current year end

	Effective for annual periods beginning on or after
New and Amended Standards	
IAS 16 & IAS 38 Clarification of Acceptable Methods of Depreciation And Amortization	1 January 2016
IAS 16 & IAS 41 Agriculture: Bearer Plants	1 January 2016
Disclosure Initiative Amendments to IAS 1	1 January 2016

Pronouncements effective in future period for early adoption

New and Amended Standards	
IFRS 7 Financial Instruments: Disclosures	1 January 2017
IFRS 9 Financial Instruments: Classification and Measurement	1 January 2018
IFRS 9 Additions for Financial Liability Accounting	1 January 2018
IFRS 15 Revenue from Contracts With Customers	1 January 2018

The Company has not opted for early adoption.

The standards and amendments that are expected to have an impact on the Company's accounting policies when adopted are explained below.

2. New and amended standards and interpretations cont'd

IFRS 9-Financial instrument

IFRS 9 is effective for annual periods beginning on or after 1 January 2018 with earlier application permitted. Early adoption must apply all of the requirements in IFRS 9 at the same time, except for those relating to:

1. the presentation of fair value gains and losses attributable to changes in the credit risk of financial liabilities designated as at FVTPL, the requirements for which an entity may early apply without applying the other requirements in IFRS 9; and
2. hedge accounting, for which an entity may choose to continue to apply the hedge accounting requirements of IAS 39 instead of the requirements of IFRS 9.

The standard contains specific transitional provisions for:

i) classification and measurement of financial assets;
ii) impairment of financial assets; and
iii)hedge accounting.

The directors have not yet performed a detailed analysis of the impact of the application of the amendments and hence have not yet quantified the extent of the impact.

IFRS 15: Revenue From Contracts With Customers

This standard provides a single, principles based five-step model to be applied to all contracts with customers as follows:

- Identify the contract with the customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to the performance obligations in the contracts
- Recognize revenue when (or as) the entity satisfies a performance obligation.

3. Summary of significant accounting policies

a) Basis of preparation

The financial statements have been prepared on the historical cost basis. The principal accounting policies are set out below.

3. Summary of significant accounting policies- cont'd

b) Property, plant and equipment and depreciation

Property, plant and equipment are stated generally at historical cost, except for those measured at fair value, when they are tested for impairment. Historical cost includes expenditure directly attributable to the acquisition of the items.

Property, plant and equipment is tested for impairment whenever there is objective evidence that the carrying amount of the asset may exceed its recoverable amount. Any resulting impairment loss is recognized immediately in the statement of profit or loss and other comprehensive income.

Subsequent costs are included in the asset's carrying value or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Board and the cost of the item can be measured reliably. The carrying amounts of replaced parts are derecognized. All repairs and maintenance are charged to the statement of profit or loss and other comprehensive income during the financial period in which they are incurred.

Depreciation of property, plant and equipment is provided for over the estimated useful lives of the respective assets using the straight-line method.

The following annual depreciation rates are applicable for the respective asset categories:

Buildings	-	2%
Plant, Machinery and Equipment	-	10-20%
Motor Vehicles	-	25%

The gain or loss arising on disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in the statement of profit or loss and other comprehensive income.

3. Summary of significant accounting policies- cont'd

c) Financial Instruments

Financial instruments include cash resources, Government of Guyana and related entities, trade receivables and prepayments, bank balance, and accounts payable and accruals. The particular recognition and measurement methods adopted are disclosed in the individual policy statements associated with each item.

d) Inventories

Inventories are valued at lower of cost and net realizable value with cost being determined on the First-In First-Out (FIFO) basis.

e) Cash and Cash Equivalents

For the purpose of the cash flow statement, cash and cash equivalents comprise cash in hand, deposit held on call with banks and other bank balances.

f) Foreign Currencies

Transactions involving foreign currencies are translated at the exchange rate ruling at the dates of these transactions. At the statement of financial position date, assets and liabilities are denominated in foreign currencies are translated into Guyana dollars at the exchange rate ruling at that date. Gains and losses resulting from the settlement of transactions and from the translated monetary assets and liabilities denominated in foreign currencies are recognized in the statement of profit or loss and other comprehensive income.

g) Revenue Recognition

Revenue from sales and services are recognized upon performance of services or delivery of products and customer acceptance.

h) Trade Receivables

Trade receivables are carried at original invoice value less a provision made for doubtful debts based on a review of all outstanding amount at year end. Bad debts are written off when identified.

3. Summary of significant accounting policies- cont'd

i) Taxation

Under the Guyana Rice Development Board Act No. 15 of 1994 Section (iv) Paragraph 32 (1), the Board is exempted from payment of Corporation and Property Taxes.

j) Provisions

Provisions are recognized when the Board has a present legal or constructive obligation as a result of past events, it is probable that an outflow embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

k) Leases

Lease in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the statement of profit or loss and other comprehensive income on a straight-line basis over the period of the lease. All leasing arrangements to which the Board is a party are considered operating leases.

l) Certain comparatives were reclassified to conform to current year presentation.

4. Critical accounting judgments and key sources of estimation uncertainty

In the application of the Board's accounting policies, which are described in note 3, the directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

4. Critical accounting judgments and key sources of estimation uncertainty cont'd

Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of each reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in the financial statements:

i) Impairment of receivables

On a regular basis, management reviews trade and other receivables to assess impairment. Based on information available as to the likely impairment in cash flows, decisions are taken in determining appropriate provisions to be made for impairment.

ii) Useful lives of property, plant and equipment

Management reviews the estimated useful lives of property, plant and equipment at the end of each year to determine whether the useful lives of property, plant and equipment should remain the same.

iii) Impairment of assets

Where there are indicators that an asset may be impaired, the Board is required to estimate the asset's recoverable amount. Recoverable amount is the greater of value in use and fair value less costs to sell. Determining the value in use requires the Board to estimate expected future cash flows associated with the assets and a suitable discount rate in order to calculate present value. No impairment of non-financial assets has been recorded for the year ended December 31, 2016.

GUYANA RICE DEVELOPMENT BOARD

NOTES ON THE ACCOUNTS

5(a) Other Income	2016 G$	2015 G$
Seed paddy sales	71,174,814	69,761,385
Seed paddy sales from No. 56 Seed Facility	2,464,200	-
Grading fees	26,850	122,494
Interest income	7,382,276	3,442,461
Commercial paddy sales	8,669,780	18,329,248
Mill licence	5,910,000	6,700,000
Export licence	7,000,000	6,000,000
Gain on exchange	37,810,006	25,891,016
Other	7,674,785	4,348,610
Drying of seed paddy	767,250	-
By-product sales	1,518,000	1,286,900
Fertilizer sales	16,901,760	-
	167,299,721	135,882,114
5(b) Cost of sales		
Cost of fertilizer sold	17,496,760	-
6 Profit for the year	28,530,274	68,338,781
After charging:		
Depreciation	16,817,813	10,619,946
Auditor's remuneration (a)	2,600,000	1,650,000
Directors' fees and expenses (b)	4,127,500	1,447,500
(a) Auditor's remuneration:		
Audit services	2,600,000	1,650,000
(b) Directors' fees:		
Chairman	449,500	137,500
Other directors	3,474,000	1,200,000
Secretary	204,000	110,000
	4,127,500	1,447,500

7 Cash on hand and at bank	2016 G$	2015 G$
Cash in hand	1,704,600	1,308,200
Cash at bank	1,300,078,249	2,203,549,652
Term deposit	12,657,175	12,581,553
	1,314,440,024	2,217,439,405

GUYANA RICE DEVELOPMENT BOARD

NOTES ON THE ACCOUNTS

8 Operating Expenses	2016 G$	2015 G$	2016 G$	2015 G$	2016 G$	2015 G$
	Administrative, Finance & Audit		Grading, Marketing, Research & Extension		Other Operating Expenses	
Advertising	5,091,163	4,502,859	-	14,122	43,848	-
Audit, consultancy and legal fees	3,878,453	3,140,225	3,262,485	467,375	150,000	-
Board and committee	-	-	-	-	6,491,707	2,338,850
Contribution to community	94,616	-	20,400	63,480	6,391,249	16,643,474
Depreciation	8,790,083	4,584,976	7,262,964	5,345,523	764,766	689,452
Electricity	5,226,977	5,844,733	24,377,419	1,918,997	-	453,285
Employment cost	89,695,814	102,172,846	366,562,283	337,265,637	6,613,348	13,021,194
Entertainment and travel	873860	1,786,730	2,241,657	4,509,247	150,420	-
Bank charges	-	-	-	-	6,217,308	1,264,294
Insurance	1,242,436	819,540	672,507	760,774	-	-
Licenses and fitness	33,250	37,500	71,925	365,340	-	-
Materials and supplies	3,123,804	3,847,741	46,028,422	51,131,665	833,381	959,683
Newspaper/magazine/subscription	3,807,248	3,755,080	426,736	357,840	-	-
Printing	521,994	1,575,100	427,598	103,420	-	-
Rates and taxes	1,085,081	1,754,157	248,777	273,566	7,348	-
Repairs and maintenance	2,133,407	5,976,720	22,331,599	26,326,654	1,060,868	4,006,516
Security	-	-	260,000	268,000	-	-
Seminar/conference/exhibition	2,526,543	3,201,149	711,334	2,105,780	50,000	44,747
Shipping expense	-	-	8,915,044	8,458,230	-	-
Sundries	1,705,096	2,427,264	1,118,957	1,848,585	31,062	202,950
Telephone expense	4,494,496	5,057,751	1,288,219	1,387,276	1,240,750	1,220,338
Transportation and vehicle expense	4,582,874	1,716,848	9,345,805	10,596,622	17,000	114,780
Weeding dam trench	52,000	59,000	157,000	1,930,082	1,000	24,000
Stocking loading/weighting	-	-	375,240	495,400	227,880	187,900
Grading fees	-	-	590,569	696,682	-	-
Cleaning and supply of seed padi	-	-	2,711,170	3,715,295	6,109,563	1,503,112
Broadcasting - air/manual	-	-	2,932,130	2,495,275	-	-
Drainage and irrigation	-	-	86,000	-	-	-
Ploughing and roughing	-	-	7,405,750	6,095,500	-	-
Agriculture development & support	-		-		-	
Service project	-	-	-	7,454	-	-
Bagging	-	-	-	342,120	-	100,940
Latin american fund for irrigated rice	-	-	-	-	-	8,951,000
Paddy bug management	-	21,000	555,300	1,568,456	-	-
Provision for inpairment	-	-	-	-	-	103,196,630
Spraying	-	-	2,418,400	1,369,600	-	-
Other expenses	-	-		2,313,720	-	-
Bursary award	-	-		-	775,400	564,342
Farmers field school	-	-	2,588,225	2,055,180	-	8,000
Rental	-	-	32,720,000		-	
Loss on exchange	-	-	-		35,877,242	
Flar	-	-	-		16,248,692	
	138,959,195	152,281,219	548,113,915	476,652,897	89,302,832	155,495,487

GUYANA RICE DEVELOPMENT BOARD

NOTES ON THE ACCOUNTS

9 Property, plant and equipment

	Land and buildings G$	Machinery and equipment G$	Motor Vehicle G$	WIP G$	2016 Total G$	2015 Total G$
Cost						
At 1 January	54,852,169	121,039,218	65,544,859	27,376,215	268,812,461	219,526,671
Additions	-	5,736,135	-	8,664,194	14,400,329	49,285,790
At 31 December	54,852,169	126,775,353	65,544,859	36,040,409	283,212,790	268,812,461
Accumulated depreciation						
At 1 January	16,988,917	71,735,919	50,025,973	-	138,750,809	128,130,863
Charge for the year	1,084,044	10,873,097	4,860,672	-	16,817,813	10,619,946
At 31 December	18,072,961	82,609,016	54,886,645	-	155,568,622	138,750,809
Net book values:						
At 31 December 2016	36,779,208	44,166,337	10,658,214	36,040,409	127,644,168	
At 31 December 2015	37,863,252	49,303,299	15,518,886	27,376,215		130,061,652

10 Inventories	2016 G$	2015 G$
Stores	6,514,717	4,244,444
Fertilisers	4,210,447	5,730,688
Fumigation Tablets	64,322,750	-
Consignment fertilizer	213,296,800	-
	288,344,714	9,975,132

There were no inventory written off in the current and prior period.

11 Receivables	2016 G$	2015 G$
Trade receivables	409,677,461	354,040,477
Sundry receivables	188,091,020	185,189,618
Prepayments	2,087,454	1,869,317
	599,855,935	541,099,412
Impairment allowance	(339,275,279)	(309,247,013)
	260,580,656	231,852,399
Government and related entities (i)	3,262,996,934	979,814,712

(i) Included is an amount of $505,217,000 which represents fertilizers sold by the Guyana Rice Development Board to Guyana Sugar Corporation. To date, this amount has not been settled nor was any provision made.

12 Capital contribution

The value of net assets taken over by the Guyana Rice Development Board at January 2, 1995 on the dissolution of the National Padi & Rice Grading Center (NPRGC) and the Guyana Rice Export Board).	137,472,973	137,472,973
Adjustment of the net liabilities relating to The Guyana Rice Export Board	38,674,345	38,674,345
The value of tangible fixed assets taken over by the Guyana Rice Development Board during 1995 from National Agricultural Research Institute - Burma and Mahaica, Mahaicony, Abary, Agricultural Development Authority - Onverwagt	26,651,126	26,651,126
Funds held by GRDB in execution of projects	6,900,191	-
	209,698,635	202,798,444

		2016 G$	2015 G$
13	**Accounts payable and accruals**		
	Payables and accruals	1,754,429,415	7,298,152
	Government of Guyana and related entities	2,792,201,451	2,889,909,614

14 **Related party transactions, balances and other disclosures.**

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operating decisions.

Listed below are transactions with related parties.

Key management personnel

During the year 7 (2015-9) key management personnel received the following benefits:

Salary	30,114,355	35,574,518
Entertainment Allowance	960,000	1,200,000
Travelling Allowance	330,000	600,000
Telephone Allowance	215,000	572,000
Vacation Allowance	2,445,508	2,964,543
Others	660,000	1,380,000
	34,724,863	42,291,061

15 Analysis of financial assets and liabilities by measurement basis

	Loans and receivable G$	Other Financial assets and liabilities at amortised cost G$	Total G$
2016			
ASSETS			
Receivables	260,580,656	-	260,580,656
Government of Guyana and related entities	3,262,996,934	-	3,262,996,934
Cash on hand and at bank	-	1,314,440,024	1,314,440,024
	3,523,577,590	1,314,440,024	4,838,017,614
LIABILITIES			
Government of Guyana and related entities	-	2,792,201,451	2,792,201,451
Trade payables	-	1,754,429,415	1,754,429,415
Bank overdraft	-	296,323	296,323
	-	4,546,927,189	4,546,927,189

	Loans and receivable G$	Other Financial assets and liabilities at amortised cost G$	Total G$
2015			
ASSETS			
Receivables	231,852,399	-	231,852,399
Government of Guyana and related entities	979,814,712	-	979,814,712
Cash on hand and at bank	-	2,217,439,405	2,217,439,405
	1,211,667,111	2,217,439,405	3,429,106,516
LIABILITIES			
Government of Guyana and related entities	-	2,889,909,614	2,889,909,614
Trade payables	-	7,298,152	7,298,152
Bank overdraft	-	288,080	288,080
	-	2,897,495,846	2,897,495,846

16 Financial risk management

Financial risk management objectives

The company's management monitors and manages the financial risks relating to the operations of the company. These risks include market risk (currency risk, interest risk rate and price risk), credit risk and liquidity risk.

The company seeks to minimise the effects of these risks by the use of techniques that are governed by management's policies on foreign exchange risk, interest rate risk and credit risk which are approved by the board of directors.

The company's management reports monthly to the board of directors on matters relating to risk and management of risk.

(a) Market risk

Market risk is the risk that the value of financial instruments will fluctuate as a result of changes in market prices whether those changes are caused by factors specific to the individual security or its issuer or factors affecting all securities traded in the market.

(i) Interest rate risk

Interest rate risk is the risk that the value of financial instruments will fluctuate due to changes in market interest rates. The company is exposed to various risks that are associated with the effects of variations in interest rates. This impacts directly on its cash flows.

The company's management continually monitors and manages these risks through the use of appropriate tools and implements relevant strategies to hedge against any adverse effects.

(ii) Interest rate sensitivity analysis.

The sensitivity analysis below has been determined based on the exposure to interest rates for all financial instruments at the end of the reporting period. The analysis is prepared assuming the amounts of the financial instruments at the end of the reporting period were in existence throughout the whole year.

Interest rate risk

	Average Interest rate %	Maturing 2016			
		1 year G$	2 - 5 years G$	Non-interest bearing G$	Total G$
Assets					
Receivables	-	-	-	260,580,656	260,580,656
Government of Guyana and related entities	-	-	-	3,262,996,934	3,262,996,934
Cash on hand and at bank	0.6	12,657,175	-	1,301,782,849	1,314,440,024
		12,657,175	-	4,825,360,439	4,838,017,614
Liabilities					
Government of Guyana and related entities	-	-	-	2,792,201,451	2,792,201,451
Trade payables	-	-	-	1,754,429,415	1,754,429,415
Bank overdraft	4	296,323	-	-	296,323
		296,323	-	4,546,630,866	4,546,927,189
Interest sensitivity gap		12,360,852	-		

16 Financial risk management- cont'd

(a) Market risk-cont'd

(ii) Interest rate sensitivity analysis - cont'd

	Average Interest rate %	Maturing 2015			
		1 year G$	2 - 5 years G$	Non-interest bearing G$	Total G$
Assets					
Receivables	-	-	-	231,852,399	231,852,399
Government of Guyana and related entities	-	-	-	979,814,712	979,814,712
Cash on hand and at bank	0.6	13,631,980	-	2,203,807,425	2,217,439,405
		13,631,980	-	3,415,474,536	3,429,106,516
Liabilities					
Government of Guyana and related entities	-	-	-	2,889,909,614	2,889,909,614
Trade payables	-	-	-	7,298,152	7,298,152
Bank overdraft	3.5	288,080	-	-	288,080
		288,080	-	2,897,207,766	2,897,495,846
Interest sensitivity gap		13,343,900	-		

(iii) Currency risk

The Company's exposure to the effects of fluctuation in foreign currency exchange rates arise mainly from foreign payables. The currency which the Company is mainly exposed to is United States Dollar.

The aggregate amounts of assets and liabilities denominated in currency other than Guyana dollars are as shown:

	Total US$	Total G$
2016		
Assets	5,930,653	1,245,437,095
2015		
Assets	7,418,904	1,557,969,871

Foreign currency sensitivity analysis

The following table details the Company's sensitivity to a 1% increase and decrease in the Guyana dollar (GYD) against the United States dollar (US$).
The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 1% change in foreign currency rates. A positive number indicates an increase in profit where the US$ strengthens 1% against the GY$ for a 1% weakening of the US$ against G$ there would be an equal and opposite impact on the profit/(loss), and the balances below would be negative.

	2016 G$	2015 G$
Profit/(loss)	12,454,371	15,579,699

(iv) Price risk

Price risk is the risk that the value of financial instruments will fluctuate as a result of changes in market prices whether those changes are caused by factors specific to the individual security of its issuer or factors affecting all securities traded in the market. Management continually identifies the risk and diversifies the portfolio in order to minimize the risk.

The Company is not significantly exposed to other price risks.

16 Financial risk management-cont'd

(b) Liquidity risk

Liquidity risk is the risk that the company will encounter difficulty in raising funds to meet its commitments associated with financial instruments.The company manages its liquidity risk by maintaining an appropriate level of resources in liquid or near liquid form. The following table shows the distribution of assets and liabilities by maturity:

	Maturing 2016		
	Within 1 year On demand	Over 5 years	Total
	G$		G$
Assets			
Receivables	260,580,656	-	260,580,656
Government of Guyana and related entities	-	3,262,996,934	3,262,996,934
Cash on hand and at bank	1,314,440,024	-	1,314,440,024
	1,575,020,680	3,262,996,934	4,838,017,614
Liabilities			
Government of Guyana and related entities		2,792,201,451	2,792,201,451
Trade payables	1,754,429,415	-	1,754,429,415
Bank overdraft	296,323	-	296,323
	1,754,725,738	2,792,201,451	4,546,927,189
Net assets/ (liabilities)	(179,705,058)	470,795,483	291,090,425

	Maturing 2015		
	Within 1 year On demand	Over 5 years	Total
	G$		G$
Assets			
Receivables	231,852,399	-	231,852,399
Government of Guyana and related entities	-	979,814,712	979,814,712
Cash on hand and at bank	2,217,439,405	-	2,217,439,405
	2,449,291,804	979,814,712	3,429,106,516
Liabilities			
Government of Guyana and related entities	-	2,889,909,614	2,889,909,614
Trade payables	7,298,152	-	7,298,152
Bank overdraft	288,080	-	288,080
	7,586,232	2,889,909,614	2,897,495,846
Net assets/ (liabilities)	2,441,705,572	(1,910,094,902)	531,610,670

16 Financial risk management-cont'd

(c) Credit risk

Credit risk is the risk that financial loss arises from the failure of a customer to meet its obligations under a contract. In the case of the company, this arise principally from receivables and cash resource holdings.

Cash and bank includes balances held at financial institutions. These banks have been assessed by the Directors as being creditworthy, with very strong capacity to meet their obligations as they fall due. The related risk is therefore considered very low.

The company's exposure to credit risk is continuously monitored to ensure that amounts are recovered. Management monitors the analysis of credit risk portfolio on an ongoing basis.
The company does not have any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics.

The Company's maximum exposure to credit risk is stated below:

	2016 G$	2015 G$
Receivables (i)	260,580,656	231,852,399
Government of Guyana and related entities	3,262,996,934	979,814,712
Cash on hand and at bank	1,314,440,024	2,217,439,405
	4,838,017,614	**3,429,106,516**

(i) The receivable balances above are classified as follows:

Past due but not impaired	260,580,656	231,852,399
Aging of past due but not impaired		
31- 60 days	6,605,265	11,592,620
61- 90 days	84,719,261	23,185,240
over 91 days	169,256,130	197,074,539
	260,580,656	231,852,399

17 Fair value determination

Fair value measurement recognised in the statement of financial position.

Level 1- Fair value determination is with reference to quoted prices in active markets for identical assets and liabilities.

Level 2- Fair value measurement are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

The following assets and liabilities are carried at amortised cost. However, fair values have been stated for disclosure purposes.

	IFRS 13 Level	2016 Carrying amount G$	2016 Fair value G$	IFRS 13 Level	2015 Carrying amount G$	2015 Fair value G$
Assets						
Property, plant and equipment	2	127,644,168	127,644,168	2	130,061,652	130,061,652
Receivables	2	260,580,656	260,580,656	2	231,852,399	231,852,399
Government of Guyana and related entities	2	3,262,996,934	3,262,996,934	2	979,814,712	979,814,712
Cash on hand and at bank	1	1,314,440,024	1,314,440,024	1	2,217,439,405	2,217,439,405
		4,965,661,782	4,965,661,782		3,559,168,168	3,559,168,168
Liabilities						
Government of Guyana and related entities	2	2,792,201,451	2,792,201,451	2	2,889,909,614	2,889,909,614
Trade payables	2	1,754,429,415	1,754,429,415	2	7,298,152	7,298,152
Bank overdraft	2	296,323	296,323	2	288,080	288,080
		4,546,927,189	4,546,927,189		2,897,495,846	2,897,495,846

Valuation techniques and assumptions applied for the purposes of measuring fair value

The fair values of assets and liabilities were determined as follows:

Property, plant and equipment fair values were measured primarily at cost less accumulated depreciation. Management's judgement was used to determine that fair value approximates the carrying value.

Receivables are net of specific provisions for impairment. The fair value of receivables is based on expected realisation of outstanding balances taking into account the company's history with respect to delinquencies.

Financial instruments where the carrying amounts are equal to fair value:- Due to their short-term maturity, the carrying value of certain financial instruments approximates their fair values. These include cash and cash equivalents, trade payable, other payables and accruals, tax recoverable, due to related party and shareholders and tax liability.

18 Pending litigation

There are a few pending litigations against the company. These matters are currently receiving the attention of the high court and the outcome cannot be determined at this date.

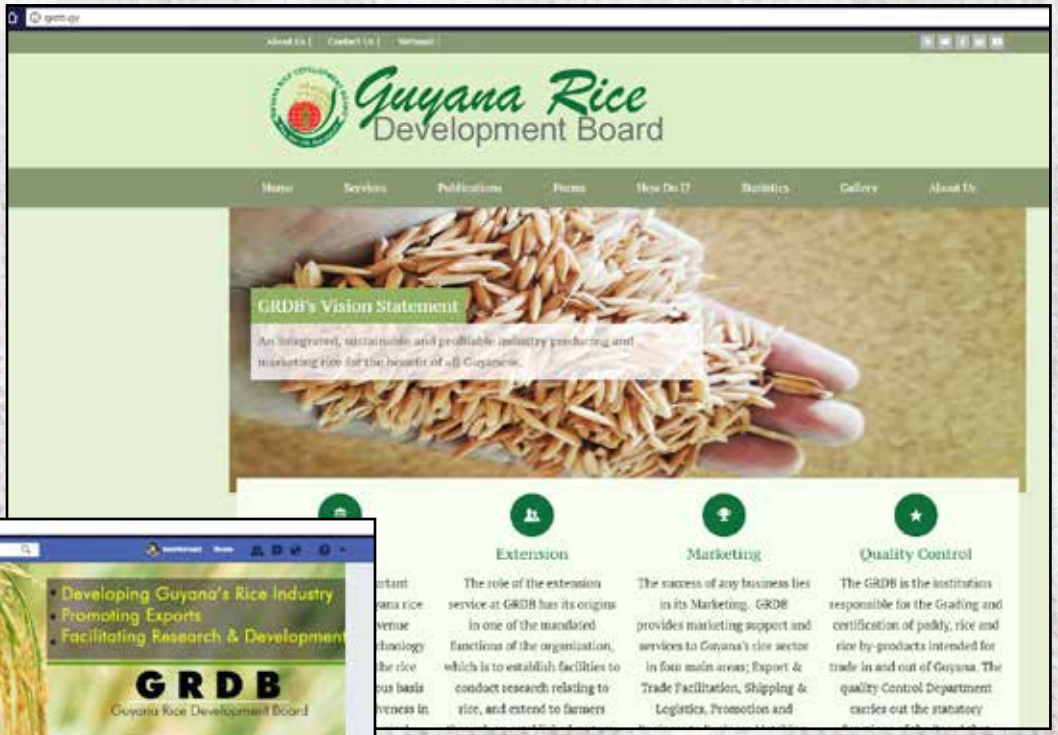
19 Approval of financial statements

The financial statements were approved by the board of directors and authorised for issue on November 14, 2018.

INFORMATION TECHNOLOGY DEPARTMENT

The I.T Department is a support function within the GRDB, and consists of an I.T Officer, and an I.T Technician. During the year 2016, the I.T Department engaged in developmental works which assisted in the marketing and disseminating of information, on behalf of the GRDB. This was done through the development of a new website, which focused mainly on making information readily available to the public, and to better facilitate public interaction with the GRDB.

Increased emphasis was placed on social media, in order for GRDB to interact and decimate information to the general public. As the world moves forward in the new technology era, the I.T Department at GRDB continues to assist in the modernisation of the sector, to make lives easier, for all that are involved.



HUMAN RESOURCE

STAFF APPOINTED IN 2016

Head Office		
Administrative Department	-	Leroy Forde Driver
	-	Anil Sawh Driver
Monitoring & Evaluation	-	Ananada Persaud M & E Coordinator
Quality Control Department	-	Nicklett Powers Grading Officer
Region 6 Sub-Office		
Quality Control Department	-	Shonette Wills Grading Officer
Extension Department	-	Thakur Ghamandhi District Rice Extension Officer
Burma Rice Research Station	-	Delroy Edwards Grading Officer
	-	Tonya Durant Extension Officer
Region 3 Sub-Office	-	Marland Galloway Driver
Anna Regina Sub-Office		
Extension Department District Rice Extension Officer	-	Adrian Hopkison

HUMAN RESOURCE

PUBLIC SERVICE MINISTRY SCHOLARS ASSIGNED TO GRDB IN 2016

Malek Bourne
Delon Wallerson
Devon Critchlow
Marcel Ageda
Rosan Ali
Christa Yaw
Tarlyn Hopkinson
Winifield Washington
Alana Peters

CONFIRMATION

One employee was confirmed in appointed position for the period 1st January, 2016 to 31st December, 2016.

1. Dwayne Daly

TRAINING OF EMPLOYEES

Table 20

NAME	COURSE	AGENCY
Marai Payman	Supervisory Management Skills	JWT Management Institute
Nekita Tang	Principles of Market Research	JWT Management Institute
Carletta Slowe	Self Image	Ministry of Agriculture
Arleen Munroe	Self Image	Ministry of Agriculture
Janesa Marcus	Principles of Foundation of First Aid & CPR Safety	Ministry of Agriculture
Satanand Narain	Principles of Foundation of First Aid & CPR Safety	Ministry of Agriculture
Satanand Narain	Employment Obligation	CAGI
Nashree Singh	Employment Obligation	CAGI
Satanand Narain	Conducting Effective Staff Appraisal	CAGI
Munindra Seeraj	Occupational Health & Safety	CAGI
Khemraj Singh	Effective Inventory Management	CAGI

RESIGNATION & TERMINATION

There were ten (10) resignations, one (1) termination and four (4) voluntary terminations for the period 1st January, 2016 to 31st December, 2016.

Table 19

Resignation
Julia Chunoo
Ravendra Arjune
Oveta Kalpoo
Peter Ramcharran
Madanlall Ramraj
Deodat Puranram
Tawana Patrick
Sheneza Massiah
Latoya Jack
Nashree Singh

HUMAN RESOURCE

EMPLOYEES SPONSORED BY GRDB AND WHO ARE CURRENTLY ON STUDY LEAVE

Table 21

NAMES	PROGRAMME	UNIVERSITY	REMARKS
Danata Mc Gowan	MSc In Botany	University of Mysore, India	First Year
Miranda Henry	MSc in Biotechnology	University of Mysore, India	First Year
Colin Watson	Masters in Business Administration	Australian Institute of Business thru The Nations University, Guyana	First Year
Pooran Seeraj	MSc in Agricultural Physics	Indian Agricultural Research Institute, New Delhi, India	First Year
Rosmery Jaikaran	BSc in Agriculture	University of Guyana	First Year
Omadevi Lakheram	BSc in Agriculture	University of Guyana	First Year
Rajendra Persaud	PhD in Plant Pathology	University of the West Indies	Second Year
Roderick Somrah	BSc in Agriculture	University of Guyana	Second/Third Year
Gangadai Dindayal	BSc in Agriculture	University of Guyana	Second/Third Year

EMPLOYEES SPONSORED BY GRDB WHO HAVE COMPLETED THEIR COURSE OF STUDY IN 2016

Table 22

NAME	PROGRAMME	UNIVERSITY
Shanna Crawford	MSc in Agronomy	Anand Agricultural University, Gujarat, India
Marsha Hohenkirk	Masters in Business Administration	Australian Institute of Business thru The Nations University, Guyana
Leelawatie Manohar	BSc in Agriculture	University of Guyana
Ghansham Payman	PhD in Agronomy	Acharya NG Ranga Agricultural University, India

GUYANA RICE DEVELOPMENT BOARD STAFF

MONTHLY STAFF

Table 23 Region 2

Department	Name of Employee	Designation
	Deoram Prahalad	Regional Superintendent
Quality Control	Ronsard Boodhram	Grading Officer
	Sanjay Singh	Grading Officer
	Balkarran Beharry	Grading Officer
	Kevin Joseph	Grading Officer
	Ramkumar Seurattan	Grading Officer
	Nearajh Ramadar	Technical Assistant
	Kara Ramnauth	Technical Assistant
	Shabeena Rahman	Technical Assistant
Extension	Davendra Singh	District Rice Extension Officer
	Gaydayal Ramnauth	District Rice Extension Officer
	Tamesh Ramnauth	District Rice Extension Officer
	Sophia Boston	District Rice Extension Officer
	Chris Cooblall	District Rice Extension Officer
	Adrian Hopkison	District Rice Extension Officer
	Deroy Gilead	District Rice Extension Officer
	Nimron Bahadur	Extension Officer
Administrative	Chidanand Das	Driver/Mechanic
	Sant Ramlakhan	Security Guard
	Russel Grosvenor	Security Guard

Table 24 Region 3

Department	Name of Employee	Designation
	Dahasrat Narain	Regional Superintendent
	Pooran Seeraj	Regional Superintendent
Quality Control	Donett Adams	Grading Officer
	Uancy Chichester	Grading Officer
	Surendra Jairam	Technical Assistant
	Christa Yaw	Grading Officer - MOA
	Cordel Roberts	Technical Assistant
Extension	Deodram Garbarran	District Rice Extension Officer
	Preemraj Persaud	District Rice Extension Officer - MOA
	Linden Cambridge	District Rice Extension Officer- MOA
	Winifield Washington	District Rice Extension Officer - MOA
Administrative	Marland Galloway	Driver
	Rudolph Adams	Security Guard
	Bhagwandat Seemangal	Security Guard
	Nivrita Seetaram	Typist/Clerk

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 25 Region 4

Department/Unit	Name	Designation
Administrative	Nizam Hassan	General Manager
	Janesa Marcus	Administrative Coordinator (Ag)
	Somwattie Singh	Confidential Secretary
	Leelwattie Manohar	Research Assistant
	Thakurdai Gopaul	Procurement Officer
	Vejailatchmi Harlequin	Communications Clerk
	Dwayne Daly	Driver
	Anil Sawh	Driver
	Sylvester Jiaram	Office Assistant
	Carletta Slowe	Office Attendant
	Pulmattie Dyal	Office Attendant
	Yevette Richards	Security Guard
	Ramgeet Singh	Security Guard
	Marcia Oxford	Security Guard
	Daveanand Ram	Security Guard
Shipping & Logistics	Colin Watson	Shipping and Logistics Officer
	Savita Liliah	Research Assistant
Monitoring & Evaluation	Ananda Persaud	Monitoring & Evaluation Coordinator
Human Resource	Soma D. Pooran	Human Resource Assistant (Ag)
Accounts	Errol Chester	Accountant (Ag)
	Abigail Constantine	Assistant Accountant
	Padmanie Sahadeo	Secretary
	Carol Mendez	Senior Accounts Clerk
	Prabhawattie Victorino	Accounts Clerk
	Keshwanand Seetaram	Accounts Clerk
	Devika Singh	Cashier
	Ariel Norton	Data Entry Clerk
Audit	Tyrone Shiwpersaud	Internal Auditor
	Rayan Fung	Audit Clerk
Marketing	Gloria Chester	Marketing Assistant
	Barabra Hochan	Research Assistant
	Ramkaran Sitaram	Marketing Clerk
	Jermaine Stewart	Clerk

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 25 Region 4 Cont'd

Department/Unit	Name	Designation
	Nekita Tang	Secretary
Quality Control	Allison Peters	General Manager (ag)
	Analisha Jodhan	Secretary
	Marsha Hohenkirk	Research Assistant
	Shemeka Reece	Regional Supervisor
	Heather Edwards	Research Assistant
	Althea Melville	Research Assistant
	Michelle Emanual	Grading Officer
	Paul Harry	Grading Officer
	Trevonne Wright	Grading Officer
	Colwyn Torrington	Grading Officer
	Nicklett Powers	Grading Officer
	Omadevi Lakheram	Grading Officer
	Taneisha Bain	Grading Officer
	Malek Bourne	Grading Officer
	Tarlyn Hopkinson	Grading Officer
	Marcel Ageda	Grading Officer
	Devon Critchlow	Grading Officer
	Ezekiel Jacobs	Technical Assistant*
	Jamal Harris	Technical Assistant
	Roderick Somrah	Technical Assistant
Information Technology	Davin Panday	IT Officer
	Arvindo Singh	IT Technician
Post-Harvest/Value Added	Dhirendranath Singh	Post Harvest Researcher
	Narita Singh	Food Safety and Quality Assurance Researcher

* Ezekiel Jacobs died in an accident in December 2016.

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 26 Region 5

Department	Name	Designations
Quality Control	Errol Joseph	Regional Supervisor
	Wanella La Rose	Trainee Regional Supervisor
	Beverly Joseph	Grading Officer
	Dwayne London	Grading Officer
	Darren Vanderstoop	Grading Officer
	Delroy Edwards	Grading Officer
	Yonette Hawker	Technical Assistant
	Abdool DaSilva	Technical Assistant
	Maywattie Mandai	Technical Assistant
Extension	KuldipRagnauth	Extension Manager
	Bissessar Persaud	Deputy to the Extension Manager and Head of Reg. 4 & 5
	Rosmery Jaikaran	Typist/Clerk
	Rishal Ramsarran	District Rice Extension Officer
	Satish Sookram	District Rice Extension Officer
	Quacie Wilson	District Rice Extension Officer
	Delon McKenzie	District Rice Extension Officer
	Toetaram Ganesh	District Rice Extension Officer
	Kevil Chester	District Rice Extension Officer
	Delon Wallerson	District Rice Extension Officer
	Alan Basil	Extension Officer
	Tonya Durant	Extension Officer
Administrative	Satanand Narain	Administrative Manager
	Kowsilla Singh	Typist/Clerk
	Permaul Ritney	Snr. Research Techncian
	Vishnudatt Singh	Driver
	Steven Veeren	Driver
	Sunil Raman	Operator/Driver
	Jainarine Mohan	Carpenter
Accounts	Marai Payman	Senior Accounts Clerk
	Owen Thorman	Accounts Clerk
	Feona Alfred	Accounts Clerk
	Tumeshwar Singh	Accounts Clerk
	Khemraj Singh	Stores Clerk

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 26 Region 5 Cont'd

Department	Name	Designations
Farm Operation	Jaddonauth Persaud	Farm Manager
	Hemant Benimadhoo	Research Technician
	Satrohan Persaud	Research Technician
	Naitram Persaud	Research Technician
	Fazal Khan	Research Technician
	Tariku Punch	Research Technician
Entomology	Viviane Baharally	Entomologist
	Kadeem Jacobs	Research Assistant
	Beesham Bharat	Research Assistant
	Leyland Sonny	Research Assistant
	Alana Peters	Research Assistant
	Danata Mc Gowan	Research Assistant
	Chandrawatie Sukdeo	Lab Assistant/Secretary
Plant Breeding	MahendraPersaud	Manager Rice Research Station/ Chief Scientist/Plant Breeder
	Violet Henry	Research Assistant
	Nandram Gobind	Research Assistant
	Dindyal Jagdeo	Technical Assistant
	Elijah Adams	Research Technician
	Jairam Persaud	Research Technician
	Jasmine Thompson	Laboratory Technician
	Shevon Abel Shapre	Research Technician
	Jamal Europe	Research Technician
Plant Pathology	Rajendra Persaud	Plant Pathologist
	Shevon Gravesande	Research Assistant
	Jomaine Sharpe	Technical Assistant
Agronomy	Ghansham Payman	Agronomist
	Shanna Crawford	Agronomist
	Tyrone English	Research Assistant
	Miranda Welch	Research Assistant
	Munindra Seeraj	Research Assistant
	Suresh Hardat	Technical Assistant
	Miranda Henry	Research Technician

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 27 Region 6

Department	Name	Designation
	Phibian Joseph	Regional Superintendent
Quality Control	Lubert Walcott	Grading Officer
	Arleen Munroe	Grading Officer
	IomeVanderstoop	Grading Officer
	Steve Lyte	Grading Officer
	Shonette Wills	Grading Officer
	Keyron Greaves	Technical Assistant
Extension	Phillip Jainarine	District Rice Extension Officer
	Marcel Harvey	District Rice Extension Officer
	Nijele Jainarain	District Rice Extension Officer
	Kelvin Chinapa	District Rice Extension Officer
	Thakur Ghamandhi	District Rice Extension Officer
	Permeshwar Ramcharitar	Field Officer
Administrative	Sanjiv Sawh	Agricultural Engineer
	Celice Paul	Typist/ Clerk
	Richard Ramdial	Driver

Table 28 Region 9 – Moco Moco

Department	Name	Designation
	Wilfred McInroy	Hinterland Coordinator

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 29 GRDB Permanent Weekly Employees

Location	NAME	DESIGNATION
Anna Sub-Office	Myrtelle Mark	Office Attendant
Crane Sub-Crane	Yvette Cottam	Office Attendant
Head Office	Bhola Nauth Baijnauth	Handyman
Burma Rice Research Station		
Agronomy	Ronald Jaigobin	Labourer
	Om Prakash Singh	Labourer
	Leon Simon	Labourer
Plant Pathology	Mohan Haimaria	Labourer
Entomology	Jamall Jones	Labourer
	Mahindra Persaud	Labourer
Plant Breeding	Simon James	Labourer
	Balram Ramnauth	Labourer
	Sherwin Mingo	Labourer
	Terrence Hermerding	Labourer
	Latchman Roopdeo	Labourer
	Yvette Wilson	Labourer
	Niketah Williams	Labourer
	Ken Gonsalves	Labourer
	Yonnette Gordon	Labourer
Farm Operation	Climax Williams	Trainee Research Technician
	Claudelle Gordon	Trainee Research Technician
	Anabelle Da Silva	Labourer
	Loakanuth Jagnarine	Labourer
	Deochand Gildhari	Labourer
	Ambika Harripersaud	Labourer
	Nicola Roberts	Labourer
	Umadat Singh	Labourer
	Lavi Longe	Labourer
	Carletta Fordyce	Labourer
	Kelwin Hutson	Labourer
	Patryce Downer	Labourer

GUYANA RICE DEVELOPMENT BOARD STAFF

Table 29 GRDB Permanent Weekly Employees Con't

Location	NAME	DESIGNATION
Administrative	Ganeshree Ramsukh	Office Attendant
	Marlyn Roberts	Office Attendant
	Lakeram Persaud	Tractor Operator
	Seeram Brijnauth	Tractor Operator
	Sipaul Immanchal	Tractor Operator
	Malchand	Labourer
	Wendy Fordyce	Labourer
	Kempton Archibald	Labourer
	Suruj Singh	Labourer
	Mahalia Carmichael	Labourer
	Premnauth Ramsood	Labourer
	Tyrone Alexander	Labourer
	Randy Ramdat	Labourer
	Chandradat Hardat	Security Guard
	Cheryl Inniss	Security Guard
	Loretta Inniss	Security Guard
	Jacob Achama	Security Guard
	Moonsar Persaud	Security Guard
	Mohamed S. Baksh	Security Guard
	Mohamed R. Baksh	Security Guard
#56 Village Sub-Office	Edna Adams	Office Attendant
	Bivendra Budhu	Labourer
	Jitendra Rambarran	Labourer
	Karran Permeshwar	Security Guard
	Anand	Security Guard
	Kennedy Jagnarine	Security Guard

LICENSED MILLS – 2016

Table 30

NAME OF MILLER	ADDRESS
Region 2	
Roopan Ramotar Investment	Land of Plenty, Essequibo Coast
Golden Fleece Rice Investment	Golden Fleece, Essequibo Coast
Imam Bacchus & Sons	Affiance, Essequibo Coast
Caricom Rice Mill Ltd.	Anna Regina, Essequibo Coast
Arnold Sankar's Rice Mill	Airy Hall, Essequibo
Sea Rice Caribbean Inc.	Paradise, Essequibo Coast
Sea Rice Caribbean Inc.	Vilvoorden, Essequibo Coast
V. Persaud & Sons	Block X Westburg, Essequibo Coast
Wazeer Hussein & Sons Rice Milling Complex and Export	29 Dryshore, Essequibo
Deonarine Rice Milling and Contracting Service	Evergreen, Essequibo Coast
Old Mac (Guyana) Inc.	Fairfield, Essequibo Coast
La Resource Rice Industry	La Resource, Essequibo Coast
Ramlakhan & Son Rice Mill	Ex- Mouth, Essequibo Coast
Region 3	
Chand's Rice Milling Complex	La Bagatelle, Leguan Essequibo
Abdool Hakh & Sons	Harlem, W.C.D.
Goed Fortuin Rice Mill (Jeetlall Ramraj)	Goed Fortuin, W.C.D.
E. Nandlall Rice Complex	Blankenburg, W.C.D.
Ojha Rice Milling Complex	1 & 2 Blenheim, Leguan
Hansraj Persaud Rice Mill and Farm	Greenwich Park, E.B.E.
Two 2 Brothers Corp	Vergenoegen, E.B.E
Rumzeight Rice Processors Inc.	Rumzeight, West Coast Demerara
Fuize Khan & Daughter Rice Milling Complex	Lot A Success Leguan, Essequibo Island
Bhagwandeen Tularam & Sons Rice Mill	Lot 1 Belfield, Leguan
Friendship Rice Mill	Friendship, Wakenaam
Rumzeight Rice Processors Inc.	Rumzeight, West Coast Demerara
Region 4 and 5	
A.C. Hakh & Sons	Golden Grove, E.C.D.
A.C Hakh & Sons	Cane Grove, Mahaica, E.C.D.
Rayaadul Hakh Rice Industries	Strangroen, Mahaicony, E.C.D
Fairfield Rice Inc.	Fairfield, Mahaicony, E.C.D.

LICENSED MILLS – 2016

NAME OF MILLER	ADDRESS
Greenfield Rice Investment Inc.	Esau & Jacob Branch Road Mahaicony, E.C.D
Guyana Stockfeed Inc.	Farm E.B.D.
D. Sukhlal Rice Industry (Deonarine Sukhlal)	De Hoop, Mahaica, E.C.D.
Tecnomills Guyana Inc.	76 Block DD Eccles Industrial Estate, E.B.D.
B & K Ractoo Rice Milling Co.	DeKendren, Mahaicony, E.C.D.
Kissoon Dyal & Son	77 Chelsea Park, Mahaica, E.C.D
Saj Rice Group Inc.	Burma, Mahaicony, E.C.D.
Guya P. Ramotar	De Kendren, Mahaicony, E.C.D.
Daad Rice Mill (Abdul Sahim Rahim)	Bush lot Village, W.C.B.
Region 6	
Nand Persaud & Company Limited	No. 36 Village Corentyne Berbice
Amazonia Rice Investment Inc.	Johanna North Black Bush Polder
Ramcoomar Ramdeo (Hemraj Rice Mill)	Bush Lot Village Corentyne, Berbice
Mohamed Sultan Ali Rice Milling Complex (Mohamed Hakim)	Letter Kenny Village, Berbice
Ancient County Rice Investment Inc.	Lot 34 Tarlogie Farm, Corentyne, Berbice
Coolie Gal Brown & White Cargo Rice (Omanarain Persaud)	
No. 68 Village, Corentyne, Berbice	
K .Babulall & Sons Rice Milling Establishment	No. 45 Village, Corentyne, Berbice
Rayaadul Hakh Rice Industries	190 Lesbeholden, South Black Bush Polder
Totaram Budhram Rice Mill	No. # 64 Village, Corentyne, Berbice
Krisco Business Enterprise (Krishndat Persaud)	#57 Village, Corentyne, Berbice
Haniff Rice Mill (M. Afzal Haniff)	#63 Village, Corentyne, Berbice
Corentyne Rice Inc.	No. 70 Village, Corentyne, Berbice
Corentyne Rice Inc.	83 Johanna South, Black Bush Polder
Tulshi Rice Mill	No. 49 Village, Corentyne, Berbice
Region 9	
Santa Fe Inc.	52 km/Lethem Rd.

RICE STATISTICS 1970-2016

Table 31

Year	Hectare Harvested	Paddy Production	Yield Tonnes/ha	Rice Equi. Tonnes	Quantity Exported (Tonnes)	Value G$ & US$
1970	119,182	222,469	1.8	144,605	59,347	18,047
1971	94,551	187,535	1.9	121,989	67,515	21,334
1972	79,462	147,130	1.8	95,639	69,949	25,251
1973	92,821	152,360	1.6	99,034	47,814	25,005
1974	105,741	255,886	2.4	165,657	50,827	49,025
1975	108,486	297,099	2.7	172,259	82,035	84,937
1976	84,027	172,904	2.0	103,754	70,681	73,594
1977	130,528	358,290	2.7	214,972	65,855	66,812
1978	114,846	308,207	2.6	184,985	104,761	95,983
1979	90,227	240,556	2.6	144,328	84,080	80,814
1980	95,991	281,846	2.9	169,107	81,008	87,491
1981	89,053	276,006	3.0	165,604	78,010	110,009
1982	95,280	302,671	3.1	181,603	35,676	60,767
1983	75,807	246,064	3.2	147,639	41,715	64,933
1984	92,987	299,628	3.2	179,785	47,498	80,945
1985	77,777	260,207	3.3	156,124	29,339	56,594
1986	83,977	293,073	3.4	171,044	38,634	57,234
1987	75,146	243,398	3.2	145,879	68,987	157,128
1988	74,223	226,862	3.0	132,281	55,926	139,165
1989	68,544	237,183	3.4	142,310	40,575	367,427
1990	51,368	155,740	3.0	93,444	50,943	513,220
1991	76,209	251,321	3.3	150,783	54,047	US$17,202,635
1992	77,327	286,000	3.7	171,000	115,102	US$35,000,135
1993	98,061	336,207	3.4	201,702	124,089	US$33,045,227
1994	97,660	378,432	3.8	233,111	182,585	US$55,547,061
1995	132,344	525,500	3.4	315,301	200,336	US$76,397,522
1996	135,436	543,437	4.0	332,542	262,265	US$93,716,748
1997	142,782	568,186	3.9	340,911	285,051	US$84,224,971
1998	129,469	522,907	4.0	339,890	249,755	US$73,259,786
1999	147,071	562,260	3.8	365,469	251,519	US$71,035,677
2000	115,872	448,740	3.8	291,967	207,638	US$51,790,072
2001	124,565	495,862	3.9	322,310	209,042	US$50,061,834

RICE STATISTICS 1970-2016

Table 31 Cont'd

Year	Hectare Harvested	Paddy Production	Yield Tonnes/ha	Rice Equi. Tonnes	Quantity Exported (Tonnes)	Value G$ & US$
2002	107,902	443,654	4.1	288,375	193,416	US$45,463,590
2003	127,662	546,183	4.3	355,019	200,432	US$45,273,049
2004	115,742	500,911	4.3	325,592	243,093	US$55,066,513
2005	106,645	420,365	3.9	273,237	182,175	US$46,172,149
2006	102,934	472,363	4.6	307,036	204,577	US$ 54,622,550
2007	105,865	458,653	4.3	298,125	269,436	US $ 75,251,465
2008	119,792	507,036	4.2	329,574	196,233	US $ 118,032,803
2009	124,820	553,522	4.4	359,789	260,815	US $ 114,120,324
2010	131,412	556,193	4.2	361,525	336,313	US $154,622,744
2011	140,674	619,198	4.4	402,479	305,382	US$ 173,239,721
2012	143,386	649,320	4.5	422,058	334,140	US $196,226,960
2013	164,808	823,930	5.0	535,555	394,988	US $239,826,389
2014	185,021	977,289	5.3	635,238	501,208	US $249,504,955
2015	190,789.56	1,058,129	5.5	687,784	537,334	US$220,768,340
2016	150,244.05	822,229	5.5	534,449	499,192	US$178,800,529

Comparison of Yearly Products 2004-2016

Table 32

Month	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
January	22,641	10,426	7,361	24,026	11,578	9,635	36,137	18,413	25,620	26,032	14,491	33,688	34,492
February	13,295	15,582	10,427	11,518	5,694	21,200	18,790	11,076	2,161	12,324	13,354	25,060	28,240
March	16,911	11,487	9,254	32,189	5,274	14,333	15,204	9,416	11,847	16,020	23,313	29,537	30,800
April	20,931	16,189	17,127	22,644	21,421	13,732	20,651	15,931	21,363	17,148	42,754	75,181	57,595
May	32,666	17,911	20,751	28,674	25,008	34,632	35,328	67,188	32,468	26,296	42,587	57,530	47,874
June	28,314	18,261	14,746	26,868	21,361	30,746	31,125	45,922	40,216	44,463	49,500	55,898	53,166
July	20,229	13,086	20,706	16,204	19,334	22,757	35,299	17,039	30,162	57,396	44,629	34,029	53,908
August	13,102	10,149	16,708	18,573	9,091	20,742	19,691	5,988	22,398	35,744	51,304	35,608	40,616
September	20,656	13,052	21,851	15,861	20,264	15,955	17,925	6,200	23,158	32,534	52,459	42,648	33,870
October	17,973	22,566	18,509	25,386	20,551	24,476	33,127	24,018	46,121	51,086	77,837	48,269	60,253
November	21,752	20,629	26,265	25,168	24,527	30,955	40,796	56,560	35,569	29,200	39,194	59,729	33,241
December	14,622	12,837	20,872	22,325	12,130	21,653	32,240	27,631	33,058	46,746	49,786	40,157	25,137
Total	**243,092**	**182,175**	**204,577**	**269,436**	**196,233**	**260,816**	**336,313**	**305,382**	**334,141**	**394,989**	**501,208**	**537,334**	**499,192**

EXPORTS ACCORDING TO PRODUCTS 2015-2016

Table 33

PRODUCT	2015 QUANTITY (Tonnes)	2015 % OF TOTAL EXPORTS	2016 QUANTITY (Tonnes)	2016 % OF TOTAL EXPORTS
BRAN	17,968	3.00	13,149	3.00
C.P.B PK	23	0.00	3	0.00
C.P.B RICE	203	0.03	135	0.00
CARGO BROKEN	13,557	3.00	15,360	3.00
CARGO RICE	102,795	19.00	110,675	22.00
CHIPS	655	0.12	581	0.00
DAMAGED RICE	90	0.00	175	0.00
DISCOLOURED RICE	187	0.03	330	0.00
PADDY	171,796	32.00	168,820	34.00
PARBOILED BROKEN	1,205	0.22	604	0.00
PARBOILED RICE	24,003	4.50	24,438	5.00
PET RICE	1,846	0.34	1,874	0.00
PKG PB RICE	6,738	1.30	8,127	2.00
PKG WHITE RICE	693	0.13	1,949	0.00
REJ PB RICE	1,464	0.30	1,533	0.00
SEED PADDY	105	0.02	14	0.00
WHITE BROKEN	31,881	6.00	18,775	4.00
WHITE RICE	161,993	30.00	132,650	27.00
PET FOODS	50	0.04	0	0.00
PKG CARGO RICE	7	0.00	0	0.00
PKG PET RICE	65	0.00	0	0.00
RICE HUSK	5	0.00	0	0.00
PKG REJ PB RICE	5	0.00	0	0.00
TOTAL	**537,334**	**100**	**499,192**	**100.00%**

EXPORTS ACCORDING TO DESTINATIONS 2014-2016

Table 34

Country	2014	Exports Percentage (%)	2015	Exports Percentage (%)	2016	Exports Percentage (%)
CARICOM						
Antigua	1,100	0.22	812	0.15	839	0.17
Bahamas	-	-	-	-	25	0.00
Barbados	2,435	0.48	2,763	0.5	2,808	0.57
Belize	1,451	0.28	101	0.02	-	-
Dominica	971	0.20	1,249	0.23	1,055	0.22
Grenada	1,754	0.34	1,777	0.34	1,815	0.37
Jamaica	50,264	10.02	47,913	8.9	43,777	8.77
St. Kitts	389	0.07	343	0.07	343	0.07
St. Lucia	611	0.12	715	0.13	837	0.17
St. Vincent	3,574	0.71	4,076	0.8	3,781	0.76
Suriname	1,558	0.31	1,181	0.23	485	0.10
Trinidad	24,328	4.85	24,926	4.63	26,761	5.36
Sub-Total	**88,435**	**17.60**	**85,856**	**16.00**	**82,526**	**16.56**
European Union						
Belgium	12,036	2.40	10,992	2	9,494	1.91
France	0	0	6,886	1.28	2,114	0.42
French Guiana	573	0.10	633	0.1	452	0.09
Greece	0	0	3,500	0.6	2,346	0.46
Germany	10	0	-	-	10	0.00
Guadeloupe	1,399	0.30	1,512	0.3	1,291	0.25
Holland	25,470	5.08	20,808	3.87	30,550	6.11
Italy	655	0.13	70,233	13	88,401	17.70
Lithuania	0	0	93	0.01	-	-
Martinique	1,120	0.22	1,269	0.2	172	0.03
Poland	151	0.03	1,518	0.28	225	0.04
Portugal	41,479	8.30	89,373	16.6	87,635	17.55
Spain	0	0	3,700	0.68	15,913	3.19
United Kingdom	18,779	3.74	21,939	4.08	21,222	4.26
Sub-Total	**101,672**	**20.30**	**232,456**	**43.00**	**259,825**	**52.01**

EXPORTS ACCORDING TO DESTINATIONS 2014-2016

Table 34 Cont'd

Country	2014	Exports Percentage (%)	2015	Exports Percentage (%)	2016	Exports Percentage (%)
North America						
Canada	0	0	123	0	-	-
USA	2,514	0.51	6,316	1	1,163	0.23
Sub-Total	2,514	0.51	6,439	1.00	1,163	0.23
Latin America						
Brazil	12,173	2.43	16,681	3.1	13,155	2.64
Chile	892	0.18	325	0.06	-	-
Colombia	2,525	0.51	4,987	0.92	3,845	0.77
Curacao	-	-	25	0	118	0.03
Costa Rica	149	0.03	-	-	25	0.00
Dominican Republic	28	0	-	-	-	-
El Salvador	-	-	-	-	27	0.00
Guatemala	0	0	2,696	0.5	28	0.00
Haiti	10,350	2.07	34,679	7	28,160	5.65
Honduras	0	0	977	0.2	2,564	0.52
Nicaragua	35,170	7.02	36,244	6.7	21,232	4.26
Panama	59,279	11.83	35,155	6.5	79,724	15.97
Peru	0	0	150	0.02	-	-
Venezuela	187,995	37.51	80,639	15	6,752	1.36
Sub-Total	308,561	61.58	212,558	40.00	155,630	31.2
West Africa						
Ghana	25	0.01	25	0.00	25	0.00
Sub-Total	25	0.01	25	0.00	25	0.00
Others						
St. Maarteen					23	0.00
Sub-Total					23	0.00
TOTAL	501,208	100.00%	537,334	100	499,192	100

AVERAGE RICE EXPORTS PRICES 2005-2016

Table 35

REGION	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CARICOM												
CARGO RICE	364	260	283	623	443	407	536	558	549	519	347	474
CARGO BKN	105	110	-	295	210	267	395	379	328	270	343	258
PKG CARGO RICE	-	-	-	-	-	-	-	-	-	-	740	-
WHITE RICE	275	295	347	688	532	513	693	667	768	519	418	409
WHITE PKG. RICE	352	390	594	763	512	611	713	730	707	665	597	518
WHITE BKN	180	175	178	426	316	369	392	363	393	329	286	260
C.P.B PK RICE	-	-	-	-	-	-	-	-	777	885	623	-
C.P.B RICE	290	310	285	945	608	655	710	668	814	747	-	650
PARB RICE	399	400	425	824	716	624	785	773	763	716	672	650
PARB PKG. RICE	468	475	638	851	756	689	807	822	687	665	698	672
PARB BKN	162	165	164	354	253	267	352	418	510	362	416	311
REJ. PB RICE	170	178	195	-	294	326	316	383	425	410	342	289
BRAN	62	63	45	118	96	120	105	97	87	68	73	99
PET RICE	-	-	190	-	250	339	384	445	407	382	344	339
PADDY	-	-	-	-	-	-	-	-	520	350	330	-
SEED PADDY	-	-	-	-	-	-	-	-	-	-	481	448
DAMAGED RICE	-	-	-	-	-	-	-	-	437	385	359	338
DISCOLOURED RICE	-	-	-	-	-	-	-	-	-	-	250	280
EUROPEAN UNION												
PARB. BKN	110	110	110	295	207	207	200	305	345	-	-	-
CARGO RICE	240	260	262	600	409	434	510	567	514	466	383	339
CARGO BKN	-	142	148	265	250	265	306	385	298	318	286	300
WHITE RICE	-	-	320	530	447	486	485	-	-	618	377	426
WHITE BKN	160	160	168	425	241	246	342	332	305	282	265	290
C.P.B RICE	244	306	261	480	440	446	-	-	-	-	-	-
PARB. RICE	-	-	400	-	550	650	764	-	809	670	-	672
BRAN	-	-	-	-	-	-	-	-	99	82	101	118
PADDY	-	-	-	-	-	-	-	-	-	-	281	296
LATIN AMERICA												
WHITE RICE	273	295	308	703	510	700	750	800	634	640	560	450
WHITE BKN	174	160	166	435	276	246	-	463	410	263	260	265
PARB. RICE	-	-	373	-	590	590	-	-	-	723	638	500
PADDY	-	-	-	-	348	420	470	520	417	470	411	300
CHIPS	-	-	190	-	-	-	-	565	-	280	280	239
CARGO RICE	233	265	280	510	400	-	-	-	540	260	200	358
PARB PKG RICE	-	-	462	-	681	670	-	-	-	-	669	575
WHT PKG RICE	-	-	-	-	502	-	-	-	-	-	504	459
BRAN	-	-	-	-	100	65	-	100	88	75	95	97
NORTH AMERICA												
WHITE RICE	-	-	-	-	-	-	-	-	-	-	491	463
PARB PKG RICE	-	-	-	-	-	-	-	-	-	-	654	550
WEST AFRICA												
WHITE RICE	-	-	-	-	-	-	-	-	-	-	360	477

PRODUCTION TOTAL FOR 2016

Table 36

REGION / ZONE	HECTARE				Paddy Production		Rice Equiv.	Yield	Yield	%
	Target	Prepared	Sown	Harvested	Bags	M/T	M/T	(Bags/ Ha)	(Tons/ Ha)	Harvested
REGION 2										
Essequibo	27,086	23,168	23,730	23,716	2,076,725	131,915	85,745	87.6	5.6	99.9
Sub-Total	**27,086**	**23,168.00**	**23,729.60**	**23,715.80**	**2,076,725**	**131,915**	**85,745**	**87.6**	**5.6**	**99.9**
REGION 3										
Wakenaam	1,573	668	589	585	39,264	2,494	1,621	67.2	4.3	99.2
Leguan	3,672	1,724	1,713	1,713	124,772	7,926	5,152	72.8	4.6	100.0
Hamburg	301	339	199	199	15,975	1,015	660	80.2	5.1	99.9
Hogg Island	69	59	42	42	1,831	116	76	44.0	2.8	99.9
West Demerara	10,850	10,354	10,198	10,182	767,748	48,768	31,699	75.4	4.8	99.8
Sub-Total	**16,465**	**13,143.84**	**12,740.84**	**12,720.05**	**949,590.00**	**60,319**	**39,207**	**74.7**	**4.7**	**99.8**
REGION 4										
Baiboo/Cane Grove	4,939	4,968	4,532	4,531	488,344	31,020	20,163	107.8	6.8	100.0
Golden Grove/Mahaica	2,065	2,146	2,001	2,001	199,206	12,654	8,225	99.6	6.3	100.0
Sub-Total	**7,004**	**7,113.20**	**6,532.70**	**6,531.80**	**687,550**	**43,674**	**28,388**	**105.3**	**6.7**	**100.0**
REGION 5										
Mahaica/ Mahaicony	21,457	19,255	15,555	15,470	1,282,306	81,453	52,945	82.9	5.3	99.5
Mahaicony/ Abary	21,053	16,972	16,137	15,988	1,370,375	87,047	56,581	85.7	5.4	99.1
West Berbice	36,842	37,818	37,434	37,299	3,336,765	211,954	137,770	89.5	5.7	99.6
Sub Total	79,352	74,044.86	69,126.60	68,756.80	5,989,446	380,455	247,296	87.1	5.5	99.5
REGION 6										
Frontlands	29,889	20,885	22,287	21,785	1,789,851	113,693	73,900	82.2	5.2	97.7
Black Bush Polder	16,308	18,919	16,241	16,238	1,389,893	88,287	57,387	85.6	5.4	100.0
Sub-Total	**46,196**	**39,804.20**	**38,528.20**	**38,022.90**	**3,179,744**	**201,980**	**131,287**	**83.6**	**5.3**	**98.7**
REGION 9										
Santa Fe	1297.1	500.87	500.87	480.6	60175	3,822	2,485	125.2	8.0	96.0
Lethem	202.5	151.82	151.82	16.1	1000	64	41	62.1	3.9	10.6
Sub Total	1499.6	652.69	652.69	496.70	61175.00	3885.89	2525.83	123.2	7.8	76.1
Total	**177,604**	**157,927**	**151,311**	**150,244.05**	**12,944,230**	**822,229**	**534,449**	**86.2**	**5.5**	**99.3**

HARVESTING PRODUCTION FIRST CROP 2016

Table 37

REGION / ZONE	HECTARE				Paddy Production		Rice Equiv.	Yield	Yield	%
	Target	Prepared	Sown	Harvested	Bags	M/T	M/T	(Bags/Ha)	(Tons/Ha)	Harvested
REGION 2										
Essequibo	13,826.30	9,891.50	9,768.90	9,755.8	918,096.0	58,318.3	37,906.9	94.1	6.0	99.9
Sub-Total	**13,826.30**	**9,891.50**	**9,768.90**	**9,755.8**	**918,096.0**	**58,318.3**	**37,906.9**	**94.1**	**6.0**	**99.9**
REGION 3										
Wakenaam	1,127.90	221.80	142.80	138.0	6,174.0	392.2	254.9	44.7	2.8	96.6
Leguan	1,850.20	15.30	4.30	4.3	282.0	17.9	11.6	65.6	4.2	100.0
Hamburg	124.70	176.50	36.50	36.4	1,503.0	95.5	62.1	41.3	2.6	99.7
Hogg Island	30.40	38.40	21.40	21.4	1,325.0	84.2	54.7	61.9	3.9	100.0
West Demerara	5,506.00	4,936.80	4,780.80	4,765.0	343,194.0	21,800.0	14,170.0	72.0	4.6	99.7
Sub-Total	**8,639.20**	**5,388.80**	**4,985.80**	**4,965.1**	**352,478.0**	**22,389.7**	**14,553.3**	**71.0**	**4.5**	**99.6**
REGION 4										
Baiboo/Cane Grove	2,429.20	2,408.90	2,134.30	2,134.0	254,064.0	16,138.4	10,489.9	119.1	7.6	100.0
Golden Grove/ Mahaica	1,012.10	1,032.30	923.90	923.8	98,126.0	6,233.0	4,051.5	106.2	6.7	100.0
Sub-Total	**3,441.30**	**3,441.20**	**3,058.20**	**3,057.8**	**352,190.0**	**22,371.4**	**14,541.4**	**115.2**	**7.3**	**100.0**
REGION 5										
Mahaica/Mahaicony	10,931.10	7,919.00	5,895.00	5,809.7	444,850.0	28,257.3	18,367.2	76.6	4.9	98.6
Mahaicony/Abary	10,931.10	8,732.70	8,011.80	7,862.3	679,700.0	43,175.1	28,063.8	86.5	5.5	98.1
West Berbice	18,259.10	19,149.70	18,868.40	18,733.4	1,746,000.0	110,907.4	72,089.8	93.2	5.9	99.3
Sub Total	**40,121.30**	**35,801.40**	**32,775.20**	**32,405.4**	**2,870,550.0**	**182,339.8**	**118,520.9**	**88.6**	**5.6**	**98.9**
REGION 6										
Frontlands	16,251.80	14,016.50	14,428.30	13,965.0	1,207,281.3	76,687.6	49,846.9	86.5	5.5	96.8
Black Bush Polder	8,153.80	10,823.80	8,143.70	8,140.6	723,870.0	45,980.9	29,887.6	88.9	5.6	100.0
Sub-Total	**24,405.60**	**24,840.30**	**22,572.00**	**22,105.6**	**1,931,151.3**	**122,668.4**	**79,734.5**	**87.4**	**5.5**	**97.9**
REGION 9										
Santa Fe	638	245.0	245	245.0	30,624.0	1,945.3	1,264.4	125.0	7.9	100.0
Lethem		0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	
Sub Total	638.0	245	245.00	245.0	30,624.0	1,945.3	1,264.4	125.0	7.9	100.0
Total	**91,072**	**79,608**	**73,405**	**72,534.7**	**6,455,089.3**	**410,032.9**	**266,521.4**	**89.0**	**5.7**	**98.8**

HARVESTING PRODUCTION SECOND CROP 2016

Table 38

REGION / ZONE	HECTARE				Paddy Production		Rice Equiv.	Yield	Yield	%
	Target	Prepared	Sown	Harvested	Bags	M/T	M/T	(Bags/Ha)	(Tons/Ha)	Harvested
REGION 2										
Essequibo	13,260.00	13,276.50	13,960.70	13,960.0	1,158,629.0	73,597.1	47,838.1	83.0	5.3	100.0
Sub-Total	**13,260.00**	**13,276.50**	**13,960.70**	**13,960.0**	**1,158,629.0**	**73,597.1**	**47,838.1**	**83.0**	**5.3**	**100.0**
REGION 3										
Wakenaam	445.30	446.55	446.55	446.6	33,090.0	2,101.9	1,366.2	74.1	4.7	100.0
Leguan	1,821.80	1,708.50	1,708.50	1,708.5	124,490.0	7,907.7	5,140.0	72.9	4.6	100.0
Hamburg	176.50	162.75	162.75	162.7	14,472.0	919.3	597.5	88.9	5.7	100.0
Hogg Island	38.40	20.24	20.24	20.2	506.0	32.1	20.9	25.0	1.6	99.8
West Demerara	5,344.10	5,417.00	5,417.00	5,417.0	424,554.0	26,968.0	17,529.2	78.4	5.0	100.0
Sub-Total	**7,826.10**	**7,755.04**	**7,755.04**	**7,755.0**	**597,112.0**	**37,929.1**	**24,653.9**	**77.0**	**4.9**	**100.0**
REGION 4										
Baiboo/ Cane Grove	2,510.00	2,558.70	2,397.60	2,397.00	234,280.0	14,881.7	9,673.1	97.7	6.2	100.0
Golden Grove/ Mahaica	1,052.60	1,113.30	1,076.90	1,077	101,080.0	6,420.7	4,173.4	93.9	6.0	100.0
Sub-Total	**3,562.60**	**3,672.00**	**3,474.50**	**3,474.0**	**335,360.0**	**21,302.4**	**13,846.5**	**96.5**	**6.1**	**100.0**
REGION 5										
Mahaica/ Mahaicony	10,526.30	11,336.00	9,660.00	9,660.00	837,456.0	53,195.9	34,577.4	86.7	5.5	100.0
Mahaicony/ Abary	10,121.40	8,238.86	8,125.50	8,125.50	690,675.0	43,872.3	28,517.0	85.0	5.4	100.0
West Berbice	18,583.00	18,668.60	18,565.90	18,565.90	1,590,765.0	101,046.8	65,680.4	85.7	5.4	100.0
Sub Total	**39230.70**	**38243.5**	**36,351.40**	**36,351.4**	**3,118,896.0**	**198,115.0**	**128,774.7**	**85.8**	**5.4**	**100.0**
REGION 6										
Frontlands	13,637.00	6,868.80	7859.1	7,820.2	582,570.0	37,005.4	24,053.5	74.5	4.7	99.5
Black Bush Polder	8,153.80	8,095.10	8097.1	8,097.1	666,022.5	42,306.3	27,499.1	82.3	5.2	100.0
Sub-Total	**21,790.80**	**14,963.90**	**15,956.20**	**15,917.3**	**1,248,592.5**	**79,311.7**	**51,552.6**	**78.4**	**5.0**	**99.8**
REGION 9										
Santa Fe	659.1	255.9	255.87	235.6	29,551.0	1,877.1	1,220.1	125.4	8.0	92.1
Lethem	202.50	151.8	151.82	16.1	1,000.0	63.5	41.3	62.1	3.9	10.6
Sub Total	**861.60**	**407.69**	**407.69**	**251.7**	**30,551.0**	**1,940.6**	**1,261.4**	**121.4**	**7.7**	**61.7**
Total	**86,532**	**78,319**	**77,906**	**77,709.4**	**6,489,140.5**	**412,195.9**	**267,927.3**	**83.5**	**5.3**	**99.7**

PADDY PRICES 2002-2016

Table 39

Year	First Crop					Second Crop				
	Extra A	A	B	C	Substandard	Extra A	A	B	C	Substandard
2000	1,300	1,250	1,200	1,150	900/1,000	1,300	1,250	1,200	1,150	900/100
2001	1,300	1,200	1,100	1,000	600/900	1,300	1,200	1,100	1,000	900
2002	1,400	1,300	1,300	1,200	1,000	1,400	1,300	1,300	1,300	1,000
2003	1,350	1,300	1,200	1,100	900	1,400	1,350	1,350	1,350	600/1,000
2004	1,400	1,350	1,350	1,350	600/1,000	1,500	1,500	1,500	1,500	600/1,000
2005		1,500	1,500	1,500	1000		1,700	1,,700	1,700	1,000
2006	2,000	1,800	1,750	1,600	1,000/1,400	1,800	1,700	1,600	1,500	1,000/1,400
2007	1,900	1,800	1,750	1,700	1,000/1,500	2,300	2,100	2,100	2,100	1,500/1,700
2008	5,500	5,000	4,000	4,000	3,000/4,000	4,500	4,000	4,000	4,000	3,000/4,000
2009	3,000-5,000	3,000-5,000	3,000-5,000	3,000-5,000	2000	2,200-2,500	2,200-2,500	2,200-2,500	2,200-2,500	1200
2010	3,100-3,500	3,000-3,500	3,200-3,600	3,100-3,600	2,700/3,500	2,500-3,500	2,400-3,500	2,300-3,500	2,200-3,300	2,000/2,900
2011	3,900-4,400	3,800-4,300	3,600-4,200	3,500-4,000	3,400-3,800	4,100-4,700	4,100-4,400	3,800-4,486	3,600-4,421	3,500/4,000
2012	4,200-4,500	4,000-4,200	3,900-4,000	3,800-3,900	3,400-3,800	4,100-4,300	4,000-4,200	3,800-4,000	3,700-3,800	3,600-3,800
2013	3,600-4000	3,576-3,900	3,511-3,800	3,446-3,800	2,500	3,511-4,100	3,446-4,000	3,446-3,900	3,446-3,800	3,000
2014	3,300-3,425	3,175-3,300	3,050-3,175	2,925-3050	2,775-2,925	3,125-3,225	2,931-3,125	2,850-2,931	2,732-2850	2,575-2,732
2015	2,500-3,300	2,400-3,200	2,400-3,000	2,200-3,000	2,000-2,800	1,600-2,400	1,500-2,300	1,500-2,200	1,500-2,100	1,500-2,000
2016	2,100-2,500	1,820-2,400	1,670-2,400	1,520-2400	1,800-2,100	1,850-2,650	1,850-2,550	1,850-2,500	1,850-2,500	1,850-2,250

NOTES

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