



## THE FUNCTIONS OF THE GUYANA RICE DEVELOPMENT BOARD

### Introduction

The Guyana Rice Development Board was established by Act Number 15 of 1994 and, as provided for under Section 3 (iii), the management, powers and functions of the Board are overseen by a General Manager, a Chairman, and Board-of-Directors.

By virtue of Section 4 of the Act, the Board-of-Directors shall comprise of no more than thirteen members, with three members representing the Guyana Rice Producers Association (RPA), two members representing Guyana Rice Millers and Exporters Development Association (GRMEDA), and one member representing consumers.

### Organizational Structure

The Structure is as follows:

1. Administration
2. Finance
3. Export & Trade Facilitation
4. Quality Control
5. Research
6. Extension
7. Internal Audit

### Administration

This department which is staffed by a General Manager, Deputy General Manager, one (1) Occupational Health and Safety Officer, one (1) Administrative Coordinator, three (3) Confidential Secretaries, two (2) Drivers, one (1) Office Assistant, and two (2) Office Attendants. It is responsible for the day-to-day activities of the Board, the hiring of new staff members, conducting training, dealing with any legal matter, staff welfare and issuing of export and producer licences.

### Finance

This department is staffed with an Accountant, two (2) Assistant Accountants, one (1) Senior and two (2) Junior Accounts Clerks, one (1) Cashier, one (1) Typist/Clerk, one (1) Data Entry Clerk, and one (1) Clerk. It is responsible for payment of paddy and/or rice grading, among other related duties.

### Export and Trade Facilitation

Headed by a Marketing Assistant, staffed by one (1) Marketing Clerk, one (1) Customs Clerk, one (1) Confidential Secretary, and one (1) Typist/Clerk, this department is solely responsible for the preparation of all relevant documentation for exporting of rice and paddy from Guyana.

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	900/1000	1,300	1,250	1,200	1,150	900/1000
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	600/1000
2004	1,400	1,350	1,350	1,350	600/1000	1,500	1,500	1,500	1,500	600/1000
2005	-	1,500	1,500	1,500	1,000	-	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	2,000	2,200-2,500	2,200-2,500	2,200-2,500	2,200-2,500	1,200
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



REGION / ZONE	HECTARE			Paddy Production Bags	Rice Equiv. M/T	Yield (Bags/Ha)	Yield (Tons/Ha)	% Harvested
	Target	Prepared	Sown					
<b>REGION 2</b>								
Essequibo	29,679	29,449	29,449	2,114,930	87,322	72.0	4.6	99.7
<b>Sub-Total</b>	<b>29,679</b>	<b>29,449.00</b>	<b>29,449.00</b>	<b>2,114,930</b>	<b>87,322</b>	<b>72.0</b>	<b>4.6</b>	<b>99.7</b>
<b>REGION 3</b>								
Wakenaam	2,430	2,041	2,040	137,019	5,657	69.6	4.4	96.5
Leguan	3,319	3,127	3,127	206,940	8,544	67.2	4.3	98.5
Hamburg	138	117	117	3,600	149	74.1	4.7	41.4
Hogg Island	115	53	53	3,650	151	73.0	4.6	95.1
West Demerara	10,921	10,424	10,424	811,612	33,510	78.7	5.0	99.0
<b>Sub-Total</b>	<b>16,924</b>	<b>15,762.30</b>	<b>15,761.10</b>	<b>1,162,821</b>	<b>48,011</b>	<b>75.2</b>	<b>4.8</b>	<b>98.1</b>
<b>REGION 4</b>								
Baiboo/Cane Grove	4,210	4,251	4,246	378,291	15,619	90.2	5.7	98.8
Golden Grove/Mahaica	1,906	1,915	1,896	156,575	6,465	85.2	5.4	96.9
<b>Sub-Total</b>	<b>6,117</b>	<b>6,166.30</b>	<b>6,141.60</b>	<b>534,866</b>	<b>22,084</b>	<b>88.7</b>	<b>5.6</b>	<b>98.2</b>
<b>REGION 5</b>								
Mahaica/Mahaicony	17,836	17,427	17,077	1,192,411	49,233	72.8	4.6	95.9
Mahaicony/Abary	12,680	12,956	12,790	880,550	36,357	73.1	4.6	94.1
West Berbice	25,803	27,672	26,971	1,736,467	71,696	69.7	4.4	92.4
<b>Sub Total</b>	<b>56,319</b>	<b>58,054.70</b>	<b>56,837.30</b>	<b>3,809,428</b>	<b>157,286</b>	<b>71.4</b>	<b>4.5</b>	<b>93.8</b>
<b>REGION 6</b>								
Frontlands	29,406	24,792	24,801	1,603,030	66,187	65.4	4.2	98.8
Black Bush Polder	15,252	14,940	14,793	997,045	41,167	67.9	4.3	99.3
<b>Sub-Total</b>	<b>44,658</b>	<b>39,731.50</b>	<b>39,594.20</b>	<b>2,600,075</b>	<b>107,353</b>	<b>66.4</b>	<b>4.2</b>	<b>99.0</b>
<b>REGION 9</b>								
Lethem	40	11	11	30	1	3.0	0.2	92.6
<b>Sub Total</b>				<b>30</b>	<b>1</b>	<b>3.0</b>	<b>0.2</b>	<b>92.6</b>

### Quality Control

It is responsible for ensuring that the quality of rice produced and/or sold by rice millers and exporters meet the requisite specification. It is headed by a Manager, whom is supported by Coordinators in all the rice-growing regions. These officers work to ensure that the rice leaving Guyana is of the prescribed and required quality as per international standards.

### Research

This component of the Guyana Rice Development Board's activity forms an integral part of its operations.

The unit is based at the Rice Research Station (RRS) Burma, where new varieties and strains are developed to enable farmers access to plants that are more conducive to providing a better quality and higher volume of grain. Research at the Station is done in Plant Breeding, Entomology, Agronomy and Plant Pathology. The research section of the Rice Research Station is headed by a Chief Scientist, who oversees the operations of the Department. He is ably supported by Research Scientists, Research Assistants, Research Technicians and Labourers.

### Extension

This department is responsible for the transfer of technology from the Research Station to the farmer. Extension Officers, based in all regions, regularly meet with farmers and serve as an advisory body to assist the farmers in the acquisition of inputs, retooling with new technology available, and/or information dissemination of pertinent data that could lead to improved and more productive husbandry practices.

Where demonstrations are needed the Extension Officers provide this service, thus, also acting as educators/facilitators/enablers to the farmers.

### Internal Audit

This department is comprised of an Internal Auditor and an Audit Clerk who audits the procedures of the Organization to ensure prescribed standards are maintained.

All departments of the Guyana Rice Development Board work together in adjunctive and collaborative endeavour, and so complement each other in order to achieve the Mission and the Vision of the Organization.



# Chairman's Statement



The rice industry has shown consistent improvement over the years and peaked in 2012 with 422,057 tonnes of rice, the highest in the history of rice cultivation in Guyana. The GRDB has played a significant role in the achievements of the rice industry.

The Research Department has introduced new high-yielding varieties which are cultivated on commercial scale throughout the rice sector, contributing to the high yields farmers are enjoying, with direct benefit in lowering the unit cost of production and increasing profitability. This has encouraged farmers to increase their acreage and put more land under cultivation: so there have been both expansive and intensive approaches to increasing rice production, expansion in acreage under cultivation, and increase in yields.

After years of research, an aromatic rice variety was successfully introduced at nursery level, with efforts being pursued to develop it to commercial scale. The aromatic rice will be branded and sold as premium rice, if successful at the commercial level.

Quality Control is an integral part of the Board's operation of the Board in an industry that is export-oriented. The Quality Control Department ensures that all rice destined for export markets meet international standards by monitoring rice mills across the industry for compliance to standards of requisite quality.

The favourable Venezuelan market can be considered one of the driving forces in the rice industry in recent years. Guyana rice enjoys a higher price in this market compared to the traditional European and CARICOM markets. The sustainability of the Venezuelan market will be a key factor for the future of the local rice industry. On the other hand, over-reliance on this market can pose a high risk to the industry.

Efforts are being pursued to grow upland rice in the Rupununi Savannahs, with the objective of developing the savannah as the new frontier for rice cultivation in Guyana. While initial results have been encouraging, much more needs to be done to achieve the desired goal.

Over the years, staff members have been sent on academic training programmes/courses at universities - both locally and overseas, ranging from diploma to PhD levels. The Board will continue to invest in human resource development in efforts to continuously improve its cadre of personnel's competencies, to discharge their responsibilities in a professional and efficient manner, and to deal effectively with the challenges of developing and sustaining a viable rice industry.

Appendix 8: Autumn Crop 2012

REGION / ZONE	HECTARE				Paddy Production		Rice Equiv. M/T	Yield		% Harvested
	Target	Prepared	Sown	Harvested	Bags	M/T		(Bags/Ha)	(Tons/Ha)	
<b>REGION 2</b>										
Essequibo	29,679	29,449	29,449	29,363	2,114,930	134,342	87,322	72.0	4.6	99.7
<b>Sub-Total</b>	<b>29,679</b>	<b>29,449.00</b>	<b>29,449.00</b>	<b>29,362.80</b>	<b>2,114,930</b>	<b>134,342</b>	<b>87,322</b>	<b>72.0</b>	<b>4.6</b>	<b>99.7</b>
<b>REGION 3</b>										
Wakenaam	2,430	2,041	2,040	1,968	137,019	8,704	5,657	69.6	4.4	96.5
Leguan	3,319	3,127	3,127	3,080	206,940	13,145	8,544	67.2	4.3	98.5
Hamburg	138	117	117	49	3,600	229	149	74.1	4.7	41.4
Hogg Island	115	53	53	50	3,650	232	151	73.0	4.6	95.1
West Demerara	10,921	10,424	10,424	10,319	811,612	51,554	33,510	78.7	5.0	99.0
<b>Sub-Total</b>	<b>16,924</b>	<b>15,762.30</b>	<b>15,761.10</b>	<b>15,466.20</b>	<b>1,162,821</b>	<b>73,863</b>	<b>48,011</b>	<b>75.2</b>	<b>4.8</b>	<b>98.1</b>
<b>REGION 4</b>										
Baiboo/Cane Grove	4,210	4,251	4,246	4,196	378,291	24,029	15,619	90.2	5.7	98.8
Golden Grove/Mahaica	1,906	1,915	1,896	1,837	156,575	9,946	6,465	85.2	5.4	96.9
<b>Sub-Total</b>	<b>6,117</b>	<b>6,166.30</b>	<b>6,141.60</b>	<b>6,033.00</b>	<b>534,866</b>	<b>33,975</b>	<b>22,084</b>	<b>88.7</b>	<b>5.6</b>	<b>98.2</b>
<b>REGION 5</b>										
Mahaica/Mahaicony	17,836	17,427	17,077	16,373	1,192,411	75,743	49,233	72.8	4.6	95.9
Mahaicony/Abary	12,680	12,956	12,790	12,042	880,550	55,933	36,357	73.1	4.6	94.1
West Berbice	25,803	27,672	26,971	24,914	1,736,467	110,302	71,696	69.7	4.4	92.4
<b>Sub Total</b>	<b>56,319</b>	<b>58,054.70</b>	<b>56,837.30</b>	<b>53,328.70</b>	<b>3,809,428</b>	<b>241,978</b>	<b>157,286</b>	<b>71.4</b>	<b>4.5</b>	<b>93.8</b>
<b>REGION 6</b>										
Frontlands	29,406	24,792	24,801	24,498	1,603,030	101,826	66,187	65.4	4.2	98.8
Black Bush Polder	15,252	14,940	14,793	14,686	997,045	63,333	41,167	67.9	4.3	99.3
<b>Sub-Total</b>	<b>44,658</b>	<b>39,731.50</b>	<b>39,594.20</b>	<b>39,184.40</b>	<b>2,600,075</b>	<b>165,159</b>	<b>107,353</b>	<b>66.4</b>	<b>4.2</b>	<b>99.0</b>
<b>REGION 9</b>										
Lethem	40	11	11	10	30	2	1	3.0	0.2	92.6
<b>Sub Total</b>										
<b>Sub Total</b>		<b>11</b>		<b>10</b>	<b>30</b>	<b>2</b>	<b>1</b>	<b>3.0</b>	<b>0.2</b>	<b>92.6</b>



REGION / ZONE	HECTARE						Paddy Production			Rice Equiv.		Yield (Tons/Ha)	Yield (Bags/Ha)	% Harvested
	Target	Prepared	Sown	Harvested	Bags	M/T	M/T	M/T	M/T					
<b>REGION 2</b>														
Essequibo	14,980	14,699.60	14,699.60	14,613.40	989,364	62,845	40,849	67.7	4.3	99.4				
<b>Sub-Total</b>	<b>14,980</b>	<b>14,699.60</b>	<b>14,699.60</b>	<b>14,613.40</b>	<b>989,364</b>	<b>62,845</b>	<b>40,849</b>	<b>67.7</b>	<b>4.3</b>	<b>99.4</b>				
<b>REGION 3</b>														
Wakenaam	1,215	1,061.50	1,060.30	998.00	65,789	4,179	2,716	65.9	4.2	94.1				
Leguan	1,700	1,596.60	1,596.60	1,551.60	91,968	5,842	3,797	59.3	3.8	97.2				
Hamburg	69	68.80	68.80	0.00	0	0	0	0.0	0.0	0.0				
Hogg Island	34	0.00	0.00	0.00	0	0	0	0.0	0.0	0.0				
West Demerara	5,536	5,252.20	5,252.20	5,172.00	391,476	24,867	16,163	75.7	4.8	98.5				
<b>Sub-Total</b>	<b>8,555</b>	<b>7,979.10</b>	<b>7,977.90</b>	<b>7,721.60</b>	<b>549,233</b>	<b>34,888</b>	<b>22,677</b>	<b>71.1</b>	<b>4.5</b>	<b>96.8</b>				
<b>REGION 4</b>														
Baiboo/Cane Grove	2,024	2,146.00	2,146.00	2,096.00	186,372	11,839	7,695	88.9	5.6	97.7				
Golden Grove/Mahaica	935	957.50	957.50	899.00	75,480	4,795	3,116	84.0	5.3	93.9				
<b>Sub-Total</b>	<b>2,960</b>	<b>3,103.50</b>	<b>3,103.50</b>	<b>2,995.00</b>	<b>261,852</b>	<b>16,633</b>	<b>10,811</b>	<b>87.4</b>	<b>5.6</b>	<b>96.5</b>				
<b>REGION 5</b>														
Mahaica/Mahaicony	8,930	8,925.10	8,925.10	8,267.20	571,760	36,319	23,607	69.2	4.4	92.6				
Mahaicony/Abary	6,202	6,882.60	6,800.80	6,052.60	433,550	27,539	17,901	71.6	4.6	89.0				
West Berbice	12,241	15,125.50	14,798.80	12,743.30	895,429	56,878	36,971	70.3	4.5	86.1				
<b>Sub Total</b>	<b>27,373</b>	<b>30,933.20</b>	<b>30,524.70</b>	<b>27,063.10</b>	<b>1,900,739</b>	<b>120,737</b>	<b>78,479</b>	<b>70.2</b>	<b>4.5</b>	<b>88.7</b>				
<b>REGION 6</b>														
Frontlands	14,777	14,636.00	14,629.10	14,497.20	923,846	58,684	38,144	63.7	4.0	99.1				
Black Bush Polder	7,627	7,639.60	7,625.10	7,518.20	499,533	31,731	20,625	66.4	4.2	98.6				
<b>Sub-Total</b>	<b>22,404</b>	<b>22,275.60</b>	<b>22,254.20</b>	<b>22,015.40</b>	<b>1,423,379</b>	<b>90,414</b>	<b>58,769</b>	<b>64.7</b>	<b>4.1</b>	<b>98.9</b>				
<b>REGION 9</b>														
Lethem	20.00	0.80	0.80	-	-	-	-	0.0	0.0	0.0				
<b>Sub Total</b>	<b>20.00</b>	<b>0.80</b>	<b>0.80</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>				
<b>Total</b>	<b>76,292</b>	<b>78,991.80</b>	<b>78,560.70</b>	<b>74,408.50</b>	<b>5,124,567</b>	<b>325,517</b>	<b>211,586</b>	<b>68.9</b>	<b>4.4</b>	<b>94.7</b>				

# General Manager's Statement



2012 can be considered a successful year for the rice industry, where rice production was recorded at 422,057 tonnes - by far the largest ever production in our history, compared with 2011, which was 402,000 tonnes. Export was 334,140 tonnes - the second largest ever (2010 was the largest amount of 336,313 tonnes), and valued at US\$196,226,960 - the highest export earnings in the history of the industry. The success of the rice industry can be attributed to the following:

1. The resilience of the rice farmers and other stakeholders.
2. The Government's provision of improved drainage and irrigation services.
3. The Research and Technology Programme of GRDB.
4. The very favourable marketing conditions negotiated with Venezuela.

This remarkable resilience in the face of unfavourable weather conditions, including floods, which exemplified the dedication and commitment of the farmers in enhancing and fostering the development of the industry cannot be overemphasized. Despite the generally successful year, in the first crop some farmers, mainly from Mahaica and Mahaicony, suffered losses of approximately 4,000 ha due to flooding.

Increased government investment in excavators, pumps and other equipment has resulted in less acreage being lost due to flooding, as well as ensured water availability even during some very dry periods.

A significant achievement of note is that Guyana's first aromatic line of rice was successfully cultivated in a large plot with the cooperation of a farmer. This will be tested across the country during the 2013 first crop. GRDB is now experiencing the benefits of the efforts it has made in training its junior staff to the post-graduate level. This programme continues so that the Rice Research Station can have qualified and competent staff in all areas of research. The GRDB Research Station is also mandated to produce basic seed for the propagation of the rice crop; this also is a mechanism for the dissemination of the technology developed. The main objective of the Seed Production Department is to produce adequate seed of high quality for farmers in all the rice-growing regions. A total of 15,011 bags of seed paddy from the 11 released varieties were produced and sold to farmers in 2013.

The strong and proactive Extension Programme of GRDB is ensuring and enabling the dissemination of the technology developed at the research station. The officers of the department also play an expanded role in the lives of farmers by developing their capabilities and capacities in the areas of problem-solving, management and decision-making. The department was also engaged in the process of facilitating, brokering information and advocacy as it seeks to expand its services to diversify and improve farmers'



livelihoods. It accomplished these tasks through interventions in the areas of technology transfer, seed production and marketing, data collection and specialised and or supporting activities.

Over the last three years Venezuela has been the major export market for Guyana's paddy and rice, accounting for approximately 60% of total export. While this is a very good trade for us, our traditional markets in Europe and CARICOM remain very significant as we continue to export considerable quantities to these markets. Jamaica and Trinidad are the major importers of Guyana rice and paddy in the CARICOM region.

During the year we have experienced a very favourable financial position; our revenue was 560M against expenditure of 493M. The two highest costs for GRDB in 2012 were employment costs, which amounted to 61% of total expenses, followed by material and supplies totaling 10%.

The Quality Control Department continues its work in ensuring that all rice produced for export are of international specified standards by monitoring the rice mills across the country and training rice millers on Rice and Paddy Grading and Quality Management. While success has been evident in the quality of exported rice and paddy, a general decline in the local sales quality has been quite noticeable. To rectify this, the department has prepared a programme for 2013 for collaborative efforts with the small mills in ensuring that rice produced for local consumption should be in accordance with the National standards.

**Appendix 6: Average Export Rice Prices 2003-2012**

REGION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>EUROPEAN UNION</b>											
CARGO PB BKN	-	-	100	110	110	110	-	-	-	-	-
PARB. BKN	100	100	100	110	110	110	295	207	207	200	305
REJ. PB RICE	110	-	-	-	-	158	-	-	-	-	-
CARGO RICE	215	206	218	240	260	262	600	409	434	510	567
CARGO BKN	130	100	118	-	142	148	265	250	265	306	385
WHITE RICE	-	-	-	-	-	320	530	447	486	485	-
WHITE BKN	155	143	143	160	160	168	425	241	246	342	332
C.P.B RICE	235	240	240	244	306	261	480	440	446	-	-
PARB. RICE	-	-	-	-	-	400	-	550	650	764	-
<b>CARICOM</b>											
CARGO RICE	-	-	217	364	260	283	623	443	407	536	558
CARGO BKN	120	100	-	105	110	-	295	210	267	395	379
WHITE RICE	270	260	275	275	295	347	688	532	513	693	667
WHITE PKG. RICE	-	-	-	352	390	594	763	512	611	713	730
WHITE BKN	-	140	140	180	175	178	426	316	369	392	363
C.P.B RICE	234	240	240	290	310	285	945	608	655	710	668
C.P.B. BKN	100	100	100	104	120	110	190	295	267	255	-
PARB RICE	392	370	390	399	400	425	824	716	624	785	773
PARB PKG. RICE	-	-	-	468	475	638	851	756	689	807	822
PARB BKN	138	100	130	162	165	164	354	253	267	352	418
REJ. PB RICE	110	110	153	170	178	195	-	294	326	316	383
BRAN	50	45	40	62	63	45	118	96	120	105	97
PET RICE	-	-	-	-	-	190	-	250	339	384	445
<b>OCT</b>											
CARGO RICE	207	206	218	242	260	260	557	375	375	-	-
CARGO BKN	116	100	118	121	110	145	355	187	185	-	-
WHITE RICE	331	-	245	245	300	-	-	-	524	605	621
WHITE BKN	145	140	143	150	160	161	-	-	-	-	-
C.P.B RICE	240	-	-	-	-	-	-	185	-	-	-
C.P.B BKN	-	-	100	104	-	-	-	-	-	-	-
<b>OTHERS</b>											
CARGO BKN	-	-	127	-	110	-	-	-	-	-	-
WHITE RICE	-	260	245	273	295	308	703	510	700	750	800
WHITE BKN	-	155	150	174	160	166	435	276	246	-	463
PARB. RICE	-	-	-	-	-	373	-	590	590	-	-
PADDY	-	-	131	-	-	-	-	348	420	470	520
PET RICE	-	-	40	-	-	194	600	-	-	-	-
CHIPS	-	-	-	-	-	190	-	-	-	-	565
CARGO RICE	-	-	226	233	265	280	510	400	-	-	-
PARB PKG RICE	-	-	-	-	-	462	-	681	670	-	-
PARB RICE FLOUR	-	-	-	-	-	353	-	-	-	-	-
DIS. WHT RICE	-	-	-	-	-	230	-	-	-	-	-
WHT RICE FLOUR	-	-	-	-	-	353	-	-	-	-	-
C.P.B. RICE	-	-	220	-	-	-	480	-	-	-	-
WHT PGK RICE	-	-	-	-	-	-	-	502	-	-	-
STOCKFEED	-	-	-	-	-	-	-	320	-	-	-
BRAN	-	-	-	-	-	-	-	100	65	-	100



Appendix 5: Export According to Destination 2012

Country	Quantity (MT)	Export Percentage
<b>European Union</b>		
Belgium	9,313	
French Guiana	24	
Guadeloupe	1,571	
Germany		
Holland	11,161	
Martinique	1,140	
Portugal	7,851	
Poland	1,009	
United kingdom	8,620	
<b>Sub-Total</b>	<b>40,688</b>	<b>12.18</b>
<b>Caricom</b>		
Antigua	1,043	
Barbados	2,113	
Dominica	1,092	
Grenada	1,995	
Jamaica	37,125	
St. Kitts	188	
St. Lucia	612	
St. Vincent	2,493	
Suriname	1,751	
Trinidad	20,937	
<b>Sub-Total</b>	<b>69,349</b>	<b>20.75</b>
<b>OCT</b>		
Curacao	19	
Turks & Caicos	4	
<b>Sub-Total</b>	<b>23</b>	
<b>OTHERS</b>		
Gambia	25	
Haiti	468	
Panama	28	
USA	1,836	
Venezuela	221,724	66.36
<b>Sub-Total</b>	<b>224,081</b>	<b>67.06</b>
<b>TOTAL</b>	<b>334,141</b>	<b>100.00</b>

ADMINISTRATIVE DEPARTMENT

For the period of January 1 to December 31, 2012, the following persons were appointed to the Board of Directors:-

Table 1: Board of Directors

Name	Designation
Mr. Nigel Dharamlall (January – May 2012)	Chairman
Mr. Badrie Persaud (July – December 2012)	Chairman
Mr. Dharamkumar Seeraj, MP	Vice-Chairman
Dr. Peter deGroot	Member
Dr. Dindyal Permaul	Member
Mr. John Tracy	Member
Mr. Leekha Rambrich	Member
Mrs. Prema Ramanha-Roopnarine	Member
Ms. Shirley Edwards	Member
Mr. Bobby Gossai (January – May2012)	Member
Mr. Ramsahai Ramnarain	Member
Mr. Jagnarine Singh	Ex-Officio Member
Mr. Madanlall Ramraj	Secretary

There were nine (9) statutory meetings of the Board of Directors.

List of the Research and Extension Sub-Committee Members is as follows:-

Table 2: Research and Extension Sub-Committee Members

Name	Designation
Mr. Dharamkumar Seeraj, MP (January – May, 2012) ( July – December 2012)	Chairman Member
Dr. Dindyal Permaul (July – December 2012)	Chairman
Mr. Ramsahai Ramnarain	Member
Mr. Leekha Rambrich	Member
Mr. Jagnarine Singh	Member
Mr. Madanlall Ramraj	Member
Dr. Mahendra Persaud	Member
Mr. Kuldip Ragnauth	Secretary

There were nine (9) meetings of the Research and Extension Committee.

List of Finance and Administration Sub-Committee Members is as follows:-

**Table 3: Finance and Administration Sub-Committee Members**

Name	Designation
Mr. Badrie Persaud	Chairman
Ms. Shirley Edwards	Member
Mrs. Prema Ramanha-Roopnarine	Member
Mr. John Tracey	Member
Mr. Jagnarine Singh	Member
Mr. Madanlall Ramraj	Member
Mr. Noel Sookhai	Member
Mr. Peter Ramcharran	Secretary

There were four (4) meetings of the Finance and Administration Sub-Committee.

List of Marketing and Quality Control Sub-Committee:-

**Table 4: Marketing and Quality Control Members**

Name	Designation
Mr. Jagnarine Singh	Chairman
Mrs. Gloria Chester	Member
Mr. Ramsahai Ramnarain	Member
Ms. Allsion Peters	Secretary

There were three (3) meetings of the Marketing and Quality Control Department.

#### **Staff Complement**

One hundred and ninety four (194) employees comprised the staffing strength of the Guyana Rice Development Board. Supervision is provided by the respective department heads.

#### **Staff Appointments**

Appointments were made to fill the vacancies at the following locations:-

#### **Head Office:**

Finance Department	Devika Singh Cashier
Administrative Department	Ravina Singh Clerk
	Kemal Govinda Office Assistant

**Appendix 4: Export According to Products 2012**

PRODUCT	QUANTITY (MT)	% OF TOTAL EXPORTS
BRAN	3,540	1.05%
C.P.B PK	17	0.00%
C.P.B RICE	123	0.04%
CARGO BKN	6,701	2.00%
CARGO RICE	20,691	6.20%
DAM RICE	715	0.21%
DISCOLOURED BROKEN RICE	26	0.00%
DISCOLOURED RICE	298	0.08%
PADDY	153,631	45.98%
PARB BKN	3,080	0.93%
PARB RICE	18,712	5.60%
PET FOODS	25	0.00%
PET RICE	431	0.13%
PKG DAM RICE	6	0.00%
PKG PB BKN	3	0.00%
PKG PB RIC	7,173	2.15%
PKG PET RICE	40	0.02%
PKG REJ PB RICE	24	0.00%
PKG W BKN	3	0.00%
PKG W.RICE	980	0.30%
REJ PB RIC	807	0.25%
SEED PADDY	128	0.04%
WHT BKN	24,096	7.22%
WHT RICE	92,892	27.80%
<b>TOTAL</b>	<b>334,141</b>	<b>100%</b>



Appendix 3: Comparison to Yearly Product 2001-2012

Month	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	18,188	17,237	8,709	22,641	10,426	7,361	24,026	11,578	9,635	36,137	18,413	25,620
February	6,683	13,271	8,416	13,295	15,582	10,427	11,518	5,694	21,200	18,790	11,076	12,161
March	9,798	13,401	11,444	16,911	11,487	9,254	32,189	5,274	14,333	15,204	9,416	11,847
April	24,135	20,738	13,382	20,931	16,189	17,127	22,644	21,421	13,732	20,651	15,931	21,363
May	16,655	13,160	13,032	32,666	17,911	20,751	28,674	25,008	34,632	35,328	67,188	32,468
June	25,091	18,172	25,426	28,314	18,261	14,746	26,868	21,361	30,746	31,125	45,922	40,216
July	21,698	15,593	20,674	20,229	13,086	20,706	16,204	19,334	22,757	35,299	17,039	30,162
August	11,012	15,378	20,277	13,102	10,149	16,708	18,573	9,091	20,742	19,691	5,988	22,398
September	10,585	11,775	9,716	20,656	13,052	21,851	15,861	20,264	15,955	17,925	6,200	23,158
October	26,905	24,541	26,160	17,973	22,566	18,509	25,386	20,551	24,476	33,127	24,081	46,121
November	19,489	18,736	21,748	21,752	20,629	26,265	25,168	24,527	30,955	40,796	56,497	35,569
December	18,803	11,413	21,448	14,622	12,837	20,872	22,325	12,130	21,653	32,240	27,631	33,058
<b>Total</b>	<b>209,042</b>	<b>193,415</b>	<b>200,432</b>	<b>243,092</b>	<b>182,175</b>	<b>204,577</b>	<b>269,436</b>	<b>196,233</b>	<b>260,815</b>	<b>336,313</b>	<b>305,382</b>	<b>334,141</b>

Crane Sub-Office  
Quality Control Department

Dwayne Campbell  
Grading Officer

Nivrita Ramlakhan  
Typist/Clerk

Burma Rice Research Station  
Accounts Department

Gangadai Dindayal  
Accounts Clerk

Sandil Kissoon  
Accounts Clerk

Corriverton Sub-Office  
Extension Department

Marcel Harvey  
Extension Officer

Deonauth Harrinarine  
Extension Officer

Kellyann Carmichael  
Field Officer

Four (4) Public Service Ministry Scholars were seconded by the Ministry of Agriculture to GRDB:-

Miranda Welch  
Wanella LaRose  
Dashasrat Narain  
Beesham Vishnu Bharat

We welcome these new staff members and wish them a long and productive stay at the Guyana Rice Development Board.

#### **Registration, Termination and Retirement**

There were seven (7) resignation, six (6) terminations for the period January 1, 2012 to December 31, 2012

#### **Occupational Health and Safety**

The Guyana Rice Development Board continues to focus on the health, safety and welfare of its staff, external clients and their communities.

The Rural Enterprise and Agricultural Development Project (READ) once again sought the skills of the Occupational Health and Safety Department to execute the Life Skills Component of the project, with the main object being to improve the living conditions of the poor rural farming communities through life



skills education. This project been implemented in Regions 2, 3, 4, 5, 6 and 10. With the areas of focus being:

- Alcohol abuse
- Gender Issues
- Community Mobilization
- Domestic Violence
- HIV/AIDS Education

Focusing on the welfare of our staff, external clients and their communities is of particular importance if we are to have a safe, healthy and sound rice industry, especially in light of the clear nexus between substance abuse, domestic abuse, gender roles and relations, HIV/AIDS, cultural and religious doctrines and practices and other social issues.

A laudable goal with respect to workers' safety, health and welfare at work sites has been attained, with the Board not having any major reportable, recorded accident or hazardous condition. A hearty thanks to all.

#### Sponsorship and Training of Employees

**Table 5: Employees Sponsored and Trained**

Name	Remarks
1. Ms. Marsha Hohenkirk	Nominated for training with the CARICOM Regional Organization for Standards and Quality in collaboration with the Trinidad & Tobago Bureau of Standards and PTB under the auspices of the UKAid/ CDB-CART Fund project
2. Mr. Trevonne Wright	
3. Mr. Jairam Harridat	Sponsored to pursue Diploma in Agriculture at GSA
4. Ms.L. Manohar	Sponsored to pursue BSc in Agriculture at UG
5. Mr. Kuldip Ragnauth	Attended the 3 <sup>rd</sup> annual meeting of The Global Forum for Rural Advisory Services (GFRAS) in the Philippines, hosted by the Asia-Pacific Islands Rural Advisory Services (APIRAS)
6. Mr. Bissessar Persaud	MSc. Agricultural Extension at Punjab Agricultural University, India.
7. Ms. Danata McGowan	Training programme "Hybrid Rice for Senior Officials of Developing Countries" in China.

#### Legal Issues

Matters involving farmers, millers/exporters and buyers were dealt with internally, and through the Board's legal advisers, Cameron and Shepherd.

#### Medical Scheme

Employees contributed to this scheme, which is underwritten by Hand-in-Hand Mutual Insurances Ltd.

#### Union Recognition

There are two (2) unions recognized by the Board, namely:-

#### Appendix 2: Rice Statistics 1968-2012

Year	Hectare Harvested	Paddy Production	Rice Equiv Tonnes	Quantity Exported (MT)	Value G\$ & US\$
1968	126,702	221,869	139,643	93,367	\$27,632.00
1969	113,081	173,392	112,644	62,243	\$19,147.00
1970	119,182	222,469	144,605	59,347	\$18,047.00
1971	94,551	187,535	121,989	67,515	\$21,334.00
1972	79,462	147,130	95,639	69,949	\$25,251.00
1973	92,821	152,360	99,034	47,814	\$25,005.00
1974	105,741	255,886	165,657	50,827	\$49,025.00
1975	108,486	297,099	172,259	82,035	\$84,937.00
1976	84,027	172,904	103,754	70,681	\$73,594.00
1977	130,528	358,290	214,972	65,855	\$66,812.00
1978	114,846	308,207	184,985	104,761	\$95,983.00
1979	90,227	240,556	144,328	84,080	\$80,814.00
1980	95,991	281,846	169,107	81,008	\$87,491.00
1981	89,053	276,006	165,604	78,010	\$110,009.00
1982	95,280	302,671	181,603	35,676	\$60,767.00
1983	75,807	246,064	147,639	41,715	\$64,933.00
1984	92,987	299,628	179,785	47,498	\$80,945.00
1985	77,777	260,207	156,124	29,339	\$56,594.00
1986	83,977	293,073	171,044	38,634	\$57,234.00
1987	75,146	243,398	145,879	68,987	\$157,128.00
1988	74,223	226,862	132,281	55,926	\$139,165.00
1989	68,544	237,183	142,310	40,575	\$367,427.00
1990	51,368	155,740	93,444	50,943	\$513,220.00
1991	76,209	251,321	150,783	54,047	US\$17,202,635.00
1992	77,327	286,000	171,000	115,102	US\$35,000,135.00
1993	98,061	336,207	201,702	124,089	US\$33,045,227.00
1994	97,660	378,432	233,111	182,585	US\$55,547,061.00
1995	132,344	525,500	315,301	200,336	US\$76,397,522.00
1996	135,436	543,437	332,542	262,265	US\$93,716,748.21
1997	142,782	568,186	340,911	285,051	US\$84,224,971.47
1998	129,469	522,907	339,890	249,755	US\$73,259,786.73
1999	147,071	562,260	365,469	251,519	US\$71,035,677.51
2000	115,872	448,740	291,967	207,638	US\$51,790,072.00
2001	124,565	495,862	322,310	209,042	US\$50,061,834.00
2002	107,902	443,654	288,375	193,416	US\$45,463,590.45
2003	127,662	546,183	355,019	200,432	US\$45,273,049.61
2004	115,742	500,911	325,592	243,093	US\$55,066,513.74
2005	106,645	420,365	273,237	182,175	US\$46,172,149.45
2006	102,934	472,363	307,036	204,577	US\$ 54,622,559.62
2007	105,865	458,653	298,125	269,436	US \$ 75,251,464.99
2008	119,792	507,036	329,574	196,233	US \$ 118,032,802.90
2009	124,820	553,522	359,789	260,815	US \$ 114,120,323.83
2010	131,412	556,193	361,525	336,313	US \$154622744
2011	140,674	619,198	402,479	305,382	US\$ 173,239,721
2012	143,386	649,320	422,058	334,140	US \$196,226,960



## Region 6

NAME OF MILLER	ADDRESS	MILL NO.
Krishndat Persaud	No.57 Village, Corentyne,	15
Nand Persaud and Company Ltd	No. 36 Village, Corentyne,	240
Outram Ramprashad & Sons Rice Milling Complex	Johanna, Black Bush Polder	220
T & R Karran	Don Robin Village, Corentyne	33 A
Thakurdial Tulshi	No. 49 Village, Corentyne	16C
Ramcoomar Ramdeo(Hemraj Rice Mill)	Bush Lot Village, Berbice	17
Rayaadul Hakh Rice Milling Industry	Lesbeholden, Black Bush Polder	Buying Center
Mohamed Sultan Ali Rice Milling Complex	Letter Kenny Village, Berbice	23
Bhogwattie Bhola	No. 47 Village, Corentyne	15C
Ahamad Ali Rice Mill	Whim Village, Corentyne	21
Lalla Persaud Juggerdeo	No. 0 Village, Corentyne	15A
Omanarian Persaud	No. 68 Village, Corentyne	4
Mahendra Singh	No. 68 Village, Corentyne	10B
Harnarine Lakhram	No. 69 Village, Corentyne	10A
Afzal Haniff	No. 63 Village, Corentyne	62
Jaiswah Boadnarine	No. 62 Village, Corentyne	12A
P & T Tulshi	No.47 Village, Corentyne	16
P & T Tulshi	No. 47 Village, Corentyne	12/012/01
Chiranjulall Rice Mill	No. 71 Village, Corentyne	9A
Rambrich Enterprises (Leekah Rambrich)	Bengal Farm, Corentyne	Buying Center
Khemharshan Babulal	No. 45 Village, Corentyne	258

- General Workers' Union (GWU), which represents staff at the Head Office and the four regional offices.
- Union of Agriculture and Allied Workers (UAAW), which represents staff at the Burma Rice Research Station.

During the year, Management met with the two (2) unions to discuss matters of concern to employees. Discussions were held on staff welfare, sports, etc.

Female members of staff, drivers, laboratory assistants, office assistants and office attendants were provided with uniforms.

### FINANCE DEPARTMENT

#### *a) Details of Revenue Earned*

Revenue earned for the period is G\$4.5M below the budget. There is a 15% increase in Sales Commission for 2012 when compared to 2011 and a 9% decrease in Seed Paddy Sales for 2012 when compared to 2011.

**Table 6: Revenue Earned for the year 2009-2012**

(G\$000)

	ACTUALS			2012	
	2009	2010	2011	ACTUAL	BUDGET
Sale Commissions	268,185	440,837	381,376	441,235	435,520
Seed Paddy Sales	92,843	68,859	105,320	95,968	110,000
Income from Investment	152	2,069	2,386	1,249	800
Licences - Mill	6,250	6,855	6,345	5,345	6,000
- Export	4,650	4,100	3,830	4,250	3,500
Grading & Inspection	239	289	139	99	200
Wharfage & Moorage	9	-	-	-	-
Gain on Exchange	118	376	854	3,502	800
Miscellaneous	19,464	7,769	2,224	3,602	3,000
Cleaning of Seed Paddy	-	96	100	190	-
By Products	1,347	1,373	997	864	1,000
ASSP	34,105	47,646	500	-	-
<b>TOTAL</b>	<b>427,362</b>	<b>580,269</b>	<b>504,071</b>	<b>556,304</b>	<b>560,820</b>

#### *b) Current Expenditure*

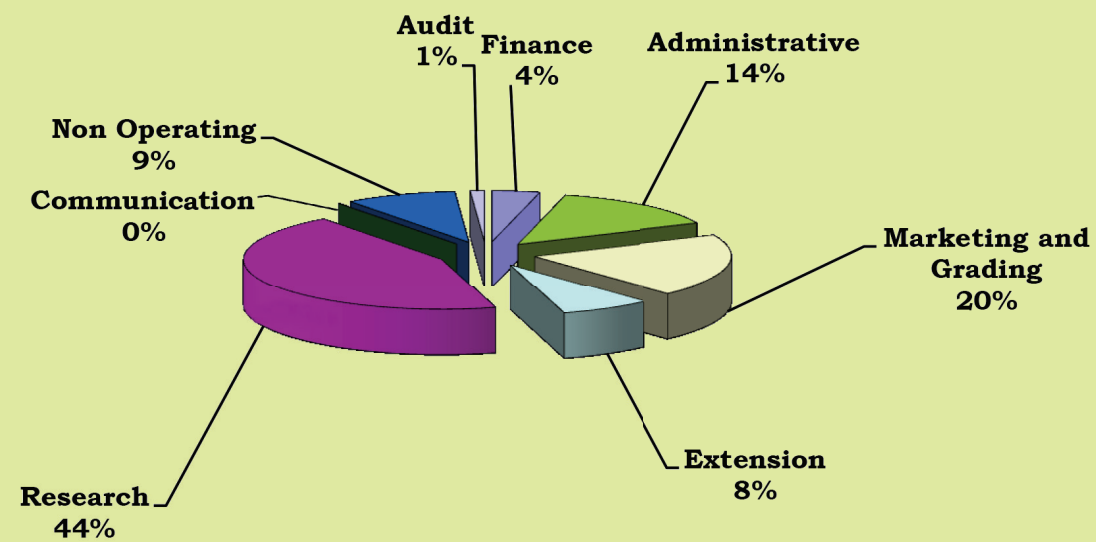
Current Expenditure for the year 2012 was \$11.2M of 2.3% below the budget of \$504.8M. The Board controlled its expenditure to keep within its approved budgetary limits.

c) Divisional Expenditure

Table 7: Divisional Expenditure for the year 2012

DIVISION	G\$'000	%
Finance	19,063,906	4
Administrative	70,933,919	14
Marketing and Grading	98,353,240	20
Extension	36,848,071	7
Research	218,097,955	44
Communication	-	-
Non Operating	44,627,873	9
Audit	5,626,959	1
<b>TOTAL</b>	<b>493,551,923</b>	<b>100</b>

**Divisional Expenditure**



**Region 4 & 5**

NAME OF MILLER	ADDRESS	MILL NO.
Saj Rice Group Inc	Burma, Mahaicony ,E.C.D .	68
Sukhlal Rice Industry (Deonarine Sukhlal)	De Hoop, Mahaica, E.C.D.	244
Deonarine Sukhlal (Buying Center)	Doorn Park Cottage, W.C.B.	Buying Center
Rayaadul Hakh Rice Industry	Strangroen, Mahaicony, E.C.D.	39
Balram & Kheman Ractoo (B & K Ractoo Rice Milling Company)	De Kendren, Mahaicony, E.C.D.	92
Kissoon Dyal & Son	Chelsea Park, Mahaica, E.C.D.	213
Sham Persaud (Satya Enterprises)	Felicity, Mahaicony, E.C.D.	72
Guyana Stockfeed Inc.	Farm, E. B.D.	256
Technomills Guyana Inc.	76 Block DD Eccles Industrial Estate, E.B.D.	10/009/01
Guya .P. Ramotar	De Kendren, Mahaicony, E.C.D.	75
Fairfield Rice Inv.	Fairfield, Mahaicony, E.C.D.	74
A.C. Hakh & Sons	Cane Grove, Mahaica, E.C.D.	58



**Appendix 1: Licensed Mills 2012**

**Region 2**

NAME OF MILLER	ADDRESS	MILL NO.
Caricom Rice Mills Ltd.	Anna Regina, Essequibo Coast	203
Land of Plenty Inv.	Land of Plenty, Essequibo Coast	122
Imam Bacchus and Sons	Affiance, Essequibo Coast	120
Indar Singh	Airy Hall, Essequibo Coast	11/003/06
Vincent Persaud	Bounty Hall, Essequibo	11/003/07
Mohamed Ramzanalli Khan	Fairfield, Essequibo Coast	251
Deonarine Rice Milling Services	Evergreen, Essequibo Coast	11/003/05
Francis Garaban & Son	47 Walton Hall, Essequibo	248
Kayman Sankar & Co. Ltd.	Hampton Court, Essequibo	110
La Resource Rice Industry	La Resource, Essequibo Coast	257
Golden Fleece Rice Inv.	Golden Fleece, Essequibo Coast	114
Ramlakhan & Sons	Ex-Mouth, Essequibo	240
Wazir Hussein	Dry Shore, Essequibo	11/005/11
Naraindra Biragie	Paradise, Essequibo Coast	249

**Region 3**

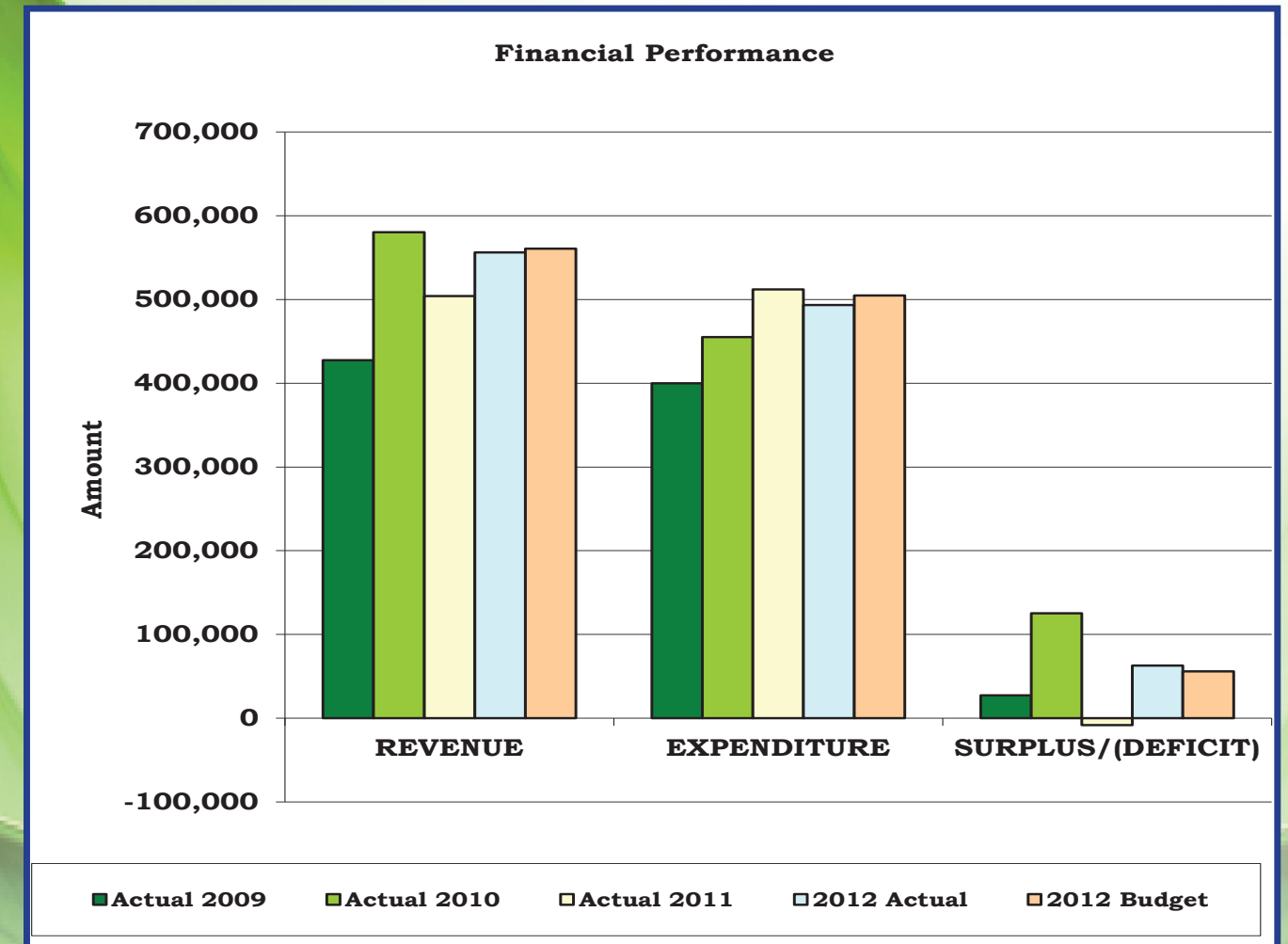
NAME OF MILLER	ADDRESS	MILL NO.
Elizabeth Nandall	29 Hague Front, W.C.D.	152
Abdool Hakh & Sons	Harlem, W. C.D.	100
Ojha Rice Milling Complex	1&2 Blenheim, Leguan	192
Goed Fortuin Rice Mill (Jeetlall Ramraj)	Goed Fortuin W.C.D.	11/003/01
Two2 Brothers Corp.	Vergenoegen, E.B. E.	11/003/02
Leguan Rice Milling Inc ( Ramrattie & Yovindra Ojha)	Blenheim, Leguan	192A
Bhagwandin Madho Rice Factory	Rumzeight, W.C.D.	144
L & P Doobay & Son Rice Milling	Doorn Haag, Leguan	191
M&H Rice Milling (Mohan & Hansraj Persaud)	Greenwich Park, E.B.E	11/004/09
Chand's Rice Milling Enterprise (I.D. Chand)	La Bagatelle, Leguan	172
Vergenoegen Co-op Society	Vergenoegen, E.B.E.	169
Bhagwandeem Tularam & Sons	Lot 1 La Bagatelle, Leguan	253
Fuize Khan	Leguan, Essequibo Island	11/003/03
Rumzeight Rice Processors Inc.	Rumzeight, W.C. D.	223
Deokinandan	Louisiana, Leguan	176

a) *Financial Performance*

The Board recorded an operating surplus of G\$62.7M, an increase of \$70.8M above 2011. Also the Board exceeded its budgeted profit by \$6.6M; this surplus can be attributed to a decrease in expenditure for the period.

**Table 8: Financial Performance** (G' \$000)

PARTICULARS	ACTUAL			2012	
	2009	2010	2011	Actual	Budget
Revenue	427,362	580,269	504,071	556,304	560,820
Expenditure	399,995	454,978	512,215	493,551	504,765
Surplus/(deficit)	27,367	125,291	-8,144	62,753	56,055



## EXPORT & TRADE FACILITATION

The increased quantity of rice exported in 2012, when compared with 2011 represents an increase of 9.42% and is the second highest rice export in the history of the industry. The major markets for Guyana's rice continued to be Venezuela, EU and CARICOM Regions, with the quantity of rice exported to Venezuela increasing by 30% from 170,180mt in 2011 to 221,724mt in 2012, while that of EU and CARICOM suffered a decline of 27%: 55,523 Mt in 2011 to 40,688 Mt in 2012 and 13%: 79,645mt in 2011 to 69,349mt in 2012 respectively.

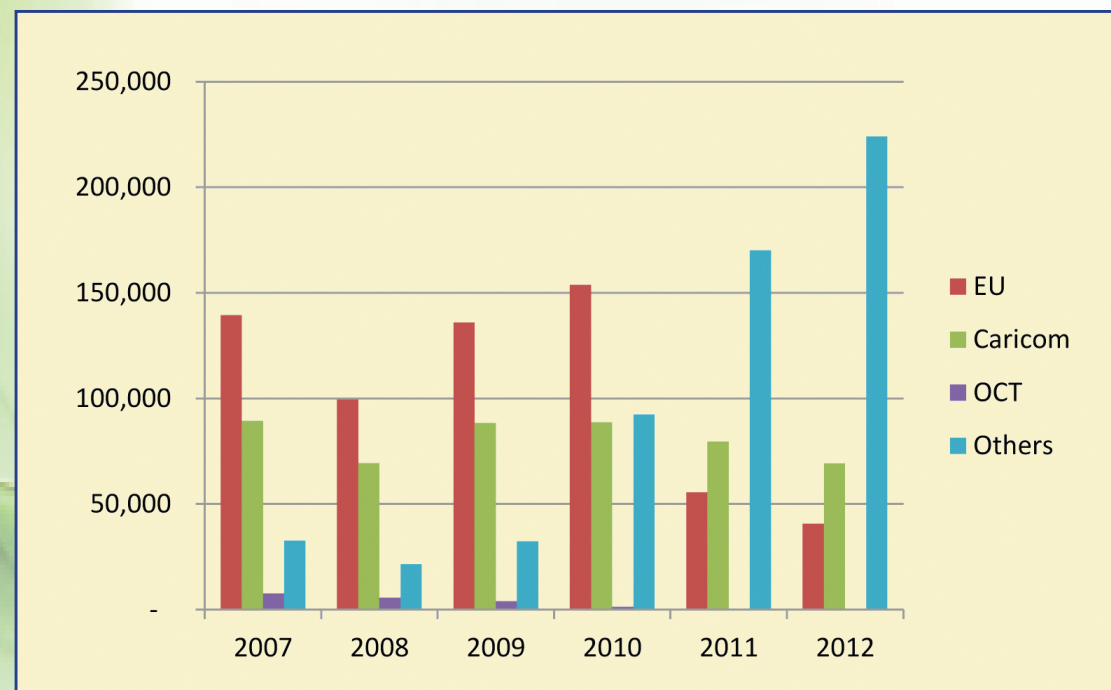
The increased quantity of rice shipped to Venezuela can be attributed to the high price being offered in that market, while decrease in quantity to the EU and CARICOM market can be attributed to the low prices being offered in the world market.

In 2012 rice exports value totaled US\$196,226,960 compared to US\$173,239,722 in 2011. This represents an increase of 13.27% of overall value of rice exported in 2012, as compared to 2011. The two tables below and the graph give a comparative analysis of the exports from 2007 to 2012.

**Table 9: Some comparative export data: Quantity exported (tonnes)**

Destination	2007	2008	2009	2010	2011	2012
EU	139,411	99,500	135,990	153,837	55,523	40,688
CARICOM	89,429	69,450	88,485	88,709	79,645	69,349
OCT	7,789	5,715	3,988	1,330	35	23
Others	32,811	21,568	32,351	92,437	170,180	224,081

**Graph1: Illustrating the data presented in Table 9**



Research Technician

Jomine Sharpe  
Dip. Agriculture (GSA)

Farm Operation  
Seed Production Co-ordinator

Jaddonauth Persaud  
Dip. Agriculture (GSA)

Research Technicians

Davendra Mohabir

Salim Alli

Hemant Benimadho

### Study Leave

Viviane Baharally

Third Year Student (Sam Higginbottom Institute of Agriculture, Technology & Science, Allanabad, India)

Bissessar Persaud

MSc. Agricultural Extension (Punjab Agricultural University, India)

Shemeka Reece

Third Year Student (University of Guyana)

Lalita Manahor

First Year Student (University of Guyana)

Jasmine Thompson

Final Year Student (Guyana School of Agriculture)

Jairam Harridat

First Year (Guyana School of Agriculture)



Pathology Pathologist/HoD	Rajendra Persaud M. Sc Plant Pathology (India) B. Sc Agriculture (UG) Dip. Agriculture (GSA)
Research Assistant	Monica Gouveia-Sookdeo  BSc. Biology (UG) Dip. Education Science (UG)
Research Technicians	Jenarine Hardat Cert. Agriculture (GSA)  Dindyal Jadgeo
Entomology Research Assistants	Narita Singh B. Sc. Biology (UG)  Danata McGowan Deg. Agriculture (UG) Dip. Agriculture (GSA)
Agronomy Agronomist/HoD	Ghansham Payman M. Sc. Agronomy (India) B. Sc. Agriculture (UG)
Research Assistants	Miranda Henry B. Sc. Agriculture (UG) Dip. Agriculture (GSA)  Munindra Seeraj BSc. Chemistry (UG)  Miranda Welch Deg. Agronomy (Pinar del Rio, Cuba)
Technical Assistant	Wilfred Mc Inroy  Latoya Jack Dip. Agriculture (GSA)

Table 10: Some more important comparative export data

Selected Countries	2007	2008	2009	2010	2011	2012
Belgium	2,624	1,868	11,424	23,434	13,184	9,313
Holland	69,130	56,296	45,958	41,161	10,360	11,161
Portugal	59,161	33,165	54,678	65,851	20,547	7,851
United kingdom	2,393	218	5,118	10,357	7,495	8,620
Jamaica	51,565	42,199	55,934	48,754	48,971	37,125
Trinidad	28,456	19,186	22,866	29,865	22,209	20,937
Venezuela			4,104	85,755	170,179	221,724
Haiti	20,790	13,703	24,881	5,766		468
Others	35,322	29,598	35,851	25,369	12,437	16,943
<b>TOTAL</b>	<b>269,441</b>	<b>196,233</b>	<b>260,814</b>	<b>336,313</b>	<b>305,382</b>	<b>334,141</b>

## QUALITY CONTROL DEPARTMENT

The department continues to uphold the integrity of its certification to the Guyana Standard GYS 170 during the reporting period. Several surveillance audits were conducted by the Guyana National Bureau of Standards (GNBS).

The Accreditation of the Board through this department is moving apace, with the final audit for accreditation being earmarked for the first half of 2013. This process has been dragging out for years. We hope that we could finally complete this process in 2013.

The increased export to Venezuela has contributed to greater participation in the certification of paddy and rice by staff of the department.

Surveillance activity during the purchasing of paddy at mills has again been conducted by staff members countrywide. Most members of staff involved in this activity are temporary. However, there are plans to incorporate the temporary staff members engaged in this activity into the department on a permanent basis.

2013 will see strengthening of certification of rice sold locally. Rice will have to be properly packaged and labeled to meet the requirements of a food product.

### a) Mill Licensing

- a. Licensing of mills commenced in all rice-production regions from the 3<sup>rd</sup> January, 2012. Sixty-three (63) mills were licensed during the period January to December 2012.

The mills together accounted for a total of 222.25 mt of hourly mill production.

A reduction of 57.99 mt, (20.7%) reduction over 2012's capacity, was mainly due to the absence of Mahaicony Rice Limited (MRL) from production.

The table below highlights the range and type of facilities in operation over the period.

**Table 11: Breakdown of the milling capacity of licensed mills as per Region**

Regions	2	3	4&5	6	Total
No. of Licenced Mills	14	15	13	21	63
Milling Capacity (mt/h)	54.75	36.5	93.0	38.0	222.25 mt/h

**Table 12: Shows an analysis of the type of mills operating countrywide.**

Mill Type	Number in Operation
Buying Centers	3
Toll Mills	22
Milling Capacity Below 5 mt	41
Milling Capacity 5mt and above	17

## Rice Research Station

Administrator/Extension Co-ordinator Satyanand Narain  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)  
Cert. Rice Research Techniques (Japan)

Plant Breeding  
Plant Breeder/Chief Scientist Dr. Mahendra Persaud  
PhD & M.Sc. (AG) Plant Breeding & Genetics (India)  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)

Research Assistants  
Shanna Crawford  
B. Sc Agriculture (UG)  
Dip. Agriculture (GSA)

Tyrone English  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)

Violet Henry  
BSc. Agriculture (UG)

Research Technicians  
Elijah B. Adams  
Cert. Agriculture (GSA)

Fazal Khan  
Cert. Rice Plant Breeding Training Programme  
(CIAT Palimar, Colombia)

Naitram Persaud

Shevon Sharpe

Jamal Europe  
Dip. Agriculture (GSA)

Sheneza Massiah  
Dip. Agriculture (GSA)

Jairam Persaud  
Cert. Agriculture (GSA)



**Region 3**

District Rice Extension Officers

Deodram Garbarran  
Dip. Agriculture (GSA)**Region 4 & 5**

District Rice Extension Officers

Satish Sookram  
Dip. Agriculture (GSA)Quacie Wilson  
Dip. Agriculture (GSA)Rishal Ramsarran  
Dip. Agriculture (GSA)Delon McKenzie  
Cert. Agriculture (GSA)Amarnauth Mangal  
Dip. Agriculture (GSA)**Region 6**

District Rice Extension Officers

Phillip Jainarine  
Cert. Agriculture (GSA)Marcel Harvey  
Cert. Agriculture (GSA)

Field Officers

P. Ramcharitar  
Cert. Introduction to Social Work (UG)

Kellyann Carmicheal

**Region 9**

Research Assistant

Beesham Bharat  
BSc. Agronomy (Pinar del Rio, Cuba)

Mechanic

Olivia Simon  
Cert. Agri. Mechanic (GTI)

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

a) Staff/Offices

- a. (GRDB) offices are located in all rice-growing regions viz: Region 2,3,4,5 and 6.
- b. Staffing complement is as follows.

**Table 13: Quality Control Staff**

Regions	Research Assistant	Regional Superintendent	Regional Supervisors	Grading Officers	Technical Assistants
2	-	1	-	4	-
3	-	1	-	4	-
4	1	-	1	6	3
5	-	-	2	2	2
6	-	1	-	3	1
<b>Total</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>19</b>	<b>6</b>

- c. This year the department received two (2) additional supervisory staff trained in Cuba.
- d. The department continued to operate with minimum staff capacity, although the work load increased. The staff complement will be addressed in the New Year.
- e. Eleven (11) monthly meetings were held during the reporting year. Meetings were mainly held on the last Saturday of each month.

b) Traininga. *Stakeholder Training*

- i. Farmers and Millers were trained during the Farmers Field School Sessions on Guidelines to follow when selling /purchasing paddy at mills.
- ii. The annual training in Rice and Paddy Grading and Quality Management was conducted between August 14<sup>th</sup> to September 6<sup>th</sup>, 2012.

- a. The training was conducted as stated below.

**Table 14: Training schedule - Rice and Paddy Grading and Quality Management**

Date	Region	Venue
August 14 <sup>th</sup> -16 <sup>th</sup> , 2012	2	GRDB Office Anna Regina
August 21 <sup>st</sup> - 23 <sup>rd</sup> , 2012	3	GRDB Office Crane W.C.D
August 28 <sup>th</sup> -30 <sup>th</sup> , 2012	4 & 5	Burma Rice Research Station
September 4 <sup>th</sup> - 6 <sup>th</sup> , 2012	6	GRDB Office Corentyne Berbice

b. Licenced Graders

- i. Sixty three (63) persons were trained as licenced graders during the reporting period.

**Table 15: A breakdown by Region is shown below**

Regions	Number Trained
2	21
3	8
4&5	14
6	11

c. Staff Training

Two (2) Officers from the Central Laboratory attended an overseas training in Trinidad and Tobago organized by the Caribbean Regional Organization for Standards and Quality (CROSQ).

The Research Assistant attached to the department attended a training programme in Barbados organized by CROSQ on twenty (20) milestones to Accreditation.

A CROSQ/CDB-CART funded workshop was held in Barbados, staff from the Board attended this workshop.

Staff of the department also attended several training programmes organized by the Guyana National Bureau of Standards (GNBS) during 2012 viz:

- i. Understanding the Requirements of the ISO/IEC 17025 Standards
- ii. Method Validation
- iii. Internal Auditor Training for Lab Management
- iv. Understanding the Requirements of the ISO Guide 65
- v. Root Cause Analysis
- vi. Data Analysis

Internal training was also conducted continuously in order to maintain the Quality System and Certification to the Guyana Standard GYS 170.

d) Data Collection

Two of the mandates of the department dictated by the Rice Factories Act are are:.

- i. To collect and make available to the rice industry relevant data relating to grading of paddy and rice; and
- ii. To grade and certify the grades of all paddy received into, or proposed to be delivered to, a rice factory for milling.

To help us fulfill those mandates and several others, routine data is collected and processed on a regular basis as follows.

**Region 6**

Regional Superintendent

Dashasrat Narain  
BSc. Agronomy (Matanzas, Cuba)  
Dip. Agriculture (GSA)

Grading Officers

Lubert Walcott  
Cert. Agriculture (GSA)

Arleen Munroe  
Cert. Agriculture (GSA)

Steve Lyte  
Cert. National Seed Improvement (NPRGC)  
Cert. Post Harvest & Quality Control Management (NPRGC)

Technical Assistant

Roderick Somrah

**Extension Department**

Extension Manager

Kuldip Ragnauth  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)  
Cert. Master Trainer (CMT,UWI)

**Region 2**

Regional District Extension Officer

Davendra Singh  
Dip. Agriculture (GSA)

District Rice Extension Officers

Tamesh Ramnauth  
Cert. Agriculture (GSA)

Subodh Kishore  
Cert. Agriculture (GSA)

Field Officer

Navin Persaud



Technical Assistants

Ezekiel Jacobs  
Cert. Paddy varietal Identification (GRDB)

Jamal Harris  
Cert. Rice & Paddy Grading & Quality Management (GRDB)  
Cert. Paddy Varietal Identification (GRDB)

Seon Johnson  
Cert. Rice & Paddy Grading & Quality Management (GRDB)  
Cert. Paddy Varietal Identification (GRDB)

Dianne Bagot-Birkett  
Cert. Agriculture (GSA)

Colwyn Torrington  
Dip. Agriculture (GSA)

**Region 5**

Regional Co-ordinator

Errol Joseph  
Cert. Agriculture (GSA)

Grading Officers

Beverly Joseph  
Cert. Quality Control (UNDP-FAO)

Technical Assistants

Yonette Hawker  
Accounts & Budgeting (CLC)

Atoya Felix  
Dip. Agriculture (GSA)

Abdool DaSilva

- i. Quality of paddy purchased at mills (Paddy intake by grades)
- ii. Monitoring of payment to farmers by milling facilities/ Millers
- iii. Local Sale survey of rice - price, quality and availability
- iv. Monthly meetings – Regional Superintendents and Quality Control Manager - Report
- v. Marketing and Quality Control Sub-Committee Meetings – Minutes

e) Monitoring of Paddy Intake at Mills

2012 saw a further reduction in the claims by farmers of non-payment by millers, as well as other irregularities previously reported.

Thirteen (13) persons were employed by the Board on a temporary basis to assist permanent staff in conducting this surveillance countrywide.

All temporary staff undergo a period of training prior to being employed.





## RESEARCH DEPARTMENT

Over the years, the objectives of the Rice Research Station were directed at developing high-yielding varieties (>6.5 t/ha) with tolerance to lodging, stable resistance to blast, high milling (HRR 55/TRR 70), excellent cooking qualities; evolving aromatic and salt tolerant varieties. It was the mandate of the station, also, to formulate a comprehensive package of practice as it relates to varietal release and rice cultivation in specific regions. Features of such packages include: water and weed management, seeding density, plant nutrition and other important agronomic factors. Another crucial area of research is to provide solutions to salinity, acidity, crop nutrition and plant health problems.

Moreover, screening breeding lines for tolerance/resistance to various pests and diseases and monitoring resistances is a continuous process; as is the rejuvenation of germplasm lines kept in cold storage. It is our considered duty to evaluate and guide farmers on possible use of any new pesticidal formulation that becomes available on the market. Monitoring for disease incidence and insect populations, timely advisory and training to farmers are also crucial activities undertaken by the RRS. Maintaining genetic purity of commercial varieties and production of sufficient quantity of seeds of high genetic purity is a priority for the Station. Research done at the research station is outlined in the paragraphs below.

### Plant Breeding

#### a) On-farm trials (OFT)

Two new strains viz. FG06-98 and FG07-35 have confirmed their superiority over existing varieties being grown across the country and have been released for commercial cultivation for the first crop 2012 as GRDB 11 and GRDB 12. During the first and second crop of 2012 these varieties have proved their worth in the farmer's fields, with grain yields averaging 6-7 t/ha (35 to 45 bags/care). The two recently released varieties viz: GRDB 09 and GRDB 10 continue to perform well in farmers' fields. GRDB 10 is popular for its high-yielding ability and GRDB 09 for ability to thrive well under difficult conditions and tolerance to delayed harvesting. The cultivation of these four new varieties is expanding rapidly across the country and already accounts for more than 50% of rice grown nationally. Farmers seem have more preference for GRDB 10 and 12.

#### b) Advanced yield trials (AYT)

Four (4) trials were conducted in different locations viz: Rice Research Station, Black Bush Polder, West Demerara and Essequibo over two seasons. Sixteen elite lines/strains were tested, along with two checks (GRDB 9 and GRDB 10) in a Randomized Block Design with three replications. The Superiority of strains G07-02 and FG06-123 indicate that they are ready for large-scale testing. These trials will be repeated in the first crop of 2013.

#### c) Observational yield trial (OYT)

Eighty-four (84) strains were studied, along with twelve (12) checks in first crop and ninety-six (96) strains and two (2) checks in second crop in an augmented design for yield potential and other important characters. No strain was promoted for further testing in the Advanced Yield Trials during first and second crops 2012. A study of these entries was recommended for one more season, along with newer entries during 2013.

### Grading Officers

Donett Adams  
Dip. Secretarial Science (GTI)

Uancy Chichester  
Dip. Agriculture (GSA)

Dwayne Campbell  
Dip. Agriculture (GSA)

### Region 4

#### Regional Co-operator

Charles Hope  
B. Sc. Economics (UG)  
Dip. Marketing (UG)

#### Research Assistant

Marsha Hohenkirk  
B. Sc. Agriculture (UG)

### Grading Officers

Trevonne Wright  
Cert. Agriculture (GSA)

Paul A. Harry  
Cert. Agriculture (GSA)

Michelle Blair  
Cert. Industrial & Social Studies (CLC)  
Cert. Communication & Effective Speaking (CLC)  
Cert. Internal Audit of a Laboratory Management (GNBS)



### Export & Trade Facilitation

Marketing Assistant

Gloria Chester  
BSc. Management (UG)  
Dip. Marketing (UG)

### Post Harvest Department

Post Harvest Researcher

Dhirendranath Singh  
Master of Agriculture (Yamagata University, Japan)  
BSc. Agriculture (UG)

### Quality Control Department

Quality Control Manager

Allison Peters  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)

### Region 2

Regional Superintendant

Deoram Prahalad  
Deg. Agronomy (Pinar del Rio, Cuba)  
Dip. Agriculture (GSA)

Grading Officers

Ronsard Boodhram  
Dip. Agriculture (GSA)

Kevin Joseph  
Cert. Agriculture (GSA)

Kishan Indrawattie  
Cert. Agriculture (GSA)

Sanjay Singh  
Cert. Agriculture (GSA)

### Region 3

Regional Superintendent

Colin Watson  
B. Sc. Agri. Engineering (Cuba)  
Dip. Computer Science (UG)

### d) Variability and Germplasm

During the first crop of 2012 a total of 6,784 breeding strains were studied and 4,200 selections were taken, which were evaluated in the second crop and more than 3,000 selections were taken for further assessment. Thirty-five (39) strains were bulked and promoted for initial yield-testing. Also thirty-eight crosses were made to create variability. Twenty-five hundred germplasm accessions were rejuvenated in the second season of 2012.

### e) Strain Purification

One hundred and thirty strains were purified. These are entries originating from AYT and OYT. More than 10,000 progenies of all the varieties were grown and studied during the two seasons. The genetic purity of the varieties was maintained and more than 10,000 selections were made.

### f) Maintenance breeding and seed production

More than 4,000 kg of pre-basic seed (of all the varieties) were produced over the two seasons of 2012. Sixty tonnes of basic seed was produced from nine varieties and four strains (Rustic, G98-22-4, G98-196, 98-30-3, G98-135, G 04-08, FG 05-259, FG06-98, FG07-35, IR, G07-2, GP18, G07-106, FG06-123), over the two seasons, at the Research Station. Seed generated here were supplied to Seed Production of the Research Station and to seed growers in the various regions for multiplication. Forty bags of basic seed of variety GRDB 11 were produced in Essequibo for the programme to decentralize seed production.

### Agronomy

### a) Evaluation of new varieties/breeding lines to different seed rates

Seed rate of 89.9 kg ha<sup>-1</sup> produced statistically similar grain yield when compared to 112.6 kg, 134.7 kg, 157.4 kg ha<sup>-1</sup> (100, 120 and 140 lbs/ac) for all varieties/breeding lines (G07-2, FG006-123, FG07-35 and GRDB 10). Using the lower seed rate (89.9 kg ha<sup>-1</sup>) is recommended for all new varieties. However, when fields are not prepared well and there is history of weeds and red rice, the higher rates can be used to favour competition.

### b) Evaluation of new varieties/breeding lines to different Nitrogen levels

All of the four varieties/breeding lines (G07-2, FG06-123, FG07-35 and GRDB 10) that were tested performed better with 75 kg N/ha when compared to the higher rates (100 kg, 125 kg and 150 kg N ha<sup>-1</sup>), at the Burma Rice Research Station, but at the Black Bush Polder Sub Station, 100 kg N ha<sup>-1</sup> performed better. This may be due to the fact that Black Bush Polder Sub-station soil has more sand in its composition than Burma; as such nitrogen may be limited there.

### c) Post-emergent weed control

Nomina 40 % WP and Nominee 25 % WP showed good promise for chemical weed control of Schoonord grass and other weed species.

### d) Schoonord grass demonstrations

Between the periods of Dec 7 to Jan 24, 41.0 acres of rice were sprayed with Nomina, targeting Schoonard grass at dosage of 100 g/ac at demonstration plots involving 21 locations, where 77



farmers attended. The size of demonstrations plots varied from 1.0 to 7.0 acres, where excellent control (weed kill) was obtained.

e) *Aqri-surge and Monty's Product*

Both product evaluation(s) revealed that their application at different rates and timing were non-significant when compared to 100 % NPK application.

**Plant Pathology**

a) *Studying the impact/effect of brown spot, sheath blight and sheath rot on seedling vigour of rice:*

The percentage germination ranged from 88.7 to 99.0%. Seed harvested from healthy plants recorded significantly higher germination as compared to the Brown Spot and Sheath Blight diseased seeds, but were statistically similar to Sheath Rot diseased seeds. The Vigor index at 21 and 30 DAS were 4063.7 and 5679.0 respectively. At 21 DAS, seed harvested from healthy plants showed significantly higher vigour than those of Brown Spot and Sheath Blight diseased seeds, but similar to Sheath Rot diseased seed.

A similar trend of vigour index was recorded by seed harvested from healthy plants, followed by Sheath Rot diseased seeds, then Sheath Blight diseased seeds and Brown Spot diseased seeds.

b) *Identification of fungal microorganisms in seed paddy and study of the impact on germination.*

Twelve fungi strains were detected from thirty-eight samples. *Alternaria* sp. and *Aspergillus* sp. were most prevalent.

c) *Evaluation of breeding lines/materials for blast disease (Pyricularia grisea (Cooke) Sacc.).*

Over the two seasons over 9,000 entries/lines were screened in an Upland Blast Nursery (UBN). The reactions ranged from highly resistant to highly susceptible. In general, the rustic (check) recorded scores with range 4 to 9 at all locations.

d) *Probing for disease 'hot spots' across the country and monitor the resistance of the commercial varieties to blast*

Nine sites were tested across the country for their possibility to be used as hot spots for screening of rice genotypes for disease reaction. Five locations viz. Pomona (Region 2), Ruby (Region 3), Little Biaboo (Region 5), Canjie and Crabwood Creek (Region 6) were considered as "hot spots" for disease. Monitoring of rice varieties for disease reaction in the different locations indicated that varieties G98-196, G98-22-4, G98-24-1, G98-30-3 and G98-135 showed moderate levels of resistance for blast. All other varieties were resistant.

e) *Monitored the incidence of rice diseases across the country:*

In general, the data showed clearly that the disease incidences were significantly higher in number/ percentage of acreages affected and recorded in second crop (autumn, 2012), as compared to the first crop (spring, 2012).

**Staff**

**Head Office**

**Administrative Department**

General Manager

Jagnarine Singh  
M. Sc. Marketing (U.A.R.K.)  
B. Sc. Agriculture (UG)  
Dip. Agriculture (GSA)

Deputy General Manager

Madanlall Ramraj  
MBA Business Administration (British Columbia)  
B. Sc. Business Administration and Management  
(BA Honors – Toronto)

Administrative Co-ordinator

Julia Chunoo  
Deg. Biology (UG)  
Cert. Human Resources (UG)

Occupational Health & Safety Officer

Ella. P. Issacs  
Dip. Occupational Health & Safety (UG)

**Finance Department**

Accountant

Peter Ramcharran  
ACCA Level 2  
CAT

Assistant Accountant

Errol Chester  
Dip. Accounts (UG)

Internal Auditor

Abigail Constantine  
ACCA Level 2  
CAT

Noel Sookhai  
ACCA  
CAT



## Heads of Department



Mr. Madanlall Ramraj  
Deputy General Manager



Dr. Mahendra Persaud  
Chief Scientist/Plant Breeder



Mr. Kuldip Ragnauth  
Extension Manager



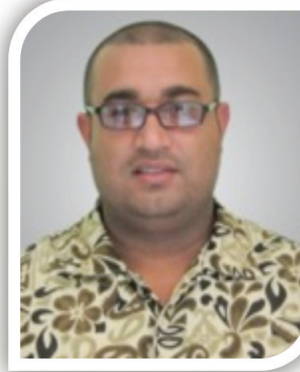
Ms. Allison Peters  
Quality Control Manager



Mr. Peter Ramcharran  
Accountant



Mr. Ghansham Payman  
Agronomist



Mr. Rajendra Persaud  
Plant Pathologist



Mr. Noel Sookhai  
Internal Auditor



Mrs. Gloria Chester  
Marketing Assistant



Ms. Narita Singh  
Research Assistant  
(ag HOD)  
Entomology Department

f) Evaluation of novel and available fungicides for the control of fungal pathogens in rice:

Treatments with Carbendazim @ 300ml and 200ml/ac.; Manzate @ 300g /ac.; Stratego @ 607ml /ac.; Super Blast @ 200ml and 100ml /ac. and Fugi-one @ 300ml /ac. (check) showed to be most promising.

g) Laboratory culture and diagnosis of rice diseases:

Blast (*Pyricularia grisea*), brown spots (*Helminthosporium spp.*), sheath blight (*Rhizoctonia solani*), sheath rot (*Sarocladium oryzae*) were predominately among the pathogens that was successfully isolated and identified from the disease samples, with a few other minor pathogens also identified.

h) Pesticide Compatibility:

Studies on the compatibility of the recommended rice pesticides indicated that most of the insecticides/fungicide 'cocktails' were highly compatible and moderately compatible.

### Entomology

Entomological activities during 2012 focused on establishing peak periods of insect activity and correlating changes in insect population, with environmental conditions through light trap and sweep net sampling across the rice-growing regions of Guyana. Trends for 2012 showed a sharp increase in paddy bug (*Oebalus poecilus*) population during the months of April – May, and a slight increase in September in both the light trap and sweep net samples at the Rice Research Station.

The department also concentrated on developing suitable control measures for the three major early season pests (leaf miner – *Hydrellia*, water weevil – *Helodytes foveolatus*, caterpillar – *Sopdoptera frugiperda*) using seed treatment insecticides, namely Flip, Cruiser 35FS, Friponil, Pronto, and Frip. All seed treatment insecticides demonstrated some level of control against the early season pests: However, these trials will be repeated to determine the correct rate of application. Seed treatment was also done using Cruiser 35FS to determine its effectiveness against *Sitophilus oryzae* and *Sitotroga cerealella* in stored seeds; Cruiser at 1.5ml /kg seeds and 1.75ml/kg seeds proved to be very effective in reducing the damage caused and reproduction rate of the storage pests.

Emphasis was also placed on the screening of foliar insecticides against the early season pests and paddy bugs (*Oebalus poecilus*). Admajor and Engeo proved to be excellent controls against leaf miner and water weevils and, along with Alphacypermethrin, these two insecticides were also very effective against paddy bugs.

### Seed Production Department

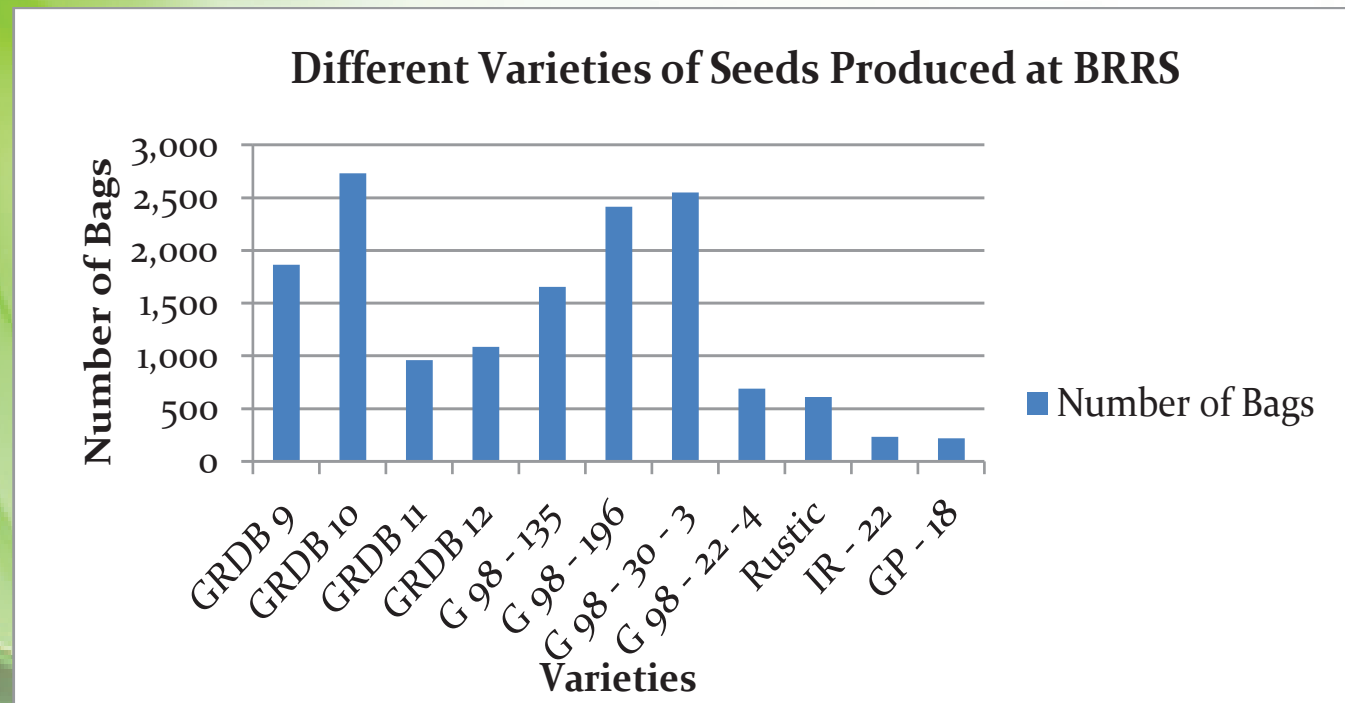
The main objective of the Seed Production Department is to produce adequate seed of high quality for farmers in all the rice-growing regions. A total of 15,011 bags of seed paddy were produced during the year (Spring Crop, 8,481 and Autumn Crop, 6,530), an equivalent of 955.2 tonnes. These seeds were of C1 and C11 quality, consisting of the commercial varieties (see table below). Approximately forty-nine percent of the varieties consist of the G98 varieties, 12.4% GRDB 9, 18.1% GRDB 10, 6.3% GRDB 11, 7.2% GRDB 12, while the remaining varieties accounted for 7.1%. Varieties F7-10, BR444 and Diwani were not cultivated for the year, 2012. An additional 180.9 tonnes (2,843.5 bags) were also harvested and sold as grains.



Table 16: Seed Production for Spring and Autumn Crop 2012

Varieties	Spring Crop, 2012		Autumn Crop, 2012		Grand Total	
	Bags	Tonnes	Bags	Tonnes	Bags	Tonnes
1 GRDB 9	1,865	118.7	0	0	1,865	118.7
2 GRDB 10	1,076	68.5	1,655	105.4	2,731	173.9
3 GRDB 11	846	53.8	113	7.2	959	61
4 GRDB 12	579	36.8	508	32.3	1,087	69.1
5 G 98 - 135	752	47.9	901	57.3	1,653	105.2
6 G 98 - 196	1,163	74.1	1,252	79.6	2,415	153.7
7 G 98 - 30 - 3	1,256	79.9	1,294	82.4	2,550	162.3
8 G 98 - 22 -4	310	19.7	378	24	688	43.7
9 Rustic	293	18.6	318	20.2	611	38.8
10 IR - 22	123	7.8	111	7.1	234	14.9
11 GP - 18	218	13.9	0	0	218	13.9
<b>Total</b>	<b>8,481</b>	<b>539.7</b>	<b>6530</b>	<b>415.5</b>	<b>15,011</b>	<b>955.2</b>

Graph below showing the different varieties of seeds produced at BRR



Grading Course Training at Crane Sub-Office by Ms. Allison Peters, Quality Control Manager



Bursary Awardees with Directors and Management



Investigations were in the areas of damages to structures, flooding and siltation of outfalls, breaches of sea defence, salinity testing, disease outbreaks and red rice infestation. Fertilizers provided by Government were distributed to farmers as a form of assistance to enable the increase of their productivity. In all these activities, extension services played a substantial role in executing and also facilitating.



President Donald Ramotar seen having a discussion with Deputy General Manager Madanlall Ramraj during a visit to GRDB Booth at the Berbice Expo



Farmers' Field School, Lesbeholden, Black Bush Polder

## EXTENSION DEPARTMENT

Extension continued to play a broader role in the lives of farmers by developing their capabilities and capacities in the areas of problem-solving, management and decision-making. The department was also engaged in the process of facilitating, brokering information and advocacy as it seeks to expand its services to diversify and improve farmers' livelihoods. It accomplished these tasks through interventions in the areas of technology transfer, seed production and marketing, data collection and special or supporting activities.

### Seed Production and Marketing

#### a) Marketing of seed produced at Burma Rice Research Station

A total of thirteen thousand, four hundred and seventy-seven (13,477) bags of seeds produced by the Burma Rice Research Station and approved for sale, were distributed to key farmers and contract-growers in the various rice-growing areas: For further multiplication, see Table 17.

**Table17: Varieties distributed according to regions**

Region	VARIETIES											Total
	Rusti c	G98 22-4	G98 30-3	G98 196	G98 135	GRD B 9	GRD B10	GRD B11	GRD B12	IR 22	GP1 8	
2	267	314	225	600	137	40	562	-	33	-	-	2,178
3	49	87	312	143	194	64	445	-	6	-	-	1,300
4&5	255	281	1,869	1,194	943	1,603	1,427	74	499	51	51	8,247
6	23	7	72	402	289	149	160	37	283	139	155	1,716
9	-	-	-	-	-	7	7	-	0	22	-	36
<b>Total</b>	<b>594</b>	<b>594</b>	<b>2,478</b>	<b>2,339</b>	<b>1,563</b>	<b>1,863</b>	<b>2,601</b>	<b>111</b>	<b>821</b>	<b>212</b>	<b>206</b>	<b>13,477</b>

#### b) Monitoring the performance of Burma Rice Research Station Seed Paddy

The division routinely makes checks on farmers' fields sown with seeds purchased from the Burma Rice Research Station, so as to ascertain performance in terms of germination and establishment during the early stages of growth. Towards this end approximately four thousand three hundred and fifty-one (4,351) acres were inspected.

#### c) Monitoring of Seed Fields at Burma Rice Research Station

Seed fields at the Research Station, are inspected, to ensure that seeds produced conforms to the required standards. Based on the findings, the necessary corrective actions are taken to bring the fields in conformity with the desired quality. For the spring and autumn crops, a total of six hundred and seventy-five (675) acres were examined at various growth stages of the crop.

#### d) Monitoring/Certification of farmers' seed production

Seeds originating from the research station and multiplied in farmers' fields are routinely inspected so as to ensure that the intended class is produced at that level. Approximately six thousand, seven hundred and thirteen (6,713) acres were examined in the process.



## Technology Application

### a) Developing Competency of extension staff

In keeping up-to-date with emerging issues, extension officers are, on a regular basis, exposed to the relevant training that enhances the delivery of service to farmers. In-service programmes participated in by officers during the year included:-

- a. Seed Certification
- b. Field Experimentation
- c. Concepts of Technical Writing
- d. Understanding the Role of Extension
- e. Role of Agricultural Cooperatives
- f. Disaster and Risk Management
- g. Climate change and Agriculture
- h. Facilitating Community Life Competence and Alcohol Abuse
- i. Peer counseling skills
- j. Chronic illness and gender violence

### b) Technology Transfer

Building capacity in farmers continued to receive intense focus during the year. Focus groups in the form of Farmers' Field Schools continued to be the main facilitating strategy for implementation of such programmes. This approach has been recognized as an important strategy for improving the decision-making capacity of farming communities and stimulating local innovation for sustainable agriculture.

A total of one thousand, three hundred and seventy-seven (1,377) farmers participated in the (FFS) sessions: See Table 18

**Table 18: Number of schools and farmers**

Region #	# of Schools	# of participants
2	8	218
3	12	387
4	4	173
5	16	377
6	11	222
<b>Total</b>	<b>51</b>	<b>1,377</b>

Field Days in the form of exchange visits attracted farmers from all regions. The participants were presented with the opportunity to observe innovative technologies, conducted jointly between farmers and the Board. Additionally, the occasion provided the opportunity for farmers from the various regions to interact with each other, and share their knowledge and experiences. A total of seven hundred and seventy three (773) farmers participated in the six (6) field days that were held.

As part of the balanced nutrition programme aimed at improving farmers' yields, a total of five hundred and forty-six (546) soil samples were collected from farmers' fields and subsequently analyzed by Agroservices International, with the relevant recommendations forwarded to the farmers.

The on-farm programme (AYT trials and promising lines) in farmers' fields continued with the involvement of the research and extension departments and collaborating farmers.

Other activities which complemented the field programmes included: end of season reviews (8), infomercials (6), radio programmes (8). Also approximately one thousand four hundred (1,280) brochures covering various aspects of rice production were produced and distributed to farmers.

### Data Collection

Data collected includes those on crop production, namely; harvesting, sowing, pest and disease levels, drainage and irrigation status, fertilizer usage and costs and prices for paddy.

The department prepared and submitted, 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 comprising all farmers and their respective acreages sown was completed during the year.

### Special Activities

These are unplanned activities that the division is called upon to perform periodically. They are of a complementary and supports regular extension activities, See Table 19

**Table 19: Showing supporting activities**

Activity	Host	Regions	# of Days
Mill Monitoring	GRDB	All Regions	144
Exhibitions	MOA,GRDB,MMA/ADA,RDC	Region 2,4,5,6	8
Exchange Visits	GRDB	All Regions	6
Minister's Visit/Other Senior Officials	MOA, GRDB, RPA	All Regions	41
Investigation	GRDB, RPA	All Regions	19
Farmers' Meeting/GRDB Outreach	MMA, RDC, RPA, GRDB, NDIA & NDC	All Regions	69
Seminar /Workshop	MOA, GRDB	All Regions	17
Flood Survey	GRDB,RPA	All Regions	80
Salinity Survey	RPA, GRDB & MOA	All Regions	40
Pesticide Training	Pesticide Board	Regions 4&5	4
Fertilizer distribution	GRDB,RPA	Region 5	120

Exhibitions included Essequibo Nite, Mahaicony Day, MMA and GRDB Open Day and Berbice EXPO.

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 GRDB also participated in other meetings held mainly with: NDCs, RDCs, NDIA and WUAs to plan and monitor (D&I) work programmes, among others.