MINISTRY OF AGRICULTURE 2008

ANNUAL REPORT

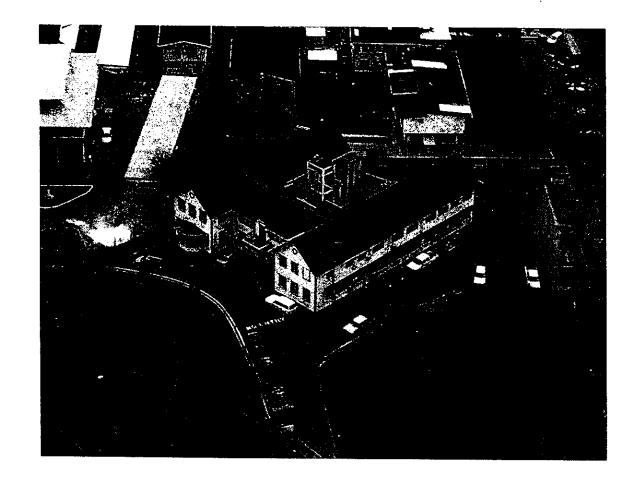


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LIST OF ACRONYMS AND MEANINGS

Acronym	Meaning
ACP	African, Caribbean and Pacific
ΑI	Artificial Insemination
APCU	Agriculture Project Cycle Unit
ASSP	Agricultural Sector Support Programme
ASDU	Agriculture Sector Development Unit
BRRS	Burma Rice Research Station
CACHE	Caribbean Council of Higher Education in Agriculture
CDB	Caribbean Development Bank
CFP	Community Forestry Programme
CIMH	Caribbean Institute for Meteorology and Hydrology
CMO	Caribbean Meteorological Organisation
COTED	Council for Trade and Economic Development
D&I	Drainage and Irrigation
EDF	European Developmant Fund
EPA	Environmental Protection Agency
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FTAA	Free Trade Area of the Americas
GBTI	Guyana Bank for Trade and Industry Limited
GDDP	Guyana Dairy Development Programme
GDF	Guyana Defence Force
GDP	Gross Domestic Product
GNBS	Guyana National Bureau of Standards
GFC	Guyana Forestry Commission
GoG	Government of Guyana
Go Invest	Guyana Office for Investment
GRDB	Guyana Rice Development Board
GSA	Guyana School of Agriculture
GUYSUCO	Guyana Sugar Corporation Inc.
ICAO	International Civil Aviation Organization
ICAR	Indian Council for Agricultural Research
IDB	Inter-American Development Bank
IICA	Inter-American Institute for Cooperation on Agriculture
IPED	Institute of Private Enterprise Development
IPPC	International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures

MINISTRY OF AGRICULTURE ANNUAL REPORT | 2008

ITTO International Tropical Timber Organization

Lesser Used Species LUS

LEAP Linden Economic Advancement Programme

MACC Mainstreaming Adaptation to climate Change in the Caribbean MMA/ADA Mahaica Mahaicony Abary/ Agricultural Development Authority

Ministry of Agriculture MOA

National Agricultural Research Institute NARI National Dairy Development Programme **NDDP** National Drainage and Irrigation Authority **NDIA** New Guyana Marketing Corporation **NGMC**

NOAU National Ozone Action Unit

NRDDB North Rupununi District Development Board

Project Execution Unit PEU **PGR** Plant Genetic Resource

PSMP Public Sector Management Programme

PRCSSP Poor Rural Community Support Services Project

PSC Project Steering Committee

PYRG President's Youth Award Programme

RPA Rice Producers Association

RSPFS Regional Special Programme for Food Security

RSC Regional Steering Committees SIDS Small Island Developing States

SRDA Strategic Research and Development Agenda

TED Turtle Excluder Device

United Nations Framework Convention on Climate Change **UNFCCC**

UNDP United Nations Development Programme

USAID/GEO United States Agency for International Development/ Guyana Economic

Opportunities

United States Department of Agriculture **USDA**

VAT Value Added Tax

WMO World Meteorological Organisation

World Trade Organisation WTO www World Weather Watch

MISSION STATEMENT

"To ensure the formulation and implementation of policies and programmes which facilitate the development of agriculture and fisheries in Guyana, thereby contributing to the enhancement of rural life; the sustained improvement of incomes of producers and other participants in the agricultural production and marketing chain; and the maintenance of a sound physical and institutional environment for present and future productive activities."

EXECUTIVE SUMMARY

The Ministry of Agriculture continues to play an important role in the economy even amid the challenges that it faces such as adverse weather patterns and erosion of preferential arrangements.

The Ministry continued to execute its mandate through initiatives such as the "Grow more" campaign, the acceleration of its diversification thrust with the creation of a Project Executing Unit, the Agriculture Sector Development Unit.

The Ministry through its various programmes, agencies and departments has stuck to the task of providing agricultural products at an affordable cost to the local consumer and for the export market.

In the execution of its mandate NARI operated several locations in 2008. These were the Headquarters, Mon Repos, Livestock Farm, Mon Repos, Intermediate Savannahs Unit, Ebini, Horticultural Station, Timehri, Crop Station, Kairuni and plant nurseries at Charity, Fort Bartica, Benab, Wellington, Hosororo, Mon Repos, Pouderoyen and St. Ignatius.

A trial was conducted to assess the response of pineapple to application of organic fertilizer. The results showed that there was significant difference in fruit weight for plants treated with cow manure and compost when compared to those treated with bionature L8-2-10.

Texel, a new breed of sheep in Guyana was introduced into the Savannahs and 48 breeding rams were provided for sale to farmers.

The Postharvest and Agro processing Department assisted IICA in designing and establishing a solar dryer for processing cassava products in the Tapakuma community.

The Livestock Department trained farmers and students of secondary and tertiary programmes in various aspects of livestock production and husbandry practices.

Extension work of the NDDP took precedence in the first half of 2008, due to the increase in demand on the local market for fresh milk, triggered by the increase in food prices on the world market.

dairy Emphasis was placed production, clean milk production and agriculture business and marketing. since more than 95% of our fresh milk production is from small to medium sized farms. which are operated manually.

Regarding Artificial Insemination, Two thousand, two hundred and seventy-four (2,274) requests were received and two thousand, two hundred and seven (2,207) services were rendered.

One hundred and ninety-two acres of pasture were established, and six (6) acres of pasture rehabilitated for the reporting period.

One hundred and nineteen (119) activities were conducted in the form of group discussions, method and result demonstrations. seminars. school talks/lectures and exhibitions.

The Guyana School of Agriculture established a new branch at Anna Regina, Essequibo with Twenty eight (28) students, of whom, sixteen (16) were enrolled in the Diploma in Agriculture and twelve (12) in the Certificate in Forestry Programme.

The School continued to offer thirty-six (36) courses in both the Diploma and Certificate in Agriculture, thirty-four (34) courses in Animal Health and Veterinary Public Health and eighteen (18) courses in Forestry.

A new Fisheries Studies Programme was implemented with significant help from a number of institutions including; NARI, the National Aquaculture Association, the Ministries of Education, Georgetown and Health. and Fisherman's Association.

A total of twenty-five (25) calves were produced on the Livestock Farm for 2008, thus surpassing the total number of calves born in 2007 which was twenty one (21) and seventeen (17) in 2006.

The farm produced Four Hundred and Fifty Six (456) piglets from 38 litters at an average litter size of 12 piglets per litter. An average of 10.9 piglets per litter was born alive.

During 2008, one hundred and eighty two permanent perennial seedlings were established. There are five hundred and twenty-seven perennials on the whole museum. This constitutes thirty (30) different families.

The Climatology Section of the Hydrometeorological Department, in collaboration with the Maintenance/Telecommunication Section serviced the existing Automatic Weather Stations and installed three new Automatic Weather Stations (AWS).

Guyana hosted the 48th Session of the Caribbean Meteorological Council Meeting and the Caribbean English Officers Network Speaking Ozone Meeting

The construction of the Radar Tower at Hyde Park, Timehri commenced on November 8, 2007 and is schedule to last for 12 months with a

Contract Completion Date set for February 2009.

The mandate of Crops and Livestock Department is to offer agricultural extension services to animal and other crops (crops excluding sugar and rice), tailored to meet the requirements of local and International markets.

The Department successfully hosted the Fifth Caribbean BeeKeepers Congress. The Grow More Food Campaign grew in momentum. providing more small

farmers and homeowners with an opportunity to participate. The Ministry continued to distribute seeds, planting materials, agro-chemicals and other agricultural inputs to assist interested individuals with their farms.

Our efforts to control and eradicate major quarantine and trade important pests and diseases continued during the year under review.

The extension staff, continued to experience challenges with transportation, finances. housing, furnishing for both offices and houses, and staff shortages.

The National Drainage and Irrigation Authority functions as the Nation's apex organization dealing with all public matters pertaining to management, improvement, extension and provision of drainage, irrigation and flood control infrastructure and services in declared areas of the country.

Fifty five (55)capital projects were approved for 2008, of which 41 have been completed while the remaining 14 are at various stages of completion.

Phase 1 of the earthworks rehabilitation in 4 Water Users Areas of Regions 3, 4 and 6 under the ASSP, has also been undertaken in 2008.

Engineers also dealt with local D&I infrastructure problems in Regions 2,3,4,5,6 and 10. The unique feature of the civil works was that most of these works were designed and construction supervised by the engineers of the Authority. This resulted in timeliness, cost saving and better quality control.

The major objective of the Pesticides Board is to introduce a national pesticide and toxic chemical control scheme and the required regulations for that scheme, with consideration for the current and future ability of the country to operate the scheme with respect to the legal framework and the degree of support that the Government of Guyana is able to provide.

The pesticide laboratory was commissioned on February 8, 2008. During the first quarter all the equipment was received and installed, including the Gas Chromatograph / Mass Spectrometer. Gas lines, fire alarm system, water pressure system and glass doors along with a vibration-free table.

The 2008 training programme was successfully completed with 612 farmers from Regions 2, 3, 4, 5, 6 and 10 trained on safe use, handling and storage of pesticides; Extension Officers, Custom Officers and other GRA officials trained in understanding the importance of pesticides and the part they play in their management; internal staff members trained on the GYS 223 (ISO / IEC 17925) standard that deals with technical and management requirements of testing and calibration laboratories and the laboratory staff given basic training on the equipment in the laboratory.

The Board launched its website and information database during the year and continued to participate in national exhibitions as part of its public awareness programme

Mahaicony The Mahaica Abary/ Agricultural Development Authority (MMA/ADA) is a statutory agency, governed by the MMA Act No.27 of 1977.

By virtue of the Act, the MMA is responsible for the development of all agricultural lands lying in the area between the Mahaica and Berbice rivers. same area that makes administrative Region No 5.

The Authority assumed responsibility for agricultural drainage and irrigation between the Mahaica/Mahaicony rivers in 2008. This was previously carried out by the Regional Democratic Council, Region No. 5 Mahaica/Berbice.

Water stored in the conservancy was used to irrigate forty-two thousand (42,000) acres of rice lands; fourteen thousand five hundred and twenty-eight (14,528) acres of sugar cane and serviced twenty-six thousand (26,000) acres of cattle pasture.

One hundred and thirty-six (136) miles of drains and canals were rehabilitated. and over one thousand (1,000) miles of access roads were harrowed, graded and shaped for farmers to gain access to their fields.

The Fisheries sector is made up of three primary components: Marine Fishery, Aquaculture and Inland Fishery.

Mr. Nigel Dharamlall, former CEO of CARIFESTA X, was appointed Chief Fisheries Officer (CFO) in November 2008. Mr. Dharamlall now provides leadership with a renewed vision for the development of the fisheries sector.

Some sixty four persons including fishermen and inland fish farmers, were trained in various aspects of aquaculture. during the year.

A total of 20,000 fingerlings of Red Tilapia were produced since the commissioning of the Tilapia Hatchery in August 2008.

The GFC is responsible for advising the subject Minister on issues relating to forest policy, forestry laws regulations. The Commission is also responsible for the administration and management of all State Forest land.

2008 was an important year for Guyana's forest sector as Guyana pioneered a study which assessed the true value that our forests provide locally and globally. This study which was one component of His Excellency The President's Climate Change Initiatives, was then presented internationally to lobby for the creation of incentives for avoided deforestation.

Guyana was also one of the first fourteen (14) countries to be formally approved as a participant in the World Bank's Forest Carbon Partnership Facility (FCPF), looking at ways to

Reduce Emissions from Deforestation and Forest Degradation (REDD).

The Forest Product Development and Marketing Council (FPDMC) was established in late 2008 and this body will play a critical role in 2009 in assisting exporters to maintain current markets and gain access to newer niche markets.

A national consultation to address Policy Approaches for Amerindian Community Forestry Enterprises, was held in September 2008 with representation from over sixty (60) indigenous communities across the Administrative regions of Guyana. The main objective was to inform forestry sector workers about Government's policies for the Sector and to obtain feedback from them on implementation issues.

The ASDU is organized to provide core services specialist and to implementation of Programs which are funded by lending institutions. As such, it is structured to operate on a cost-share basis for the implementation programs under its purview.

At the end of the year, the department added three Projects to its portfolio of projects for implementation and two pipeline interventions for preparation. These were the ADP, READ and Bioenergy Program, and the initiatives supported by TradeCom (EU) and the Guerro Trust Fund (UNDP), respectively.

2008 can be considered as one of the better years for the rice sector in the last decade. During this year we saw the highest prices being paid for rice and thus in some cases the stakeholders were once again making some profits. This year was also celebrated as Guyana's 100th year as a significant exporter of rice. This notable achievement coincided with the fact that the value of rice exports for the same year has been the highest (US\$ 118,032,802,90) Guyana's history.

An International Rice Conference was held on the 7th and 8th November, 2008 at the International Conference Centre. The conference drew presenters from a number of agriculture institutions and Universities across the world.

During the year a total of fifty one (51) Farmer Field schools were established and one thousand and thirty eight (1,038) farmers participated in the training sessions.

The Ministry of Agriculture, recognizing the importance of addressing Climate Change in Guyana, created a National Climate Unit within the Ministry. The Unit was established on the 1st April, 2007, as the National Focal Point for Climate Change for Guyana.

the sustainable development of the nation's fishery resources, for the benefit of the participants in the sector and the national economy.

The Hydro Meteorological Services Unit is responsible for observing, archiving and understanding Guyana's weather climate and providing and hydrological, meteorological, and oceanographic services in support of Guyana's national needs and international obligations.

In 2007 the Government of Guyana, in collaboration with the IDB, pursued the creation of the Agriculture Sector Development Unit (ASDU) in order to better manage and coordinate external donor funds for all projects within the Agriculture Sector.

ORGANISATION AND MANAGEMENT

The Ministry's Mission is addressed through four programme areas: Ministry Administration, Crops and Livestock Support Services, Fisheries Department, Hydro Meteorological Services and a Project Executing Unit, the Agriculture Sector Development Unit.

Ministry Administration is responsible for effectively and efficiently managing and coordinating human, financial, physical and material resources necessary for the successful implementation and administration of the Ministry's programmes and operations.

Crops and Livestock Support Services Programme is responsible for promoting development and supporting agriculture in Guyana, through the provision of a range of technical and regulatory services to the sector.

The Fisheries Department is responsible for managing, regulating and promoting The ASDU is organized to provide core specialist services and to the implementation of Programs which are funded by lending institutions. As such, it is structured to operate on a cost-share for the implementation programs under its purview.

Projects currently being administered by the ASDU include the following:

- Agricultural The Export Diversification Program (ADP)
- Agricultural Support Services Program (ASSP) which was subject to restructuring.
- The Rural Enterprise Agricultural Development Program (READ)
- The Conservancy Adaptation Program (CAP)
- Expanding The Bioenergy Opportunities in Guyana Project

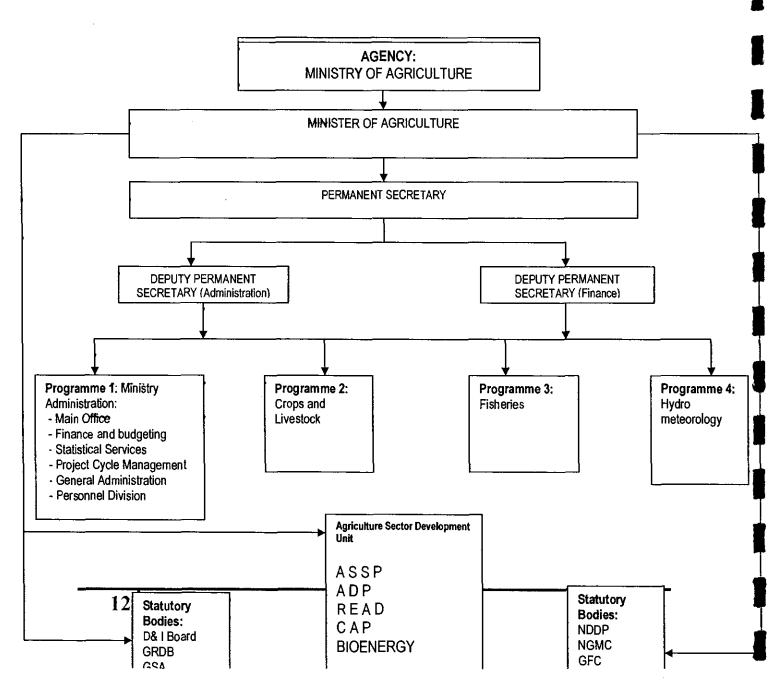
Semi-autonomous agencies and Departments which fall under the Ministry of Agriculture are:

- The Guyana Sugar Corporation, the Guyana Rice Development Board:
- Guyana The Forestry Commission;
- The New Guyana Marketing Corporation;
- The National Agricultural Research Institute: the

- Mahaica/Mahaicony Abary Agricultural Development Authority;
- The National Drainage Irrigation Authority;
- Pesticides The and Toxic Chemicals Control Board: and
- The Crops and Livestock Department.

The Organisational Structure of the Ministry is more clearly depicted in the Organogram which follows.

ORGANISATIONAL CHART



FINANCIAL OVERVIEW

Sectors/ Programmes	2008 BUDGET EXPENDITURES ('000)								
	Approval			·······		Expenditure	% Expenditure Utilised		
	Total	Capital	Recur	Total	Capital	Recur	Total	Capital	Recur
NDIA	1,693,803	980,000	713,803	1,967,535	975,984	991,551	116.2%	99.6%	138.9%
Hydromet	475,362	336,000	139,362	220,321	99,353	120,968	46.3%	29.6%	86.8%
NARI	323,404	38,500	284,904	345,662	38,500	307,162	106.9%	100.0%	107.8%
GSA	213,854	15,000	198,854	236,023	15,000	221,023	110.4%	100.0%	111.1%
Crops & Livestock	863,607	25,000	838,607	1,457,899	23,056	1,434,843	168.8%	92.2%	171.1%
Fisheries/ aquacuture	86,996	15,000	71,996	68,413	13,361	55,052	78.6%	89.1%	76.5%
NDDP	6,900	6,900	-	6,900	6,900	-	100.0%	100.0%	
NGMC	61,962	14,000	47,962	679,825	14,000	665,825	1097.2%	100.0%	1388.2%
Project Evaluation Equipment	3,000	3,000	-	2,991	2,991	-	99.7%	99.7%	
General Administration	908,461	7,000	901,461	1,169,407	7,000	1,162,407	128.7%	100.0%	128.9%
MMA	365,436	140,000	225,436	436,434	140,000	296,434	119.4%	100.0%	131.5%
PRCSSP	3,700	3,700	-	3,700	3,700	-	100.0%	100.0%	
National Climate Change Unit	1,800	1,800	_	1,798	1,798	-	99.9%	99.9%	
Rice Competitive Programme	33,014	33,014	_	5,968	5,968	-	18.1%	18.1%	

TOTAL	5,368,299	1,945,914	3,422,385	6,759,042	1,503,777	5,255,265	125.9%	77.3%	153.6%
Agri Support Serv Proj	302,000	302,000	-	133,110	133,110	-	44.1%	44.1%	
Extension Services	25,000	25,000	-	23,056	23,056	-	92.2%	92.2%	

7. Agriculture Sector Development Unit

HEAD OFFICE

ADMINSTRATION

MISSION STATEMENT

To co-ordinate and facilitate the implementation of all operational activities under the purview of General Administration.

ORGANISATION **MANAGEMENT**

AND

The Administrative Division of the Ministry is responsible for the provision of logistic, administrative and support services to the Ministry's Head Office and the various Agencies under the Ministry's purview.

The Ministry Administration comprises the following sub-programmes

- 1. Main Office (Office of the Minister of Agriculture, Office of the Permanent Secretary, Deputy Permanent Secretaries and Secretaries)
- 2. Budgeting and Finance
- 3. Planning Unit
- 4. Project Cycle Management
- 5. General Administration
- 6. Personnel Administration

The Division, as part of its functions assists the Permanent Secretary and other Managers in preparation of documents in the form of Memoranda, aides memoire and other documents, determined by the Permanent Secretary. The Division is also responsible for the functions of the Registry, by ensuring that the system put in place operates in an efficient and effective manner.

Additionally, the Division ensures that the following are done:-

- a) All buildings and the compound are properly maintained.
- All vehicles b) properly maintained and receive adequate supply of fuel
- c) The boardroom is properly allocated and prepared for official meetings and other purposes.
- All offices and surroundings are cleaned and tidy and refuse disposed of.

SUMMARY AND REVIEW OF CURRENT YEAR'S PROGRAMME

The Administrative Division continued to function in an effective manner. Under the Administration sub-programme routine works involved building, plumbing and electrical maintenance. All utility bills were adequately handled. The security firm continued services, with monitoring.

Routine tasks completed by the Registry Section included maintaining the filing dispatching system, and registering correspondence and filing and retrieving the Ministry's records. There is need for additional equipment.

Financial support services were provided under the Budget and Finance programme. in accordance the Financial Administration and Audit Act. Financial and Stores Regulations and other circular instructions. Routine duties for the period under review included the provision of information for generating allotments, preparation of agencies' reports, collection and deposit of revenues, reconciliation of bank statements and secretarial duties for the Ministry's Tender Board. The department continued to place emphasis on effectively operating the Integrated Financial Management and Accounting System (IFMAS).

The Planning Unit is responsible for collecting, compiling, analysing and disseminating agricultural statistics. compiling Farmers' Register, conducting crop production surveys, preparing project profiles, conducting specific studies with a view of providing information to guide decision makers.

Routine activities within the unit included weekly collection of market and supermarket prices, collection of regional "other crops" data, updating farmers register and preparation of statistics for the annual agricultural digest for the year 2008.

Of the nine (9) Riverain surveys planned for 2008, only six (6) were completed because of various difficulties. The division expects to commence the Riverain surveys very early in 2009.

The Project Cycle Management Unit (PCMU)/ Agricultural Project Cycle Unit (APCU) continued to provide a high level of support to the Ministry in a number of areas including policy analysis, sectoral and subsectoral monitoring to the Ministry, project cycle development and project monitoring, advice on information technology and webbased communication, coordination of technical assistance and budget preparation and expenditure monitoring.

The Personnel Department of the Ministry of Agriculture is responsible for the implementation of effective personnel policies within the guidelines of the Public Service Rules, Public Service Commission Rules and Regulations, other conventional personnel practices in force and circulars which may be issued from time to time, thereby ensuring a harmonious industrial relations climate within the organization.

The Personnel Department is currently charged with the responsibility of handling all the personnel and human resource matters for the entire staffing of the existing Programmes of the Ministry of Agriculture and other pertinent matters emanating from agencies within the Agriculture sector.

The Department maintained its contact with Public Service Commission and Public Service Ministry on a one and one basis to ensure that Human Resource matters were dealt with expeditiously and with some degree of accuracy.

The Department was also able to secure approval for employment matters and acting appointments for several employees.

coordinated The Department and participated in the successful and well attended Retirement and Long Service Award Ceremony and Games Night which was held at Banks DIH Thirst Park.

The ASDU is organized to provide core and specialist services to the implementation of Programs which are funded by lending institutions. As such, it is structured to operate on a cost-share basis for the implementation of programs under its purview.

During 2008, focus was placed on equipping the Unit with the required staff, furniture, equipment and provision of institutional arrangements for its operations. Emphasis was also placed on the preparation of some of the new projects for execution including the following:

- The Agricultural Export Diversification Program (ADP)
- restructured Agricultural Support Services Program (ASSP)
- Enterprise • The Rural and Agricultural Development Program (READ)
- The 'Expanding Bioenergy Opportunities in Guyana' Project

At the end of the year, the department added to its portfolio two pipeline interventions for preparation. These were the initiatives supported by TradeCom (EU) and the Guerro Trust Fund (UNDP), respectively.

The ASDU considers that it has made significant strides in achieving the goals of the Unit for the year, despite the constraints experienced in achieving the financial targets.

THE NATIONAL AGRICULTURAL RESEARCH INSTITUTE (NARI)

MISSION STATEMENT

The mission of the National Agricultural Research Institute (NARI) is to advise on and develop technology for sustained agricultural production through adaptive and investigative research.

NARI's goal is to increase productivity and improve the quality of crops and livestock for national food security and for export. The Institute has direct responsibility for the improvement of technology of the non-traditional crops and livestock sub-sectors.

In the execution of its mandate NARI operated several locations in 2008. These were the Headquarters, Mon Repos, Livestock Farm, Mon Repos, Intermediate Savannahs Unit, Ebini, Horticultural Station, Timehri, Crop Station, Kairuni and plant nurseries at Bartica. Benab, Charity. Fort Wellington, Hosororo, Mon Repos, Pouderoyen and St. Ignatius.

SUMMARY AND REVIEW **OF CURRENT YEAR'S PROGRAMME**

Research and development activities were conducted through the following departments:

Office of the Director, Soil & Water Management Department, Post Harvest and Agro processing Department, Plant Biotechnology and Genetic Resources

Department, Agronomy Department, Livestock and Pasture Production

Department Protection and Crop Department.

OFFICE OF THE DIRECTOR

A trial was conducted to assess the response of pineapple to application of organic fertilizer. The results showed that there was significant difference in fruit weight for plants treated with cow manure and compost when compared to those treated with bionature L8-2-10. One trial was in progress to evaluate the growth production parameters of precocious cashew. Total plant

production at the various nurseries was 131,064.

INTERMEDIATE SAVANNAHS -**EBINI**

Trials were conducted on ten cowpea lines and ten soybean varieties. The highest yielding cowpea line and sovbean varieties were IT 99 K-529-1 and BRS Jucara and BRS Trajaca respectively.

Texel, a new breed of sheep in Guyana was introduced into the Savannahs and 48 breeding rams were provided for sale to farmers.

SOIL AND WATER MANAGEMENT DEPARTMENT

Field work was done to characterize the physical and chemical properties of the soils in Region 5.

Two digitized soil and land capability maps and eight soil and land use survey maps were made available for this Region.

Revegetation of mined out areas in North-East Kara Kara and its environs in Region 10 continued. Fabric silt fences were repaired and replaced and coconut, golden apple and

cowpea (Minica IV) were introduced to the site.

SOIL MICROBIOLOGY DIVISION

Rhizobium inoculant production continued in 2008. A field observation of cowpea inoculant was conducted and preliminary indications are that three

strains of Rhizobium are effective for the production of cowpea.

The division also supplied 47 acre equivalent of Rhizobium inoculant to farmers in Mahaica, Linden, GUYSUCO LBI operations and researchers at NARI.

PRODUCT DEVELOPMENT

Work was started on the production of various food products for use in cooking and direct consumption. These products were cashew prunes, cashew in syrup, onion powder, sorrel bar-b-cue sauce, cashew sauce, dehydrated sweet pepper, sweet pepper in brine, dehydrated carrot, dehydrated ginger and pineapple in all purpose sauce. All products maintained good shelf life and received favourable response from interested groups.

Additionally, the following trials and studies were conducted:

- Freezing as a method preservation of vegetables (bora, pumpkin, carila, saeme.
- Production of composite flours for the baking industry using wheaten, sweet potato and bread fruit flours.
- Production of edible mushroom. A low cost mushroom fruiting house was constructed at NARI.
- The trials were successfully participants completed and reported favourably on outcomes.

The Postharvest and Agro processing Department assisted IICA in designing and establishing a solar dryer for processing cassava products in the

Tapakuma community. The design is a model using the direct solar drying system.

ESTABLISHMENT OF OUT-STATION FIELD DEPOSITORIES FOR MANGO, COCONUT AND CASSAVA.

Coconut and mango depositories established at NARI's Ebini and St. Ignatius Outstations, continued to show improvement in acclimatization and one superior entry of cassava has been identified for advance to on-farm evaluation.

With the aid of a grant from Global Crop Diversity Trust, a concerted effort to expand the diversity of cassava depositories has begun. Twenty seven of the 34 entries in the old avocado nursery have been established in a new depository at Kairuni. There are more than 225 accessions of targeted crop species.

TCP/GUY/3001/D-TECHNICAL ASSISTANCE IN SUPPORT OF THE REGIONAL SPECIAL **PROGRAMME FOR FOOD** SECURITY (RSPFS) AT COUNTRY LEVEL IN THE AREA OF CROP **MANAGEMENT**

This project is funded by the FAO.

To support project implementation, a South-South Cooperation technician; Mr Osvaldo Ferrando Gonsalez is attached to NARI.

The project started in 2007 and involves the production of quality seedlings and production of vegetables under shelter with the use of organic material (organoponic).

A total of 50144 seedlings was produced in 2008. Most of the seedlings were used in the

organoponic facility. 1270 kg vegetables were produced in the organoponic facility at Mon Repos. Another structure has been started at Kairuni.

Training sessions were conducted to demonstrate intensive vegetable semi-protected production under conditions. More than 200 extension agents, vegetable producers and students attended these sessions.

TECHNOLOGY TRANSFER

The Livestock Department trained farmers and students of secondary and tertiary programmes in various aspects of livestock production and husbandry practices. The Department also produced a number of information products in support of its training programme.

TCP/GUY/3012 TECHNICAL SUPPORT OF THE REGIONAL SPECIAL **PROGRAMME** FOR FOOD SECURITY (RSPFS) AT (SMALL COUNTRY LEVEL RUMINANT DEVELOPMENT).

An FAO consultant Dr. Jose Despaigne Rodriquez is working on this project. Six project goals have been identified. Several diseases and other problems were diagnosed from a survey conducted in various regions. Some intestinal parasites were also identified.

Rations were formulated from local ingredients and there was delivery of information products at training sessions on small ruminant production.

THE NATIONAL DAIRY DEVELOPMENT PROGRAMME (NDDP)

MISSION STATEMENT

To work with all stakeholders within the cattle industry to transform cattle farming in Guyana into a primary, modern, sustainable agriculture activity through the:-

Formulation, identification, adoption and implementation of sound policies, strategies and appropriate technologies.

Regularization and monitoring activities within the sector with a view to:-

- **Improving** stakeholders' livelihoods.
- Supplying consumers with affordable, high wholesome, quality beef, milk and dairy products.
- Achieving and sustaining national self-sufficiency in beef, fresh milk and milk products.
- Adding value to primary beef, milk and dairy products.
- Exporting beef, cattle and its byproducts.

SUMMARY AND REVIEW OF **CURRENT YEAR'S PROGRAMME**

DAIRY:

Extension work of the NDDP took precedence in the first half of 2008, due to the increase in demand on the local market for fresh milk, triggered by the increase in food prices on the world market.

Emphasis was placed production, clean milk production and agriculture business and marketing, since more than 95% of our fresh milk production is from small to medium sized farms, which are operated manually.

On-going milk quality testing and testing for some endemic diseases like mastitis. tuberculosis and brucellosis continued in Regions # 2, 3, 4, 5, 6 and 10.

These activities were executed by combined teams from the National Dairy Development Programme, School of Agriculture, University of Guyana and the Regional Democratic Councils.

Beneficiaries were individual farmers. women's groups, housewives and the agricultural science departments of various schools.

In an effort to increase production and reduce morbidity, the NDDP encouraging the use of other dairy breeds like the Brown Swiss and Jersey which have been found to be more resistant to our local environmental conditions.

BEEF:

NDDP continued its drive to improve the gene pool of our local herds and bring our beef industry to a competitive level with the rest of the world, by making quality semen available to farmers, in an effort to increase the birth weight of local stock.

Several breeds are being experimented with in this drive, including Brahman, Charolais, Angus and Simmental (dual purpose).

Collaboration continued with two (2) large private farmers in Region #5 and Region #3, to use their farms as pilots to produce genetic material and to conduct method and result demonstrations.

Several Cattle Farmers Associations were also resuscitated during the period.

MONTHLY **AWARD** FOR ANIMALS



These awards were given out in an effort to stimulate farmers to rear high quality and productive animals.

A total of ninety-one (91) farmers were awarded for rearing individual animals recording a daily milk production of over sixteen (16) pints.

INSEMINATION SERVICES

Two thousand, two hundred and seventy-four (2,274) requests received and two thousand, two hundred and seven (2,207) services were rendered.

CONSTRAINTS

Shortage of field staff and extreme environmental conditions (increased humidity, temperature and rainfall) severely affected the implementation of the Artificial Insemination Programme.

PASTURE PROGRAMME

One hundred and ninety-two acres of pasture were established, and six (6) acres of pasture rehabilitated for the reporting period.



FARMERS EDUCATION/ **EXTENSION ACTIVITIES**

One hundred and nineteen (119) activities were conducted in the form of group discussions, method and result demonstrations. seminars. school talks/lectures and exhibitions.

Several farm visits were made by Dr. D. Walrond and Field Staff to conduct fertility tests, pregnancy diagnosis, embryo transfer and to give advice on improving general husbandry practices etc.

In addition, a total of thirteen thousand. four hundred and thirty-five (13,435) individual farm visits were made in Regions 2, 3, 4, 5, 6, 7 and 10 by NDDP's field staff.

OTHER ACTIVITIES

Pilot study of the Veterinary Service of Guyana, PVS Tool of OIE.

Facilitated the re-habilitation and operation of the Dantzig milk

pasteurization plant. Supported upgrading of a private abattoir involved in export of beef to the Caribbean.

- Participated in activities related to the IDB Funded Agricultural Export Diversification Project.
- Collaborated with the Guyana National Bureau of Standards (GNBS) to establish standards for milk and dairy products.
- Participated in the Public Sector Modernization Programme.
- Continued collaboration with sister agencies (IICA, NARI, GDDP/Saint Stanislaus College Farm) and private entities on various activities and issues related to the cattle sub-sector.

CONCLUSION

Generally, it can be considered that the programme continues to be competitive in its drive to have a cattle population that is genetically sound and is striving to meet the demands of our local and international markets, both for beef and fresh milk production.

With the increase in the number of artificial insemination calves management systems that are currently been implemented we can be assured that our extraction rate for beef cattle over the next five (5) years will be lowered and our production (kg/animal) increase.

THE GUYANA SCHOOL OF AGRICULTURE (GSA)

MISSION STATEMENT

"To promote and the support development of sustainable Agriculture Forestry through technological advancement and the theoretical and practical training of individuals pursuing careers in Agriculture and Forestry."

VISION STATEMENT:

The Vision is that in another approximately ten years, the institution will be the foremost regional training centre whose facility and graduates will be in the forefront of repositioning agriculture and forestry locally in the Caribbean through technical, managerial and entrepreneurial competencies.

NEW INITIATIVES

A new branch of the GSA at Anna Regina, Essequibo with Twenty eight (28) students, of whom, sixteen (16) were enrolled in the Diploma in Agriculture and twelve (12) in the Certificate in Forestry Programme.

The branch is located at the Essequibo Technical Institute (ETI). Mr. Dennis Jaikarran, Principal of the Institute is the Co-ordinator of the GSA programme on the Essequibo Coast.

In April 2008, Ms. Evelyn Corado, an Agricultural **Business** Development Officer and a VSO Volunteer from the Phillipines began attachment to the School, to develop and deliver training in Entrepreneurship.

With NCERD's assistance, the School introduced remedial classes for all students who had not attained the required

proficiency in English Language and Mathematics on entry to the Institution.

The School took part in several career fairs sponsored by the Ministry of Culture, Youth and Sport and the University of Guyana and hosted several conferences, forums. seminars and training workshops in the School's auditorium for various agencies including the Guyana Forestry Commission, the Fisheries Department, the NEW GMC and the Ministry of Agriculture.

The Institution also continued close collaboration with the Association of Caribbean Tertiary Level Institutions (ACTI) Guyana Chapter by attendance at monthly meetings at the University of Guyana.

ACADEMIC MATTERS / STUDENT ENROLLMENT

The new acadernic year began on September 14, 2008

One hundred and ninety (190) and twenty-eight (28) students were enrolled at Mon Repos and the Essequibo Branch respectively, giving total enrollment of hundred and eighteen students.

Students were drawn from all regions of Guyana except Region 8.

The School continued to offer thirty-six (36) courses in both the Diploma and Certificate in Agriculture, thirty-four (34) courses in Animal Health and Veterinary Public Health and eighteen (18) courses in Forestry.

A new Fisheries Studies Programme was implemented with significant help from a number of institutions including: NARI. the National Aquaculture Association, the Ministries of Education, and Health. and Georgetown Fisherman's Association.

LIBRARY

The Library received several donations of books and other publications. Significant donors were CTA, Partners of the Americas and Ms. Sonia Reece, Part-time Forestry Lecturer.

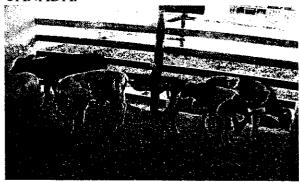
The Library's internet service was enhanced to provide wireless access. through equipment donated by Mr. Arun Mangar a mernber of the School's Board. The School's programme also provided several extra curricular activities including:

- **Participation** the World in Environment "GREEN Day WALK", the Annual Inter House Track and Field Sports Championship
- The Annual Christmas Luncheon, Mashramani
- Attendance at the Regional Agriculture Investment Forum at the Convention centre where students met His Excellency President Bharrat Jagdeo after the opening ceremony.

PRODUCTION

DAIRY

A total of twenty-five (25) calves were produced on the Livestock Farm for 2008, thus surpassing the total number of calves born in 2007 which was twenty one (21) and seventeen (17) in 2006. Close to 90% of the progeny is the product of frozen sernen imported by the National Dairy Development Programme (NDDP) from SEMEX in CANADA.



Calves produced from imported frozen semen

SHEEP

The School's Livestock Farm was a part of the British funded Texel Sheep Breeding Programme which in April saw the laparoscopic insemination of both GSA's and NARI's Barbados Blackbelly ewes with frozen semen from elite British Texel sires. The laparoscopic insemination was done by a team for the British Biotechnology Firm Innovis.

SWINE

The farm produced Four Hundred and Fifty Six (456) piglets from 38 litters at an average litter size of 12 piglets per litter. An average of 10.9 piglets per litter was born alive.

CROP MUSEUM

During 2008, one hundred and eighty two permanent perennial seedlings were established. There are five hundred and twenty-seven perennials on the whole museum. This constitutes thirty (30) different families.

The sale of the Crop Museum's produce was one million, eighty nine thousand seven hundred dollars (\$1,089,783). Expenditure for the Museum was Eight hundred and Twenty Four Thousand, Three Hundred and Thirty Eight Dollars (\$824,338).

Floods caused a serious decline in production as several plants succumbed and the inclement weather affected certain agronomical practices.

HYDROMETEOROLOGICAL SERVICES

MISSION STATEMENT

To observe. archive and understand Guyanese weather and climate and provide meteorological, hydrological and oceanographic services in support of Guyana's national needs and international obligations.

ORGANISATION MANAGEMENT

AND

The main purpose of this department is: To contribute to Guyana's social, economic, cultural and environmental goals through the performance of the functions of a National Hydrometeorological Service in the public interest generally and in particular:

- (a) for the purposes of assisting persons and authorities engaged in primary production, industry, trade and commerce;
- b) for the purposes of navigation and shipping and of civil aviation; and
- c) for the purposes of the Guyana Defence Force (GDF).

Overall activities of the department include:

Observation and data collection to meet the needs of future generations for reliable, homogeneous national climatological, hydrological and oceanographic data;

Research directed to the advancement of hydrological, oceanographic and meteorological sciences the and development of a comprehensive description and scientific understanding of Guyana's weather, climate and water resources;

Provision of hydrological, meteorological, oceanographic and related data, information,

forecasts. warnings, investigation advisory services on a national basis; and

Coordination of Guyana's involvement in regional and international hydrology, meteorology, oceanography and related conventions.

There are six sections in the Hydrometeorological Service: Administrative, Climatological, Agrometeorological, Water Resources, Aeronautical and the National Ozone Action Unit (NOAU).

SUMMARY AND REVIEW **OF CURRENT YEAR'S PROGRAMME**

HYDROMETEOROLOGICAL SERVICE'S CONTRIBUTION TO THE OBJECTIVES OF THE PRSSP.

The Department contributes objectives of the PRSSP by providing timely atmospheric, weather and water resources and information; data this is the Hydrometeorological Service's input for sustainable development in all sectors, particularly agriculture, aviation, tourism, mining, fishing, security, etc. The budget proposal is also geared towards meeting the economic programmes of agencies/industries such shipping, as engineering, drainage and irrigation, agriculturists, Civil Defence Commission, infrastructural development maintenance, water sector and the general public, as well as, to meet Guyana's commitments under international programmes and conventions.

A national socio-economic priority is poverty reduction, improved infrastructure and sustainable development. Rehabilitation of sea and river defence, drainage and irrigation channels, transportation (road, air, land and sea), construction, health, mining and agriculture are all weather, climate and hydrology sensitive. Hydrometeorological data are therefore, crucial inputs during the planning of projects and during the implementation and operations stage of activities.

WATER RESOURCES SECTION

The Water Resources Section of the Hydrometeorological Service is responsible for monitoring and recording hydrological data to ensure that water is of sufficient quantity and high quality for the country's economic and social needs. The network presently has a total of 17 recording stations that monitor water level, continuously and 12 staff gauge stations that are being monitored on a daily basis.

The primary functions of this section are:

to construct and maintain the hydrological (surface and ground water) network in Guyana

to make the observations and to analyze hydrological data

prepare the hydrological bulletin, hydrological forecasts and guides for various hydro-meteorological practices in Guyana

THE CLIMATOLOGY SECTION

Climatological Section is responsible for meeting Guyana's needs for climatological data and expertise, and for promoting the effective use of this data and expertise. It responds to user enquires, prepares and supplies data products, develops and implements new user services and data applications and provides seasonal forecast for Guvana.

ACHIEVEMENTS

During 2008, field assignments planned and executed in all regions. Regions 2, 3, 4, 5, 6 and 10 were visited regularly. One visit was made to the stations in Regions 1, 7, 8 and 9.

The Climatology Section in collaboration with the Maintenance/Telecommunication Section serviced the existing Automatic Weather Stations and installed three new Automatic Weather Stations (AWS). These included relocating the AWS at the Cheddi Jagan International Airport from its previous location to a location alongside the run way as recommended by the International Civil Aviation Organization (ICAO) with the help of an engineer from Sutron (Supplier of the instruments).

AERONAUTICAL **METEOROLOGY** SECTION

Aeronautical Meteorological Section is responsible for serving the aviation meteorological needs under International Civil Aviation Organization regulations. The central office of this Section is currently located at the Cheddi Jagan International Airport Section which operates 24 hours a day, all the year round. A sub office is located at the Ogle Airport Inc which operates a 12 hour shift.

This Section continues to provide forecast for aviation activities, general public weather forecast (daily and seven days) and disseminated the hourly meteorological data for Cheddi Jagan International Airport and other meteorological stations through Global Telecommunication System via NOAA.

The weather data, forecast and other meteorological information are issued to various airline operators and pilots for planning and execution of flight operations respectively. Products provided includes aerodrome forecasts, flight forecasts, preflight briefing and advises of significant weather that could affect the aviation industry.

OTHER ACHIEVEMENTS

Guyana hosted the 48th Session of the Caribbean Meteorological Council Meeting from the 27th November, 2008 to the 2nd December, 2008 at the Guyana International Convention Centre, Liliendaal.

Guyana also hosted the Caribbean English Speaking Ozone Officers Network Meeting from May 28 - 30, 2008. This bi annual attended meeting was bv several international representatives from UNEP/ROLAC, the Ozone Secretariat, and the Multilateral Fund Secretariat Caribbean counterparts. The MOU agreement between UNEP, UNDP and Government of Guyana was signed on the 30th May, 2008.

The construction of the Radar Tower at Hyde Park, Timehri commenced on November 8, 2007 and is schedule to last for 12 months with a

Contract Completion Date set for February 2009.



Civil works progress on the Hyde Park Radar Tower

CROPS AND LIVESTOCK SUPPORT SERVICES

MISSION STATEMENT

To promote the development of crops and animal agriculture in Guyana through the provision of a range of technical and regulatory services to allow for national self-sufficiency and to promote surplus for trade.

ORGANISATION

Within the framework of the programmes under the umbrella of the Ministry of Agriculture, the Crops and Livestock Department is the executing agent for Programme 2.

The mandate of Programme 2 is to offer agricultural extension services to animal and other crops (crops excluding sugar and rice), tailored to meet requirements of local and International markets.

Programme 2 has been sub-divided into three (3) sub-programmes, namely:

Administration -01**Extension Services** -02**Animal Services** -03

ADMINISTRATION – 01

The administration sub-programme offers administrative support as a service to the department. It is divided into the Office of the Minister of Agriculture, Secretariat of the Chief Crops and Livestock Officer and Training.

Objective: Promotes efficient Human Resources Management. Renders general Administrative Services. **Promotes** Organizational Performances.

OFFICE OF THE MINISTER OF **AGRICULTURE**

- **Promotes** Agricultural Development at the Macro level.
- Addresses crisis in Agriculture and critical National needs.

SECRETARIAT OF THE CHIEF LIVESTOCK CROPS AND **OFFICER**

- facilitates Ensures ** and Programme Performance. Monitoring and Evaluation.
- Prepares annual budget and cash flow projection for the Crops and Livestock programmes.
- Monitors the provision Agricultural Extension Services to ensure that relevant skills and technology were being transferred to farmers.
- Facilitates request and allocation of subvention to Local & International Organizations.

REVIEW AND SUMMARY OF **ACHIEVEMENTS**

The Crops and Livestock Department continued with the implementation of its many programmes and activities that were all aimed at achieving Department's Goals and Objectives.

The Department successfully hosted the Fifth Caribbean BeeKeepers Congress, which was well attended by participants from several Caribbean countries and as far as Africa. There has been an upsurge in activities in this area. More persons are taking up beep keeping as a career opportunity. To further lend assistance to the process, the department has moved away from its bee termination activities and has concentrated efforts on their (bees) removal to non-residential areas to provide beekeepers potential bee keepers with start up materials.

The Grow More Food Campaign grew in momentum, providing more farmers and homeowners with opportunity to participate. The Ministry continued to distribute seeds, planting materials, agro-chemicals and other agricultural inputs to assist interested individuals with their farms.

Our efforts to control and eradicate major quarantine and trade important pests and diseases continued during the year under review. This saw teams of animal and plant health officers visiting major producing areas and executing programme and activities to ensure that these pests and diseases remained at levels that would not constitute a treat to our ability to trade on the international market.

In the area of training, farmers and students were exposed to topics and ideas of agricultural importance in an effort to raise their awareness to new farming methods and technologies. Much attention was given to improving techniques in agriculture to mitigate the effects of climate change and the impacts of flooding.

Staff continued to be the recipients of upgrading programmes, especially in computers and related technology in an effort to improve on report writing and data base management. The department benefited from the infusion of several veterinary officers and agronomists who

were recent graduates of Cuba. This has greatly enhanced our ability to provide vital extension services farmers and homeowners.

The department collaborated on different levels with several national international organizations in an effort to better serve its clientele.

The extension staff, continued to experience challenges with transportation, finances, housing, furnishing for both offices and houses, and staff shortages, these challenges what were some overcome with farmers intensive networking with group/ association and other organizations, Ministries and agencies

Act of Parliament, "The Drainage and Irrigation Act 2004" and came into existence on January 1, 2006.

MISSION STATEMENT

The National Drainage and Irrigation Authority shall function as the Nation's apex organization dealing with all public matters pertaining to management, improvement, extension and provision of drainage, irrigation and flood control infrastructure and services in declared areas of the country. While providing support and assistance to other public institutions dealing with connected activities. it shall also evolve mechanisms for improved water use with financial sustainability, equity and efficiency as the guiding principles.

ORGANISATION MANAGEMENT

AND

OFFICE OF THE **CHIEF EXECUTIVE OFFICER**

The Chief Executive Officer functions as the Chief Engineer and Administrative Head of the NDIA. All technical powers to manage the projects of the Authority are vested in him. The financial and administrative powers are vested in the Ministry of Agriculture, which exercises

NATIONAL DRAINAGE & **IRRIGATION AUTHORITY** (NDIA)

ESTABLISHMENT

The National Drainage and Irrigation Authority (NDIA) replaced the National Drainage and Irrigation Board (NDIB). This Authority was established by an them on the advice of the Chief Executive Officer.

ENGINEERING UNIT

This section is headed by the Consultant Engineer (specially contracted engineer) who is responsible for coordinating all drainage and irrigation engineering activities and reports directly to the Chief Executive Officer.

FINANCE AND ADMINISTRATIVE UNIT

The Manager Finance Administration, heads the Finance and Administration Division of the National Drainage and Irrigation Authority and reports directly to the Chief Executive Officer. The division has the responsibility of

budget and expenditure and eventually revenue collection.

SUMMARY AND REVIEW OF **CURRENT YEAR'S PROGRAMME**

Fifty five (55)capital projects were approved for 2008, of which 41 have been completed while the remaining 14 are at various stages of completion.

Phase 1 of the earthworks rehabilitation in 4 Water Users Areas of Regions 3, 4 and 6 under the ASSP, has also been undertaken in 2008.

Links with the Regional Neighborhood Democratic Councils and the related organizations of Central

Government, were strengthened and maintained and technical assistance provided whenever requested.

Engineers also dealt with local D&I infrastructure problems in Regions 2,3,4,5,6 and 10. The unique feature of the civil works was that most of these works were designed and construction supervised by the engineers of the Authority. This resulted in timeliness, cost saving and better quality control.

SUMMARY OF WORKS UNDERTAKEN IN 2008

DRAINS AND CHANNELS REHABILITATED AND MAINTAINED

Region 2; Cozier Canal

Region 3; A-Line canal, Potosi/Kamuni, Parika; Canals Polder, V/Hoop /La Jalousie and Bonasika/Den Amstel.

Region 4; Mahaica Creek to Plaisance and Mocha to Timehri

Region 6; Crabwood Creek, Black Bush Polder and 52/74 areas.

Region 10; Blueberry Hill, Green Valley, Victory Valley, Wismar/Christianburg.

OUTFALL CHANNELS **EXCAVATED**

Region 3: Canal #1 and 2 Pouderoyen

Region 4; Greenfield, Hope, Belfield and Victoria

Region 6; Eversham, Joppa, Lesbeholden, # 43, # 47 and Adventure.

EMBANKMENT, **EMPOLDERING PROTECTION** AND **SCOUR** WORKS

Region 2; Ituribisi and La Union outfall channels.

Region 3; Palmyra

Region 4. East Demerara Water Conservancy and Kofi outfall channel.

CONSTRUCT AND REHABILITATE CULVERTS. KOKERS, OTHER STRUCTURES

Region 3; Parika back dam, Leguan, Palmyra, Hogg Island, Beribissiballi and Boerasire conservancy Region 4: Enmore, Buxton, Nooten Zuil,

Garden Crown Dam, of Eden, Friendship and Brickery

Region 5; Retrieve Mahaicony

Region 6; Vryheid Canje, and Moleson Creek.

CONSTRUCT AND REHABILITATE SLUICES

Region 2; Cozier canal Region 3; De-Willem Region 4; Kuru Kururu, Diamond, Kofi, Montrose and Strathavon Region6. Adventure, #67 village, Maida

and Borlam.

REVETMENT WORKS AT

Riverstown in Region 2; Beribissiballi in Region 3; Enmore and Golden Grove in Region 4

REHABILITATE DRAINAGE **PUMPS AT**

Anna Regina and Cozier in Region 2 Cane Grove, Victoria, Golden Grove and Triumph in Region 4

PURCHASE AND INSTALL IN **REGION 4**

2 mobile pumps 5 long reach hydraulic excavators, boat and engine and airboat, 2 pontoons, 2 punts, 2 4x4 vehicles.

SUPPLY AND INSTALLATION OF COMMUNICATION SET

WATER USERS ASSOCIATIONS AND CDC'S AND **FARMERS'** GROUPS:

Maintenance of drainage and irrigation channels in Regions 3,4,6 and 10 were contracted to established Water Users Associations. CDC's and farmers groups. This is in keeping with Government's policy of involving farmers and beneficiaries in the maintenance of the D & I system.

PROCUREMENT OF EXCAVATORS FOR EMERGENCY DRAINAGE WORKS

Some 350 miles of canals and drains were rehabilitated and maintained using the 19 hydraulic excavators in the various Regions. The approximate savings compared to the utilization of contractors was some \$500,000 per mile - a total savings of \$175.0M.

MOBILE PUMPS

Over the years, Government has acquired 24 mobile pumps, which are at present located at strategic points along the coast and have greatly assisted in reducing the accumulation of excess water during intense rainfall.

REVIEW OF SPECIAL **INITIATIVES**

The design of the D&I system needs to be modified and modernized to reduce flooding especially risk of accommodate climate change influence. It is therefore proposed that an additional drainage sluice in the East Demerara Water Conservancy and an outlet through the 180 foot Government reserve between Douch Four and Hope on the East Coast of Demerara be introduced, so as to improve the discharge capacity and flood control performance of the East Demerara Water Conservancy.

PESTICIDES AND TOXIC CHEMICALS BOARD

MISSION STATEMENT

To provide and promote the necessary infrastructures required for establishment of a comprehensive registration scheme, with appropriate educational, advisory, health-care and extension services for enabling and exercising adequate control over quality, sale and usage of pesticides and toxic chemicals while ensuring that the interest of end-users and manufacturers' rights are well protected.

ORGANISATION AND MANAGEMENT

The major objective of the Board is to introduce a national pesticide and toxic chemical control scheme and the required

As part of the overall Financial Plan for the Operation and Maintenance of the Drainage and Irrigation Systems in Guyana, a Master Plan for Rehabilitation has been prepared by the NDIA. This Plan includes cost estimates and a time complete frame to schedule the rehabilitation of drainage and irrigation (D&I) structures in the declared areas, covering about 297,000 cultivated acres. The Plan is phased over a ten year period.

The Agricultural Support Services Program (ASSP) has targeted nine (9) D&I areas of approximately 120,000 acres for modernization during the period 2003-2008. To this end, NDIA successfully has undertaken and completed the rehabilitation of 250 miles of canals and drains as part of the ASSP earthworks component.

regulations for that scheme, consideration for the current and future ability of the country to operate the scheme with respect to the legal framework and the degree of support that the Government of Guyana is able to provide.

REVIEW OF 2008 AND SUMMARY OF ACHIEVEMENTS

The organisational chart of the Board was revised to include 26 persons headed by the Registrar, however at the end of 2008; only nine persons were on staff.

The pesticide laboratory was commissioned on February 8, 2008. During the first quarter all the equipment was received and installed, including the Gas Chromatograph / Mass Spectrometer. Gas lines, fire alarm system, water

pressure system and glass doors along with a vibration-free table.

No analytical testing was done during the year due to various problems associated with the gas chromatograph. However, in preparation to achieve accreditation, Standard Operating Procedures and two manuals, Workplace Health and Safety and Quality Manual were completed.

INTERNATIONAL MEETINGS

Guyana was represented at a number of meetings on chemical management associated with the Strategic Approach to Management International Chemical (SAICM) and the Rotterdam Convention on the Prior Informed

Procedure for hazardous pesticides in International Trade.

Board staff attended the 13th Meeting of the Coordinating Group of Pesticide Control Boards and resulting from that, Guyana will host the 14th Meeting of the CGPCB. The Board also participated in several inter-sectoral meetings and those relating to the FAO project on Integrated Management of Aquatic Weeds.

TRAINING PROGRAMME

The 2008 training programme was successfully completed with 612 farmers from Regions 2, 3, 4, 5, 6 and 10 trained on safe use, handling and storage of pesticides; Extension Officers, Custom Officers and other GRA officials trained in understanding the importance of pesticides and the part they play in their management; internal staff members trained on the GYS 223 (ISO / IEC 17925) standard that deals with technical and management requirements of testing and calibration laboratories and the laboratory staff given basic training on the equipment in the laboratory.

IMPORTATION OF CHEMICALS

Importation for the year was again headed by herbicides and showed an increase by sixteen percent (16%) over the previous year with one hundred and twelve (112) pesticides imported by thirteen (13) importers.

The largest category of chemicals imported for the year was herbicides, accounting for four hundred and seventy million, five hundred and twenty eight thousand, four hundred and thirty eight dollars (\$470,528,438.67) or forty seven percent (47%) of the total imports.

This was followed by insecticides with twenty seven percent (27%), toxic chemicals with eleven percent (11%), fungicides with nine percent (9%) and rodenticides with six percent (6%). There was a sixteen percent (16%) increase in total importation for the year in review (2008) in comparison to the previous year's total importation.

Pesticides	Total Cost Imported
Insecticides	\$271,432,677.43
Herbicides	\$470,528,438.67
Fungicides	\$86,951,744.88
Rodenticides	\$64,639,477.72
Toxic Chemicals	\$109,323,618.97
TOTAL	\$1,002,875,957.67

One hundred and sixteen vending premises were licensed for the period with all premises inspected at least once per month with random enforcement inspections. There were twelve (12) seizures of illegal and unlicensed chemicals from vending premises.

The Auditor General's Office completed their examination of the Board's financial statements for 2007 and validated that the financial statements were in conformity with generally accepted accounting practice. The Board continued on the path towards self sustainability with assessed Fees collected, totaling thirty million five hundred and forty-seven thousand two hundred and sixty dollars (\$30,547,260,00). Subvention for the year was approximately sixteen million (G\$) dollars.

Specifications for two major pieces of equipment, a High Performance Liquid Chromatograph (HPLC) for residual analysis and a generator for supplying electricity, were submitted to the Agriculture Sector Development Unit (ASDU) for acquisition under the Agricultural Export Diversification Programme (ADP).

BOARD OUTREACH

The Board launched its website and information database during the year and continued to participate in national exhibitions as part of its public awareness programme. A Pesticide Corner was launched in Secondary Schools in Guyana and a booklet on the actions of pesticides used in Guyana was developed for use by extension officers.

LIST OF CHEMICALS PROHIBITED IN GUYANA

2,4,5-T and its salt and esters;

Aldrin: Captafol; Chlordane: Chlorobenzilate: Chlordimeform: Dieldrin; Dinoseb; Endrin. 1-2-Dibromoethane; Fluoroacetamide; Heptachlor; Hexachlorobenzene; Lindane; Mercuric chloride; Methyl Parathion: Parathion: Mirex: Pentachlorophenol; Phosphamidon; Toxaphene; Mixed Isomers Hexachlorocyclohexane;

2009 FORECAST

The lack of an administrative building constrained the work of the Board during 2008, however for 2009, along with general administrative work, inspections, licensing, and registration and training activities, the Board proposes to execute the following activities:

- preparation of a newsletter; fulfilling the requirement of the Rotterdam and Stockholm conventions;
- developing and implementing a national chemical management plan for Guyana;
- hosting the 14th CGPCB meeting in Guyana;
- analysis of pesticides;
- developing a pesticide manual and pesticide magazine, and participating in more public awareness activities especially using radio and television.

MAHAICA/MAHAICONY ABARY AGRICULTURAL DEVELOPMENT **AUTHORITY**

MISSION STATEMENT

To promote, facilitate and enhance sustainable agricultural development in the Region, through the efficient management of the land resource.

Organisation and Management

Mahaica Mahaicony Abary/ Agricultural Development Authority (MMA/ADA) is a statutory agency, governed by the MMA Act No.27 of 1977. By virtue of the Act, the MMA is responsible for the development of all agricultural lands lying in the area between the Mahaica and Berbice rivers. same area that makes administrative Region No 5. The Agency is charged with the responsibility of providing the necessary drainage and irrigation services attendant agricultural development within the Region.

The Authority is financed by a mix of self-generated revenues and Government appropriations. In keeping with the provisions of Sections 25 to 32, of the Act, the Authority is required to maintain separate books and accounts which are to be audited by the Auditor General and presented to the National Assembly on an annual basis.

In order to execute its mandate effectively, MMA/ADA addressed its programme through three basic components:

1. CIVIL WORKS

Abary Conservancy Primary Drainage and Irrigation Channels,

Rehabilitation of Secondary Draniage and Irrigation Channels Drainage and Irrigation Structures Road and Accesses.

2. Agricultural Development Realignment of Freehold Agricultural Lands Acquisition Survey Cadastral Survey Dairy Plots, Right Bank Abary River Engineering Surveys.

General Administration – State Services

- Employment Costs
- Communication Equipment
- Transportation Summary and Review of Current Year's Programme.

Civil Works

The Authority assumed responsibility for agricultural drainage and irrigation between the Mahaica/Mahaicony rivers in 2008. This was previously carried out by the Regional Democratic Council, Region No. 5 Mahaica/Berbice.

Overall the Authority managed to complete its 2008 programme despite the increased area of responsibility when compared to 2007.

Water stored in the conservancy was used to irrigate forty-two thousand (42,000) acres of rice lands; fourteen thousand five hundred and twenty-eight (14,528) acres of sugar cane and serviced twenty-six thousand (26,000) acres of cattle pasture.

Additionally, sixteen (16) miles of Primary Irrigation Canals rehabilitated. These works enhanced the flow of water to rice lands and other agricultural areas including Blairmont Estate.

During the May/June rain, the mouth of the Abary River was dredged. This brought relief to farmers who depended on the river for drainage.

The twenty-five (25) sea/rivers sluices which are controlled by MMA, were manned continuously by operators residing in the areas.

One hundred and thirty-six (136) miles of drains and canals were rehabilitated, and over one thousand (1,000) miles of access roads were harrowed, graded and shaped for farmers to gain access to their fields.

MECHANICAL DEPARTMENT

This work of this department is critical to the execution of the Authority's Work Programme, depending as it does on routine maintenance of the Authority's fleet of machines and equipment. The department was successful maintaining high in availability of equipment throughout the year.

LANDS AND SURVEYS

The department executed several Cadastral, Engineering, Route Location and Hydrographic surveys to address various issues.

Support was also given to resolving disputes concerning ownership and demarcation of State lands and reserves.

COMMERCIAL VENTURES

Seed Processing Plant: The Authority continued to offer the services at the Plant at competitive rates. Nineteen thousand, three hundred and four (19,304) bags of paddy were processed during the year.

Paddy Cultivation: One hundred and sixty-eight (168) acres of paddy were cultivated at Trafalgar, West Coast Berbice for both spring and autumn crops. A total of six thousand, four hundred and sixty-seven (6,467) bags of were harvested.

FISHERIES DEPARTMENT

OVERVIEW OF **FISHERIES SECTOR**

The Fisheries sector is made up of three primary components: Marine Fishery, Aquaculture and Inland Fishery.

These components are further divided into subdivisions as follows:

- 1. Marine Fishery
- Offshore Industrial Trawl Fishery
- Inshore Artisanal Fishery
- 2. Aquaculture
- Brackish-water Culture
- Fresh-water Culture
- 3. Inland Fishery
- Subsistence Fishery (for food)
- Ornamental Fish Fishery

The Offshore Industrial Fishery consists of 146 trawlers, 6 fish/ processing plants and numerous wharves

and dry docking facilities. Forty-one trawlers are licenced to catch large penaeid shrimp and the remaining 105 are licenced to catch seabob.

The Inshore Artisanal Fishery consists of approximately 1129 vessels ranging in size from 6-18 meters propelled by sails, outboards or inboard engines and using gear that include Chinese seine, pin seine, cadell lines, hand lines, drift seine and circle seine.

There are about 4,500 small scale fishermen. Approximately 1200 are boat owners, with about seventy percent being members of the six (6) existing Fishermen's Cooperatives. With assistance from CIDA and EU, onshore infrastructure (wharves, ramps, workshops, fuel depots, requisite shops, ice machines, storage bins, and fish

storage bins) were constructed at eight sites along the coast for this Fishery.

The Inland Subsistence Fishery involves the catching of fish in rivers, lakes, canals flood plains etc. by subsistence or part-time fishermen for their own consumption or for sale.

There is a small but active Inland fishery for ornamental fish which are caught in the upper reaches of the rivers by collectors and bought on the Coast by six exporters of ornamental fish, who export mainly to the U.S.A.

ORGANISATION AND **FISHERIES** MANAGEMENT OF DEPARTMENT

The Mission of the department is to manage, regulate and promote the sustainable development of the nation's fishery resources for the benefit of the participants in the sector and the national economy.

Sub-Programmes of the department include:

- Programme Administration
- Legal and Inspectorate
- Research and Development
- Extension Services.

Key responsibilities are to:

Advise the Minister and Permanent Secretary, technical officers and policy makers on matters pertaining to the fishing industry

Prepare and undertake plans in the field development fisheries and management. monitor their and implementation, outcome and impact.

Facilitate and promote the development of an aquaculture industry.

international Monitor treaties. agreements, mandates etc. which affect resource management and use.

Recommend and oversee implementation of regulations and fisheries management actions.

Register, inspect, licence and monitor all aspects of the fishing industry.

Liaise with industry and community stakeholders and disseminate relevant general industry technical and information, and garner feedback.

Ensure collection of revenue under the Fisheries Act (1957) and Maritime Boundaries Act (1977).

REVIEW OF CURRENT YEAR'S **PROGRAMME**

ADMINISTRATION

2008. the department During successfully discharged its mandate to provide the relevant support services necessary for the development and maintenance of fisheries programmes and activities.

Mr. Nigel Dharamlall, former CEO of CARIFESTA X, was appointed Chief Fisheries Officer (CFO) in November 2008. Mr. Dharamlall now provides leadership with a renewed vision for the development of the fisheries sector.

The Department also added three (3) Fisheries Field Assistants, and an Administrative Officer to its staff complement which now stand at forty

The Legal and Inspectorate Unit of the department is now housed in the Guyana Fisheries Limited building.

STATISTICAL UNIT

The role of the Statistical Unit is to collect and analyze data and conduct surveys to provide scientific and socioinformation economic for policy determination, planning and resource management.

In 2008 the unit performed the following activities:

Market Survey , Management of Data Entry, and Management of Export Licensing.

production **Fisheries** sub-sector (metric tanes) of marine resources

(metric tones) of marine resources				
ITEM	2008	2007	2006	
Prawns (w/w)	931	657	1,663	
Prawns (t/w)	582	411	1,039	
Seabob industrial	32,77	34,381	32,52	
Seabob artisanal	1,312	427	916	
White belly (w/w)	1,289	1,039	2,062	
Total Shrimp	36,30	36,504	35,10	
Finfish (Industrial)	374	339	955	
Finfish (Artisanal)	23,45	26,082	24,29	
Red Snapper	871	976	424	
Total Finfish	24,70	27,397	25,67	
Overall Production	61,00	63,901	60,77	

w/w- whole weight, weight

t/w - tail

AOUACULTURE

The Aquaculture Unit was established in March 2008. The unit has acquired a new state of the art semi intensive Tilapia hatchery and aims to facilitate the rapid development of aquaculture in Guyana through the provision of technical assistance and fingerlings at reduced cost to farmers.

ACHIEVEMENTS

Some sixty four persons including fishermen and inland fish farmers, were trained in various aspects of aquaculture, during the year.

A total of 20,000 fingerlings of Red Tilapia were produced since commissioning of the Tilapia Hatchery in August 2008.

KEY ISSUES FOR THE FISHERIES **SECTOR**

Transition to a semi-autonomous agency.

Adopt regulations to enforce Fisheries Act 2002.

Fisheries Implement the Management Plan.

There is need for trained staff to collect, monitor and analyze market survey data.

Trawler owners need to submit their log sheets on a monthly basis.

The relationship between Marine Administration Department (MARAD) and Guyana Coast Guard (GCG) needs to be improved since their roles in the

- sector are significant to the performance of the sector.
- There needs to be an enhanced programme awareness fishers: artisanal, semi-industrial and industrial as part of the overall stakeholder partnership necessary for effective management and sustainability.
- Specialized training for staff attached to the Legal and Inspectorate Unit.
- Up-graded training is needed for TED Inspectors, captains and crew members on sea turtle conservation.

GUYANA FORESTRY COMMISSION (GFC)

MISSION STATEMENT

To excellence in forestry provide management services to our stakeholders through the application of professional skills to contribute to our nation's development.

ORGANISATION MANAGEMENT

AND

The functions and responsibilities of the GFC are assigned under the Guyana Forestry Commission Act.

The GFC is responsible for advising the subject Minister on issues relating to forest policy, forestry laws and regulations. The Commission is also responsible for the administration and management of all State Forest land.

The GFC is governed by a board of directors appointed by the President. The board is responsible for the performance of the functions conferred on the Commission by the Act. The Commissioner of Forests is the Chief Executive Officer and an ex-officio member of the Board. The Commissioner is responsible for the execution of the policy of the Commission.

The work of the Commission is guided by a Draft National Forest Plan that has been developed to address the forest policy. The Commission develops monitors and standards for forest sector operations, develops and implements forest protection and conservation strategies, oversees forest research and provides support and guidance to forest education and training.

Summary and Review of Current Year's **Programme**

IMPORTANT HIGHLIGHTS

2008 was an important year for Guyana's forest sector as Guyana pioneered a study which assessed the true value that our

forests provide locally and globally. This study which was one component of His Excellency The President's Climate Change Initiatives. was then presented internationally to lobby for the creation of incentives for avoided deforestation.

Guyana was also one of the first fourteen (14) countries to be formally approved as a participant in the World Bank's Forest Carbon Partnership Facility (FCPF), looking at ways to

Reduce Emissions from Deforestation and Forest Degradation (REDD).

The Forest Product Development and Marketing Council (FPDMC) was established in late 2008 and this body will play a critical role in 2009 in assisting exporters to maintain current markets and gain access to newer niche markets.

new Eight (8) Community Forestry Organizations (CFO's) were formed in 2008. The GFC and the Forestry Training Centre Incorporated (FTCI) continued to provide these organizations with the relevant training.

Guyana's Forest Bill 2007 (Bill No. 21 of 2007) which seeks to consolidate and amend

the law relating to forests, was at the final stages of a select Parliamentary Sub-Committee as of December 2008.

The Bill was the product of a lengthy period of public consultation with all stakeholder groups including Amerindian NGO's, the Products Association, Forest Guyana Manufacturing Association, Civil Society Groups, and even International Bodies.

OTHER ACHIEVEMENTS

REVENUE COLLECTED

Total Revenue collected for 2008 was \$ 842M.including \$176M collected compensation on breaches committed in Net revenue from normal GFC operations was approximately \$ 700M. The budgeted revenue for the year was \$ 650M, reflecting an excess over budgeted projections of approximately \$50M.

The GFC has a minimum royalty system in place; hence, even though production was below expectation, companies still had to a minimum Export pay royalty. Commission favorable was also approximately \$ 150M.

Collection of arrears has shown significant improvement, and it is projected that all outstanding arrears should be paid off by mid 2009.

RECRUITMENT

In 2008, the GFC recruited and trained thirty four (34) additional Rangers. Three (3) Government of Guyana Scholarship awardees to Cuba returned after the successful completion of their BSc. in Forestry and were employed at the GFC. Twelve (12) Management Trainees were also employed, along with an additional twenty-five (25) persons in various positions ranging from Field Assistants, Clerks and Drivers. Due to this high level of recruitment the GFC has now achieved its full staff complement for the first time in several years.

STAFF TRAINING

Four staff members attended the GFC sponsored certificate in advanced supervisory management.

Internal training was also done in Finance Policy and Procedures for all control clerks (Parika, Linden, Soesdyke, New Amsterdam and Supenaam) and staff of the finance division. The objective of the training was to standardize the presentation of financial information across departments.

Twenty eight (28) middle managers benefited from a special Advanced Supervisory training program that is to affiliated Loyola the University, American Management Association and the Caribbean Institute of Quality.

FOREST RESOURCES **MANAGEMENT**

Five (5) Forest Management Plans (FMP's) and twenty-seven (27) Annual Operational Plans (AOP's) were submitted during the period under review

The National Log Export Policy which will be effective from January 2009. will increase the rate of export commission on key species used in value added production in the local industry in Guyana. The rate of export commission on logs is currently 2%.

Under the new policy, only companies that have their own concession will be allowed to export logs.

Log exports for 2008 were 92,400m³ representing 33.6% of total log production (275,320m³) as compared to 2007 where log exports (157,097m³) represented 48% of total log production (330,374m³).

PROJECTS COMPLETED IN 2008

programmes in Sustainable Training Forestry Management were conducted for Community Forestry Organizations and Indigenous Communities under the FTCI agenda for 2008.

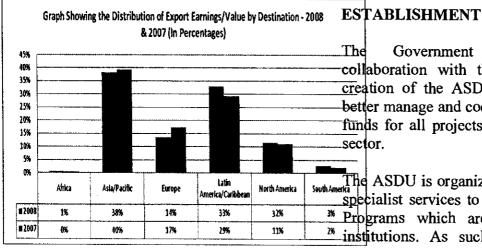
An ITTO Project on Enhancing Legality was implemented with the aim of developing an integrated and dynamic GIS that will incorporate satellite image analysis. illegality indicators and a legality database by establishing a bar-code log-tracking system that will feed into a central database linked to a national wide-area network.

This surveillance system when fully implemented, will significantly improve the GFC's ability to enforce compliance with forestry regulations.

A national consultation to address Policy Approaches for Amerindian Community Forestry Enterprises, was held in September 2008 with representation from over sixty (60) indigenous communities across the ten Administrative regions of Guyana. The main objective was to inform forestry sector workers about Government's policies for the Sector and to obtain feedback from them on implementation issues.

Distribution of Export earnings/Value by **Destination (2007-2008)**

AGRICULTURE SECTOR **DEVELOPMENT UNIT**



The Government of Guyana, collaboration with the IDB, pursued the creation of the ASDU in2007 in order to better manage and coordinate external donor funds for all projects within the agriculture sector.

The ASDU is organized to provide core and specialist services to the implementation of 38 Programs which are funded by lending institutions. As such, it is structured to operate on a cost-share basis for the implementation of programs under its purview.

REVIEW AND **SUMMARY OF ACTIVITIES**

Consequent establishment its arrangements were put in place to house the ASDU in the lower flat of the Head Office of the Ministry of

Agriculture. The rehabilitation of the new ASDU office is completed and the staff is now located in the new building.

During 2007/2008, focus was placed on equipping the ASDU with the required staff, furniture, equipment and provision of institutional arrangements for its operations.

In addition, during 2008 emphasis was placed on the preparation of some of the new projects for execution. These included the following:

(i) The Agricultural Export Diversification Program (ADP) which was signed on April 4, 2008;

(ii) The Agricultural Support Services Program (ASSP) which was subject to

The restructuring. Post-restructuring agreements were captured in an Aide Memoir dated August 19, 2008, and the Amendatory Contract was subsequently signed on October 16, 2008;

- (iii) The Rural Enterprise Agricultural Development Program (READ) was signed on July 24, 2008; and
- (iv) The Expanding Bioenergy Opportunities in Guyana Project was signed September 23, 2008.

The ASDU directed efforts too towards the implementation of the grants, projects and Technical Assistance that were continuing, such as the Conservancy Adaptation Program (CAP), the Agricultural Support Services Program and the Food and Agricultural Organisation's Assistance.

During the year, the ASDU supported the Ministry in initial discussions with respect to the preparation of new technical assistance.

At the end of the year 2008, the value of the portfolio of foreign-funded projects which the ASDU was implementing amounted to US\$55.4 million.

The ASDU considers that it has made significant strides in achieving the goals of the Unit for the year, despite the constraints experienced in achieving the financial targets at the end of the year, the department added three Projects to its portfolio of projects for implementation and two pipeline interventions for preparation. These were the ADP, READ and Bioenergy Program, and the initiatives supported by TradeCom (EU) and the Guerro Trust Fund (UNDP), respectively.

The ADP achieved partial eligibility in December 2009 and the IDB disbursed US\$300,000 to the Program.

In relation to the other new Programs the ASDU significantly advanced the progress of complying with the conditions precedent to first disbursement.

The ongoing programs, ASSP, CAP and the FAO Assistance, experienced slow progress. This was attributed to several constraints, which the department experienced.

GUYANA RICE DEVELOPMENT BOARD

The Guyana Rice Development Board was established by Act Number 15 of 1994 and as provided for under section 3 (iii). Establishment, Management, Powers and Functions of the Board, is headed by a General Manager and a Chairman of the Board of Directors

VISION

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

MISSION

To efficiently utilize the resources of Guyana to produce and market high quality rice and rice by-products as a staple food for local and international markets while providing employment and foreign exchange earnings.

ORGANISATIONAL STRUCTURE

GRDB Departments

Administration

Finance

Marketing

Quality Control

Research

Extension

Internal Audit

SUMMARY OF ACHIEVEMENTS

2008 can be considered as one of the better years for the rice sector in the last decade. During this year we saw the highest prices being paid for rice and thus in some cases the stakeholders were once again making some profits. This year was also celebrated

as Guyana's 100th year as a significant exporter of rice. This notable achievement coincided with the fact that the value of rice

exports for the same year has been the 118,032,802,90) (US\$ Guyana's history.

GRDB Rice Research Station continued to do extensive research work in the production of new varieties of padi that are high yielding and pest and disease resistant. The research staff continued to increase our "on-farm" research work during 2008. This has resulted in the improvement of the technical capacity of farmers while enhancing the new technologies developed at the BRRS and other partnering research facilities.

Trials were conducted to develop new disease resistant varieties: two new varieties would be released in the second crop of 2009. These varieties are now being tested in semi-commercial plots in farmers' fields. Sixteen basic seed plots, Advance six Yield Trials. fertilizers trials and thirteen on Farm testing of the new lines were done in farmers' fields. During the year, the Plant Breeding Department screened 500 introduced advanced breeding lines from the FLAR (Latin American Fund for Irrigated Rice) program and 20 of these were tested in farmers' fields.

NOTABLE ACTIVITIES IN 2008

To mark the auspicious occasion of the 100th year for Guyana as a significant exporter of rice the Ministry of Agriculture planned a calendar of special events.

One such activity was the Logo and Motto Competition, which recorded over one hundred and fifty (150) entries. The winning entry titled "Rice our life our history" was submitted by twenty-four year old Angelique Williams.

However, the highlight of the occasion was the International Rice Conference held on the 7th and 8th November, 2008 at the International Conference Centre. The conference drew presenters from a number of agriculture institutions and Universities across the world.

Presentations were made on a number of issues affecting rice ranging from technology in rice cultivation, rice genetics, weed management, storage management and a number of other issues over the two day period.

President Bharrat Jagdeo addressed the opening ceremony and congratulated the organizers of the conference while noting the importance of the rice sector to Guyana's economy The President highlighted the essential link between rice, slavery and indentureship, and said "even as we celebrate this achievement." it is important that we understand better who we are".

Also attending and addressing the conference was Hon. Robert Persaud Minister of Agriculture and Jamacian Minister of Industry, Investment and Commerce, Mr.Karl Samuda who gave a of commitment on behalf government, that Jamaica will continue to take the 60,000 tonnes of rice that the two countries had agreed upon a number of years ago.

memorandum of understanding (MOU) to that effect was signed between the Jamaican Minister and Guyana Minister of Foreign Trade Dr. Henry Jeffery.

In the area of international trade, we saw the commencement of a process that will lead to free trade with the European Union. The Economic Partnership Agreement (EPA) between Cariforum Countries and the European Union came into effect and for a period of two years, leading up to full duty-free and quota-free access, by year 2010. CARIFORUM rice exporting countries were given quotas of 187,000 tons for 2008 and 250,000 tons for 2009. The quotas are duty-free.

SEED **PRODUCTION** AND **MARKETING**

Seeds produced by the Burma Rice Research Station and approved for sale were distributed by the Extension division to targeted farmers and contract growers in the various rice growing regions. A total of 20,823 bags of seeds were received by farmers via the Extension division.

Focus groups in the form of Farmers Field Schools continued to be the main strategy to train farmers. Training in Regions 3, 4 and 6 was financed under Agriculture the Sector Support Programme through the Ministry of Agriculture, and 2 and 5 by the Guyana Rice Development Board.

During the year a total of fifty one (51) Farmer Field schools were established and one thousand and thirty eight (1,038) farmers participated in the training sessions.

Region#	Schools	Participants
2	6	146
3	24	443
4	5	156
5	3	74
6	13	219
Total -	্বাট্	1038

As part of the training programme other activities were held which complemented the formal Farmers Field School sessions. These include End of Season review of, training (8), field days (10), and exchange visits (10).

Fourteen brochures covering various aspects of rice production were distributed to farmers.

Notices were placed in the press to farmers of field inform school programmes, office days of Extension officers and sale of seed padi.

Notice boards were also placed at Farmers Field School venues to indicate details of activities.

NATIONAL CLIMATE UNIT

BACKGROUND

The Ministry of Agriculture, recognizing the importance of addressing Climate Change in Guyana, created a National Climate Unit within the Ministry. The Unit was established on the 1st April, 2007, as the National Focal Point for Climate Change for Guyana.

MISSION

To facilitate the development in Guyana of a sound knowledge base of the realities of Climate Change and the identification and implementation of appropriate mechanisms and actions for effective response.

KEY OBJECTIVES

- To gather information on Climate Change issues for use by decision makers, operatives and the general public.
- To facilitate research on Climate Change issues.
- To guide the process education and public awareness on Climate Change and for training and capacity building.
- To develop, through the NCC, an effective network and framework for collaboration among the various players involved in activities related to Climate Change.
- To provide advice to decision makers on the mainstreaming of Climate adaptation Change into national measures sectoral policies and actions.

To provide updates on national achievements in relation to Climate Change through reports on the work of the NCU and NCC to the Minister of Agriculture and the NREAC.

To ensure Guyana's compliance with commitments made through global and effective regional processes by monitoring of the implementation of the actions and targets set out programmes and projects.

To represent Guyana's interests at global and regional forums on Climate Change through preparation of position papers and participation in meetings

MAJOR FUNCTIONS

- 1) Information Collection Management and Exchange
- 2) Research
- 3) Education, Public Awareness and Outreach Programmes
- 4) Capacity Building
- 5) Networking/Collaboration
- 6) Representation and **Participation**
- 7) Monitoring

- 8) Facilitation, Coordination and Guidance
- 9) Preparation and Submission of Progress Reports

SUMMARY OF ACHIEVEMENTS

- ofProvision Information, Technical Guidance and conduct of Research.
- Accessing Grants and Capacity Building
- Public Education and Awareness (PEAs) activities
- Extensive Networking/ Collaboration with both local and international Partners
- **Participation** at local international fora relevant to addressing climate change
- Support for Climate Change negotiations
- Monitoring and facilitating compliance with Guyana's Climate Conventions and Agreements

APPENNDICES

Table 1. COMPARSION OF EXPORTS AS PER PRODUCTS (Metric Tonnes) 2002-2008

PRODUCTS	2002	2003	2004	2005	2006	2007	2008
Cargo Rice	112,654	113,765	120,207	97,868	117,180	128,764	89,915
Cargo Bkn	2,429	4,814	15,391	2,263	3,072	3,968	5,191
White Rice	37,034	41,006	59,260	41,789	42,308	60,537	46,771
C.P.B Rice	7,121	7,394	7,326	4,330	6,787	11,362	9,301
White Bkn	18,086	14,910	15,787	13,564	10,318	26,126	18,472
White Pkg							
Bkn	0	0	0	0	0	6	52
White Rice Fl.	0	0	0	0	0	16	0
C.P.B Bkn	1,366	1,771	1,256	427	775	2,126	119
P.B Bkn	684	814	2,037	2,232	1,363	2,098	2,483
P.B Pkg Rice	521	347	93	1,262	2,235	4,393	5,910
P.B Rice Fl	0	0	0	0	0	3	0
Pkg Wht Rice	1,654	975	458	147	198	255	323
Rej P.B. Rice	856	734	694	309	286	956	884
Pet Rice	288	190	153	584	558	1,309	950
Mixed Bkn	0	0	0	0	20	0	0

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Chips	0	0	0	11	0	16	0
Bran	4,374	3,695	2,582	1,386	1,382	2,586	545
Husk	0	14	0	0	0	0	0
Paddy	0	1,083	3,701	0	36	0	36
Dam. P.B	0	630	244	278	0	424	201
P.B Rice	6,194	8,290	13,415	15,708	17,805	24,488	15,017
Pej. Wht Rice	0	0	0	0	0	0	0
Dis Wht Rice	0	0	472	0	0	3	0
Dis P.B Rice	0	0	16	0	253	0	0
C.P.B PKG	0	0	0	0	0	0	21
P.B Pkg Bk	0	0	0	0	0	0	18
Pet PKG Rice	0	0	0	0	0	0	24
TOTAL	193,261	200,432	243,092	182,158	204,576	269,436	196,233

Table 2: EXPORT AS PER DESTINATION 2008

DESTINATION	QUANTITY (MT)	TOTAL EXPORT PERCENTAGE
CARICOM:		
ANTIGUA	384	
BARBADOS	2,159	
DOMINICA	964	
GRENADA	1,618	
JAMAICA	42,199	
ST. KITTS	120	
ST. LUCIA	626	
ST. VINCENT	1,638	
SURINAME	556	
TRINIDAD	19,186	
SUB TOTAL	69,450	35.40%
EUROPEAN		
<u>UNION:</u>		
BELGIUM	1,868	
FRANCE	192	
GERMANY	10	
GUADELOUPE	2,196	
HOLLAND	56,297	

MARTINIQUE	2,106	
POLAND	3,449	
PORTUGAL	33,165	
UNITED KINGDOM	217	
SUB TOTAL	99,500	50.70%
OCT:		
ARUBA	5,715	
SUB TOTAL	5,715	2.91%
OTHERS:		
COLOMBIA	706	
CUBA	136	
DAKAR, SENEGAL	288	
DOMINICAN		
REPUBLIC	46	
GAMBIA	2,710	
GUATEMALA	506	
HAITI	13,703	
PANAMA	3,473	
SUB TOTAL	21,568	10.99%
TOTAL	196,233	100%

TABLE 3. IMPORTS OF PESTICIDES IN 2008

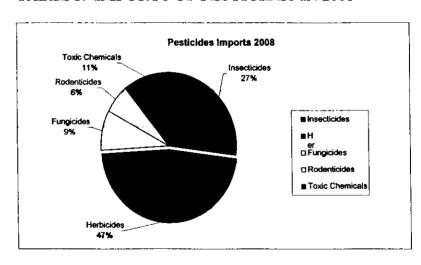


TABLE 4. POULTRY PRODUCTION DATA 2008

Month/Year (2008)	Poultry Local 2008	Meat (kg.)			Pullet eggs (cases) 2008	Broiler hatching eggs Imported cases 2008
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	1	T	<u> </u>	T
January	2,968,371	994,641		4,004
February	1,197,721	1,078,137	250	5,249
March	1,939,108	1,356,717	295	4,983
April	1,820,501	1,119,630	45	4,509
May	2,398,658	1,508,108	65	4,911
June	1,731,649	1,310,276		4,266
July	1,478,354	1,504,235		3,969
August	2,256,016	1,997,016		3,737
September	1,595,351	2,269,824	4,077 Hens	4,787
October	1,121,330	2,590,771		5,800
November	2,135,877	2,172,125		6,530
December	2,544,236	1,982,251		3,920
Total	23,187,487	19,883,732	655	56,665

TABLE 5. EXPORT OF NON-TRADITIONALS

Commodities	Annual Tota	l	Destination	
Dried Thyme	10	kg	USA	
Dry Coconut	34650	kg	USA	
Banana	9	kg	USA	
Bora	69	kg	USA	
Bark	133	kg	USA	
Calabash	10	kg	USA	
Corn Seed	7146	kg	USA	
Cucumber	810	kg	USA	
Medicinal Herb	0	kg	USA	
Medicinal bark	0	kg	USA	
Eddoes	7864	kg	USA	
Pumpkin	613.4	kg	USA	
Sweet Basil	502	kg	USA	
Achar	337	kg	USA	
Fruits & Vegetables	2463	kg	USA	
Eddoes and Pepper	0	kg	USA	
Eddoes, Pepper & Plant parts	0	kg	USA	
Egg Plant	1411.64	kg	USA	
Plant Parts	40	kg	USA	

Commodities	Annual Tota	al	Destination	
Peppers	8764	kg	□ USA	
Pineapple	1851	kg	USA	
Tea Bush & Bark	80	kg	USA	
Saeme	19	kg	USA	
Corn	145	kg	USA	
Mango	449	kg	USA	
Tea Bush	9	kg	USA	
Thyme	19	kg	USA	
Bora	1771.2	kg	Canada	
Bread Nut	390	kg	Canada	
Plant Parts	302.6	kg	Canada	
Pepper	2654	kg	Canada	
Saeme	1392	kg	Canada	
Star Apple	87	kg	Canada	
Squash	576.8	kg	Canada	-
Sapadilla	842	kg	Canada	
Thyme	414.3	kg	Canada	
Egg Plant	630	kg	Canada	
Married Man Pork	3.6	kg	Canada	
Mango	22752	kg	Canada	
Mamie	58	kg	Canada	
Pineapple	188	kg	Canada	
Whytee	331	kg	Canada	
Genip	2617	kg	Canada	
Cashow	76	kg	Canada	• •
Water Coconut	5	kg	Canada	
Coconut Choker	113.6	kg	Canada	
Dry Coconut	136	kg	Canada	
Noni	432	kg	Canada	
Psydium	31	kg	Canada	
Bread Nut	24	kg	Canada	
Katahar	94	kg	Canada	
Fruits & Vegetables	599	kg	St. Martin	
Eddoes	168	kg	St. Martin	
Egg Plant	30	kg	St. Martin	
Bora	9	kg	St. Martin	
Pineapple	55	kg	St. Martin	
Water Melon	227	kg	St. Martin	
Pumpkin	260	kg	St. Martin	

Commodities	Annual Total	l	Destination	
Corilla	6	kg	St. Martin	
Squash	5	kg	St. Martin	
Calaloo	14	kg	St. Martin	
Bread Nut	7	kg	St. Martin	
Ochro	7	kg	St. Martin	
Pepper	4.5	kg	St. Martin	
Tomatoes	500	kg	Suriname	
Genips	1700	kg	Suriname	
Celery	425	kg	Suriname	
Wheat Middling	26130	kg	Suriname	
Water Melon	116274	kg	Barbados	
Orange Orange	17532	kg	Barbados	
Lime	2253	kg	Barbados	
Plantain	64786	kg	Barbados	
Pumpkin	126138	kg	Barbados	
Eddoes	18131	kg	Barbados	
Pineapple	2791	kg	Barbados	
Coconut	11491	kg	Barbados	
Ginger		kg	Barbados	
Casareep	12	gal	Barbados	
Papaw	7	kg	Barbados	
Tomato	105	kg	Barbados	
Tangerine	2196	kg	Barbados	
Cassava	136	kg	Barbados	
Bora	598	kg	Barbados	
Cabbage	5	kg	Barbados	
Sweet Pepper	1	kg	Barbados	
Pepper	26	kg	Barbados	
Grapefruit	455	kg	Barbados	
Passion Fruit	4	kg	Barbados	
Egg Plant	2	kg	Barbados	
Coffee	922.73	kg	Barbados	
Pineapple	3658	kg	Trinidad	
Plantain	14536.5	kg	Trinidad	
Copra	1055138	kg	Trinidad	
Copra Meal	1461.97		Trinidad	
Rice Bran	726.48		Trinidad	
Coconut	15372	kg	Trinidad	

Commodities	Annual Total		Destination
Coconut	1640.9	kg	Trinidad
Cassava	22	kg	Trinidad
Sweet Potata	27	kg	Trinidad
Pumpkin	45	kg	Trinidad
Eddoes	17546	kg	Trinidad
Pepper	10	kg	Trinidad
Barley Flour	1800	kg	Trinidad
Rice Husk	13000	kg	Trinidad
Limes	10000	kg	Martinique
Pumpkin	15000	kg	Martinique
Tomato	3000	kg	Martinique
Watermelon	3000	kg	Martinique
Ginger	500	kg	Martinique
Pepper	2500	kg	Martinique
Yams	5000	kg	Martinique
Egg Plant	500	kg	Martinique
	-·· <u> </u>		
Pineapple	27099.45	kg	Antigua
Pumpkin	31340.45	kg	Antigua
Eddoes	2260	kg	Antigua
Water melon	7272.63	kg	Antigua
Coconut	1261.4	kg	Antigua
Ginger	240	kg	Antigua
Raw Peanut	500	kg	St. Lucia
Cocnuts	670.45	kg	St. Lucia
Cassava	17727.36	kg	St. Lucia
Copra	154300	kg	St. Lucia
Rice Bran	17.7	kg	St. Lucia
Premium Consentrate	10182	kg	St.Lucia
Mix Concentrate	1364	kg	St.Lucia
Copra Meal	39571	kg	St. Lucia
Wheat Middling	46364	kg	St. Lucia
Cracked Corn	6818	kg	St.Lucia
Cerassie Tea	7240	kg	England
Golden Apple	88	kg	England
Noni	30	kg	England
Thyme	10	kg	England
Coconut	18	kg	England

Commodities	Annual Tota	ıl	Destination	
Pineapple	10	kg	England	
Plantain	21	kg_	England	
Orange	22	kg	England	
Pumpkin	20	kg	England	
Mangoes	1882	kg	England	
Wheat Middling	129890	mt	Suriname	
Coffee bean	477	kg	Barbados	
Celery	225	kg	Barbados	

<u>Table 6. Gross Domestic Product (at 1988 Prices)</u> (G\$ Million)

ltem -	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP AT FACTOR COST	5,270	5,426	5,352	5,474	5,537	5,500	5,587	5,478	5,759	6,068	6,253
GRICULTURE, FORESTRY AND FISHING	1,475	1,670	1,519	1,571	1,626	1,588	1,633	1,461	1,535	1,542	1,467
Sugarcane	600	754	642	668	748	664	714	545	569	585	496
Rice Paddy	153	161	130	143	129	161	148	139	140	135	150
ivestock	109	111	116	119	125	130	133	129	125	128	137
Other crops	272	275	278	281	285	291	297	288	308	322	347
ishing	142	143	164	165	159	159	157	161	156	161	158
Forestry	200	226	189	195	180	183	184	199	237	211	179
MINING AND QUARRYING	645	591	626	652	607	554	518	426	334	409	434
Bauxite	262	240	254	267	249	222	207	104	76	168	178
Other	383	351	372	385	358	332	311	322	258	241	256
MANUFACTURING	575	654	563	577	640	637	653	591	646	654	616
Sugar	190	240	204	212	276	271	292	216	233	239	20
Rice	56	64	50	56	48	57	52	29	49	48	5
Other	328	350	309	309	316	309	309	346	364	367	36
CONSTRUCTION	471	424	452	461	443	468	487	533	597	631	68
SERVICES	2,103	2.007	0.400	2.242	2 222	2.252	2.200	0.467	2.646	2.020	2.05
Distribution	439	2,087	2,193	2,213	2,222	2,253	2,296	2,467 483	2,646 532	2,830 579	3,05
Transport and Communications	439	448	480	506	529	555	575	629	692	782	86
Rental of dwellings	93	87	92	94	94	97	98	104	114	118	12
Financial services	294	300	309	293	290	293	296	315	340	364	40
Government	650	657	689	689	682	686	694	708	722	729	73
Other ¹	188	191	198	204	204	210	213	228	246	258	27

Source: Bureau of Statistics

Components may not add to the total due to rounding

¹ Includes electricity, gas and water

<u>APPENDIX</u>

MOTION BY THE MINISTER OF FINANCE

WHEREAS the Constitution of Guyana requires that Estimates of the Revenue and Expenditure of Guyana for any financial year should be laid before the National Assembly;

AND WHEREAS the Constitution also provides that when the Estimates of Expenditure have been approved by the Assembly an Appropriation Bill shall be introduced in the Assembly providing for the issue from the Consolidated Fund of the sums necessary to meet that expenditure;

AND WHEREAS estimates of Revenue and Expenditure of Guyana for the financial year 2010 have been prepared and laid before the Assembly on 2010-02-08

NOW, THEREFORE BE IT RESOLVED:

That this National Assembly approves the Estimates of Expenditure for the financial year 2010, of a total sum of one hundred and twenty-five billion, five hundred and sixty-eight million, five hundred and seventy-three thousand dollars (\$125,568,573,000), excluding seventeen billion, two hundred and seven million, and twenty-six thousand dollars (\$17,207,026,000) which is chargeable by law, as detailed therein and summarised in the undermentioned schedule, and agree that it is expedient to amend the law and to make further provision in respect of finance.

Ashni Singh

Minister of Finance

MINISTRY OF FINANCE 2010-02-08

	SCHEDULE	G\$ '000			
AGENCY NUMBER IN ESTIMATES		NET SUM GRANTED CURRENT	NET SUM GRANTED CAPITAL		
61 - 19	GENERAL ADMINISTRATION SECTOR				
01	OFFICE OF THE PRESIDENT				
	Programmes				
	011. Head Office Administration	1,638,191	2,226,696		
	012. Presidential Advisory (Cabinet and Other Services)	391,885	0		
	014. Public Policy and Planning	4	0		
	Total	2,030,080	2,226,696		
02	OFFICE OF THE PRIME MINISTER				
	Programme				
	021. Prime Minister's Secretariat	133,212	3,190,624		
	Total	133,212	3,190,624		
03	MINISTRY OF FINANCE				
	Programmes	1	ŀ		
	031. Ministry Administration	11,626,895	10,757,203		
	032. Government Accounting Administration	2,890,156	2, 500		
	Total	14,517,051	10,759,703		
04	MINISTRY OF FOREIGN AFFAIRS	Ì			
	Programmes	ĺ			
	041. Ministry Administration	752,299	5,502		
	042. Foreign Relations	1,640,236	26,500		
	043. Foreign Trade and International Cooperation	98,483	0		
	Total	2,491,018	32,002		
07	PARLIAMENT OFFICE				
	Programme				
	071. National Assembly	636,216	62,000		
	Total	636,216	62,000		
09	PUBLIC AND POLICE SERVICE COMMISSION				
	Programme				
İ	091. Public and Police Service Commission	42,206	1,221		
	Total	42,206	1,221		
10	TEACHING SERVICE COMMISSION				
1	Programme				
	101. Teaching Service Commission	58,575	5,000		
	Total	58,575	5,000		
11	ELECTIONS COMMISSION				
	Programmes		ı		
	111. Elections Commission	1,040,845	20,000		
	112. Elections Administration	897,8 7 2	C		
	Total	1,938,717	20,000		
13	MINISTRY OF LOCAL GOVERNMENT				
	AND REGIONAL DEVELOPMENT		l		
	Programme				
	131. Main Office	52,807	(
	132. Ministry Administration	33,606			
	133. Regional Development	151,223			
	Total	237,636	1,574,620		
	Subtotal	22,084,711	17,871,866		

	SCHEDULE	G\$'000			
AGENCY NUMBER IN ESTIMATES		NET SUM GRANTED CURRENT	NET SUM GRANTED CAPITAL		
14	PUBLIC SERVICE MINISTRY				
	Programme		1		
	141. Public Service Management	353,422	9,500		
	Total	353,422	9,500		
16	MINISTRY OF AMERINDIAN AFFAIRS				
	161. Amerindian Development	279,064	217,981		
	Total	279,064	217,981		
26 - 29	ECONOMIC SERVICES SECTOR				
21	MINISTRY OF AGRICULTURE				
2.	Programmes				
	211. Ministry Administration	1,178,986	3,335,000		
	212. Crops and Livestock Support Services	1,085,173	2,172,700		
	213. Fisheries	86,858	10,000		
	214. Hydrometeorological Services Total	247,760 2,598,77 7	63,000 5,580,700		
	I Usar	2,370,777	3,360,700		
23	MINISTRY OF TOURISM, COMMERCE AND INDUSTRY				
	Programmes				
	231. Main Office	412,048	32,000		
	232. Ministry Administration	63,317	13,500		
	233. Commerce, Industry and Consumer Affairs Total	64,734 540,09 9	496,200 541,700		
30 - 39	INFRASTRUCTURE SECTOR		2.2,		
31	MINISTRY OF PUBLIC WORKS AND COMMUNICATIONS				
[Programmes 311. Ministry Administration	218,074	44,790		
	312. Public Works	655,898			
	313. Communication and Transport	54,700			
	Total	928,672	9,903,829		
40 - 49	SOCIAL SERVICES SECTOR		<u> </u>		
41	MINISTRY OF EDUCATION				
	Programmes				
	411. Main Office	393,290	1		
	412. National Education Policy - Implementation & Supervision 413. Ministry Administration	137,007 1,253,864			
	414. Training and Development	854,975			
	415. Education Delivery	4,076,204			
	Total	6,715,340	1,957,842		
44	MINISTRY OF CULTURE, YOUTH AND SPORTS				
	Programmes				
	441. Ministry Administration	155,638	8,800		
	442. Culture	422,514	58,380		
	443. Youth	371,716	16		
	444. Sports	167,743			
	Total	1,117,61	484,68		
	Subtotal	12,532,98	18,696,23		

	SCHEDULE	G\$'000			
AGENCY		NET SUM	NET SUM		
NUMBER IN		GRANTED	GRANTED		
<u>ESTIMATES</u>		CURRENT	CAPITAL		
45	MINISTRY OF HOUSING AND WATER				
	Progamme	j]		
	451. Housing and Water	464,720	5,367,300		
	Total	464,720	5,367,300		
46	CEORCETOWN BURLIC HOCKET L CORROR ATTON				
1 0	GEORGETOWN PUBLIC HOSPITAL CORPORATION	ļ	1		
	Programme 461. Public Hospital	2.460.640	111 000		
	Total	3,460,648	111,000		
	1 otal	3,460,648	111,000		
47	MINISTRY OF HEALTH		İ		
17	Programmes		ļ		
	471. Ministry Administration	575,491	46,000		
	472. Diseases Control	458,425	88,000		
	473. Primary Health Care Services	402,196	320,200		
	474. Regional and Clinical Services	2,226,658	1,189,109		
	475. Health Sciences Education	342,895	3,300		
	476. Standards and Technical Services	216,940	11,300		
	477. Rehabilitation Services	190,455	5,600		
	Total	4,413,060	1,663,509		
	A 36441	4,415,000	1,000,000		
48	MINISTRY OF LABOUR, HUMAN SERVICES				
	AND SOCIAL SECURITY				
	Programmes				
	481. Ministry Administration	153,568	27,300		
	482. Social Services	4,840,589	344,500		
	483. Labour Administration	267,849	14,400		
	Total	5,262,006	386,200		
	A Char	3,202,000	300,200		
50 - 69	PUBLIC SAFETY SECTOR				
51	MINISTRY OF HOME AFFAIRS				
	Programmes				
	511. Secretariat Services	213,622	1,251,541		
	512. Guyana Police Force	4,777,853	513,500		
	513. Guyana Prison Service	877,773	104,500		
	514. Police Complaints Authority	8,167	1,200		
	515. Guyana Fire Service	503,529	124,000		
	516. General Register Office	93,927	4,400		
	Total	6,474,871	1,999,141		
		, i			
52	MINISTRY OF LEGAL AFFAIRS				
	Programmes				
	521. Main Office	12,707	324,500		
	522. Ministry Administration	38,668	· ·		
	523. Attorney General's Chambers	78,432	4,000		
	524. Office of the State Solicitor	14,344	1,970		
	525. Deeds Registry	63,004	9,800		
	Total	207,155			
53	GUYANA DEFENCE FORCE	1			
	Programme				
	531. Defence Headquarters	5,797,948			
 	Total	5,797,948	436,700		
1					
55	SUPREME COURT				
	Programmes				
1	551. Supreme Court of Judicature	353,627			
	552. Magistrates' Department	329,186			
	Total	682,813	120,500		
			10.40=000		
	Subtotal	26,763,221	10,425,820		

3\$ '000	SCHEDULE	G\$'000			
AGENCY		NET SUM	NET SUM		
NUMBER IN		GRANTED	GRANTED		
ESTIMATES		CURRENT	CAPITAL		
	DUDLIC BROSE CUTIONS				
6	PUBLIC PROSECUTIONS Progamme				
	561. Public Prosecutions	65,428	2,188		
	Total	65,428	2,188		
	10.11	32,12	_,		
7	OFFICE OF THE OMBUDSMAN				
	Programme				
	571. Ombudsman	3,956	0		
•	Total	3,956	0		
8	BUDITO SEDVICE ADDRIT ATE TRIBUTAL	Ì			
	PUBLIC SERVICE APPELLATE TRIBUNAL Programme	ŀ	·		
	581. Public Service Appellate Tribunal	6,789	1,680		
	Total	6,789	1,680		
		3,73	-,		
70 - 89	REGIONAL DEVELOPMENT SECTOR				
71	REGION 1: BARIMA/WAINI	· \			
	Programmes		-		
	711. Regional Administration and Finance	81,561	12,500		
	712. Public Works	167,359	56,600		
	713. Education Delivery	549,032	58,900		
	714. Health Services	237,297	35,965		
	Total	1,035,249	163,965		
72	REGION 2: POMEROON/SUPENAAM	Ì			
-	Programmes				
	721. Regional Administration and Finance	101,318	6,700		
	722. Agriculture	182,624	110,000		
	723. Public Works	91,375	89,600		
	724. Education Delivery	893,945	43,000		
	725. Health Services	344,593	36,500		
	Total	1,613,855	285,800		
73	REGION 3: ESSEQUIBO ISLANDS/WEST DEMERARA				
	Programmes				
	731. Regional Administration and Finance	121,308	7,200		
	732. Agriculture	215,603	47,500		
	733. Public Works	83,057	88,500		
	734. Education Delivery	1,218,529	49,000		
	735. Health Services	469,200	39,500		
	Total	2,107,697	231,700		
74	REGION 4: DEMERARA/MAHAICA				
	Programmes				
	741. Regional Administration and Finance	107,011	11,500		
	742. Agriculture	179,489	30,500		
	743. Public Works	131,861	51,500		
	744. Education Delivery	1,677,874	41,000		
	745. Health Services	231,258	25,900		
	Total	2,327,493	160,400		
75	REGION 5: MAHAICA/BERBICE				
	Programmes	ļ			
	751. Regional Administration	60,439	12,400		
	752. Agriculture	109,545	80,600		
	753. Public Works	113,340	73,500		
1	754. Education Delivery	748,250	38,000		
	755 Health Services	217,476	16,300		
	Total	1,249,050	220,800		
ľ	Subtotal	8,409,517	1,066,533		

SCHEDULE

G\$'000 **AGENCY NET SUM NET SUM** NUMBER IN **GRANTED** GRANTED **ESTIMATES CURRENT** CAPITAL 76 **REGION 6: EAST BERBICE/CORENTYNE Programmes** 761. Regional Administration and Finance 74,916 13,300 762. Agriculture 353,690 102,179 763. Public Works 140,953 106,000 764. Education Delivery 1,576,732 46,000 765. Health Services 778,659 31,500 Total 2,924,950 298,979 77 **REGION 7: CUYUNI/MAZARUNI Programmes** 771. Regional Administration and Finance 86,989 12,000 772. Public Works 140,250 32,000 773. Education Delivery 561,991 40,733 774. Health Services 248,745 26,100 Total 1,037,975 110,833 78 **REGION 8: POTARO/SIPARUNI Programmes** 781. Regional Administration and Finance 46,008 11,800 782. Public Works 84,384 39,000 783. Education Delivery 42,500 283,786 784. Health Services 22,000 116,382 Total 530,560 115,300 79 **REGION 9: UPPER TAKATU/UPPER ESSEQUIBO Programmes** 791. Regional Administration and Finance 79,717 13,100 792. Agriculture 15,632 9,800 793. Public Works 88,033 134,000 794. Education Delivery 438,045 28,200 795. Health Services 192,134 32,750 Total 813,561 217,850 80 REGION 10: UPPER DEMERARA/UPPER BERBICE **Programmes** 801. Regional Administration and Finance 122,837 1,700 802. Public Works 81,604 132,011 803. Education Delivery 1,030,694 48,080 804. Health Services 210,979 39,775 Total 1,496,521 171,159 Subtotal 6,803,567 914,121 **GRAND TOTAL** 76,594,001 48,974,572