# GUYANA NATIONAL BUREAU OF STANDARDS (GNBS)

# **ANNUAL REPORT**

# 2006

Guyana National Bureau of Standards National Exhibition Centre Sophia Greater Georgetown Guyana

December 2006

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# VISION OF GNBS

"To improve the quality of life of the people of Guyana through the process of standardization".

Standardisation can be defined as an activity which provides solutions to problems essentially in the spheres of science, technology and economics, aimed at the achievement of the optimum degree of order in a given context.

Generally, the activity consists of the processes of formulating, issuing and implementing standards. An important benefit of standardization is improvement of the suitability of goods and services for their intended purposes.

This activity of standardization can make a significant contribution to improving the quality of life of the people in the country.

# MISSION STATEMENT

"To promote standardization and quality systems in the production and importation of goods and services for the protection of the consumer and the advancement of local and foreign trade thereby improving the quality of life of the people of Guyana".

The VISION of the GNBS can be achieved through the implementation of the MISSION Statement. This statement spells out the different work programmes of the Bureau, targeting consumer protection and advancement of trade. The consumer protection programme activities involve the verification of weights and measures, monitoring the quality of local and imported commodities and investigation of consumers' complaints. The trade-support activities are focused on a range of conformity assessment subprogrammes and information services.

#### MEMBERS OF NATIONAL STANDADS COUNCIL 2006

1.	Mr. Melvyn Sankies	Chairman	-
2.	Dr. Chatterpaul Ramcharran	Member	Guyana National Bureau of Standards
3.	Mr. Willet Hamilton	Member	Ministry of Tourism, Industry and Commerce.
4.	Mr. Valmikki Singh	Member	National Frequency Management Unit.
5.	Mr. Narvon Persaud	Member	Guyana Association of Professional Engineers.
6.	Mr. Anthony Ross	Member	Guyana Manufacturers Association.
7.	Mr. Patrick Dyal	Member	Guyana Consumers Association.
8.	Mr. Khalid Alladin	Member	Environmental Protection Agency.
9.	Mr. Jewel Sears	Member	Food and Drugs Department.
10.	Mr. Brian Greenidge	Member	Guyana Rice Development Board.
11.	Mr. William Benjamin	Member	Benjamin Business Machines.
12.	Mr. Rameshwar Ramrattan	Member	Georgetown Chamber of Commerce and Industry.

The National Standards Council is the Governing Board of the GNBS dealing with policy matters. The Board was reconstituted with effect from July 01, 2005 with essentially the same members, excepting Mr. Dhanpaul Dhanraj, from The Guyana Rice Millers & Exporters Development Association. Also, Ms. Jewel Sears replaced Mr. Lee Van DeSantos who resigned from the Food and Drugs Department. Mr. Anthony Ross replaced Dr. Gocool Persaud representing the GMA, and Mr. Khalid Alladin replaced Ms. Emilia Maslen, representing the EPA. The Board Members meet on a monthly basis and monitor the work of the GNBS. A comprehensive monthly report is submitted to the Council by the Executive Director. Board members are also responsible to chair and manage Standards Development Technical Committees in the preparation of standards for the different sectors of the economy. Oral reports are also submitted by Council Members to the meeting, which are captured in the minutes of the meetings.

#### **EXECUTIVE OFFICERS**

## (Management Team)

Dr. Chatterpaul Ramcharran - Executive Director

Ms. Candelle Walcott-Bostwick - Head, Conformity Assessment Department

Ms. Evadnie Enniss-Fields - Head, Information Services Department.

Ms. Charmain Niles - Head, Administration and Finance

Department.

Ms. Shune Vickerie - Head, Standardisation Department.

Mr. Shailendra Rai - Chief Inspector, Metrology and Compliance

Department.

#### DEPARTMENTS/WORK PROGRAMMES

\* Metrology & Standards

Compliance Department - Weights & Measures (Legal Metrology)

- Standards Compliance monitoring

(Import quality)

\* Laboratory Services Department - Calibration activities

\* Standardisation Department - Standards Development

Standards Promotion & ImplementationRegional & International activities.

- Codex activities

\* Conformity Assessment Department - Technical Assistance

Product Certification

- Audit Service

Inspection & Certification

Accreditation activities.

\* Information Services Department - Communication

Metrication

- Standards Information

Information Technology

\* Administration and Finance - Administration

Finance

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#### **EXECUTIVE SUMMARY**

#### HIGHLIGHTS OF ACHIEVEMENTS FOR 2006

During the year 2006, the Guyana National Bureau of Standards (GNBS) continued relentlessly to promote standardization and quality systems in Guyana through its ten (1) work programmes, viz., (1) Legal Metrology (Weights and Measures) (2) Standards Compliance (3) Laboratory Services (4) Conformity Assessment (5) Standardisation (6) Communication (7) Metrication (8) Standards Information (9) Information Technology (10) Administration and Finance. The work of the Institution is reported under these Programmes.

In the pursuit of its mission and vision, the GNBS made a number of notable achievements, as summarized below. It is believed that the various stakeholders, including manufacturers, importers, retailers, vendors and consumers have become more conscious of the importance of standards, and are making the requisite adjustments to put systems in place in order to comply accordingly.

# (1) Legal Metrology (Weights and Measures)

The GNBS conducted the verification of new, locally-manufactured and imported devices submitted for testing during the year, resulting in a quantity of 889 scales, 2,198 masses, and 806 measures tested for accuracy. In addition, 1,085 electricity meters were also initially verified of which 411 had to be calibrated. For subsequent verification, 7,380 scales, 11,506 masses, 267 measures were tested for accuracy. At filling stations and bulk terminals 1,262 petrol pumps, 32 bulk meters and 6 storage tanks were verified.

In addition, the GNBS was successful in verifying 6 weighbridge scales used at sugar estates, 60 weighbridge scales used in the rice industry and 28 known weighbridge scales used in the other industries, for the first and second half of the year, respectively.

Inspectors also conducted surveillance activities and visited 7,524 stalls/premises countrywide to ensure that all weighing and measuring devices used in commercial trade were tested and stamped. During these exercises, 969 scales, 1,480 masses, 54 measures and 15 rules were seized and removed. The execution of weights and measures surveillance inspections by the GNBS is pivotal in providing consumer protection and equity in trade. It ensures that all devices used in official and legal business activities are accurate and are in an acceptable working condition.

# (2) Standards Compliance

Under this programme, some twenty- five categories of imported or locally manufactured commodities falling under the purview of the GNBS were monitored for compliance to National Standards. It requires the importers and manufacturers of these commodities to register with the Bureau, in order to facilitate ports-of-entry and warehouse inspections, to verify quality and ensure that requirements under the import control regulations are met.

In addition, GNBS Inspectors also conducted product by product surveillance campaigns at sale outlets based on complaints received. As a result, a total of 292 importers, 50 used-tyre dealers and 9 local manufacturers were registered with the GNBS for the importing, retailing and manufacturing of commodities monitored by the GNBS.

As a result, a total of 1,393 port-of-entry inspections and 1,215 surveillance inspections were conducted. Further, a total of 75 periodic inspections were conducted at tyre retail outlets resulting in 300 defective tyres being destroyed.

Further, Inspectors conducted sampling at wharves and rice mills, and samples collected were coded and forwarded to the Laboratory Services Department for testing. As a result, 1,144 containers (27,799.2 metric tonnes) of white and parboiled rice from 6 exporters were sampled prior to exportation to Jamaica.

During the year, 87 consumer complaints were received by the GNBS, predominantly for electrical appliances and cell phones. Seventy-five (75) of the complaints were favourably resolved, 6 were referred to the Ministry of Tourism, Industry and Commerce for further investigation, and 6 are pending further investigation by the GNBS.

# (3) Laboratory Services

During the year, Laboratory Services Department provided calibration services to industry, as 278 masses, 9 volumetric measures, 3 scales, 4 gauges, 8 calipers, 2 micrometers, and 6 measuring tapes were calibrated to establish traceability to the national and international standards. Most of the total of 310 devices calibrated were to establish traceability for companies that are certified to the ISO 9001 International Standard, and those working towards such certification.

The working standards, i.e, Masses, Electronic Balances and Provers of the GNBS were also calibrated using the secondary standards. The Department also tested 1,037 samples of white and parboiled rice to ascertain the percentage broken kernels for shipment to Jamaica. In addition, 31 gold samples were tested for purity, with 10 samples falling below the required karat, and therefore, failing the tests.

# (4) Conformity Assessment

Technical assistance was provided to ten companies to facilitate the development of their quality management systems to the ISO 9001: 2000 standard. Technical assistance was provided in the form of regular on-site meetings, interpreting the requirements of the standard and reviewing of policies and procedures completed by the companies. The Art Williams and Henry Wendt Aeronautical Engineering School (AES) was the only company to be registered to the ISO 9001 standard. Forty percent of the Companies participating in this programme have documented a quality management system to the ISO 9001:2000 standard.

During the period, contact was made with eight SMEs to determine their level of interest in implementing a quality management system. Ten SMEs which were previously working with the programme through the EMPRETEC Project were in contact with the GNBS. Most of these SMEs had little or no documentation. The GNBS provided some assistance to some of these Enterprises, however, the response was not satisfactory.

The Product Certification Officer visited twelve local manufacturers who were involved in manufacturing products for which national standards are available. The manufacturers visited were gold jewelers, Agro processors, food manufacturers, potable water bottling, paint and rum manufacturers.

Ten surveillance visits and six renewal audits were conducted at clients permitted to use the National Standards Mark under the Product Certification Scheme. Five (5) jewellery manufacturers and two (2) poly vinyl chloride (p.v.c) pipe manufacturers are currently permitted to use the National Standards Mark on products certified to the respective national standards.

For the Audit Service programme, nine (9) audits were conducted at seven (7) companies for the year 2006 to determine the level of conformance to the quality system at the company to the ISO 9001:2000 standard.

With respect to the Accreditation programme, technical assistance was provided to twelve (12) inspection agencies, six (6) certification agencies and two (2) testing laboratories for the purpose of accreditation to the ISO 17020, ISO Guide 65 and the ISO/IEC 17025 standards, respectively. Twelve inspection agencies, three certification agencies and two testing laboratories have made submissions to the GNBS for review. However, there was evidence of lack of commitment of these organizations to have their management systems completed in a timely manner. No certification or inspection agency has completed the first draft of the quality manual to the respective standards. The two testing laboratories have completed first drafts of the quality manual to the ISO/IEC 17025 standard.

For the Laboratory Certification Programme thirteen, (13) quality manuals and forty four (44) technical manuals were submitted by thirteen (13) clinical laboratories, and reviewed during the year.

The Guyana Rice Development Board and the Guyana Power and Light Inc were the only non medical laboratories to submit quality manuals and quality system procedures during the year.

Five renewal audits were conducted at the Central Medical Laboratory- Georgetown Public Hospital Corporation, Dr. Balwant Singh's Hospital Laboratory, St. Joseph Mercy Hospital Laboratory, Sigma Labs and the Eureka Medical Laboratory.

Renewal of Certifications were granted to the Central Medical Laboratory-Georgetown Public Hospital Corporation, Dr. Balwant Singh's Hospital laboratory and the Eureka Medical Laboratory. There was sufficient evidence to show that the laboratory management system at these laboratories were effectively implemented and maintained. Four out of five (80%) laboratories audited were granted renewal of Certification.

Six surveillance visits were conducted as scheduled to the Dr. Balwant Singh's Hospital laboratory and the Central Medical Laboratory- GPHC during the year.

With reference to the GNBS's ISO 9001 quality system, the quality manual along with thirteen quality system procedures were completed and approved by the Executive Director in March 2007. A copy of the quality manual and procedures were submitted to each Head of Department for implementation. In addition, staff were sensitized on the role of the Management Representative, the GNBS ISO 9001 implementation plan, the road to ISO 9001 registration, the benefits of implementing an ISO 9001 quality management system at the GNBS and identification of areas for improvement, the quality management principles, management commitment and the process-based quality management system. Ninety percent of the quality system documentation was completed.

Three external training programmes were conducted to facilitate awareness and development of the ISO 9001 quality management system in Companies developing their quality systems to the ISO 9001:2000 standard.

Ten participants attended the ISO 14001:2004 EMS Essentials course and the ISO 14001:2004 EMS Lead Auditor Course held **August 20-21, 2006** and **August 22-26, 2006** respectively, at the Ministry of Foreign Service. The companies represented were Guyana Sugar Corporation, Demerara Power Company Limited, Arrow Point Nature Resort, Environmental Protection Agency and the Guyana National Bureau of Standards.

A memorandum of understanding was established between the GNBS and EPA to facilitate a framework for the implementation of EMS in Companies in Guyana, the GNBS, as the National Standards Body, and the EPA, as the Environmental Monitoring Agency in Guyana.

# (5) STANDARDISATION

During the year 2006, 199 standards were approved by National Standards Council, of which, 169 were adopted from the International Electrotechnical Commission (IEC), 20 were adopted from the International Organisation for Standardisation (ISO), 8 were adopted from the Caricom Regional Organisation for Standards and Quality (CROSQ), and 2 were adapted nationally. Two (2) proposals for the development of National Standards were approved by National Standards Council. The total amount of standards produced by the GNBS to date is 481.

Three (3) National Public consultation Sessions on the Draft Guyana Standards (Code of Practice for the assessment of interior lodges and resorts; Specification for storage, handling and transportation of liquefied petroleum gas cylinders; Specification for milk and Specification for food hygiene) were held.

Seven (7) standards were disseminated for public comments.

Two (2) memoranda were submitted to Cabinet seeking approval to make two (2) standards compulsory, viz., GYS 264:2003 "Specification for the storage, handling and transportation of liquefied petroleum gases (LPG) cylinders" and GYS 58:2006 "Specification for poultry feed and feed ingredients".

Guyana voted for the Draft Caricom Standards, "Specification for poultry feed and feed ingredients," "Specification for coconut oil" and "Specification for canned sausages" to be submitted to the Council for Trade and Economic Development (COTED) for approval as compulsory Caricom Standards.

## (6) COMMUNICATION

The Communication Division continues to provide critical programme support to the technical departments of the Bureau in the form of promotional campaigns, live television and radio programmes, editing printed materials, advertisements, producing and designing print materials, arranging press briefings, symposia and graduation ceremonies, etc.

During this year, the Division launched and executed promotional campaigns for the Standards Mark Scheme and the Metrication programme using mass media advertisements, brochures and posters.

By the end of the year, 42 editions of Standards Corner, 44 editions of Standards Advisory, 52 notices and 24 press releases were published, as the Bureau intensified its public education programme.

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Eight (8) press briefings highlighting matters such as the cell phone issue, the quality of chicken feeds, the quality of used tyres, standards approved by the Standards Council, the GNBS suggestion box and National Quality Week.

The Division was also able to conduct school lectures in Region 3 and 4, regional visits to Regions 2,7 & 10 in its bid to educate stakeholders and obtain valuable feedback concerning the impact of the GNBS programmes.

Secondary school students, members of the various Chambers and the public at large were targeted through lectures, meetings and live television programmes.

Other significant achievements include:

-(i) Organising GNBS participation in World Consumer Rights Day celebration, (ii) Organising and spearheading GNBS participation in the first ever Linden Expo, and GUYEXPO 2006, (iii) Preparing and issuing articles for the daily newspapers, publishing in the GMA magazine, the Ministry Pride in our Industry promotion and the daily newspapers, (iv) Organising and managing the participation of the GNBS in GUYEXPO 2k6, (v) managing and organizing activities for National Quality Week 2006 under the theme: "Standards: big benefits for small business.", (vi) Producing the Organisation's quarterly newsletter, (vi) Preparing and recording metric scripts and (viii) Standardisation in the Forestry Sector.

# (7) METRICATION

In the Metrication Programme, 80 visits were made to various sectors to target senior management operatives to solicit their support, determine training needs, determine the status of metrication, review existing legislation, prepare a work plan for implementation of metrication and provide assistance for such implementation. Visited were Regulatory Agencies, Government Ministries, Private Security, Educational Institutions, Local Manufacturers, Supermarkets, Advertising Agencies/Media Houses, and Non-Governmental organisations. Metrication training was provided to 1,007 participants of 33 organisations. The Programme also targeted the commercial and retail sectors, with visits to shops, stores, stalls and supermarkets countrywide, holding one-on-one discussions and carrying out practical demonstrations on the metric system. In addition, the daily newspapers, radio and TV programmes were screened for misuse of metric units, and letters were dispatched accordingly, pointing out such misuses. Sixty-nine (69) letters were issued and 18 telephone calls made in this regard.

# (8) STANDARDS INFORMATION

Under this Programme, the monthly Standards Information Bulletin (725 copies) was prepared on various subject areas and issued to the relevant stakeholders. The spectrum of activities was wide as the Programme tried to produce an efficient service to the different Department of the GNBS, University students, school children, industry clients and other stakeholders. Patrons had access to over 1,218 reading materials that were valuable and informative. The CDS/ISIS database system was launched in order to provide a more efficient service.

#### 0.0 INTRODUCTION

This report highlights the activities, achievements and the challenges of the various work programmes of the Guyana National Bureau of Standards (GNBS) for the year 2006 including its Branch Office in Region 2 (Anna Regina), Region 6 (New Amsterdam), and the Weights and Measures Offices in the other Regions of the country. It also covers the Projects of the Institution in one Section and the Projections into the future year.

The report is structured and presented under the ten (10) different work programmes of the GNBS with the Administration and Finance Department providing a critical, supporting role to the operations of the said programmes. In discussing the achievements of each work programme, an attempt is made to evaluate the results obtained in the context of the challenges posed by the environment, and also, to make observations or comments on the evaluation, and ultimately, possible recommendations for further actions. This approach would add value to the report, as field experiences from the different activities are reflected in the evaluation conducted.

Standardisation is based fundamentally on the development, promotion, implementation and enforcement of standards which activities are intended to streamline and impact on industries, sectors, or companies. While the GNBS has the mandate to produce the standards needed by the different sectors of the economy through its various Technical Committees, it is the responsibility of the Regulatory or controlling body of each Sector to enforce the standards produced and issued. The success achieved by such Bodies/Agencies in the application and management of the standard is beyond the control of the GNBS.

The GNBS is involved in the promotion and implementation of some standards for products where there is not a Regulatory Body in the country e.g. used tyres, textiles, garments, and footwear, etc. The GNBS also has the responsibility to administer the range of International Management System Standards (ISO standards) for the development of the manufacturing companies. The cooperation and response from the manufacturers, importers and the private sector have largely not been encouraging. Attendance and participation at meetings, seminars, consultations and symposia have not been so positive, as the stakeholders tried to shy away from standards.

The GNBS made significant contributions to other Agencies and Departments with representation at their Boards, Councils or Committee Meetings, thus providing necessary, invaluable information or participating in brain-storming sessions at workshops to design strategic plans or evolve recommendations for actions on particular problems or issues. Technical Officers of the GNBS also made numerous presentations externally for other institutions, in providing support to their operations, particularly in relation to the International Management System Standards. The GNBS, in addition, maintained its in-house series of seminars for staff, throughout the year, as also, ensured the external training of staff (local and foreign) in its Human Resource Development programme. All these activities are discussed in the Administration and Finance Section of the Report.

It is hoped that the report would make interesting reading while it attempts to address the objectives of the work programmes.

## 1.0 LEGAL METROLOGY PROGRAMME (Weights and Measures)

The main activities executed this year under the Legal Metrology (Weights and Measures) Programme were routine and in keeping with the Annual Work Programme for the year. These activities included the initial verification of devices manufactured locally and imported to determine compliance with manufacturing and importation requirements and accuracy prior to use i.e. the inspection and testing of new scales, weights, measures and metre rules before they are approved for used in commerce. Included also, is the subsequent verification of devices twice yearly, to ensure accuracy is maintained i.e., the inspection and testing of devices already in use in commerce. Important among the activities are the verification of petrol pumps and bulk meters; calibration of storage tanks; surveillance of devices at sale outlets to ensure consumer protection; licensing of local manufacturers; metric sensitization of stakeholders and facilitation of the conversion of imperial devices to metric.

Further, other activities such as internal training of Inspectors, attending meetings and the investigation of complaints relating to short weight of products purchased and paddy supplied to rice mills, which were not included in the work programme for 2006 were conducted, based on requests from stakeholders.

#### 1.1 Licensing of Manufacturers of Weighing and Measuring Devices

For the year 2006, a total of five (5) manufacturers were licensed with the GNBS to manufacture scales and masses, and to convert devices from imperial to metric units, as compared with five (5) manufacturers of scale and masses for 2005, six (6) for 2004, nine (9) for 2003, and eight (8) for 2002. Also, two (2) manufacturers of measures were licensed for 2006, as compared with two (2) for 2005 and 2004, respectively, none for 2003 and one (1) for 2002. The reduction in the number of manufacturers licensed with the GNBS over the past two years is due to the revocation of two manufacturers' licenses by the GNBS for noncompliance with manufacturing requirements and unscrupulous practices, and the voluntary discontinuation of the manufacturing of devices by one manufacturer.

The inspection of registered manufacturers' premises was done at the beginning of the year to determine compliance with the manufacturing requirements i.e. the examination of their facilities and tools used in their operations, quality control techniques, manufacturing standards, test masses and calibration scale, prior to the issuing of manufacturing licences. In addition, quarterly inspections were conducted to ensure that requirements were maintained.

Based on periodic inspections conducted at manufacturers' premises, it was observed that manufacturers were generally adhering to manufacturing requirements stipulated by the GNBS and generally, devices manufactured locally by licensed manufacturers were submitted to the GNBS for verification prior to sale.

Manufacturers of devices continued to express concerns regarding imported devices that are being offered for sale in both metric and imperial units, since the sale of these scales is creating unfair competition for them, who are required to manufacture only metric devices. As a result, Inspectors of the GNBS carried out surveillance inspections at sale outlets during the year and most of the devices found on display were in metric units and were stamped by the GNBS. However, unstamped devices found during surveillance inspections were seized and removed for verification. The quantity of unstamped devices seized is reflected in **Table 4** under 'Surveillance Inspections'. Further, in situations where devices were in both imperial and metric units, dealers were advised to convert them to metric and submit same to the GNBS for verification, prior to use.

Devices in dual mode (imperial and metric units) which were sold to consumers without being verified by the GNBS were seized and removed during surveillance inspections by Inspectors and were subsequently converted to metric and verified by the Bureau. The use of dual mode devices would delay the transformation of the system of measurement from imperial to metric, since vendors would continue to use the imperial units. As a result, the GNBS is only verifying metric devices. Devices in imperial unit or dual mode are required to be converted to metric, prior to verification by the Bureau. It is recommended that only metric devices be manufactured and imported for use in trade, since the metric system is the only legal system of measurement in Guyana.

#### 1.2 Initial verification of imported and locally manufactured devices.

The initial verification of devices (new) involves the inspection and testing of devices, imported or locally manufactured prior to use, in order to ensure compliance with the manufacturing or importation requirements and to determine accuracy. Devices initially verified during the year were mainly submitted by Importers and Local manufacturers registered with the GNBS.

#### 1.2.1 Scales, masses, measures and metre rules

Resulting from initial verification exercises conducted during the year 2006, a total of 889 scales, 2198 masses and 806 measures were initially verified, however, no metre rule was initially verified during the year. **Figure 1. below shows** the monthly initial verification of devices verified for 2006, which indicates that there has been a monthly fluctuation in the number of new devices verified throughout the year based on the demand for same within a specific period. During the months of February, March, June, August and October a significant amount of devices were submitted for verification.

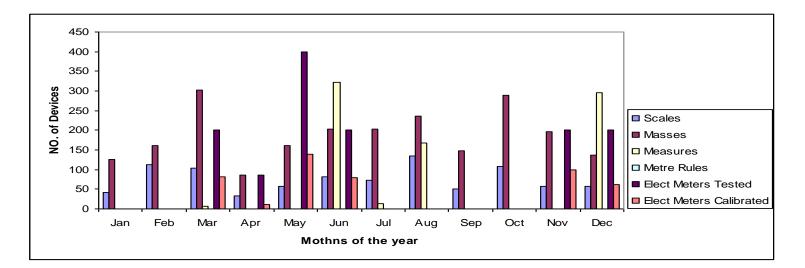


Figure 1. Initial Verification of Devices for 2006

**Table 1.** below shows a comparison of devices initially verified for the years 2001 to 2006. The table shows that there has been a slight decrease in the number of scales verified this year, as compared with the year, 2005. However, there has been an increase in the number of masses and measures initially verified, which is mainly due to increased awareness of dealers, vendors and shopkeepers to use only metric devices, which are verified by the Bureau, and intensive surveillance inspections carried out by Inspectors of the Bureau during the year to remove all defective and unstamped devices used at sale outlets.

Over the past three years, the verification of scales and masses initially verified continued to decline when compared to previous years, which is mainly due to a decline in demand for same on the market, since most vendors and shopkeepers were already in possession of metric devices and those with imperial devices were moving to convert these devices to metric instead of buying new ones. Further, there has been an increase in the number of measures initially verified over the past two years, as compared with no metre rule initially verified this year. This is attributed to the lack of cooperation of dealers and wholesalers to use verified metre rules, as recommended by the GNBS.

Table 1.
Initial verification of devices

YEARS	SCALES	MASSES	MEASURES	METER RULES
2001	1867	3227	541	ı
2002	1029	2094	512	ı
2003	1128	2087	298	31
2004	940	1951	344	303
2005	969	2141	586	222
2006	889	2198	806	-

Rejected devices were returned to manufacturers for rectification and further adjustments and were subsequently verified. Non-conformities identified during verification were highlighted to manufacturers at the time devices were submitted for verification to prevent a re-occurrence of same in the future. In situations where the devices could not be rectified, the devices were scrapped and reworked by the manufacturers.

There is need for importers of devices used in commercial trade to comply with the requirements for the importation of devices. In situations where practicable, samples of devices should be submitted to the GNBS for type approval prior to importation. Further, devices imported should be accompanied by type approval certificates and must be initially verified by the GNBS prior to sale. During the up coming year, the GNBS will continue to intensify inspections at the ports-of-entry and sale outlets to ensure that devices imported and offered for sale are verified by the Bureau as required. Devices found to be unstamped would be seized and dealers would be prosecuted.

In addition, some vendors and shopkeepers continued to cheat consumers by using unverified yard sticks and measures, despite comprehensive sensitisation and surveillance activities carried out by the Metrication and Legal Metrology and Standards Compliance Departments of the GNBS, during the year. As a result, it is imperative that vendors and shopkeepers adapt the metric system by using only verified metric scales, masses, measures and metre rules. Further, there is need for stronger penalties to be instituted on importers, dealers, manufacturers, vendors and shopkeepers found selling and using unverified devices.

#### 1.2.2 Electricity Meters

The verification of the accuracy of 240 volts electricity meters imported by Guyana Power and Light (GPL) to be installed on customers' premises continued during the year by the GNBS, in order to ensure accuracy prior to use. The execution of this activity is necessary due to numerous complaints made by consumers regarding inaccurate and defective meters installed by GPL, which have resulted in inaccurate readings and excessively high bills. For the year, the Bureau was successful in verifying a total of 1085 electricity meters of which 411 (38.7%) had to be calibrated, since they were inaccurate. There has been a significant decrease in number of electricity meters verified for 2006 as compared with the previous year, where 3679 were tested of which 868 were calibrated. The decrease in the number of meters verified is attributed to the decrease in the demand for 240 volts meters, which are verified by the GNBS and an increase in the demand for 110 volt meters, which are not verified by the GNBS, due to the absence of a Test Bench to test 110 volts meters. The demand for 110 volts meters by GPL customers is based on the fact that most appliances imported from the United States and China and used in Guyana is operated by 110 volts current.

However, it was recommended that the GNBS acquire another Test Bench to conduct the verification of 110 volts single and double phase electricity meters in the near future or have the existing Test Bench converted to test both 110 volts and 240 volts meters, since the present Test Bench cannot test 110 volts meters. As a result, 110 volts meters are not being verified by the GNBS for accuracy, prior to installation at consumer's premises and numerous complaints regarding excessively high bills and malfunctioning meters were received by the GNBS.

## 1.3 Subsequent verification of devices

The subsequent verification of devices involves the inspection of devices already in commercial use to ensure that they are in good working condition, and the testing of same to ensure accuracy.

The verification of devices used at markets, shops, hospitals, clinics, health centres, post offices, airlines, shipping agencies, fisheries, supermarkets, sugar estates, rice mills and other industries was conducted at the GNBS Head Office, Sophia Exhibition Site, Weights and Measures offices countrywide, at the Bureau's Branch offices in Regions 2 and 6, at clients' premises, and during mobile stamping exercises conducted at markets and strategic locations in the various Regions. These exercises were conducted during the periods January to March and July to September, for the first and second half of the year, respectively, as required by the 1981 Weights and Measures Act, in order to ensure accuracy is maintained, which is vital for consumer protection and equity in trade.

#### 1.3.1 Verification of scales, masses and measures

A total of 7380 scales, 11506 masses and 267 measures were subsequently verified for the year 2006 as compared with 6391 scales, 12093 masses and 387 measures for 2005. **Figure 2** shows the monthly subsequent verification of devices for 2006, which indicates that during the month of February and August for the first and second half of the year respectively, the highest amount of scales and masses were verified, followed by January, July and March, respectively. The scheduled verification periods (January to March and July to September) were responsible for the increase in the number of devices verified during these months.

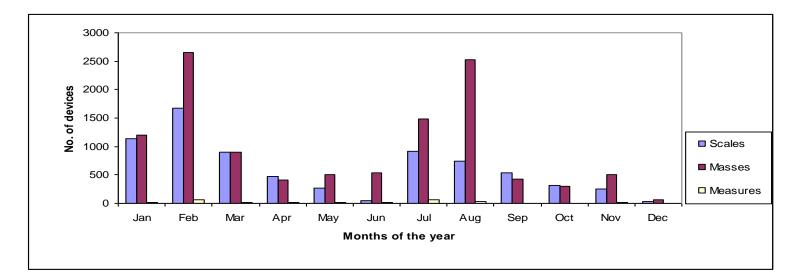


Figure 2. Subsequent Verification of Devices for 2006

**Table 2.** below shows a comparison of devices subsequently verified for years, 2001 to 2006. There has been a significant increase in the number of scales subsequently verified as compared with the previous years, while there was a decrease in the number masses and measures verified when compared with 2005 for masses and previous years for the measures. This increase in the number of scales verified could be attributed to the comprehensive mobile stamping exercises conducted countrywide and intensive weights and measures surveillance inspections conducted at shops and markets during the periods of April to June and October to December, for the first and second half of the year, respectively. The decrease in the number of masses and measures verified during 2006 is attributed to the lack of cooperation of vendors and shopkeepers to submit their masses and measures for verification, their reluctance to adopt and use metric masses and measures and to weigh solids instead of measuring same.

This resulted in the seizure of all unstamped and defective devices, which were found at markets and shops during surveillance inspections. The quantity of unstamped and defective devices seized is reflected in **Table 4.** under 'Surveillance Inspections'. Devices seized were subsequently repaired, verified and returned to vendors and shopkeepers.

There is need for full time transportation and additional Inspectors to conduct continuous inspections at shops throughout the year, since emphasis is currently being placed primarily at markets and much work is not presently being done at shops, due to inadequate transportation and available Inspectors to effect same. In addition, it has been proven in many situations that devices used at shops are not being stamped as required and they are often found in deteriorating conditions, hence the need to conduct continuous inspections at sale outlets is vital for consumer protection and equity in trade. Further, there is need for better cooperation from stakeholders in submitting their devices for verification twice yearly, as required by the Act. In addition, urgent attention would need to be given to the revision of the 1981 Weights and Measures Act and the

development of Regulations for the said Act. This is necessary, since the existing penalties are too small and vendors and shopkeepers are capitalising on the situation by cheating consumers through the use of unverified and defective devices, which is affecting the effectiveness of the Legal Metrology Programme in Guyana.

The subsequent verification of devices used in trade has impacted significantly on commerce since at least 90% of devices in use were verified thus, ensuring that consumers receive the correct quantities of goods purchased.

TABLE 2 SUBSEQUENT VERIFICATION OF DEVICES

YEAR	SCALES	MASSES	MEASURES
2001	418	3217	12
2002	3360	7151	515
2003	4812	8427	932
2004	5722	11208	599
2005	6391	12093	387
2006	7380	11506	267

#### 1.3.2 Verification of Weighbridge Scales

The verification of weighbridge scales used at sugar estates, rice mills and other industries in Guyana continued during the year, in order to ensure transparency in trade and the protection of consumers. As a result of verification exercises carried out, the Bureau was successful in verifying 6 weighbridge scales used at sugar estates, 60 weighbridge scales used in the rice industry and 28 known weighbridge scales used in the other industries, for the first and second half of the year, respectively, as compared with a total of 53 verified for 2005, 51 for 2004 and 44 for 2003. There has been a significant increase in the number of weighbridge scales verified by the GNBS this year as compared to the previous years. This increase is based on the acquisition of the test truck and masses by the GNBS, which facilitated the execution of this activity in an effective and timely manner, as compared to the previous situation of renting trucks and masses to conduct verification exercises. As a result, the Bureau was able to conduct more verification activities during the year.

Most of the weighbridge scales verified were found to be inaccurate initially and as a result, had to be calibrated and re-verified to obtain accuracy. Some scales were also found in deplorable conditions, which often caused them to be inaccurate after testing and as such, they have to be subsequently serviced and re-verified.

However, some of the major challenges encountered by the GNBS in the execution of this activity during the year were the unavailability of funds to conduct unscheduled surveillance checks at rice mills, using the GNBS Test Truck, in Regions # 2 and 6 during the rice crop season, the acquisition of verification fees from some clients for services provided by the GNBS, the prevention of the tampering of scales by some millers to cheat farmers and the conversion of mechanical weighbridge scales used by some millers to digital, in order to ensure transparency in the rice industry. verification of all weighbridge scales used in commercial trade has become necessary due to concerns raised by the Guyana Rice Development Board (GRDB) and the Rice Producers Association (RPA) and numerous complaints received from farmers and other consumers, regarding short weight received in commerce and requests from some stakeholders to have their scales verified by the GNBS. This activity would ensure equity in trade and consumers satisfaction, which is vital for the effective functioning of industries operating in Guyana. In addition, the use of inaccurate scales could result in the substantial loss of revenue and the dissatisfaction of external buyers, which could adversely affect trade.

There is urgent need for millers operating with mechanical scales to have same converted to digital, which is critical to ensure transparency in commerce. In addition, owners of weigh bridge scales are required to maintain and verify their scales periodically as required by the 1981 Weights and Measures Act. This is necessary, to ensure the proper functioning of scales and to reduce the frequency of calibration or adjustments during verification activities. Further, there is need for stronger penalties to be instituted for persons found using defective and unverified weighbridge scales, since it is becoming a regular practice by some millers to deliberately cheat farmers and consumers.

#### 1.4 Verification of Petrol Pumps and Other Volumetric Devices

A total of 1262 petrol pumps, 6 storage tanks and 32 bulk meters were tested, of which, 406 petrol pumps were calibrated for the various petrol companies and private stations countrywide for the first and second half of the year, 2006. **Figure 3.** shows the monthly verification of petrol pumps for 2006, which indicates that most of the pumps were verified mainly during the verification periods of the first and second half of the year, except in situations where requests were received from the parent companies and private owners to re-verify pumps that had to be repaired or replaced.

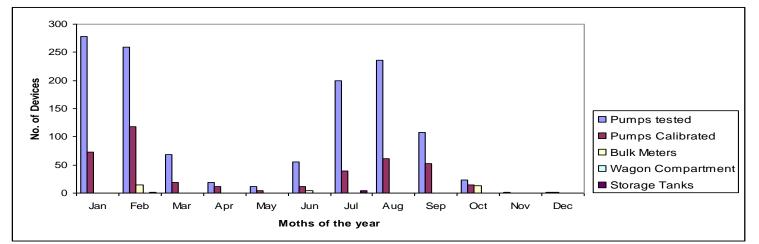


Figure 3. Verification of Petrol Pumps for 2006

**Table 3.** below shows a comparison of petrol pumps, bulk meters, wagon compartments and storage tanks verified for the years, 2001 to 2006. There has been an increase in the number of petrol pumps and bulk meters verified this year when compared with the last five years. However, there was a decrease in the number of storage tanks tested for 2006 as compared with 2005. The fluctuation in the number of devices verified annually could be attributed to the opening and closing of service stations by companies and private owners over these years. The verification of storage tanks was carried out based on requests from stakeholders.

The verification of petrol pumps twice yearly has impacted significantly on vehicle owners since at least 98% of petrol pumps in use in Guyana were verified, thus ensuring that they receive the correct quantities of fuel purchased from service stations. In addition, the verification of bulk meters at petrol terminals also provided assurance to petrol dealers in receiving the correct quantities of product purchased.

Non-conformities relating to safety and the general operation of service stations observed during verification exercises were highlighted to the proprietors of the various service stations visited for corrective actions to be taken. Follow up inspections conducted by GNBS Inspectors revealed that non-conformities highlighted previously were addressed in most situations. Checks were also conducted at service stations during the year to ensure that products were advertised and sold in metric quantities. Pumps found to be inaccurate or defective during verification exercises that cannot be repaired or calibrated immediately were sealed off at the nozzle to prevent usage, until they are subsequently repaired, replaced and re-verified by the GNBS. In addition, the adjusting mechanism of pumps found to be accurate during verification were sealed off with security seals by GNBS Inspectors to prevent tampering and approval seals were placed on the front panel of the pumps, in order to provide guidance to consumers.

There is need for petrol companies and private owners of petrol stations to replace defective and old pumps that are still in use at stations. This is necessary since these pumps tend to become inaccurate within a short period of time, and are difficult to adjust during verification. In addition, pumps are required to be properly labelled with the total sale, price per litre and volume in order to provide guidance to consumers when purchasing products. Further, products must be advertised and sold in metric quantities, since pumps are verified and are operating in metric units.

TABLE 3 VERIFICATION OF PETROL PUMPS

YEARS	PUMPS TESTED	PUMPS CALIBRATED	BULK METERS	WAGON COMPARTMENTS	STORAGE TANKS
2001	1090	695	33	-	-
2002	1093	484	5	-	-
2003	1191	308	14	-	17
2004	1139	380	5	-	7
2005	1197	378	15	33	7
2006	1262	406	32	-	6

## 1.5 Surveillance inspections

Inspection activities carried out at shops and markets to ensure that devices used for trade were stamped and are in good condition as required by the GNBS. These activities are carried out during the periods of April to June for the first half of the year, and October to December for the second half of the year. Based on surveillance exercises carried out for the year 2006 a total of 7524 stalls/premises were visited, as compared with 5151 premises/stalls visited for the year 2005.

Resulting from surveillance exercises conducted at markets and shops during the year 2006, a quantity of 969 scales, 1480 masses, 54 measures and 15 rules were seized and removed, since they were found to be unjust or defective, in comparison with 950 scales, 1309 masses, 237 measures and 172 rules seized and removed in 2005. Table 4. shows a comparison of Weights and Measures surveillance inspections conducted for the years 2001 to 2006. There was an increase in the number of surveillance inspections carried out in 2006 when compared with the previous years, since more emphasis was placed on ensuring that devices used to conduct commerce were verified as required and are in good condition. In addition, there was a significant increase in the number of scales and masses seized during the year 2006, as compared with the previous years, which is mainly due to the reluctance of vendors and shopkeepers to have their devices stamped twice yearly. However, there was a decrease in the number of measures and rules seized during 2006 when compared with previous years. This could be attributed to the acquisition of verified metric measures and metre rules by most vendors and shopkeepers. Measuring rules seized during the year was as a result of intensive surveillance inspections carried out by Inspectors at stores based on complaints received by the GNBS from consumers regarding the use of defective and unstamped rules.

Despite significant efforts made by the GNBS over the years to ensure that devices used in trade are verified periodically and are kept in good condition in order to ensure accuracy and equity in trade, some vendors and shopkeepers are not verifying their devices and properly maintaining them as required. As a result, these devices become inaccurate, although they were stamped for the corresponding period. Therefore, there is need for better cooperation from vendors/shopkeepers in having their devices stamped twice yearly as required by the 1981 Weights and Measures Act and for stronger penalties to be instituted against persons found to be in possession of defective and inaccurate devices. This is dependent on the revision of the 1981 Weights and Measures Act and the development of Regulations for the said Act.

TABLE 4
WEIGHTS AND MEASURES SURVEILLANCE OF DEVICES

YEARS	NO. OF PREMISES VISTED	SCALES	MASSES	MEASURES	RULES
2001	397	84	367	129	1
2002	3511	219	1016	176	1
2003	3891	273	1405	237	-
2004	6267	641	1697	405	-
2005	5151	950	1309	237	172
2006	7524	969	1480	54	15

#### 1.6 Consumer Complaints

#### 1.6.1 **Rice Farmers**

Resulting from complaints received from representatives of the Guyana Rice Producers Association (RPA) and farmers primarily in Regions #2 and #6, regarding the alleged tampering of scales to cheat farmers and inaccurate dockage and moisture contents, Officers from the Regions #2 and #6 Branch Offices conducted surveillance inspections at rice mills in their respective Regions to ensure transparency in the weighing process and compliance with the relevant requirements of the GNBS. Based on investigation and subsequent testing conducted by Inspectors of the Bureau, it was discovered that the scales were weighing correctly. However, farmers were advised to carefully observe the weighing of their paddy when supplying to millers and make the necessary objections in situations where the correct procedures for the operation of the scale are not being followed. Further, continuous monitoring was done by GNBS Inspectors during verification activities and surveillance inspections and it was observed that the correct procedures were being followed. It was, however, reported by farmers that in the absence of GNBS Inspectors, some millers do not follow the correct operating procedures, resulting in the farmers being cheated.

#### 1.6.2 Consumers

During the year, the GNBS received 2 complaints regarding the short weight of meat products purchased. The complaints received were investigated and 2 scales and 8 masses, which were found to be imperial and unverified, were seized and removed. Further, it was observed that the dealers were advertising their products in imperial units despite using metric scales. They were advised to advertise their products in metric units and desist from using unstamped devices.

In addition, the Region 5 Administration also reported to the GNBS that consumers and fishermen were complaining of short weights and measures received for fish and fuel purchased, respectively, at the Fish Coop at Rosignol. As a result, an investigation was conducted and four scales were seized and removed by Officers, since they were inaccurate and arrangements were made to verify the petrol pump located in the Coop's compound.

## 1.7 National Weights and Measures Monitoring Committee Meetings

Monthly meetings of the National Weights and Measures Monitoring Committee, which is constituted of Weights and Measures Officers of the various Regions, Director of the GNBS (Chairman), and representatives from the Metrication, Public Relations and Metrology and Standards Compliance Departments, were held as scheduled throughout the year at the GNBS, with the exception of August due to General Elections and November due to the Legal Metrology Training for Inspectors. The objective of these meetings was to facilitate open discussions on matters relating to weights and measures and metrication activities and to obtain direct feed back from Officers on activities executed in the Regions. Officers who attended the meetings provided feedback concerning the progress of activities conducted in the Regions for the various months, according to the National Work Programme and reported on problems encountered during the execution of their duties in the Regions. In addition, work to be executed during the following month was scheduled and discussed at each meeting and difficulties encountered by Officers with the Regional Administrations were continuously highlighted at these meetings. The GNBS had made several attempts to address some of the concerns raised at the meetings, through the Regional Executive Officer (REO) and the Regional Chairman of these Regions. However, much progress was not made in this regard and as a result, a meeting was convened with the new Minister of Local Government to discuss the said matters. At the meeting, the Minister promised his support for the Programme and to address the issues raised.

#### 1.7.1 Issues Raised at Meetings

Some of the main concerns affecting the execution of Weights and Measures activities in the Region, which were highlighted by Officers at meetings held throughout the year were the absence of full time Weights and Measures Officers in Regions 1, 4, 8, and 9 to conduct weights and measures activities in the Regions, lack of transportation to carry out field activities, the absence of appropriate facilities and basic tools to conduct the stamping of devices and surveillance activities, the need to review the existing Weights and Measures Act of 1981 and develop Regulations for the said Act, protection of Inspectors during surveillance activities and the lack of cooperation from vendors and shopkeepers to adapt the metric system and use only verified metric devices.

In light of the above, the GNBS convened a meeting with the new Commissioner of Police who promised his full cooperation to address this matter. In addition, the Bureau has increased its sensitization activities to educate stakeholders on the various activities of the programme and are presently seeking funding to have the existing 1981 Weights and Measures Act reviewed. However, there is need for some of these concerns to be addressed urgently by the relevant Regional Administrations, in order to ensure the effective functioning of the Weights and Measures offices in the Regions and to improve the level of services provided in the Regions. Failure by Regional Administrations to address these concerns would result in the withdrawal of the GNBS equipment from these Regions and the absence of Weights and Measures services in these Regions. This would significantly affect the lives of persons living in these Regions, since the accuracy of the devices used in commerce cannot be ascertained within the Region and as a result consumers would be cheated.

#### 1.7.2 **Regional Development**.

The GNBS continued to work in collaboration with the Regional Weights and Measures Officers in Regions during the year in an effort to improve the level of services provided in the Regions and to increase the capacity and coverage of the Regional Weights and Measures offices. As a result, a significant amount of work on the verification of devices used in commercial trade, surveillance inspections at sale outlets to ensure devices are stamped and metric sensitization was carried out throughout the year in Regions 5, 7 and 10 due to the appointment of Weights and Measures Officers in these Regions.

The appointment of Officers in Regions 5, 7 and 10 was made possible based on continuous consultations with the Regional Administration of Regions # 5, 7 & 10 and representations made to the Public Service Ministry (PSM) by the GNBS, to effect the employment of W&M Officers and to re-establish the Weights and Measures Offices in these Regions. As a result, Weights and Measures Officers were appointed by the Regions, subsequently trained by the GNBS, and are currently executing Weights and Measures and Metrication activities in their respective Regions. In addition, assistance was provided by the Regional Administrations of these Regions in providing the

necessary facilities and basic tools to effectively execute verification and surveillance activities in these Regions.

However, despite representations made by the GNBS to the Public Service Ministry (PSM) and the Public Service Commission (PSC) for the replacement of a full time Officer for Region 4, to date, no appointment was effected. In addition, despite efforts made by the Bureau during the years 2002, 2003, 2004, 2005 and 2006 to have established Weights and Measures offices operating in Regions 1, 8, 9, no Weights and Measures activity was done in these Regions during the year, 2006, since there were no designated Weights and Measures Officers in these Regions, no proper facilities to conduct the verification of devices, lack of transportation to execute field activities, and lack of participation at National W & M Monitoring Committee Meetings.

The absence of designated Weights and Measures Officers in Regions #1, 8 and 9 demonstrates the lack of cooperation and support of these Administrations for the Weights and Measures Programme and there is need for these Administrations to provide the necessary personnel, facilities and resources necessary to facilitate the execution of Weights and Measures and Metrication activities in the Regions, which is vital for consumer protection and equity in trade.

#### 1.8 Regional visit

In an effort to increase awareness of the various activities conducted by the GNBS under the Legal Metrology Programme, the GNBS has intensified its outreach programme during the year to target persons living in the hinterland and other areas that are not so easily accessible, to sensitise and educate the average person, shopkeepers and other community leaders and workers on the services offered by the Bureau and its role in consumer protection. In addition, arrangements were also made to provide these services to the communities visited on a periodic basis, in order to improve their lives and to ensure consumer protection. During the year, visits were conducted to Region #2 (Capoey, Mainstay and Tapakuma), Region#3 (Santa Mission, Parika, Wales, Bonasika, Caria Caria, Hogg Island and Wakenaam), Region#6 (New Amsterdam, Springlands and Mora), Region#7 (Bartica), and Region#8 (Madhia).

#### Region #2and #3

The Director along with Officers from the Weights and Measures and Metrication Departments in collaboration with Regional Weights and Measures Officer of Region #3, visited shops and stores in Parika on 2006-06-13 to sensitise them on the use of the metric system, the care and use of their devices and to obtain general feedback from stakeholders on the impact of activities conducted by the GNBS. During the visits conducted, a total of 37 premises were examined and the shopkeepers were sensitised on the metric system and the care and use of their devices and the areas of concerns were noted to be addressed by the Bureau.

In addition, the Director, Chief Inspector and the Metrication Officer of the GNBS conducted similar visits to Santa Mission in Region #3 on 2006-05-08 and Mainstay, Capoey and Tapakuma in Region #2 on 2006-05-16, to sensitise vendors and shopkeepers on the requirements of the National Weights and Measures Programme, care and use of devices used in trade and the application and use of the metric system. During the visits conducted, training sessions were held with school children and villagers, where they were educated on the metric system and its application in everyday life, and visits were conducted at shops and Health Centres within the Communities where devices were in use. The necessary guidance on the requirements governing the operation of devices used in trade, and care and use of devices were provided to vendors, shopkeepers and health workers by Officers.

Further, the Director along with Officers from the Weights and Measures and Metrication Departments, in collaboration with Regional Weights and Measures Officers of Region #3, visited shops in Bonasika, Caria Caria, Hogg Island and Wakenaam on 2006-07-25 and 2006-07-26. During the visits conducted, a total of 35 premises were visited and shopkeepers were sensitised accordingly and the areas of concerns were noted to be addressed by the Bureau. The verification of devices for the second half of the year was also conducted in Wakenaam during the said visit.

#### Region #6

The Director, Chief Inspector and the Metrication Officer of the GNBS conducted a visit to Region #6 on 2006-05-30, where a meeting was convened with the Regional Chairman. In addition, checks were made on devices used by vendors at the New Amsterdam and Springlands Markets, which revealed that most devices were verified for the first half of the year. However, the devices were observed to be in an untidy condition due to poor care and use of same by vendors. Further, a few vendors were found using imperial masses on metric scales and were measuring rice and other grains instead of weighing same, as required. As a result, vendors were advised by the GNBS Officers to weigh their products and maintain their devices in good condition at all times.

After the meeting, the Director and the Chief Inspector also visited Toolsie Persaud sand and stone outlet at Canje to witness the operation and to assess the progress the company made so far regarding the installation of the weighbridge scale at that location as promised in 2005. It was observed that the foundation for the scale has been completed and workers are currently working on the approach to the scale and the office to house the indicator. It was also observed that sand and stone were being sold by cubic yard as indicated at the meeting by the company. A visit was also conducted at Juman, supplier of sand and stone at #78 Village Corentyne, where the method used in selling sand and stone by the company was demonstrated to Officers of the Bureau.

In addition, visits were conducted at the Maida/Tarlogie and Macidonia / Joppa Neighbour Democratic Council Offices located on the Corentyne, to explore the possibility of stamping devices at one of these locations during the first and second half of the year, respectively, in order to facilitate vendors and shopkeepers living within Springlands and New Amsterdam to have their devices verified twice yearly. Based on an examination of the offices, it was decided that the stamping of devices would be conducted on Mondays during the normal stamping periods at the Macidonia / Joppa NDC Office, by the GNBS Inspectors stationed in Region #6.

A subsequent visit was conducted by the Director along with Officers from the Weights and Measures and Metrication Departments in collaboration with Regional Weights and Measures Officers of Region #6 on 2006-07-06, where shops along the East Bank Berbice up to Mara was visited, to sensitise them on the use of the metric system, the care and use of their devices, requirements of the Weights and Measures programme and to obtain general feedback from stakeholders on the impact of activities conducted by the GNBS. During the visits conducted, a total of 7 premises were visited and the shopkeepers were sensitised on the metric system and the care and use of their devices and the areas of concerns were noted to be addressed by the Bureau.

#### Region #7

The Director, Chief Inspector and a Senior Inspector within the Department visited Bartica on September 19, 2006 to assess the effectiveness of the Weights and Measures programme and to address matters affecting the effective execution of Weights and Measures activities in the Region. During the visit conducted, an examination of the existing Weights and Measures office was carried out, which was followed by a meeting convened with the Regional Executive Officer (REO) regarding the upgrading of the Weights and Measures office, the provision of basic tools to conduct the verification of devices and transportation to conduct field activities. At the meeting, the REO promised to address the matters discussed and to have work commenced immediately to upgrade the office. In addition, the verification of petrol pumps for private Service Stations in Bartica was carried out and vendors and shopkeepers operating in the Region were sensitized on the use of the metric system.

#### Region #8

The Director, Chief Inspector and the Metrication Officer of the GNBS conducted a visit to Region #8 during the period of 2006-04-04 to 2006-04-06, to assess the progress of the Weights and Measures Programme in the Region, meet with Regional Officials, conduct metric sensitization activities and to conduct the verification of petrol pumps. Based on the visit conducted, the following observations were made:

- (1) No Weights & Measures activities were conducted by Mr. Curtis Barnett, District Development Officer of the Region #8, who was identified by the Region and trained by the GNBS to execute such activities.
- (2) The Physical Standards and equipment that were handed over to the Region by the GNBS to facilitate the periodic verification of devices were kept in an atrocious condition and there were visible evidence of deterioration.
- (3) The 1500 approval seals handed over to Mr. Barnett to be placed on devices verified in the Region were unaccounted for and could not have been located.
- (4) The meeting held with Regional Chairman (RC) in the absence of the Regional Executive Officer (REO) was unsuccessful, since the Regional Chairman was unable to make any decision concerning the provision of Weights Measures services by the Regional Administration, and as such, all decisions were referred to the REO. As a result, the RC and Mr. Barnett had promised to make arrangements to convene a meeting with the Director of the GNBS in Georgetown on 2006-04-07, to discuss the findings of the visit and possible solutions. However, the meeting did not materialise, since the Regional Officials did not show up at the Bureau for the meeting.

In light of the above findings, the equipment and standards were returned to the GNBS Head Office for maintenance and calibration and Mr. Barnett was asked to submit the approval seals to the GNBS, since no devices were verified in the Region.

In addition, the Regional Administration was strongly advised to conduct a careful assessment of the Weights and Measures Programme in Region # 8 and take immediate actions to effect the appointment of a full time Weights and Measures Officer to address the existing deficiencies within the system. The Administration was also advised to provide the necessary support and funding required for the effective and efficient execution of the Weights and Measures and Metrication activities in the Region.

#### 1.9 Public awareness

Information gathered from field inspections, consumer complaints and verification exercises, which were useful for the protection and guidance of consumers, were analyzed and prepared routinely throughout the year for publication in the form of releases, notices, newsletters etc. by the Public Relations Department. In addition, Senior Officers within the Department participated in exhibitions and radio and television programmes organized by the Public Relations Department to provide guidance to consumers, to increase their awareness of the services offered by the GNBS, the benefits that could be garnered by consumers if they access these services and to keep the public informed on the various activities carried out by the GNBS.

Further, notices were published to remind vendors, shopkeepers and other users of Weighing and Measuring devices to have their devices verified at the respective Weights and Measures offices and during mobile stamping exercises conducted during the periods January to March and July to September for the first and second half of the year 2006.

## 1.9.1 **Television Programmes**

During the year, Inspectors were involved in seven (7) live call-in television programmes conducted in Regions #2, 4 and 6. Some of the areas of concerns that were addressed via television programmes to increase the awareness of the public were length, mass and volume measurements used in commerce, the activities and requirements of the National Weights and Measures Programme, the care and use of devices used in commerce, tips on purchasing commodities by length, weight or measure at sale outlets, measurement in the lumber sector and the use of the metric system.

Some of the main concerns raised by members of the public during the programme were relating to the operation of rice mills, the operation of the metric devices, requests made by consumers for products in imperial units, expired food and drugs offered for sale, poor quality of fertilizers, garments, animal feeds and electrical appliances sold on the local market and the labeling of food and drugs in foreign language. The concerns raised regarding the activities executed by the Bureau were adequately addressed by the members of the panel and in situations where the concerns raised were not related to the GNBS, the relevant agencies were informed accordingly. In addition, vendors and shopkeepers were advised to adhere to the requirements governing the operation of the use of Weighing and Measuring devices. Further, consumers were sensitized on shopping tips and some of the malpractices wholesalers and retailers are involved in when weighing and measuring products sold to consumers. Further, they were advised to demand the correct quantity of products purchased.

#### 1.10 Training of GNBS Inspectors

Continuous internal training was conducted for Inspectors of the department throughout the year in various subject areas, in order to increase their knowledge of the various activities conducted by the GNBS and to improve their competency on the Job. Some of the main subject areas covered for the year were the calculation of maximum permissible error (MPE) for scales, testing of electricity meters, the approach to be used in sensitizing vendors and shopkeepers on the use of the metric system and the care and use of devices and the verification of Bulk Meters used at Petrol Terminals using the 2000L Seraphin Test Measure. The training conducted for Inspectors has proven to be beneficial, since improvements in their performance were evident in the execution of their duties. In addition, it also provides Inspectors with the necessary knowledge and approach required to effectively conduct the education of vendors and shopkeepers on the use of the metric system.

In addition, Inspectors of the Department participated in a two-week training programme conducted by Mr. Tweedsmuir Mitchell, Metrology Consultant attached to the Jamaica Bureau of Standards (JBS) and funded by Caribbean Development Bank (CDB). The training commenced on 2006-11-28 and concluded on 2006-12-08. The topics covered during the training were the checking of net contents of prepackaged goods, verification of bulk meters and wagon compartments, calibration of storage tanks and the calibration of Test Measures used to conduct the verification of bulk meters, which involved both theory and practical sessions. The knowledge and experience acquired by Inspectors from the training was beneficial and would enable them to effectively carry out these activities in the future.

#### 1.11 Other Activities

In addition to the routine activities conducted by the Department during the year based on the Annual Work Programme, several meetings were convened with stakeholders and follow-up activities conducted to address the concerns raised by the said stakeholders.

## 1.11.1 Assessment of Weighing and Gauging operation conducted by GRA

Based on a request received from the Guyana Revenue Authority (GRA), a visit was conducted by Mr. J. Softley, Senior Inspector, on 2006-02-03 at DDL to observe the weighing and gauging operation conducted by Customs Officers, in order to identify the training needs for Officers and to determine the necessary equipment required to execute the said activity. As a result, a letter of recommendation was prepared and submitted to the GRA on the matter.

#### 1.11.2 Meeting with Caricom Secretariat

Based on a visit conducted by Mr. Koch, a PTB Consultant, working on CROSQ Metrology Project, meetings were convened with Mr. Patrick Walker of the Caricom Secretariat and Madam Celine of the European Union, as a courtesy call, and to sensitise them on the project and its objectives. This project would commence in May, 2007 and is expected to last for four years. Some of the areas to be covered under the Project are capacity building for Legal and Scientific Metrology, Accreditation, Legislation and infrastructural development to a small extent.

#### 1.11.3 Meeting held with Suppliers of Sand and Stone

Two separate meetings were held with suppliers of sand and stone in New Amsterdam and Springlands on 2006-05-30 and 2006-05-31, respectively, to discuss the requirements governing the sale of same and to address concerns suppliers may have in the operation of their businesses. At the meetings held, suppliers indicated that they are selling their products in cubic yards and not by tonnes, since they do not have scales to weigh same. The Chief Inspector informed suppliers that all solids must be weighed and steps should be taken by the Companies to acquire scales. However, suppliers expressed concerns regarding the exorbitant cost to acquire a weighbridge scale. It was advised that the wheel

scales be used as an interim measure until companies could afford to purchase the recommended scales. In addition, the use of the Toolsie Persaud scale to be installed shortly at Canje should be utilized by suppliers to conduct the weighing of trucks. Further, suppliers had indicated that consumers should be advised to purchase directly from the suppliers in order to prevent them from being cheated by the middle men.

#### 1.11.4 Meeting held with Importers and Dealers of Weighing and Measuring Devices

A meeting was convened with Importers and Dealers of Weighing and Measuring Devices in the Board Room of the GNBS on 2006-05-03. The objectives of the meeting were to review and discuss the requirements governing the importation and sale of devices with the expectation of improving the quality of devices imported and offered for sale locally, to outline difficulties encountered by the GNBS, and to address the concerns of Importers and Dealers in the operation of their businesses.

Some of the main concerns discussed and agreed on at the meeting were:

- (i) The importation of only metric devices to be used for commercial trade.
- (ii) Adequate labelling of devices imported to provide guidance to potential users.
- (iii) The need for increased awareness of vendors and shopkeepers on the care and use of devices.
- (iv) The initial verification of all devices imported to be used for commercial purposes by the GNBS, prior to sale, in order to ensure accuracy.
- (v) The submission of Type Approval Certificates to the Bureau in order to differentiate the difference between devices imported for domestic and commercial use.
- (vi) The registration of all Importers of devices with the GNBS.

It was recommended that the GNBS should work closely with the Guyana Rice Development Board (GRDB) and the Rice Producers Association (RPA) in intensifying metric sensitization activities at rice mills countrywide to educate farmers and millers on the use of the metric system. The Director promised that the Bureau would address this matter promptly and the GNBS would strive to provide a better service to its stakeholders in the future.

#### 1.11.5 Meeting held with the Regional Chairman of Region #6.

A meeting was convened with the Regional Chairman of Region #6 on 2006-05-30 to discuss the upgrading of the GNBS Branch Office located at the Regional Democratic Office building and the provision of transportation to GNBS Officers stationed at the said office to conduct field activities. At the meeting, the Chairman promised to discuss the matter with the Regional Executive Officer who is responsible for addressing same, in order to ensure that the necessary repairs are conducted. In addition, he promised to have the lights and points in the office fixed and to provide transportation to the GNBS Inspectors one day per week to conduct field activities. Further, the Chairman expressed concerns regarding the inaccurate measurements of sand and stone and the poor quality of electrical products and nails offered for sale in the Region. He also expressed the need to have fuel tanks owned by the Region calibrated by the Bureau. The Director promised that the GNBS would address the matters highlighted by the Chairman.

### 1.11.6 Meeting with the Commissioner of Police

Based on difficulties encountered by Inspectors of the GNBS when conducting surveillance inspections at retail outlets and markets in the past and the existing crime situation in the country, the need for Police Officers to accompany Inspectors of the GNBS during surveillance inspections has become even more important. As a result, a meeting was convened with the new Commissioner of Police on 2006-10-04, regarding the provision of police officers during surveillance inspections at shops and markets. The Commissioner pledged his full support for the activities of the GNBS and indicated that he would notify the Divisional Commanders accordingly of this arrangements.

In addition, the Commissioner had requested a copy of the 1981 Weights and Measures Act for his perusal and advised that a correspondence be sent to him on the matter along with a copy of the Schedule for Surveillance activities to be executed by the GNBS, which was subsequently submitted.

The GNBS is very optimistic that as a result of the recent meeting held, the necessary steps would be taken by the Guyana Police Force, to provide the much needed protection for Inspectors of the GNBS to facilitate the effective execution of their duties.

#### 1.11.7 Acquisition of Equipment.

The 2000L Test Measure purchased from Western Scientific Company in Trinidad based on funding allocated in the 2005 Capital was received by the GNBS on 2006-04-13 and as a result, a press briefing was conducted on 2006-04-27 to sensitize members of the public on the importance of such equipment and its intended purpose to conduct the verification of bulk meters, wagon compartments and storage tanks at petrol terminals and other private entities.

#### 1.11.8 Calibration of Working Standards

The working standards (Volumetric and Masses) used by the GNBS, its Branch Offices and the Regions to carryout the verification of devices for stakeholders were calibrated in house by the Laboratory Services Department to maintain accuracy and traceability to international standards.

#### 1.11.9 Quality Management System

In an effort to have the GNBS certified to the ISO 9001 Quality Management System Standard, to improve the operational efficiency to better serve its stakeholders, the Department made considerable stride in preparing the relevant procedures for the various activities conducted under the Legal Metrology Programme. The procedures were prepared in accordance with the ISO 9001 standard and were submitted to the Conformity Assessment Department for approval. The implementation of the Quality Management System is expected to commence early in 2007 in preparation for internal audits and subsequent certification to the ISO 9001 Standard.

## 1.12 Monitoring and Evaluation

The primary activities scheduled in the Legal Metrology Annual Work Programme for 2006, which include the initial and subsequent verification of weighing and measuring devices, Weights and Measures surveillance inspections of devices at shops and markets for the first and second half of the year in order to ensure that devices used for commerce were verified for the corresponding period, regional development and visits and metric sensitization activities to facilitate the use of the metric system and educate stakeholders on the activities conducted under the Legal Metrology Programme were achieved during the year, with the exception of the reviewing and updating of the 1981 Weights and Measures Act, preparation of Regulations for the said Act and the checking of net contents in prepackaged goods. As a result, the Department was able to complete approximately 90% of the activities outlined in the Legal Metrology Annual Work Programme for 2006.

The reviewing and updating of the 1981 Weights and Measures Act, preparation of Regulations for the said Act and the checking of net contents in prepackaged goods, which accounts for the remaining 10%, were not achieved mainly due to the timely training of Inspectors on the checking of net contents in prepackaged products and funding to execute same. However, based on funding provided by the Caribbean Development Bank (CDB), the necessary training of Inspectors on the checking of net contents in prepackaged goods was subsequently provided in December. As a result, the execution of this activity is expected to commence in 2007, while the GNBS is still seeking funding to facilitate the reviewing and upgrading of the 1981 Weights and Measures Act and the development of Regulations for the said Act.

The status of completion of activities carried out under the Programme for the corresponding periods was determined through quarterly review meetings conducted by the Department. The reviews carried out revealed that activities were executed within the stipulated time frame as outlined in the Annual Work Programme. In situations where activities were not carried out within the stipulated time frame due to unforeseen circumstances, these activities were rescheduled and executed subsequently.

#### 1.13 Projections

The Department would continue its routine activities based on the Annual Work Programme for the New Year. In addition, it would embark on the monitoring of the net contents of prepackaged commodities at sale outlets and manufacturing companies, the verification of bulk fuel meters and tanker wagon compartments. The execution of these new activities in 2007 is as a result of recently conducted Legal Metrology training and the need to ensure that commodities are sold with the correct net quantities and petrol dealers receive the correct quantities of fuel purchased from Bulk Terminals. In addition, the existing 1981 Weights and Measures Act will be reviewed and Regulations for the said Act will be developed.

#### 2.0 STANDARDS COMPLIANCE

The Standards Compliance Programme is geared to ensure consumer protection and satisfaction through the monitoring of some 25 categories of commodities, local and imported, falling under the purview of the GNBS, in order to ensure compliance with their respective national standards. The investigation of consumer complaints received from consumers in relation to the quality of products purchased and services provided are also carried out. It involved the inspection of commodities at sale outlets, Importers Bonds and Warehouses and at Ports-of-entry, based on Customs entries referred to the GNBS from the Customs and Trade Administration and information received from shipping manifests.

The Metrology and Standards Compliance Department was also involved in the sampling of rice exported from Guyana to Jamaica at wharves and mills and the coding of same to facilitate testing, to determine the broken content.

# 2.1 **Registration of Stakeholders**

## 2.1.1 **Registration of Importers**

A total of 292 importers of commodities monitored by the GNBS under the Standards Compliance Programme were registered for the year, as compared with 115 for 2005, 103 for 2004, 85 for 2003, 94 for 2002 and 213 for 2001. There has been a significant increase in the number of importers who registered with the GNBS this year as compared with the past five years.

The increase in the number of Importers registered for 2006 is attributed to the repositioning of Inspectors of the GNBS at Customs House last November, to facilitate the referral of customs entries to the Bureau, in order to effect the registration of importers with the GNBS, conduct inspection of imported commodities at ports-of-entry, and the acquisition of information from shipping manifests. This initiative is based on a directive from Cabinet during the last quarter of 2005 for the Guyana Revenue Authority (GRA) to carry out agency functions for the GNBS in order to effectively monitor the quality of imports falling under the purview of the Bureau. As a result, the GNBS was successful in conducting an increased number of examinations of commodities monitored under the Standards compliance programme. This has resulted in a number of commodities being placed on hold since they were not in compliance with their respective national standards and were found to be defective. In the circumstances, the said commodities had to be relabeled and in one instance had to be reshipped.

However, despite continuous efforts made by the GNBS to seek cooperation of Customs and Trade Administration (CTA) in strengthening the Standards Compliance programme, and commitment given by the Customs and Trade Administration at meetings held with the Administration, Customs Officers stationed at the ports-of-entry continued to release commodities monitored by the Bureau that are stamped "Hold for Inspection" without inspection by the GNBS. This was evident based on monthly correlation of Customs entries held for examination against inspections conducted which showed that 11 entries were released without examination for the month of January, 7 for February, 12 for March, 12 for April, 3 for May, 3 for June, 7 for July, 22 for August, 3 for October, and 6 for November. This has contributed significantly to the increase in the number of consumer complaints relating to sub-standard quality products imported.

A meeting was convened with the Customs and Trade Administration (CTA) regarding the release of commodities at the ports of entry without inspection by the GNBS and the results of correlation done by GNBS were provided to the CTA for follow-up actions. At the meeting, the CTA promised their full support and cooperation to address the matter and to brief the respective officers accordingly so as to facilitate inspections of commodities by the GNBS.

Nevertheless, the Bureau was successful in examining at least 90% of the commodities held for inspection at the ports-of-entry or at the Importers' warehouses, based on rigorous follow-ups conducted by the Inspectors of the Bureau with the Customs Officers-in-Charged at the various ports-of-entry, on commodities released without inspection by the GNBS. As a result, some of the commodities examined had to be placed "on hold" since they were not in compliance with the relevant labelling standards.

# 2.1.2 Registration of Used Tyre Dealers

Regarding used tyres, 50 dealers were registered with the Bureau for 2006, as compared with 51 for 2005, 59 for 2004, 56 for 2003, and 50 for 2002. This indicates that the Bureau maintained the continuous monitoring of tyre dealers each year. Inspections of the premises of registered tyre dealers were carried out during the first quarter of the year to ensure that tyres offered for sale comply with the relevant quality requirements, for example, free from cracks on sidewalls, and stored in accordance with the requirements outlined in the Code of Practice for the Storage of Tyres. Permits to sell used tyres were issued to the registered dealers. In situations where minor non-conformities were observed, dealers were given specific time-frames to take corrective actions, and follow up inspections were conducted to ensure compliance, prior to the issuing of permits. In addition, periodic inspections of premises and tyres offered for sale were conducted at sale outlets, resulting in a total of 75 inspections conducted throughout the year and a quantity of 300 defective tyres were destroyed, as compared with 225 for 2005, 377 for 2004, 440 for 2003 and 449 for 2002.

In some cases, dealers were reluctant to allow Inspectors to destroy defective tyres found during examination at sale outlets, since difficulties were experienced with the importers, from whom tyres were purchased, regarding obtaining exchanges or refunds for tyres destroyed by the GNBS. This matter was discussed with the relevant importers and they had promised to address such exchanges based on the submission of destruction certificates issued by Inspectors of the GNBS during examination. As a result, the tyres were subsequently destroyed. Further, it was decided that if such a situation continues to exist, the GNBS would conduct the examination of tyres at the ports-of-entry for importers who are not willing to cooperate with the GNBS.

## 2.2 Standard Compliance Inspections

# 2.2.1 **Import Inspections**

Based on the implementation of the new system at the Customs and Trade Administration (CTA), which has resulted in the referral of Customs Entries to the Bureau from CTA, a total of 1393 inspections were conducted at the ports-of-entry and warehouses for 2006, as compared with 298 for 2005. Commodities examined were mainly new and used tyres, electrical appliances, furniture, footwear, textiles, paints, soap powder, garments, fertilizers, safety matches, gas stoves, cigarettes, animal feeds, safety helmets, PVC pipes, fluorescent lamp ballasts, water and electricity meters, cell phones, Christmas tree and decorative lighting outfits and toys and playthings. Commodities were examined to determine compliance with their respective national standards and were found to be generally in compliance.

However, there were some commodities that were inadequately labelled and as a result, these commodities were placed "on hold" at the importers' bonds pending re-labelling or the submission of Test Certificates. These include:

- i. Furniture 2 containers and 610 pieces,
- ii. Fertilizers 2 containers, 15000 tonnes and 50,000 bags,
- iii. Footwear -1 container and 240 pieces,
- iv. Garments -1 container and 72 pieces,
- v. Soap powder 7 containers,
- vi. Animal feed -1 container,
- vii. Toys and playthings 4 containers,
- viii. Fairy lights 4 consignments,
- ix. Electrical appliances 352 pieces,
- x. Textiles 1 skid, and
- xi. Gas stoves 1 container and 8 pieces.

In addition, one container of electric kettles that were inadequately labeled and defective was reshipped to the supplier.

Most of the commodities held were subsequently labelled in accordance with requirements, or certificates of compliance were submitted from independent third party testing bodies to the GNBS, and the commodities were subsequently released.

In addition, a total of 877 used tyres were rejected and destroyed during examination, since they had cracks on their side walls, damaged bead area and were below the 4 mm thread depth.

The recommencement of ports-of-entry inspections by the Bureau and increased cooperation from CTA Officers have increased the effectiveness of the Standards Compliance programme during the year since there has been a significant increase in the number of inspections conducted by the GNBS at the ports-of-entry.

# 2.2.2 Surveillance Inspections

Surveillance inspections were carried out by the GNBS on specific products based on numerous consumer complaints received. These products include cell phones, electrical appliances, safety matches; cigarettes, soap powder, garments and footwear.

Resulting from complaints received examination of the above-mentioned products were carried out at sale outlets on separate occasions, and a total of 1,215 inspections were conducted during 2006, as compared with 1338 for 2005, 1,326 for 2004, and 2497 for 2003. As a result, a total of 37 cellular phones, 13 pieces of electrical appliances, 50 pieces of garments; 56 packets of cigarettes and 20 pairs of footwear were found to be inadequately labeled. However, they were placed on hold and subsequently re-labelled with their missing information. The other commodities examined during surveillance inspections were generally in compliance with their relevant National Standards. Details of used tyres surveillance conducted at sale outlets are featured under 2.1.2 "Registration of used tyre dealers".

Intensified surveillance inspections were conducted on cell phones since 50% of the complaints received for the year related to defective cell phones purchased by consumers. In addition, the GNBS convened a meeting with dealers to discuss the problems consumers were experiencing and possible solutions to the problems. Based on surveillance inspections carried out at sale outlets by Inspectors, it was observed that used and refurbished phones were displayed for sale with out adequate labels to guide consumers. As a result consumers were being tricked into buying used and refurbished phones as new, which subsequently developed problems after being put into use. In the circumstances, dealers were advised to label their phones properly to guide consumers and checks were conducted by the GNBS Inspectors to ensure that new phones displayed for sale were actually new.

In addition, extensive surveillance activities were conducted on electrical appliances since the second highest number of complaints was received for defective electrical appliances purchased. Most of the appliances examined during surveillance inspections were adequately labelled, and those which were not labelled were placed on hold. However, most of the products tend to develop problems after being put into use for a short period of time and had to be returned to the stores from which they were purchased.

There was a decrease in the number of inspections conducted this year, as compared with the years 2005, 2004 and 2003, since more emphasis was placed on the inspection of commodities at the ports-of-entry during the year. In addition, it should be noted that some products focused on during the year 2006 in the "product-by-product" campaign were different from those in 2005, 2004 and 2003, since inspections were carried out mainly on products for which numerous complaints were received.

# 2.2.3 Local Product Monitoring

# 2.2.3.1 Registered Products

The monitoring of locally-manufactured commodities continued during the year, being a requirement of the WTO/TBT Agreement to monitor both locally- manufactured and imported commodities, in order to ensure consumer satisfaction and protection. As a result, nine (9) manufacturers had registered with the GNBS for 2006, as compared with 14 manufacturers for 2005, 3 for 2004 and 9 for 2003. These were mainly manufacturers of garments, furniture, textiles and soap powder. There has been a decrease in the number of manufacturers registered with the Bureau for the year 2006, as compared with the past three years, which is mainly due to the general lack of cooperation of manufacturers to participate in the programme, despite visits conducted by GNBS Inspectors to the various manufacturing companies and notices published by the Communications Department, sensitizing them on the importance of the programme and the need to annually register with the GNBS. As a result, there is need for stronger enforcement activities, such as, the seizing of commodities not in compliance with the respective Guyana National Standards and the prosecution of manufacturers by the Bureau in the New Year.

The examination of commodities manufactured by the registered manufacturers was carried out routinely throughout the year, resulting in visits to the factories of 6 garment, 21 furniture, 3 animal feeds and 1 soap powder manufacturers. Commodities examined were generally in compliance with their respective national standards. However, in situations where commodities were not in compliance with the respective national standards, the manufacturers were advised accordingly in order to facilitate the compliance of products manufactured. This approach was used to assist manufacturers to produce products of acceptable quality, instead of applying enforcement actions.

## 2.2.3.2 Poultry Feed Quality

Based on numerous complaints received by the GNBS for 2006 regarding the quality of animal feeds manufactured and offered for sale locally, a meeting was convened by the GNBS on 2006- 11-08 with regulatory agencies and manufacturers to discuss the problems affecting the sector. Resulting from the discussions held at the meeting, a tenpoint action plan, as stated under 2.7.11 developed by the GNBS, was approved and the GNBS was tasked with implementing the said plan.

As a result, visits were conducted to three (3) animal feed manufacturer's premises by representatives of the GNBS and the Veterinary Public Health Department, to witness the processes involved and to acquire samples to be tested, in order to verify the label claims, based on the recent complaints received by the GNBS regarding the quality of animal feed offered for sale locally.

In addition, the samples acquired were submitted to Guysuco and Food and Drugs Department for testing. Further, steps are currently been taken to have the said samples analysed by an Accredited Laboratory in the USA, in order to determine the Lysine, Methionine, Cysteine, Vitamins A, B, E, D, Calcium, Magnesium, Phosphorus, Copper, Zinc, Iron and Micro toxins (Aflatoxin and Ochratoxin) contents.

The national standard for the labelling and testing of animal feeds was finalized and approved by National Standards Council as a Guyana Standard; however, steps are currently being taken to make the said standard mandatory to facilitate the implementation of same in the poultry sector. The GNBS is also involved in monitoring the quality of imported animal feeds and ingredients, which involves the examination of feeds imported at the Ports-of-entry to determine compliance with the relevant requirements outlined in the national standard and the sampling of locally manufactured and imported feeds to be tested, in order to verify the label claims.

# 2.3 Consumer Complaints Investigation

During the year, 87 consumer complaints were received, as compared with 103 for 2005, 77 for 2004, 24 for 2003, and 35 for 2002. **Table 5.** below shows a comparison of complaints received for the years, 2001 to 2006. There has been a slight decrease in the number of complaints received for 2006 as compared with 2005. This decrease could be attributed to the continuous sensitization of consumers by the GNBS.

Table 5
INVESTIGATION OF CONSUMERS' COMPLAINTS

YEARS	COMPLAINTS RECEIVED	SOLVED	UNSOLVED	REFERRED	PENDING
2001	57	52	2	ı	3
2002	35	23	1	10	1
2003	24	22	2	ı	1
2004	77	69	-	8	1
2005	103	90	2	7	4
2006	87	75	-	6	6

Complaints received as shown in **Table 6** below related primarily to products such as: electrical appliances, cell phones, tyres, footwear, Ipod, concrete blocks, compressor, rechargeable lamp, animal feeds, gas stoves, garments, footwear, computer, water dispenser and battery. The nature of complaints received for cell phones and electrical appliances, for which most of the complaints were received, related to defective batteries, used phones sold as new, poor signal, speaker and display malfunctioning, damaged hard drive, used television sold as new, DVD players not reading discs, defective freezer and deceptive labeling of television.

The main commodities for which complaints were received in 2006 were similar to those received in 2005, 2004, 2003 and 2002. The complaints received this year were investigated with 75 being resolved, 6 referred to the Ministry of Tourism, Industry and Commerce for relevant investigation and 6 pending further investigation by the Bureau. Complaints pending from 2005 were resolved in 2006 and those pending for 2006 would be further investigated and resolved in 2007. In situations where the GNBS was unable to resolve complaints they were referred to the Ministry of Tourism, Industry and Commerce for action.

Table 6 COMMODITIES AND NUMBER OF COMPLAINTS RECEIVED.

COMMODITIES	NUMBER OF COMPLAINTS
Electrical Appliances	33
Cell Phones	40
Ipod	1
Rechargeable	1
Tyres	1
Footwear	2
Gas stoves	3
Compressor	1
Concrete blocks	1
Garments	2
Animal Feeds	1
Battery	1

**Table 6** indicates that about 50% of the complaints received relate to cell phones and 40% relate to electrical appliances and the remaining 10% relate to other commodities.

Although most proprietors of stores from which commodities were purchased cooperated with the GNBS in resolving consumer complaints, there were a few who were reluctant to address complaints drawn to their attention. This resulted in the complaint being referred to the Ministry of Tourism, Industry and Commerce for further investigation.

In situations where complaints were received pertaining to defective electrical products, inspections were conducted at sale outlets and products not in compliance were placed on hold pending submission of Test Certificates.

# 2.4 Sampling of Rice.

The sampling of rice exported to Jamaica continued during the year 2006 as a result of a Memorandum of Understanding signed between the GNBS and the Jamaica Bureau of Standards in 2003, since the Jamaican Authorities were dissatisfied with the quality of rice exported from Guyana to Jamaica, despite being certified by the GRDB.

During the year, Inspectors conducted sampling at wharves and rice mills, and samples collected were coded and forwarded to the Laboratory Services Department for testing. As a result, 1144 containers (27,799.2 metric tonnes) of white and parboiled rice from 6 exporters were sampled prior to exportation to Jamaica as compared with 1437 containers (34, 919.1) for 2005, 1,425 containers (34,627.5 metric tonnes) for 2004 and 1124 containers (28,706 metric tonnes) for 2003. The results of rice analysis conducted are reported in Section 3 of this report.

**Table 7.** below shows that there has been a decrease in the number of rice sampled for the year 2006 as compared with the previous years. The decrease could be attributed to the decrease in the shipment of rice to Jamaica.

Table 7.
COMPARISON OF RICE SAMPLED FOR THE YEARS 2001-2006

YEARS	NO. OF CONTAINERS	METRIC TONNES
2001	-	-
2002	-	-
2003	1124	28,706
2004	1425	34,627.5
2005	1437	34,919.1
2006	1144	27,799.2

During the year, the GNBS encountered major difficulties with the sampling of rice at wharves and mills, because of inadequate personnel to sample rice at several locations simultaneously. In the circumstances, assistance was sought from the GRDB to take rice samples and submit same to the GNBS for testing. This new arrangement was effected on November 20, 2006. However, the GRDB is currently taking steps to have their laboratories certified to the ISO 17025 standard, after which the GRDB would recommence the analysis of rice exported to Jamaica based on agreement with the Jamaican authorities.

## 2.5 Training of GNBS Inspectors.

As part of the GNBS in-house training conducted by Senior Officers to facilitate capacity building within the GNBS, Inspectors of the department were trained on the identification of commercial entries of commodities monitored by the GNBS, the conduct of an Inspector, the labelling and storage requirements of new and used tyres, physical defects found on used tyres, the labeling of furniture and fertilizers, inspection of toys and playthings and Christmas tree and decorative lighting outfits, inspection of cell phones and how to determine new, refurbished and used cell phones during inspections at sale outlets.

The training received was beneficial to Inspectors, since they are better equipped to conduct examinations of these commodities at the Ports-of-entry and at sale outlets, which would enable them to provide better guidance to manufacturers and importers and verify label claims at the time of examination.

In addition, the Chief Inspector also participated in a training programme on ISO 9001 Quality Management Systems, which was held by the GNBS based on funding provided by GTIS during the period July 19 to July 21, 2006 at the Tower Hotel, Main Street, Georgetown. The training conducted aimed to enhance the knowledge of participants who was drawn from various Companies, in order to facilitate the implementation of the ISO 9001 Quality Management System in Companies operating in Guyana, to attain Certification to the said standard.

#### 2.6 **Public awareness**

Information gathered from field inspections, consumer complaints and verification exercises, which were useful for the protection and guidance of consumers, were analyzed and prepared routinely throughout the year for publication in the form of releases, notices, newsletters etc. by the Communication Division. In addition, Senior Officers within the Department participated in exhibitions and radio and television programmes organized by the said Department to provide guidance to consumers, to increase their awareness of the services offered by the GNBS, the benefits of consumers in accessing these services and to keep the public informed on the various activities carried out by the GNBS. The Public Relations activities are covered in Section 6 of this report.

#### 2.7 Other Activities

In addition to the routine activities conducted under the Annual work Programme for the year, several meetings were convened with stakeholders and follow-up visits were conducted at Companies to address various concerns raised by stakeholders based on the implementation of Mandatory Standards under the Standards Compliance Programme of the GNBS, in order to increase awareness and to strengthen the Programme.

# 2.7.1 Meeting with Unilever Company of Trinidad.

A meeting was convened with Mr. O' Brian of Unilever Company of Trinidad on 2006-02-09, regarding the in-adequate labelling of the Breeze and Radiante Soap powder manufactured by the said Company, which were imported by Bryden and Fernandes and DeSinco. The Breeze and Radiante soap powder imported had no expiry and manufacture dates, batch number and the form of the product was not stated on the label of the packets At the meeting, Mr. O' Brian promised his full support and cooperation in addressing the non-conformities for all future consignments and request that the existing consignment on hold be released by the GNBS. This request was granted by the Director. A letter confirming the decisions taken at the meeting was subsequently sent by the Bureau to the company. As a result, future consignments imported were fully in compliance with the labeling requirements for the said product.

# 2.7.2 Meeting with Representatives from the MTTIC

A meeting was convened on the 2006-02-06 between the GNBS and the Ministry of Tourism, Industry and Commerce (MTIC) to identify areas within the 2006 Work Programme where the Bureau and the Ministry could collaborate to facilitate the effective execution of activities. Some of the areas identified are the consumer education, small business development and an importers forum. The GNBS participated in a number of live call- in television programmes organized by the MTIC, which were geared to educate and sensitise consumers on tips for shopping, warranty offered on products and purchasing of quality products imported.

#### 2.7.3 Cell Star drive test

As a result of complaints received from customers of cell star regarding poor signal, Officials from the company had invited a representative from the GNBS to participate in a drive test training conducted by Cell Star Guyana Inc. on 2006-01-26 to test their GSM signal strength on the West Coast of Demerara. As a result, Mr. Keemo Fyffe represented the Bureau. This exercise was beneficial to the GNBS since it provided knowledge regarding the overall operation of the GSM network system and the investigation of consumer complaints made against Cell Star Guyana Inc.

# 2.7.4 Meeting with Gismos and Gadgets

A meeting was convened with Gizmos and Gadgets, an importer of cell phones on 2006-03-09 to discuss the conditions of warranty offered to customers by the said Company and other concerns regarding the investigation of consumer complaints received by the GNBS on cell phones purchased from the company. The proprietor indicated that his store sells only new phones for which warranties are offered and promised his full support to the Bureau in addressing complaints received for cell phones purchased from his store.

## 2.7.5 National Forum on requirements for importation.

A National Forum was held with Importers at the Tower Hotel on 2006-03-29 to discuss the requirements for importation of commodities monitored by the GNBS based on the new system implemented at Customs in November, 2005 and to promote the use of Standards in the acquisition of products imported for resale purposes. At the Forum, presentations were made by the President of the Georgetown Chamber of Commerce and Industry (GCCI), Director of the GNBS and Ms. Eileen Cox of the Guyana Consumer Association. Some of the main concerns raised by Importers present were the importation of products in foreign language, quality of imported products, the need for increase awareness of consumers, the need for mandatory standards for essential commodities in order to ensure safety and health, the presence of fake certification marks on electrical appliances, the need for the registration of all importers, inadequate labelling of products, better cooperation from the CTA to effectively monitor the quality of imported products and expired food and drugs offered for sale at sale outlets countrywide. The forum was beneficial to importers since it provided them with useful information about GNBS activities and the requirements of the Standards compliance programme. As a result, importes are more aware of the requirements and most of them are cooperating with the GNBS.

## 2.7.6 Meeting held with the GCCI.

A special meeting, convened by the GCCI on 2006-03-16 at 14:00h to discuss the quality of imported products, was attended by the Director, Chief inspector and the Senior Inspector, with responsibility for Standards Compliance activities of the GNBS. At the meeting, the President and Members of the GCCI raised concerns regarding the poor quality of food products imported and offered for sale on the local market, products imported in foreign languages and the lack of cooperation from Customs to effectively monitor the quality of imports. These matters were discussed at length and it was decided that the respective Agencies would address the concerns raised.

# 2.7.7 Meeting held with Importers and Dealers of Cell Phones.

A meeting was convened with Importers and Dealers of cell phones in the Training Room of the GNBS on 2006-05-10. The objectives of the meeting were to review and discuss the requirements governing the importation and sale of cell phones with the expectation of improving the quality of cell phones imported and offered for sale locally, to outline difficulties encountered by the GNBS, and to address the concerns of Importers and Dealers in the operation of their businesses.

Some of the main concerns discussed and agreed on at the meeting were:

- (i) The provision of all accessories and the operation manual with every new cell phone purchased.
- (ii) Adequate labelling of cell phones imported to provide guidance to potential users, e.g. used or refurbished.
- (iii) The need for Importers and Dealers to facilitate the periodic inspection of cell phones at sale outlets, in order to ensure compliance.
- (iv) The need for Importers and Dealers to address complaints at their level regarding defective phones purchased by consumers.
- (v) The need for Importers and Dealers to purchase cell phones from Suppliers who issue warranty which could be passed on to the consumers.
- (vi) The need to issue suitable warranties to consumers with acceptable conditions and duration periods, in order to cover the product purchased in the event of manufacturer's defects.
- (vii) The registration of all Importers and Dealers of cell phones with the GNBS.
- (viii) The need for better cooperation from Importers and Dealers, in order to effectively monitor the quality of imported cell phones.
- (ix) The manipulation and misuse of phones by some consumers.
- (x) The importation of acceptable quality cell phones and accessories offered for sale to consumers.
- (xi) The provision of after sale services for the various brands of cell phones offered for sale to consumers.
- (xii) The reduction of time taken by Importers and Dealers to address complaints regarding defective phones sold to consumers.
- (xiii) The need for the Network Provider to improve the quality of signals available to consumers in Guyana.

It was recommended that the GNBS should work closely with Importers and Dealers in educating consumers on the care and use of cell phones. A few Importers present promised to provide the necessary information to be used in the educational process. The Director promised that the Bureau would follow-up with these Importers to acquire the said information, and actions would be taken by the GNBS to educate consumers via the media. In addition, the need for Importers and Dealers to train their employees to be more consumer friendly, and to be able to provide adequate guidance to consumers was also emphasised at the meeting.

# 2.7.8 Meeting held with Cuban Engineer on Energy saving Lamps

A meeting was convened on 2006-05-23 with a Cuban engineer in Guyana working with GPL in distributing energy-saving lamps to residents as part of a project between the Government of Guyana and Cuba. The purpose of the meeting was to acquire information regarding the quality of energy saving lamps currently being distributed under the project. The engineer provided the Bureau with the necessary information required on the product and promised her full cooperation in providing a test Certificate for the product and the standards which the product was manufactured and tested against in order to ensure compliance. However, to date the said test certificate and standards were not submitted to the Bureau. Nevertheless, the Bureau was able to source the standards from a standards institution which is now available for use.

## 2.7.9 Visit Conducted at Gafoors Nail Plant at Land of Canaan

The Director, Chief Inspector and a Senior Inspector of the GNBS conducted a visit to Gafoors Nail Plant at Land of Caanan, East Bank Demerara, to examine the operation of the said Plant, based on concerns raised about the poor quality of nails offered for sale on the local market. An examination of the nails produced by the company revealed that some of the nails have "wings". However, based on discussions held with Mr. Bansal, Engineer of the Company, it was revealed that the company operates at a 1% tolerance limit for defective nails. The GNBS through CROSQ is presently working on a standard for nails, which is expected to be approved shortly as a Caricom standard and would be adopted subsequently as a Guyana Standard. As a result, the said standard would be used by the GNBS to monitor the quality of nails manufactured locally, through Product Certification and imported nails.

## 2.7.10 Visit conducted at Cheddi Jagan International Airport (CJIA)- Timehri.

On 2006-06-15, a visit was conducted by the Director, Chief Inspector and a Senior Inspector of the GNBS to examine the operation of the Customs Office at CJIA with the aim of positioning an Inspector at the Airport to monitor the quality of commercial imports. Based on examination of Laparkan, Amerijet and Total Air Cargo bonds and the Customs Operations at the Airport, the Bureau was advised by the Officer -in-Charge to meet with the Commissioner General to discuss the positioning of an Inspector at the Airport. The Deputy Commissioner General advised that permission be sought from the Airport authorities. As a result, a meeting was subsequently held with the Deputy Operations Manager of the Airport on 2006-08-03 to seek approval for Inspectors of the Bureau to work within the facilities at the Airport. Based on the meeting held the necessary approval was granted for the GNBS to have access to the airport to conduct examinations and to examine customs document. This exercise will commence in the New Year, in collaboration with the Customs and Trade Administration, in order to implement an effective system at the Airport.

# 2.7.11 Meeting held with Manufacturers of Animal feed and Monitoring Agencies

A meeting was held with manufacturers of Animal Feed and representatives of Regulatory Agencies on Wednesday, November08, 2006 in the conference Room of the GNBS. The objective of the meeting was to establish a partnership arrangement between all stakeholders to address the existing concerns raised about the quality of animal feeds offered for sale locally. As a result, a ten-point action plan developed by the Guyana National Bureau of Standards (GNBS), in order to address the standards and quality aspects of animal feeds in the country, was discussed with participants. These are as follows:-

- 1. The GNBS would take the responsibility for the product, animal feeds, and therefore, included it in the list of 25 products being monitored. The Standards Compliance Department is designing the necessary inspection and monitoring checklist and establishing the requisite record system.
- 2. A review of the National Standards on poultry feed is currently being carried out, and these would be harmonized with the Caricom Regional Standard. The revised standard will be used in the standardization process of poultry feeds. Steps will be taken to formulate standards for other animal feeds.
- 3. A special meeting would be held with all animal feed manufacturers, importers and distributors on **Wednesday, November 08, 2006** at the GNBS to discuss requirements of the standards, the standardization activity of the Bureau, including the regime of sampling and testing, institution of a quality management system into their operations as this would ensure consistency in the quality of feeds produced, and a number of other matters.
- 4. Animal feed manufacturers and importers would be required to be registered with the GNBS on an annual basis.
- 5. Inspections of the feed manufacturing and importation operations would be carried out, and technical assistance given where necessary in order to improve or enhance the said operations in compliance with the requirements of the National Standard. Surveillance activities would be implemented to ensure maintenance of quality operations.
- 6. Sampling and testing of feeds would be conducted comprehensively and the test results evaluated on a sustained basis. Quarterly reports on the test results would be submitted to the Ministry of Agriculture. Feeds would be tested at GUYSUCO's Laboratory, and later at NARI's Laboratory in the New Year.
- 7. Imported feeds would be monitored at the ports-of-entry in relation to the requirements of the standard. Inspectors will be guided by the routine screening of Customs Entries and shipping manifests at Customs House, and actual examination at the ports.

- 8. Feed manufacturers would be encouraged to institute an ISO 9001 Quality Management System into their operations and the GNBS would provide the necessary technical assistance to enable them to be certified to the said international standard.
- 9. Since testing of feed samples would be concentrated at the NARI's laboratory, the GNBS would work with the said laboratory for it to be certified to the ISO 17025 international standard.
- 10. Joint meetings would be held with officials from the GNBS and the Ministry of Agriculture on a periodic basis to evaluate the results of all of the above activities, and to make recommendations for further actions.

In addition, the **DRAFT GUYANA STANDARD: Specification for Poultry feed and feed ingredients** (2<sup>nd</sup> revision) was discussed.

# 2.7.12 Meeting held with Representatives of Digicel

A meeting was convened with the Manager of Digicel on 2006-11-27 based on his request to meet with the GNBS to discuss matters regarding the operation of their business in Guyana, since the GNBS is responsible for monitoring the quality of cellular phones imported and offered for sale locally under its Standards Compliance Programme. Some of the matters discussed at the meeting were the importation requirements, after sale services, registration, training of dealers and handling of consumer complaints. The Manager promised full cooperation with the GNBS in ensuring quality phones are offered for sale to consumers.

## 2.7.13 National Tobacco Council.

Guyana acceded to the Framework Convention on Tobacco Control (FCTC) on April 15, 2005. Being a member of the FCTC, mandates Guyana to enforce the following:

- Comprehensive ban on tobacco advertising, sponsors and promotion to be implemented within five years.
- Strong health warnings on tobacco packaging that cover at least 30% (and ideally 50%) of the principle display panel within three years.
- Protection from second hand smoke in all indoor workplaces and public places and in public transportation; and
- Measures to reduce the smuggling of tobacco products.

As a result, a National Tobacco Control Council comprising of representatives from the relevant Government Ministries and Agencies was established to contribute to a multiagency working National Tobacco Control Council, in order to ensure that the key requirements are addressed by Guyana.

The GNBS was elected to sit on the Council and Mr. Shailendra Rai, Chief Inspector of the Legal Metrology and Standards Compliance Department was identified as the Bureau's representative on the Council. To date, two (2) meetings of the Council were attended and the GNBS was tasked in ensuring that the second requirement of the FCTC, which is to ensure that strong health warnings on tobacco packaging cover at least 30% (and ideally 50%) of the principle display panel within three years, is addressed. As a result, the necessary representations were made by the GNBS to CROSQ to have the existing Caricom Standard on Tobacco Products be revised to include the requirements as outlined in the FCTC document, to which most Caricom countries are signatories.

In addition, a National Workshop on "Building and Strengthening National Capacity for Tobacco Control" was held by Pan American Health Organisation in collaboration with the Ministry of Health on November 7-8, 2006 at Cara Lodge. The objectives of the workshop were as follows:

- To make stakeholders more aware of the mechanism by which the FCTC can support national tobacco control objectives.
- To strengthen the capacity of an inter-sectoral working group-National Tobacco Control Council.
- o To draft a plan of action for the National Tobacco Control Council.

At the workshop, presentations were done by Ms. Heather Selin, Team Leader, PAHO/WHO, WDC, Ms. Renee Franklin Peroune, Health Promotion Advisor, PAHO/WTO, GUY and Ms. Lucy Anderson, Health Promotion Coordinator, Ministry of Health.

# 2.8 Monitoring of GNBS Branch Offices.

## Region #2 Branch Office.

The Director and the Chief Inspector visited the GNBS Branch Office at Anna Regina, Region #2 on 2006-05-17, where checks were conducted on the records kept by the office, equipment, seals and the facility, in order to ensure that all records are properly kept and updated and the equipment, seals and facility are maintained and kept securely. Checks conducted revealed that all records were well kept and updated, seals used were accounted for and securely kept and all equipment used and the facility were well maintained and kept in a tidy condition. The Officers stationed at the Office were commended for the work done and was encouraged to continue to be responsible and professional in the execution of their duties in the Region.

## **Region #6 Branch Office**

The Director and the Chief Inspector conducted a similar visit to the GNBS Branch Office at New Amsterdam, Region #6 on 2006-05-30. The findings of the visit revealed that some records were not kept and updated and equipment used was not properly maintained, as required. The facility was maintained and kept in a tidy condition; however, the necessary repairs to the office were not conducted by the Region as promised. All seals used were accounted for and securely kept in the office. The Officers stationed at the Office were advised on the necessary corrective actions to be taken and were encouraged to be more responsible and professional in the execution of their duties in the Region. A follow up visit showed that most of the recommendations were addressed.

# 2.9 Monitoring and Evaluation

The activities conducted under the Standards Compliance Programme for the year 2006 were the registration of importers, manufacturers and dealers, monitoring of Customs desk, ports of entry inspections, surveillance at sale outlets, sampling of rice at wharves and mills and the investigation of consumer complaints, which were routine and in keeping with the Annual Work Programme for 2006. However, there is need for import control surveillance inspections of commodities monitored by the GNBS to be intensified at sale outlets in the New Year, in order to address the smuggling of sub-standard products and to ensure the compliance of products with the relevant National Standards. This would be effected.

The status of completion of activities carried out under the Programme for the corresponding periods was determined through quarterly review meetings conducted by the Department. The reviews carried out revealed that activities were executed within the stipulated time frame as outlined in the Annual Work Programme. In situations where activities were not carried out due to unforeseen circumstances, they were rescheduled and executed. As a result, the department was able to complete approximately 95% of the activities outlined in the Standards Compliance Annual Work Programme for 2006.

## 2.10 Projections

The Department would continue its routine activities based on the Annual Work Programme for the New Year. In addition, with the employment of additional staff, the department would embark on the intensive surveillance inspections of commodities monitored by the GNBS at sale outlets, in order to ensure quality products are offered to consumers.

Further, the GNBS vows to take steps to monitor commodities falling under its purview that are imported through Timehri, Springlands and at Lethem, in an effort to strengthen the Standards Compliance Programme.

#### 3.0 LABORATORY SERVICES

The objective of the Laboratory Services Department is to provide scientific calibration and testing services to the manufacturing, commercial and public sector in the country. It provides these services in six areas, namely, Mass, Volume, Pressure, Dimension, Rice and Gold. In order to provide these services, the GNBS has established three (3) calibration laboratories to conduct mass, length, temperature, pressure and volume calibrations and two testing laboratories to facilitate the testing of gold and rice. These laboratories analyse gold and rice samples submitted by customers to ensure that the products sold are of the required quality for the customer. The rice tested by the GNBS is specifically for the Jamaican market where the percentage broken of rice is analysed to the Caricom Rice Standard before the rice is exported.

The Gold Testing Laboratory tests gold for purity in conformance with the National Standard GYS 50-2: 2003, Specification for gold articles- Part 2: Guidelines for manufacturing, alloying and testing. This testing supports the Product Certification Programme of the GNBS which ensures that certified manufacturers produce and label gold articles with the required purity as specified in the standard to ensure that customers get the required value for their money.

In addition, a limited service is extended to the general public for verification of the purity of gold articles purchased from the local market

These laboratories are manned by qualified and competent personnel, in order to obtain credible and reliable results and the Metrology Services offered by the Department to industries provide traceable measurements to National and International Standards, which ensure that industries and laboratories use measurements that are accurate in their production and testing activities. This will in effect allow products and services offered by industries and laboratories to be accepted at the national and international levels thus promoting free trade and reducing trade barriers.

In order to achieve the objectives of the Department and mandate of the GNBS, the Department is staffed with four dedicated personnel who are multi-tasked. The staff performed their assigned responsibilities with much enthusiasm despite the existing challenges.

## 3.1 Calibration of Weighing and Measuring devices.

During the year, a total of 310 devices, largely Masses, Calipers, Scales and Micrometers were submitted by stakeholders internally and externally for calibration, as compared with 146 for 2005. Most of the devices calibrated were to establish traceability for companies that are certified to the ISO 9001 International Standard and also, those opting for such certification. The devices were all calibrated and the necessary calibration certificates were issued. These certificates indicate the accuracy of the devices calibrated within an acceptable tolerance, along with an uncertainty statement of confidence level within 95%.

#### 3.1.1 Stakeholders devices submitted

Devices submitted externally for calibration by companies were generally to establish traceability to the National or International Standards. Also it is required that all measuring equipment be calibrated once, depending on the frequency of use. The calibration of the measurement instruments and apparatus is done to establish that products and services conforms to existing quality standards and this, in turn, gives an assurance of quality of the products and services offered to consumers.

# 3.1.2 Working Standards

The working standards, i.e., Masses, Electronic Balances and Provers of the GNBS were calibrated using the secondary standards. The working standards are used by the Standard Compliance Department to verify Weighing and Measuring Devices nationally.

## 3.1.3 Primary Standards.

The Primary Standards at the GNBS have the highest metrological qualities and are sent to laboratories in the United States of America or the Jamaica Bureau of Standards to be calibrated to maintain traceability to International Standards.

The chart in Figure 4. below shows that the number of devices submitted for calibration for the year 2006, during the months of January to May were relatively low. This was as a result of the majority of companies not sending their devices to be calibrated. However, there was a significant increase during the months of June and July showing the highest number of devices submitted, which would have resulted from companies submitting their devices. The months October and November show a variation whereby new companies submitted their devices to be calibrated for the first time and also some devices were recalibrated.

It is worthwhile to point out that the testing and calibration programme is still in its embryonic state, and it is developing gradually to reach its full capacity. For example, there is limitation in the range of calibration carried out until the higher physical standards are acquired. Therefore, the testing and calibration services offered to the public are accordingly limited.

Devices submitted for Calibration for the year 2006

Figure 4.

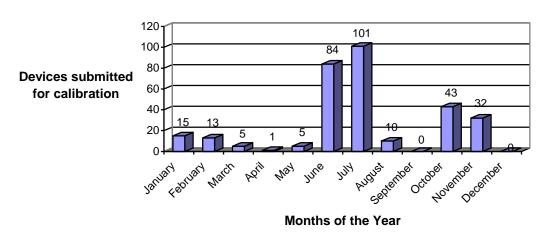


Table 8. below shows that there was an increase in a number of devices submitted for calibration during the year, as compared with 2005. This is attributed to the increase in companies, for example, the Guyana Rice Development Board and the Ogle Aeronautical School opting for International Certification, that require their instruments to be calibrated in order to maintain accuracy and to obtain traceability to the International Standard. Also, some companies are aware of the calibration service offered and are submitting their devices for calibration. The Laboratory Service Department was only established in 2005.

Table 8.

Comparison of devices calibrated during 2005 and 2006.

Year	Calipers	Rules/ Measu ring Tape	Micro meters	Gauges	Scales	Masses	Measures
2005	2	2	3		4	129	6
2006	8	6	2	4	3	278	9

Most of the devices calibrated were Masses. The Masses ranged from a class M3 to a Class F1 and capacities from a range of 1mg to 20kg. These classes are given by the International Recommendation OIML R 111; Weights of Classes E1 – M3, Part 1: Metrological and technical requirements. From the Dimension Laboratory only two analog instruments were submitted one being a Caliper and another, a Micrometer. The others were all Digital instruments.

All of the devices submitted for calibration were due for recalibration on the expiration of their calibration date.

In order to adequately carry out the calibration of the most commonly used masses kit (0-20kg), there is urgent need for a 30kg mass comparator to be acquired by the GNBS. This is necessary since the comparators presently used do not have the capacity to accommodate masses above 200g; hence, the GNBS is presently unable to conduct calibration for masses beyond 200g capacity.

Although, the Department has acquired equipment to conduct temperature calibration, the necessary software required and also, a triple cell maintenance bath are needed in order for this activity to be executed by the Bureau. In addition, there is need for training of laboratory technicians on pressure calibration, in preparation to provide this service to industries in the New Year.

# 3.2 Rice Testing

Samples of parboiled and white rice were taken from Wharves and Mills by Inspectors from the Standard Compliance Department and submitted to the Laboratory Services Department for testing in order to determine the broken content, as specified in Guyana Standard, "GYS 211: 2002 Rice-Specification, sampling, tests and analysis".

It is to be noted that the life of the Memorandum of Understanding expired and this was not renewed since the CARICOM Regional Standard on rice became official. This standard was used as the basis for certifying the percentage broken of the rice shipped to Jamaica.

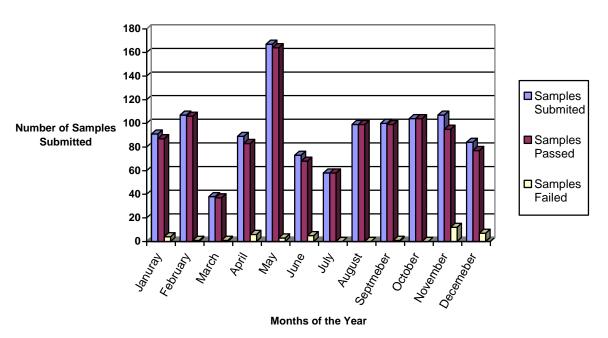
The GNBS carries out sampling, testing and certification of rice only for percentage broken. The Guyana Rice Development Board (GRDB) carries out these activities for the other parameters of the rice. The GRDB, which is the Authoritative Body for the rice industry in Guyana, has the requisite infra-structure in place to deal adequately with the conformity assessment activities. It is only logical that the GRDB be allowed to include the parameter, percentage broken in its range of tests, instead of having another institution, the GNBS, to perform this limited function.

However, as of November 2006 based on a mutual agreement between the Guyana Rice Development Board (GRDB) and the Guyana National Bureau of Standards (GNBS), the GRDB has commenced the sampling of rice unbehalf of the GNBS.

The Chart in the Figure 5. below shows that the number of samples analysed during the year were fairly consistent except for the months of March, June and July, where there was a decline in the number of samples submitted for analysis. This decline indicates the production and exports were not at it's maximum, and also the time for harvesting may also affect the decline in samples submitted. The other months were at an average with the exception of May where a 167 samples were submitted. This is because

harvesting was at a peak. The number of samples failed was at a minimum except for the month of November, where 12 samples did not comply. This failure can be attributed to the production process at the mills, where the broken content are monitored.

 $\label{eq:Figure 5.}$  Number Of Rice Samples Analysed during the year of 2006



**Table 9.** below shows that during the year, a total of 1037 samples were analysed of which 998 met the required specifications and 39 failed, as compared with 1387 tested for 2005 and 1502 for 2004. This indicates that there has been a decrease in the number of rice sampled during the year. The decrease could be attributed to the decrease in the processing and sampling of rice exported to Jamaica. The percentage of samples failed the analysis conducted decreased from the previous year.

Table 9.
Rice Samples tested for 2004 to 2006

YEAR	NO. OF SAMPLES	PASS	FAILED
	TESTED		
2004 (October)	1502	1490	12
2005	1387	1334	53
2006	1037	998	39

The specification in the Regional and National Standards for broken kernels is 25%. Samples which complied with this specification passed the analysis.

# 3.3 Gold Testing

During the year, a total of thirty one (31) gold samples were submitted by the Product Certification Scheme of the GNBS and also, consumers, and tested for purity of gold. This compared with 14 for 2005 and 8 for 2004. Ten (10) of the samples tested failed since they were below the required karat, while eleven (11) samples passed the tests conducted. The samples were tested for customers to verify the purity of the Gold purchased and to support the Product Certification Scheme of the GNBS. The Product Certification Officer would normally advise manufacturers whether the samples tested were within the expected specification, based on the results submitted.

Table 10. below shows that there has been a significant increase in the number of gold samples tested for the year 2006. Thirteen (13) samples were tested for the Product Certification Scheme and 18 samples, for consumers, which were received as complaints. This increase is due to consumer complaints regarding under-carating of gold articles sold to them and an increase in the samples submitted by the Product Certification Department, in order to certify manufacturers.

Table 10. Comparison of Gold Articles submitted for Testing for 2004 to 2006.

YEAR	NO. OF SAMPLES TESTED	PASS	FAILED
2004 (October 2004)	004 (October 2004) 8		0
2005	14	14	0
2006	31	11	10

60

The GNBS is moving to acquire its own Fume Hood in the new year to conduct the testing of gold articles submitted to the Bureau. This would enhance the efficiency of the laboratory which would be able to carry out the testing of gold articles and also generate income for the GNBS. The existing arrangements of using the fume hood of the Food and Drugs Laboratory continues to limit the number of samples tested by the GNBS.

The testing has impacted significantly for consumers by giving them the assurance of the carat of their gold articles purchased and also it has assisted the Product Certification Scheme whereby jewellers followed a systemic quality system.

# 3.4 Training of Officers

Mr. Edward Melville, Senior Laboratory Technician and Mr. Vishnu Matbadal, Laboratory Technician 11 within the Department attended a two weeks training programme conducted during the period July 10 to July 21, 2006 on the Temperature Calibration, which was conducted by Hart Scientific of the USA, based on funding provided by Canadian Development Bank (CDB). The training conducted aimed at enhancing the knowledge and skills of the Technicians who participated, in order to enable them to competently perform calibration of Liquid in Glass Thermometers, Platinum Resistance Thermometers and Thermocouples used by industries in Guyana, which is necessary for the certification of companies operating in Guyana.

As a result, Mr. Melville, and Mr. Matbadal, conducted internal training on temperature metrology for Mr. Micaiah Sukhu, Technical Assistant and Mr. Osei Drakes, Inspector/Laboratory Technician within the Department. The training conducted was aimed at enhancing the knowledge and skills of Officers within the department, in order to enable them to competently perform scientific calibration.

Further, Mr. Melville, and Mr. Matbadal completed an online-training programme on Measurement Uncertainty.

Mr. Micaiah Sukhu and Mr. Osei Drakes, Laboratory Technicians within the Department, participated in two separate three-day workshops conducted by Ms. Candel Walcott-Bostwick, Head, Conformity Assessment Department on the "Guyana Standard, "Specification for General Operation of a Laboratory (GYS:170)". The training conducted was held at the Tower Hotel, Main Street, Georgetown during the periods of 2006-05-10 to 2006-05-12 and 2006-05-17 to 2006-05-19, respectively. The aim of the training provided was to equip participants with the necessary knowledge required to manage and operate a Laboratory, in preparation to facilitate the implementation of the ISO 17025 standard in Laboratories.

## 3.5 Developing the quality management system of the GNBS laboratories

The first draft of the ISO/IEC 17025 quality manual and quality system procedures for the Laboratory Services Department was prepared based on the requirements of the ISO/IEC 17025 standard and submitted to the Quality Management Department for approval. The department will be audited in early 2007 to determine compliance to the standard.

The procedures developed by the Department were adopted as the Standard Operating Procedures and are presently being used to execute calibration activities carried out. The Department is currently developing its quality system to the ISO/IEC 17025 standard for the purpose of Accreditation to ensure that customers have confidence in the calibration and testing results produced. This achievement will also support local industries that are opting for ISO 9001 registration and laboratories opting for ISO/IEC 17025 accreditation.

# 3.6 Monitoring and Evaluation

The activities conducted under the Laboratory Services Department for this reporting period were based on requests received internally and externally for the calibration of Working Standards and Rice samples obtained by the Bureau at wharves and mills.

Requests received were promptly addressed and samples obtained were analysed routinely during the year. However, there is need for better cooperation from clients to submit their weighing and measuring equipment to the GNBS for calibration, as required. In addition, there is need for continuous training of Laboratory Technicians to facilitate capacity building within the Department, in order to achieve maximum output, primarily in the area of calibration.

Further, it is very critical that staff be proven competent in the activities of the Department to promote self confidence and also gain confidence and support from customers. Competency is one of the underlying factors that contribute to accurate and reliable results that the customer requires. In addition, adequate environment, equipment, methodologies and measurement accuracy are crucial for the laboratory environment. The GNBS is working on these avenues.

## 3.7 **Projections**

The Department will continue its routine activities in the New Year based on the Annual Work Programme. In addition, the Department would widen its scope of calibration to include temperature, pressure, electrical/electronic and moisture, providing the necessary software, equipment, facilities and training are acquired, as planned to facilitate same.

#### 4.0 CONFORMITY ASSESSMENT

#### 4.1 Technical Assistance

# 4.1.1 Quality Management Systems

Technical assistance was provided to the companies listed below to facilitate the development of their quality management systems to the ISO 9001: 2000 standard. Technical assistance was provided in the form of regular on site meetings, interpreting the requirements of the standard, and reviewing of policies and procedures completed by the company. Each company representative was responsible for ensuring that the nonconformances identified during the review were addressed within an agreed time frame. This programme is focused on facilitating the registration of companies in Guyana to the ISO 9001:2000 standard in the drive to guarantee customer satisfaction and competitiveness of products and services provided.

- (i) Art Williams and Henry Wendt Aeronautical Engineering School (AES)
- (ii) Guyana Stockfeeds Limited (GSF)
- (iii) Kayman Sankar and Company Limited (KSCL)
- (iv) Caricom Rice Mills Limited (CRML)
- (v) Guyana National Industrial Corporation Incorporated (GNIC)
- (vi) Guyana National Shipping Corporation Incorporated (GNSC)
- (vii) Brass Aluminium and Cast Iron Foundry
- (viii) Ricks & Sari Agro Industries Limited
- (ix) Didco Trading
- (x) Banks DIH Limited

# **4.1.1.1** Art Williams and Henry Wendt Aeronautical Engineering School (AES)

A number of meetings were held with the Quality Manager and the Management Representative of AES. At these meetings the nonconformances identified during the audits were corrected. The AES was audited by the Trinidad and Tobago Bureau of Standards (TTBS) in June 2006, for registration to the ISO 9001:2000 standard. AES was granted registration to the ISO 9001:2000 standard by TTBS in July 2006 after successfully establishing and implementing a quality management system to the ISO 9001:2000 standard. This was the only company to be registered under this programme in 2006 out of the seven companies with the quality management system established.

## **4.1.1.2** Guyana Stockfeeds Limited (GSF)

During the first six months, GSF had adopted a lax attitude towards the reviewing of their manuals and implementation of the quality management system in their operations. This led to the delayed completion of the documentation and implementation plan as initially scheduled.

A letter was sent to the Head of this Company to ascertain the level of commitment towards the ISO 9001 registration and the execution of the implementation plan for completion of the quality management system documentation.

The GNBS received a positive feedback from the Managing Director establishing commitment to this process to have GSF registered as soon as possible. As a result, the Quality Coordinator was assigned to work exclusively on the completion of the quality system documentation with the GNBS personnel. Weekly meetings were held with this company.

The GNBS was able to review the policy manual, procedural manual and work instructions.

The manuals for the Feed Mill and Hatchery are currently being reviewed and are expected to be finalized in 2007. GSF would shortly begin the implementation phase.

The GNBS will continue to work with this company in 2007.

# 4.1.1.3 Kayman Sankar and Company Limited

A number of meetings were held with the Internal Auditor to review and finalise the quality and procedure manuals. These manuals were finalized and an audit was conducted.

All nonconformances identified during the audit were corrected and the registration audit was scheduled for November 2006. However, financing that was available under the Guyana Trade and Investment Support Project to finance the registration fee was withdrawn, hence KSCL was unable to meet the payment for the scheduled date for registration. KSCL is looking for another funding agency to provide financial assistance towards registration scheduled for 2007. The GNBS will continue to work along with this company in 2007 and will solicit financial assistance under existing projects.

## 4.1.1.4 Caricom Rice Mills (CRML)

CRML completed documentation and commenced implementation of the quality management system. The quality team was trained on internal quality audit by representatives from the Conformity Assessment Department. One audit was completed and the nonconformances identified are being corrected by the company. The GNBS will continue to work with this company in 2007 and will solicit financial assistance under existing projects.

# **4.1.1.5** Guyana National Industrial Corporation Incorporated (GNIC)

Several meetings were held with the Management Representative to correct the nonconformances identified during the audit conducted by the GNBS. At the , meetings held, it was revealed that there was lack of commitment towards the implementation of the Quality Management System since there was evidence of lax implementation. The GNBS will continue to work with this company in 2007.

# 4.1.1.6 Guyana National Shipping Corporation Incorporated (GNSC)

This company has updated all procedures associated with the quality management system. An audit was conducted of the quality management system by the GNBS which revealed lack of implementation of many policies and procedures. The GNBS will continue to assist with the implementation of the quality system in 2007.

# **4.1.1.7** Brass Aluminium and Cast Iron Foundry(BACIF)

The implementation plan and the cost for providing the technical assistance over a three month period for the ISO 9001:2000 quality management system at BACIF was sent to the Head of this Company for review.

Six meetings were held with BACIF. The company is presently compiling the quality manual and the six mandatory procedures to the requirements of the ISO 9001:2000 standard. The GNBS will continue to work along with this company in 2007.

## 4.1.1.8 Ricks & Sari Agro Industries Limited (RSAIL)

A letter was sent to the Head of this Company to ascertain the level of commitment towards the ISO 9001 registration and the execution of the implementation plan for completion of the quality system documentation. The GNBS is awaiting a response from this Company.

Subsequently, a visit was made to this company where it was indicated that a management representative along with a team to develop the quality management system was identified. The team will commence the documentation of the quality policy and procedures as defined for the documentation phase of the implementation plan in 2007.

The team requested a weekly meeting with the GNBS personnel to provide technical assistance on the development of the policies and procedures which is scheduled to commence in January 2007.

# 4.1.1.9 DIDCO Trading Company Limited

A letter was sent to the Head of this Company to ascertain the level of commitment towards the ISO 9001 registration and the execution of the implementation plan for completion of the quality system documentation. The GNBS is awaiting a response from the Company. The GNBS will continue to work with this company in 2007.

#### 4.1.1.10*Banks DIH*

A request was made by this company for the cost to provide technical assistance for the implementation of the ISO 9001 quality management system. This information was sent to the Company as requested. This Company has submitted five procedure manuals for review to the ISO 9001:2000 standard. The GNBS will continue to work with this company in 2007.

# **4.1.2** Environmental Management System (EMS)

Letters were sent out to the Companies which participated in the EMS Essentials and the ISO 14001 Lead auditor courses completed in August to communicate the need to identify a team to work on developing the EMS system. Companies were informed that the GNBS was finalizing a MOU with EPA for the execution of the implementation plan which will commence in January 2007 under the GOG/UNDP Project.

## 4.1.3 Small and Medium sized enterprises (SME)

## 4.1.3.1 Assistance to SME's

During the period, contact was made with eight SMEs to determine their level of interest in implementing a quality management system.

A meeting was held with a representative from Grove Craft Production where the importance of implementing a quality management system was outlined. At the end of the session, the representative expressed the need to participate in Business Management and not the GNBS programme.

The representative from Yons Kids Wear contacted the GNBS on information relating to the cost to participate in the GNBS programme.

Representatives from three SMEs who attended the SME conference expressed interest to continue on the EMPRETEC scheme and work along with the GNBS. The representatives were from Summerson Furniture, Irene's Pyrography and Rainforest Pottery.

Ten SMEs which were previously working with the programme through the EMPRETEC Project were in contact with the GNBS. Most of these SMEs had little or no documentation. The GNBS provided some assistance to some of these Enterprises. However, the response was not satisfactory. Most of the business owners are busy and found it difficult to meet with the GNBS personnel, to prepare their manuals.

The Ministry of Tourism, Industry and Commerce sent five questionnaires to identify the SMEs interested in receiving assistance in the area of quality management. Copies of the completed questionnaires were sent to the GNBS for review. The results showed that only one SME had expressed an interest to receive assistance from the GNBS.

Follow-up with the SMEs are ongoing and will continue in 2007. Awareness sessions and programmes will be scheduled for 2007 to ensure that SMEs are aware of the importance of establishing a quality management system to be more competitive. The National Standard will also be promoted for use by SMEs.

The National Standard GYS: 231, "Good management practices for micro and small enterprises," was submitted to the Caricom Regional Organisation for Standards and Quality (CROSQ), Subcommittee: Technical Management Committee meeting held in Barbados by the Standardisation Officer representing the GNBS. This standard was accepted on the work programme of the Committee and will be circulated to Caricom member states by CROSQ to evaluate the need to have this standard adopted as a regional standard for micro and small enterprises.

## 4.1.3.2 SME Conference

A conference was held for SME's at the Hotel Tower in 2006 on the subject, "Competing in the Caricom Single Market and Economy through standardization." At this conference, a presentation was made by Ms. Candelle Walcott-Bostwick on the Benefits of the implementation of Standards, Technical Regulations and Conformity Assessment Mechanisms to enhance SME Competitiveness. The presentation outlined the requirements for competitiveness which identified the standards and technical regulations to be adopted by SMEs and the importance of establishing a national conformity assessment infra- structure in Guyana.

# **4.1.3.3** Caricom Regional Organisation for Standards and Quality (CROSQ) Focus Group meeting.

This focus group meeting was coordinated by the Standardisation Department. Ms. Walcott-Bostwick made a representation defining the challenges experienced in Guyana with respect to the implementation of standards and technical regulations. A model of the Quality Infra- structure /conformity assessment infra structure that will be required for National Competitiveness in Guyana was presented to participants and the facilitator, Dr. Andre Vincent Henry.

# 4.1.3.4 Private Sector Consultation facilitated by the Caricom Secretariat and Guyana Manufacturing and Services Association Ltd. (GMSA)

A request was made by CROSQ for Ms. Walcott-Bostwick to represent that organization at this consultation. The presentation, 'The importance of Standards in Export competitiveness' was sent by CROSQ for delivery at the consultation. Due to the comprehensive programme prepared by the GMSA, the presentation being the seventh item on the agenda, had to be minimized. The presentation outlined the role of CROSQ in Caricom and the CSME.

# 4.1.3.5 The second round table on the strategic plan and coordinating mechanisms for SMEs

The second round table for SMEs with the theme 'Accelerating the growth of SMEs innovative approaches for the region' was held at the Caricom Secretariat. The objective of this round table was to review the proceedings, conclusions and recommendations of the roundtable for SMEs and coordinating mechanisms held in Jamaica in 2003. The round table identified eight key areas for the development of SMEs in the region. The components addressed were Funding and financing, Policy legislative and regulatory framework, Technical utilization, Information and communication technology, Marketing and management issues, Quality and supply management issues and Net working strategies. Transportation was identified as another area to be addressed, however, time did not allow for expansion of this component. At this round table, representatives were placed into eight groups which comprised a representative from each group/ interest body represented. A summary of the proceedings of the last round were circulated and each group reviewed and expanded on what was presented. Each group had to identify the goal supported by objectives with key indicators and action plans for the assigned components which were presented to the participants for comments.

Presentations were made during sessions addressing the analysis of the SME sector in the Region, thinking and planning strategically and developing action plans and programmes among others.

Groups had to prepare a bankable project using the outline presented. At the end of the two day session, the facilitator of the round table and Caribbean Association of Small & Medium Enterprises Inc. were provided with recommendations which will be incorporated into the strategic plan for SMEs. The feedback on this round table will be circulated to participants. Forty three delegates attended the session.

Based on the responses from SMEs in Guyana, it is evident that most SMEs were not aware of the significance of implementing a quality management system to increase competitiveness. The GNBS was unable to plan a programme to sensitise SMEs based on their sectors of the importance of implementing quality management systems as well as implementing such a system in their operations. This was due to the availability of motivated and trained personnel in this area.

# 4.2 **Product Certification**

The goal of the Product Certification Programme is to promote, implement and monitor product certification systems in industries in order to provide consumers with the assurance that locally-manufactured products conform to the requirements specified in Guyana Standards.

Through this scheme, manufacturers are permitted to use the National Standards mark on their products, after their manufacturing processes and products have been assessed as conforming to the relevant Guyana National Standards on a continuous basis.

During the year 2006, the product certification programme, was involved in monitoring of clients on the scheme and soliciting new clients for the product certification scheme.

The Product Certification Officer visited twelve local manufactures who were involved in manufacturing products for which national standards are available. The manufacturer's visited were gold jewellery manufacturers in Georgetown; Agro processors, food manufacturers, potable water bottling, paint and rum manufacturers.

Many of these proprietors have expressed an interest to participate in the GNBS product certification scheme and have applied to participate in the scheme.

However, the main constraints affecting the expansion of this scheme was the unavailability of independent testing facilities in Guyana which has prevented many of these clients from being certified.

A visit was made to David Ali's gold jewellery establishment and a subsequent preliminary audit was done. The results of the audit revealed that the establishment did not meet all of the requirements of the product certification scheme and certification was not granted. This client was encouraged to put the required facilities in place in time for a next visit in January of 2007.

GNBS received a copy of the list of licensed gold jewellers in Guyana from the Guyana Geology and Mines Commission. This list will allow the GNBS to expand its product certification programme to jewellers located in Berbice, Essequibo and Demerara in 2007.

## 4.2.1 Maintenance of Standards Mark

Ten surveillance visits and six renewal audits were conducted at the premises of clients permitted to use the National Standards Mark under the Product Certification Scheme. Five (5) jewellers and two (2) polyvinyl chloride (p.v.c) pipe manufacturers are currently permitted to use the National Standards Mark on products certified to the respective national standards.

The gold jewellers are: King's Jewellery World, DeAbreu's Creations, Steve's Jewellery, Alim's Jewellery and Seeram's Jewellery. The P.V.C. pipe maqnufacturers are: Guyana Thermoplastic Limited and Plastic Products Limited.

Alim's Jewellery was suspended for failing to maintain the requirements of the product certification scheme.

Seeram's Jewellery had some set backs which affected the maintenance of this establishment to the Product Certification Scheme. There was fire at the workshop and robbery at the retail outlet during the year.

These two jewellers, however, will each seek renewal of certification in January of 2007.

Constraints affecting the expansion of this scheme in 2006 were the unavailability of accredited testing laboratories to test product quality as required by the national standards, lack of accreditation of the programme to the ISO Guide 65 and high fee to participate in the programme. The GNBS will address these constraints in 2007 to facilitate the expansion of this programme. The table below summarizes the number of surveillance and renewal audits for the eight (8) clients currently on the Product Certification Scheme.

Table 11. Audits of certified companies

Name of Client	Product	No. of Surveillance audits conducted	No. of Renewal Audits conducted
Kings Jewellery World	Gold articles	1	1
Steve's Jewellery	Gold articles	2	1
Seeram's Jewellery	Gold articles	1	No renewal
De Abreu's Collections	Gold articles	1	1
Alims Jewellery	Gold articles	1	suspended
Johnny's Jewellery	Gold articles	1	1
Guyana Thermoplastics	PVC Pipes	2	1
Limited (GTL)			
Plastic Products Limited	PVC Pipes	1	1
(PPL)			

Table12.
Status of clients on Product Certification Scheme

Name of client	Product	Certified	Status
Gafoors	Steel Nails	No	Certification audit already conducted
			but failed; process ceased until
			CARICOM standard for steel nails is
			approved and adopted by the GNBS
Guysuco	Sugar	No	Certification process to be
			commenced after standards have
			completed the review process
Jus' Water	Water	No	Preliminary audit to be conducted;
			cost estimate to be computed; testing
			facilities not available
Udo Gopaul	Gold articles	No	Preliminary audit already conducted;
			to contact client and determine if he
			is still interested in the certification
			scheme.
Laurence	Gold articles	Preliminary	Recommendations made. Client to
Lowe's		audit conducted	address same before advancement to
Jewellery			the next stage.
Correria's	Gold articles	Preliminary	Recommendations made. Client to
Jewellery		audit conducted	address same before advancement to
			the next stage.
Gopaul's	Gold articles	Preliminary	Recommendations made. Client to
Jewellery		audit conducted	address same before advancement to
			the next stage.
Gafson's	Steel nails	2 Certification	Client to adjust manufacturing
Industries		audits	process to meet the requirements of
		conducted	GYS 214.

Gafson's	PVC Insulated	Plant tour	Preliminary audit will be conducted
Industries	Cables	conducted.	when standard for PVC cables is
		Application	completed. STI is completed
		form uplifted	
Banks DIH	Rum, bottled	Application	Independent testing facilities are not
Limited.	water,	forms uplifted.	available in Guyana for all
	carbonated	Procedures	parameters in the national standards.
	beverages, beer	explained.	
Sunil Persaud's	Gold articles	Application	
Jewellery		form uplifted	
Tandy's	Jams & Jellies	Application	Independent testing facilities not
Manufacturing		form uplifted.	available in Guyana.
		Procedures	
		explained to	
		client.	
Fibre Tech	Fibre Tech	Application	
Creations	products	form uplifted.	

The list of tests required for locally-manufactured products: vinegar, jams and jellies, tomato ketchup, packaged water, lacquer and rum was forwarded to the Trinidad and Tobago Bureau of Standards to identify testing laboratories in Trinidad with the capability of performing the tests identified in the respective national standards. A list of possible testing facilities was sent to the GNBS for action. Due to the lack of testing facilities in Guyana, this step was necessary to facilitate the expansion of the product certification scheme.

## 4.3 Audit Service

Nine audits were conducted at seven companies for the year 2006 to determine the level of conformance to the quality system at the company to the ISO 9001:2000 standard. An audit report highlighting the nonconformances identified during the audit was prepared at the end of each audit by the auditors. This was sent to the company within fourteen working days for corrective actions. Audits were conducted at the following companies:

- (i) Art Williams and Henry Wendt Aeronautical Engineering School (AES)
- (ii) Kayman Sankar and Company Limited (KSCL)
- (iii) Caricom Rice Mills Limited (CRML)
- (iv) Guyana National Shipping Corporation Incorporated (GNSC)
- (v) Guyana National Industrial Corporation (GNIC)
- (vi) Ricks & Sari Agro Industries Limited
- (vii) Edward B. Beharry and Company Limited

#### 4.3.1 Art Williams and Henry Wendt Aeronautical Engineering School (AES)

Two audits of the quality management system at AES were conducted to determine the level of conformance to the requirements of the ISO 9001:2000 standard. A number of nonconformances were identified and addressed under the Technical Assistance programme of the GNBS by the Company Representative.

## 4.3.2 Kayman Sankar and Company Limited (KSCL)

One audit of the quality management system was conducted at KSCL to determine the level of conformance to the requirements of the ISO 9001:2000 standard. Nonconformances identified during the audit were addressed by the Company.

## 4.3.3 Caricom Rice Mills Limited (CRML)

One audit of the quality management system was conducted at CRML to determine the level of conformance to the requirements of the ISO 9001:2000 standard. Nonconformances identified were addressed by the company. Another audit is planned for January, 2007.

#### 4.3.4 Guyana National Shipping Corporation (GNSC)

One audit of the quality management system was conducted at GNSC to determine the level of conformance to the ISO 9001:2000 standard. A number of nonconformances were identified during the audit and reported to the client. The audit client, on reviewing the audit report, sought clarification on a number of the nonconformances identified. The nonconformances will be addressed under the Technical Assistance programme of the GNBS.

#### 4.3.5 Guyana National Industrial Corporation (GNIC)

Two audits of the quality management system were conducted at GNIC to determine the level of conformance to the ISO 9001:2000 standard. A number of nonconformances were identified and reported to the client. Nonconformances identified are being addressed under the Technical Assistance programme of the GNBS.

#### 4.3.6 Ricks and Sari Agro Industries Limited

One gap analysis was conducted at Ricks and Sari to determine the gap in the company's existing quality system to the ISO 9001:2000 standard. The findings revealed that the company has a basic quality system in place. However, there was no documentation to support the policies and procedures established.

The Technical Assistance programme will provide assistance to develop all documents required by the standard in 2007.

## 4.3.7 Edward B. Beharry and Company Limited (EBBL)

One audit of the quality management system was conducted at EBBL to determine the level of conformance to the subclause 8.2.2, "internal quality audit" of the ISO 9001:2000 standard. The audit findings were reported to the audit client. The audit revealed that the company's procedure met the requirements of the standard.

This programme is available on request and has suffered some setbacks due to the resignation of two trained officers from the Department. Five Officers assigned to the department were trained in the ISO 9001:2000 standard and the ISO 14001:2004 standard and auditing of Environmental Management Systems during July to August 2006. The auditing principles addressed during this programme were universal and has better equipped staff in the department with the principles for performing audits of any quality management system. In addition, practical attachments to gain experience on the auditing of all ISO management system standards will better equip staff.

#### 4.4 Accreditation

## 4.4.1 Accreditation of Inspection Bodies

In 2006, the Guyana National Bureau of Standards continued its technical assistance programme in the area of Inspection accreditation. The GNBS, through the Conformity Assessment Programme, provides technical assistance in the form of visits to provide guidance, interpretation, and review of ISO 17020:1998 standard, and inspection management system documentation completed by Inspection Agencies.

This programme enables Inspection Agencies to develop policies and procedures for the inspection management system for accreditation to the requirements of the ISO 17020 standard.

The Inspection Agencies participating in this programme included:

- (1) Environmental Health Unit (EHU)
- (2) Plant Health Unit (Ministry of Fisheries, Crops & Livestock)
- (3) Animal Health Unit (Ministry of Fisheries, Crops & Livestock)
- (4) Wild Life Unit (WLU)
- (5) Guyana Rice Development Board (GRDB)
- (6) Guyana Marketing Corporation (GMC)
- (7) Guyana Tourism Authority (GTA)
- (8) Veterinary Public Health Unit (VPHU)
- (9) Guyana Forestry Commission (GFC)

- (10) Environmental Protection Agency (EPA)
- (11) Government Analyst/ Food and Drug Department (Ministry of Health)
- (12) Ministry of Health

#### 4.4.1.1 Environmental Health Unit

This agency did not submit policies and procedures meeting the requirements of the ISO 17020:1998 standard. However, a manual of operations for Government Public Health Inspectors was submitted. This was reviewed and comments were sent to the agency. The agency was urged to prepare a quality manual addressing the requirements of the ISO 17020 standard. It was indicated that the Inspectors manual submitted can be used as a reference document. The EHU was then advised to peruse the guidelines for Quality Management system Documentation to receive guidance as to how to prepare the quality management documentation. The GNBS will continue to work with this agency in 2007.

#### 4.4.1.2 Plant Health Unit

Visits were conducted at this agency during the course of this year. These visits encompassed the explanation and interpretation of clauses 1.0-9.0 of the ISO 17020 standard. No documentation was submitted by this agency for review for this period. It was indicated that the representative had resigned. However, a meeting was held with the Head of this agency and the former Head of the Conformity Assessment Department.

The purpose was to explain the relevance of the standard to the agency. It was indicated by the Head of the Unit that sections of the standard were not applicable to its operations and the Unit was following the FAO procedures and phytosanitary procedures as well. The GNBS will continue to work with this agency in 2007 to determine the actual role of this unit as an inspection agency.

## 4.4.1.3 Animal Health Unit

No documentation was submitted by this agency during the year. Contact was made which was futile in some cases. Nevertheless, it was indicated that the representative had commitments to the Bird Flu Crisis.

The GNBS will continue to keep in contact with this agency in 2007 to determine the actual role of this unit as an inspection agency.

#### 4.4.1.4 Wild Life Unit

No documentation was submitted by this agency for the period 2006. However, contact was made with the Head of this agency to ascertain the level of commitment towards accreditation to the ISO 17020 standard. A representative from the Wild Life Unit visited the GNBS. The purpose of the visit was to clarify the needs request sent by the GNBS for ISO 17020 accreditation.

It was indicated that due to unavailability of time, the Agency was unable to complete documentation to the ISO 17020 standard as scheduled. A new representative was provided with explanations on the interpretation of the requirements of the ISO 17020 standard by the Conformity Assessment personnel. The GNBS will continue to work with this agency in 2007.

## 4.4.1.5 Guyana Rice Development Board.(GRDB)

A second review of policies addressing clauses 1.0-12.0 of the ISO 17020:1998 standard was completed during the year. No additional documentation was submitted for review. The GNBS will continue to work with this agency in 2007.

# 4.4.1.6 Guyana Marketing Corporation

This organisation unofficially informed the GNBS that it was not involved directly in the inspection of products but facilitates the Plant Health Unit which is directly involved in inspections. Nevertheless, sessions were held with representatives from GMC to provide interpretations on clauses of the standard.

This organization had submitted policies addressing clauses 1.0-12.0 of the ISO 17020 standard. These were reviewed and follow-up sessions were held with representatives from GMC to clarify comments made during the review. The GNBS will continue to work with this Agency in 2007.

## 4.4.1.7 Guyana Tourism Authority (GTA)

A number of meetings were held with the Head of this agency and staff to provide interpretations and clarify clauses of the ISO 17020:1998 standard. Three reviews were done on the documentation completed of the inspection management system to the ISO 17020:1998 standard. During the reviews, clauses 1.0-8.6 were reviewed and nonconformances identified were highlighted in the reports sent to the agency for correction.

The procedures for Document Control, Corrective Action and Internal Audit were submitted for review. The nonconformances identified were highlighted in the reports sent to the agency for correction.

## 4.4.1.8 Veterinary Public Health Unit

This organization has not submitted any documentation to GNBS as it relates to ISO 17020:1998 standard. However, a letter was sent to GNBS reiterating commitment towards this process. The GNBS will continue to follow up with this agency in 2007.

## 4.4.1.9 Guyana Forestry Commission

The Guyana Forestry Commission submitted policies addressing the ISO 17020:1998 standard. Two reviews were completed for this year. A report highlighting the nonconformances during the review were submitted to the Agency for correction.

In addition, the procedure for handling complaints, appeal and resolution was reviewed by the GNBS. A report was sent to GFC identifying the nonconformances to be addressed.

For the second review, there was an improvement in the documentation submitted. However, document control identification was not implemented. Eight procedures were submitted to the GNBS and are currently being reviewed.

## 4.4.1.10 Environmental Protection Agency(EPA)

The EPA submitted eleven procedures to the ISO 17020 standard for review. A report on the review highlighting the nonconformances identified were sent to the agency for action. The EPA has since addressed some of the comments.

#### 4.4.1.11 Government Analyst /Food and Drug Department

For the period 2006, several visits were conducted at this Agency to provide technical assistance in the form of guidance to the inspection department to facilitate the completion of the inspection quality system documentation to the ISO 17020 standard. Guidance and interpretation for all clauses in the standard were completed.

Reviews of five procedures, including procedures for code of conduct, document control, corrective action, internal audit and management review were completed. Comments were submitted to this agency to address the nonconformances highlighted.

Two sets of reviews were completed for the inspection policy manual, namely for clauses 1.0-7.0 of the ISO 17020 standard. Some aspects of clauses 8.0 (Personnel) was submitted for review. Comments highlighting the nonconformances identified during the review of all documents submitted were sent to the Agency for action. However, to date, the agency has not submitted any additional documentation.

## 4.4.1.12 Ministry of Health

The Ministry of Health expressed interest to participate in this cluster since it is involved in the inspection of Health Care Facilities in Guyana. The GNBS will meet with this Ministry in 2007 to determine the applicability of the ISO 17020 standard to its operation against the ISO 19011 standard for the auditing of management systems.

The majority of agencies did not express the required commitment in 2006 to ensure that inspection management systems were developed to the ISO 17020 standard. Many of the inspection agencies experienced the following challenges: high staff turn over, lack of clearly defined functions among inspection agencies, and lack of personnel trained and familiar with the ISO 17020 standard.

# 4.4.2 Accreditation of Certification Bodies

The accreditation process for organizations to the ISO/IEC Guide 65, "General requirements for bodies operating product certification systems", is slowly proceeding. Of the six members in this cluster, only three certification bodies made submissions to the GNBS. These Certification Bodies are the Guyana Forestry Commission, Guyana Rice Development Board and Guyana Tourism Authority. To date, these organizations have submitted policies and procedures addressing the requirements of the ISO Guide 65 standard. Reports highlighting the nonconformances were sent to these agencies for correction. No submissions were made by the Plant Health Unit, Animal Health Unit and the Veterinary Public Health Unit despite many reminders which were sent by correspondences and telephone calls by the GNBS.

#### 4.4.2.1 Guyana Forestry Commission(GFC)

At present, GFC has completed addressing the requirements of the standard in its policy manual and commenced the documentation of the procedures required by the standard. However, GFC's policy manual and the procedures developed are being reviewed for adequacy to the standard by GNBS. To date, 75% of the policy manual and two procedures were reviewed.

## 4.4.2.2 Guyana Rice Development Board

Seventy five percent of this organisation's policy manual was reviewed. However, the procedures to the ISO Guide 65 standard are being developed.

#### 4.4.2.3 Guyana Tourism Authority

This organization has completed and submitted 20% of its certification policy manual to GNBS for review. To date, no procedures addressing the requirements of the standard were developed or submitted by this Agency.

No submissions were made by the Plant Health Unit, Animal Health Unit and the Veterinary Public Health Unit despite many reminders which were sent by correspondences and telephone calls by the GNBS.

Challenges affecting the accreditation of certification bodies to the ISO Guide 65 standard include functions for certification bodies have not been clearly defined, inadequate resources to develop a certification management system and lack of trained personnel to develop the quality system.

# 4.4.3 Accreditation of Testing Laboratories

The GNBS Laboratory Services quality manual and quality system procedures were completed to the ISO/IEC 17025 standard. The Laboratory Services Department will commence implementation of the laboratory management system in 2007. The Government Analyst/ Food and Drug Department submitted four procedure manuals addressing the ISO/IEC 17025 standard for review. This review will be completed in January 2007.

The Officer responsible for providing technical assistance to laboratories opting for accreditation successfully completed a five day training programme on the assessment of laboratory competence offered by the American Association for Laboratory Accreditation (A2LA) in Atlanta Georgia, U.S.A. This training programme comprehensively addressed the interpretation of the ISO/IEC 17025:2005 standard, "General requirements for the competence of testing and calibration laboratories", the A2LA accreditation requirements and the assessment evaluation.

This training programme has better equipped the Officer with the knowledge and skills required to provide guidance in laboratories in Guyana that are required to become accredited.

## The ISO 15189 Laboratory Accreditation Workshop

The GNBS was invited to the opening ceremony of this workshop to provide remarks to the participants of the workshop. At the opening ceremony, Ms. Yvette Irving provided background information on the European Union Project-'Strengthening of medical laboratories in the Caribbean'. The goal of the project is to have laboratories accredited to the ISO 15189 standard.

At the opening ceremony, the Minister of Health, Dr. Leslie Ramsammy, Dr. H Goeda, a representative from PAHO and Ms. Candelle Walcott-Bostwick representing the GNBS, provided remarks at the opening ceremony supporting the drive to accreditation of medical laboratories in Guyana. Dr. Ramsammy, in his remarks, pointed out that from January 2007, all medical laboratories will have to operate at a minimum to the National Laboratory Standard, GYS 170:2003, "General requirements for the operation of a laboratory" among other requirements.

Ms Walcott-Bostwick, in her remarks, pointed out the objective of the Laboratory Certification Programme and the challenges that will have to be addressed by laboratories, and at the National level for accreditation of laboratories to be possible, noting that only two laboratories in Guyana are certified to the National Standard.

# 4.4.4 Laboratory Certification

# 4.4.4.1 Certification of testing laboratories to the GYS 170: 2003 standard- Status of the completion of manuals to date.

Thirteen (13) quality manuals and forty-four (44) technical manuals were submitted by thirteen (13) clinical laboratories and reviewed during the year. The laboratories that submitted manuals were Guyana Responsible Parenthood Association, St. Joseph Mercy Hospital, New Amsterdam Hospital, Eureka Medical Laboratory, Woodlands Hospital, Suddie Public Hospital, Multi-Tec Reference Laboratory, Medical Arts Centre, Sigma Labs, Dr. Balwant Singh's Hospital, Mc Bens Diagnostic Centre, Georgetown Medical Centre and Ogle Diagnostic Centre.

The Guyana Rice Development Board and the Guyana Power and Light Inc were the only non-medical laboratories to submit quality manuals and quality system procedures during the year.

Two audits were conducted at Georgetown Medical Centre, Sigma Labs and the Guyana Rice Development Board during the year for the purpose of certification. The results of these audits revealed that the laboratory management system at these laboratories were not adequately implemented. As a result, follow up audits are scheduled for January 2007.

Dr. Balwant Singh's Hospital Laboratory and Georgetown Medical Centre Laboratory submitted manuals in preparation for renewal and follow up audits, respectively. One application for Laboratory Certification was received during the year by a newly established laboratory: the Inter-American Medical Laboratory. The laboratory representative was informed of the requirements for laboratory certification. This laboratory should commence the development of its laboratory management system in January 2007.

# 4.4.4.2 Maintenance of the Laboratory Management System to the GYS 170: 2003 standard.

Five renewal audits were conducted at the Central Medical Laboratory-Georgetown Public Hospital Corporation, Dr. Balwant Singh's Hospital Laboratory, St. Joseph Mercy Hospital Laboratory ,Sigma Labs and the Eureka Medical Laboratory.

Renewal of Certifications were granted to the Central Medical Laboratory-Georgetown Public Hospital Corporation, Dr. Balwant Singh's Hospital laboratory and the Eureka Medical Laboratory. There was sufficient evidence to show that the laboratory management system at these laboratories were effectively implemented and maintained.

The renewal audit conducted at the St. Joseph Mercy Hospital Laboratory indicated that there was not sufficient evidence that the laboratory management system was effectively implemented and maintained. As a result the renewal of certification of this laboratory was not be granted. Another audit of this laboratory is scheduled for March 2007.

The second renewal/ third follow up audit for Sigma Labs was scheduled for October. However, during the opening meeting, the audit was cancelled since there was evidence that the laboratory had not addressed the outstanding nonconformances identified at the last audit conducted January 2006. A letter was sent to the laboratory to determine the level of commitment to have the laboratory certified. The GNBS has requested that the laboratory address the nonconformances and implement the quality management system before approaching the GNBS for another audit.

The Laboratory Director of Georgetown Medical Centre requested that the audit of the laboratory be rescheduled to a later date. The GNBS will schedule new audit dates for Sigma Labs and Georgetown Medical Centre in January 2007.

Three surveillance visits were conducted at Central Medical Laboratory GPHC and Dr. Balwant Singh's Hospital Laboratory, respectively, during the year. The results of these visits indicated that these laboratories had consistently implemented a laboratory management system meeting the requirements of the GYS 170: 2003 standard.

# 4.5 GNBS- Management Systems

## 4.5.1 GNBS Quality Management System

The GNBS quality manual along with thirteen (13) quality system procedures, were completed and approved by the Executive Director in March 2007.

A series of ISO 9001 implementation and awareness sessions were held with general and senior staff during the year to communicate the policies and procedures documented. A copy of the quality manual and procedures were submitted to each Head of Department for implementation. In addition, staff were sensitized on the role of the Management Representative, the GNBS ISO 9001 implementation plan, the road to ISO 9001 registration, the benefits of implementing an ISO 9001 quality management system at the GNBS and identification of areas for improvement, the quality management principles, management commitment and the process- based quality management system.

Ms. Candelle Walcott-Bostwick, Head Conformity Assessment was appointed the Management Representative by the Executive Director. This is a requirement of the ISO 9001 standard, to facilitate the development, implementation and maintenance of the quality management system.

Staff within the Conformity Assessment Department were assigned to work with Departments within the GNBS to facilitate the completion of the Departmental procedures for the quality management system.

The review of the quality manual was completed and arrangements will be put in place to commence implementation of the quality system in January 2007. Completion of the documentation of the quality system is scheduled for December 31, 2006 after which, training and implementation will commence in January, 2007.

#### 4.5.2 **GNBS Inspection Management System**

The Standards Compliance Department of GNBS submitted the inspection quality manual addressing the requirements of the ISO 17020 standard for review. Two reviews were done on the policy manual for the ISO 17020:1998 standard. The comments highlighted the need to address procedures that were referenced and not submitted for review. The clauses reviewed were from 1.0-16.0 of the standard. Meetings were held with the Chief Inspector, Senior Inspector to discuss these comments that were made during the document review. No procedures were submitted for review. At the meetings with personnel from this department and conformity assessment staff, it was suggested that the procedures similar to the GNBS ISO 9001:2000 quality system will not be developed but referenced. This inspection manual will be completed in 2007.

## 4.5.3 **GNBS Laboratory Management System**

The quality manual and quality system procedures will be submitted to the Laboratory Services Department for implementation in January 2007.

The quality system procedures common to the ISO 9001:2000 standard were modified to address both the ISO/IEC17025 and the ISO 9001 standards.

The GNBS is equipped with a comprehensive laboratory and quality management system ready for implementation by January 15, 2007.

## 4.5.4 GNBS Certification Management System

This GNBS Certification manual addressing the requirements of the ISO Guide 65 standard was completed and reviewed. However, the operations manual is currently being reviewed. Some procedures will be developed to address the requirements of this standard, while the other will be referenced to the GNBS ISO 9001 quality system procedures.

Procedures for the product certification scheme and the laboratory certification programme are being implemented. Procedures common to the ISO 9001:2000 standard will be referenced to the GNBS quality system.

#### 4.6 Training

## 4.6.1 **Internal Training**

#### ISO 9001:2000 Departmental peer evaluation sessions

In an effort to enhance the technical assistance programme within the Department, three sessions were held with staff in the department to evaluate their level of understanding of the requirements of the ISO 9001:2000 standard, "Quality management systems- Requirements" on completion of the ISO 9001 training programme held in July, 2006.

Ten clauses of the ISO 9001:2000 standard were completed during these sessions. The remaining clauses will be addressed in January 2007.

#### 4.6.2 External Training

#### ISO 9001:2000 Training and awareness sessions

Three external training programmes to facilitate awareness and development of the ISO 9001 quality management system in Companies were conducted by staff from the Conformity Assessment Department. The training programmes were conducted at Caricom Rice Mills Limited, Banks DIH Limited and Ricks and Sari Agro Industries Limited.

#### 4.6.2.1 Caricom Rice Mills Limited.

This organization was provided with training on the Internal auditing principles and practices at their location. The objective of the training programme was to provide the 10 participants with the necessary tools to perform audits of the ISO 9001 quality management system at CRML. Two representatives from the Conformity Assessment Department provided this training programme. Certificates of attendance were issued to the participants.

#### 4.6.2.2 Banks DIH Limited

This organization was provided with training and awareness on the ISO 9001:2000 standard at their location. Ten representatives from four departments participated in the training programme. The objective of this training programme was to provide participants with a better understanding of interpreting the requirements of the standard to facilitate the development of the quality system within the Trisco and Rum departments at Banks DIH.

## 4.6.2.3 Ricks & Sari Agro Industries Limited

This is a new company expressing an interest to the GNBS to implement the ISO 9001:2000 quality management system. As a result, an awareness session was conducted at the location by representatives from the Conformity Assessment Department. Thirty-one (31) representatives from the company participated in the training programme. The objective of this awareness session was to sensitise the staff members of the importance of implementing the quality management system.

#### 4.6.3 **GYS 170:2003 Training programme**.

A training programme designed for laboratory personnel was held on May 10-12, 2006 and May 17-19, 2006 at Hotel Tower, Main Street Georgetown. The training programme 'Developing and implementing a laboratory management system" meeting the requirements of the GYS 170:2003 standard, "General requirements for the operation of a laboratory", was attended by thirty-one (31) participants from twelve (12) medical laboratories and five (5) non-medical laboratories . Six personnel from the GNBS were also trained to build capacity at the GNBS.

The objective of the training programme was to provide laboratory personnel with adequate knowledge and skills to develop the quality manuals and quality system procedures to ensure completion of manuals. It was the goal of this training programme to have at least ten (10) laboratories certified by November, 2006. However, only one laboratory was certified in December 2006.

Based on the evaluations of the quality manuals submitted and the slow progress made by laboratories to become certified clearly states lack of management commitment to this process which continues to contribute to the increase in inaccurate results issued by medical laboratories. The GNBS will make additional efforts to have top management of these laboratories recognize the need to implement a laboratory management system to assure to their clients that results issued are accurate and reliable. Absence of legislation for the operation of laboratories also contributed to the lack of expected commitment of the top management of most laboratories.

After the training programme, it was observed that seven (7) laboratories have submitted quality manuals with marked improvements. These laboratories are Suddie Public Hospital, Eureka Medical Laboratory, Guyana Rice Development Board, Mc Bens Diagnostic Centre, Woodlands Hospital, Medical Arts Centre and Multi-Tec Reference Laboratory. Some eight laboratories are correcting the quality manuals and quality system procedures for submission.

#### 4.7 National Committees

## 4.7.1 National Committee on Conformity Assessment

For this year, three meetings were held for the National Committee for Conformity Assessment. This Committee continued to serve the purpose of establishing a conformity assessment infrastructure in Guyana, through working with the testing, inspection and certification bodies in Guyana which perform conformity assessment activities. These bodies are preparing their documentation for accreditation to the respective ISO standards; ISO/IEC Guide 65, ISO17020 and ISO/IEC17025, respectively. At the meetings, cluster bodies highlighted the progress made towards developing their quality systems and the challenges experienced.

#### 4.7.2 National Laboratory Quality Committee

## 4.7.2.1 Clinical sub-committee

Six (6) clinical subcommittee meetings were held during the year. An average of fifteen (15) representatives from fifteen (15) medical laboratories attended the meetings. At each meeting the laboratory representatives provided progress reports on the completion of their quality manuals, quality system procedures and technical manuals addressing the requirements of the GYS 170 standard. Representatives also used this opportunity to highlight challenges affecting the completion of their manuals and any issues affecting their profession. The GNBS then devised mechanisms to address the concerns raised by the laboratory representatives. Information was provided to laboratories at this forum in the form of presentations and open discussions to assist laboratories in the development and implementation of the laboratory management system. These sessions were

coordinated by Ms. Walcott-Bostwick, Technical Secretary. The minutes of these meetings were prepared and circulated to members.

One laboratory out of thirteen laboratories completed documentation of the quality system by December 15, 2006. This laboratory was Certified as indicated in the report.

## 4.8 Monitoring and evaluation

#### 4.8.1 Technical Assistance

There is evidence of commitment from most of the companies preparing for ISO 9001 registration especially those companies with documentation already completed. The new companies have not commenced the implementation plan, however, the GNBS officers will continue follow up meetings to commence the implementation process. It is anticipated that more companies will be registered in 2007.

## 4.8.2 Product Certification

Lack of testing facilities for locally-manufactured products is hindering the expansion of the Product Certification Scheme. Clients have indicated that the product certification fee was too expensive. The GNBS will review the cost to participate in the scheme in January 2007 and also solicit testing facilities to support the scheme.

## 4.8.3 Audit Service

Audits conducted have indicated that all Companies audited had documented the quality management system to the ISO 9001:2000 standard. However, the level of implementation and management commitment varied in each company.

## 4.8.4 Accreditation

With reference to the Laboratory Certification Programme, the review of the quality manual indicated that 95% of the requirements of the GYS 170:2003 standard were addressed by the laboratory. The technical manuals reviewed had minor corrections to be made. The other laboratories are currently developing their quality system documentation. There are at least twenty (20) laboratories developing their quality systems. However, absence of legislation to monitor the quality of laboratories has resulted in the lack of commitment by the management of laboratories to have their laboratories certified.

#### 4.8.5 GNBS –Management Systems

The GNBS management system documentation is 100% completed and the implementation is scheduled to commence in January, 2007. This was a significant achievement for the GNBS for 2006.

#### 4.8.6 Training

With reference to the internal training conducted in the department, it was observed that the staff participating had a good understanding of the requirements addressed and were able to provide explanations in their own words.

## 4.8.7 National Committee on Conformity Assessment

Two critical factors affecting the completion of the quality management systems for certification and inspection bodies are training on the requirements of the respective standards and a clear indication of the roles and functions of inspection and certification bodies operating in Guyana.

# 4.8.8 Projects

The response from the Project Offices have been very slow, however the GNBS will continue to follow up with the project officers to determine the status of proposals submitted to improve the activities of the GNBS

#### 5.0 STANDARDISATION

The Standardisation Department of the Guyana National Bureau of Standards (GNBS) is responsible for planning, organizing and directing the development of national standards. Standards are developed in a wide variety of fields by Technical Committees (see Appendix 1) comprising of experts in each field. Justification must be provided for any standards development project.

The standards development process (see Appendix 2) is coordinated by four (4) Technical Officers of the Standards Department. The department works closely with various Technical Committees and other interested parties to develop and execute the standards development work programme, which includes, inter alia:

- (a) research activities and foresight planning for identification of greater priorities for standardization:
- (b) formulation of draft standards and identification of suitable regional and international standards for adoption as national standards;
- (c) review and maintenance of national standards;
- (d) periodic consultations with producers, service providers, government agencies, the private sector, consumer representatives, special interest groups and the general public to promote the concept and importance of standardization in national development; and
- (e) participation in regional and international standardization.

The standards development work programme of the GNBS focuses on the development, adoption and application of standards that will enhance product or service competitiveness, and ultimately the economic development of Guyana. These standards may be developed from scratch but such an approach is often time consuming. Also, there is always the very real possibility that the lengthy development process will culminate in no more than a re-invention of the wheel.

In view of this, the standardization department encourages Technical Committees to adopt regional or international standards that will bring greater benefits to Guyana on a wider scale. Technical Committees operate on a consensus principle and the public is given the opportunity to examine and comment on all draft standards before they are adopted as national standards.

The Standardisation Department houses Guyana's WTO Enquiry Point which answers all reasonable enquiries from other Members and interested parties, as well as provide, inter alia, relevant documents regarding:

- (a) Technical regulations adopted or proposed within its territory;
- (b) Standards adopted or proposed within its territory;
- (c) Conformity assessment procedures, or proposed conformity assessment procedures, which are operated within its territory;
- (d) The membership and participation of the Member or of relevant institutions within its territory, in international and regional standardization bodies and conformity assessment systems; and
- (e) The membership and participation of the member or of relevant institutions within its territory in bilateral and multilateral arrangements within the scope of the Agreement.

The Standardisation Department also houses Guyana's Codex Contact Point which:

- (a) Act as the link between the Codex Secretariat and member Countries;
- (b) Coordinate all relevant codex activities nationally;
- (c) Receive all codex final texts (standards, codes of practice, guidelines and other advisory tests) and working documents or codex sessions and ensure that they are circulated to those concerned nationally;
- (d) Send comments on codex documents or proposals to the Codex Alimentarius and/or its subsidiary bodies and/or the codex Secretariat;
- (e) Work in close cooperation with the National Codex Committee.
- (f) Act as a channel for the exchange of information and coordination of activities with codex members:
- (g) Receive the invitation to codex sessions and inform the relevant chairpersons and the Codex Secretariat of the names of participants from Guyana;
- (h) Maintain a library of codex final texts; and
- (i) Promote codex activities nationally.

## 5.1 Status of National Standards Development

#### 5.1.1 Standards to be purchased

A request for the purchase of thirty (30) International (ISO) standards (see Appendix 3) was submitted to the Information Services Department of the GNBS. These standards were needed to be adopted nationally. Availability of funds did not permit the purchase of these standards in 2006, but they would be targeted early in 2007.

## 5.1.2 Standard Proposals

Two (2) proposals for the formation of national standards were approved by National Standards Council. These proposals were "Specification for the storage, handling and transportation of steel, high pressure compressed gas cylinders" and "Code of Practice for hatcheries". The formulation of these national standards was assigned to the Technical Committee – Mechanical Engineering and Agriculture, respectively.

## 5.1.3 Standards at Technical Committee stage

There are twelve (12) standards remaining on the work programme of the Technical Committees for 2006. Completion of the development of these standards before the end of the year was severely affected by a lack of quorum at Technical and Sub-Committee meetings. Scheduled meetings had to be postponed. Technical Secretaries, in an effort to complete the development of these standards, conducted telephone interviews and personal visits to Technical Committee members and stakeholders to solicit comments on Draft Guyana Standards. This process was unsuccessful because they did not review the standard(s) which were disseminated to them in advance.

## 5.1.4 Standards at Public Comments Stage

Three (3) National public consultation sessions were held on the Draft Guyana standards, "Code of Practice for the assessment of interior lodges and resorts", "Specification for the storage, handling and transportation of Liquiefied Petroleum Gas Cylinders", "Specification for milk", and "Specification for food hygiene". This process was successful in soliciting comments on the Technical content of the above-mentioned standards. Comments on these standards were considered by the respective Technical Committees.

Seven (7) standards were disseminated for public comments, as follows:

- (1) Code of Practice for the packaging and transport of fresh fruits and vegetables;
- (2) Code of Practice for nutritional labelling;
- (3) Specification for food hygiene;
- (4) Specification for salt;
- (5) Requirements for point of care testing (POCT) sites;
- (6) Code of Practice for septic tanks and lactrine sewerage systems; and
- (7) Code of Practice for the assessment of interior lodges.

# 5.1.5 Standards approved by National Standards Council

Table 13. shows the standards approved by National Standards Council over a five year period.

Table 13. Standards approved by National Standards Council

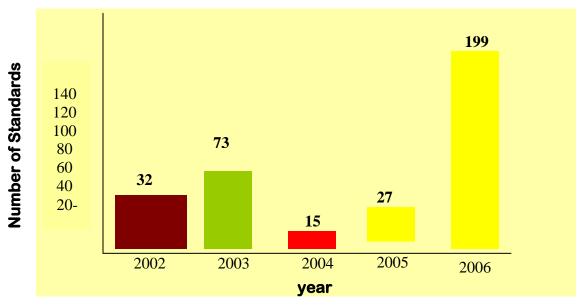
	YEAR				
	2002	2003	2004	2005	2006
Standards approved by National Standards Council	32	73	15	27	199
Standards in publication	203	267	305	322	481

**Note:** The number of standards approved each year include revised national standards.

During the year 2006, one hundred and ninety-nine (199) standards were approved by National Standards Council. Of this, one hundred and sixty-nine (169) were adopted from the International Electrotechnical Commission (IEC) (list available), twenty (20) were adopted from the International Organisation for Standardisation (ISO) (Appendix 4), eight (8) were adopted from the Caricom Regional Organisation for Standards and Quality (CROSQ) (Appendix 5), and two (2) were adapted nationally (Appendix 6). Guyana adopted the IEC standards under the Country Affiliate Programme. The GNBS was requested to submit its logo, the standard number format and a foreword. The Standardisation Department status of standards catalogue was updated to include the above-mentioned standards. These standards have been published and are available for sale.

The bar graph below shows the number of standards approved by NSC over a five year period.

Figure 6.
Standards approved by National Standards Council



## 5.1.6 Compulsory Standards

Two Memoranda requesting Cabinet to approve the national standards, GYS 264:2003 "Specification for the storage, handling and transportation of liquefied petroleum gases (LPG) Cylinders" and GYS 58:2006 "Specification for poultry feed and feed ingredients" were submitted to the Honourable Minister of Tourism and Industry and Commerce to seek approval from Cabinet as compulsory national standards.

GYS 58:2006 was revised due to numerous complaints from poultry farmers about the poor quality of feed being sold in Guyana. Many poultry farmers claimed that the feed causes stunted growth and in some cases death to their poultry. With the implementation of this standard as compulsory, importers and producers of poultry feed would need to comply with the minimum requirements specified in the standard. The difficulties experienced by poultry farmers will be addressed and they will benefit as consumers. The enforcement of the standard would ensure that high quality feed is being produced and sold in Guyana.

GYS 264:2003 was developed for the purpose of ensuring the health and safety of persons coming into contact with LPG cylinders. With the implementation of this standard as compulsory, importers and retailers would have to comply with the minimum requirements as specified in the standard. The problem of poor storage in places where this product is being offered for sale would be addressed, as also, poor storage conditions. The deficiencies generally associated with handling, and transport of the cylinders by all stakeholders would also be addressed. The standard would enhance an improvement in the storage, handling and transportation of these cylinders.

## 5.2 Regional Standards

#### 5.2.1 Consultations on CARICOM Standards and documents

Public consultations were conducted on the following Draft Caricom Standards and documents which were under formulation by CROSQ:

- (a) Specification for tomato ketchup;
- (b) Specification for poultry meats and poultry products;
- (c) Hospitality assured standards;
- (d) Safer building trainer's manual;
- (e) Safer building student's manual;
- (f) Specification for poultry feed and feed ingredients;
- (g) Specification for rum;
- (h) Specification for labelling of prepackaged foods.

A public consultation on the Draft Caricom Standard, "Specification for tomato ketchup" was held on March 08,2006, in the Training Room of the GNBS. The purpose of this consultation was to solicit comments on the abovementioned standard. National Stakeholders highlighted that the 12% tomato solids content is too stringent. Guyana's manufacturers of tomato ketchup cannot comply with the requirements, without the addition of food grade starch and colouring. This will force Guyanese manufacturers out of business. Implementation of this standard would incur a high cost of production due to the importation of raw materials. Guyana's manufacturers recommended that the standard should include provisions for the manufacture of tomato ketchup with a tomato solids contents of 12% and/or 6% with or without the addition of food grade corn starch and colouring.

A meeting was held on October 19, 2006 at 10:00h in the Conference Room of the GNBS. The purpose of this meeting was to review the technical content of the Final Draft Caricom standard, "Specification for poultry feed and feed ingredients", discuss the effects of implementation of this standard as a mandatory caricom standard within Guyana; and whether this standard should be approved as a voluntary or mandatory caricom standard. Out of nine (9) stakeholders invited, six (6) attended. It was agreed that Guyana should vote for this standard to be approved as mandatory caricom standard, subject to the incorporation of Guyana's comments. The GNBS completed the voting form which was submitted to the CROSQ Secretariat on October 31, 2006 for consideration. The Caribbean Disaster Emergency Response Agency (CDERA) has developed a "Safer Building Training Manual". Ii is designed to certify residential contractors so that they can construct homes in the Caribbean that are less vulnerable to national hazards. The manual provides information on training and evaluation principles for adult learners.

A student's manual was also developed by CDERA with the potential of a regional guide.

Comments on (b),(c), (d), (e), (g) and (h) were not received from National Stakeholders. Comments on (a) and (g) were submitted to the CROSQ Secretariat for dissemination to the respective Regional Technical Committee for consideration.

5.2.2 A meeting was held with manufacturers, importers and distributors of laundry detergent, QAC aromatic disinfectant and hand dishwashing detergent on March 14, 2006 at the GNBS. The purpose of this meeting was to inform them on the decision of the Eight Meeting of the Council for Caricom Rergional Organisation for Standards and Quality (CROSQ) held on March 09-10, 2006 at the Trinidad and Tobago Bureau of Standards. They were informed about the withdrawal of "Specification for quaternary ammonium compounds (QACs), aromatic disinfectant", "Specification for hand dishwashing detergent" and "Specification for synthetic laundry detergent powder" as caricom standards pending consideration of Guyana's comments. In this regard, the meeting solicited comments on these standards from the stakeholders present. Comments received were submitted to CROSQ Secretariat for consideration by the respective Regional Technical Committee.

A special meeting with stakeholders of the poultry sector was held on March 21, 2006 at 09:00h in the Training Room of the GNBS. The purpose of this meeting was to inform poultry stakeholders of the extended deadline for the implementation of the Caricom Standards, "Specification for grading and quality requirements for table eggs" (Effective January 01, 2208) and "Specification for poultry meats and poultry products" (Effective January 01, 2007) as mandatory.

They were urged to institute the required systems for implementation of the standards.

- 5.2.3 Guyana attended the Caricom Regional Organisation for Standards and Quality (CROSQ) Third Technical Management Committee (TMC) meeting held on January 17-18, 2006 in Barbados. The purpose of this meeting was to report to and advise the Executive Committee of the CROSQ Council on matters concerning the organisation, coordination, strategic planning and programming of the technical work of CROSQ. The following were agreed to by Caricom Member States:
  - (i) The TMC Meeting will be held on a quarterly basis and will be rotated among Caricom Member States. Each Member State agreed to host one TMC meeting.
  - (ii) Caricom will apply to the World Trade Organisation (WTO) for membership. This application will be submitted to the WTO Secretariat in Rome.
  - (iii) The addition of twenty-six (26) new standards to the CROSQ Work Programme for 2006. These were:
  - 1. Specification for chocolate confectionary and cocoa products.
  - 2. Profiled Zinc Coated and Aluminium Zinc Alloy Coated steel Sheets for Roofing and General purposes Specification.
  - 3. Cement.
  - 4. Aerosols for the Delivery of hazardous Chemicals.
  - 5. Polyethylene Garbage Bags Specification Part 2: high Density.
  - 6. Package Natural Coconut Water.
  - 7. Specification for Aerosol Propellant Gases.
  - 8. ISO/FDIS 14064 1:2005 Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
  - 9. ISO/TC 207 Working Document Greenhouse gases Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.
  - 10. ISO/FDIS 14064 3:2005 Greenhouse gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.
  - 11. ISO/207 Working Document Greenhouse gases Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition.
  - 12. ISO 9001:2000 Quality Management Systems Requirements.
  - 13. Hospitality Assured Certification.
  - 14. Specification for Soya Bean Oil.

- 15. Specification for Labelling of Electrical Appliances.
- 16. Specification for Wheat flour.
- 17. Specification for Fresh Fruits and Vegetables.
- 18 Specification for Canned Vegetables.
- 19. Tourism and Recreational Security.
- 20. Specification for Diesel.
- 21. Specification for Gasoline.
- 22. Liquid Petroleum Gases.
- 23. Precious and Semi Precious Metals Guidelines for Manufacturing, alloying and Testing of God Materials.
- 24. ISO 14001:2004 Environmental Management Systems Requirements with Guidance for Use.
- 25. ISO 22000 Food Safety Management Systems Requirements for any Organisation in the Food Chain.
- 26. Specification for Labelling of Gold.
- 5.2.4 Guyana attended the Fourth Meeting of the Caricom Regional Organisation for Standards and Quality (CROSQ) Technical Management Committee held on April 25-26, 2006 at the Heritage Hotel in Antigua and Barbuda. The Technical Management Committee:
  - (a) Highlighted that the Eight CROSQ Council Meeting withdrew the Caricom Standard, "Poultry Meats and Products" as a Caricom Standard and requested the Regional Technical Committee to redraft the standard taking into consideration the comments submitted by Barbados.
  - (b) Was informed that the Caricom Standards, "Specification for QAC Based Aromatic Disinfectant", and "Specification for synthetic Laundry Detergent" were withdrawn, because the standards development process did not comply with the procedures of the TMC. As a result, they were reassigned to the Regional Technical Committees for redrafting and consideration of Suriname's comments.
  - (c) Was informed that CROSQ cannot adopt ISO standards as Caricom Standards. CROSQ can only reference them. In this regard, Caricom Member States were requested to adopt the ISO 9000 series, ISO 14000 series, ISO 22000, ISO 15189, ISO 17025, ISO 10011, ISO 18000, ISO 10019 and ISO Climate standards nationally.
  - (d) requested Caricom Member States to implement the "Safer Building Trainer's Manual" and the "Safer Building Student's Manual" within their schools and universities.

- 5.2.5 Guyana attended the Caricom Regional Organisation for Standards and Quality (CROSQ) Sixth Technical Management Committee (TMC) Meeting held on October 25-26, 2006 in Barbados. The purpose of this meeting was to report to and advise the Executive Committee of the CROSQ Council on matters concerning the organisation, coordination, strategic planning and programming of the technical work of CROSQ. The following were agreed to by CARICOM Member States:
  - (1) The Executive Secretary will inquire from the CARICOM Secretariat if there is a regional copyright for CARICOM standards,
  - (2) TMC will recommend to CROSQ Council that member States ratify CROSQ in their National Jurisdictions in order that regional standards can be seamlessly implemented nationally.
  - (3) Jamaica will re-visit the justification for the development of the Product Certification Scheme.
  - (4) CROSQ Secretariat will set a meeting with Caribbean Export to discuss a regional Certification Mark.
  - (5) CROSQ will organize a Regional Forum on Caribbean laboratory Accreditation scheme.
  - (6) The poultry and poultry products standard will be sent to the Twenty-Third COTED meeting for approval. The deadline date for receipt of comments on the standard was extended to November 24, 2006.
  - (7) CROSQ Secretariat will write the Bureau of Standards Jamaica regarding the status of development of the Regional Building Codes. The Regional Building Code Project document will be discussed at the Caribbean Development Bank (CDB) Board Meeting in October 2006.
  - (8) Approved the Draft Terms of Reference of the Regional Technical committees with amendments. CROSQ Secretariat will include the amendments in the final draft and circulate it to TMC members.
  - (9) Agreed that TMC recommends to CROSQ Council that the Editorial Committee be appointed as a special Committee of the Council.

TMC will recommend that the Draft Terms of Reference of the Editorial Committee be approved. It was further agreed that a recommendation be submitted to CROSQ Council for St. Lucia to be appointed as Chair of the Editorial Committee.

- (10) ISO's pricing method will be used as a guide for pricing of CARICOM standards. These standards will be priced in US dollars.
- (11) Guyana's proposal for the development of "Guidelines for Good Management Practices for SMEs" will be sent through the formal process for a new work item.
- 5.2.6 A representative from the Bureau attended the Twentieth Meeting of the Council for Trade and Economic Development (COTED) held on January 12, 2006 in Georgetown, Guyana. The COTED agreed that the standard, "Specification for grading and quality requirements for table eggs" should be declared a voluntary caricom standard. The standard, effective from January 01, 2008 would be applied as a mandatory caricom standard. Also, the Caricom Standard, "Specification for poultry meats and products", a voluntary Caricom Standard. The standard effective from January 01, 2007, would be applied as a mandatory Caricom standard. The Bureau informed stakeholders on this decision via correspondence.

Guyana voted for the draft Caricom standards, "Specification for poultry feed and feed ingredients", "Specification for coconut oil" and "Specification for canned sausages" to be submitted to the Council for Trade and Economic Development (COTED) for approval as mandatory Caribbean Community Standards.

Prior to voting on the above-mentioned standards, public consultations were held with national stakeholders. They all agreed that the standards should be made mandatory in order to maintain consistency in the specifications and therefore, quality of the product.

## 5.3 International Standards

#### 5.3.1 **ISO** standards

See Section 5.1.5

#### 5.3.2 **IEC** standards

Guyana became a member of the IEC Country Affiliate Programme and received a username and password to access standards under preparation and or revision by IEC Technical and Sub-Committees. Emanating from the perusal of the website and standards catalogue, Guyana requested one hundred and sixty-nine (169) out of two hundred (200) free standards to be adopted nationally (See Section 5.1.5).

#### 5.4 Standards Promotion

- 5.4.1 Three (3) national standards, (GCP 17:2003 "Code of Practice for quality in the restaurant service", GCP 18:2003 "Code of Practice for tour operators and tour guides" and GCP 20:2004 "Code of Practice for street vended foods") were submitted to the Information Services Department of the GNBS to be featured in the National Newspapers to sensitise national stakeholders on the requirements of the standards. Some stakeholders responded to these articles by purchasing some of the standards for implementation within their establishments.
- 5.4.2 The Standardisation Newsletters (first and second quarters), 2006 were disseminated to national stakeholders for information purposes. The newsletters (featured articles on the "Importance of standardization: the "Caribbean Single Market and Economy (CSME) not my Business"; "CROSQ and Quality Assurance", "CROSQ supporting the CSME" and "Harmonised Standards critical to Regional and International Trade". The purpose of this newsletter is to sensitise national stakeholders on current standardization issues.

# 5.5 **Standards Implementation**

5.5.1 Three public consultations on the Guyana standard, GYS 264:2005, "Specification for the storage, handling and transportation of liquiefied petroleum gas cylinders" were held. The first consultation was held on Tuesday, December 12, 3005 to target stakeholders in Georgetown. The second consultation was held on Tuesday, January 24, 2006 to target stakeholders from the East Coast, West Coast and West Bank of Demerara. The third consultation was held on March, 21 2006 to target stakeholders from Berbice; and the fourth consultation was held on Tuesday June 27, 2006 to target stakeholders from Essequibo. The puropose of these consultations was to solicit comments from stakeholders on the effects of implementation of this standard as a compulsory standard before seeking Cabinet's approval.

Stakeholders highlighted that if the standard is made compulsory, this would alleviate the problems of illegal selling of LPG and malpractices of storage, handling and transport. Also, there would not be an increase in the cost of the product on the consumer or the manufacturer. In this regard, the standard was approved as a compulsory national standard.

## 5.6 WTO/TBT Enquiry Point

## 5.6.1 Work Programme submitted to ISO

Guyana's Standards Development Work Programme for January to June 2006 was prepared and submitted to the WTO Secretariat via the National Notification Authority (Ministry of Foreign Affairs.)

## 5.6.2 *Notifications*

Routine checks were conducted on the WTO/TBT website for any notifications posted by other WTO Member States. No relevant notifications were observed.

## 5.6.3 Request for Information

The WTO/TBT Enquiry Point received requests for five (5) national standards. These were:

- (a) Dental Vacuum equipment;
- (b) Clay products clay floor, roof tiles and decorative vent blocks;
- (c) labelling of prepackaged goods;
- (d) Specification for wheat flour; and
- (e) Specification for abattoir.

These enquiries were promptly responded to and requests for the purchase for (c), (d) and (e) were executed in a prompt manner.

#### 5.7 Codex Activities

- 5.7.1 Two meetings of the National Codex Committee were held on January 17, 2006 and on August 24, 2006 in the Conference Room of the GNBS. The purpose of the first meeting was to identify which Codex Committee Meeting Guyana will attend in 2006, since the Codex Trust Fund will only fund Guyana's attendance at one meeting. The Committee agreed that Guyana will attend the Codex Committee on Food Import and Export Inspection and Certification Systems meeting. Mrs. Marilyn Collins (Director, Food and Drug Department, Ministry of Health) was identified to attend future meetings and present Guyana's comments and/or positions on the documents under discussion. In this regard, Mrs. Collins attended the Fifteenth Session of the Codex Committee on Food Import and Export Inspection and Certification Systems held in Mar del Plata, Argentina on November 06-10, 2006. The meeting discussed issues with respect to the draft Guidelines currently at step 3 of the Codex process:
  - (a) Proposed draft revision of the Guidelines for Generic Official Certificates; and

(b) Proposed draft Appendices to the Guidelines on the Judgement of Equivalence of Sanitary measures associated with Food Inspection and Certification Systems.

The purpose of the second meeting was to solicit comments on the Codex Circular letter, "National Food Control System and consumer participation in food standards setting and on use of codex standards at national and regional levels. Members agreed that the Codex Secretariat should complete the requested information and submit a response within the specified deadline.

5.7.2 Two meetings of the National Codex Committee – Sub-Committee – Genetically Modified Foods/Organisms was held on February 15, 2006 and March 22, 2006 at the GNBS. The purpose of the first meeting was to formulate the Sub-Committee Terms of Reference; review the Sub-Committee composition; elect a vice-Chairperson; prepare a work programme; and discuss comments on the draft policy paper on GMO and GMP for Guyana.

The purpose of the second meeting was to review members' comments on the "Draft Policy on Genetically Modified Organisms and Genetically Modified Products for Guyana".

- 5.7.3 A total of five hundred and ninety-six (596) electronic mails were received. These mails were sorted and filed in their respective subject folders. In addition, one hundred and eleven (111) hardcopies of codex documents were disseminated to the Food and Drug Department, and the Ministry of Agriculture for information purposes. The purpose for dissemination of these documents is to sensitise the above mentioned stakeholders on the status of development of codex standards guidelines and codes.
- 5.7.4 Two quarterly editions of the Codex newsletter were disseminated to national stakeholders for informational purposes. The purpose of these newsletters was to sensitise national stakeholders on current issues/practices related to food safety.

The first quarter edition of the codex newsletter feature the "Importance of Codex to Guyana" and the "Activities of the Codex Contact Point/Secretariat". The second quarter edition of the codex newsletter featured articles on "Tips to prevent food bourne illness during this holiday season", "Tips for preparing meat" and "Seven food safety steps for successful bulk meats".

- 5.7.5 Guyana completed the Codex Trust fund Application Form for 2007 and submitted it to the Codex Secretariat in Rome. Guyana selected in order of priority, the five codex meetings at which it will be represented in 2007. These committees were:
  - (a) Codex committee on Food Import and Export Inspection and Certification Systems;

- (b) Codex Committee on food labelling;
- (c) FAO/WHO Coordinating Committee for Latin America and the Caribbean:
- (d) Codex Committee on fish and fishery products; and
- (e) Codex Committee on fresh fruits and vegetables.
- 5.7.6 A press conference was held on February 14, 2006 to sensitise national stakeholders on the activities of the Codex contact Point/Secretariat. This information was also disseminated via the GNBS Standards Information Bulletin and the Codex Newsletter.

# 5.8 **National Building Code**

# 5.8.1 Status of development of the National Building Codes

Out of a total of nine (9) Building Codes (revised -7 and developed -2), three (3) were completed. These were "Administration and Enforcement", "Excavation and Foundation" and "Code of Practice for the design and construction of septic tanks and associated secondary treatment and disposal systems". The remaining six (6) Codes: "electrical", "Plumbing", "Use of Guyanese hardwoods in construction", "Concrete and block masonry", Structural Steel", and "Design, construction and environmental maintenance of settlements, housing schemes and small township" are currently under revision by the National Building Code Sub-Committees. The revision and development of the National Building Codes were severely affected by a lack of quorum at Sub-Committee meetings. This could have been attributed to the non-payment of stipend by the GNBS. However, the Technical Secretary followed up with members via telephone for comments on the draft Building Codes. This process was unsuccessful because members refused to review the Code(s) without the payment of a stipend. In this regard, Sub-Committee meetings were cancelled until the payment of stipend by the GNBS.

5.8.2 Two (2) meetings of the National Building Code Committee were held on October 11, 2006 and December 06, 2006 at the GNBS.

The purpose of the first meeting was to discuss the completion and promotion of the National Building code. It was highlighted that:

- (a) The proposal soliciting funding from GTIS for completion and promotion of the National Building Code was not approved because this project was outside the mandate of GTIS. In this regard, it was agreed that funding be solicited from other sources.
- (b) The activities of the National Building Code Committee and the completed National Building Code be promoted on the GNBS sponsored television programmes.

The purpose of the second meeting was to discuss and prepare the National Building Code Work Programmes for 2007.

- 5.8.3 Revised draft of the National Building Codes "Plumbing", "Use of Guyanese hardwoods in Construction", "Structural Steel" and "Concrete masonry units" were prepared.
- 5.8.4. Follow up for membership on the National Building code Sub-Committees were executed. To date, three (3) organizations expressed an interest to sit on these Committees. These organizations are: University of Guyana, Mayor and City Council, and Engineering and Construction Incorporated. Additional follow up will continue.
- 5.8.5 Several reminders were made to Dr. Wilson, University of Guyana to submit the Draft National Building Code Loadings. To date, the GNBS has not received this standard.
- 5.8.6 A lecture by Mr. Terance Fletcher on "Excessive Settlement of Engineering Structures" was conducted on March 02, 2006 at the GNBS for stakeholders of the Construction Sector. The purpose of this lecture was to update stakeholders on the current engineering settlement practices.

# 5.9 Websites Monitoring

See 5.6.2.

#### 5.10 Other Activities

#### 5.10.1 Meetings/Workshops

5.10.1.1The Head (ag.) Standardisation Department attended and represented Guyana at The International Organisation for Standardisation (ISO) awareness raising Workshop on Social Responsibility for the Caribbean Region on October 24, 2006 at the Accra Hotel in Barbados. This workshop was organized by ISO in collaboration with the Caribbean Regional Organisation Standards and Quality (CROSQ), the Pan American Standards Commission (COPANT), and hosted by the Barbados National Standards Institution (BNSI). The purpose of this workshop was to raise awareness among National Standards Bodies and their stakeholders, of the process taking place to produce an international standard on social responsibility, and to begin a process of preparation for efficient and competent participation in the ISO Working Group as well as developing strategies for actions related to stakeholders. The workshop was attended by representative(s) from Antigua and Barbuda, Barbados, Guyana, Grenada, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and Jamaica.

- 5.10.1.2The Head (ag.) Standardisation Department attended the National Advisory Council on Occupational Health and Safety (NACOSH) meeting held on March 20, 2006. The purpose of this meeting was to discuss the activities for Occupational, Safety and Health month, which is April 2006.
- 5.10.1.3The Head of the Standardisation Department attended the National Advisory Council (NACOSH) meeting held on Tuesday, September 26, 2006 at the SIMAP Building Camp Street. The purpose of this meeting was to discuss important issues arising out of the minutes of the meeting held on August 08, 2006. It was agreed that:
  - (a) NACOSH will convene a meeting with the Minister of Labour, Human Services and Social Security to discuss critical issues.
  - (b) Members will formulate a theme for OSH month 2007 and submit it to the Minister of Labour.
- 5.10.1.4The Head (ag.) of the Standardisation Department attended the Council for Technical and Vocational Education and training Meeting held on Monday, August 21, 2006 at 12:30h in the boardroom of the TVET Secretariat, 113 Woolford Avenue. The purpose of this meeting was to discuss important issues arising out of the minutes of the meeting held on April 24, 2006, important correspondences and the Director's report for the period June 19, 2006 to August 18, 2006. It was agreed that the TVET Secretariat will circulate to members for comments the department's work programme and the standards received by CANTA for perusal.
- 5.10.1.5The Head (ag.) Standardisation Department attended the inaugural meeting of the Fire Advisory Board held on Wednesday, October 04, 2006 in the boardroom of the Ministry of Home Affairs. The purpose of this meeting was to be acquainted with the members of the Board, prepare a draft terms of reference and work programme for 2006/2007.
- 5.10.1.6An inaugural meeting was held with key stakeholders from both the public and private sectors on Wednesday December 06, 2006 at 09:30h in the training room of the GNBS. The purpose of this meeting was to discuss the various issues relating to hatcheries operations, and the quality of hatching eggs used in the Poultry Industry.

The GNBS is currently trying to ascertain whether there is need for a standard or guideline to be developed so as to provide hatchery owners, or potential owners, with the necessary direction in relation to hygienic hatching conditions and preserving the quality of hatching eggs.

This is as a result of the many complaints recently received from poultry farmers about the stunted growth of chicken and in some cases even death in the flock.

5.10.1.7 A representative from the department attended a two day workshop on "Sewage Sludge management, environment and public health considerations" held on March 29-30, 2006 at Regency Suite. The purpose of this workshop was to sensitise stakeholders on the current practices in sewage and sludge management. Information received from this workshop used by the Technical Secretary of the Technical Committee-Civil Engineering in the preparation of a draft Guyana Standard, "Septic Tank".

#### 6.0 COMMUNICATION

The Communication Division has experienced another very productive and successful year as the GNBS worked tirelessly to achieve its mandate and targets set. The Division was able to fulfill its objectives in a substantial way as it continued to provide support for technical departments, educate and sensitise stakeholders about GNBS activities, organize GNBS participation in exhibitions and national events and give guidance and consumer advisories on matters pertaining to the selection of quality goods. A variety of communication strategies were employed to effectively execute its duties.

## **6.1** Programme Support

One of the main functions of the Division is to provide vital programme support to the technical work programmes of the organization. This function is continuously provided by the Division to ensure that there are communication inputs into key programmme activities of the GNBS. Below are the major activities which were undertaken and successfully executed:

## **6.1.1** Launching of Codex Contact Point

A Press Briefing organized by the Division to formally launch the National Codex Point was held on **Tuesday February 14.** At the launching, the objectives and importance of Codex were outlined and its activities were promoted. Several media houses representing the print and electronic media were in attendance and provided wide coverage on the topic. The information was useful and will benefit all stakeholders especially in the food sector and consumers.

#### **6.1.2** Importers Forum

An Importers Forum was held on **Wednesday, March 29, 2006** at Hotel Tower and the necessary communication inputs in the form of notices and media invitations were prepared and issued to the various media houses. Extensive coverage of the event in various sections of the print and electronic media was provided by all media houses present and Head of the Information Services Department also chaired the proceedings. The opportunity was taken by the GNBS to share information with importers on the need to supply Guyanese consumers with affordable but quality goods.

## **6.1.3** National Laboratory Week

National Laboratory Professional Week was celebrated in the month of April and in recognition of this occasion, the GNBS, being integrally involved in promoting standardisation and quality systems in laboratories, published a special congratulatory notice highlighting the two laboratories which have satisfied the requirements of the national standard and have maintained their certification from GNBS. This gesture was well received by laboratories and one of the certified laboratories made another publication, this time as a full page advertisement.

## **6.1.4** Live Metric Television programmes

Four (7) live "call – in" television programmes were conducted outlining various aspects of the metric system including the commonly used units. The programmes took the form of workshops and live demonstrations, and were conducted in order to get across the "Think Metric" message to consumers. They were planned specifically to educate viewers and to receive feedback from callers from various parts of the country concerning the challenges which may be faced in the implementation of the metric system.

Many calls were received highlighting various malpractices and misuses of the metric units. GNBS staff took note of the concerns raised and these were addressed during surveillance visits and education and sensitization sessions conducted.

#### 6.1.5 Metric Radio series

As a means of giving additional support to the metrication programme, National Centre for Education Resource Development (NCERD) offered to air a series of ten metric radio programmes. In this connection, the Communications Division prepared ten scripts covering the topics (i) The origin of the metric system,

(ii) Base units of the metric system, (iii) Metric usage Do's and Dont's, (iv) Mass (v) Length (vi) volume etc. after which the programmes were recorded and subsequently aired on: "Talking About Education". It is hoped that the airing of these programmes helped to provide listeners with a clearer understanding of the metric system.

#### 6.1.6 Standardized Format for Writing Calendar Dates & Time

Over time, it was observed that the writing of calendar dates and times often confused readers with the wide variation of styles, and often created confusion. To arrest this problem, the GNBS proposed the use of the format set out by the International Organisation for Standardisation. In this connection, a series of advertisements outlining the standardized formats for writing of calendar dates and times were published in the daily newspapers to promote its use.

In response, many stakeholders expressed their appreciation for the initiative taken by the GNBS to have this area standardized, and have taken steps for its implementation.

## **6.1.7** World Metrology Day

On May 25, World Metrology Day which celebrates the signing of the Metre Convention, was commemorated and the occasion was marked by the Bureau of Standards for the first time. The GNBS participation took the form of a specially prepared advertisement outlining the origin of metrology, its significance as a means of consumer protection and the role it plays in the facilitation of Conformity Assessment.

Metrology which is the science of measurement helps to regulate commercial transactions and to enforce and support free trade.

#### 6.1.8 Product Certification

An advertisement promoting the holders of the National Standards Mark was placed in the Independence issue of the Guyana Review. Strip advertisements highlighting the same information were placed in the three daily newspapers. This was done as a means of promoting the Standards Mark Scheme and the holders of the mark expressed their satisfaction to the Bureau for providing additional publicity for their products.

#### **6.1.9** Standardisation in the Forestry Sector

The Guyana Forestry Commission together with GNBS and other regulatory Bodies such as the Environment Protection Agency, Mayor and City Council and Central Housing & Planning Authority have embarked on a project to standardize the operations in the Sawmilling and Lumber Yard sector in order to arrest the existing chaotic situation.

Head, Information Services, who attended meetings on behalf of the GNBS, and representatives present, have proposed that a draft manual incorporating regulations and procedures from Agencies represented, be prepared and used as a draft document to formulate a national, mandatory standard. Members were of the view that this strategy would help to regularize the operations in this sector.

In this connection, the GNBS prepared documentation on requirements set out in the 1981 Weights & Measures Act regarding the mandatory verification of measuring devices (measuring tapes / Rulers) used to sell lumber to consumers.

Another area that was incorporated in the document was the metric element, where according to Order Number 4 of January, 2002, all measurements should be rendered using metric units. The manual is almost complete.

## **6.1.10** Other support activities

The Division also arranged press briefings, symposia, chaired opening and closing ceremonies for training courses, organized news interviews, responded to correspondence written by members of the public seeking information and seeking redress on consumer matters and edited printed materials such as the Standards Information Bulletin brochures and fact sheets.

# Below are other collaborative activities which took place during the year 2006:

- ❖ Meeting for stakeholders in the poultry sector
- Meeting for Manufacturers/ Importers and Distributors of Disinfectants, Handwashing and laundry detergents.
- ❖ Public Symposium on Genetically Modified Foods
- Meeting of Cellular Phone Dealers
- Forum for strategic participation in a competitive environment.
- ❖ Press Conference on Cell phone malpractices among vendors/ dealers
- ❖ Public Consultation Session- Draft Tourism Standard
- ❖ Meeting with stakeholders in the Animal Feed sector
- CROSQ Small Business Conference
- ❖ National Building Code Forum

#### **6.2 Promotional Activities**

As a means of publicizing GNBS activities under its various work programmes, the following activities were executed as shown in table 14.

Table 14.

Promotional activities for the period 2002- 2006.

No	Name of Activity	Year	Year	Year	Year	Year
		2002	2003	2004	2005	2006
1	No. of press releases issued	22	20	24	27	24
2	No. of editions of Standards Advisory (Formerly Standards. Bureau and you)	12	15	44	44	29
3	No. of editions of Standards-Corner published	26	16	23	35	42
4	No. of notices published	22	27	39	52	42
5	No. of press briefings held	04	04	09	09	08
6	No. of school lectures held	07	06	03	04	08
7	No. of live Radio / TV programmes	-11	0	-	07	12
8	No. of pre –recorded radio programmes	52 –	discontinued	discontinued	-	20

The figures in the table above show the number of activities undertaken by the Communications Division over the last five years to support the programmes of the technical departments, help in the dissemination of information to stakeholders and promote significant events. The number of activities executed in the respective years varied as the need arose, and according to events outlined in the respective work programmes. This is especially applicable to notices, press briefings and press releases. The remaining activities such as school lectures, and live programmes are dependent on available resources.

With respect to the Standards Advisory in the year 2002 and in foregoing year, this programme was discontinued temporarily due to financial constraints. It will however be restarted in the New Year.

## **6.2.1 Radio Programmes**

The Five Minute radio programme, after a three year absence, was re-introduced in the month of February. However, due to financial challenges, this programme was aired twice per month on alternate Mondays on the Voice of Guyana. During this year, the activities of the various work programmes were featured. (See table for number of programmes)

- **6.2.2 Standards Corner.** The weekly Standards Corner feature continued to be published free of cost in the Wednesday edition of the Guyana Chronicle, through the auspices of the Editor-in Chief. The column is used mainly to feature short articles on various aspects of standardisation, e.g.,
  - The importance of metrology

- o The cell phone issue.
- World Environment Day
- o Fuel Pump verification process.
- o Guidelines for purchasing used tyres.
- o The GNBS Standardisation Programme.
- o The Product Certification programme.

## 6. 2.3 Standards Advisory

The Standards Advisory is a small column that is also published in the Wednesday edition of the Chronicle. It is set out in the form of tips to guide consumers on a variety of consumer matters. For example, tips on purchasing furniture, electrical appliances, cellular phones, used tyres, tyre defects, etc.

However, in the month of August, this feature was discontinued temporarily due to financial challenges. It is hoped that in the new - year, this vital educational tool will be re-started.

#### 6. 2.4 Press Releases

Press Releases were also effectively used as a means of advising and educating consumers and for highlighting faulty products. Some of the key press releases issued to media houses covered issues such as: Caution against unlicensed rice millers and inferior cellular phones, support for the metric system, publicizing locations of GNBS suggestion boxes, consumer alert about inferior kettles and warning against bogus Inspectors who were collecting monies on behalf of the GNBS. Releases were also used to feature new standards.

#### 6. 2.5 Notices and Advertisements

A total of forty--four notices were placed in the print and electronic media to highlight major activities and events organized under the work programmes of the Bureau. It sometimes takes the form of consumer alerts or promotional advertisements. For example, during this year, metrication messages were advertised during spots bought in cricket matches featuring the West Indies Team.

## **6.2.6 Live Television Programmes**

Television programmes continued to be aired on NCN television. The focus this year was on metrication and seven (7) of the 14 live television programmes targeted this area. The remainder of the programmes focused on (i) Building Codes (ii)ISO 9001 certified companies,(iii) Standards in the lumber sector (iv) Weights and Measures malpractices, and (v) Standards in micro and small enterprises(1).

Calls were entertained especially in the metric programmes to obtain feed back from callers on problems affecting the sector. This activity has proven to be a useful form of obtaining feedback from stakeholders.

# **6.2.7 Press Briefings**

For the current year, eight (8) press briefings highlighted matters such as: (i) Achievements for 2005/ projections for 2006, (ii) New System implemented at Customs for monitoring import, (iii) Inferior and reconditioned Cellular phones sold as new, (iv) Commissioning of the 2000 litre seraphin, (v) National Quality Week, (vi) Commencement of ISO 14001 Environment Management and Lead Auditor Courses, (vii) Implications for the implementation of the standard" Code of practice for the cultivation of Paddy", (viii) Building Codes, (ix) Standards approved by the Standards Council, (x) Launching of the Codex Contact Point, (xi) Seizure of nonconforming devices, and (xii) the problem affecting chicken growth in Guyana.

## **6.2.8 School lectures**

The Bureau has over the years adopted a policy of exposing secondary school students in Guyana to the subject of standardisation and to begin to inculcate the importance and values of standards and quality pertaining to goods and services. During this year over 250 secondary school students drawn from regions 3 and 4 benefited from lectures which focused on areas such as:

- Role and functions of standards.
- o Careers in the field of standardisation
- Activities of the National Standards body
- o How standards provide consumer protection.

These activities had some impact on stakeholders as follow-up inquiries were made and there was an increase in sales of standards featured.

However, in order to increase the volume of promotional activities, more financial resources need to be available.

## 6.2.9 School Visits

Over 65 students and teachers from the Corentyne Comprehensive High School paid a visit to the GNBS on March 02 during which, a lecture was delivered by Head, Management systems, on the role and functions, of the GNBS, main activities of the core programmes, and their relations to consumer protection. Students were afterwards taken on a tour of the departments including the laboratories. Teachers and students indicated that they found the exercise informative and educational.

## 6. 3 Campaign Activities

# 6.3.1 Codex Campaign

The Division, together with key stakeholders in the Codex sector, embarked upon a campaign to promote the activities of Codex in Guyana. To achieve this objective, a draft communication strategy was prepared together with budget but regrettably, efforts to realize funding were unsuccessful. However, it is hoped that in the coming year this activity can be executed.

## **6.3.2** Procurement Campaign

The GNBS had come up with a strategy to have Government Agencies procure standard compliant goods. This campaign would be launched and sustained in the first quarter of the New Year when more human and financial resources would be available.

## 6.4 Standards Awareness Outreach

The Division has employed a variety of communication strategies to make stakeholders aware of standards. One of these is the featuring of new standards in the form of Press releases which are then issued to media houses for publishing. It has proven to be an effective strategy in that after publication, there is a noticeable increase in the volume of sales for the particular standard.

Another strategy used to promote awareness of standards is the publishing of articles on standards in the newspapers or in the standards corner column.

Public Consultation sessions are also used to promote greater awareness about standards. These activities are continuous.

## 6.5 Publications

#### **6.5.1** Newsletter

The GNBS continued to produce its quarterly newsletter. The articles captured the highlights of activities undertaken during the respective quarter. This year an increased use of photographs was incorporated and it continued to be printed on glossy paper.

About two hundred and fifty copies were distributed each quarter to stakeholders such as libraries, members of National Standards Council, Sister Bureaus, Government Ministries, other regulatory agencies and non-governmental bodies. The list has been further revised to include foreign embassies, certified laboratories and holders of the national standards mark, agencies working towards international certification and stakeholders in the legal sector.

It is hoped that the information shared will keep stakeholders informed about the major activities undertaken by the Bureau and their impact on regional and international trade.

## 6.5.2 Guest Articles

Through the courtesy extended by stakeholders who produce newsletters and the editors of newspapers, the GNBS is granted the opportunity to have relevant guest articles published. To this end the following articles were published:

- o "CSME and its impact on Regional Trade."—Guyana Chronicle
- o "Conformity Assessment Activities and their impact on trade" ( GMA Newsletter )
- o "The Importance of Quality in Goods and Services and The importance of Codex to Guyana" (Ms Eileen Cox's Column)
- o "Conformity Assessment: Building an Infrastructure for sustainable development."-( GMSA newsletter).

#### **6.5.3** Standards Feature

This technique is employed by the Division as a means of standards promotion. The GNBS, besides developing standards, has also taken on the responsibility to help in the promotion of these standards with the objective of helping stakeholders to use them.

During this reporting period, standards targeting small businesses and the tourism sector, were featured, given the fact that World Cup Cricket will be hosted in Guyana.

The Standards featured were: Specification for synthetic laundry detergent powder, Code of Practice for the licensing of the accommodation sector, Guidelines for good management practices for micro and small enterprises, Code of Practice for quality management in the restaurant service and Code of Practice for tour operators and tour guides.

As a result, there were increased requests for standards relevant to the accommodation and restaurant sectors.

## **6.5.4** Information Dissemination

One of the main functions of the Communication Division is the dissemination of information and this goal is achieved by various means.

Firstly, the GNBS website is one of the major means of sharing information. Copies of the newsletter, features in the Standards Corner and Standards Advisory, Standards for public comments, the latest edition of the newsletter and brief reports from recently concluded activities and consumer alerts can be found on the website.

Fact sheets, posters and brochures outlining the activities under the various work programmes are another means of disseminating information. Live television programmes, lectures, participation in national exhibitions, telephone inquires, answering letters in the letters column and through the use of the Technical Standards Information unit are other means by which information is disseminated.

#### 6.6 National Events/ Exhibitions

## 6. 6.1 University of Guyana Career Fair.

The University of Guyana held its Career Fair on Friday, February 10 under the theme "Career Choices: Be informed. Plan your Future."

The Guyana National Bureau of Standards (GNBS) took the opportunity to participate in this activity and made full use of the chance to share information to visitors, educate them on its core activities and apprise students and other visitors of career opportunities in the field of standardization.

The Bureau showcased programme activities spanning its six (6) departments. This was done through the mounting of useful posters with relevant information, and performing demonstrations on selected equipment such as the seraphin used in the calibration of fuel pumps and the common equal arm scale used in the markets and shops countrywide. Also on display were: a tyre depicting the common defects found on used tyres, the national standards mark and a secondary standard for measuring length.

Printed materials covering the core programmes of the GNBS were distributed to members of the public, tertiary level students, school children and teachers.

There was a free flow of information between visitors and staff on duty concerning career opportunities, and activities of the Bureau to facilitate consumer protection.

GNBS' participation in the fair enabled hundreds of persons to visit its booth and provided the opportunity for the exchange of information on the role, functions and activities of the Bureau. They were also able to have their questions answered especially those relating to the use of the metric system and the reasons why the Bureau does not monitor food for instance.

# **6.6.2** World Consumer Rights Day

World Consumer Rights Day was celebrated on Wednesday, March 15 under the theme: "Energy Sustainable Access for all"

A message to mark the occasion was prepared for the Executive Director, which was published as part of the full page supplement in the newspapers.

As part of activities to mark World Consumer Rights Day, Head, Information Services, together with colleagues from the subject Ministry, delivered a lecture to secondary school students of Region No. 10 on Thursday, March 16 at the LICHAS Hall.

Information shared included an overview of the GNBS, its roles and function, departmental programmes, the services which it offers and the link between standards and trade and consumer protection. Career opportunities were also discussed.

The lecture was very interactive as students asked many questions regarding consumer protection facilities, the absence of direct access in Linden and the need for live television, sensitization programmes in the Region. These requests were noted for follow —up action to be taken.

## 6.6.3 Linden Expo and Trade Fair

The Linden Exposition was held over the period April 28 – May 01, 2006 in Linden. The exposition which was organized by Ministry of Tourism, Industry and Commerce (MTI) coincided with Linden Town week celebrations.

Once again, the GNBS took the opportunity to educate and sensitise stakeholders in Region # 10 about its work programmes and activities that are designed to protect consumers from poor quality goods.

The areas specifically targeted were:

- Weighing and Measuring Tips for Consumers.
- Commonly used Metric Units and "Think Metric" techniques
- Services offered by the GNBS.
- Benefits of Standards
- Labelling of Jewellery, garments, furniture, safety matches.
- Correct use of Equal Arm Scale.
- Commodities monitored by the GNBS.
- Defects in Used Tyres.

## **Printed Materials**

Fact sheets entitled: Standards and the Consumer, Master the Metric System, Look for the Standards Mark, Quality Management, Product Certification, Standardisation, Laboratory Management, Metrology and Standard Compliance and Conformity Assessment were issued to stakeholders and consumers.

Over the six (6) day duration of the exhibition, staff members on duty interacted with visitors and were instrumental in sharing vital information on the core programmes of the Bureau.

Throughout the exhibition, visitors to the booth were given practical demonstrations and had their questions and queries answered by staff on duty. Persons were issued with fact sheets on the Bureau's programmes and activities. Persons were given the opportunity to weigh themselves on a metric scale and also check their height in centimetres.

At the exhibition, visitors took the opportunity to share their concerns with staffers. Below are some comments from visitors:

- More Public Awareness activities should be conducted in Region # 10.
- The GNBS should have staff checking on the items available for sale in Linden.
- Scales and Weights should be checked more regularly in the Region.

The President of Guyana, the Honourable Mr. Bharrat Jagdeo requested that the GNBS check on the quality of energy saving bulbs available at certain outlets. This information was conveyed to the Metrology/ Standards Compliance Department for their action.

Outreach activities such as this one always provide valuable feedback for the Bureau since it is sometimes difficult to make more regular visits.

#### 6.6.4 **GUYEXPO 2K6**

GUYEXPO 2006 was held over the period October 26 to 31 under the theme: "Exhibiting Excellence". GUYEXPO is Guyana's National Trade Fair and exposition and it is staged to showcase local products and services that can enhance trade and attract foreign investment.

The GNBS participated and made full use of another opportunity to showcase its many activities in the field of standardisation and show its relevance to consumer protection, improved quality of products and enhanced trade.

The various Departments focused their attention on education and sensitisation of stakeholders and visitors to the Exhibition, through the use of printed materials. Additionally, the GNBS was able to display and provide demonstrations regarding the following: General labelling requirements for commodities, Defects in Used Tyres, Weighing and measuring tips for consumers, Standards Development Procedure, Calibration Procedures for Weighing and Measuring Devices, the importance of using building codes to avert disaster, the commonly used metric units, Standards and consumer protection, Certification and certification marks, Standards Compliance procedures.

**Printed Materials:** Fact Sheets entitled "Standards and the Consumer", "Standards and the Manufacturer" "and "Master the Metric System" were prepared for distribution to visitors. Posters depicting the following information were also prepared and placed on the walls of the display area: Weighing and measuring tips for consumers, purchasing tips for Consumers, Certification Marks of other countries, What is a standards mark? Conformity Assessment, The Standards Development Process, What Standards do for us and, The list of commodities monitored by the Bureau.

Throughout the exhibition, persons who visited the GNBS booth were given practical demonstrations, had their questions and queries answered by staff on duty, and were issued printed materials on its various Work programmes. The team spirit was evident and there was heartening support by the majority of staff members. The Bureau received the following recommendations by some persons who visited its booth:

- O Visitors particularly from Region ten expressed the need for GNBS to either set up a branch office there or pay more frequent visits where the malpractices especially regarding weights and measures can be addressed. They also expressed concerns about the poor quality goods sold in the region.
- Visitors enquired about and suggested that metric conversion charts should be made available again to members of the public.
- Staff in the Metrication Division should visit secondary schools to see whether the metric system was taught and used there.

## 6.6.5 National Quality week/ World Standards Day

National Quality Week (NQW) was successfully celebrated by the Guyana National Bureau of Standards during the week of October 08 to 13. A number of activities highlighting the theme chosen by the International standards setting bodies were executed to showcase the achievements accomplished by standardisation.

World Standards Day which formed an integral part of the celebrations was commemorated on October 14. This year's theme was; "Standards: Big benefits for small business." The following activities formed part of the week's observances.

(i) The week of activities commenced with an article placed in the Sunday Chronicle. This space was donated by the Environment Protection Agency as part of its contribution towards National Quality Week. The (EPA) holds membership in the National Standards Council. A special view point prepared by the Director was inserted in the Column.

(ii) The EPA also donated its segment allotted on NCN's *Guyana Today* to allow the Bureau to share with the public the activities planned to mark the week's celebrations. The Staff of the Communication Division appeared as guests on this programme. The staff of the Division was also guests on the radio programme "Let's Gaff" during which information pertaining to the origin of World Standards Day, highlights of work done in the field of standardisation and the activities undertaken by the Bureau was shared with the listening public.

The hour spent on the foregoing programme was very informative and rewarding.

(iii)One of the high points of the week's activities was the Small Business Conference which was hosted at the Hotel Tower by the Caribbean Regional Organisation for Standards and Quality (CROSQ) together with the GNBS. The conference which targeted all stakeholders in the small business sector was planned to share information on the details and execution of the specially funded IDB project to boost standardisation in the small business sector.

Informative and educational presentations were delivered by Ms Deborah Nurse, Consultant attached to the project, Ms Candelle Walcott Head, Conformity Assessment Department GNBS, Ms Sharon Alexander of the Ministry of Tourism, Industry and Commerce and Mr. Patrick Zephyr of the Guyana Small Business Association.(GSBA)

The Executive Director of the Bureau gave the overview and opening remarks to set the stage following which, the Honourable Minister, Mr. Manniram Prashad, delivered the Feature Address. Following the presentations, the participants were given the opportunity to share their views and concerns regarding the presentations and the benefits which they can derive from the project. The media was in attendance to provide coverage of this event. They were concerned that this project might not come to fruition.

(iv) Following the conference, was the GNBS Open Day, during which members of the public and school children were given the opportunity to tour the GNBS interact with staff members and have their questions answered.

This year, students of the Sophia Special School and Bishops High School accepted the invitation to visit the GNBS. Students indicated that they benefited from the exercise. Some members of the media also visited the GNBS and conducted interviews with the Head, Information Services Department.

However, the GNBS was disappointed that more members of the public did not take the opportunity to visit and learn more about the importance of standardisation.

(v) Another major activity which took place on the evening of Thursday,October 12, was a live panel discussion which was aired on NCN Television on the topic "Standards: big benefits for small business".

The panel comprised: Dr Leslie Chin of the Institute of Private Enterprises Development (IPED), Mr. Patrick Zephyr, President of GSBA, Mr. Clifford Zammett, Director of Consumer Affairs (MINTIC), and Ms Patricia Helwig (EMPRETEC). The moderator was Head, Information Services of GNBS.

Areas focused on in the discussion were: the level of implementation of standards in small businesses, factors affecting standards implementation, CSME and its impact on small businesses and the role GNBS and IPED can play in assisting small businesses in the developmental process. The Ministry's representative examined the impact of the lack on the quality of goods and services offered to consumers. The discussion was very lively and informative. Cell Star Guyana INC sponsored this programme.

# (vi) Staff Appreciation Day/ Long Service Award Ceremony

The final working day of National Quality week is designated and is set aside to show appreciation to the hardworking staff members and present awards to those who have given five, ten or fifteen years, etc. of service to the organization.

Lunch was provided and in the afternoon session, seven long-serving members of staff who served 5 and 10 years, respectively, were presented with gifts and certificates. Members of Council and media houses joined the GNBS for this occasion. Coverage of this event was provided in the print and electronic media.

- (vii) A special message to mark the occasion of World Standards Day was delivered by the Honourable Minister on NCN Radio and Television. The Executive Director also delivered his message on NCN Television.
- (viii) On World Standards Day, a supplement containing messages from the Honourable Minister, Chairman, National Standards Council the International Standards Organisations and the Executive Director, was published in the daily newspapers. National Quality Week 2006 can be deemed a resounding success.

## **6.7 Suggestion Boxes**

As a means of obtaining information from outlying Regions, the GNBS positioned suggestion boxes at strategic locations within these Regions. This initiative was launched in the month of March and boxes were cleared on a monthly basis by Regional weights and Measures Officers and GNBS Inspectors located in Regions 2 and 6.

Promotional advertisements were placed on television to advise residents about the location and use to which the boxes can be put. However, they are not fully utilized as yet and the Bureau plans to do more publicity in the coming year.

## **6.8 Quarterly Review Meetings**

Head of Department convened quarterly review meetings to evaluate the activities executed by the Department under the Communication, Metrication Standards information and Information Technology work programmes.

The review sessions examined the successes, challenges affecting the full completion of planned activities, resources needed to execute programmes for the upcoming quarter and ways in which staff can improve their performance.

The agenda for meetings also addressed staff welfare matters and they were given the opportunity to make suggestions for improvement and highlight grievances, which were raised at management meetings.

At the end of the third quarter, the Executive Director convened review meetings with the Departments and focused on (1) the percentage completion of the work programmes, (2) format for writing monthly reports (3) activities to be completed before the close of the year (4) challenges affecting the completion of work programmes (5) Department needs / staff welfare matters and (6) recommendations for improvement.

Written reports were compiled after this meeting for the purpose of record keeping and for taking action on important decisions made. This approach provides for a comprehensive evaluation of the progress of work.

## 6. 9 Other Activities

## **6.9.1** Pride in our Industry

During this year, the Ministry of Tourism, Industry and Commerce (MINTIC) together with the Guyana National Bureau of Standards (GNBS) and the Small Business Association of Guyana continued to spearhead a campaign to help small and medium industries in the Agro-processing, Jewellery, Aquaculture, Furniture and Handicraft sectors improve the quality of their products to meet regional and international standards, and to encourage Guyanese consumers to support local businesses.

In this connection, several planning meetings comprising stakeholders from the Divisions of the Ministry of Tourism, Industry & Commerce, GNBS and the Small Business Association of Guyana, were convened in the Ministry's Boardroom to discuss strategies for helping Guyanese manufacturers in strategic sectors to cope with the challenges expected with the advent of CSME.

The priority sectors identified for assistance were: furniture, processed foods, aquaculture, jewellery and packaging. A decision was also taken to design a questionnaire to asses the needs of businesses in this sector and administer it at a specially planned forum which was held on July 12 at Hotel Tower.

The attendance fell below expectations. However, the programme was executed with those present and the needs were enumerated and issued to the relevant regulatory authorities for action. The Bureau of Standards undertook the responsibility to work with those companies which indicated their interest in establishing quality management systems. Work has commenced in this regard and will be continued in the new-year.

Data gathered from the questionnaire will also be used as a guide in the formulation of suitable work programmes to address stated needs. This activity will be undertaken by the respective Divisions of the Ministry of Tourism, Industry and Commerce with support coming from the GNBS and the Guyana Small Business Association.

Training of stakeholders in the manufacturing sectors to package goods, will be done in the coming year.

This project is ongoing and it is scheduled for completion in 2008. The Bureau anticipates increased capacity building and greater efficiency, and hopes to benefit significantly in participation.

## 6.9.2 Sponsorship

Sponsorship for live television programmes and National Quality Week Activities was received from the following organizations: Republic Bank, Beharry Group of Companies, Guyana Sugar Corporation, National Centre for Education Research and Development (NCERD) Art Williams and Harry Wendt Aeronautical School, UMobile and the Ministry of Tourism, Industry and Commerce.

The GNBS is grateful to all its sponsors for the assistance received in the past year.

## **6. 9.3** Stand up Against Poverty

The GNBS, as a stakeholder organization in helping to reduce Poverty in Guyana, participated in the United Nations sponsored activity to create awareness of this problem that affects all societies. The Assistant PRO attended a specially convened meeting by UNESCO to come up with Guyana's method of marking this special occasion.

On the designated day **Monday, October 02,** GNBS staff members joined colleagues on Homestretch Avenue, Georgetown to repeat the UN pledge against Poverty.

#### 6.9.4 GMSA Business Luncheon

Head, Information Services, represented the GNBS at the GMSA Business Luncheon held at Hotel Tower on Friday, October 13. The keynote presentation was delivered on the topic of "Ambush marketing and Sunset Legislation" by Legal representative and advisor to the West Indies Cricket Board on legal matters pertaining to the staging of Cricket World Cup 2007.

## 6.9.5 Poverty Reduction Strategy Report (PRSP) 2006

Head, Information Services, coordinated and prepared the GNBS' PRSP progress report for the year 2005. The report included a background of the organisation, its strategic activities which focused on the goals and objectives or the PRSP, major achievements, key indicators, key issues, challenges which affected outcomes, future plans for the period 2006 to 2010, and budgetary projections and estimates for the same period.

## 6.9.6 Meeting on Labelling and Packaging in Washington DC

Guyana was represented at a specially convened meeting on *Labelling and Packaging of Tobacco products* by Ms Evadnie Fields, Head, Information Services Department of the GNBS.

The meeting which was sponsored by the Pan American Health Organisation, was held on **July 11, 2006** in Washington DC, USA. Its primary objective was to examine the effectiveness of current labelling and packaging legislation regarding tobacco products with the intention of finding new and innovative ways of combating the advertising onslaught by manufacturers and retailers of the above products.

One of the key areas addressed was deceptive labelling and flawed ingredient testing techniques with the intention of deceiving consumers into believing that some cigarettes labelled as light or low tar, low nicotine, etc. are safer than others.

Other critical issues that were discussed at the meeting were the effectiveness of picture advertising, the effectiveness of health warnings, the need for education and communication campaigns and more stringent regulations on the use of package space for advertisements.

## 6.9.7 Other Programme Support activities

The Division also arranged press briefings, symposia, chaired opening and closing ceremonies for training courses, organized news interviews, responded to correspondence written by members of the public seeking information and seeking redress on consumer matters and edited printed materials such as the Standards Information Bulletin brochures and fact sheets.

Other collaborative activities include:

- Meeting with Cell Star INC.
- Mashramani Activity.
- o Animal feeds meeting.
- o Meeting of Manufacturers/ Importers of disinfectants, handwashing and laundry detergents.
- o World Metrology Day.
- o GNBS ISO 9001 Activities
- Staff Development Sessions

# 6.9.8 Monitoring/ Evaluation

Evaluation was conducted on a weekly basis at management meetings following which, the monthly report was submitted. A quarterly review was done followed by a half year review and lastly the Annual Report. At these meetings, there was information exchange and sharing of ideas to ensure improvement where necessary.

This programme continued to function as one of the core programmes of the Bureau and is one of the main means through which the programme activities, promotional events and achievements of the organisation are disseminated to its many stakeholders across the country.

Each year, new initiatives are undertaken to achieve the goals set and notwithstanding the challenges, the objectives targeted are achieved as fresh ideas are injected.

In order to make the Division more self sufficient and reduce costs for design and printing, at least one of the staff would be trained in 'Microsoft Publisher' or 'Corel Draw'. This would enable brochures and the GNBS newsletter to be designed in-house.

It is hoped that in the coming year, the message of standardization could be taken to Regions No. 1 and 9 and that more funds will be made available to successfully execute planned activities.

## 7.0 METRICATION

The Metrication programme is one of four programmes under the Information Services Department. In 2006, Metrication continued to make progress as education and sensitization activities increased and many stakeholders in the regional communities were targeted with metric messages. The four commonly used units for mass, length, volume and temperature were the areas focused on in addition to time and date writing.

#### 7.1 Sector Activities

A very successful method that was used to reach stakeholders with the metric message was sector visits. These visits were significant in that they targeted senior management operatives at the agencies/organizations listed to solicit their support, determine training needs, determine the status of metrication in the organization, provide assistance where necessary for the implementation of metrication, review existing legislation and prepare a workable plan of action for the implementation of metrication.

Eighty one (81) visits and subsequent meetings were conducted with management representatives of the various organizations as listed below in Table 15.

Table 15 Metrication Sector Visits

No. of	Sectors	Name of Agencies
Organisations		
11	Regulatory	Guyana Lands and Survey Commission,
	agencies	Government Analyst Food and Drug Dept., Guyana
		Revenue Authority (CTA), City Engineers Dept.,
		Guyana Prison Service, Guyana Fire Service,
		Guyana Police Force, Guyana Water Inc., Guyana
		Defence Force, Civil Aviation Authority
20	Government	Ministry of Health, Public Service Ministry,
	Ministries	Department of Education, Ministry of Education,
		Cyril Potter College of Education, NCERD,
		Guyana Fisheries, Crops and Livestock, Ministry of
		Agriculture, Guyana Office for Investment,
		Ministry of Amerindian Affairs, Ministry of
		Labour, Human Services and Social Security,
		Ministry of Housing and Water, Ministry of
		Foreign Trade and International Cooperation,
		Ministry of Public Works and Communication,
		Ministry of Tourism, Industry and Commerce,
		Office of the President, Office of the Prime
		Minister.

No. of Organisations	Sectors	Name of Agencies
5	Private Security	Federal Management System, RK Security, Brans Security, GEB Security, Professional Guard Service
5	Educational Institutions	Government Technical Institute, Carnegie School of Home Economics, Sophia Special School, Guyana Industrial Training Centre, International Business School
5	Local Manufacturers	Barama Company Ltd, Omai Peanut Co. (Guy.) Ltd, Continental Agencies Ltd., AH & L Kissoon, Gafoor Ltd.
23	Supermarkets/Impo rters/ Wholesalers	W.M. Fogarty, New Guyana Marketing Corp. Guyana Stores Ltd., Bonny Supermarket, Nigels Supermarket, C & F Meats, Johnny P. Supermarket, N & S Mattai, Bounty Chain, MFK Trading, Sachie, Guynaz, Police Consumers Coop Society Ltd., Bish & Sons, P. Ramroop and Sons, Pearl Trading W/sale retailing, NAJAB Trading, Casa Mato, S & D International, Cho- Chin Ltd, TATABU Trading, Alim's Dry Goods Store, DSL.
8	Advertising Agencies/Media Houses	VCT Communications – 28, King's Advertising Agency, National Communication Network, Guyenterprise Advertising Agency, Ingle Field Ogilvy and Mather, Channel 2, Guyana Press Association
4	Non-Government Organization	Youth Challenge International, Guyana Red Cross Society, Central Islamic Organization of Guyana

During 2006, the agencies and organizations visited had varying degrees of implementation and use of the metric system, and it was sometimes challenging to meet senior functionaries who were in a position to effect changes to existing practices.

Almost all of the Government Ministries have knowledge of metrication or they were using some aspects of metrication. In the year 2007, a more cohesive and strategic approach will be used to ensure all state agencies/organizations fully adopt and accelerate the use of the metric system.

The local manufacturing sector continued to be the leaders in the implementation of the metric system, and they must be commended for this. Their success is due to having a well trained workforce, using standardized metric machinery, prepackaging all goods and beverages to metric quantities due to franchise contracts, export orders, easy inter-changeability and universal market acceptance of the particular product(s).

On the other hand media houses and advertising agencies were giving some heartening support in the past year. However, there is still room for improvement, especially in the area of advertising in the electronic media, as media houses and advertising agencies complained that their clients continued to request services to be done in imperial units.

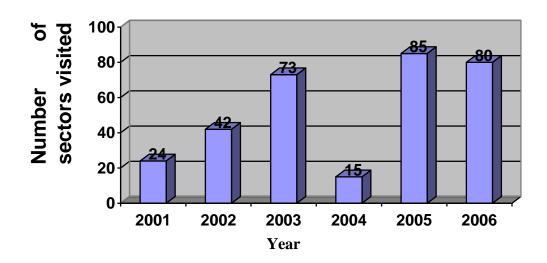
Figure 7. shows a comparison of sector activities for the last 6 (six) years.

However, in 2006 there was an upsurge in activity as additional assistance was provided by the Regional Sub-office and the appointment of new Weights and Measures Officers in the Regions. The slight decline in activities for 2006 was due to pre-election uncertainties by all stakeholders.

In 2007, the sector activities will continue in the strategic manner where more agencies will be targeted for training so that they can fully implement the metric system.

Figure 7.

Metrication Sector Activities



The Metrication sector activities increased significantly from year to year with a dip in 2004 due to the shortage of manpower and the loss of members of the National Metrication Committee. However, in 2005 and 2006, there was an upsurge in activity as additional assistance was provided by the Regional Sub-office and the appointment of new Weights and Measures Officers in the Regions.

In 2007, the sector activities will continue in the strategic manner where more agencies will be targeted for training so that they can fully implement the metric system.

## 7.2 Metrication Training

The Metrication Division continued to offer training to all agencies that made requests for such training. The training programme which follows a workshop approach, focused on getting participants "to think metric". Hence, there were a number of practical activities and role playing in the sessions which were very interactive.

Thirty-three (33) organizations benefited from metrication training in 2006. Where necessary, training was tailored to suit their respective work situations. Table 16. below shows the organizations that received metrication training.

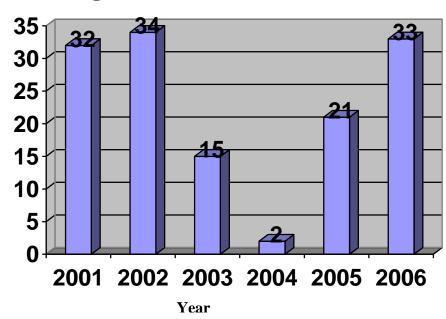
Table 16
Organisations receiving metrication training

No.	Name of participants	Number trained
1	Guyana Police Force (Traffic Ranks – Recruits)	100
2	Guyana Prison Service	18
3	Guyana Fire Service	24
4	New Guyana Marketing Corporation	5
5	Cell Star Guyana Ltd	44
6	Sophia Special School	49
7	Carnegie School of Home Economics	62
8	Guyana Red Cross Society	18
9	St. Cutbert's Mission	34
10	City Engineers Department	25
11	Bartica Regional Democratic Council	15
12	Central Islamic Organisation of Guyana	30
13	International Business Collage	50
14	RK Security	5
15	Ministry of Health	15
16	Parika/ Salem School	17
17	Ministry of Agriculture	20
18	Professional Guard Service	28
19	School of the Nations	45
20	Demerara Oxygen Company Ltd	20
21	Government Analyst Food & Drug Department	15
22	Santa Mission Primary School, Residents	35
23	Capoey Lake Primary School, Residents	30
24	Mainstay Lake Primary School, Residents	41
25	Anands	10
26	Avishkar	10
27	Avinash	5
28	Ravinas	7
29	Guyana Industrial Training Centre	45
30	St. Dennis Mission Primary School	35
31	Mahdia Primary School	26
32	Makenzie Municipal Market	18
33	Government Technical Institute	56
	Total	1,007

Figure 8.

# Number of Organisations receiving training from 2001 to 2006

No. of ogranisaitons receiving training



The participants who benefited from metrication training in 2006 displayed keen interest in the topics, including, What is the GNBS, historical background to metrication, mass units, linear units, volume and capacity units.

The sessions were highly interactive, using a workshop style approach where participants participated in the "think metric" demonstrations such as mass versus height, and body mass in kilograms versus body height in centimeters. In addition to this, prepackaging of rice was physically demonstrated on an equal arm scale showing quantity versus mass as in comparison to the so-called pint as sold in the market places. Since there seem to be confusion as to the correct way of writing time and date, participants benefited from a practical demonstration in accordance with the ISO Standard 8601 which deals with the correct procedure of writing numeric representations of date and time.

## 7.3 Education Campaign

The metrication programme targeting the commercial and retail sectors in 2006, proved to be most challenging. This activity entailed visits to shops, stores, stalls and supermarkets countrywide, holding one to one discussions with vendors and shopkeepers, carrying out practical demonstrations and having a first hand look at the practices employed by vendors and shopkeepers regarding the sale of goods and services in metric.

From observations, vendors and retailers continued to sell goods in imperial quantities although they were in possession of metric devices. The reason given by vendors/shopkeepers is that the majority of consumers continued to request items in imperial units and they are forced to sell their goods in the said unit due to competition by other vendors.

In doing so, it was discovered that imperial measures and masses were substituted and used for selling. This led to other malpractices as unverified measuring devices were used sometimes to cheat consumers in the process.

Efforts were made in 2006 for vendors to stop selling rice using liquid measures, and to acquire suitable scales to weigh the rice. Some cooperation was received from vendors who were willing to purchase the 50 kilogram platform scale that was identified to be used by vendors for weighing rice but major setbacks were encountered due to inadequate supply of that particular capacity of scale and the exorbitant cost requested by those suppliers that have them in supply, thus, the vendors were unwilling to pay this sum.

In 2007, efforts would continue to be made to implement this system of prepackaging and weighing grains by mass.

The areas benefited from these one-to-one sessions were the supermarkets, the municipal markets, hardware stores, textile importers and mini- marts.

In Region 4, 2,302 persons benefited from this activity. In an effort to help vendors and shop keepers in the retail sector to master the metric system, the following strategies were employed:

## - The use of Price charts

All vendors/retailers countrywide were advised to post price charts displaying prices for goods pre-packaged in half kg, one kilogram, two kilograms, five kilograms and calculations were shown to them in this regard in metric quantities. Practical demonstrations were given in this regard.

## Prepackaging of Goods

It was noted that prepackaging of goods was working for supermarkets and this strategy was shared with vendors/shopkeepers to prepackage all goods in metric quantities making it easier for consumers to purchase.

Observations during surveillance exercises revealed there was unwillingness by vendors to use the metric system, as in comparison with the supermarkets and mini-marts that were leading in the metrication drive due to their strategy of prepackaging goods and posting up of a price lists.

During surveillance of prepackaged and canned products imported from the United States, Canada and the Far East, it was found that goods were labelled in a dual format, using sequences of imperial units followed by metric and vice-versa.

Ninety-nine (99%) of local prepackaged products were correctly labelled in metric with only 1% of non-conformance.

The large textile importers imported their bales of raw textiles in metric, but the retailers were forced to retail their textiles in imperial quantities due to public demand. They were advised not to do so.

From the metric outreach programme countrywide, it was also discovered that senior members of population were least cooperative and were holding on to the imperial system.

# 7.4 Market Surveillance/intelligence

#### Surveillance activities in 2006

The surveillance activities conducted in 2006 closely embraced the education campaign. As a result, these exercises were conducted simultaneously, thus the stake holders that benefited from these activities would be the same.

The Regional Weights and Measures officers played an important role in their respective Regions carrying out surveillance sensitization exercises.

Listed in the Table 17. below are the areas covered during the surveillance/sensitization exercises for 2006.

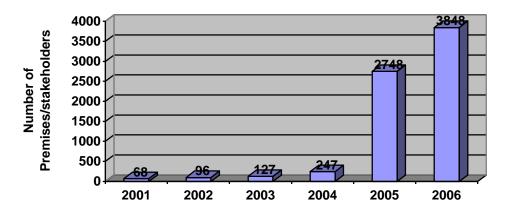
**Table 17. Regional surveillance activities** 

Region	Areas covered	Number of premises
2	Anna Regina, Queenstown Health Centre – Hospital, St. Dennis Mission, Mainstay Lake, Capoey Lake, Shopkeepers, Exmouth, Charity market, Suddie	263
3	Zeeburg, Lenora, Parkia, Bagotville, Vreed-en-Hoop, Leguan, Windsor Forest, Goed Intent, Meter-Meer-zorg, Stewartville, Santa Mission, Shopkeepers, Present Hope, St. Laurence, Hubu, Unity, Hide Park, Bonasika, Caria Caria, Hogg Island, Wakenaam, Wales market	692
4	Supermarkets – Guynaz, Sachi, C & F, Fish Hook, Bonny's, Bounty chain, Nigel's, N & S Mattai, Guyana Stores, Fogarthy's, MFK Trading, Mini marts, Textile importers, Hardware dealers, Municipal markets – La Penitence, Kitty, Mon Repos, Lusignan, Golden Grove, Annandale, Bourda, Stabroek, Ann's Grove, Clonbrook, Mahaica, Cane Grove, Barama and Commercial areas around Georgetown	2302
5	Hopetown, Mahaica, Rosignol, Bath settlement, WCB	222
6	East Berbice/Corentyne, Supermarkets, New Amsterdam Municipal market, Stores, Skeldon Municipal Market and Corriverton Market	261
Region	Areas covered	Number of stakeholders
7	Cuyuni – Mazaruni, Bartica Municipal market	24
8	Mahadia	46
10	Mackenzie Municipal market	38
	Total	3848

The graph below in Figure 9. shows a large volume of surveillance activities conducted in 2006 as compared with 2005 due to the combined efforts of Weights and Measures Officers in the respective Regions.

Figure 9

Metrication surveillance activities in 2001 – 2006



Year

It was observed during the surveillance exercises countrywide that the supermarket, minimart and manufacturers continued to be the leaders in the adoption and use of the metric system. This is due to the full adoption and use of prepackaging and labelling of goods, such as grains, flour, sugar and beverages. The municipal market vendors are willing to sell only in metric, but they are forced to sell in imperil unit due to the continued request by consumers. The sale of meat, chicken etc. in the municipal market was in dual mode. Most provision vendors sell in the imperial equivalent on a metric scale.

#### 7.5 Communication Activities

As part of the metrication outreach programme on the "Think metric" concept, a series of activities were conducted, as follows -:

- A series of five minute radio programmes were aired on NCN on the topics (i). The historical background to the metric system, (ii) mass,
- (iii) length (iv) temperature and (v) volume (See Communication report in Section 6 for details).
- A series of live "How to think metric" TV programmes on NCN took the form of a workshop approach. The areas covered were (i) mass,
- (ii) length, (iii) volume, time and (iv) date writing. Some weights and measures demonstration were performed by Inspectors who participated in the show.
- Two "Think Metric" workshop style, live call-in programmes were held at RCA Charity, Essequibo and at Little Rock Television station in New Amsterdam, respectively.

#### 7.6 Metric Units misuse

The Metrication Division has been using a very effective strategy to point out misuses of the metric system in the media. The daily newspapers, radio and TV programmes were checked for evidence of misuse, and letters, pointing out the errors were sent to the relevant newspapers, advertising agencies or directly to clients and telephone calls were also made in this regard.

As a result, sixty-nine (69) letters highlighting instances of misuse of the metric system were issued to television stations, media houses, printing agencies and other organizations interfacing with the public. A total of eighteen (18) telephone calls were made to defaulters for misusing the metric system.

In response, almost all of the stakeholders took steps to address these flaws with the exception of a few, who kept citing that their customers made request specifically to have advertisements prepared using imperial units. This non-conformance will be closely monitored in 2007.

# 7.7 Writing Dates and times

Another initiative taken under this programme was to arrest the confusion taking place throughout the country in the writing of dates and times. In an effort to standardize the format according to ISO standard 8601, 60 letters were sent out to stakeholders in Government Ministries, Semi-Autonomous agencies, Regulatory bodies, media houses, Utilities, banks, the legal sector, etc.

The responses and overall cooperation were heartening.

#### 7.8 National Metrication Committee

The National Metrication Committee was chaired by Mr. Narvon Persaud (Council Member), and comprises members drawn from key stakeholder organizations, as follows:

The Guyana Police Force

The Guyana Forestry Commission

The Guyana Sugar Corporation

The Guyana Lands and Survey Commission

Ministry of Agriculture

Consumer Advisory Bureau

Ministry of Public Works and Communication

Ministry of Culture Youth and Sports

Ministry of Education

Ministry of Housing and Water

Ministry of Tourism, Industry and Commerce

Guyana Rice Development Board

This Committee met once monthly and its main objective was to provide much needed support, devise fresh strategies and provide technical guidance for the execution of the National Metrication Programme.

During the year of 2006, six (6) statutory meetings were held. However due to elections and unforeseen circumstances by members, a quorum could not be achieved in some instances.

- Members of the Committee were able to arrange training for members of their respective organisations (e.g. Guyana Police Force), and participated in live television programmes.
- o Guyana Forestry Commission distributed metric materials.
- o Ministry of Public Works ensured that road signs were posted up in metric and assisted in soliciting sponsorship for live programmes.

The work of the National Metrication Committee is vital to the success of the National Metrication programme.

# 7.9 Metrication Legislation

During 2005, the legal sub-committee, had reviewed and made/proposed changes to the Motor Vehicle and Road Traffic Act (Chapter 51:02);

The changes proposed by this committee were shared with the Traffic Chief at a specially convened meeting for this purpose. The next phase will see this Act being reviewed by a representative team from the Guyana Police Force.

## 7.10 Monitoring and Evaluation

A special Quarterly Review meeting was convened in September 2006, where the Director reviewed the activities for the work programme, all previous monthly reports and the format for the monthly report. The minutes of this meeting were prepared and submitted to the Director. He also discussed staff needs, activities for the next reporting period and strategies for analyzing data contained in the report. The Head of the department also convenes quarterly meetings to check and evaluate progress of work.

The activities covered for 2006 were satisfactory and in compliance with the annual work programme. There is still need for metrication reports to be submitted by all affiliated Regions to the GNBS and there is need for a more positive approach by Officers when promoting the metric system in their respective Regions. This would be addressed in the new year.

In the foregoing year, it was observed that generally, businesses were willing to change over to use the metric system, but the consumers were the driving force behind the use of the imperial system. Hence, in the New Year a consorted effort would be made to target consumers with the metric system. The passage of the Omnibus Bill would enhance the enforcement of the metric system.

#### 8.0 STANDARDS INFORMATION

During the period under review, the Technical Standards Information Unit (TSIU) was able to achieve its entire objective. The CDS/ISIS library automated system has been installed and the collection will be fully automated as a project to make information easily retrievable, enhance the Department's operations, as well as the dissemination of information in a timely manner.

#### 8.1 Automation of TSIU

New acquisitions were still recorded by the use of a manual system which is a substitute, until all documents can be input into the library automated system which is presently installed in the Technical Standards Information Unit.

Those acquisitions were indexed, classified, labelled and interfiled/shelved by specific subject, title or reference/call numbers in sequence, so that accessibility and traceability can be achieved. For this duration, forty two (42) documents were entered into the CDS/ISIS software application.

This is an ongoing activity for officers of this department.

When automation is completed, it would strengthen the goodwill of the organization with its stakeholders, collection development and make information sharing worthy. It will also assist libraries to relate effectively with others for the purpose of inter- library loans.

Automation of the entire collection will make it more 'user' friendly which would foster a better organization climate.

## 8.2 Upgraded Collection

Table 18. below is a representation of the acquisitions received in the last five (5) years

Table 18. Receipt of materials

Year	2002	2003	2004	2005	2006
Materials	1092	961	1022	1292	891
received					

These figures demonstrate an increase and decrease in the acquisition of materials. From the period 2002 - 2003, there was a decrease by 12%; 2003 - 2004, an increase by 6%; 2004 - 2005, an increase of 20.9%, while 2005-2006 shows a drastic decrease by 45%.

This year's figure reflected a reduction in financial resources spent to purchase relevant standards, text books and periodicals to improve the collection.

More financial resources would be allocated in 2007 to enhance the development of this documentation centre.

During this period, it was recognized that Secondary School Students and the University of Guyana students made full uses of the TSIU.

The University of Guyana Library donated a total of three hundred (300) text books of which two hundred and thirty (230), that were not useful to the collection, were given to Sophia Special School.

More finances would be spent on text books and standards so that staff could make better use of the collection, the goal of which is to meet a National Documentation Centre level.

## 8.3 Current Awareness Bulletin

During the period under review, seven hundred and twenty five (725) copies of Standards Information Bulletin (SIB) were produced by the Technical Standards Information Unit. Eleven articles were prepared and sent to various agencies, clients, organisations, institutions and Sector Committees. Articles on the various topics are showed in **Table 19.** These are topics prepared by Technical Officers in relation to their work programmes, and the preparations of the Bulletins were coordinated by the Senior Information Officer.

Table 19.
Standards Information Bulletin (SIB) produced for 2006

Month	Title of Articles								
January	Importance of Accrediting Inspection Bodies.								
	The highlight of this article was on the competence of an								
	organization/agency and /or person in conducting inspections through								
	the evaluation processes to meet required standards (ISO/IEC 17020)								
	for accreditation.								
February	Regulation of Genetically Modified Organisms.								
	The emphasis of this article was on the role that must be adopted by								
	the Government and regulators as it relates to policy position, to								
	inform and protect the consumer and the producers/retailer on issues								
	of genetic engineering (GE) and genetically modified organisms								
	(GMO'S).								
March	Importance of Codex to Guyana.								
	The researcher spoke about the role GNBS plays as the National								
	Codex Contact Point in Guyana. These standards developed by								
	Codex Alimentarius Commission dealt specifically with food with								

	guidelines and recommendations to protect the health of consumers and ensure fair practices in the food trade.							
April	Importance of Standards Compliance Programme.							
<b>F</b>	This article focused on the use of standards as a regulatory tool to							
	satisfy mandatory requirements, relating to market accessibility							
	through the standardization process. Thus, its main focus is on							
	ensuring that product suitability is not affected by the rapid							
	reorientation of global manufacturing.							
Mov								
May	Metrology, Standardisation and Conformity Assessment:							
	building an infrastructure for sustainable development.							
	The article looked at the importance of three pillars optimizing							
	companies output to meet the global markets. All three pillars play							
	vital roles because provisions are made to assist in strengthening the							
	technical infrastructures in Guyana which is necessary for sustainable							
	development.							
June	Local requirements for globalization.							
	With globalization, companies have to meet certain requirements in							
	the market, which establishes a level playing field for all competitors.							
	These players have to ensure that goods conform to the technical							
	regulations and standards that apply to domestically produced							
	products for health, safety and consumer protection.							
July	Acrylamide in food and its potential health hazards.							
J	High levels of acrylamide found in fried and baked food can cause							
	cancer in animals especially carbohydrate foods such as potato chips							
	and French fries.							
August	Legal Metrology and trade.							
C	The Legal Metrology system established by the GNBS allows							
	consumers to be protected from unfair trading practices as it pertains							
	to weights and measures of goods and products.							
September	Conformity Assessment infrastructure and international trade.							
Septemeer	The researcher focused on the impact of Conformity Assessment							
	activities on trade, the rapid increase of non- tariff barriers to trade in							
	areas such as; Product specifications covering buyer's requirements,							
	national, regional and international standards and technical							
	regulations applicable to the importing country, health, environmental							
	and safety requirements and procedures relating to the assessment of							
	product conformity. Other areas touched included the impact of							
	technical barriers to trade on developing countries and the							
	implications of Conformity Assessment activities for countries such							
	as Guyana.							
October	Business benefits of ISO 14001.							
	This material focused on today's businesses which are not only about							
	selling product or services to consumer for exchange for money. It							
	highlighted evolution cause by the global market-place where set							
	rules are critical to facilitate trade. The rules employed must be							

	flexible enough so that it can be applied to companies in the North, South and Europe. ISO 14001 has proven to be a useful tool and yardstick to maintain regulatory compliance to a position of improving productivity and enhance competitive advantage.
November	Electrical Facts.  The article examined what consumers of electrical services should know when they are making decision on wiring of buildings. They must be aware of regulations that are available which can give them guidelines.
December	ISO and Developing Countries.  The ISO action plan to assist developing countries is by improving awareness of key stakeholders in developing countries of the role of standardization in economic growth, world trade and sustainable development.

This is an ongoing task for Technical Officers which was coordinated by the Senior Information Officer.

Articles published by Technical Officers, are helpful in information sharing with industries, various agencies, clients and other stakeholders. Interest was expressed by stakeholders and clients about the benefits they receive from these articles.

# **8.4** Profile of Activities

The results of the various activities of the Technical Standards Information Unit during 2006 are summarized in **Table 20.** 

Table 3
Profile of activities of TSIU

Activities			Months											
			Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1.	Acquisitions	212	78	33	37	23	75	96	161	46	36	49	45	891
2.	Books catalogued & classified	11	38	19	29	9	17	19	4	-	9	-	-	478
3.	Books bound	5	-	4	5	2	7	10	4	3	9	-	2	51
4.	Book Covers Printed				04	1	-	-	-	-	-	-	-	05
5.	Books stripped for Binding	-	4	-	-	-	-	-	-	-		-	-	4
6.	Books that Date Due Labels were prepared for	67	47	74	50	105	17	99	15	-	-	-	-	474
7.	Brochures Printed	-	-	-	-	-	-	-	-	-	80	-	-	80
8.	Catalogue Cards Cut	-	60	75	1	-	-	-	-	-	28	-	ı	163
9.	Catalogue Cards Written and Filed by Author/Subjects	35	78	69		68	-	-	-	-	27	-	-	257
10.	Copy Right Pages Printed	-	100	50	-	-	-	100	50	20	50	20	-	370
11.	Data Forms Printed										80	50	-	130
12.	Date Due Labels Printed		120	24	-	-	56	256	-	-	9	-	-	465
13.	Dissemination of Codex Documents	121	47	34	6	26	147	-	6	7	7	6	-	407
14.	Files Labeled	20	11	6	15	-	7	08	8	14	6	-	ı	95
15.	Issue Slips Printed	-	120	-	1	-	-	-	-	-	-	-	ı	120
16.	Loans	16	59	21	19	35	59	24	149	36	64	18	18	488
	- External						-	-		-	1	16		17
	- Internal	16	59	21	19	35	59	24	149	36	63	2	18	471
17.	Lettering of Documents	36	35	-	-	6	17	19	4		9	-	-	126
18.	Newspaper clippings	27	54	75	64	75	30	-	31	11	-	32	-	399
19.	New Standards Received	6	-	2	-	5	3	14	7	-	-	-	-	37

20.	Queries	17	24	36	30	13	11	49	23	31	36	21	10	301
	- External	6	13	22	17	8	8	9	19	20	33	18	10	183
	- Internal	11	11	14	14	5	3	40	4	11	3	3		118
21.	Shelves Labeled	48	-	-	1	1	-	1	ı	1	-	1	ı	48
22.	Standards bound	43	54	78	4	10	27	60	43	21	-	13	18	361
23.	Standards cover printed	63	33	82	4	18	30	69	43	21	-	37	18	418
24.	Standards Information Bulletin Printed	40	50	100	190	-	44	90	-	110	36	40	30	730
25.	Standards Issued Free (complementary)	2		2	1	1	-	1	ı	1	1	1	3	10
26.	Standards Printed	-	-	12	1	1	-	1	ı	1	-	1		12
27.	Standard Sold	8	2	5	1	5	08	13	6	5	16	12	3	84
28.	Standards Received from Standardization	9	-	2	21	5	-	14	7	-	-	-	-	58
	Department to be Photocopied and bound.													
29.	Standards Requested	5	218		1	2	-	38	1	2	37	2	1	305
30.	Usage of the internet facility	16	13	14	3	1	12	6	14	16	19	4	1	117
31.	Visitors	10	17	10	5	7	5	11	10	13	77	12	1	178

## Sale of Standards

The eighty four (84) standards that were sold represent a total of \$526,940.

This figure when compared to last year has demonstrated a decrease in sales figure. This was partly due to the reluctance on the part of some stakeholders to purchase standards. In the New Year more educational activities would be done to emphasise the importance of standards so that standards sales can increase.

With respect to standards received from the standardisation department for binding, the figures reflected the reduced number of national standards approved for the foregoing year.

The figures for external loans showed a sharp decline while on the other hand many more stakeholders sought the assistance from the Unit in the form of queries. The remaining activities such as newspaper clippings, new acquisitions etc form part of the routine activities of the Unit.

## 8.5 Implementing of Card System

The card system was re-introduced by the Senior Information Officer. All books and materials that were catalogued had cards written for them. Cards were written manually for four hundred and seventy eight books during this year in comparison to ninety eight in the previous year. This year's figure represent an increase of 487.7% .Those cards written were by authors and subjects specifically.

With this system in place together with automation will certainly make retrieval of information more efficient for library personnel, who in turn will be effective when dealing with stakeholders.

## 8.6 Other Activities

- □ Approximately 1,748 old draft CARICOM and ISO standards were withdrawn from GNBS collection. These documents are filed in the archival section for future reference. Some of these standards were withdrawn from ISO system while others were replaced by another standard thus, the reference number(s) had changes made to it/them, so the Guyana Standards that were adopted from ISO had to also be taken out of TSIU stock/collection.
   □ 5,431 Indian Standards were batched, labeled and placed into magazine boxes.
   □ I, 832 standards were ticked off in the various catalogues to establish the TSIU holdings for 2006.
   □ 317 Subject headings were ticked off in the Dewey Decimal
- Classification Scheme, Sears Subject Headings, and the People Places and Things as part of the cataloguing procedure.
- GNBS reference numbers were assigned to 169 ISO/IEC/GYS standards.
- ☐ Literature searches were done for the following topics
  - Lamp Ballasts
    - Liquid soap
    - Building code for disable persons
    - Foam mattresses
    - Toys and playthings
    - Standards for baby comforter and beds
    - Sampling and testing of animal feed

The Senior Information Officer trained two officers in the department on how to catalogue books and other library materials.
Documents returned were all re-shelved into their respective locations.
Requests were made for standards required by the Standards Writing officer but only a few were received due to cash flow of GNBS.
External and internal course materials had indexed prepared to make information user friendly for staff. This task was done to retrieve reports written by officers on their return from courses locally or international.
Regional and International Standards were updated.
Officers in the Division have started as a project, to assign ISBN's onto the GNBS standards, which is a requirement for all books.
TSIU manual is presently being updated.
The status of standards price list is in process. This task should be completed in the first quarter of 2007.
Officers of the Department received training on how to use the CDS/ISIS application software as part of automation procedure. This training exercise was conducted by Ms Faye Langford Adams of the Bank of Guyana.

#### 9.0 INFORMATION TECHNOLOGY

The Information Technology programme provides technical support to all programme activities of the GNBS and assists staff in carrying out their functions effectively. The network system allows staff to share files, folders and help them to communicate over the intranet and internet. The GNBS would move to update this technology to provide support to internal and external stakeholders. Information technology plays an integral part in the development of everyday business.

#### 9.1 Routine/ Daily Activities

In order for the GNBS network to function efficiently, the following activities were executed on a daily basis:

- Running the virus scan to protect the system from viruses
- Carrying out the Data backup on a daily, weekly and monthly basis as a secondary means of saving data.
- Checking Router (firewall) switch and DSL modem which ensures DSL service is running.

#### 9.2 Support Services provided to staff

On a daily basis, staff requires various kinds of assistance to execute their duties. Below are some of the services provided to staff:

- Resetting of user password
- Installing scanner drivers
- Installing printer drivers
- Downloading printer drivers from the internet.
- Sharing printers for Information Service and Registry Department
- Transferring files to CD
- Converting word file to PDF format for website
- Installing Windows new releases update from Microsoft website for 5 client computers
- Scanning computers for viruses.
- Running disk cleanup and disk defragmenter on client computers
- Adding client computers to the GNBS domain
- Renaming computers
- Uploading Microsoft windows updates
- Deleting user accounts upon request
- Sharing files for all staff over the network
- Troubleshooting computer network problems

#### 9.3 Maintenance work done on Server

Routine work was carried out on the server to ensure its efficiency. The following works were executed:

- Restarted Exchange Server service.
- Restarted DHCP server service
- Restarted DNS server service
- Ran disk defragmenter and disk cleanup
- Uploaded windows update files
- Uploaded virus scan update files
- Reset IP address on firewall
- Fixed backup software (Veritas)
- Fixed DHCP server error in event viewer.
- Fixed DNS server error in event viewer.
- Cleaned tape drive.
- Formatted tape to back-up data.
- Cleaned virus on server and upload patch files to remove virus
- Reconfigured full backup schedule
- Fixed backup software to run on schedule time.
- Disabled user accounts
- Relabeled tape for use.

#### 9.4 Repairs & Maintenance

During the year, maintenance work was carried out on client computers in various Departments to make sure all client computers on the network are working efficiently. Items replaced and reloaded were five (5) operating systems software, two (2) system boards, two (2) processors, six (6) memory. Three (3) printers were also serviced.

#### 9.5 New Equipment acquired for 2006

The GNBS received new equipment listed in Table 21. below. These were donated by CARANA under the USAID programme, as well as purchased from the income generated during the year.

Table 21.

New IT equipment received

No.	Items	Description
1	5 HP desktop computers	These computers were donated by CARANA Project.
2	2 HP Laser Jet Printers 1020 & 1 HP Laser Jet Printer 3550.	Purchased by GNBS
3	6 Stabilizers, 9 Network Surge and 5 APC Backup	Purchased by GNBS
4	3 Keyboards XTECH	Purchased by GNBS
5	4 Backup Tapes for Dell Server.	Purchased by GNBS
6	4 Flash Drives	Purchased by GNBS
7	1 desktop computer	Purchased by GNBS

### 9.6 Evaluation

The GNBS currently needs an additional server as a backup for many of the network services. Actions would be taken in the new year to acquire this server.

The new server will be used for the following services:

- Back up Domain Controller(DC)
   The server will back up the active directory and other network services that are not done by the present DC. This will include also DNS and DHCP
- Intranet Hosting

The server will act as a web server to host an internal website or Intranet. This will be used to give access to quickly needed information, especially to new employees. Administrative applications would also be developed and added.

#### SQL Server databases

The GNBS has had a plan to implement a database for the Library. Hence it would have to be hosted on a database server.

Finance and administration database applications are also on stream and will need to have a host.

As the GNBS grows, more data software applications would be hosted on this machine.

#### • Backup for user data

A hot backup of network data is needed as presently GNBS does not have any such live information to aid in continuity and in event of a failure

#### • Backup for Exchange server

In the past the GNBS has suffered from numerous mail blackouts because of the exchange server being down. We are very dependent on communications to and from our stakeholders and need to have dependable mail system.

- The GNBS needs a network printer to share over the network so that all users can have access to a printer to print.
- The network system at GNBS needs more client computers and more servers to offer better loading balance.

#### 9.7 Observation

The system boards on the computers which are not in the air conditioned rooms are very dusty and on most occasions, their parts have to be replaced. They develop most of the problems experienced throughout the year, mainly because of the temperature of the environment in which they operate. The GNBS would move to address this problem in the New Year.

#### 9.8 Recommendations

- In the new year, the GNBS would try to address the recommendations put up by the Network Administrator, as follow:
- A Printer server should be purchased as this will allow the management of all printing jobs done by staff.

- The Bureau needs a spare modem and router so that in the event there is a failure it can be immediately replaced. Presently, the GNBS has only one Dell Power Edge Server. This server is used as a file server, printer server, backup server, exchange server and internet router, not to mention that it is the only domain controller for the GNBS' network. The entire GNBS network depends solely on this machine for business continuity. If this server is to fail at any time, there is no backup server, hence the whole network system could be down. An additional server as a backup for many of the network services is needed.
- The GNBS needs to buy a Print Server which allows one to connect a USB printer directly to a network, eliminating the need to dedicate a PC to print sharing chores. Using a Print Server frees up the ""print share PC" so, there is no need to leave it on all the time. It also removes the printing bottleneck, and sets PC's free to do more useful work.
- All the standards at GNBS should be stored on CD. This will eliminate the
  amount of printing which has to be done. The files are saved as PDF files,
  so no one can make changes to the standards. The CD holds large files of
  information so most standards that GNBS has at present, will be on one or
  two CDs and this will eliminate the need to have the entire standard on
  hard copy.
- The GNBS should have an IT Department and IT room which will deal with all IT matters.
- The GNBS should work with IT programme, staff and stakeholder to assure that the IT programme can benefit within the environment of the system.
- Another staff member is needed to work in the IT Department.
- The Compaq server needs to be fixed because only one server is working and if the server at present should go down the whole network system will be down. There is no backup server at this moment.

#### 10.0 ADMINISTRATION AND FINANCE

The Administration and Finance Department, with eighteen (18) non-technical staff members, is responsible for the overall Administrative and Finance support of the Guyana National Bureau of Standards. The objective of the Department is to render effective and efficient support to the six (6) Technical Departments of the GNBS in the most cost-effective and timely manner. The Department also plays a key role in liaising with other Ministries on financial matters pertaining to the operation of the GNBS.

### 10.1 Staff Training

#### 10.1.1 Overseas Training

For the year, the GNBS participated in a number of overseas training as outlined hereunder:

- 10.1.1.1 Ms. Candelle Walcott-Bostwick, Head, Laboratory Services Department attended the training course "Assessment of laboratory Competence" in Atlanta, USA from May 01 05, 2006. The objective of the course was to examine ISO/IEC 17025 requirement as well as the process of accreditation and assessment of a laboratory's competence. Additionally, the course afforded the participants the opportunity to evaluate laboratory documents and quality manuals, provide knowledge needed to evaluate a laboratory quality audit programme as required by ISO/IEC 17025 and to initiate the sequence of activities involved in scheduling, planning, conducting and reporting on assessment.
- 10.1.1.2 Ms. Shune Vickerie, Head, Standardisation Department attended the United States Department of Agriculture (USDA) Technical Seminar on "Enhancing Participation in Codex Alimentarius: Latin America and the Caribbean" on June 01 03, 2006 at the Sheraton Barra Hotel in Rio De Janeiro, Brazil. The objective of the Technical Seminar was to identify mechanism by which the Coordinating Committee of Latin America (CCLAC) can effectively participate in Codex, and to prepare for the Twenty-Ninth Session of the Codex Alimentarius Commission in Geneva, Switzerland scheduled for July 03 07, 2006.
- 10.1.1.3 Ms. Charissa Wilson, Technical Officer within the Standards Development Department, attended a Sub-regional training course in Codex Alimentarius during the period June 06 09, 2006 in St. John's Antigua.

The course which was sponsored by the Food and Agriculture Organisation of the United Nations (FAO), in collaboration with the Barbados National Standards Institute (BSNI), and entitled "Enhancing participation in Codex Alimentarius" focused on the basic understanding of national codex activities/functions and developed an action plan for the country's Codex activities.

- 10.1.1.4 Mr. Edward Melville and Mr. Vishnu Matbadal, Senior Inspector and Inspector I, respectively, attended an Industrial Temperature Seminar and product training and an Electrical Equipment training course at Hart Scientific Company. The training which was conducted at the Company headquarters in Utah, U.S.A was held during the period July 10 18, 2006. The objective of the training was to provide the officers with the knowledge, skill and understanding in the operation, calibration and maintenance of Hart Scientific Temperature calibration equipment with ranges 40 150°C and 40 300°C.
- 10.1.1.5 Ms. Evadnie Enniss-Fields, Head, Information Services, attended a workshop on Tobacco Packaging and Labeling: FCTC Implementation and Beyond". The workshop which was held at the Pan American Health Organization headquarters in Washington on July 11, 2006, aimed at enabling the participants with detail guidance on the process of implementing the packaging measures and other labeling issues

#### 10.1.2 **Local Training**

- 10.1.2.1 Ms. Evadnie Enniss-Fields, Head Information Services, attended a workshop which formed an integral part of the Public Management Modernisation Programme (PMMP) on February 17, 2006 at the Public Service Ministry, Training Division. The objective of the workshop was to provide participants with background information on Logical Framework Methodology (Log Frames), their purpose, benefits to the planning process and key element which would be included in the preparation of the framework. The area targeted was accountability and efficiency improvement.
- 10.1.2.2 Mr. Edward Melville, Senior Inspector, attached to the Laboratory Services and Ms. Rodlyn Grant, Technical Officer of the Conformity Assessment Department attended a one-day workshop on Measurement Uncertainty and Measurement System Analysis at the Government Analyst/Food and Drug Department, during the period February 7 9, 2006 at its Kingston location. The project, funded by the Guyana Training and Investment Support (GTIS), was organized to identify and discuss the importance of implementing the Quality System at Food and Drug Department.

- 10.1.2.3 Mr. Edward Melville, Snr. Inspector and Vishnu Matbadal, Inspector II of the Laboratory Services Department attended a four (4) day training entitled "Increase capacity for Laboratory Analysis" organized by the Environmental Protection Agency during the period March 20 24, 2006. The training exposed participants to several principles of ISO 17025 and the use of Quality Manual as a requirement for ISO 17025.
- 10.1.2.4 Four Officers from the Bureau, namely, Osei Drakes, Inspector, E. Patram, R. Grant and R. Blair, also participated in the training course, "Laboratory Management, GYS 170:2003 Standard "General requirements for the operation of a laboratory." The course which was held at the Tower Hotel on May 10 -12 and continued on May 17 19, 2006 provide participants with the knowledge in understanding the importance and benefits of implementing a quality system, understanding the requirements of GYS 170:2003 standard, developing quality policies and associated procedures for quality systems, implementing the laboratory management system and outlining procedures for ensuring that the laboratory is providing accurate, reliable and consistent test results.
- 10.1.2.5 Ms. Charmain Mars-Niles, Head, Administration and Finance, attended a pension seminar facilitated by the Office of the Commissioner of Insurance on May 22, 2006 in the Conference Room of Demerara Mutual Life Assurance Society Ltd. The objective of the seminar was to identify problems pension plan managers are facing in complying with the requirements for registration of the pension plan.
- 10.1.2.6 Ms. Evadnie Enniss-Fields attended a Seminar on "How to export to the European Union" on May 24, 2006 in the Conference Room of the European Union Delegation of Guyana. The objective of the seminar was to promote relevant information required by developing country exporters interested in supplying the EU markets.
- 10.1.2.7 Ms. Ramrattie Karan and Rodlyn Grant, Technical Officers of the Conformity Assessment Department, attended a two (2) day training workshop on Environment Impact Assessment during the period June 22 23, 2006 at the Ocean View International Hotel. The main objective of this training was to promote general awareness of the EIA process and provide a forum for interagency cooperation in the review and redesignating of environmental permit with a view to increasing effectiveness in mitigating negative environment consequences.

10.1.2.8 Dr. Chatterpaul Ramcharran, Director, Candelle Walcott- Bostwick, Head Conformity Assessment Department, Rudolph Blair, Rodlyn Grant, Elton Patram and Ramrattie Karan, Technical Officers of the Conformity Assessment Department, participated in a two (2) day training programme entitled Essential Management Systems (EMS)"ISO 14001:2004 Standards" during the period August 20-21, 2006 at the Foreign Service Institute, Ministry of Foreign Affairs.

The training programme, organised and funded by the UNDP, was conducted by Ms. Linda Lawrence of the Quality Management Institute (QMI/ESA), Canadian Standards Association Learning Centre, and use of project Capacity building for the Management of Natural Resources. The objective was to provide participants with a comprehensive understanding of the ISO 14001:2004 standard and its implementation. Further, the participants were exposed to Essential Management Service System (EMS), Lead Auditor Training Programme ISO 14001:2004 during the period August 22 -26, 2006 at the same venue. The objectives of the training were to provide participants with in-depth understanding of the ISO 14001:2004 standards and the ISO 19011 standards and knowledge of auditing principles, management of an audit programme, typical audit activities and the competence of EMS auditors

- 10.1.2.9 The Director, the Head of Standards Development Department (ag), the Head of Information Services and the staff of the Conformity Assessment Department participated in a National Conference entitled, "Competing in the Caricom Single Market and Economy through Standardisation." The conference which was held on October 11, 2006 at Hotel Tower was designed to build awareness on the importance of standardization and conformity assessment to SMEs. The event was coordinated by the Head of Standardization Department (Ag.)
- 10.1.2.10 Mr. Khemraj Bhoowan, Technical Assistant within the Information Services Department, attended a training course on "Product Labelling and Packaging" from October 21-28, 2006. The training which was facilitated by Guyana Manufacturing and Services Association Limited, aimed to provide the participants with the knowledge at improving the presentation and information content of products originating from SME in the agro-processing sub-sector in Guyana. The training was also aimed at providing a customized software package on the use of the software and advice on proper packaging techniques.

#### 10.1.3 **In House Training**

- 10.1.3.1 As the GNBS continued to improve the skills of it human resources, a series of in-house training sessions, aimed at staff development, thus enabling them to acquire the necessary knowledge to achieve the objectives of the Bureau, were conducted during the year of review. As a result, the first in-house training commenced on Friday, January 20, 2006 with the Director declaring the session open and urging staff to participate in the process. Ms. Evadnie Enniss-Fields, Head, Information Services and Mr. Ansel Wilson, Technical Assistant presented on the topic "How to Think Metric".
- 10.1.3.2 Four (4) training sessions on GNBS Quality Management Systems were also conducted by Anthony Ross, former Head, Conformity Assessment Department. The objectives of the sessions were to sensitize members of staff on the Quality Management Systems (QMS) which is expected to be introduced within the GNBS. Additionally, in-house workshops were completed during the period under review.
- 10.1.3.3 Mr. Robindranauth Bridgemongal, Technical Officer II of the Conformity Assessment Department, conducted an in-house training session on the Standard GYS 50: "Specification for gold articles" on May 03, 2006. The session was held in the training room of the GNBS and attended by Rudolph Blair, Rodlyn Grant, Elton Patram and Abidin Mohamed, all technical officers of the Conformity Assessment Department
- 10.1.3.4 Roxan Bourne, Senior Information Officer, Debra Gill, Assistant Information Officer and Indira Persaud, Records Clerk of the Information Unit were involved in a two-day computerized Integrated Scientific Information System training during the period August 16/17, 2006. The purpose of the training which was designed mainly for the staff involved in the use of Library and Documentation Centre was to facilitate the development of the skills and knowledge for the staff of the unit.
- 10.1.3.5 Edward Melville, Senior Inspector and Vishnu Matdadal, Inspector 11 of the Laboratory Services Department held a one day training session in the training room of the Bureau on September 08, 2006. The training was attended by the staff of the Laboratory Department and focused on Temperature Metrology.
- 10.1.3.6 Ms. Candelle Walcott-Bostwick, Head, Conformity Assessment Department conducted in-house awareness sessions which commenced on October 20, 2006 on GNBS ISO 9001 implementation programme. The sessions were held every Friday at 14:15h in the Conference Room and concluded on December 15, 2006.
  - The objectives of the sessions were to familiarize staff and encourage them to participate in the implementation of the Bureau Management Systems to attain accreditation by December 2007.

- 10.1.3.7 Ms. Simone Beckles, Assistant Director of the Guyana Revenue Authority, conducted a half day training on Value Added Tax (VAT) on November 03, 2006. The training organized in collaboration with the Guyana Revenue Authority and the GNBS was conducted in the Bureau's Conference Room and aimed at sensitizing staff on the objective and benefits of the tax.
- 10.1.3.8 Mr. Tweedsmuir Mitchell, Consultant from the Jamaica Bureau of Standards, conducted a two-weeks training programme on the calibration of bulk meters, tank wagon compartments, storage tanks and the checking of net contents of prepackaged goods at retail outlets and manufacturing entities. The training which commenced on November 28 and concluded on December 09, 2006 was held in the training room of the GNBS while practical sessions were conducted at petroleum retailer's outlets

#### 10.1.4 Overseas Conference/meetings

- 10.1.4.1 Mr. Elton Patram, Technical Officer, formally of the Standardisation Department attended the 3<sup>rd</sup> Technical Management Committee (CROSQ) meeting during the period January 16 17, 2006 in Barbados. The objective of the meeting was to discuss a range of Regional standards matters, including a review of existing Regional standards and standards submitted to COTED for approval, standards presently under consideration by CROSQ, adoption of certain strategic international standards and new standards for consideration by CROSQ.
- 10.1.4.2 Mr. Anthony Ross, former Head of the Conformity Assessment Department, participated in a three (3) day meeting in Barbados during the period January 18 20, 2006. His participation at the meeting was to finalise arrangements for the introduction and implementation of CSME.
- 10.1.4.3 Mr. Anthony Ross, Head, Conformity Assessment Department attended a two (2) day special meeting of the International Organization for Standards (ISO) Technical Committee (TC) 207 during the period March 02 04, 2006 at the Paria Suite, San Fernando, Trinidad and Tobago. The objective of the meeting was to develop a new ISO Standard for small and medium size enterprises, (SME) by the merging of the requirement of ISO 9001:2000 Quality Management Systems Standard and ISO 14001:2004 Environmental Management Systems Standard.
- 10.1.4.4 Dr. Chatterpaul Ramcharran, Executive Director, participated in the Eighth Meeting of the Council of the Caricom Regional Organization for Standards and Quality (CROSQ) on March 09 10, 2006 in Trinidad and Tobago. Participants at the meeting focused on a wide range of regional standards matters and reviewed existing Caricom Standards submitted to COTED for approval. The meeting also discussed a number of administrative and legal issues for the organisation of CROSQ.

- 10.1.4.5 Ms. Shune' Vickerie, acting Head of the Standardization Department, participated in the fourth meeting of the Regional Organization of Standards and Quality, Technical Management Committee during the period April 25 –26, 2006 in Antigua and Barbuda. The objective of the meeting was to review issues relative to standards.
- 10.1.4.6 Dr. Chatterpaul Ramcharran, Executive Director, attended the 9<sup>th</sup> Council meeting, workshop and seminar of the Caricom Regional Organization for Standards and Quality (CROSQ) during the period July 11 14, 2006 in St. Lucia.
- 10.1.4.7 Ms. Shune' Vickerie, Head Standardization Department, attended the 6<sup>th</sup> CROSQ Technical Management Committee meeting from October 25-26, 2006 in Barbados.

The objectives of Guyana's representation were to participate in discussions relating to standardisation and standards development regionally, to propose Guyana gold standard to be developed as a regional standard, and to report on the status of development of five sugar standards assigned to Guyana as the Regional Secretariat.

10.1.4.8 Dr. Chatterpaul Ramcharran, Executive Director, participated in the Sixth International Conference/Workshop on Quality in Havana, Cuba during the period November 28-30, 2006. The Conference hosted by the Cuban National Bureau of Standards (NC) and other National Regional and International Quality Organization was geared at sensitizing participants on a variety of Management Systems, Quality and Security, Tourism and Quality, Products Certification, Quality and Food Safety, Environment Management and Occupational Health and Safety Management.

#### 10.2 Representative at meetings/workshops, etc

- 10.2.1 Ms. Rodlyn Grant, Technical Officer, attended a Symposium hosted by the School of Earth and Environmental Scheme during the celebration of World Environment Day on June 05, 2006 at the Educational Lecture Theatre, University of Guyana.
- 10.2.2 Mr. Elton Patram, Technical Officer of the Conformity Assessment Department, participated in a National Climate Change (NCC) Consultation on June 13, 2006 at the Sea Breeze Hotel, Georgetown. The Consultation organised by the United Nations Framework Convention on Climate Change (UNFCC), reviewed the Initial National Communication, with the aim of producing the Second National Communication.

- 10.2.3 Ms. Candelle Bostwick, Head of Conformity Assessment, attended and rendered remarks on behalf of the GNBS at the opening ceremony of the ISO 15189 Laboratory Accreditation workshop. The programme which was facilitated by the Department of Laboratory Services, Ministry of Health was conducted from October 09-12, 2006 at the CIDA building, Main Street, Georgetown.
- 10.2.4 Mr. Rudolph Blair, Technical Officer 1, coordinated a forum on "Strategic Preparation for participation in a competitive Environment" on July 05, 2006 at the Tower Hotel. The objective of the forum was to provide representatives with the necessary information on the following:
  - What Manufacturers need to know about CSME
  - Conformity Assessment infrastructure in Guyana
  - Challenges experienced by small businesses
  - Regulations available
  - Benefits of implementing the ISO 9001 system.

The forum was represented by Caricom Secretariat, Guyana Small Business Association, the Government Analyst Food and Drug Department and Edward Beharry and Company Ltd.

The Bureau was represented by Mr. R. Blair, Mr. Abidin Mohamed, Mr. Elton Patram, Ms. R. Grant and Ms. R. Karan, all Technical Officers of the Conformity Assessment Department. Additionally, Ms. E. Fields, Head, Information Services and Mr. S. Rai also attended the forum.

- 10.2.5 Ms. Shune Vickerie, Head of Standard Development Department, represented the Bureau at a meeting organized by the Council for Technical and Vocational Education and Training (TVET) on August 21, 2006 at the Board Room of the Ministry of Education's TVET Secretariat. The purpose of the meeting was to discuss the Director's Report and other significant correspondences presented to the Council for discussion/approval.
- 10.2.6 Ms. Charissa Wilson, Technical Officer of the Standardisation Department, represented the Director at a meeting organized by the University of Guyana, Faculty of Agriculture and Forestry, on August 25, 2006. The purpose of the meeting was to facilitate the process of developing standards for mushrooms and the certification of the product.
- 10.2.7 As the Government continued to work closely with the Private sector to implement a National Competitiveness Strategy (NCS) programme to offer expansion, develop jobs, exports etc., C. Niles, Head of Administration and Finance and J. Fanfair, Administrative Officer were identified as members of a selective panel to conduct the following interviews to identify suitable candidates for the subsequent positions:

- 1. Programme Management Officer
- 2. Procurement Officer
- 3. Finance and Accounts Officer
- 4. Administrative Assistant
- 5. Office Assistant/ Driver

The interviews were conducted over a period of five days at the Ministry of Tourism, Industry and Commerce

- 10.2.8 Mr. Shailendra Rai, Chief Inspector of the Inspectorate Department, represented the Bureau at the National Tobacco Control Council meeting on September 20, 2006 in the Board Room of the Ministry of Health. The purpose of the meeting was to discuss significant correspondences for the attention of the Council.
- 10.2.9 Ms. Candelle Walcott-Bostwick, Head, Conformity Assessment Department, conducted a training programme at the St Joseph's Mercy Hospital during the period September 20-21, 2006.

The objective of the training was to introduce good Laboratory while outlining the benefits of implementing the System. The exposed participants to an in depth examination of Laboratory and Technical requirements.

Management Management

- 10.2.10 Ms. Marcia Austin, Accountant, represented the Bureau at a budget meeting at the Ministry of Finance on September 28, 2006. The purpose of the meeting was to justify the submission of the capital expenditure submitted in the 2007 budget.
- 10.2.11 Ms. Candelle Walcott-Bostwick, Head, Conformity Assessment Department, represented the Bureau at the convening of the second roundtable strategic plan workshop and the coordinating mechanisms for SMEs from October 24-25 at the Caricom Headquarters. The workshop which was facilitated by Caricom Secretariat was organized to complete the work begun at the first roundtable within the context of the more recent economic and social development in the Regional and International arena, and in particular, to refine and finalize the five year strategic plan for the development of SMEs sector in Guyana.
- 10.2.12 Ms. Candelle Walcott-Bostwick conducted a presentation on behalf of CROSQ/GNBS on the "importance of standards in export competitiveness" at the Private Sector consultation for Guyana held on October 26 at Hotel Tower. The consultation was facilitated by Guyana Manufacturers Association in collaboration with CSME.

- 10.2.13 Dr. Chatterpaul Ramcharran, Ms. Shune' Vickerie, Ms. Candelle Walcott-Bostwick and Mr. Khemraj Bhoowan attended a focus group meeting on October 09, 2006 in the Foreign Service Institute Conference Room of the Ministry of Foreign Affairs. The objective of the meeting was to develop a Regional Standard and Quality Infrastructure.
- 10.2.14 Ms. Evadine Fields, Head of the Information Department represented the Bureau at the launching Ceremony of Tourism Awareness Month on November 01, 2006 at the Umana Yana.
- 10.2.15 Ms. Roxan Bourne, Senior Information Officer of the Information Unit represented the Bureau at a one day symposium and postal exhibition on November 10, 2006, at the George Walcott Lecture Theatre (GWTL), Turkeyen Campus. The symposium and exhibition which was organized in collaboration with the University of Guyana and UNESCO in observance of World Day of Science for Peace and Development 2006, offered participants an opportunity to discuss topics and identified faculty and science-based operators with the aim of forming a collaborative project.
- 10.2.16 Dr. Chatterpaul Ramcharran, Executive Director, and Evadine Fields, Head, Information Department, represented the Bureau at the launching of the Component 2 -Improving Accountability and Efficiency in Semi Autonomous Agencies and Statutory Bodies (PMMP) at the Georgetown Club on November 09, 2006. The induction programme funded by the IDB Public Management Modernization Programme principle objective is geared at improving Public Management efficiency, transparency and Accountability in the Public Service. Further, Ms. Evadine Fields attended the Component 3 Institution and Governance Assessment and Consensus Building Event on the Framework for Modernizing the Public Sector on November 20, 2006 at the Meridian Pegasus.
- 10.2.17 Ms. Candelle Walcott-Bostwick, Head of Conformity Assessment, attended and rendered remarks on behalf of the GNBS at the opening ceremony of the ISO 15189 Laboratory Accreditation workshop. The programme which was facilitated by the Department of Laboratory Services, Ministry of Health was conducted from October 09-12, 2006 at the CIDA building, Main Street, Georgetown.

#### 10.3 **Personnel Matters**

- 10.3.1 Ms. Candelle Walcott-Bostwick, Technical Officer and Coordinator of the Laboratory Services Department was appointed to act Head of the Conformity Assessment Department with effect from January 02, 2006.
- 10.3.2 Ms. Indira Persaud, Records Clerk/Typist Registry Department was reassigned to the Information Services Unit with effect from January 09, 2006.

- 10.3.3 During the year under review, a dress code was developed and a table of offences and penalties revised and circulated to staff members. Members of staff were also issued with three pairs of uniforms. The updating of the Administrative Systems Manual and policies was also completed.
- 10.3.4 In view of the various complaints received in relation to the sweeping of the office, Management, at its weekly meeting, unanimously agree to change the hours of work of the Maid/cleaners effective from February 01, 2006. The following hours were implemented:

	Previous	Present
Mondays to Thursdays -	08:00 – 16:30h	07:30 - 16:00h
Fridays -	08:00 – 15:30h	07:30 – 15:00h

#### 10.3.5 Confirmation

During the year, the following persons were confirmed in their positions:

Candell Walcott-Bostwick Head Conformity Assessment Department

Nerundeen Abzal Inspector, Region #6

Kenrick Singh Inspector Assistant

#### 10.3.6 Transfers

Ms. Candelle Walcott-Bostwick, Head of Laboratory Services Department, was transferred as Head of Conformity Assessment Department with effect from May 08, 2006. In addition, Mr. Elton Patram and Mr. Abidin Mohamed, both Technical Officers from the Standards Development Department, were transferred to the Conformity Assessment Department effective May 09, 2006.

Consequent upon the transfer of Ms. Candelle Walcott-Bostwick to Head, Conformity Assessment Department, Mr. Shailendra Rai, Chief Inspector, was assigned to coordinate the Laboratory Services Department. This took effect from May 08, 2006.

#### 10.3.7 **Staff Award**

In observance of National Quality Week and International World Standards Day, the following employees were awarded in appreciation for their long and outstanding contribution to the development of the Bureau at a simple ceremony in October:

Ms. Marcia Austin	10 yrs
Ms. Karen Primo	10 yrs
Ms. Charmain Niles	5 yrs
Ms. Ramrattie Karan	5 yrs
Mr. Bramanand Ramroop	5 yrs
Ms. Roxan Bourne	5 yrs
Ms. Allison Haynes	5 yrs

The ceremony which was held in the Bureau's Training Room was attended by Mr. Melvyn Sankies, Chairman, National Standards Council, other Council Members and members of staff. The Chairman, in congratulating the awardees, urged other members of staff to be dedicated and concentrate their efforts in the development of the Bureau.

#### 10.3.8 Resignation

During the year under review, the Bureau suffered the loss of the following employees through resignations:

Anthony Ross	Head,	Conformity	Assessment	May 05, 2006
Robindranauth Bridgemongal	Departm Technica	ent al Officer 11		May 08, 2006
Charissa Wilson	Technic	al Officer		September 04, 2006
TracyAnn Seaforth	Assistan	t Public Relatio	ns Officer	November 18, 2006

#### 10.3.9 Recruitment

In view of the recent resignation of Charissa Wilson, Technical Officer of the Standards Development Department, three applicants were interviewed to fill the vacant position. Ms. Avodele Hoppie was identified as the most suitable candidate for the position and assumed duty on October 02, 2006.

#### 10.3.10 Human Resource Data Base

As the Administrative Department seeks to improve its records system, a Human Resources Data base programme was developed and installed on the computer of the Administrative Officer. The objective of the programme is to aid in the preparation of accurate Human Resources statistics.

#### 10.3.11 **Leave**

During the year in review employees proceed on their annual leave as scheduled.

#### 10.4 **Registry**

During the year in review, one thousand three hundred and forty seven (1,347) documents were typed and nine hundred and seventy eight (978) documents were filed. Further, three thousand nine hundred and eight seven (3,987) sheets of paper were used during the typing process.

### 10.5 **Rendering Administrative Support**

#### **Meetings**

During the year in review, seventy (70) Technical Committees, Sub-committees, Groups, Consultation, Press Briefing and National Standards Council meetings were held.

At the request of the Coordinator, Standards Development Department, support was rendered by arranging for the National Conference entitled "Competing in the Caricom Single Market Economy (CSME)" on October 11, 2006 at the Hotel Tower.

#### 10.6 **Maintenance**

#### 10.6.1 **Vehicle Maintenance**

General servicing was done to the Bureau's fleet of vehicles as scheduled during the year in review. In addition, six tyres were purchased.

#### 10.6.2 **Equipment Maintenance**

During the period covered by the report, the following equipment were repaired/serviced:

Air conditioning Unit

- One (1) 30 kg Electronic Balance
- Hot Box Oven
- Hp digital camera (assessed)
- Cannon projector
- One (1) computer power supply unit was purchased and installed in one computer assigned to the Registry Department.
- One Laser Jet printer attached to the Director's office
- Hp 4001 Printer
- Four (4) computers
- Air conditioning unit in the Reference Mass Laboratory
- Drum Unit on the photocopying machine was cleaned.

#### 10.6.3 **Building Maintenance**

Nine (9) fluorescent lamps and one (1) ballast were replaced in the building during the year in review. Further, one (1) grilled door was installed at the Eastern door of the Information Unit and one (1) at the Western door of the Mass Laboratory. Six (6) padlocks were also purchased to reinforce the grilled doors in the following areas:

- Information Unit
- Mass Laboratory
- Kitchen

As the Bureau continues to improve working conditions for staff and services to stakeholders, the wooden floor in the Conference Room, Receptionist area, office of the Head Administration and Finance, Director's Office, Standardization Department and the Administrative Officer Office were replaced with concrete during the year. Further, the Receptionist area was recarpeted and a new Receptionist Console purchased to enhance the area. A cashier cage was constructed at the outer section of the Accounts Department to prevent entry of the public while conducting official business.

Two septic tanks were cleared by Cevon Waste Management and repairs were effected on the garage which housed the Bureau's vehicles.

Nine zinc sheets and runner boards were replaced on the roof of the building.

#### 10.7 FINANCE

The GNBS operates two accounts:

- Government Subvention Account (#688-109-8)
- Other Income Account (#688-746-7)

#### 10.7.1 **Subvention**

Government Subvention received for the period January to December, 2006 totalled \$69.3M.

Table 22. shows the nine (9) major expenses for the year 23006 financed by Government Subvention.

Table 22 Major Expenses

Chart of a/c	Line Item	Amount
101-106	Wages & Salaries	46,308
101-106	5% Salary Increase for 2006	2,492
201-205	Overhead Expenditure	13,709
121-124	Equipment & Supplies	238
131	Fuel & Lubricants	2,729
141-143	Rental & Maintenance of Building	30
161-165	Transport, Travel & Postage	515
171-173	Utility Charges	1,391
181-184	Other Goods & Services	1,473
191-194	Other Operating Charges	415
	Total	69,300

A budget of \$84.8M was submitted to the Ministry of Finance. The organization received a budget of \$69.3M which was broken down as, \$60M for salaries, 2.5M for retroactive salary (5%) and \$6.8M as other charges.

#### 10.7.2 **OTHER INCOME**

Other Income received for the period January to December 2006 totalled 23.710M which was utilized to partly offset operational expenses during the year due to the unavailability of subvention funds (budget cut).

Table 23 shows Income generated and refunds for 2006.

Table 23
Income Generated

Revenue Centres	Amount
Import Monitoring Fees	6,732,500
Verification of Devices	11,196,617
Sale of Publications	596,620
Calibration of Electric Meters	505,400
Calibration of Petrol Pumps	655,000
Rice Testing & Lab Fees	1,848,500
Training Programmes	969,000
Donations	194,000
Pension Refunds etc.	1,048,286
Total	23,745,923

The percentage of Income generated by the main revenue centres is illustrated in Figure 10.

Figure 10
Income Generated by Revenue Centres

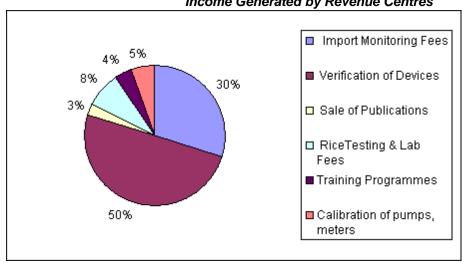


Table 24. shows expenses incurred/offset from Income generated.

Table 24. Expenses incurred

Expenses	Amount
Goods and Services	7,263,211
Travel Expenses & Subsistence	2,980,855
Employment Cost	429,400
Public Utility & Fuel Charges	4,039,334
Maintenance of Building & Equipment	2,930,467
Rental of Building	270,000
Maintenance of Vehicle	1,036,906
Training	2,081,864
Refund (Pension Contribution etc)	549,570
Employer Pension contribution	2,128,884
TOTAL	23,710,491

The financial year 2006 has not been without its challenges for the GNBS. The annual budget (Government Subvention) had been cut by 15.5 million dollars which had forced the GNBS to almost exhaust it's Other Income received during the year. It also adversely affected activities planned to be carried out by the Admin and Finance Department, as well as the Technical Work Programmes.

Table 25. shows the Income generated for 2006 and a projection for 2007.

Figure 25
Revenue Projection for 2007

Revenue Centres	2006 (Actual)	2007 (Projections)
Import Monitoring Fees	6,732,500	7,405,750
Verification of Devices	11,196,617	12,316,279
Sale of Publications	596,620	656,282
Rice Testing & Lab Fees	1,848,500	2,033,350
Training Programmes	969,000	1,065,900
Calibration of pumps, meters	1,160,400	1,276,440
Donations	194,000	213,400
TOTAL	22,697,637	24,967,401

Table 26. shows Government Subvention and Capital releases received over the period 2001-2006, and revenue generated over the said period.

Table 26.
Government contribution and Revenue received

<b>Revenue Centres</b>	2001	2002	2003	2004	2005	2006
Subvention	55,723	59,119	58,041	62,947	66,807	69,300
Capital	2,900	-	20,000	5,000	12,000	10,000
Revenue	8,000	7,914	12,500	24,331	19,024	23,746
TOTAL	66,713	67,033	90,541	92,278	97,831	103,046

Table 27. shows the amount of Income Tax remitted on behalf of staff for the year 2006. Also Employee and Employers contribution for Pension, Health Insurance (Medical Scheme) and N.I.S. contributions remitted for the year 2006, on behalf of staff.

Table 27. Employer & Employee remittance for 2006

Headings	Employee	Employer
Health Insurance	295,286	388,868
National Insurance Scheme	2,027,863	3,054,826
Pension	1,952,581	1,952,581
PAYE	9,546,353	
TOTAL	13,822,083	5,396,275

Note: The Bureau remitted a total of 5.3M on behalf of staff for Medical Scheme, Pension and National Insurance. The Medical & N.I.S. contributions are subvention expenses (budgeted for with the salaries request, while the Pension contribution is being offset from Revenue received.

#### 10.7.3 **Capital**

The Capital Estimate approved by the Ministry of Finance was \$12M for 2006.

Approval was granted for the purchase of capital items as indicated hereunder:

Acid Digestion Fume Hood Portable Electronic Balance Water meter Test Bench Electrical & Electronic Testing Equipment Computers

However, due to the increased cost of equipment, only the Acid Digestion Fume Hood, Portable Electronic Balance and Water Meter Test Bench will be acquired.

#### 10.7.4 **Procurement**

The following equipment were purchased during the year:

- 2 Printers
- 3 Key boards
- 1 Air conditioning unit
- 1 HP color Laser Jet 3550 printer (Director's Office)
- 12 Fans
- 2 Water dispensers (Regions # 2 & 6)
- 2 Fax machine
- 3 Filing cabinet
- 1 Office cubicle
- 1 Telephone intercom
- 1 Writing desk
- 2 Semi Executive chairs

Further, five computers were acquired through the GTIS/CARANA Project and distributed to the following departments:

- 1. Head Conformity Department
- 2. Conformity Assessment Department
- 3. Administrative and Finance Department
- 4. Information Unit
- 5. Standards Development

#### 10.7.5 **Inventory Monitoring**

The monitoring of equipment was done on a monthly basis during the year in review.

#### 10.7.6 Overseas payments/transfer

Transfer for the sum of US\$1,560 was made in favor of Scientific Supplies and Co. for the purchase of three electronic balances. These balances were approved under the capital budget for 2006. Further, the sum of US\$47,483 was transferred to Western Scientific to facilitate the purchase of the water meter test bench and the Fume Hood. Due to the further increase for the item, the company has agreed to facilitate credit of 3.2 million which must be settled by December 2007.

#### 10.7.7 **Audit 2003**

The Audit for the year 2003 has been completed. The report on the findings and final Financial Statement will be submitted as soon as the review is completed.

#### 11.0 PROJECTS

The GNBS is participating in a number of Projects which started in 2006 in order to secure funding for human resource development, equipment acquirement, building capacity of the Institution, and enhancing the promotion of standardization and quality systems so that it can provide an efficient and effective service to its stakeholders, and thus, achieve its mission and vision. The Projects fall into the areas of standardisation, Conformity Assessment and Metrology (Legal and Scientific), the three pillars required to support local, regional and international trade. Details of the Projects are outlined below.

- 11.1 Strengthening Market Access of Opportunities for Small and Medium Sized Enterprises.
- 11.1.1 The Inter-American Development Bank (CDB), as the administration of the Multilateral Investment Fund (MIF), has signed a non-reimbursable Technical Cooperation Agreement entitled, "Strengthening Market Access Opportunities for Small and Medium sized enterprises (SMEs) in the Caribbean" (ATN/ME 8991-RG) on June 01, 2005 with the Caribbean Regional Organisation for Standards and Quality (CROSQ) in its capacity as Executing Agency for the disbursement of resources over four years, to benefit Guyana, with the objective of promoting the competitiveness and exports of SMEs in Caricom.

The goal of the project is to strengthen the competitiveness of recipient SMEs by getting them involved in industry, country and region wide standardisation efforts to facilitate trade in goods and services and promote Regional, Hemispheric and Global integration. Its purpose is to build on the existing infrastructure of Regional Standardisation and develop a model for technical standard setting, demonstrating to Government and the private sector its strategic importance for trade facilitation and, hence, the need to ensure its sustainability through a steady demand for standards development with an increasingly large share of co financing finished by stakeholders. The project will be achieved through four components:

- (a) Component 1 Awareness building;
- (b) Component 2 Development of standards and conformity

**Assessment Guidelines** 

- (c) Component 3 Training; and
- (d) Component 4 Development of a regional Information System.

- 11.1.2 In executing component 1 Awareness building, a national conference entitled, "competing in the Caribbean Single Market and Economy (CSME) through standardization" was held on Wednesday, October 12, 2006 at 09:00h in the Rupununi Room of the Hotel Tower. The purpose of this conference was to sensitise one hundred and fifty (150) stakeholders (representatives from SMEs, private and public sectors) on:
  - (a) The importance of their participation in national, regional and international standardization activities;
  - (b) Benefits of implementation of standards and conformity assessment mechanisms within their business(es); and
  - (c) The project "ATN/ME 8991-RG Strengthening Market Access Opportunities for SMEs in the Caribbean".

Out of one hundred and fifty (150) participants invited, thirty-five (35) stakeholders attended. Brief remarks were delivered by Dr. Chatterpaul Ramcharran (Executive Director, GNBS) and the Honoutable Manniram Prashad (Minister, Ministry of Tourism, Industry and Commerce). Presentations were delivered by Ms. Deborah Nurse, Project Manager CROSQ/IDB-MIF Project – "Overview of the IDB/MIF Project, "Promoting SME Competitiveness in the Caribbean through Technical Standards", Ms. Candelle Walcott-Bostwick, Head, conformity Assessment, GNBS- "Benefits of the implementation of standards, Technical Regulations and conformity Assessment Mechanisms to enhance SMEs Competitiveness", Ms. Sharon Alexander, Industrial Development Analyst, Ministry of Tourism, Industry and Commerce – "Importance of the Small Business Act" and the National Competitiveness Strategy to SMEs; and Mr. Patrick Zephyr, President, "Challenges encountered by SMEs in competing with in the CSME".

The following comments/recommendations/constructive criticisms about the conference were highlighted by the participants:

- (a) Brochures outlining a list of standards formulated for goods and services, and the services offered by the GNBS for SMEs should be disseminated.
- (b) Adequate time management of presenters. A copy of their presentations should be disseminated to participants during or at the end of the conference for perusal. It was agreed that presentations should not be too lengthy and consist of technical information. The information presented must be implementable within SMEs. They requested the use of relevant examples to effectively illustrate the presenter's points. There should be adequate interactive discussions between the presenters and participants, and hands-on exercises on matters discussed.
- (c) SMEs should be periodically sensitised on the current standardization activities occurring nationally, regionally and internationally.

- (d) the conference programme was to comprehensive, with extensive presentations running one after the other. This led to the loss of one's concentration/focus.
- 11.1.3 Eighty percent (80%) of the objectives of the conference were achieved. Attendees were sensitized on the importance of their active participation in standards development activities; and the importance of implementation of standards and conformity assessment mechanisms within their business. The GNBS was disappointed with the poor attendance and participation of SMEs at this conference. However, the GNBS considered the recommendations highlighted and disseminated the presentations which were conducted and worked closely with SMEs in the implementation of standards and conformity assessment mechanisms in order to access regional and international markets.
- 11.1.4 In executing component 2 Development of standards and conformity assessment guidelines, a focus Group meeting was held on Monday, October 29, 2006 at 09:00h in the Foreign Trade and International Cooperation Conference Room. Out of twelve (12) persons invited, four (4) persons attended. this meeting was conducted by Dr. Andre Vincent Henry from United Industries International. The purpose of this meeting was to find out from SMEs, and Private and Public Sectors:
  - (a) their experience with the input of Technical Regulations as they affect exporting;
  - (b) The key issues in addressing standards and Technical Regulations;
  - (c) Establishment of a standard and quality infrastructure.
- 11.1.5 Ideas to Business Limited was contracted by United Industries International on behalf of the Caricom Regional Organisation for Standards and Quality (CROSQ) to lead a study entitled, "Promoting SME Competitiveness in the Caribbean through Technical Standards". The study main objectives were:
  - (a) Identification of the technical requirements to support the quality infrastructure for the main export markets of the Member States of CROSO:
  - (b) Recommendations of the main sectors, products and services to be standardardised at the national and regional levels;
  - (c) Identification of the main challenges facing small and medium sized business in particular in respect of entering those export markets; and
  - (d) Recommendations concerning the prioritisaiton of the standards to be developed,

The results of this study will allow countries in the Caribbean to provide the support necessary to ensure that Caribbean exports are competitive in international markets. A requirement of this study was to understand the needs of exporters. In this regard, twelve (12) questionnaires were disseminated to specific stakeholder categories. Out of the twelve questionnaires disseminated five (5) were completed and submitted to United Industries Limited for analysis.

#### 11.2 USAID/GTIS Projects

The GNBS received approval from GTIS for institutional support in six (6) areas listed below. However, only two (2) of the six (6) areas were executed.

### 11.2.1 Provision of financial support for four (4) companies to become certified to ISO 9001:2000 standard.

The *Art Williams and Henry Wendt Aeronautical Engineering School* was the only company that was provided financial support for the ISO 9001:2000 registration. The other companies which included Caricom Rice Mills, Guyana National Shipping Corporation Incorporated (GNSC), Guyana National Industrial Corporation Incorporated (GNIC) and Kayman Sankar and Company Limited (KSCL) were informed by GTIS that financial assistance will not be provided for the ISO registration.

# 11.2.2 Strengthening the GNBS capability to provide credible services in the areas of testing, calibration, inspection, certification and HAACP Management System.

The training programme for ISO 9001: 2000 standard was held July 19 to 21, 2006 at Hotel Tower, Main Street, Georgetown. Twenty (20) participants from eleven private sector companies, along with nine (9) GNBS personnel, attended the training programme. The companies represented were Guyana National Shipping Corporation Limited, Banks DIH Limited, Caricom Rice Mills Limited, Guyana Stockfeeds Limited, Guyana National Industrial Company Inc, Sterling Products Limited, Art Williams & Harry Wendt Aeronautical Engineering School, Ricks & Sari Agro Industries Limited, Brass Aluminum & Cast Iron Foundry, Didco Trading Company and the Guyana Sugar Corporation.

The objective of this training programme was to provide participants with an understanding of the requirements of the ISO 9001:2000 standard, the benefits of implementing the quality management system, the importance of management commitment to this process and practice in the writing of policies and procedures to address the requirements of the standard.

The training programme comprehensively addressed the requirements of the standard. The instructors, Mr. Orette Campbell and Ms. Margaret Weston, Consultants, Delphi Consulting Services, Trinidad and Tobago, used their experiences to explain the requirements of the standard and its application in companies. Participants were also provided with opportunities to clarify areas of doubt and also to participate in group exercises which were completed during the sessions.

Based on an evaluation of the training programme, participants generally indicated that they were better equipped to establish and/or review the quality management systems at their entities for ISO 9001:2000 certification.

The GNBS trained officers will continue to provide technical assistance to these companies as they journey towards ISO 9001 certification. The GNBS will also have its quality system reviewed and updated. An action plan will be developed with each agency with time frames for completing activities to ISO 9001 certification.

The training programmes for ISO 17020 and ISO Guide 65 standards were suspended pending the submission of an action plan indicating commitment to develop the quality system at the respective agencies for ISO certification. The execution of these training programmes were cancelled by GTIS. The GNBS was not officially informed of the reason for the cancellation.

# 11.2.3 Building institutional capacity in upgrading the Laboratory Services Department of the GNBS by the acquisition of vital equipment.

GNBS has submitted quotations for the following laboratory equipment:

- 1. A cupellation furnace to carry out gold testing;
- 2. A dead weight tester (DH-Budenberg %\*)EHXA hydraulic dead weight tester);
- 3. An automatic meter test and calibration system (multi purpose test bench for electricity meters);
- 4. 30.0 kg mass comparator (balance); and
- 5. Five computers.

Three quotations for the equipment mentioned above were provided to GTIS, however only five computers were purchased.

Five computers were given to the GNBS from GTIS in support of improving the efficiency at the GNBS. These computers were distributed to four departments namely; Conformity Assessment, Standardisation, Information Services and Administration and Finance Departments.

## 11.2.4 Provision of a technical expert for a two week attachment to the Legal Metrology Programme of the GNBS.

The GNBS provided the costing and details of the attachment programme to GTIS, however this activity was not approved due to financial considerations.

### 11.2.5 Provision of funds for the refurbishing of the current facility accommodating the GNBS.

The GNBS was unable to obtain a quotation for the installation of a Central air-conditioning unit due to the unavailability of the contracting Agency. The quotation for an extension of the GNBS building was completed and will be sent to the GTIS office when requested.

# 11.2.6 The need for an expert to determine the impact of the GNBS programmes on trade and economic development.

This activity was not executed by the GTIS project.

During the month of July, the GTIS representative informed the GNBS that the project will not be funding the ISO 17020 and ISO Guide 65 training programmes among other activities that were approved for funding due to a limited budget for the project. It was indicated that the GNBS will receive funding for these training programmes under the IADB project. The GNBS contacted the IADB Office and was sent a copy of the approved project document which identified the areas to be funded by the IADB. Arrangements are being made for the project document to be signed by the Government of Guyana at which time the project will be executed. This project is scheduled for implementation in 2007.

### 11.3 ENVIRONMENTAL MANAGEMENT AND SUSTAINABILITY PROJECT: Capacity Building for the Management of National Resources and the Environment

The Ministry of Foreign Affairs (MOFA), in its capacity as executing agency for the GOG/UNDP Capacity Building for the Management of National Resources and the Environment Project, and the Guyana National Bureau of Standards (GNBS),in its capacity as implementing agency, commenced implementation of this project in July, 2006.

The objective of this project is to build capacity to implement a National Environmental Management strategy for all levels of development activities.

The project outputs are to:

- (a) have a core team of ISO 14001 Trainers and Lead Auditors,
- (b) provide education and awareness on the ISO 14001 standard,

- support industries to document, implement and maintain Environmental Management Standards; and
- (d) revise the MOU between the GNBS and the Environmental Protection Agency to support implementation of Environmental Management Standards.

The time frame for the implementation of this project is **April 2006- December 2007**.

Three components of this Environmental Management System Project were completed in August 2006, which included:

- (1) **Needs assessment**: This was done prior to the training programmes to evaluate the needs of companies in Guyana to be committed to the implementation of an Environmental Management System (EMS). The needs assessment conducted at thirty (30) companies in Guyana identified the needs and commitment to implement an EMS to support environmental protection and prevention of pollution in balance with socio- economic needs. Fifteen (15) companies in Guyana have expressed the desire to implement an EMS. The GNBS will be establishing communication with these Companies to facilitate the implementation of the EMS. The assessment indicated that at least eleven companies in Guyana have commenced the implementation of an EMS or have recognized the need for implementing an EMS. The companies responded include eleven sectors. The sectors include energy operation, pharmaceutical manufacturing, sugar production, rice production, furniture manufacturing, cement manufacturing, food and beverage manufacturing, ecological resorts, aviation services and health care.
- Requirements with guidance for use, Essential course. This course provided participants with the background to Environmental Management Systems and a better understanding of the requirements of the ISO 14001:2004 standard. The course provided the foundation for developing and maintaining an environmental management system. It covered the core requirements of the standard which commenced with developing an environmental policy, planning, implementing and continual improvement of an organisation's environmental performance. This course was not a Train the Trainer course. However, participants were provided with hints for conducting training programmes during the course by the Instructor.

(3) ISO 14001:2004 EMS Lead Auditor Course. This course is a RABQSA certified course which provided participants with an in-depth knowledge of the ISO 14001:2004 standard, "Environmental Management Systems-Requirements with guidance for use", auditing principles, managing an audit programme, typical audit activities and an in-depth knowledge of the ISO 19011standard, "Guidelines for quality and/or environment management systems auditing."

Participants were provided with the knowledge and skills required to plan, manage and perform the activities associated with third party Environmental Management System audits. During the course, participants were involved in group exercises and daily quizzes to ensure that groups understood the daily course materials. At the end of the Lead Auditor course, participants wrote a two-hour exam. Seven (7) out of nine (9) participants successfully completed the Lead Auditor Course. The resit exam is scheduled for January 2007.

Participants interested in becoming certified lead auditors will have to participate in at least four audits of Environment Management Systems under the supervision of a Certified Lead Auditor with a minimum of 20 audit days within the last three years.

These components were executed by the Quality Management Institute (QMI) Training/Canadian Standards Association (CSA) Learning Centre, Ontario Canada. Ms. Linda Lawrence, a certified Lead Auditor/Trainer instructed these courses.

Ten (10) participants attended the ISO 14001:2004 EMS Essentials course and the ISO 14001:2004 EMS Lead Auditor Course held **August 20-21, 2006** and **August 22-26, 2006** respectively, at the Foreign Service Institute. The companies represented were Guyana Sugar Corporation, Demerara Power Company Limited, Arrow Point Nature Resort, Environmental Protection Agency and the Guyana National Bureau of Standards.

The participants will be expected to develop the EMS at their institution and in addition, provide support to the GNBS in the execution of the remaining project activities. The GNBS personnel are now equipped to provide technical assistance to companies opting for EMS certification.

A memorandum of understanding was established between the GNBS, the National Standards Body and the Environmental Protection Agency (EPA) to facilitate a framework for the implementation of EMS in Companies in Guyana. These agencies will work together to provide awareness sessions and training on the ISO 14001 standard and other guidelines necessary for EMS implementation in the various sectors in Guyana.

#### 11.4 CARIBBEAN EXPORT DEVELOPMENT AGENCY GRANT

A proposal was developed and submitted for a Laboratory management training project with seven deliverables.

**Deliverable D1**: Overseas attachment for the GNBS staff members to

accredited testing and calibration laboratories and an

Accreditation Body.

**Deliverable D2**: GNBS strengthened in capacity for supervising, promoting

and monitoring ISO/IEC 17025 implementation.

**Deliverable D3**: 25 persons from ten laboratories and GNBS trained in

ISO/IEC 17025:2005 management system.

**Deliverable D4**: Gap analyses conducted at 10 laboratories by GNBS.

**Deliverable D5**: Laboratory Quality Management System (LQMS)

documentation and implementation at 10 laboratories and

at GNBS.

**Deliverable D6**: Training in pre-assessment and internal assessments of

LQMS. Ten (10) laboratory personnel and four (4) GNBS

personnel and at GNBS.

**Deliverable D7**: Training 10 persons from laboratories or associated

institutes and GNBS in laboratory instrumentation, repair

and maintenance, specialised training included.

There was no feedback from the Project Office on whether the proposal submitted for Laboratory Management by the GNBS was approved.

#### 11.5 GOG/IMF PRGF Arrangement

A list of needs for ISO Certification was submitted by five inspection agencies. These agencies were Veterinary Public Health Unit, Guyana Rice Development Board, Guyana Tourism Authority, Guyana Forestry Commission and the Environmental Protection Agency. These submissions were sent to the Office of the President as requested. The other Agencies have requested additional time to complete the request. Contact will be made with the Office of the President and the Agencies in January 2007 to determine the status of this project.

#### 11.6 CANADIAN DEVELOPMENT TRUST FUND (CIDA)

A copy of the guidelines for the Canadian Fund was sent along with information on the background of the project to the Canadian Standards Association (CSA). A questionnaire to determine the role and functions of the GNBS in conformity assessment in Guyana was sent by the Canadian Standards Association. This questionnaire was completed and returned. This project will be further discussed with CSA in January 2007.

#### 11.7 **Public Management Modernisation Project (PMMP)**

#### 11.7.1 **Workshop**

The GNBS, a semi--autonomous Agency, was selected as one of the pilot agencies to participate in this project and Head of the Information Services Department was named as the Bureau's representative who will run with this project.

In this connection, a workshop was held on **Thursday, February 17, 2006** at the PSM Training Division, Durban & Vlissengen Road for representatives of Agencies and Statutory Bodies. The area targeted was *Accountability and Efficiency Improvement* using the logical Framework concept as the tool for executing the activities under the project.

Brief presentations were made on development of log frames and how they can be used to manage projects after which group activities were executed. Following this meeting, in the month of March, baseline data about the GNBS and a detailed profile sheet about the organization were submitted to the Project Implementation Unit.

#### 11.7.2 Launching of Component 2

The Public Management Modernisation Project launched component 2 of the project on Thursday, November 09, 2006 at the Georgetown Club and the GNBS was represented by the Executive Director and Head, Information Services Department. The Minister within the Ministry of Finance delivered the feature Address after which, the Consultants responsible for the execution of the project delivered a power point presentation on the core issues to be addressed.

# 11.7.3 Component 3 (Consensus Building Event)

Component 3 which focused on Institutional & Governance Assessment and Consensus Building took place in the Essequibo room of Le Meridien Pegasus on Monday, November 20 and Head, Information Services attended the session.

Consultant, Mr. John Cumberford, delivered a presentation on the topic; "Towards a Governance Framework for Guyana." after which participants shared their views on aspects such as Accountability, Judicial Issues, Civil Service issues and modernizing the Central Machinery of Government.

# 11.7.4 Consultant's visit to GNBS

A fact finding visit was paid to the Bureau by Ms Andrea Simms- Williams, a Consultant attached to the PMMP project. She held discussions with the Executive Director and Head, Information Services Department, about the role, functions and key activities of the GNBS. She also discussed challenges currently experienced after which, she took a brief tour of the building and facilities.

# 12.0 SIGNIFICANT ACHIEVEMENTS

# 12.1 ANNUAL REPORTS LAID IN PARLIAMENT

Section 32(2) of the GNBS Act No 11 of 1984 requires that the Annual Report be printed and laid before the National Assembly. On Thursday, February 16, 2006, four (4) Annual Reports of the GNBS for the years 2001-2004 were laid in Parliament i.e., the 88<sup>th</sup> sitting of the 8<sup>th</sup> Parliament. An extract from the Executive Summary was published in the Chronicle newspapers of March 01, 2006 under the caption, "GNBS helping rice farmers". The Annual Report for 2005 was laid in Parliament at its sitting on April 06, 2006. Similarly, an extract from the summary was published in the Chronicle newspapers of April 10, 2006 under the caption, "GNBS reorganized to support CSME, WTO obligations," These Annual Reports for five (5) years were discussed at length in the National Assembly with praises for the GNBS coming from all sections of the Assembly.

# 12.2 TESTING AND CALIBRATION EQUIPMENT

ON April 13, 2006, the GNBS received its large Seraphin Test Measure (2000L) from the port-of-entry, as soon as it arrived in the country from the Seraphin Company of U.K. The cost of the test measure is \$9.6M. The acquirement of this Test Measure is a significant achievement for the GNBS, as the measure is used to calibrate bulk meters at petrol terminals and in other industries, as well as tank wagons (different compartments) and storage tanks. This equipment strengthens the Legal Metrology capability of the GNBS as it can discharge its legal responsibility to monitor the commerce of bulk liquids, more specifically, the accuracy of volumes that move in trade. Inspectors from the Legal Metrology Department were also trained for one (1) week on the use of the equipment by a Consultant from the Jamaica Bureau of Standards, which training programme was funded by the Caribbean Development Bank.

# 12.3 INFORMATION TECHNOLOGY (IT)

Efforts were made to strengthen the GNBS IT network system which is critical for the efficient and effective operation of its various work programmes. The GNBS received five (5) HP desktop computers from USAID/CARANA for the various Departments, and purchased one (1) computer for the Inspectorate function. Other components purchased include 3 HP Laser Jet Printers, 6 stabilisers, 9 network surges and 5 APC backup, 3 keyboards, 4 flash drives and 4 backup tapes for the Dell Server. In the new year, GNBS would move to acquire an additional server as a backup for many of the network services, and a network printer to share over the network so that all users can have access to a printer. The range of recommendations made by the Network Administrator in Section 10.8 will be addressed.

# 12.4 GNBS BUILDING IMPROVEMENT

During the year, further improvement works were carried out to the old building housing the GNBS in order to arrest the deteriorating conditions. It was indicated by the subject Ministry (Tourism, Industry and Commerce) that the GNBS would remain at its present location. From February of the year, work was conducted gradually to replace the termite-infested, wooden floor with concrete in different phases based on the inflow of revenue generated. The western half of the building has been completed with part of the eastern. Work will continue in 2007 to complete the floor of the entire building. The roof of the building was completely serviced, and made bat-proofed. Part of the ceiling was also serviced, and this will continue in the new year. A small, pre-fab office was set up for the Head of the Standardisation Department.

# 12.5 SIGNIFICANT PROCUREMENT

During the year, funds were expended to acquire various assets in order to facilitate the smooth operations of the GNBS. A list of the assets is shown in Section 10.7.4.

# 12.6 OUTREACH PROGRAMME WITH AMERINDIAN COMMUNITIES

The work programme activities of the GNBS were extended to the Amerindian Communities in the various Regions of the country during the year. A team from the GNBS, headed by the Executive Director, visited the communities and launched the activities, with the potential for sustainability, in order to provide various services to the communities. Visits were conducted to Orealla and Siparuta in Region 6, Moraikabai in Region 5, St. Cuthbert's Mission in Region 4, Santa Mission in Region 3, Lakes Mainstay, Capoey and Tapakuma in Region 2, and Mahdia in Region 8. Region 9 (Lethem) and the three Sub-Regions of Region 1 could not be visited due to the scarcity of funds, but these would be addressed in the first quarter of the new year. In the various communities, meetings were held with the Captains and available Councillors on the mission of the GNBS; seminars with school children on standards and quality; metrication; scales, weights and measures (devices) and the metric issue; meetings with residents on metrication (how to think metric and use the metric units) and an understanding of standards and quality; visits to shops and other retail outlets to sensitise and educate the operators on the switch over to the metric system, and the care and use of their devices; and visits to hospitals or health centres in relation to the accuracy of the scales used in their operations. In each community, the service was provided to check and stamp their devices. The residents of the various communities were very appreciative of the new activities/ services provided by the GNBS. Arrangements were also put in place for the continued, twice per year stamping of devices. An effort would be made to maintain these visits at least once per year besides the routine stamping of devices.

# 13.0 SIGNIFICANT CHALLENGES

# 13.1 Financial

The financial year 2006 was very challenging for the GNBS, requiring the special skills of the management team to manage the budget for the successful completion of the year. There was no increase in the budget (current estimates) from the previous year 2005 with exception of the 5% across-the-board increase in staff emoluments. The current estimate for 2006 was \$ 69.3M over \$ 66.8 M for 2005. Nevertheless, the GNBS expanded many of its activities under the various work programmes, thus requiring additional finances. From the month of June, funding of the various activities was hinged to the inflow of income generated, and therefore, delayed accordingly. While a few significant activities started could not be completed, these would be projected into the new year for early completion.

# 13.2 GNBS Expansion

As the GNBS grows, associated with the increase in work programme activities, it is striving to ease itself from the conjested operations and thus, expand its physical infrastructure at its present location at the Sophia site. While funding did not permit it in 2006, GNBS would expand its Scientific Metrology laboratory facilities in the new year to accommodate temperature calibration, pressure calibration, and electrical calibration The provision of these vital services is critical for various industries, activities. laboratories, institutions and companies in the country, particularly, companies certified to the international quality management system standards. The expansion plan will also include the housing of the large 2000L Seraphin Test measure acquired during the year at a cost of \$9.6M to carry out calibration of bulk meters, tank wagons, storage tanks, and other vessels. A drawing plan has already been prepared to extend the GNBS building on the eastern side in order to modify the internal layout of the institution that benefits a There will be more rooms for Standards Development, National Standards Body. Conformity Assessment, Mass Metrology Laboratory, a proper training room, and other facilities to make the environment more comfortable for staff performance.

# 13.3 Legislation

The effort to attract funding to review and update the GNBS Act No. 11 of 1984 and the Weights and Measures Act of 1981 was not successful. There is also need to establish Regulations under the said Acts. While USAID-GTIS had granted approval early in the year to fund two Consultants, legal and technical, to deal with the legislation, the approval was withdrawn later in the year due to constraint of such funds. The GNBS is exploring other possibilities to access assistance to modernize its legislation.

# 13.4 Monitoring quality of imports

Cabinet had granted approval for the Customs and Trade Administration (CTA) and the GNBS to collaborate and implement a system to deal with the quality of imports. The system was effected on November 21, 2005 with the positioning of an Inspector at the CTA's entries receiving desk to screen all commercial entries, and follow-up examination of commodities at the ports-of-entry or at bonds/warehouses. While there is room for improvement in the system established, the GNBS faced grave difficulties with the CTA to have the system at the Springlands entry, and at the Cheddi Jagan International Airport. There has been an influx of goods passing through these ports, which need to be monitored for quality. The matter has been reported to the Commissioner – General of CTA for actions to be taken early in the new year.

# 13.5 Poultry feed testing

As a result of complaints from farmers about the stunted growth of chicken and the association of this phenomenon with the quality of poultry feeds, the Ministry of Agriculture established a Steering Committee to investigate the problem. The GNBS was tasked with the responsibility to monitor the quality of feeds produced. The GNBS does not have facilities to carry out feed testing, and therefore, banked on the assistance from Guysuco's laboratory. Due to the large volume of its own work load, the turn around time for results output was delayed. In addition, certain micro-nutrients, such as the amino acid profile and the vitamins could not be handled by the laboratory. Assistance was sought from overseas testing laboratories in the U.S. but the fees are very high. Funds could not have been mustered to carry out the testing.

# 13.6 Certification of rice shipped to Jamaica

The certification of rice by GNBS to facilitate exports to Jamaica spreads over three (3) Departments, viz., Standards Compliance (taking samples from the mills and ports-of-exit), Laboratory Services (testing of samples collected), and the Conformity Assessment Department (issuing certificates for each shipment). This certification activity is carried out on behalf of the GRDB and the Jamaica Bureau of Standards (JBS).

The activity is very laborious, time-consuming, uneconomical, which adversely affects the work programme of the Standards Compliance and the Laboratory Services Departments. Accordingly, the GNBS is moving to have the laboratory of GRDB certified to the National Laboratory Standard, after which, the said laboratory would carry out certification of the rice. GRDB already developed its policy manual and procedural manuals, but the implementation phase has been very slow and the laboratory is still not certified.

# 13.7 Testing of electricity meters

The six-station, single phase electricity meter test bench donated to the GNBS can only verify meters of 240V. There is need for the GNBS to have a test bench which could handle meters of 110V. The possibility to convert the same test bench to handle meters of both voltages has been exploited without success. The GNBS would need to purchase another test bench. This is critical since the new meters submitted by GPL for verification during 2006 were found to be out of calibration to the extent of about 30%. These meters had to be calibrated and retested by the GNBS before release to GPL.

# 13.8 Building Code development

Several Sections of the current Building Code had been under review by the respective Sub-Committees of the Civil Engineering Technical Committee. A few new sections were also under development. During the year, members of the Sub-Committee demanded that a stipend be paid before the work continued. With the availability of no funds to facilitate this activity, the Building Code activities were brought to a standstill. Efforts would be made in the new year to secure funds to continue the development of the National Building Code.

# 13.9 Weights and Measures activities in Regions 1,8 & 9

While Weights and Measures and Metrication activities have been conducted in all the Regions of the country, there have been severe difficulties with Regions 1,8&9. The GNBS provided technical assistance to the said Regions to facilitate the development of Weights and Measures Offices in providing training of Officers of the Regions, providing weighing balances and tools to conduct the testing and stamping of scales, weights and measures, seals and printed materials for use in the process. However, the Officers identified and so trained did not continue to show any interest, and no activities were conducted in the said Regions. Efforts were made by the GNBS to have actions taken by the Administration of the Regions but without any success. No interest was shown by the said Administrations. This problem would need to be addressed in the new year.

# 13.10 Product Certification Scheme

In the Product Certification Scheme, the National Standards Mark is issued to any product which complies with the national standard and which is subjected to a scheme of inspection and testing. The Scheme had not been successful during 2006 because the companies of potential products do not have the requisite testing facilities, and the said facilities are not available locally. Companies have not been willing to have their products tested overseas because of the cost involved. The operation of the Scheme would be reviewed in the new year.

# 14.0 OBSERVATIONS AND COMMENTS

# 14.1 Auditing GNBS's Accounts

Over the years, the GNBS has been striving to have prompt auditing of its Accounts by the Auditor General's Department as required by the National Standards Act, and in order to keep abreast with the years. However, there have been difficulties with the availability of Auditors from the said Department to carry out the audits, and therefore, a considerable delay in the presentation of audit reports. While the 2003 audit has been completed in 2006, the final report has not yet been received from the Department. The financial statement for the year 2004 has been prepared, and a request made for the audit to be conducted. Effort is being made by the GNBS to have its Accounts audited for 2004, 2005 and 2006 during the year 2007.

# 14.2 GNBS Quality Management System

The GNBS is moving boldly to have its general operations certified to the ISO 9001 International Standards, its Inspection System certified to the ISO 17020 International Standard, and its Testing facilities certified to the ISO 17025 International Standard. This effort is commendable as it would streamline all the operations of the institution, making them more efficient, effective and cost-competitive on a sustained basis. This would result in consistently improved services being offered by the GNBS. The policy and procedural manuals have already been developed, training and sensitisation sessions are currently underway, and implementation would shortly be started. It is anticipated that certification status would be achieved by the end of the year.

# 14.3 Launching of Codex Secretariat

The GNBS launched its Codex Secretariat in February of the year with a press conference, and a package of information issued to media houses to feature on a continued basis. Several separate media interview were conducted, and all the routine GNBS's media programmes focused on the subject. The publication of a quarterly Codex Newsletter also commenced. Codex, in short for Codex Alimentarius Commission, is an international organisation based in Rome, which deals with the formulation of food standards, and the issuing of these international standards for national adoption by member countries. The National Secretariat coordinates all Codex activities, and it is governed by a National Committee.

# 14.4 Monitoring net contents of prepackaged goods

This activity, which was a component of the 2006 Work Programme, was not carried out because of the availability of trained Inspectors. However, CDB funded a two-week training programme by a consultant form the Jamaica Bureau of Standards in November, 2006. The Inspectors now have the capability, including the IT Software, to carry out the monitoring of net contents of prepackaged goods for consumer protection. This activity would commence in the new year.

# 14.5 Certification of medical laboratories

The GNBS operates a Laboratory Certification Programme which includes medical laboratories from the public and private sectors. Three (3) laboratories are currently certified to the National Laboratory Standards, viz., the Central Medical Laboratory of the Georgetown Hospital, Dr. Balwant Singh's Laboratory and Eureka Laboratory. About thirty (30) other laboratories are working towards certification to the standard, and are at varying stages in the development and implementation of their quality manuals. The progress has been very slow, based on different levels of commitment, but is anticipated that they would be certified before the end of 2007. Certification of the laboratories is vital to ensure the issuing of accurate, consistent and reliable test results.

# 14.6 Moisture meter calibration

Moisture meters are used at the various rice mills in the country, to assess the moisture content of the paddy received from farmers. The operational accuracy of these meters is critical in the purchase of paddy and the subsequent procession of the said paddy. The meters need to be calibrated periodically. While this activity is currently being conducted by the National Flour Milling Company, numerous requests were received from proprietors of rice mills for the GNBS to carry out such calibration activity. This should be a responsibility of the GNBS.

Although this activity was targeted in the work programme, it could not be carried out in 2006 because it was difficult to obtain an electric oven, dessiccators and other associated items to carry out moisture determination on samples of paddy. These items would be obtained in the new year, making it possible for the GNBS to provide an important service to the rice industry.

# 14.7 Accreditation of Public Sector Agencies

In the Conformity Assessment drive to support local, regional and international trade, the GNBS is providing technical assistance to the public sector inspection bodies, testing laboratories and certification agencies to facilitate their accreditation to the respective international standards. Technical Officers visited the Agencies and provided training/sensitization on the said standards, assisted with the development of their manuals, and in some cases, conducted audits on systems partially developed. While movement is slow, it is anticipated that the agencies would be brought closer to the accreditation status by the end of the year.

# 14.8 Contribution to other organizations

The GNBS, during 2006, served on many Boards, Councils, Committees, and attended numerous meetings of other organizations, and therefore made a contribution to the work of these organizations.

Accordingly, the GNBS served on the following:

- Technical, vocational, education and training (TVET) Council
- Fire advisory Board
- National Advisory Council on Occupational Health & Safety
- Laboratory Advisory Committee at the Ministry of Health
- National Tobacco Control Council
- Numerous Project meetings
- Council of Caricom Regional Organisation for Standards and Quality (CROSO)
- Technical Management Committee of CROSQ
- National Biosafety Committee
- National Climate Change Committee
- National Codex Committee.

# 14.9 Cell phone issue

Consumers' complaints on cellular phones surged in the last year, amounting to 51% of the total complaints received for the year. A number of measures were taken to address the issue, including several press releases in the media, all the GNBS's media programmes focusing on the subject, the newsletter and website publication, a full page advertisement in the Chronicle and Stabroek News papers. The aspects dealt with include a statement of the problem, what cellular phone dealers must do and must not do (requirements of dealers), what consumers must look for when buying a cell phone, what consumers must do in the care and use of cell phones, and what the GNBS would do in the commerce of cell phones.

In addition, aggressive surveillance inspections were conducted at some 34 outlets, specifically targeting, <u>inter alia</u>, the sale of used and refurbished phones as new phones. Cell phones dealers also had to be registered with the GNBS.

# 14.10 IT

The Information Technology programme of the GNBS assists staff in carrying out their functions efficiently. The network system allows staff to share files, folders and help them to communicate over the intranet and internet. It is necessary for this technology to be updated in the new year. Consideration would be given to purchase an additional server as a backup for many of the network services, e.g. back up domain controller (DC), intranet hosting, SOL Server databases, back up for use data and back up for exchange server. A spare modem and router would be looked at in the event there is a failure, it can be immediately replaced.

# 15.0 MONITORING AND EVALUATION

Monitoring and evaluation exercises were conducted on each work programme throughout the year to measure progress of the various activities. Weekly Evaluatory meetings of each work programme were held on Fridays with Department Heads, Monday morning management meetings held with all the Department Heads, monthly progress reports submitted by each Department, enclosing a "monitoring and evaluation" component, and introduced in the third quarter of the year, a quarterly review meeting (monitoring and evaluation) of each work programme of the GNBS. Minutes of this meeting were kept. Also, each work programme in the Annual Report dealt with "monitoring and evaluation" at the end. This trend will continue in the new year.

Overall, the GNBS had a very successful year, achieving over 85-90% of its target despite the varied challenges. While some programmes excelled others were deficient in certain respects beyond control due to the scarcity of funds. The Legal Metrology (Weights and Measure), Standards Compliance, Communication, Standards Information, Standardisation, and certain parts of Conformity Assessment Programme demonstrated outstanding performances. The Laboratory Services Programme was affected by the absence of analytical balances with capacities of higher ranges, the inability to obtain the equipment to conduct moisture meter calibration to serve the rice industry, the absence of an operating fume hood, and the difficulty to use the 240V electricity meter test bench to carry out testing of 110V meters. These challenges would be addressed early in the new year. The Metrication Programme is still experiencing resistances from consumers, and while the progress is slow, the education/sensitizing activities would continue.

Morever, the Standards Compliance Programme would be reinforced to include monitoring of imports at Springlands, Cheddi Jagan International Airport, and later, at Lethem. With injection of more human resources in the new year, aggressive surveillance inspections at retail outlets would be intensified and maintained on a sustained basis to make the Programme more effective. The Weights and Measures Programme would also be improved by commencing the monitoring of the net contents of prepackaged goods, and the verification/calibration of bulk meters, tank wagons and storage tanks.

# 16.0 PROJECTIONS

The GNBS essentially provides a service to the Nation in the areas of Standardisation, Conformity Assessment and Metrology (Legal and Scientific). These areas form the pillars on which successful trade (local, regional and international) is hinged. Consumer protection is also inherent in the services provided besides the development of the operations of manufacturers and importers. While the routine activities would continue in providing vital, essential and necessary services to the different stakeholders, the GNBS would launch new initiatives and other innovative activities in order to consolidate its effort to promote standards and quality systems in Guyana. Projections in the new year would include the following:

- (1) With the acquisition of a 2000L test measure, and the training of Inspectors carried out on the equipment towards the end of the year, the GNBS would routinely carry out in the new year, the verification and calibration of bulk meters, tank wagons, storage tanks and other vessels/containers used in the various sectors of the economy.
- (2) With the requisite training of Inspectors conducted, the scientific monitoring of the net contents of prepackaged commodities would commence in the new year to enhance consumer protection.
- (3) The monitoring of the quality of imports would be intensified with the new control system instituted at the Cheddi Jagan International Airport, at Springlands and at Lethem.
- (4) The National Standards Act of 1984 and the Weights and Measures Act of 1981 would be updated and modernized, and Regulations would be developed to give effect to these Acts.
- (5) The GNBS would provide a calibration service of moisture meters to the rice industry.
- (6) Efforts would be made by the GNBS to have its operating systems certified to the ISO 9001 international standard. Also, its inspection, testing and certification systems would be accredited to the respective international standards.
- (7) The testing and calibration activities would be expanded to include temperature, pressure and electrical/electronic. This service would be provided to various industries, laboratories and other institutions.
- (8) Weights and Measures Offices would be established in Regions 1,8 &9 and Officers trained to manage the activities of the said Offices.
- (9) GNBS would continue its "outreach" programme with the Amerindian communities in the various Regions of Guyana, providing assistance and support in several areas, including weights and measures, metrication, and standards and quality.

- (10) Efforts would continue to be made to solicit funds to carry out the extension and expansion of the building housing the GNBS. The layout in the building would be modified to achieve modernization status.
- (11) A new campaign would be launched and sustained on the public sector procurement of standards-complaint goods. This would later be extended to the private sector.
- (12) Actions will be taken to submit the metrication Omnibus Bill to Parliament, through Cabinet, so that all legislation would address the metric units issue. This would facilitate and expedite the switch over from the imperial to the metric system.
- (13) The IT network system would be strengthened with the purchase of a new server, a spare modem and router, network printer, and more computers. An IT Assistant would be appointed to support the efforts of the network Administrator.
- (14) Assistance will be sought to measure the impact of the GNBS's Programmes on the development of the national economy.
- (15) GNBS would need to review and use a more aggressive approach to drive the public sector inspection, testing and certification agencies to become accredited to their respective international standards.

# APPENDIX 1 TECHNICAL COMMITEES OF THE GUYANA NATIONAL BUREAU OF STANDARDS

Standards are formulated by the work of technical committees comprising persons from various interest groups such as producers, consumers, technologists and professionals from both private and public sectors. This type of partnership allows for transparency, openness and consensus to be achieved in the development of the standard. This approach, although time consuming, allows for adopted standards to be more readily accepted by all parties.

The following Technical Committees currently operate under the auspices of the Bureau:

Technical Committees in Operation.

<b>Technical Committees (TC) Number</b>	<b>Technical Committee</b>
TC 1	Agriculture
TC 2	Foods
TC 3	Chemical
TC 4	Electrotechnical engineering
TC 6	Mechanical engineering
TC 9	Laboratory management
TC 10	Civil engineering
TC 12	Tourism
TC 13	Wood products
TC 14	Environment

# APPENDIX 2 Standards Development Process

Guyana's standards are developed in accordance with the WTO's Code of Good Practice for the Preparation, Adoption and Application of standards. The following outlines the process undertaken:

The preparation of standards is undertaken upon the Standards Council's authorization. Recommendations are made to the Council based on requests from National Organisations, the general public, existing Technical Committees, or Bureau staff.

If the project is approved, it is referred to the appropriate Technical committees, or the project is assigned to the Bureau staff. In the absence of an appropriate Technical Committee, if deemed necessary, a new Technical Committee is formed. A Technical Committee comprises of experts and stakeholders in the relevant field and a Bureau staff member serves as Secretary.

The draft document is then made available for general public comments. All interested parties, by means of a notice in the press, are invited to comment within a sixty (60) day period. In addition, copies are forwarded to those known to be interested in the subject.

The Technical Committee considers all the comments received and amends the draft accordingly. The final draft is then recommended to Council. On Council's approval, notice of the standard is published in the local newspapers, and copies are placed for sale.

If compliance with the standard is deemed necessary for the health and safety of consumers, Council may recommend to the Minister to declare the standard compulsory. If necessary, the Minister may seek to obtain the formal concurrence of any other Minister and Sector who may be responsible for any areas which the standard may affect. The compulsory standard is then sent to the Attorney General's Office for vetting and final review to ensure compliance with current legislation.

A national standard is reviewed and updated every five years in an effort to reflect the latest developments in safety and technology, as well as current realities in the marketplace and consumer demands.

Amendments to, and revisions of standards formally require the same procedure as is applied to the preparation of the original standard.

# **APPENDIX 3**

# ISO STANDARDS TO BE ADOPTED AS NATIONAL STANDARDS

1. <b>IWA 1: 2001</b>	Quality management systems- Guidelines for process improvements in health service organizations.
2. <b>IWA 2: 2003</b>	Quality management systems- Guidelines for the application of ISO 9001:2000 in education.
3. <b>ISO/Guide 34:2000</b>	General requirements for the competence of reference material producers.
4. <b>ISO 9000:2005</b>	Quality management systems- Fundamentals and vocabulary.
5. <b>ISO 10005: 1995</b>	Quality management- Guidelines for quality plans.
6. <b>ISO 10006: 2003</b>	Quality management systems- Guidelines for quality management in projects.
7. ISO 10007: 2003	Quality management systems- Guidelines for configuration management.
8. <b>ISO 10012: 2003</b>	Measurement management systems- Requirements for measurement processes and measuring equipment.
9. <b>ISO/TR 10017: 2003</b>	Guidance on statistical techniques for ISO 9001: 2000.
10.	Medical devices Quality management systems- Requirements for regulatory purposes.
11. <b>ISO 14964: 2000</b>	Mechanical vibration and shock- Vibration of stationary structures- Specific requirements for quality management in measurement and evaluation of vibration.
12. <b>ISO/TR 14969: 2004</b>	Medical devices- Quality management systems-Guidance on the application of ISO 13485: 2003.
13. <b>ISO 15161: 2001</b>	Guidelines on the application of ISO 9001:2000 for the food and drink industry.

14. ISO/TS 16949: 2002 Quality management systems- Particular requirements for the application of ISO 9001: 2000 for automotive production and relevant service part organisations. 15. ISO/TS 29001:2003 Petroleum, petrochemical and natural gas industries- Sector- specific quality management systems- Requirements for product and service supply organisations. 16. ISO/IEC 9003: 2004 Software engineering- Guidelines for the application of ISO 9001: 2000 to computer software. 17. ISO/IEC Guide 66: 1999 General requirements for bodies operating assessment and certification/registration of environmental management systems. 18. **ISO 14001: 2004** Environmental management systems- Requirements with guidance for use. 19. **ISO 14004: 2004** Environmental management systems- General guidelines on principles, systems and support techniques. 20. ISO 14015: 2001 Environmental management- Environmental assessment of sites and organisations (EASO). 21. **ISO/TR 14047: 2003** Environmental management- Life cycle impact assessment- Examples of application of ISO 14042. 22. ISO/TR 14049: 2000 Environmental management- Life cycle assessment-Examples of application of ISO 14041 to goal and scope definition and inventory analysis. 23. **ISO 14050: 2002** Environmental management- Vocabulary bilingual edition. 24. ISO/TR 14062: 2002 Environmental management- Integrating environmental aspects into product design and development. 25. **ISO 22000** Food safety management systems- Requirements

for any organization in the food chain.

26. **ISO 10019** 

Selection of consultants.

27. ISO/FDIS 14064-1: 2005

Greenhouse gases- Part 1: Specification with guidance at the organization level for quantification and reporting of green house gas emissions and removals.

28. **ISO/FDIS 14064-2: 2005** 

Greenhouse gases- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.

29. ISO/FDIS 14064-3: 2005

Greenhouse gases- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.

30.

Greenhouse gases- Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition.

# APPENDIX 4 (ISO) Standards Adopted as National Standards

- 1. **ISO 15189:2003** Medical laboratories Particular requirements for quality and competence.
- 2. **ISO/IEC 17025:2005** General requirements for the competence of testing and calibration laboratories.
- 3. **ISO 15489 -1:2001** Information and documentation Records management Part 1: General.
- 4. **ISO/TR 15489-2:2001** Information and documentation Records management Part 2: Guidelines.
- 5. **ISO 9001:2000** Quality management systems Requirements.
- 6. **ISO 10002:2004** Quality management systems Guidelines for performance improvements.
- 7. **ISO 10002:2004** Quality management Customer satisfaction Guidelines for complaints handling in organizations.
- 8. **ISO/TR 10013:2001** Guidelines for quality management system documentation.
- 9. **ISO/TR 10014:1998** Guidelines for managing the economies of quality.
- 10. **ISO 10015:1999** Quality management Guidelines for training.
- 11. **ISO/TR 13352:1997** Guidelines for interpretation of ISO 9000 Series for application within the iron ore industry.

- 12. **ISO 13485:1996** Quality systems Medical devices Particular requirements for the application of ISO 9001.
- 13. **ISO 13488:1996** Quality systems Medical devices Particular requirements for the application of ISO 9002.
- 14. **ISO15189:2003** Medical laboratories Particular requirements for quality and competence.
- 15. **ISO 19011:2002** Guidelines for quality and or environmental management systems auditing.
- 16. **ISO 14001:1996** Environmental management systems Specification with guidance for use.
- 17. **ISO 14031:1999** Environmental management Environmental performance evaluation Guidelines.
- 18. **ISO 14041:1998** Environmental management Lifecycle assessment Goal and scope definition and inventory analysis.
- 19. **ISO/TR 14061:1998** Information to assist forestry organizations in the use of environmental management system standards ISO 14001 and ISO 14004.
- 20. **ISO 19011:2002** Guidelines for quality and or environmental management systems auditing.

# **APPENDIX 5**

# **CROSQ Standards Adopted as National Standards**

- 1. CCS 0025:1992 Specification for rum.
- 2. **CCS 0044:1998** Requirements for the labelling of brewery products (Beer, Stout, Shandy, Malta).
- 3. CCS 0045:1999 Specification for safety matches.
- 4. **CCS 0046:2002** Rice Specification, sampling, tests and analysis.
- 5. CCS 0047:2003 Specification for brewery products.
- 6. **CCS 0049:2003** Code of hygienic practice for packaged water.
- 7. **CCS 0050:2004** Specification for carbonated beverages.
- 8. **CCS 0052:2005** Specification for grading and quality requirements for table eggs.

# **APPENDIX 6**

# **Standards Adapted Nationally**

- 1. Electric cables PVC insulated, non-armoured cables for voltages up to and including 450/750V, for electric power, lighting and internal wiring.
- 2. Specification for poultry feed and feed ingredients.



Audit Office of Guyana

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

AG: 117/2015

05 October 2015

# REPORT OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GUYANA NATIONAL BUREAU OF STANDARDS FOR THE YEAR ENDED 31 DECEMBER 2006

I have audited the accompanying financial statements of the Guyana National Bureau of Standards (GNBS) which comprise of the balance sheet as at 31 December 2006, the income and expenditure statement and the statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information. The audit was conducted in accordance with the Audit Act 2004.

Management's responsibility for the financial statements

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

Auditor's responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with International Standards on Auditing issued by the International Federation of Accountants (IFAC), and those of the International Organization of Supreme Audit Institutions (INTOSAI). Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

# Basis for Qualified Opinion

Assets valued \$5,678,010 under the category building, represents capitalization cost incurred in 2001 for the renovation of the Office. However, the Bureau does not own the building that housed the Office therefore the amount should have been reflected as expenditure in the Income and Expenditure Statement. This resulted in an overstatement of fixed assets and understatement of expenditure by the above-mentioned amount.

The amount of \$886,940 was shown as stock as at 31 December 2006. However, there was no evidence that external auditors were invited to observe the stock count as at 31 December 2006, as a result, the accuracy and validity of the amount reported could not be verified.

# Opinion

In my opinion, except for the effects of the matters described in the Basis for Qualified paragraphs, the financial statements give a true and fair view, in all material respects, the financial position of Guyana National Bureau of Standards as at 31 December 2006 and of its financial performance and its cash flows for the year then ended in accordance with Generally Accepted Accounting Principles.

AUDIT OFFICE OF GUYANA 63 HIGH STREET KINGSTON GEORGETOWN GUYANA

# GUYANA NATIONAL BUREAU OF STANDARDS BALANCE SHEET AS AT 31 DECEMBER 2006

	NOTES	<b>2006</b> \$	<b>2005</b> \$
FIXED ASSETS			
Property Plant & Equipment	12 =	45,768,846	54,928,971
CURRENT ASSETS			
Stock	3	886,940	425,436
Debtors	9	949,900	1,314,600
Cash in Hand/Bank	10	4,781,856	(6,304,346)
Total		6,618,696	(4,564,310)
Total Assets	=	52,387,542	50,364,661
EQUITY AND LIABILITIES			
Government Capital		84,236,861	74,236,861
Accumulated Deficit		(32,018,097)	(24,182,944)
		52,218,764	50,053,917
CURRENT LIABILITIES			
Accruals	11	172,166	304,681
Suspense A/C	_	(3,388)	6,063
Total Liabilities	_	168,778	310,744
	·		W0.071.771
EQUITY AND LIABILITIES	=	52,387,542	50,364,661

Director-Guyana National Bureau of Standards: Evadnie Ennis

GUYANA NATIONAL BUREAU OF STANDARDS

# GUYANA NATIONAL BUREAU OF STANDARDS INCOME AND EXPENDITURE STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2006

	NOTES	2006	2005
OPERATING INCOME		\$	\$
Government Subvention	1 (b)	69,299,995	66,807,008
Other Income	4	25,406,360	24,273,838
,		94,706,355	91,080,846
OPERATING EXPENDITURE			
Employment Cost	5	64,291,266	59,876,942
Office Expenses	6	7,028,313	6,335,272
Other Admin Expenses	7	11,336,556	12,904,752
Others	8	9,996,889	11,985,587
Depreciation	2	9,888,484	7,624,344
	=	102,541,508	98,726,897
Net Deficit from Operations	=	(7,835,153)	(7,646,051)
Balance as at 01.01.2006	Φ)	(24,182,944)	(16,536,502)
Deficit as at 31.12.2006		(7,835,153)	(7,646,051)
Accumulated Deficit at 31.12.2006	-	(32,018,097)	(24,182,553)

# GUYANA NATIONAL BUREAU OF STANDARDS CASH FLOW STATEMENT AS AT 31 DECEMBER 2006

	2006	2005
Operating Activities	\$	\$
Operating Deficit	(7,835,153)	(7,646,051)
Depreciation Charges	9,888,484	7,624,344
Suspense	(3,388)	(6,063)
Increase/Decrease in Stock	461,504	23,887
Increase/Decrease in Debtors	(364,700)	(739,600)
Increase/Decrease in Creditor/Accruals	172,166	-
Net Cash Flow from Operating Activities	2,318,913	(743,483)
Investing Activities		
Purchase of Fixed Assets	(2,339,989)	(17,307,338)
Net Cash Outflow from Investment Activities	(2,339,989)	(17,307,338)
Financing Activities		
Government Capital Contribution	10,000,000	12,000,000
	10,000,000	12,000,000
Increase/Decrease in cash and cash equivalents	9,978,924	(6,050,821)
Opening cash and cash equivalent for the year	(6,304,346)	(347,942)
Closing cash and cash equivalent for the year	3,674,578	(6,398,763)

# Background of the Guyana Natioonal Bureau of Standards:

The objective of the G.N.B.S. is to promote standardization and quality systems in the production and importation of goods and services for the protection of the consumer and to advance local and foreign trade, thereby improving the quality of life for the people of Guyana, outlined in the GNBS Act 11 of 1984.

# 1. Principal Accounting Policies

# (a) Accounting Convention

These accounts have been prépared using the historical cost convention and is in accordance with General Accounting Principles.

#### (b) Income

Income is derived principally from contribution made by Central Government and from income generated.

# 2. Depreciation

Depreciation is calculated using straight-line basis at the rates specified below which are contributed to write off the assets over their estimated useful lives.

Motor Vehicle	10%
Office Equipment	20%
Office Furniture	10%
Sundry Equipment	10%-20%

A full year's depreciation is charged on all assets purchase during the year.

# 3. Stocks

Stocks are valued at lower of cost and net realizable value. \$886,940

#### 4. Other Income -

The Other Income collected during the year was derived from such activities as registration of importers, course fees and verification of devices.

	2006	2005
5. Employment Cost - \$ 64,291,266	\$	\$
Administrative Salary	6,525,792	6,170,950
Senior Technical	3,491,744	3,175,067
Other Technical and Craft Skilled	21,875,401	20,659,045
Clerical and Office Support	7,842,857	7,133,518
Semi-Skilled and Unskilled	3,366,003	2,920,894
Contracted Employee	4,318,326	4,687,709
Temporary Employee	-	24,431
Overtime	144,000	150,344
Employers, Contribution to NIS	3,049,035	2,796,521
Pension, Gratuity & Health Scheme	3,735,226	2,984,201
Miscellaneous Allowances	9,942,882	9,174,262
	64,291,266	59,876,942
	2006	2005
6. Office Expenses - \$7,028,313	\$	\$
Drugs and Medical Supplies	10,000	-
Field Materials and Supplies	23,800	5,000
Office Materials and Supplies	2,371,920	1,809,598
Print and Non-Print	1,271,141	196,604
Travelling and Subsistence, etc	2,844,284	3,907,081
Contribution to International Organization	in the second	-
Postage and Telex	176,657	262,611
Janitorial and Cleaning Expenses	330,511	154,378
•	7,028,313	6,335,272
	2006	2005
7. Other Administrative Expenses - \$11,336,556	\$	\$
Maintenance & rental of building	2,799,885	894,778
Telephone & Electricity	5,264,547	3,766,384
Equipment Maintenance	1,002,450	2,126,229
Others service (184)	2,269,674	6,117,361
	11,336,556	12,904,752
	,	~~ y · y · v m

	2006	2005
8. Others Goods & Services - \$9,996,889	\$	\$
National & other Event	43,950	257,175
Fuel & Lubricant	3,547,160	2,990,491
Motor Vehicle Spares & Repairs	1,450,822	1,444,195
Overseas Conference	1,404,402	(67,289)
Refreshments & Meals	788,345	680,521
Training	-	808,604
Others (194)	2,762,210	5,871,890
	9,996,889	11,985,587
9. Debtors - \$949,900.	2006	2005
	\$	\$
Staff Debtors	949,900	1,314,600
	2006	2005
10. Cash in Hand and at Bank - \$4,781,856.	\$	\$
Cash at bank A/C # 688-109-8	(4,414,960)	(6,354,306)
Cash at bank A/C 688-746-7	9,146,816	
Cash in Hand	50,000	50,000
	4,781,856	(6,304,306)
	2006	2005
11. Creditors and Accruals - \$172,166.	\$	\$
Suspense		-
Sundry Accruals	(15,474)	
Sundry Accruals	187,640	304,681
•	172,166	304,681

Fixed Assets 12.		T S	Sundry & Office Furniture &		
	Building \$	Laboratory Equipment S	quipment \$	Motor Vehicle \$	Total \$
Cost/Valuation January 1	5,678,010	71,087	83,945,822	13,474,000	103,168,919
Additions during year			2,339,989		2,339,989
Disposals Total Assets as at 31 December 2006	5,678,010	71,087	86,285,811	13,474,000	105,508,908
			43 311 578	8 6 540 000	49.851.578
Depreciation for year 2006			8,988,484		9,888,484
Accumulated Depreciation31 December 2006	-		52,300,062	7,440,000	59,740,062
Net Book Value Dec 31, 2005	5,678,010	71,087	42,277,868	6,934,000	54,928,965
Net Book Value Dec. 31, 2006	5,678,010	71 087	22 085 740	000 1000	45 768 846



Audit Office of Guyana

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312/SL: 26/2/2015

05 October 2015

Ms. Evandie Enniss Executive Director (ag.) Guyana National Bureau of Standards Flat 15 Sophia Exhibition Centre Georgetown.

Dear Ms. Enniss,

# AUDIT OF THE FINANCIAL STATEMENTS OF GUYANA NATIONAL BUREAU OF STANDARDS FOR THE YEAR ENDED 31 DECEMBER 2006

The audit of the financial statements of Guyana National Bureau of Standards for the year ended 31 December 2006 has been completed and the following are the findings arising from the audit which are now forwarded your comments and appropriate action.

- 2. The audit was conducted in accordance with Generally Accepted Auditing Standards, including those of the International Organisation of Supreme Audit Institutions (INTOSAI) and the International Standards on Auditing, issued by the International Federation of Accountants (IFAC). These standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.
- 3. The main purpose of the audit was to express an opinion on the financial statements and to evaluate the operations of the Bureau to ascertain whether:
  - (a) The financial statements have been properly prepared, in accordance with applicable laws, and properly present the operations and affairs of the Bureau;
  - (b) The accounts have been faithfully and properly kept;
  - (c) The rules, procedures and internal management controls are sufficient to secure effective control on the assessment, collection, and proper allocation of revenue;
  - (d) All monies expended and charged to an account have been applied to the purpose or purposes for which they were intended; and

(e) Essential records are maintained, and the internal management controls, rules and procedures established and applied are sufficient to safeguard the control of stores and other public property.

# FINDINGS AND RECOMMENDATIONS

#### A. Balance Sheet

# Fixed Assets: \$45,768,846

4. The amount of \$45.769M represents the net fixed asset. An examination of the records revealed that the fixed assets schedule reflected a difference of \$638,995 when compared with the financial statements under the categories sundry, office equipment and office furniture.

*Recommendation:* The Audit Office recommends that the Management of the Bureau take the necessary steps to investigate and reconcile the difference.

Management's Response: Management acknowledge this error and the schedule was corrected.

- 5. Despite your response, please note that the correction was not evident on the revised financial statements.
- 6. Assets valued \$5.678M under the category building; represent capitalization cost incurred in 2001 for the renovation of the Office. However, the Bureau does not own the building that housed the Office therefore the amount should have been reflected as expenditure in the Income and Expenditure Statement. This resulted in an overstatement of fixed assets and understatement of expenditure by the said amount.

Recommendation: The Audit Office again recommends that the Management of the Bureau take the necessary steps to ensure all expenditures are properly classified so that the fixed assets and the expenditure are accurately reflected in the financial statements.

Management's Response: Management will take the necessary steps to have this amount removed from the current head and adjust statement.

7. An amount of \$323,115 represents the cost of computer components that the Bureau paid for in 2002 but never received since the supplier went out of business. The Bureau stated that efforts were made to recover the amount paid but to no avail and a letter was written to the Director of Public Prosecutions on the 20th September 2002, but to date no response was received. In the meantime, the Bureau has been depreciating the assets that they have not received. As a result, the fixed assets in the Balance Sheet and depreciation charges in the Income and Expenditure Statement were overstated.

*Recommendation:* The Audit Office recommends that the Management of the Bureau seek the necessary approval to write off this expenditure and adjust the financial statement to reflect its true position.

Management's Response: Management will take the necessary steps to have this item removed.

8. The fixed assets register was not properly prepared. Fixed assets were not coded, precisely written and not in chronological order as to when they were purchased. As a result, the verification process of physical assets was difficult.

Recommendation: The Audit Office recommends that the Management of the Bureau take stringent actions to have the fixed assets register promptly and properly written up and maintained.

Management's Response: Management will work to ensure this error does not reoccur.

9. The Bureau did not use the system of quotations when making purchases of asset therefore, the Bureau did not comply with existing purchasing procedures. In addition, payment vouchers were not prepared for the purchases made via bank drafts, rather a journal voucher was created and the supporting documents were filed separately.

*Recommendation:* The Audit Office recommends that the Management of the Bureau ensure that all purchases made comply with existing procedures.

Management's Response: Management will work to ensure the quotation system is used at all times. As it relates to overseas purchases in my view if an actual cheque was not prepared a payment voucher was not necessary instead a journal voucher was used to bring the bank transfer into account.

10. A sample of sundry, office equipment and office furniture valued \$57.164M was selected from the fixed assets register to be physically verified for existence. Assets valued \$3.432M could not be verified for existence. Assets valued \$140,000 were deemed un-serviceable by the Bureau and assets valued \$34.375M were not marked, precisely recorded, and not coded in the fixed assets register and schedule. Therefore, the existence, accuracy and validity could not be verified. (Appendices I to III)

Recommendation: The Audit Office recommends that the Management of the Bureau take the necessary steps to ensure all assets are properly recorded, coded and marked.

Management's Response: Management will work to ensure that assets are written off in a timely manner and are properly marked. Management will have to make arrangements in the future to have assets in the sub-offices (all Regions) available for verification.

11. Additions valued at \$2.338M were selected to be physically verified for existence. Of this amount \$496,110 could not be physically verified for existence and \$69,780 was reflected as unserviceable. In addition, assets valued \$812,924 were not marked to be identified as property of the Bureau. (Appendices IV to VI). As a result, the completeness and existence of assets could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau (i) locate the assets and inform the auditors when they are located, (ii) take the necessary action to dispose of the unserviceable assets, and (iii) take steps to ensure that all assets are marked to identify them as property of the Bureau.

Management's Response: Management will work to ensure that assets are written off in a timely manner and are properly marked. Management will have to make arrangements in the future to have assets in the sub-offices (all Regions) available for verification.

# Stock: \$886,940

12. External auditors were not notified about the stock count as at 31 December 2006, as a result the accuracy and validity of the amount report could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau notify external auditors to witness the Bureau's stock counts at the end of each financial year.

Management's Response: Management will ensure that auditors are invited for stock count.

13. A sample of 14 items was selected to verify the accuracy of the stock ledger maintained by the Bureau. Physical count revealed that ten of the items had differences when cross-referenced to the stock ledger. As a result, the stock ledger did not reflect the true position of the physical items. (Appendix VII)

Recommendation: The Audit Office recommends that the Management of the Bureau investigate and reconcile the differences.

Management's Response: This is accurate due to the fact there were unposted requisitions, due to the fact items were issued while the register was in the auditor's possession.

14. Your response is not acceptable, since the register at all times can be retrieved from the auditors for updates.

# Debtors: \$949,900

- 15. The amount of \$949,900 was shown as debtors. However, an examination of related records revealed the following observations:
  - (a) The opening balance in the general ledger was understated by \$20,100 when compared to the audited financial statements for the year 2005.

- (b) The closing balance in the financial statements was overstated by \$30,000 when compared with the general ledger amount of \$919,900.
- (c) The debtor's schedule and debtors' ledger revealed amounts of \$951,095 and \$943,100 respectively.
- 16. As a result, the accuracy and validity of the amount shown as debtors in the financial statements could not be relied on.

Recommendation: The Audit Office recommends that the Management of the Bureau investigate the differences observed with a view of having them cleared.

Management's Response: This error was acknowledged and management is working to have this balance corrected.

17. Further, it was observed that seven advances relating to payment voucher number 223 were not entered in the debtor's ledger. However, the amounts were cleared on the employees leave allowance received in April 2006. As a result, it could not be ascertained whether the Bureau accounted for all advances issued in the debtor's ledger.

Recommendation: The Audit Office recommends that the Management of the Bureau put systems in place to ensure that the debtor's ledger is updated at all times.

Management's Response: This was an oversight. However, all other advances were recorded in the records.

18. Audit examination on the Debtor's schedule and ledger revealed that an advance amounting to \$20,000 was issued to an employee in 2005, however, the repayment of the advance commenced in 2012. As a result, it could not be easily determined as to what procedures are in place for the prompt repayment of advances.

Recommendation: The Audit Office recommends that the Management of the Bureau put systems in place to ensure that all advances are repaid promptly.

Management's Response: This was corrected after detected in the 2005 audit which was done in 2012 and same was corrected.

# Cash at Hand/Bank: \$4,781,856

19. The Bureau reported an overdraft \$6.304M as the opening balance of cash at bank whilst the general ledger revealed an amount of \$5.672M, resulting in a difference of \$632,771. As a result, the opening balance shown in the general ledger was understated.

Recommendation: The Audit Office recommends that the Management of the Bureau investigate this difference with a view of having it cleared.

Management's Response: Management will work to ensure this is cleared.

20. The Bureau reported an amount of \$4.732M as the net bank balance for the two bank accounts held. This included the other income account balance of \$9.147M and the subvention account overdraft of \$4.415M. The overdraft account should have been reported as a liability in the financial statements however, it was net off from the other income account. In addition, bank reconciliation statements were not presented for examination. As a result, the completeness, accuracy and validity of the amount shown as the bank balance in the financial statements could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau take the necessary measures to ensure that the amounts are reflected correctly in the financial statements.

Management's Response: Management will work to ensure same.

21. An independent cash count was not performed for the Bureau as at 31 December 2006; as a result, the accuracy and validity of the amount shown as cash in hand could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau notify external auditors to witness the Bureau's cash counts at the end of each financial year.

Management's Response: Management will work to ensure same.

22. The Bureau reported an amount of \$50,000 as cash in hand for the year under review. In addition, an emergency float of \$100,000 was reflected as cash in hand of \$30,850 as at 31 December 2006. This amount was not reflected in the financial statements. As a result, the amount shown in the financial statements was understated.

Recommendation: The Audit Office recommends that the Management of the Bureau take the necessary action to ensure that all amounts are disclosed accurately in the financial statements.

Management's Response: Management will work to ensure statements for the remainder years reflect same.

#### Accumulated Deficit: \$32,018,097

23. The amount of \$32.018M was shown as accumulated deficit. However, the inconsistencies found during the audit would have a material effect to the amount reported as deficit for the year under review.

Recommendation: The Audit Office recommends that the Management of the Bureau address the issues highlighted above so that the financial statements reflect the true position of the Bureau.

#### Accruals: \$172,166

24. The amount of \$172,166 was shown as accruals. However, supporting documents were not submitted for the verification of this amount. As a result, the completeness, accuracy and validity of the amount shown could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau ensure that adequate accounting records and subsidiary records are maintained to facilitate proper accountability of creditors and accruals.

Management's Response: A ledger is available

25. Despite your response, the ledger that is available does not reflect the details of the accruals, as a result, the amount shown could still not be verified.

# Suspense Account: \$(3,388)

26. The suspense account was made up of un-reconciled balances that existed in the financial statements over a number of years. In fact, the negative amount of \$3,338 acts as a balancing figure within the Bureau's accounts. This is not good accounting practices and indicates that one or more accounts may be under/over stated.

Recommendation: The Audit Office recommends that the Management of the Bureau investigate the amount shown as fixed assets with view of having it cleared.

Management's Response: Management will work to ensure same is cleared.

# B. Income and Expenditure Statement

# Income: \$94,706,355

27. Cash received could not be traced to the specific deposit slip. It was observed that cash would be used to change cheques, and deposited days after being received. As a result, the completeness and accuracy of monies received being banked promptly could not be verified.

Recommendation: The Audit Office recommends that the Management of the Bureau put procedures in place to ensure that the revenue received are promptly deposited intact so as to ensure proper accountability of all revenue received.

Management's Response: Steps have been taken to ensure same is been done promptly.

# Others: \$9,996,889

28. The amount of \$9.997M was shown as amounts expended for others. However, an examination of the general ledger revealed an amount of \$10.062M resulting in a difference of \$65,289. Further audit checks revealed that the difference represents the amount brought forward on the line item 'overseas conference' from the previous year.

Recommendation: The Audit Office recommends that the Management of the Bureau put measures in place to have the difference reconciled.

Management's Response: Management will ensure correction is being made.

29. A payment of \$40,000 for the purchase of tyres was made during December 2006, but did not specify for which vehicle the item was required for. As a result, the physical verification of this purchase could not be done.

Recommendation: The Audit Office recommends that the Management of the Bureau ensure that payment vouchers are clear and specific for the purpose (s) that the amounts were expended for.

Management's Response: This was an over sight. Management will take this opportunity to ensure that this practice does not continue.

30. The Bureau had six vehicles under their control for the year under review. However, logbooks were not maintained for four of the vehicles. As a result, it could not be easily determined as to whether journeys made by these vehicles were in the interest of the Bureau. (Appendix VIII)

Recommendation: The Audit Office recommends that the Management of the Bureau take the necessary steps to introduce and maintain logbooks for all the vehicles under its control.

Management's Response: Logs books were maintained by the drivers, but were not submitted to the accounts when completed. However, systems are being put in place to eliminate this.

# C. Statement of Cash Flows

31. The statement of cash flows which form part of a complete set of financial statements was presented for audit, however, it was not prepared in accordance with the existing accounting standards.

Recommendation: The Audit Office recommends that the Management of the Bureau take the necessary steps to ensure that the statement of cash flows is prepared in compliance with existing standards.

Management's Response: A Management's Response was not received.

# D. General

The Audit Office wishes to express its gratitude for the co-operation given to its officers during the course of this audit. In keeping with the policy of the Audit Office of Guyana, a reply to this report is expected within thirty (30) days of the receipt of this management letter.

With kind regards.

Yours sincerely

. Dillon

Audit Manager for Auditor General

Appendix I

List of sample assets that were recorded in fixed assets register but were not physically verified for existence

Date Purchased	Supplier	Description of Item	Value \$	Location of Item	Physically Verified	Remarks
12.06.1997	Not known	1 GXL - 24 Pro Gold Tester S/N: 0010098	75,860	Not known	No	Location of asset not recorded in register
31.12.2003	Troemner	1 - E2 Weight Kit with certificate	1,810,017	Not known	No	Date of acquisition an location of asset was not i register. Entity stated that item is currently overseas for calibration. Need to chec documentation.
21.02.2003	Auto Supplies Co.	1 - 60,000 BTU Peake AC Unit S/N # 200247043	390,000	Training Room	No	
23.06.2004	NT Computeac	1 ,- Digital Camera	155,900	Confidentia 1 Secretary	No	
31.12.2004	Brass Aluminum & Cast Iron Foundry Ltd.	20 - Heavy Duty Masses	1,000,000	Not known	No	Location of asset not recorde in register. Entity stated the masses were smelted an reformed into heavier masses hence the existence could no be verified.
		Total	3,431,777			

# Appendix II

# Sample asset that is un-serviceable

Date Purchased	Supplier	Description of Item	Value \$	Location of Item	Item Marked	Remarks
07.11.2001	Engineering & Construction Inc.	2 - Steel Drums 1m x 1m x 1.5m	140,000	Inspectorate	No	Item was seen in the compound, un-serviceable.

# Appendix III

# Assets recorded in fixed assets register but could not be verified

Date Purchased	Supplier	Description of Item	Value \$	Location of Item	Item recorded in F.A. Register	Remarks
12.06.1997	Not Known	1 - Meteorology Set (Weights, rulers, tapes & balances) S/N: 60M 97- 2636,097-406	1,450,849	Reference Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Could not determine if asset seen was the same that was listed in register. Serial Number not seen.

Date Purchased	Supplier	Description of Item	Value \$	Location of Item	Item recorded in F.A. Register	Remarks
28.02.2000	Western Scientific	1 - Weighting Platform Scale KA 30-3 Level Metric Pan A	3,134,835	Heavy Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Item does not have serial number, nor was it marked by the Entity. Could not determine if the asset is the same listed in register
27.02.2001	Unique Scale Services	7 - Cylindrical Weight Set	6,761,572	Reference Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Item does not have serial number, nor was it marked by the Entity. Could not determine if the asset is the same listed in register
31.01.2001	Sartorius	1 - Electronic Scales	2,196,152	Heavy Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Item does not have serial number, nor was it marked by the Entity. Could not determine if the asset is the same listed in register
31.12.2003	Stable Training Services Inc.	1 - 20 Liter Test Measure	1,041,982	Heavy Mass Laboratory	Yes	Location of asset not recorded in register. Item does not have serial number, nor was it marked by the Entity. Could not determine if the asset is the same listed in register.
31.12.2003	Western Scientific	1 - 500L & 50L Provers, Balances	12,157,719	Heavy Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Asset is vaguely written without serial number, thus it could not be determine whether the item seen was the same in the register.
31.12.2003	Sartorius	1 - Balances	1,835,887	Heavy Mass Laboratory	Yes	Date of acquisition and location of asset was not in register. Item does not have serial number, nor was it marked by the Entity. Could not determine if the asset is the same listed in register.
31.12.2004	Scientific Supplies & Technology	1 - Comparator and Pressure Equipment	1,027,936	Volume Dept.	Yes	Location of asset not recorded in register. Asset is vaguely written without serial number, thus it could not be determine whether the item seen was the same in the register.
31.08.2005	CCS Guyana	1 - Network Server & Fixtures	835,856	Computer Lab	Yes	SN# BFKZGF1. Asset is vaguely written without serial number, thus it could not be determine whether the item seen was the same in the register.

Date Purchased	Supplier	Description of Item	Value \$	Location of Item	Item recorded in F.A. Register	Remarks
05.08.2005	Western Scientific	1 - Temperature Bath Equipment	3,932,304	Not known	Yes	Location of asset not recorded in register. Asset is vaguely written without serial number, thus it could not be determined whether item seen is the same as in the register.
		Total	34,375,092			

# Appendix IV

# List of additions that were not physically verified

Date Purchased	PV №	Cheque №	Supplier	Description of Item	Value \$	Location of Item	Physically Verified	Remarks
				1 - AOC CRT 17" Monitor CT720G S/N: /M9PS5AA600518 (Black)	26,500		No	
13.04.2006	131	790071149	NT. Computeac	1 - Logitech Internet Pro Desktop S/N: 2192/8262	4,200	Standards Compliance Department	No	
			•	1 - APC Network Surge arrest 7 S/N: S4Z0602P60037	8,190	Department	No	
				1 - APC Voltage Regulator 600W S/N: S3I0551x04430	9,180		No	
22.02.2006	72	790071061	Wireless Connections	2 - Avanti Table Top Water Coolers S/N: 050200448, 050200933	39,900	Region 2 & Region 3	No	Assets located in the regions.
				2 - Wind mere 16" Stand Fan 110v #CH- 16SF	15,600	Region 2 & Main Office	No	
			Kennav	2 - Royal 12 Digits Desk Calculator #XE48	4,775	Region 2 & Region 3	No	
22.02.2006	72	790071061	HDL Limited	1 - Sharp 10 Digit Scientific Calculator #EL-501WB-BK	3,588	Region 7	No	
				1 - Sharp 10 Digit Simi Desktop calculator #EL- 334MB	3,038	Region 6	No	
27.02.2006	76	790071065	Auto Supplies Co.	1 - 18,000 BTU PWU-018 Window Type Peake Air Conditioning Unit	122,000	HD Information Service Dept.	No	Valued at \$115,000, Installation cost not included in the register.
10.03.2006	118	790071087	M. Da Silva - Wireless Connection	1 - Sharp fax machine - S/N: 57107573	32,000	Sub office - Region 6	No	Entity stated that asset is located in Region 6

Date Purchased	PV №	Cheque №	Supplier	Description of Item	Value \$	Location of Item	Physically Verified	Remarks
25.10.2006	1001	Bank draft	Scientific Supplies and	2 - Portable electronic balance 40000GX0. 1G, 120V/60HZ or AA Batteries - OH- SP4001	193,440	Heavy Mass Laboratory	No	One seen with SN# 1200815246 00
			Technology	3 - Hard Shell carry case for SP4001 - OH-77256-01	33,700		No	
		F 6 10		Total	496,110			

# Appendix V

# List of un-serviceable additions

Date Purchased	PV №	Cheque №	Supplier	Description of Item	Value \$	Location of Item	Item Marked/ Inventorised	Physically Verified	Remarks
30.01.2006	41	790071008	NT Computeac	1 - HP Printer 1020 LJ - S/N: CNBK719439	39,780	Main Office	•	Yes	Un- serviceable
30.08.2006	357	790070932	D. Wyles	1 - North Star 731 Telephone	30,000	Receptionist Area	2006/09/28/ GNBS/ RA	Yes	Un- serviceable, In storage room
				Total	69,780				

# Appendix VI

# List of additions that were not marked to be identified as property of the Bureau.

Date Purchased	PV №	Cheque №	Supplier	Description of Item	Value \$	Location of Item	Remarks
31.03.2006 & 30.08.2006	JV003- 01 & JV008- 01	Bank draft dd 23.03.2006 & 07.08.2006	1- Western Scientific Supplies	Seraphin Test Measure	716,204	Metrology Lab	No serial number seen in supporting documents. Item had SN #03-18613.
25.10.2006	1001	Bank draft	1- Scientific Supplies and Technology	Portable electronic balance 40000GX0. 1G, 120V/60HZ or AA Batteries - OH- SP4001	96,720	Heavy Mass Laboratory	One item seen with SN# 120081524600. Could not validate whether the item seen was the same listed in the register.
				Total	812,924		

Appendix VII
Excess/shortages between the stock ledger and physical count

№	Item	Amount In Ledger	Physical count	Difference
1	Ruler Plastic	5	3	2
2	Masking Tape	5	4	1
3	Paper 14 x 8.5 legal	3	10	(7)
4	Paper 11 x 8.5 letter	2	11	(9)
5	Black Ink Pen	10	4	6
6	Red Ink Pen	13	28	(15)
7	Hanging File Folder	105	53	52
8	Message Pads	12	11	1
9	Small Note Pads	5	-	5
10	Ink	83	118	(35)

Appendix VIII

No Log Books were maintained for the following vehicles

Vehicle Type	Vehicle #			
Twin Cab Pickup	PHH 5986			
Suzuki Vitara	PEE 883			
Nissan Mini Bus	PFF 6922			
Nissan Mini Bus	PDD 9587			
High Arm Truck	GJJ 3011			