

**GUYANA NATIONAL BUREAU OF STANDARDS
(GNBS)**



ANNUAL REPORT 2003

Promoting Standards and Quality in Guyana

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

January 2004

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VISION OF GNBS

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

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.

MEMBERS OF NATIONAL STANDARDS COUNCIL 2003

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. Dhanpaul Dhanraj	Member	Guyana Rice Millers & Exporters Development Association.
6.	Mr. Narvon Persaud	Member	Guyana Association of Professional Engineers.
7.	Dr. Gocool Persaud	Member	Guyana Manufacturers Association.
8.	Mr. Patrick Dyal	Member	Guyana Consumers Association.
9.	Ms. Eliza Florendo	Member	Environmental Protection Agency.
10.	Mr. Leevan DeSantos	Member	Food and Drugs Department.
11.	Mr. Brian Greenidge	Member	Guyana Rice Development Board.
12.	Mr. William Benjamin	Member	Benjamin Business Machines.
13.	Mr. Lance Hinds	Member	Information Technology Association of Guyana.
14.	Mr. Rameshwar Ramrattan	Member	Georgetown Chamber of Commerce and Industry.
15.	Mr. Naresh Singh	Member	Guyana Oil Company.

EXECUTIVE OFFICERS

(Management Team)

Dr. Chatterpaul Ramcharran	-	Director
Mr. Jowala Somai	-	Head, Management Systems Department
Ms. Shune Vickerie	-	Coordinator, Standardisation Department.
Ms. Evadnie Enniss-Fields	-	Head, Information Services Department.
Ms. Charmain Niles	-	Head, Administration and Finance Department (ag.).
Mr. Shailendra Rai	-	Chief Inspector, Metrology and Compliance Department.

DEPARTMENTS/WORK PROGRAMMES

* Management Systems Department	-	Laboratory Certification
	-	Product Certification
	-	Quality & Environmental Management
	-	Conformity Assessment
* Standardisation Department	-	Standards Development
	-	Standards Promotion
	-	Standards Implementation
	-	Codex activities
* Metrology & Standards Compliance Department	-	Weights & Measures (Legal Metrology)
	-	Standards Compliance monitoring
* Information Services Department	-	Communication
	-	Metrication
	-	Standards Information
* Administration and Finance	-	Administration
	-	Finance

EXECUTIVE SUMMARY

The Guyana National Bureau of Standards (GNBS) performed creditably during the year 2003 despite a cut in the budgetary allocation, a decrease in the revenue generated due to the modification of the Standards Compliance Programme, no increase in the staff complement, and a difficult environment still with resistance due to residual effects of the crime wave from the previous year. There have been significant achievements by the various work programmes under the four (4) Technical Departments, viz., Standardisation, Metrology and Standards Compliance, Management Systems and Information Services. Also, the Administrative and Finance Department supported the activities of the technical work programmes.

Under the Standardisation Department, 73 National Standards were approved by National Standards Council, 47 of which were actually published, and the remaining 26 were being edited by the Editorial Committee. At the end of the year, 8 standards were still at the public comments stage, and 42 standards, which were added on to the work programme during the year by various requests from different sources, were transferred to the 2004 work programme. Four (4) national standards were approved by Cabinet as mandatory standards, viz., standards based on rice and also, labelling of textiles, garments and footwear. In the promotion of standards, besides the use of the media, separate national symposia were held for stakeholders of the seafoods, poultry, processed foods, fresh fruits and vegetables, wood products, jewellery and textiles and garments industries to sensitise stakeholders about their roles and responsibilities in conforming to the requirements of national standards. Comments and recommendations from each symposium were fed to the respective Standards Development Technical Committee for implementation.

In addition, seven (7) public consultations were conducted on various draft standards at the public comments stage, and the comments were considered in the development of the said standards. Moreover, 14 CARICOM draft regional standards were reviewed by stakeholders in consultation sessions and meetings, and the comments dispatched to the Secretariat.

The Metrology and Standards Compliance Department, under its Weights and Measures Programme, licensed nine (9) manufacturers to produce scales and weights. A quantity of new devices (1128 scales, 2087 masses, 298 measures and 31 meter rules) locally manufactured and imported was tested and verified. A total of 4,503 scales, 8,316 masses and 932 measures already in commerce were tested and verified. Further, a total of 309 scales, 111 masses and 17 fuel tanks were externally verified for the airlines, seafoods, sugar, rice and other industries countrywide. In addition, 1,191 petrol pumps and 14 bulk meters were tested, of which 308 pumps and all the bulk meters had to be calibrated for the various petrol companies and private stations. Surveillance activities were conducted at 3,891 stalls/premises, where 273 scales, 1,405 masses and 237 measures were seized and removed since they were found to be unjust. One rice miller was prosecuted during the year for the use of an unjust scale and this matter is still engaging the attention of the Whim Magistrate Court. The training of vendors, shopkeepers and other retailers on the use of the metric system, and the care and use of their devices was conducted throughout the year during sensitization exercises, resulting in 3003 premises being visited, and 39 imperial scales converted to metric units.

Under the Compliance Programme, 85 importers and 56 used tyre dealers were registered with the Bureau. Surveillance inspections were conducted at 2,497 sales outlets in which various quantities of sub-standard quality products were seized and removed. Furniture items (350 pieces) were placed on hold pending labelling. Defective tyres (440) were destroyed. The examination of fertilisers continued at the ports-of-entry, and 28 inspections were conducted. Samples were taken, tested and found to be satisfactory. The monitoring of locally-manufactured commodities continued during the year and nine (9) manufacturers were registered with a total of 51 inspections conducted at bonds and warehouses. Consumer complaints (24) received on various products were investigated and 22 were resolved. With respect to the certification of rice, 1,124 containers (28,706 metric tones) of white and parboiled rice were sampled and tested prior to exportation to Jamaica.

The **Management Systems Department** provided technical assistance to 24 laboratories, mainly clinical, to develop and implement their quality and procedure manuals. Two-food testing laboratories, Food and Drugs Department, and IAST were granted partial certification for testing seafoods according to the EU requirements. The Central Medical Laboratory of the Georgetown Public Hospital was also certified to the national standard. Seventeen (17) surveillance visits and six (6) renewal audits were conducted at the nine (9) certified laboratories to ensure their quality systems were maintained and their certificates could be renewed. It was found that six (6) certified laboratories had consistently maintained the requirements for certification. In order to improve their capability, nineteen (19) personnel from fifteen (15) testing laboratories were trained on the international laboratory standard, ISO 17025. The gold-testing and metrology laboratories of the Bureau are also working towards accreditation to the standard. A training programme on the national laboratory standard was facilitated where 27 personnel from 18 laboratories were trained.

The Management Systems Department also conducted routine surveillance audits and renewal audits on the seven (7) clients of the Product Certification Programme. A new company, DeAbreu's Creations, was certified having complied with the requirements of the national standard. Several potential clients are working towards certification. Under a LEAP Project, a training programme was conducted in Linden to educate jewelers on the requirements of the standards. Moreover, a gold-testing laboratory was established with the necessary equipment and tools to conduct testing of gold jewellery for clients on the product certification scheme.

The Management systems Department further provided technical assistance to five (5) companies in developing and implementing their Quality Systems according to the ISO 9000 Standard. These companies have been absorbed under the GNBS/CPEC Project on ISO 9001:2000. Ten (10) companies have been networked on this project which started with a documentation and implementation workshop and continued with a series of gap analysis at the said companies, to be followed with the actual documentation and implementation of their manuals. In addition, the standard prepared for micro and small enterprise development was subjected to a series of public consultation sessions across the country and the comments were considered to improve the standard. The Bureau is also working to document and implement a Quality Management System in its operations so that it can be registered to the ISO 9001 international standard.

The Management Systems Department also tried to formalize a National Conformity Assessment Committee, networking all the relevant Agencies, in order to spearhead the establishment of a National Conformity Assessment System which is internationally recognized. Through the USAID/GEO project, the Bureau hosted six (6) training programmes for the public and private sectors covering all the relevant ISO standards relating to conformity assessment. A national forum was also held on conformity assessment. The Bureau emphasized the importance of conformity assessment activities at various fora organized by the Ministry of Foreign Trade, and the effect it can have on Guyana's ability to export.

The **Information Services Department** provided communication support in various forms to all work programmes of the Bureau. In addition, 7 press conferences, 27 press releases, 48 notices, 38 editions of Standards Advisory, 34 editions of Standards Corner, press coverage for 19 events, 22 editions of the radio programme, "Standards Bureau and You," 11 viewpoints, 138 metric spots on the radio, 4 editions of the newsletter, 6 lectures to school children, spearheading a series of national symposia and public consultations were all conducted and featured during the year. The Department also participated in many national events such as the UG Career Fair, the Mashramani celebration, National Library Week, GMA exhibition, and National Quality Week with a host of activities. The Department further managed the National Metrication Programme, and also the Standards information Unit.

The **Administration and Finance Department** provided support to all the other Departments and Programmes so that their objectives could be achieved in the most cost effective and timely manner. The Department implemented the staff training matrix, maintained the building, equipment and vehicles, and attended to Personnel and Procurement matters.

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 2003, 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.

The report is conveniently structured and comprehensively presented under the five (5) Departments of the Bureau, viz., **Standardisation, Management Systems, Metrology and Standards Compliance, Information Services and Administration and Finance Departments.** Under each Department, the report is preceded with an 'overview' which pinpoints the objectives of the Department, and outlines the various work programmes or lead activities falling under the said Department. Page (iv) of the Report displays information on the work programmes which fall under each Department of the Bureau of Standards. In discussing the achievements of each work programme an attempt is made to evaluate the results in the context of the challenges imposed by the operating environment.

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 standard 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 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 been negative in outlook, as the stakeholders tried to shy away from standards. It has been suggested by a few that the environment in the country is not conducive to the promotion and application of standards.

The report also lists under each Department, the unscheduled or unplanned activities carried out by staff members throughout the year. The Bureau was represented by Technical and other Officers at a wide range of meetings of other Institutions or Agencies. The Officers also made numerous presentations, in-house and external, and were involved in various training programmes in the effort to acquire requisite skills and build capacity.

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

1.0 STANDARDISATION DEPARTMENT

OVERVIEW

The goal of the standardization department is to promote standardization in the production of goods and services for the advancement of local and foreign trade, and consumer protection. The core functions of the Department are producing, promoting and monitoring the implementation of national standards.

There are three (3) Technical Officers in the Standardisation Department, assisted by five (5) other Technical Officers drawn from the other Departments of the Bureau, who function as Technical Secretaries of the fifteen (15) Technical Committees, along with their associated sub-committees and working groups to produce the standards relevant to the needs of stakeholders.

The fifteen (15) Technical Committees established by the Bureau are:

1. Agriculture;
2. Foods;
3. Chemical;
4. Electrotechnical engineering;
5. Mechanical engineering;
6. Legal metrology;
7. Consumer products;
8. Cosmetics and Medical devices;
9. Laboratory management;
10. Civil engineering;
11. Safety;
12. Tourism;
13. Wood products;
14. Environment; and
15. Management Systems.

Each committee consists of representatives from general interest (those who are not associated with production, distribution, direct use, or regulation of products, materials or services); producer interest (those who are predominantly involved with the production, promotion, retailing or distribution of products, materials or services); regulatory authority (those who are predominantly involved in regulating by statute the use of products, materials or services); and user interest (those who are predominantly using the products, materials or services). Each Committee meets once per month on an average to deliberate on the standards listed under its work programme for the year.

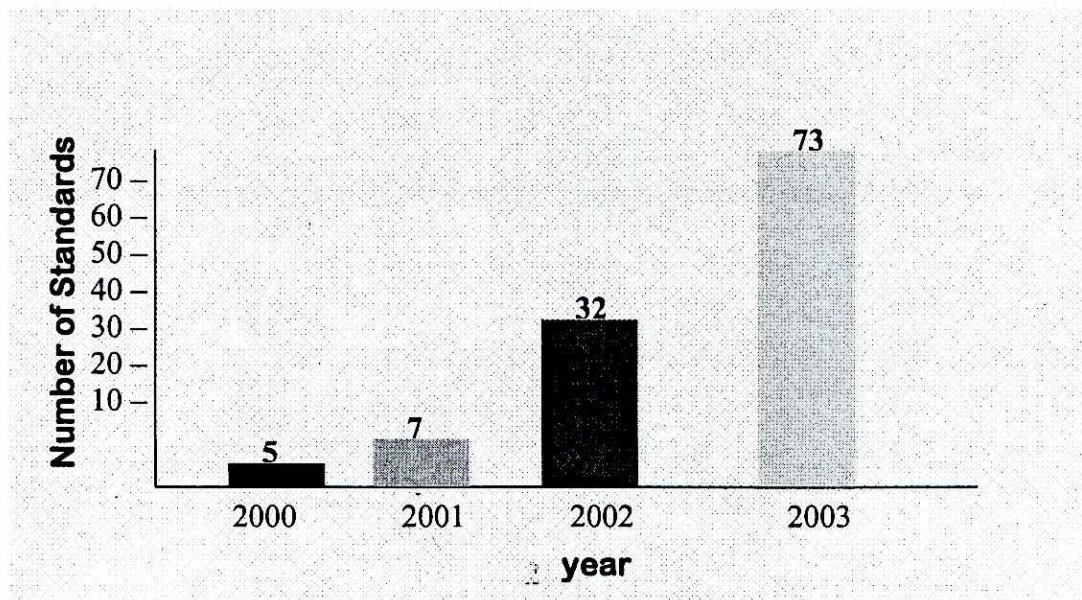
The development of a standard involves several stages. A proposal received by the Bureau is submitted to the National Standards Council for approval, after which it is assigned to one of the fifteen Technical Committees for the development of a draft standard by the Technical Secretary. After deliberating on the draft standard, it is exposed for public comments which are considered by the Technical Committee and the final draft is submitted to Council for approval as a voluntary standard. To make the standard mandatory, the Minister of Tourism, Industry and Commerce has to seek Cabinet's approval prior to the preparation and gazetting of an Order signed by the said Minister.

1.1 STANDARDS DEVELOPMENT

STATUS OF STANDARDS DEVELOPMENT

STANDARD DEVELOPMENT STAGE	YEAR	
	2002	2003
(1) Standards under preparation and revision by Technical Committees and Sub-Committees	54	50
(2) Standards issued for public comments	14	8
(3) Standards approved by National Standards Council (NSC)	32	73
(4) Standards approved by Cabinet as mandatory standards	2	4
(5) Standards to be printed	67	30
(6) Standards published	16	47
(7) Standards withdrawn	44	44
(8) Mandatory standards	15	19
(9) Standards in publication	187	264

1.1.1 During the year 2003, seventy-three (73) National Standards (62 formulated and 11 revised) were approved by NSC (see Appendix 1). The bar graph below shows the number of standards approved by NSC over a four years period.



Of the seventy-three (73) standards, nineteen (19) were brought over from 2002 work programme to 2003 work programme. The remaining fifty-four (54) standards were approved from the 2003 work programme. Out of the seventy-three (73) standards approved, forty-seven (47) were published, increasing the total of standards in publication to two hundred and sixty seven (267). The remaining twenty six (26) standards are being edited by the editorial committee.

Fifty (50) standards are under preparation and revision by Technical and Sub-committees. Eight (8) of these standards were issued for public comments. The remainder (forty-two standards) would be transferred to 2004 work programme.

Four (4) National Standards were approved by Cabinet as mandatory standards. These are:

- (a) Rice – Specification, sampling, tests and analysis;
- (b) Specification for labelling of garments;
- (c) Specification for labelling of textiles; and
- (d) Specification for labelling of footwear.

1.1.2 The development of standards faced many challenges during 2003. These include:

- (a) The lack of a quorum at Technical Committees and Sub-committees meetings, delayed the development and consensus approval of forty (40) committee draft standards. The development of these standards were tremendously delayed due to members and stakeholders not reviewing standards and forwarding the comments to the respective committees. The lack of a quorum at Technical Committees meetings could have been attributed to the absence of payment of stipends.
- (b) The unavailability and limited access to technical data and reference standards delayed the preparation of ten (10) draft standards by Technical Secretaries. Efforts to purchase some of these were futile, because they were very costly.
- (c) Inadequate number of staff and computers, tremendously delayed the editing, correction and publishing of thirty (30) National Standards which were approved by NSC.

Nevertheless, despite the many associated difficulties of the standards development programme, Technical Secretaries made significant progress in the production of standards.

1.2 STANDARDS PROMOTION AND IMPLEMENTATION

- 1.2.1 Symposia were held for stakeholders of the seafoods, poultry, processed foods, fresh fruits and vegetables, wood products and textiles and garments sectors in region four (4). The purpose of these symposia was to sensitise stakeholders of each sector about their roles and responsibilities in conforming to the requirements of National Standards; and for them to highlight the difficulties encountered during the implementation of standards. Comments emanated from each sector were forwarded to the respective Technical Committee for them to monitor the implementation of these standards and address their concerns.

The main difficulties encountered were the poor attendance of key stakeholders of the respective sectors and finance to conduct these symposia in other regions of Guyana.

- 1.2.2 Seven (7) public consultations were conducted in region four (4) for seven (7) Draft Guyana Standards which were issued for public comments. (See **Appendix 2**). The main difficulties encountered were the unavailability of technical personnel to review the standards, lack of finance to conduct these consultations in other regions of Guyana and frequent blackouts which delayed the photocopy and distribution of the standards in a timely manner.
- 1.2.3 Training on the implementation of National Standards were conducted in Linden for stakeholders of textiles and garments and jewellery sectors. The main difficulty encountered was the absence of key stakeholders of the respective sectors.
- 1.2.4 Stakeholders were informed of the standards formulated for 2003 via correspondence, GNBS newsletter and newspaper. Some stakeholders responded by purchasing the needed standards from the GNBS.

1.3 REGIONAL AND INTERNATIONAL ACTIVITIES

- 1.3.1 Guyana's stakeholders reviewed fourteen (14) Draft Caricom standards (See **Appendix 3**) which were formulated by the Caricom Regional Organisation for Standards and Quality (CROSQ). Some of Guyana's comments were considered and incorporated into the final draft standards. Stakeholders were informed on the status of development of these standards and copies of the approved standards were circulated. The major challenge facing this activity was the poor response from stakeholders with their comments.

- 1.3.2 As the WTO Enquiry Point and a member of WTO, Guyana submitted seventeen (17) Notifications on the technical regulations formulated (See Appendix 4) and the GNBS standards work programme 2003 to the WTO Secretariat. Requests and enquiries on the notifications were conveyed to Regional and National stakeholders. The main difficulty encountered was the unavailability of a computer with internet access to promptly respond to requests and queries.

1.4 CODEX

As the National Codex Secretariat with responsibilities for codex matters, the GNBS:

- 1.4.1 Disseminated one hundred and thirty-two (132) codex documents to the Ministry of Agriculture and the Food and Drug Department, for information purposes. The main difficulty encountered was the delay in receipt of codex documents from the Codex Alimentarius Commission in Rome.
- 1.4.2 Conducted a symposium for stakeholders of the food sector. The purpose of this symposium was to sensitise stakeholders on the role of the National Codex Secretariat in identifying National priorities and for ensuring active participation in codex matters.
- 1.4.3 Disseminated the eighth and ninth issue of the codex newsletter which consisted of food and food related matters occurring Nationally and Internationally to stakeholders.
- 1.4.4 Benefited from training on the application of the Hazard Analysis Critical Control Point (HACCP) system and a GAP Analysis of the Codex Secretariat.

These deliverables were from the Food and Agriculture Organisation of the United Nations Project, "Strengthening of the Food Control System," which was executed by the Ministry of Agriculture.

2.0 METROLOGY AND STANDARDS COMPLIANCE DEPARTMENT

OVERVIEW

During the year 2003, the Metrology and Standards Compliance Department was engaged in the activities of three programmes namely, The Weights and Measures Programme, The Standards Compliance Programme and the Rice Certification Programme. The department has an Inspectorate of 11 Inspectors operating under the Chief Inspector servicing the three programmes. The Chief Inspector reports to the Director.

The activities undertaken this year under the Weights and Measures Programme include the initial and subsequent verification of devices manufactured locally and imported, devices used in commercial trade, calibration of storage tanks, the verification of petrol pumps, bulk meters and wagon compartments, verification of Regional and GNBS working physical standards, surveillance of devices at sale outlets and facilitation of the conversion of imperial devices to metric. Scales and measures manufacturers are also being licensed annually.

The Standards Compliance Programme is geared to ensure protection of consumers by the monitoring of some 20 categories of commodities imported or manufactured locally to ensure compliance with their respective national standards. It involves the inspection of commodities at ports-of-entry and sale outlets based on information received from shipping manifests at Customs House, requests from Importers, and also, scheduled inspections. In addition, the investigation of consumer complaints forwarded to the GNBS from the Consumer Affairs Division of the Ministry of Tourism, Industry and Commerce on technical matters relating to commodities monitored by the Bureau are carried out.

The Metrology and Standards Compliance Department is also involved in the certification of Rice exported from Guyana to Jamaica. This involves the sampling of Rice at the wharves and mills and the analysis of same to determine the broken content, prior to exportation. Certificates are issued for each consignment.

2.1 Weights and Measures

2.1.1 *Manufacture of Weighing and Measuring Devices*

During the year 2003, a total of nine (9) manufacturers registered with the Bureau to manufacture and convert scales and masses as compared with eight (8) manufacturers registered for the year 2002. The examination of registered manufacturers' premises was conducted to determine compliance with the manufacturing requirements i.e. the facilities and tools used in their operations, quality control techniques, manufacturing standards, test masses and calibration scale, prior to the issuing of manufacturing licences, and follow-up visits were also conducted throughout the year to ensure requirements are maintained.

The manufacturer of measure did not register for the year 2003. However, all other known manufacturers of devices had registered.

Based on examinations conducted at manufacturers premises it was observed that manufacturers were adhering to manufacturing requirements stipulated by the GNBS. In addition, devices manufactured were submitted to the GNBS for verification prior to sale.

2.1.2 *Initial Verification of Imported and Locally-Manufactured Devices*

Appendix V shows a comparison of devices verified for the years 2001 to 2003.

A quantity of 1128 scales, 2087 masses, 298 measures and 31 meter rules locally manufactured and imported were initially verified by the Bureau for the year 2003, in comparison with 1263 scales, 2123 masses and 512 measures verified during the year 2002, indicating a decrease in the number of devices initially verified. A quantity of 14 scales and 52 masses was rejected in 2003, as compared with 14 scales and 3 masses rejected in 2002, since they did not pass the tests conducted and met the manufacturing requirements.

Devices rejected were returned to manufacturers for rectification and further adjustments and they were subsequently verified. Non-conformities identified were highlighted to manufacturers at the time of submission of devices for verification to prevent a re-occurrence of such non-conformities.

In Figure 1, the bar graph shows the initial verification of devices, for the year 2003 in respect of scales, masses, measures and meter rules as compared with 2002.

There had been a decrease in the number of devices initially verified since the demand for new devices on the market declined. Most of the vendors were already in possession of metric devices. However, those with imperial devices were moving to convert their imperial devices instead of buying new devices.

There is need for Importer of devices used in commercial trade to be more aware of the requirements for importation of said devices. In situations, where practicable, samples of devices should be submitted to the GNBS for type approval prior to importation. Further, imported devices need to be initially verified by the GNBS prior to sale.

2.1.3 *Subsequent Verification of Devices*

Appendix V shows a comparison of devices verified for the years 2001 to 2003.

The verification of devices used for commercial purposes was conducted at the Bureau's Legal Metrology Laboratory, Regional Weights and Measures Offices and during mobile stamping conducted at markets and various areas countrywide for the periods January to March and July to September, for the first and second half of the year, respectively.

A total of 4,503 scales, 8,316 masses and 932 measures were subsequently verified for 2003 in comparison with 3,166 scales, 7,033 masses and 515 measurers for 2002, signifying a significant increase in the number of devices subsequently verified. This could be attributed to the comprehensive mobile stamping exercise conducted countrywide in taking the service to the people.

Further, a total of 309 scales, 111 masses and 17 fuel tanks were externally verified for the Airlines, Seafoods, Sugar, Rice and other industries countrywide as compared with 194 scales, and 118 masses externally verified in 2002. These figures indicate an increase in the number of devices externally verified due to increase awareness and the effective implementation of the Weights and Measures Programme. **Figure 2** shows a bar graph for subsequent verification of scales, masses and measures for these years.

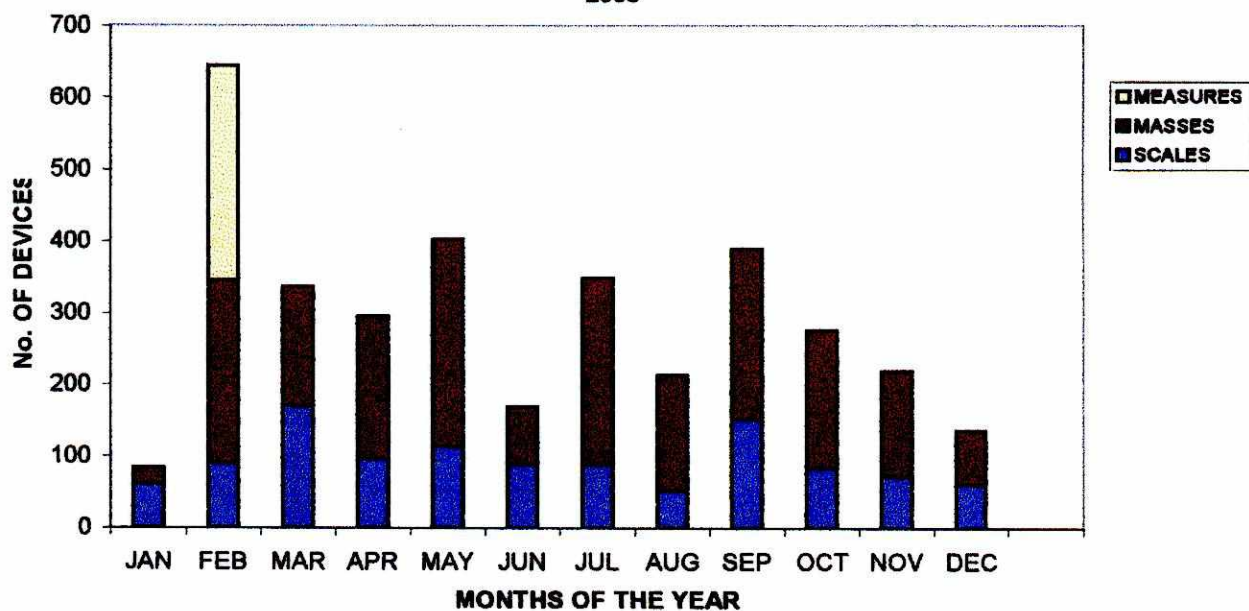
Appendix VI shows a comparison of petrol pumps verified for the years 2001 to 2003.

A total of 1191 petrol pumps and 14 bulk meters were tested of which 308 petrol pumps and 14 bulk meters were calibrated for the various petrol companies and private stations countrywide for the first and second half of the year 2003. This shows an increase in the number of petrol pumps and bulk meters verified since in the year 2002 a total of 1093 petrol pumps and bulk meters were tested of which 484 petrol pumps and one (1) bulk meter was calibrated. The increase is attributed to the construction of new stations and expansion of existing service stations.

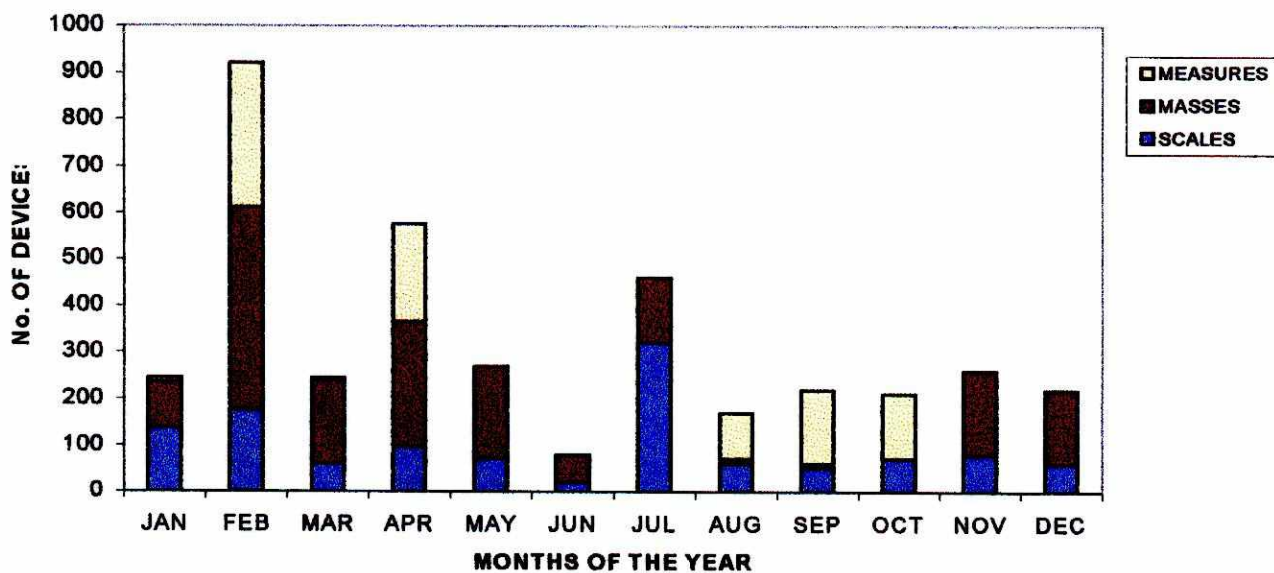
Non-conformities observed during verification exercises were highlighted to the proprietors of the various service stations visited.

INITIAL VERIFICATION REPORT (FIGURE 1)

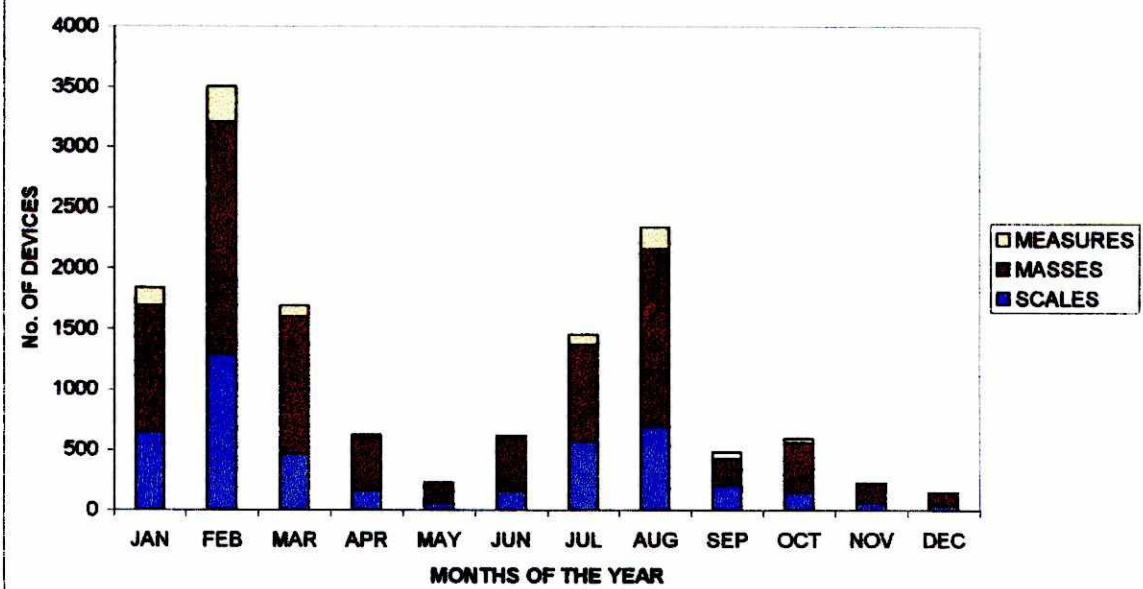
2003



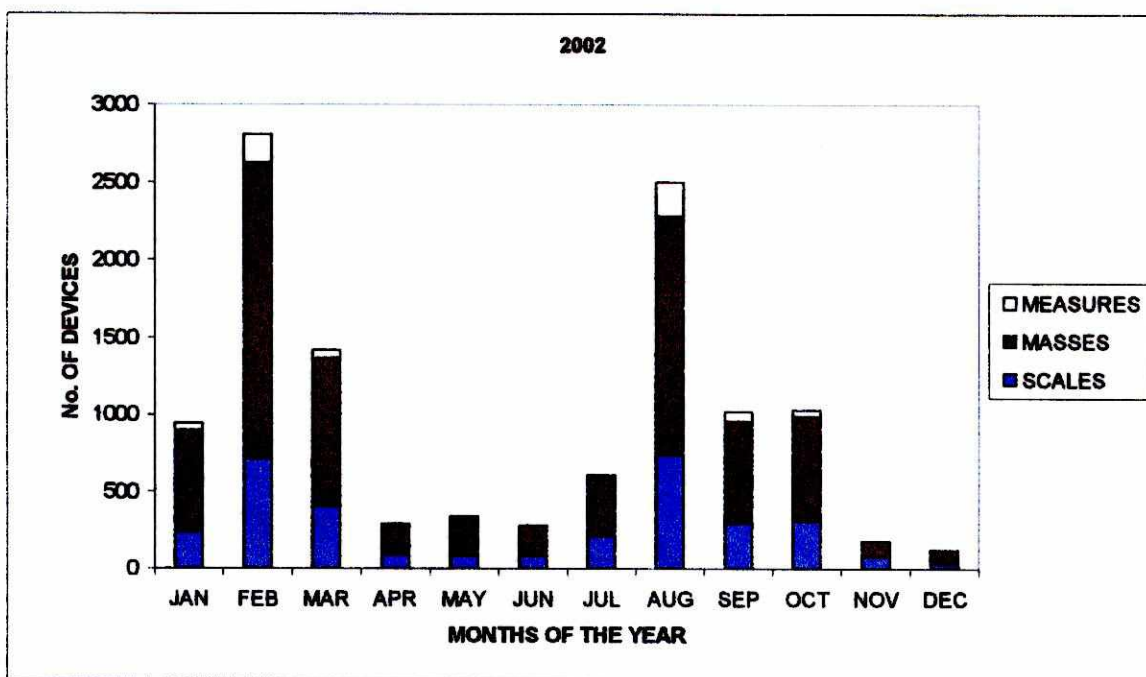
2002



SUBSEQUENT VERIFICATION REPORT FOR 2003 (FIGURE 2)



2002



Some amount of work was done on the verification of bulk scales used in industries, however, much more could have been done if the Bureau had in its possession a test truck and large capacity masses. Due to the lack of funding the Bureau was unable to acquire a test truck and large capacity masses in 2003.

No significant amount of work was done regarding the verification of bulk meters and wagon compartments at bulk terminals, due to the absence of the large capacity test measure. However, with the recent acquisition of this test measure, the GNBS will be able to conduct same in the new year, 2004.

Figure 3 shows a bar graph of petrol pumps and bulk meters verified for 2003 as compared with 2002.

A significant amount of work was conducted by the Bureau in collaboration with the Regional Weights and Measures Officers in Regions 2,3,4,6 & 7. However, despite efforts made by the Bureau during the year 2002 and 2003 to have established weights and measures offices operating in Regions 1,5,8,9 and 10 no significant Weights and Measures activities were conducted in these Regions. As a result, there is need for more support and cooperation from these Regional Administrations.

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No significant amount of work was done regarding the verification of bulk meters and wagon compartments at bulk terminals, due to the absence of the large capacity test measure. However, with the recent acquisition of this test measure, the GNBS will be able to conduct same in the new year, 2004.

2.1.4 *Sensitization Activities*

The training of vendors, shopkeepers and other retailers on the use of the metric system and the care and use of their devices was conducted continuously throughout the year during sensitization exercises carried out by Inspectors of the Bureau and Regional Weights and Measures Officers. Resulting from these exercises a total of 303 premises were visited and a quantity of 39 scales were converted for 2003 by licensed manufacturers and verified by the Bureau, as compared with 42 scales and 14 masses converted for 2002. There has been a decrease in the number of devices converted since most devices in use on the market are already in metric.

Although most of the devices used by vendors/shopkeepers are in metric consumers are still requesting commodities in imperial quantities. Vendors are claiming that if they do not facilitate consumers in this regard consumers would go to another vendor who is willing to facilitate them; thus creating unfair competition. In addition, vendors are complaining that wholesalers are still selling in imperial quantities and the Bureau need to do more educational work with these wholesalers.

2.1.5 *Surveillance Inspection of Devices*

Inspection activities to ensure devices used for trade were stamped and therefore in good condition were conducted during the months of April, May and June for the first half of the year, and October, November and December for the second half of the year. During these exercises carried out a total of 3891 stalls/premises were visited for the year.

Appendix VII shows a comparison of weights and measures surveillance for the years 2001 to 2003.

Resulting from surveillance exercises conducted at markets and shops, a quantity of 273 scales, 1,405 masses 237 measures were seized and removed, since they were found to be unjust or defective while in 2002 a total of 219 scales, 1,016 masses and 176 measures were seized and removed.

The increase in the number of devices seized is due to the reluctance of vendors and shopkeepers to have their devices stamped.

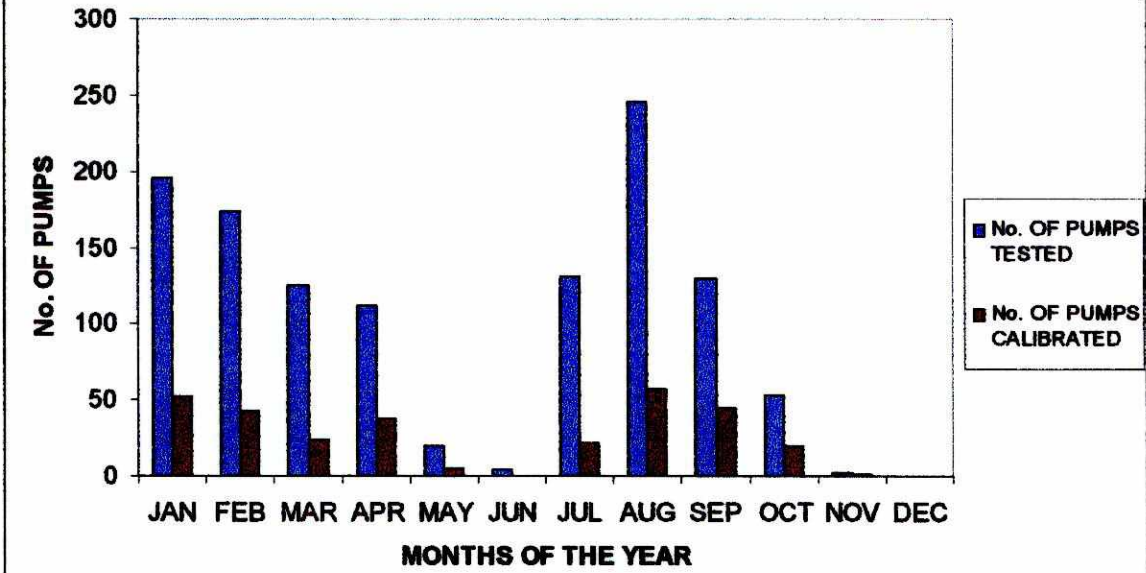
The prosecution of one rice miller was done during the year. However, the outcome is yet to be determined since the matter is engaging the attention of the Whim Magistrate Court.

Despite a significant effort made by the GNBS to ensure that devices are verified periodically and are in good condition at the time of verification vendors and shopkeepers are not properly maintaining their devices and are issuing them, resulting in these devices becoming inaccurate although they were stamped for the corresponding period.

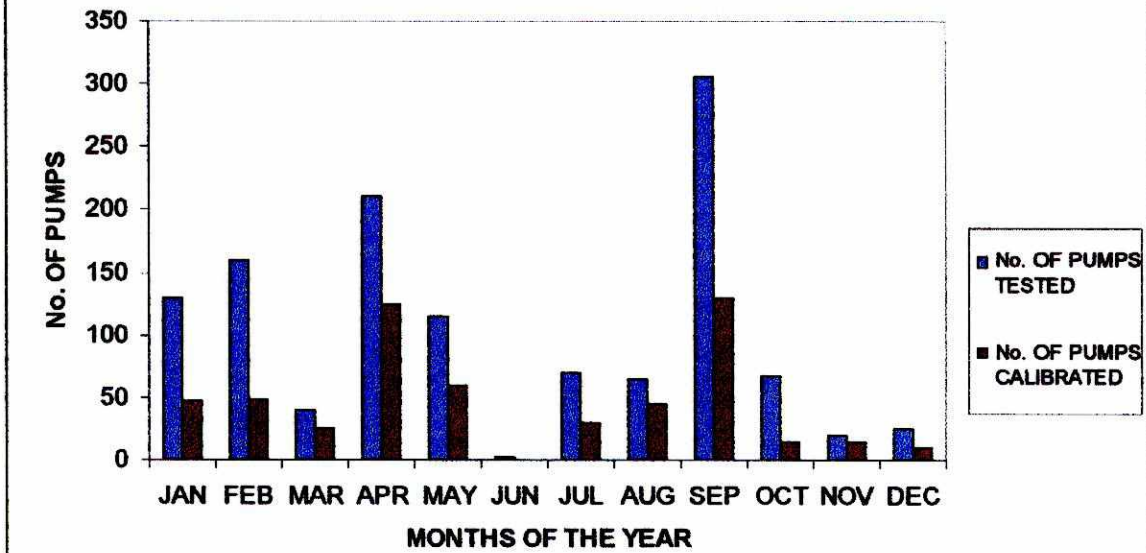
Vendors/shopkeepers need to ensure that their devices are stamped twice yearly as required by the 1981 Weights and Measures Act and are kept in good condition at all times.

Further, instead of seizing their devices only, vendors and shopkeepers should be prosecuted or fine for using inaccurate and improper devices.

VERIFICATION OF PETROL PUMPS REPORT FOR 2003 (FIGURE 3)



2002



2.1.6 *National Weights and Measures Monitoring Committee Meeting*

Meetings of the National Weights and Measures Monitoring Committee were held bi-monthly, instead of monthly throughout the year at the GNBS, due to the lack of participation and attendance of Regional Weights and Measures Officers. At these meetings, Officers who attended provided feedbacks concerning the progress of activities and problems encountered during the execution of their duties in the Regions. These meetings also facilitated open discussions on problems affecting the effectiveness of the programme, and allowed for coordination of activities countrywide in a timely and organized manner.

2.1.7 *Review of Weights and Measures Act*

The GNBS approached the Guyana Economic Opportunity Programme (GEO) for funding needed for a consultant to review the 1981 Weights and Measures Act currently used by the Bureau and to develop Regulations to give effect to the said Act. The Project did not materialise in 2003 but a provision was made for early 2004.

2.1.8 *Public Awareness*

Information gathered from Field Inspections, Consumer Complaints and Verification exercises which are useful for the protection and guidance of consumers were analysed and prepared routinely throughout the year for publication in the form of releases, notices, newsletters etc by the Public Relations Department.

Despite efforts made by the Bureau to guide consumers through various sensitization programmes and visits conducted, they need to be more vigilant when making purchases to avoid being cheated by unscrupulous vendors.

Further, information relating to the various activities conducted under this programme were periodically being forwarded to the Public Relations Department for publication.

The Bureau is moving to establish a National Measurement Accuracy Traceability System in the country, i.e. to acquire the national physical primary standards in Mass, Volume and Length, and use these to calibrate the secondary standards which would in turn calibrate the working standards.

The working standards would be used to verify devices used in industry and commerce.

In order to establish the National measurement traceability system Government has approved G\$20M for the Bureau to acquire the necessary reference, physical standards and equipment.

To date, the Bureau has received some of the equipment, however, the remainder is expected to arrive early in the new year.

The equipment and standards acquired will enhance the capability of the GNBS metrology department and would enable the Bureau to provide a better quality service to its stakeholders.

A heavy mass laboratory, a light mass laboratory and a volumetric laboratory were constructed at the cost of G\$2M. These facilities will house the equipment and standards acquired.

The existing working standards used by the Bureau and the Regions were calibrated as required, for the year to maintain accuracy and traceability to international standards.

2.2 STANDARDS COMPLIANCE PROGRAMME

2.2.1 *Monitoring of Imported and Local Commodities*

A total of 85 importers of commodities monitored by the Bureau under the Standards Compliance Programme registered with the Bureau for the year as compared with 94 for 2002, 213 for 2001 and 282 for 2000. This indicates that there has been a continuous decline in the number of importers who registered over the last four years which is attributed to the discontinuation of the ports-of-entry inspections, signaling to importers the unnecessary to register with the Bureau. It is important for the Bureau to maintain its presence at the ports-of-entry in order to monitor the commodities entering the country. There is no substitute for ports-of-entry control. Regarding used tyre dealers, 56 registered with the Bureau for the year 2003 as compared with 50 for 2002, 45 for 2001 and 59 for 2000, indicating that the Bureau had maintained control over the registration of these tyre dealers.

Guidelines on the importation and sale requirements of commodities monitored by the Bureau were issued to importers and dealers at the time of registration. In addition, notices were published in the newspapers and on television education importers and dealers on the requirements for the various commodities.

As a result of the discontinuation of ports-of-entry inspections the GNBS has intensified surveillance inspections at sale outlets to ensure imported commodities monitored by the Bureau are in compliance with their respective national standards. This was done through an intensified product-by-product campaign approach, whereby emphasis was placed on the monitoring of a particular product over a short period of time. Products covered in the campaign during the year 2003, include used tyres, safety matches, razor blades, cigarettes, electrical

appliances, furniture, textiles, garments, footwear and the pin plugs. **Appendix VIII** shows a comparison of import control surveillance for the years 2001 to 2003. Resulting from examination of sale outlets, a total of 2,497 inspections were conducted and a quantity of 2,363 packs of cigarettes, 9,314 boxes of safety matches and 248 packets of razor blades were seized and removed and 350 pieces of furniture items were placed on hold pending relabelling.

For commodities which were not in compliance, the importers were advised to take corrective actions to avoid a reoccurrence for further shipments. However, for used tyres, a quantity of 440 defective tyres were destroyed as a result of examination conducted at sale outlets, as compared with 449 in 2002.

There was a decline in the number of tyres destroyed which could be attributed to increase awareness of the requirements for used tyres and continuous monitoring at sale outlets. However, a number of non-conformities regarding storage of tyres were highlighted to dealers who subsequently took steps to correct these non-conformities. This was verified by Inspectors through follow-up visits.

A meeting was convened on 2003-03-26 with Importers and Dealers of used tyres. At this meeting there were discussions on the requirements for storage and quality of tyres imported and sold locally. Dealers expressed their dissatisfaction with importers who are reluctant to replace or refund the costs of tyres destroyed by GNBS Inspectors during routine surveillance inspections and called for the continuation of port-of-entry inspections so as to prevent poor quality tyres reaching them.

Importers promised to import better quality tyres and to address the concerns raised by dealers. The GNBS advised dealers to report any further difficulties encountered with Importers.

Based on numerous complaints received by the GNBS regarding inadequate labeling and tar and nicotine contents of the cigarettes offered for sale on the local market the GNBS had launched an intensive surveillance campaign at sale outlets resulting in the seizure of various brands including Newport, Business Club, Lotto, Marlboro, More, Euro, Rothmans, Don Hill, 555, L & M and ASSOS.

Samples of Business Club, Bristol and Benson and Hedges were acquired and tested by an Independent testing laboratory in the USA for Tar Nicotine content. The Bristol and Benson & Hedges cigarettes passed the tests conducted while the Business Club brand failed.

As a result, a meeting was convened by the Importer of the Business Club brand of cigarettes and representatives from the manufacturing company to discuss the results obtained. A time-frame to deal with non-conformities was agreed upon.

Resulting from numerous complaints received by the Public Utility Commission from consumers regarding the overcharging by Guyana Power and light (GPL) and Guyana Water Incorporated (GWI) for electricity and water utilized, the PUC requested a meeting with the GNBS which was convened on 2003-01-09. At this meeting, it was agreed that the GNBS would commence the monitoring of electrical and water meters under its Standards Compliance Programme, in order to ensure the accuracy of meters imported.

In addition, meetings were subsequently held with GPL and GWI informing them of the decision taken by the GNBS to monitor all imported electrical and water meters, and the relevant importation requirements they are expected to adhere to.

The examination of fertilizers continued at ports-of-entry to ensure compliance with the national labelling standard. The net mass of the bags was also checked to ascertain compliance with the stipulated quantity. In addition, samples were also taken and tested to ensure the percentage of active ingredients are in compliance with the stipulated quantities. For this year a total of 28 inspections were conducted as compared with 27 inspections in 2002. Tests conducted revealed that the fertilizers were satisfactory.

The discontinuation of ports-of-entry inspections by the Bureau continues to affect the effectiveness of the Standards Compliance Programme since there has been a vast decrease in the amount of importers registered with the Bureau as compared with the previous years. In addition, Inspectors experienced great difficulties in their attempts to address products which are not in compliance, since they would have already been distributed to dealers countrywide. Inspectors also experienced difficulties in the execution of their duties since importers continued to be reluctant to cooperate with Inspectors during Inspections.

2.2.2 *Local Commodities*

The monitoring of locally-manufactured commodities continued during the year, resulting in 9 manufacturers who registered with the Bureau under this programme and a total of 51 inspections conducted at bonds and warehouses. There was an increase in the number of inspections conducted this year as compared with 34 inspections in 2002.

The examination of commodities manufactured locally revealed that most of the commodities were not in compliance with their respective national standards. As a result, manufacturers were advised to take appropriate corrective actions to ensure compliance. Follow-up inspections were also conducted by the Bureau to ensure non-conformities highlighted during initial inspections were adequately addressed. In situations where manufacturers were previously advised of non-conformities and no actions were taken to address same, the commodities were placed on hold until the non-conformities were addressed.

Despite efforts made by the Bureau during the year to have all local manufacturers of commodities monitored by the Bureau registered under the standards compliance programme most manufacturers were not registered for the year 2003. In order to have these manufacturers registered and to ensure the compliance of locally manufactured products to established National Standards there is need for stronger enforcement activities by the GNBS

2.2.3 *Consumer Complaints*

During the year, a total of 24 consumer complaints relating to the quality, weight and cost of products purchased and services provided was received. Some of the complaints received were referred to the Bureau from the Ministry of Tourism, Industry and Commerce for technical assistance and further investigation, while some were received directly by the GNBS. Twenty two (22) of the complaints received were resolved and two (2) unresolved. Consumer Complaints received were mainly for items such as electrical appliances, used tyres, cell phones, textiles, soap powder, battery. The nature of complaints received include defective products, inadequate labelling, short weight and measurement, misleading pricing of products and poor services provided.

There has been a decrease in the number of complaints received for 2003 as compared with 35 complaints received in 2002.

Although there were proprietors who were cooperative with the GNBS in resolving consumer complaints regarding the quality of products purchased there were a few who were reluctant to address complaints drawn to their attention. In situations where there were defective products inspections were conducted and products not in compliance were placed on hold pending submission of test certificates.

2.2.4 *Promotion of Standards Compliance Activities*

During the year 2003, information relating to the various activities conducted under the Standards Compliance Programme were disseminated to the public via the various media houses. Numerous advisories relating to defective products discovered during surveillance inspections, such as razor blades, three pin plugs, safety matches, furniture and cigarettes were published to guide consumers. Further, requirements relating to various commodities monitored by the Bureau were also disseminated to various stakeholders during surveillance in the form of flyers.

2.2.5 *Strengthening of the Standards Compliance Programme*

In addition to the 16 categories of commodities monitored in 2002, seat belts, fluorescent lamp ballasts, electricity and water meters and measuring tapes and rules were included in the 2003 work programme. This was due to the dissatisfaction of consumers regarding the quality and accuracy of the said products. The Bureau was successful in having the standards for labeling of textiles, garments and footwear developed and made mandatory. This would facilitate the promotion and enforcement of the said standards, thus providing better guidance for consumers when purchasing the items.

Several meetings were held with the Customs and Trade Administration in an effort to enhance collaboration between the two agencies and to solicit the cooperation needed from Customs to carryout agency function for the GNBS.

Training was conducted for Customs Officers to educate them on the various activities of the Standards Compliance Programme and the importance of their role in improving the efficiency and effectiveness of the programme which would ensure that quality products are offered to consumers, including adherence to safety requirements.

Several meetings were held with the Customs and Trade Administration and training provided to Customs Officers regarding the agency functions to be performed for the GNBS, which include the supply of shipping manifests to the GNBS. However, these functions were not carried out by Customs Officers at the ports-of-entry as expected, resulting in the clearing of commodities without inspection by the GNBS. This reduced the effectiveness of the Standards Compliance Programme of the Bureau.

2.2.6 CERTIFICATION OF RICE

The certification of rice exported to Jamaica commenced in January, since the Jamaican Authorities were dissatisfied with the quality of rice exported from Guyana to Jamaica, despite being certified by the Guyana Rice Development Board (GRDB).

As a result, a memorandum of understanding was signed between the Guyana National Bureau of Standards (GNBS) and the Jamaica Bureau of Standards (JBS) regarding the certification of rice exported by Guyana to Jamaica. This certification was done by GNBS on behalf of JBS.

During the year, sampling was conducted by Inspectors of the GNBS at wharves and rice mills countrywide and tested to determine the percentage broken.

As a result, 1124 containers (28,706 metric tonnes) of white and parboiled rice for various exporters were sampled and analysed prior to exportation to Jamaica.

The commencement of the certification of rice exported to Jamaica by the Bureau, through the Metrology and Standards Compliance Department had severely affected the activities of the Metrology and Standards Compliance programmes due to the increased demand for Inspectors to facilitate the certification activities. Inspectors were required to work late hours during the nights and weekends to conduct the sampling of rice at mills and wharves countrywide. Additional Inspectors would need to be hired at the commencement of the new year.

3.0 MANAGEMENT SYSTEMS DEPARTMENT

OVERVIEW

The Management Systems Department of GNBS spearheads five (5) programmes which deal with the implementation of standards through the provision of training, technical assistance, inspection, auditing and certification. Both international standards e.g. ISO 9001 and 14001, and Guyana Standards such as GYS 170, 50, 107 were promoted.

During the year, the department was staffed with four (4) Technical Officers, and one (1) Technical Assistant, under the Head of Department. The programmes of the Management Systems Department are listed below:

- (i) **Laboratory Certification:** The goal of this programme is to promote the implementation and maintenance of a quality assurance system in testing laboratories that provide a service to the public and industries in order to ensure accurate, reliable and consistent test results to all users.
- (ii) **Product Certification:** Certifies the quality of locally-manufactured products to relevant Guyana Standards with the objective of providing assurance to consumers or buyers.
- (iii) **Quality Management:** Promotes and provides assistance to local companies wishing to establish quality management systems and working with companies to improve the quality of their products, hence increasing competitiveness.
- (iv) **Environmental Management:** Promotes and provides assistance to local companies wishing to establish environmental management systems and working with companies to address identified environmental impacts.
- (v) **Conformity Assessment:** Facilitating the process of establishing an internationally-recognised national system for conformity assessment, meeting the requirements of relevant ISO standards and guidelines.

The activities and achievements of these programmes are discussed below.

3.1 LABORATORY CERTIFICATION

Laboratories registered to the Laboratory Certification Programme are involved in developing their laboratory systems, i.e a quality manual in compliance with the National Standard 'GYS 170:1998 – General requirements for the operation of a laboratory and also technical procedure manuals for tests conducted at the laboratories. Attaining the requirements of the standard, laboratories are certified by the GNBS and are renewed annually. During the certification period surveillance visits are periodically conducted to ensure maintenance of the system. The activities of the programme are geared to improve the quality of laboratory operations in Guyana and in effect, to protect consumers.

3.1.1 *Technical Assistance to Laboratories*

To date eight (8) testing laboratories have been certified. Six clinical laboratories, namely Guyana Medical Laboratories, Guyana Responsible Parenthood Association, Sigma Labs, Eureka Medical Laboratory, St. Joseph Mercy Hospital Laboratory, Central Medical Laboratory – Georgetown Public Hospital Corporation and two Food testing laboratories were granted partial certification for testing seafoods according to the EU requirements, namely Government Analyst, Food and Drug Department and the Institute of Applied Science and Technology. Food and Drug was certified to do chloramphenicol, total volatile base nitrogen (TNB-N) and microbiological analysis and IAST was certified to do lead, cadmium and mercury in seafoods for export to the EU market.

A further eleven (11) laboratories are correcting their quality and technical manuals for resubmission to the Bureau. These laboratories are also developing their quality systems in the process. (APPENDIX IX).

Two (2) chemical testing laboratories were developing their systems to meet the National Standard. One of these laboratories is correcting its quality and technical manual for resubmission to the Bureau.

In comparison to 2002, the other eight laboratories are developing their systems to meet the ISO 17025 standard, 'General requirements for the competence of testing and calibration laboratories'.

At present, twenty four (24) laboratories have been making the extra effort to have their systems developed. Two laboratories have completed their documentation and are presently implementing the system. Unavailability of staff is hindering the certification process. The Laboratory Certification Programme is unique in Guyana and it is gaining support mainly from the Clinical Laboratories.

Three testing laboratories were granted certification during the year. Partial certifications were granted to IAST and Food and Drug laboratories.

The Central Medical Laboratory – GPHC was the only clinical laboratory certified for the year. The other twenty four (24) laboratories were not certified for the year because of the following constraints:

- (1) The laboratory personnel were not trained in the development and implementation of a quality system meeting the requirements of the laboratory standard. However, a training programme was conducted in October, 2003 on the revised laboratory standard – GYS 170:2003 of which twenty seven (27) personnel from eighteen (18) laboratories participated. Laboratories are now equipped to develop their quality systems and should be certified in 2004.
- (2) Laboratories have limited resources which affected the development of the quality systems and adequate commitment was not displayed by management. Adequate time, personnel and resources were not readily available.
- (3) Laboratory management were not involved in the development of the quality system and reviewing of manuals before submission. This lead to repeated corrections to manuals to address non-conformances before the certification process could continue.

One application form was received and processed from the Phoenix Medical Laboratory. This is a new establishment that is now developing its laboratory quality system. The laboratory is now developing its quality manual.

The Laboratory Certification Programme is voluntary and only laboratory professionals with an interest in laboratory quality apply for the programme.

ESSO Ramsburg, Macorp and Loring Laboratories had applied for certification in previous years. However, efforts to contact these laboratories were not successful. The Bureau will take further follow up actions to ascertain the interest of these laboratories in the programme.

Nineteen (19) quality manuals and fifty two (52) technical manuals were submitted by sixteen (16) testing laboratories. Eleven (11) of these laboratories are not certified and are reviewing their manuals.

Laboratories have been consistently using the knowledge gained through technical assistance provided to develop their manuals. However, due to the lack of training in the actual documentation and development of manuals, there was evidence of poor expression in the language used. Quality and technical manuals often had typrographical and grammatical mistakes to be corrected. Use of professional language in manuals was also lacking. It is anticipated that the training conducted in the revised standard will address these areas of concern.

3.1.2 *Maintenance of Quality Systems*

During the year seventeen (17) surveillance visits were conducted at the nine certified laboratories to ascertain whether the laboratories were maintaining their quality systems in their operations. Also six (6) renewal audits were conducted at certified laboratories to ensure that their quality systems were intact and their certification could be renewed.

It was found that all six (6) certified laboratories had consistently maintained the requirements for certification. There were no major non-conformances to affect the quality of results produced. Laboratories demonstrated commitment to the Certification Scheme.

The Food Testing Laboratories did not perform testing for Seafoods during the surveillance periods which resulted in no records of implementation.

The absence of an accredited metrology laboratory in Guyana to provide traceability and calibration services in volume, temperature and weights is affecting the accuracy of measuring instruments used in laboratory operations. This has a direct or indirect effect on the quality of tests results produced by these laboratories.

The absence of a National Proficiency Testing Scheme in Guyana or a Reference laboratory hinders monitoring of the laboratory's competence to conduct testing within the scope for certification. Proficiency testing schemes that are available at the regional and international levels are quite expensive for local laboratories to subscribe.

Staff attrition and poor management commitment at these laboratories rarely affected the effective implementation of the quality system.

Among the certified laboratories, Bio Med Labs of Guyana was not maintaining the requirements and conditions for certification. The certification of this laboratory was not renewed in December 2002. No renewal audit was conducted at this laboratory in December 2003 since the laboratory was relocated but no information to this effect was forwarded to the Bureau.

It was recommended that the certification of this laboratory be withdrawn. Management is yet to make a final decision.

The second surveillance visits scheduled for IAST and Food and Drug Department were not conducted since these laboratories are working towards the ISO 17025 standard. The personnel were also involved in training programmes during the scheduled times.

The third surveillance visits to the other certified laboratories were not conducted because the officer responsible for the programme was on a training programme in India during the first quarter.

Lack of necessary reviews that objectively monitored the quality system was evident in most of the certified laboratories. Laboratory personnel were not trained to do auditing and thus lacked the ability to effectively audit or review their laboratory systems.

As the Bureau continues to promote laboratory quality in Guyana, enforcing measures such as cancelling, withdrawing and suspending certifications issued was not the main focus. It is anticipated that the continuous support offered to laboratories will encourage laboratories to develop their systems and recognise the importance of a quality system.

Continuous training was not available for laboratory personnel after they left the University in areas of laboratory management, quality control and quality assurance. Training is required in quality assurance, quality control, laboratory management, technical operations and laboratory safety.

Training in some technical areas such as Microbiology, Haematology and Biochemistry at the University of Guyana lacked sufficient practicals, therefore students were deficient in practical aspects which affected laboratory quality. The University of Guyana also offered no training in laboratory management.

Training offered by CAREC and the Ministry of Health was most times not offered to all the private laboratories. In some instances, the cost and lack of publicity was a critical factor.

3.1.3 *Improving the capability of laboratory personnel*

Nineteen (19) personnel from fifteen (15) testing laboratories (non clinical) were trained in the ISO 17025 standard – 'General requirements for the competence of testing and calibration laboratories' (APPENDIX X). To date, the Demerara Distillers Limited, G & S Sanata and Guyana Power and Light have informally indicated that these laboratories will not be developing quality systems to meet the ISO 17025 standard.

The other laboratories have commenced and in some cases completed their internal gap analyses. The Bureau will be visiting these laboratories in 2004 to do a formal gap analysis.

A 'user group' was established with these laboratories to facilitate sharing in the development of procedures and policies to meet the requirements of the standard. At this forum laboratory representatives made suggestions and based on discussions queries were answered.

The implementation of the ISO 17025 standard will be a challenge for local testing laboratories for the following reasons:

1. The laboratories opting for the international standard are not certified to the National Standard, therefore there may be no documented quality systems in these laboratories.
2. There is no accredited metrology laboratory in Guyana to provide calibration and traceability services to laboratories in Guyana. These services at the regional and international level are costly.
3. Laboratory personnel are not involved in continuous training sessions to upgrade their technical skills and effectively maintain a laboratory management system.
4. In Guyana, the inadequate and insufficient supply of electricity and water will affect laboratory testing.
5. The slow and inefficient access to laboratory resources such as reagents, equipment, and other supplies will affect the services provided by laboratories.
Not much emphasis was placed on the quality of an item purchased, but the cost, which affects the performance of the laboratory.
6. No National Proficiency Testing Scheme is available in Guyana to monitor the competency of tests performed at the laboratories in Guyana. It is a requirement of Accreditation that all testing laboratories participate in proficiency testing at least annually for the tests accredited. Proficiency testing services are very costly at the regional and international proficiency testing providers. The Bureau does not have adequate resources to operate a proficiency testing scheme.

3.1.4 *Assistance to the GNBS gold testing and metrology laboratories*

The gold testing and metrology laboratories of the Bureau are currently developing their systems to meet the ISO 17025 standard for the purpose of accreditation since the GYS 170:2003 national standard is similar to the ISO 17025 standard. These laboratories can also be certified to the national standard in the interim.

The quality manual for the gold testing laboratory was submitted for review and is being corrected by the laboratory personnel.

These laboratories currently do not have any documented quality system, therefore implementation of the ISO 17025 standard will require commitment to document and implement policies and procedures in the laboratories. Resources that are limited include time availability of trained personnel to develop the system and calibration of equipment.

3.1.5 *Liaison with the Ministry of Health –Proficiency Testing Scheme*

The Bureau met once with the Standards Department of the Ministry of Health where it was decided that the Ministry of Health will function as the coordinating body while the Bureau will function as the enforcing body under the Laboratory Certification Programme.

To date, not further development or feedback on the action plan for the improvement of clinical laboratories in Guyana was received from the Ministry of Health.

The Ministry of Health also promised to coordinate a proficiency testing scheme for clinical laboratories in the country. To date no such scheme was established or any alternative arrangement put in place.

The Ministry of Health has not been responding as expected which resulted in a negative effect on improving and monitoring the test results issued by clinical laboratories and their competency.

The unavailability of a National Proficiency Testing Scheme affected the effective monitoring of the competence of certified laboratories. This will also affect the credibility of the programme since laboratory competency is not presently monitored through certification. The establishment and maintenance of a laboratory quality system is monitored through National Certification.

However, the Bureau conducted three interlaboratory comparisons for Biochemistry. This was done with the limitation of resources available. The results were analysed and discussed with the laboratories. However, this programme can be more formalized with the availability of additional resources.

3.1.6 *Reviewing of the National Standard*

The revised national standard, GYS 170:2003, 'General requirements for the operation of a laboratory' was approved by the National Standards Council and published. To date thirteen laboratories have purchased copies of the revised standard for implementation at the laboratories.

3.1.7 *Establishment of Reference Test Methods*

Reference methods for clinical testing laboratories were developed by the Management Systems Department for Microbiology, Haematology, Chemistry, Serology and Sample collection. These manuals will be used by the Bureau to guide uncertified laboratories.

Reference methods have not been established for the chemical, microbiological and food testing laboratories. The Bureau has a copy of the 17th edition of the AOAC methods of analysis that are applicable to these testing areas.

3.1.8 *Approval of the Laboratory Certification Manual*

The Laboratory Certification Manual was approved by the Management of GNBS and the National Standards Council during the year. Most of the policies and procedures documented in the manual have been implemented.

To date the advisory committee on Certification was not established, decisions on certification were finalised by the Director, GNBS after the audit reports were submitted by the auditors.

The Laboratory Certification Scheme was not accredited during the year, however efforts were made in streamlining the scheme for accreditation.

A special meeting was held with testing laboratories to launch the Laboratory Certification Manual in January 14, 2003 and sensitise the laboratories on the procedures for Certification.

3.1.9 *National Laboratory Quality Committee*

National Laboratory Quality Committee meetings were held monthly at the GNBS. The clinical laboratory sub-committee members were very committed and attended meetings consistently. There were ten clinical sub-committee meetings. No meeting was held for the chemical, microbiological and food testing laboratories.

Members used these meetings to highlight problems affecting their laboratories and the internal constraints, and limitations experienced while implementing the laboratory quality systems. Common constraints included (a) heavy workload which limited the time allocated to develop quality and technical manuals, (b) staff attrition, (c) limited availability of appropriate and adequate resources to do testing and (d) the use of rapid test kits in Pharmacies and Doctor's Offices.

The meetings were also used to progress check members status of the development of their quality and technical manuals.

It was decided that meetings will be held quarterly in 2004 so that laboratories can focus on developing their quality systems and present more comprehensive reports.

3.1.10 *Other activities*

3.1.10.1 *External meetings*

The EU project 'Strengthening of Medical Laboratory Services in Guyana' is a project focused at improving national and regional medical laboratories for improved patient management, disease prevention and control. Improved health reduces disease outbreaks that threaten the tourist industry, a major source of economic growth, employment and foreign currency.

The Caribbean Epidemiology Centre (CAREC) is an institution charged with a mandate to provide guidance and leadership for Caribbean medical laboratory operations. CAREC has embarked on the implementation of this project to reform medical laboratories and strengthen operations in both public and private sector laboratories in the Caribbean. Guyana is one of the project beneficiaries with the Ministry of Health being the coordinating in country office.

The Guyana National Bureau of Standards is among the stakeholders that will benefit from this project because of the existing Laboratory Certification Programme.

The stakeholders from a National Steering Committee met monthly to obtain feedback from the project representatives at the Ministry of Health. The project will address the following areas:

1. Human Resource Development
2. Laboratory management
3. Regional coordination
4. Operational research
5. Legislation and accreditation

This project is guided by a number of Steering Committees to address the different aspects of the project for implementation.

The Legislation and Accreditation Sub-Committee recommended the ISO 15189:2003, Medical Laboratories – Particular requirements for quality and competence, as the standard for medical laboratories in the Caribbean. This committee is currently reviewing a guidance document that will facilitate implementation of this standard in Caribbean Laboratories. This document will also function as a guide for assessment of compliance with the standard.

For the project, training in laboratory management has commenced where two representatives from each beneficiary country attended. Guyana is represented by staff from the Ministry of Health and Blood Bank. This programme should be completed in 2005. Stakeholders had to indicate their needs at the national steering committee meeting.

This project once successfully implemented will improve the quality of medical laboratory services in Guyana. However, to attain the requirements of the ISO 15189 standard will be a challenge. The challenges will only be defeated if the Ministry of Health plays a more active role in assisting laboratories in developing their laboratory quality systems. Only a small fraction of clinical laboratories in Guyana were capable of meeting the requirements of the National Standards GYS 170:1998 which is very basic in comparison to the international standard. The challenges highlighted in section 3.1.3 if this report are also applicable here.

3.1.10.2 *Training Programme*

The Management Systems Department facilitated a training programme for the GYS 170:2003 standard where twenty seven personnel from eighteen laboratories were trained in the development and maintenance of the laboratory management system meeting the requirements of GYS 170:2003 standard.

This training programme was designed to facilitate:

- Development of a quality manual and associated procedures for the quality system meeting the GYS 170:2003 standard.
- Development and implementation of a quality management system.
- Development of procedures for ensuring that the laboratory is providing accurate, reliable and consistent results.

The tools acquired through this programme should allow laboratory personnel to submit quality and technical manuals that meet the requirements of the GYS 170:2003 standard.

Based on the participant's evaluation of the course it was beneficial and had addressed their needs. However, it was indicated the course should have been designed for clinical laboratories and more clinically related examples used.

3.1.10.3 *Workshop*

Quality in Blood Services

This workshop was sponsored by the MOH and PAHO to improve the quality of Blood Bank services in Guyana.

At this workshop all public hospitals with Blood Banking services and two private laboratories attended.

The workshop focused on the documentation hierarchy of the quality system where each level in the hierarchy was discussed.

Participants had to develop procedures using flow charts on their blood banking operations. Guidance was provided by the facilitator Dr. Serge Xueref, PAHO/WHO consultant from Washington.

The Caribbean Regional Standard for Blood Banks and Transfusion Services will be implemented by facilities with blood banks on developing their quality systems.

Participants were expected to implement the principles learned at their institutions. Ms. Hardy Chief Medical Technologist, National Blood Transfusion Service along with CAREC will monitor the development of these facilities.

3.1.10.4

The Technical Officer responsible for this programme was involved in a number of training programmes which would improve efficiency and competency of the programme in the new year through the implementation of the knowledge and skills acquired.

This will in effect improve the effectiveness of the programme that will result in economic growth and development through good laboratory practices.

During the coming year collaboration with laboratories participating in the Laboratory Certification Programme will be a critical factor in encouraging the Certification and Accreditation of Laboratories in Guyana.

The attendance to the nine (9) training programmes affected the regular duties of the Officer who was unable to conduct all scheduled surveillance visits to certified laboratories and visit uncertified laboratories to monitor their progress towards certification. This also limited the time available to do research and development of the programme.

3.2 **PRODUCT CERTIFICATION (STANDARDS MARK)**

The product certification programme of the Guyana National Bureau of Standards serves to promote, implement and monitor certification systems in industries to provide the assurance that locally-manufactured products conform to the requirements specified in the relevant national standards.

Before certification can take its course, the following infrastructure must be in place.

- Relevant Guyana Standard for the product.
- Testing facilities for the product in accordance with the standard.
- Adequate quality control system in the manufacturing process.

The major activities of the programme are:-

- (1) Granting permission through the issue of a certificate to manufacturers to mark their product with the Standards Mark, once having satisfied the requirements of the relevant standard and the certification scheme; and
- (2) Conducting regular surveillance to ensure that certified manufacturers continue to conform to the requirements of the relevant standard and the certification scheme.

Under the programme, the activities of the Gold Testing laboratory are also being coordinated as an extended facility to the certification of gold jewellery.

This report briefly summarizes the activities, accomplishments and challenges experienced for the year 2003 for the product certification programme of the GNBS.

3.2.1 *Maintenance of Standards Mark permits*

Clients on the GNBS product certification scheme include Steve's Jewellery, King's Jewellery, Seeram's Jewellery, Niko's Jewellery, DeAbreu's Creations, Guyana Thermoplastics Limited and Plastic Products Limited. To effectively monitor these clients, surveillance audits were conducted as scheduled; however, the frequency of surveillance audits per client could not have been achieved because the certification personnel were being trained during that period.

It was clearly noted that due to the crime situation in the country, Diyaljee's and Topaz had withdrawn from the scheme.

Several visits were made to the certified jewellers to aid in the development of a documented quality system. To date, manuals had been received from King's, Seeram's and Niko's jewellery. Despite the fact that all surveillance audits could not be accomplished, no complaint was received regarding poor quality products by the certified clients. Renewal audits were conducted at Steve's jewellery, plastic Products Limited and Guyana Thermoplastics Limited.

3.2.2 *Granting of permits to New Products*

Applications had been received for the certification of sugar, steel nails and fibre tech products from Guysuco, Gafsons Industries and Fibre Tech, respectively. The certification process had commenced for steel nails but the client did not complete the Quality Manual, which halted the flow of activities.

There is no standard for fibre tech products which prompted the Standards Department to start the development of such standard.

The Guyana Standards for sugar were also being reviewed for suitability for product certification; hence, certification could not have been accomplished.

The absence of credible testing facilities also posed a major problem for the certification of new products.

3.2.3 *Expansion of the Jewellery Certification Programme*

DeAbreu's Creation was certified as meeting the requirements of the Guyana Standards for gold articles. This was the result of several audits and visits to assist and verify that all the requirements of the standards for gold articles and the product certification scheme were fulfilled. The process was very long and tedious as much emphasis had to be placed on the development and implementation of a quality control system in the client's operation.

Lawrence Lowe's Jewellery is also on the scheme but the certification process could not have been completed because the client is still implementing the quality system as outlined in the Quality Manual.

Several enquiries had been received regarding the certification of gold jewellery but could not have been processed because of the lack of infrastructure for certification on the client's premises.

The jewellery standard had been reviewed and Part I based on marking requirements was approved as mandatory. Part II of the standard based on guidelines for manufacturing, alloying and testing was approved as a voluntary standard.

As such, a training programme was developed and conducted in Linden via LEAP to educate the jewellers on both voluntary and mandatory requirements. The requirements for the certification of gold jewellery were also emphasized.

3.2.4 *GNBS Gold Testing Laboratory*

The infrastructure required for gold testing had been acquired and fully put into operation. As such, testing was conducted on samples of gold jewellery on a regular basis for clients on the product certification scheme.

A quality manual for the laboratory was also prepared in accordance with ISO/IEC 17025: General requirements for the competence of testing and calibration laboratory. Subsequently, this manual was reviewed by the Laboratory Certification Officer for approval.

Validation of the short-cut fire assay method of testing against the internationally-recognised cupellation method was also underway but had to be terminated because one of the participating testing bodies, GGMC, went out of order and could not be made functional.

3.2.5 *Procedure for Product Certification*

In enabling an efficient and transparent certification process, procedures for granting certificates, monitoring clients and reviewing certificates, had been developed. Subsequently, these procedures were reviewed and approved by the National Standards Council. This had triggered implementation to 70% completion. Steps had also been taken to align/incorporate the procedures into the GNBS quality management system. As such, activities of the certification programme that were similar to that of other like programmes had been identified for harmonization.

Other Activities

Several user group meetings were attended for ISO 9001 and ISO 17025 to guide stakeholders to develop and implement same.

Internal user group meetings were attended to aid in the development of a quality system at the GNBS. As such, procedures and processes regarding ISO 9001:2000 were studied as per the activities of the GNBS.

Jewellery sub-committee meetings were conducted and resulted in the jewellery standards being approved as mandatory/voluntary. Electrotechnical committee meetings were conducted to develop standards relevant to the electrotechnical sector. As such, standards were also approved.

Public Consultation sessions regarding the draft of the jewellery standards that are now developed, were held in Georgetown, New Amsterdam, Anna Regina, respectively. At these sessions, the requirements of the standards and the product certification scheme were clearly explained. Factsheets were also disseminated to the jewelers that were present.

A standard information bulleting for product certification was prepared and circulated to the relevant manufacturers for information.

Impressions about the programme

In summarizing, most of the targets planned could not have been achieved for 2003 because time-off from the normal work schedule had to be granted to attend important training programmes for developing self competence to execute the goal of the Product Certification programme.

Essentially, the laboratory arena in the country is now in a state of rapid development; hence, the issue of limited credible testing facilities would soon have little bearing on product certification.

As a key tool for certification, existing standards have to be consistently reviewed to incorporate new/updated market requirements and at the same time, be prepared in accordance with ISO/IEC Guide 7 so that they can be 100% certification friendly.

3.3 QUALITY MANAGEMENT SYSTEMS

The goal of the Quality Management Systems Department of the GNBS for 2003 was to encourage and facilitate companies in Guyana to apply the principles of Quality Management to their operations in order to increase their competitiveness in an open market system. The programme sought to achieve this goal through six (6) objectives, as follows:-

- (1) Providing assistance to companies in implementing Quality Management Systems;
- (2) Increasing awareness about quality management systems and their benefits;
- (3) Developing a scheme to certify micro and small enterprise to the guidelines for good management practices;
- (4) Coordinating externally funded project for ISO 9001:2000, such as CPEC and GEO;
- (5) Establishing the documentation for the GNBS quality management system;
- (6) Implementing the GNBS quality management systems.

The major accomplishments for 2003 are highlighted below.

3.3.1 *Technical Assistance to Companies*

The quality management systems programme worked with a number of companies to implement Quality Management Systems within their operations during 2003. These companies included:

- (1) GNSC
- (2) Guyana Stockfeeds Limited
- (3) GUYSUCO
- (4) Denmor
- (5) Aeronautical Engineering School.

Aeronautical Engineering School, Denmor and Guysuco were in initial stages of developing their Quality Documentation, while GNSC and Guyana Stockfeeds have developed draft Quality Policy Manual and operations procedures.

All of these companies have been absorbed under the GNBS/CPEC Project on ISO 9001:2000.

3.3.2 *CPEC/GNBS Project on ISO 9001:2000*

The Guyana National Bureau of Standards early in 2002 had approached CPEC on the possibility of funding an ISO 9001:2000 project. A concept paper was developed and accepted by the Project Steering Committee. Subsequently the project proposal was developed and approved in July 2003. The project was officially launched in September 2003 in a small ceremony.

A documentation and implementation workshop was held for the ISO 9001 standard for participating companies under the Project. The programme was facilitated by Ms. Margaret Weston and Mr. John Roberts of Premier Quality Services Limited. This workshop was held from October 20-22, 2003 in the Cazabon, Tower Hotel.

The participating companies on the project are:

- | | |
|---------------------------|------------------------------------|
| 1. Denmor | 6. SOCOCO Limited |
| 2. Guysuco | 7. Edward B. Beharry & Co. Ltd |
| 3. Guyana Stockfeeds Ltd. | 8. Kayman Sankar & Co. Ltd |
| 4. GNSC | 9. Aeronautical Engineering School |
| 5. GNIC | 10. Caribbean Container Inc. |

Two Officers of the Guyana National Bureau of Standards were attached to the Premier Quality Services Limited, a subsidiary of the Trinidad and Tobago Bureau of Standards, for two weeks from November 03-14, 2003. The purpose of the attachment was to observe the operation of Quality Management Systems in ISO (001:2000 registered companies. Observation of the operations of the Trinidad and Tobago Bureau of Standards also formed part of the visit.

The third deliverable is to conduct a series of Gap analysis at the ten participating companies. This process began on December 08, 2003 and to date gap analysis have been completed at Guysuco, Guyana Stockfeeds, SOCOCO, Aeronautical Engineering School, Edward B. Beharry & Co. Limited, Kayman Sankar and Co. Limited and GNIC. The project deliverable that have been completed are on schedule. Reports are expected to be presented to top management on required actions to be taken to ensure the Quality Management Systems are implemented.

3.3.3 *Awareness of Quality Management Principles*

A series of articles highlighting the importance of Quality Management Systems and Principles and their benefits were prepared to be published in the GNBS newsletter and the Standards Information Bulletin (SIB).

The GNBS also mounted a training workshop on Statistical Process Control and Statistical Quality Improvement Techniques for industry from June 17-19, 2003. This workshop was facilitated by consultant, Mr. Owen Ramsay. The aim of the workshop was to introduce to Quality Managers, Engineers and technicians the use of statistics as a tool to control and improve quality of their products and services. Companies benefiting were:

- | | |
|--------------------------|-----------------------------|
| * Banks DIH | * Caribbean Containers Ltd. |
| * DDL | * DOCOL |
| * GUYSUCO | * Linmine |
| * University of Guyana | * GNBS |
| * Sterling Products Ltd. | |

Based on the articles sent out to various stakeholders on quality matters a number of requests and enquiries were received on the application of ISO 9001:2000 e.g. Dwidwag Construction enquired on receiving assistance for ISO 9001 implementation. Follow-up were made with several companies trained under the SPC workshop, which confirmed that those contacted were implementing the training received e.g. Linmine, GUYSUCO and Sterling Products Limited.

3.3.4 *Micro and Small Enterprise Development*

A series of public consultation sessions were held for the Guyana Standard guidelines for Good Management Practice for Micro and Small Enterprises. Three consultations were held in New Amsterdam, Linden, Anna Regina and Georgetown. Presentations at the consultations were made by:-

- | | | |
|---------------|---|---|
| (1) IPED | - | Accessing finance |
| (2) GVC | - | Training |
| (3) GO-INVEST | - | Marketing & Export promotion |
| (4) GNBS | - | Certification and presentation of the standard. |

Comments received were reviewed by the Management Systems Technical Committee and the standard was approved by the National Standards Council in September 2003. Discussions were held with the Guyana Training Agency to determine the feasibility of the training being offered through the Agency. Meetings were also held with the Guyana Small Business Association to optimize their involvement.

The companies meeting the requirements of the guidelines will be registered under the GNBS Certification Programme.

3.3.5 *GNBS Quality Management System*

The GNBS has established a Quality team to document and implement the Quality Management System in its operations. The team met on a fortnightly basis to identify the quality processes and required documentation. To date, a draft policy manual and a procedural manual containing 14 quality procedures have been documented. The review of these documents have begun.

3.3.6 *Other Activities*

- (1) The GNBS Quality Management Programme made two presentations at a Linden Economic Advancement Programme sponsored workshop on textiles and garments held from July 28 to 30, 2003. The presentations focused on the role of the GNBS in providing services to the local Industrial Sector and on standards and quality in the textile and garments sector. The target audience consisted of persons or companies involved in textile and garments from Linden and Region #10.
- (2) The GNBS Quality Management Programme made a special presentation at the Empretec workshop held on June 10, 2003 at the Tower Hotel. The focus of the presentation was the "role and function of the GNBS and how each participant can utilize the services offered". The target audience consisted of budding and potential entrepreneurs in Guyana.
- (3) The GNBS was represented on the CPEC/THAG Tourism Project Steering Committee which met on a monthly basis. Four deliverables have been completed.
- (4) Attended a CIDA-sponsored workshop on Current Negotiations/Proposals on Guyana's trade in services held on the 16 April 2003 held at the Foreign Service Institute. The workshop focused on preparing agencies on issues that will be useful in negotiating trade agreements, and ensure awareness of the new trading environment under the World Trade Organisation (WTO). It also made individual producers and companies aware of the ways in which trade liberalization will affect them, and the requirements that will be placed on them and on their products from increased global competition.

3.4 ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental Management System (EMS) is an activity that can manage the impact on the environment, thus complying with applicable laws and regulations.

It is a voluntary initiative that can facilitate market access, effective production, delivery of service and customer satisfaction through conformance to the requirements of the standard. The Guyana National Bureau of Standards provides assistance to organizations in developing and implementing the ISO 14001 standard.

3.4.1 *Technical Assistance to Companies*

Two (2) meetings were held with the West Demerara Regional Hospital. At these meetings the Bureau provided a template which can be used in documenting the EMS thus meeting the requirements of ISO 14001.

The hospital experienced a high staff turnover, thus, documentation was not accomplished.

No other organisation indicated any interest in EMS, which is still a voluntary initiative. Organizations will therefore not invest human and financial resources which will incur additional costs.

At the national level, there is no policy or directive to drive environmental management and or protection, hence organisations will not take on the initiative unless it becomes a compulsory requirement.

3.4.2 *Public Awareness*

Information on EMS was researched and compiled for dissemination via the Standard Information Bulletin and the first quarterly newsletter.

Factsheets on environmental labelling was prepared for dissemination. Selected organizations were sent factsheets, Standard Information Bulletin and the quarterly newsletter to sensitise them on the EMS and the Bureau's involvement.

No organization showed any interest by seeking further information or assistance.

3.5 CONFORMITY ASSESSMENT PROGRAMME

With the Caribbean Single Market Economy (CSME) and the Free Trade Areas of Americas (FTAA), trade agreements are expected to be signed and implemented by 2005. The focus of the conformity assessment programme of GNBS was to continue its awareness programme, provide training to relevant personnel as to what is required for recognition of conformity assessment activities and providing assistance to any agency to improve their operations to meet international standards.

The overall goal of this programme is to establish an internationally-recognised, National Conformity Assessment System in Guyana to facilitate export trade.

3.5.1 *National Conformity Assessment Committee*

3.5.1.1 A discussion paper on "Conformity Assessment – Its importance for Trade and Economic Development," was prepared outlining the findings and making recommendations as to the way forward for Guyana. This paper was circulated to the Ministers and Permanent Secretaries as well as Heads of all the Government Agencies involved in conducting conformity assessment activities.

3.5.1.2 A meeting was held to discuss the paper and determine the way forward. This meeting was chaired by the Honourable Minister of Tourism, Industry and Commerce and had some seventeen (17) representatives from other agencies and Ministries. The outcome of the meeting was the decision that the Permanent Secretaries and Heads of Agencies shall constitute the National Committee on Conformity Assessment (NCCA) which will meet quarterly to outline and discuss the way forward in addressing issues that will affect exportation of products out of Guyana as well as monitoring imports coming into Guyana. The NCCA will report to the Ministers of relevant Ministries, who will champion their ideas at cabinet level.

3.5.1.3 Sectorial meetings were held by GNBS to determine or identify the obstacles that can affect the ability to export from the sectors. The problems were identified and some suggestions were made on how these problems can be addressed. These ideas were incorporated into the discussion paper.

From the problems that have been identified during all of the activities implemented under the Conformity Assessment programme, the two most serious concerns were allocation of additional resources to address some of these problems and the other is the lack of interest shown by the private sector to participate in the activities.

The involvement of the Ministers and Permanent Secretaries in addressing the issues that have been and are being identified, offers a more coordinated approach and signals a positive attitude towards addressing Conformity Assessment issues.

3.5.2 *Training on Conformity Assessment*

3.5.2.1 During the year, the GNBS through funding from the USAID/GEO project was able to host training programmes covering all the relevant ISO standards relating to conformity assessment. The training programmes benefited organizations from private sector, regulatory monitoring and public sector. On the average, some twenty-two (22) persons were trained for each course. The subject areas covered are:

- (a) ISO 9001:2000 standard on quality management systems;
- (b) ISO 14001:1999 standard (An introductory one (1) day course);
- (c) ISO 19011:2002 standard on Auditing for management systems;
- (d) ISO 17025:1999 standard on accreditation of calibration and testing laboratories;
- (e) ISO 17020: standard on requirements for inspection bodies; and
- (f) ISO Guide 65: standard on requirements for certification bodies.

3.5.2.2 The organizations that participated in the training programmes were able to start the process of making improvements to their operations to meet the requirements of the appropriate ISO standard and improve their credibility. These training programmes resulted in the formation of two (2) user groups on ISO 9001 and ISO 17025 standard that meet at the GNBS bi-monthly. The GNBS is also collaborating with three (3) laboratories in their preparation for accreditation to the ISO 17025 standard.

3.5.2.3 The areas of concern were that the targeted personnel did not respond and hence the persons nominated were not in a position of authority to make changes, hence the effect of the training could not have been instantaneous. The other areas of concern is the non-participation of some agencies where the excuse of unavailability of staff or the subject matter is not of importance to their organization were used, although they play an important function in the export of products.

3.5.2.4 The training programmes that were conducted in 2003 have laid the foundation on which conformity assessment activities are expected to be transformed into activities that are credible and accurate, hence being internationally recognized so as to facilitate easier market access for exports.

3.5.2.5 One other aspect of conformity assessment that needs to be addressed in the new year is calibration. There is the need to develop the calibration infrastructure to address the needs of industry and agencies involved in conformity assessment activities. Accurate measurement forms the basis on which conformity assessment activities operate.

3.5.3 *Awareness on Conformity Assessment*

3.5.3.1 The GNBS at various fora organized by the Ministry of Foreign Trade and International Cooperation (MFTIC), has been able to emphasize the importance of conformity assessment activities, and the effect it can have on Guyana's ability to export. This subject was highlighted and discussed at the following fora:-

- (a) Meetings of the National Technical Working Group (NTWG) that discuss the CSME, FTAA and WTO trade negotiations.
- (b) One day discussion on the Development of a National Trade Strategy for Guyana.
- (c) One day Trade Policy Review discussion for Guyana.
- (d) Discussion on the needs of Guyana under the Hemispheric Cooperation Programme (HCP).

Arising from these discussions were the incorporation of extracts on conformity assessment into the documents that were being discussed or into reports arising out of the discussions.

3.5.3.2 The GEO conformity assessment consultant, Mr. James Scott visited all the organisations in Guyana that are involved in conformity assessment and had discussions with the Head of these organizations and other staff meetings. During these visits, he did an assessment of their operational activities and identified areas where their operations are not conforming to internationally recognized practices. These issues were identified in the discussion paper.

3.5.3.3 The GNBS, in collaboration with GEO project, hosted a National Forum on Conformity Assessment. Presentations were made by Mr. James Scott and participants discussed their operations in relation to the requirements outlined in the various ISO standards. The findings of this discussion were incorporated into the discussion paper.

3.5.3.4 Articles on conformity assessment were prepared and disseminated through the newsletter and other forms of media coverage. A factsheet was also done and distributed during the National Agricultural exhibition.

3.5.4 *Standards on Conformity Assessment*

All relevant ISO standards were adopted by the GNBS through the Technical Committee – Management Systems.

3.5.5 *Other Activities*

The GNBS participated in the General Assembly of the Guyana National Initiative for Forest Certification and is represented on the Standards Development Committee. A proposal for a standard for sustainable forest management was submitted to the NSC, which agreed to recognize the GNIFC working group as a committee for standard development. The draft standard is in its third phase and has completed two rounds of review and field testing and is expected to be completed in June 2004.

The GNBS was involved in discussions with different organizations working with USAID to determine the focus of USAID's involvement in Guyana for the next cycle 2004-2008. Specific areas were highlighted to officials as they relate to the operations of GNBS.

Discussions were held with various representatives from the Inter-American Development Bank (IADB) on the possible areas for funding and financing in Guyana. These discussions were centered on Trade and Investment and the Multilateral investment Fund (MIF) that is being managed by the IADB. The GNBS provided information to the Private Sector Commission (PSC) that would be used to develop a funding programme for the IADB in Guyana.

The GNBS participated in a working group that is addressing issues that are related to seafoods exportation to the European Union. The GNBS representative was involved in an assessment of the various operations such as testing, inspection and certification, and is working with some of the agencies involved to address deficiencies identified.

The GNBS did collaboration with Mr. Owen Ramsey (consultant on process control), met with Heads of GTI and Engineering Faculty of UG, to discuss what can be done to increase the knowledge of graduates on the subject matter of standards and quality. Both of these institutions were receptive and agreed that these can be included when the curriculum is up for review. They will contact the GNBS for assistance.

An auditor training programme covering the requirements of the 19011 standard was conducted by GNBS for the EPA staff. Some 12 persons participated.

The GNBS participated in a conference on Conformity Assessment hosted by TTBS. The conference looked at conformity assessment activities in the region and made recommendations how the CARICOM region should approach this subject matter.

4.0 INFORMATION SERVICES DEPARTMENT

OVERVIEW

The Information Services Department comprises three programmes, namely:- Communication, Metrication and Technical Standards Information.

The goal of the communications programme is to establish the Standards Bureau as the leading agency that is responsible for the development and promotion of standardization, management systems, metrology and standards compliance using a variety of communication approaches and strategies.

The Metrication programme sets out to educate, train and sensitise various categories of stakeholders, including vendors, retailers and the general public in the use of the four (4) commonly used units of the metric system and eventually help Guyanese switch over fully to the use of the metric system.

The Technical Standards Information Unit sets out to provide and secure information for the support services of the technical staff and assist in the promotion of standards.

For the year under review, the department surmounted many challenges that it faced to achieve the set objectives.

4.1 COMMUNICATION PROGRAMME

4.1.1 *Programme support communication*

The Communication Division was successful in fulfilling its role by providing support to the activities of the technical departments of the Bureau. The use of the collaborative and inclusive approach ensured greater success in the execution of GNBS activities and planned programmes.

Some of the major tasks accomplished by the Communication Division during the year include preparation of media briefs for standards promotion activities (e.g. public consultations), preparation of notices and programmes for a series of national symposia, preparation of advertisements and notices (e.g. mandatory standards and standards for public comments), arranging news interviews, and organizing press conferences and briefings.

Staff members of the Communication Division worked closely with their colleagues for the successful achievement of set objectives and activities. There was increased support from staff in the technical departments and greater media coverage for GNBS activities.

Most of the media houses have supported the Bureau's programmes by providing media coverage in the print and electronic media.

However, there needs to be more flexibility in terms of financial costs for educational and information activities especially with respect to the Government media. It was felt that more could have been done to reduce prices for advertisements and programmes.

4.1.2 PROMOTIONAL ACTIVITIES

4.1.2.1 *Symposia/Public Consultations*

The Communication staff worked closely with staff members of the technical departments in the execution of the following symposia: Seafoods, Wood products, fresh fruits and vegetables, poultry, textiles and garments, and processed foods.

In addition, Heads of Department functioned as chairpersons for these activities and media interviews were arranged. The relevant promotional activities were also done for public consultation sessions.

However, in some instances, despite the invitations sent out and follow up reminders, the attendance of some stakeholders was poor. It is hoped that greater interest will be shown by stakeholders in the future, in response to communication efforts.

4.1.2.2 *Promotional Advertisements*

Three new thirty second metric commercials were aired thrice weekly on the Voice of Guyana during Prime Time during the period January to June 09, 2003, in an effort to boost metrication. After June 09, this activity was halted due to cut backs in finances.

4.1.2.3 *Cricket sponsorship*

The GNBS seized the opportunity to further push the National Metric Campaign through the sponsorship of cricket during the World Cup Cricket. Metric advertisements were aired during commercial breaks in West Indies games.

4.1.2.4 *Newspaper Articles*

Two newspaper articles entitled “The Role of Standards in the development of the National Economy” and “The Role of Standards in the development of the Tourism Sector” were prepared and sent to the Editor-in-Chief of the Stabroek News for publishing, in the interest of promoting standards. After repeated attempts and despite assurance given to the GNBS, the articles were never published.

It is hoped that more support will be given towards standards promotion in the coming year especially by the print media.

4.1.2.5 *National Standards Mark*

National Standards Council, at its first meeting held this year, approved a new national standards mark. The mark is depicted as the acronym GNBS in a double walled circle. Notices were prepared by the Communication Division and sent to the two main newspapers for publication. Information was also prepared by the Division for the gazetting of the mark.

Colour copies of the mark were sent to agencies and departments within the Ministry of Tourism, Industry and Commerce (upon request by the Permanent Secretary) to familiarise staff with the mark, and its importance. The mark inscribed on any product signifies that the product conforms to the requirements set out in the relevant national standards.

4.1.2.6 *Press Briefings/Conferences*

In order to pass detailed information about certain activities planned by GNBS and to update the general public on new initiatives undertaken by the Bureau, seven press briefings were held to sensitize stakeholders and the general public on the following subjects:

- (i) In the area of non-conformance to standards, the subject of cigarettes and matches were addressed.
- (ii) The new National Standards Mark.
- (iii) Highlights from the last COTED meeting.
- (iv) Plans for 2003 and new initiatives
- (v) Certification of rice to Jamaica
- (vi) CPEC Project and standards approved by Council
- (vii) Highlights for the year 2003 and plans for 2004.

4.1.3 INFORMATION DISSEMINATION

During the year 2003, the Communication Division undertook several activities to boost the promotion of standardization.

In this connection a total of twenty-seven (27) press releases were sent to the various media houses for publishing, forty eight (48) notices highlighting activities such as public consultations and symposia were published in the newspapers and electronic media. Thirty eight (38) editions of standards advisory were published in the Wednesday edition of the Guyana Chronicle. Standards Advisory was a new initiative undertaken by the Division in the second half of the year to sensitise consumers and provide tips on subjects pertaining to standardisation.

With respect to Standards Corner, thirty-four (34) editions were published. In some instances, the newspapers failed to print the material because of inadequate space. This feature is published free of cost in the Wednesday edition of the Chronicle to boost standardisation. The Chronicle has always offered its support to standardisation by providing free coverage of consumer information.

4.1.3.1 *Press Coverage*

The media houses provided support by covering the many symposia, public consultation sessions and special events such as opening of fora and courses. They assisted the Bureau greatly in presenting vital information to the public. Press coverage was offered for nineteen (19) such events.

Media programmes/advertisements

A total of twenty-two (22) editions of "Standards Bureau and You" radio programmes were aired on the Voice of Guyana. However, this programme had to be discontinued in the month of June due to financial cutbacks. This programme was sorely missed by listeners especially those in the outlying Regions. It is hoped that this programme will be restarted in the new year.

One hundred and thirty eight (138) metric spots of 30 second duration were aired on the Voice of Guyana. These had to be discontinued also due to financial cutbacks.

A total of eleven (11) Viewpoints were prepared by the Director of the GNBS and aired on the Voice of Guyana. The Chronicle newspaper also published the viewpoints. Among some of the topics covered were: "The need for Standards Education", and "Establishing a National Conformity Assessment System in Guyana".

4.1.3.2 *Newsletter*

The publishing of the GNBS quarterly newsletter continued throughout the year. Three editions have been prepared and sent to Sister Bureaus, Libraries, Industries, Sister Agencies, Ministries etc.

The fourth quarter edition would be published in early January, 2004.

4.1.3.3 *Lectures for School Children*

A series of six (6) lectures targeting senior secondary school students in Region #5 and #10 was conducted during the period May-June. The purpose of the lectures was to introduce students to the role standards play in determining and regulating quality of goods and services, and to encourage students to take up careers in standardization.

Schools which participated were: Mahaicony Secondary, Bush Lot Secondary, Rosignol Secondary, Christianburg-Wismar Multilateral School, New Silver City Secondary and Linden Foundation Secondary. In the case of Linden Foundation, over 500 students participated.

The overall response by students was encouraging. Schools in Region #2 and 6 were originally included but these were cancelled due to financial cuts. In the new year, the GNBS hopes to focus on the areas outside of Region #4 with the promotional activities.

4.1.4 **PARTICIPATION IN NATIONAL EVENTS/EXHIBITIONS**

4.1.4.1 *University Career Fair*

In the month of February, the GNBS again participated in the University's Career Fair which was held on February 21, 2003. The activities pertaining to the fair were coordinated by the Communication Division. The effort was a collaborative one, with help from the technical departments.

During the fair which lasted for one day, scores of visitors which included mainly University students, school children and students from technical institutions, visited the GNBS booth. They received information packages containing factsheets on metrication and the various work programmes of the Bureau. Students took the opportunity to explore possibilities of taking up careers in standardization.

4.1.4.2 *Mashramani Celebration*

The GNBS formed part of the Ministry of Tourism's contingent. About twenty persons teamed up with the "Hits and Jams" float. Those who participated had great fun. The Communication Division coordinated this activity on behalf of GNBS.

4.1.4.3 *InfoFest/National Library Week*

For the first time, the Guyana National Bureau of Standards took an active role in National Library Week. The Bureau's participation came mainly through its role in Infofest which was held during the period May 27-30, 2003. At "Infofest", the GNBS staged a mini exhibition at the National Library Conference Room along with participants from libraries mainly around the city.

Materials and services which are available at the Technical Standards Information Unit were displayed. Visitors to the booth, took the opportunity to find out more about GNBS operations generally, and about the TSIU.

4.1.3.4 *Guyana Manufacturers Association Exhibition (GMA)*

The Bureau of Standards related the importance of standards and certification to success in manufacturing industries during its participation in the GMA exhibition.

The Bureau used its own facilities to cut costs. This impacted negatively in the sense that visitors were fewer. However, over the five-day period (October 08 to 12, 2003) visitors to the booth were issued with flysheets, factsheets and metric information.

Staff on duty explained the importance of applying standardization techniques in industry. The process of certification was also explained.

Visitors expressed the desire to have GNBS monitor additional commodities such as drugs, food, and essential services such as electricity. However, adequate information was provided with regard to the respective monitoring agencies.

4.1.4.5 *National Quality Week 2003*

The Communication Division coordinated and successfully planned and executed the activities for National Quality Week 2003. The theme chosen by International Standards Bodies for the year 2003, was: "Global Standards for the Global Information Society". As is customary a number of activities was planned.

World Standards Day messages were aired on radio and GTV 11 by Ms. Short-Gill on behalf of the Honourable Minister, Mr. Manzoor Nadir and the Director of the GNBS, Dr. Chatterpaul Ramcharran. However for the first time, the usual supplement was cancelled due to shortage of finances.

Other activities which took place during Quality Week were: panel discussion on GTV11 involving Mr. Michael George of GT &T, Mr. Lance Hinds, President of the Information Technology Association in Guyana, Mr. Alex Graham, Businessman and Mr. Valmikki Singh of the National Frequency Management Unit.

The programme which was very informative addressed issues such as piracy of software and copyright laws. The moderator was Mr. Martin Goolsaran of GTV 11. The programme was sponsored by GT &T. A mini-exhibition and open day were held on Wednesday October 15, 2003 at the Bureau. Scores of school children and members of the public mainly around the city visited the Bureau throughout the day. Staff took time to explain their respective programmes and activities to the visitors. Information was also distributed.

One hour live coverage was made available on radio (98.1FM). Sponsorship for ½ of the programme came from GUYSUCO. Another highlight of the week's activities was the school lecture delivered by Ms. Grace McAlmont of the Public Service Ministry. Participating schools were Bishops High, St. Winifred's High, St. John's College, Brickdam Secondary and Christ Church Secondary.

The topic discussed was: Information and Communications Technology: It's impact on Guyana's Society. The lecture was well received and students asked many questions especially on availability of Information Technology to schools. Sponsorship of snacks for this activity was provided by Banks DIH and DDL. The Sophia Auditorium and the PA system were also given free of charge. Thanks must be extended to Mr. Percival Boyce and Mr. Forbes Mitchell, respectively.

Finally, staff who have worked with the Bureau for over five years and ten years received long service awards. This activity culminated National Quality week.

In retrospect, National Quality Week 2003 was a success. Thanks to the help received from corporate citizens in the form of sponsorship.

4.1.4.6 *School Visits*

Students and teachers of JC Chandisingh Secondary visited the Bureau during the month of May to find out more about the role and functions of the National Standards Body. Staff took time off to explain the activities of the various departments to the visiting school.

A contingent from the Berbice Adult Education Association which involved mainly young adults also visited the Bureau. Their specific area of interest was standards for Micro Enterprises and Small Business. Ms. Evadnie Fields provided the overview of the Bureau while Mr. Anthony Ross dealt with the specific topic mentioned above.

4.1.5 **OTHER ACTIVITIES OF THE COMMUNICATION PROGRAMME**

During the past year, many activities were undertaken by the staff of the division. These included preparing correspondences in response to consumer complaints, answering letters to the editor, attending inter-agency meetings, completing questionnaire at the request of international standards institutions, e.g. WTO matters, attending half and one-day conferences/fora, attending special meetings with consultants, preparing ISO documentation and attending ISO in-house sessions, facilitating media interviews upon request and participating in training programmes.

CONCLUSION

The Communication Division faced one major challenge during the year, which was the financial cutback as a result of budget shortfalls. This forced the Division to curtail some of its activities. To surmount this challenge, alternative methods such as press releases and news interviews were used. It is hoped that during the coming year, additional financial resources will be made available.

4.2 METRICATION PROGRAMME

4.2.1 *Legal Metrication Sub-Committee*

The Legal Metrication Sub-Committee convened eleven (11) statutory meetings to garner legal support and to set an infrastructure for the passing of the Omnibus Bill.

The Committee reviewed the Motor Vehicle & Road Traffic Act, identifying imperial units and converting them to metric. The committee should complete its final review by February 2004.

The Customs & Excise Act and the City Constabulary Act were prioritized and listed for the next reviewing process.

The work done so far by the committee is commendable, since legal expertise is provided by the members free of cost in the effort to achieve the objectives. Financial constraints limited the availability of photocopied materials. Secretarial support may be inadequate for the typing of completed Acts.

4.2.2 *National Metrication Committee*

The National Metrication Committee convened eleven (11) statutory meetings. The Steering Committee provided technical guidance, assisted in decision making and monitored the progress rate of the Metrication Programme. The following achievements were realized through the National Metrication Committee.

GUYSUCO continued to set the tone for industries in the transition and full utilization of the Metric System. Guyana Forestry Commission continued to promote the metric system by enacting regulations mandating its use.

Progress checks were carried out on work being done by the Legal Metrication Sub-Committee.

Guyoil had agreed to provide sponsorship for a live television workshop programme. The Guyana Forestry Commission and the Guyana Rice Development Board had promised similar support.

The Guyana Rice Development Board continued to work towards the full implementation of the Metric System in the rice sector.

The Committee was instrumental in organizing Metrication training for ranks of the Guyana Police force.

The National Metrication Committee is a vital component of the Metrication Programme. Its members continued to work objectively towards the overall goals of the programme and served individually as advocates for the Metric System. Members are keen about the passing of the Omnibus Act and sometimes expressed frustration on its position.

4.2.3 *Sector Activities*

Seventy-three (73) visits and subsequent meetings were conducted with management representatives from organization under the following priority sectors:

- Government Ministries
- State Agencies
- Media Houses
- Local Manufacturing Agencies

The objective of these visits was to provide technical support to the various sector organizations, enabling them to adopt the Metric System.

The following achievements were realized.

Thirty-nine (39) organizations benefited from basic training, applicable to their respective work situation.

The list below highlights some of the organizations trained.

1. Guyana Revenue Authority
150 Customs Officers.
2. Guyana Police Force
280 Ranks (Police Officers and recruits).
3. Demerara Distillers Limited
55 members of staff.
4. Guyana Fire Service
125 Fire Officers.
5. Guyana Prison Service Commission
32 Prison Officers.
6. Georgetown Mayor & City Council
105 City Constabulary Officers & Office Workers.

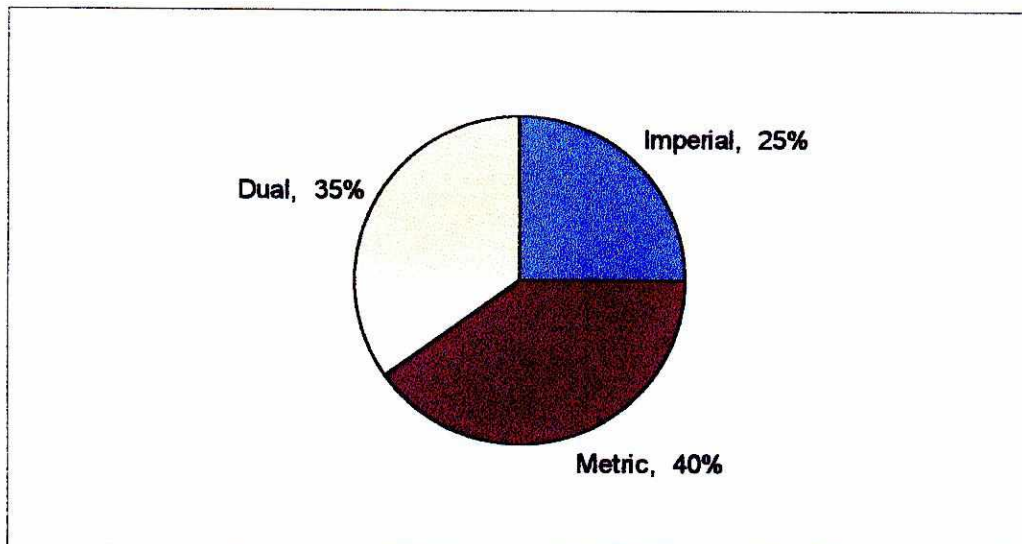
7. Ministry of Housing
28 Members of Staff.
8. National Bureau of Statistics
63 Members of Staff.
9. Ministry of Home Affairs
35 Members of Staff.
10. Ministry of Local Government
38 Members of Staff.
11. Guyana Stockfeeds Limited
45 Members of Staff.

In total, one thousand, one hundred and eighty six (1,186) staff members benefited from Metrication Training.

Based on both the analyses of a questionnaire conducted in January-February 2003 and intelligence gained from the frequent visits to various organizations, the following were observed.

- About 85% of all locally-manufactured products are labelled in metric sizes or quantities.
- Most companies committed their workforce to metrication training.
- Many companies that have adopted the metric system have also retained the imperial system for a dual approach.

The chart below is an illustration of the general status of the various measurement systems as it relates to implementation in companies.



General procurement is done mostly in imperial. This may be attributed to the lack or insufficient enforcement programmes in place to ensure the transition (imperial to metric). Also because many retailers still operate basically in the imperial system, forcing organizations to operate dual so as to facilitate the mainstream of things in the markets.

4.2.4 *Metrication Training in Schools*

Teachers and students from many schools and colleges were trained in the practical application of the Metric System.

Fifteen (15) institutions benefited from the exercises, as follows:

- (1) Sophia Training Centre (Ministry of Culture, Youth & Sports).
- (2) Sophia Special School (Ministry of Education).
- (3) Cyril Potter's College of Education (CPEC).
- (4) Guyana School of Agriculture (GSA).
- (5) Grove Craft Centre.
- (6) Mae's Secondary School.
- (7) Carnegie School of Home Economics.
- (8) Tutorial High School.
- (9) Leguan Secondary School.
- (10) Wakenaam Secondary School.
- (11) Central Secondary School.
- (12) Santa Rosa Mission Primary School.
- (13) Santa Rosa Mission Secondary School.
- (14) YMCA Training College.

A total of 830 teachers and students benefited.

With the metrication policy firmly enshrined in the schools curricula, teachers and students are familiar with the theoretical aspect of the system, however, more can be done in enforcing the practical application of the system.

Limited availability of funds and also transportation confined the metrication awareness activities to Region #4. (mainly Georgetown).

4.2.5 *Metrication In Commerce*

Metrication officers provided technical and moral support to vendors and store owners on the use of the metric system in their business transactions. They were briefed on:

- (1) How to measure in metric units.
- (2) How to adjust prices from imperial to metric.
- (3) Common malpractices of vendors.
- (4) Utilisation of price charts.
- (5) Prepackaging in metric.

They were issued supporting factsheets and posters and were offered conversion charts at a price of \$100.00 per copy.

One hundred and twenty-seven (127) of such surveillance visits were conducted throughout the country. Twenty five hundred (2500) business premises were visited.

The table below shows the activities in the various regions.

REGION	NUMBER OF SURVEILLANCE	AREAS COVERED
I	4	Mabaruma, Kumaka, Hosororo, Matthews Ridge, Santa Rosa Mission (Moruca).
II	15	Anna Regina, Charity, Suddie, Adventure.
III	8	Leguan, Wakenaam, Parika, Wales, Vreed-en-Hoop.
IV	62	Stabroek, Bourda, Kitty, LaPenitence Markets, Shops and Supermarkets.
V	8	Mahaicony, Rosignol and Fort Wellington Markets.
VI	10	New Amsterdam, Albion, Canjie, Springlands.
VII	8	Bartica.
VIII	2	Mahdia.
IX	2	Lethem.
X	8	Linden, Wismar.

Most Sub-Offices lack direct supervision. Transportation and financial support were inadequate and may have accounted for the low output in some Regions.

Generally, vendors expressed mixed views about the metric system. Most are reluctant to initiate the change, fearing negative consequences in terms of sales and profits. Consumers prefer to conduct their in the imperial system. They are uncertain about using the metric system and are further deterred by hostility from the vendors. However, with the increasing numbers of prepackaged products being stocked, consumers and vendors will have to deal with metric units at wholesalers and retailers outlets.

Bounty Farm and Didco, the two large chicken giants, have begun marketing their products in metric sizes and quantities. Guysuco has been marketing sugar in smaller metric sizes e.g. 500g, 1kg, 4kg. The Flour Mill is producing sizes of 1kg, 2kg and 4kg. Smaller manufacturers of products like processed fruits, food condiments, nuts, edible oil etc. are all conforming to metric sizes.

The vendors and consumers may be hesitant to adopt the metric system but progress in other areas is continuing at a rapid pace.

4.2.6 *Distribution of Materials*

During the period of January to December, a number of factsheets and posters were distributed free of cost. Conversion charts were sold to vendors and freely distributed to schools and sector organizations. The table below illustrates the system of distribution.

Factsheets	1,560
Posters	604
Simple Conversion Booklets	100
Conversion Manual	50
Conversion charts freely distributed	-
Conversion charts sold	-
Total charts distributed	1,614

4.2.7 *Public Awareness*

To educate and sensitise the general public about the basic use of the metric system, four (4) live television telecasts were aired in the respective Regions of 2,4 and 6.

These programmes targeted approximately two hundred thousand (200,000) viewers living within the transmitting radius of the television stations.

Nineteen (19) letters were issued to television stations, radio stations, printing agencies and other organizations interfacing with the public, urging them to embrace the metric system as a conformity or organization policy and to refrain if possible from using the imperial system.

It was observed that about 80% of the information printed in the daily newspapers is metric. About 75-85% of information broadcasted on the radio is metric. About 75% of information on television is metric, except for foreign programmes.

Due to the fact that the United States of America is still imperial, the television programmes being fed to Guyana and the entire region severely affects the perception of the people, who believe that the mainstream of measurement in the world or this part of the world is still imperial.

The public and other commercial stakeholders are influenced by some senior political figures who expressed negligence in openly using, if not advocating the use of the imperial or dual system of measurement, hence undermining the work completed by the GNBS and its predecessors.

4.3 TECHNICAL STANDARDS INFORMATION UNIT (TSIU)

4.3.1 *Automation of TSIU*

In the period under review, most documents that were received by this section had been recorded, classified and indexed with the use of a manual system that was substituted. A CDS-ISIS Windows-Software Application was installed in the month of October but data could not be inputted because Technical Standards Information Unit has a more advanced software application set up which is not compatible. Mechanisms are being put in place by Mr. Kishore, Consultant, Cheddi Jagan Research Centre, to have this problem resolved by the end of December 2003. This is a continuous task.

When this software is fully implemented, retrieval of information will be less time-consuming and dissemination of materials will be more efficient to patrons.

With the use of the manual system, more effort is put into the different tasks done in this department. An automated library, however, will assist to enhance this collection development. Once automation commences there will be a better way to deal with clients/patrons and also other libraries as it relates to inter-library loans.

4.3.2 *Reorganisation of TSIU to meet National Documentation Centre Level*

All materials collected by this department were shelved and interfiled into specific location where they are simple to be redeemed. The codex documents were shelved in a special area designated. These materials are arranged according to definite subjects in alphabetical order.

This task is not fully accomplished due to a lack of manpower. Thus, to achieve this activity there will be a need for some male assistance to shift the shelves into their proposed areas.

A well organized library allows its users to recover any document at a given time with less effort than one that is not organized. An organized collection, develops a user-friendly atmosphere.

4.3.3 *Upgraded collection*

Within this period, the Technical Standards Information Unit had recorded a total of 961 new acquisitions. These include magazines, books, draft standards, normal standards, official gazettes, bulletins, newsletters, CD-Roms, Reports, Codex documents, catalogues, brochures and regional and international standards.

Text books were all classified, indexed and lettered using the Dewey Decimal Classification system along with sears list of subject headings. Officers and patrons now have modernized equipment and tools to extract relevant information necessary for presentations and research.

With the allocation of financial resources towards this activity, it would assist to foster a better collection development of TSIU. To acquire new documents from Sister Bureau takes several months, sometimes which delayed some planned activities of Officers.

4.3.4 *GNBS Website*

The host to install GNBS website was identified and the information that will be used is presently being edited by a Committee set up for this purpose.

With the implementation of a GNBS website, stakeholders, consumers and clients will be able to derive tremendous benefits from the information given by each department.

Stakeholders have to make telephone calls or come in person to get the relevant information they need. So, with a GNBS website, these individuals will have a greater scope to acquire needed materials/articles. The information that will be found on this website will highlight what is done by each programme.

4.3.5 *Publicizing the Services of TSIU*

During Information Library Week and Quality Week, the general public was informed about the activities of this Division as well as other Sections. However, a marketing strategy is yet to be developed to attract more clientele.

With a good market strategy, clients and stakeholders will be knowledgeable of the role and activities performed by TSIU Division.

If enough publicity is given about this department, the public will have a better appreciation for the Standards reproduced by TSIU. Persons are not aware of the various documents that TSIU holds in its division. Should this be known more standard may be sold which will gain more revenue for the Guyana National Bureau of Standards.

4.3.6 *Annual Statistics*

Within this year, the following were tabulated:

-	New Additions	961
-	Loans	354
-	Queries	258
-	Visitors	276
-	Usage of the internet facility	415
-	Standards Printed	65
-	Standards Bound	412
-	Standards Covers Printed	463
-	Standards Sold	95
-	Newspaper clippings	386
-	Books Catalogued	44
-	Catalogue Cards written (by author and subject)	185
-	Documents lettered	44
-	Catalogue Cards interfiled	185

During last year, more new documents were received than this period but there was an increase in the amount of standards bound. There was also a growth in the amount of standards sold which represented a sum of \$442,600.00 for a total of 95 standards.

With more publicity given on a quarterly basis pertaining to standards it will derive benefits to stakeholders. With this system in place, the sales figure will be maximized tremendously for GNBS.

4.3.7 *Current Awareness Bulletin*

Throughout the period under review, eleven (11) different articles were dispatched to three hundred and twenty (320) stakeholders and clients from various industries/agencies and institutions.

The articles inserted in the bulleting were relevant to manufacturers and consumers generally.

Stakeholders and clients had benefited from the information prepared by the Technical Officers of GNBS.

4.3.8 *Other Activities*

4.3.8.1 Ms. R. Bourne – Senior Information Officer was elected as an Executive Member of Guyana Library Association. She represented the Guyana National Bureau of Standards at the monthly meetings that were held at the National Library Conference Room every first Wednesday.

4.3.8.2 Ms. D. Gill – Information Officer (Ag.) was sent on four (4) Library Development Training Programme. These courses are as follows:

- Module 1 - Fundamentals of information and library studies.
- Module 2 - Classification of information resources.
- Module 3 - Management of Library and information resources.
- Module 4 - User Services.

These programmes were run for 33 weeks and a diploma certificate was issued to each successful Library Technician. Programme like these assist library personnel to be more competent in their function so as to bring about efficiency and credibility.

4.3.8.3 Both Ms Bourne and Ms. Gill attended a Business Communication English course sponsored by GNBS. Ms. Bourne also, attended a training course on Business Writing hosted by GEO.

4.3.8.4 Labelled cabinets, shelves, local course materials and international course materials.

4.3.8.5 The following catalogues were updated:-

TTBS, BNSI, CARICOM, JBS and GNBS.

4.3.8.6 Requests and correspondence were addressed.

4.3.8.7 Several files were created by title and subject.

4.3.8.8 A listing was made of all standards printed and bound by TSIU during this year.

4.3.8.9 Prepared an in-house Caricom catalogue.

4.3.8.10 Filled out ISBN forms to be sent to Caricom Secretariat for each GNBS standard to have their individual International Standard Book Number (ISBN).

4.3.8.11 Special displays were mounted for Agriculture and Quality Week.

4.3.8.12 A new price list was prepared for GNBS standards.

During this year, the TSIU had several challenges but with the assistance given by staff from other departments, it was able to accomplish most of its objectives planned.

One of the set backs of TSIU however was the lack of manpower. It is hoped that for the coming year, that at least one more Officer will be employed on a full time basis.

5.0 ADMINISTRATION AND FINANCE DEPARTMENT

The objective of this department is to render effectively administrative as well as financial support to the other departments and programmes of the Bureau so that they can achieve their objectives in the most cost-effective and timely manner.

5.1 *Staff Training*

Training staff, and conducting training sessions for external beneficiaries are of utmost importance and is usually considered a prioritised activity for the Bureau. For the year, a number of in-house sessions were conducted by Department Heads and staff members as shown in Appendix 2. In addition, staff members benefited from the undermentioned training courses, seminars, symposium and conferences which resulted in significant capacity building to better achieve the objectives of the Bureau.

5.1.2 Mr. James Scott, GEO Consultant to the Bureau, conducted separate training programmes on ISO 9001 Quality management Systems, ISO 19011 – Guidelines for Quality and Environmental Management Systems Auditing, ISO 17025: General requirements for competence of testing and calibration laboratories and Statistical Process Control/SPC and Statistical Quality Improvement/SQI training programme.

5.1.3 Ms. Patricia Persaud, Consultant/Lecturer of the University of Guyana conducted a very intense training course in Business Communication for Department Heads and Senior Staff. The overall objective of the course was to facilitate efficient and effective communication by Senior Staff in their day-to-day activities. The duration of the course was for five (5) weeks and at the conclusion, staff members were equipped with the skills for effective communication, grammatical structure, punctuation techniques, minutes and report writing.

5.1.4 Ms. Charmain Niles, Ms. Roxan Bourne, Mr. Jowala Somai, Mr. Shailendra Rai, Ms. Sheron Daniels, Ms. Tracyann Seaforth and Mr. Lloyd David participated in a four (4) day training course on Business Writing which was facilitated by the Guyana Economic Opportunities Project during the period October 28-31, 2003.

Ms. Charmain Niles participated in a one (1) day training seminar for female supervisors.

Keemo Fyffe, Devandand Ramcharran and Ms. Candaicy David attended training session on the construction of nutrition labels using the genesis and data base, and Quality and safety based on good manufacturing practices and hazard analysis critical control point principles.

Ms. Shune Vickerie participated in a two day seminar on WTO Trade Policy review of Guyana from January 29-30, 2003.

Ms. Candelle Walcott attended a laboratory workshop – “Quality Assurance Procedures ISO/IEC: 17025 standard and laboratory safety for the Food Laboratory” at Cara Inn, Georgetown – December 1-12, 2003.

Ms. Roxan Bourne attended a monthly meeting held at the Guyana National Library.

Mrs. Debra Gill, acting Information Officer, completed a Library technician Diploma on the organization of information resources which was facilitated by the Guyana Library Association and Institute of Distance and Continuing Education.

5.1.5 Staff members of the Bureau participated in six (6) overseas training as follows:-

- (1) Ms. Shune Vickerie and Ms. Candelle Walcott, attended the 35th International Training programmes on Standardisation and Quality Assurance and Management System for developing countries which was held in New Delhi, India on January 20 to March 14, 2003.
- (2) Ms. June Prince attended a workshop in Trinidad and Tobago on Caribbean Poultry Association – Table egg school. Areas of focus were grading and quality of marketing and poultry reproductive health on August 13-15, 2003.
- (3) Mr. Jowala Somai, Head Management Systems attended a two (2) day seminar in Trinidad and Tobago on Conformity Assessment Accreditation and trade – the link and importance to National Development from August 26-27, 2003.
- (4) Mr. Robindranauth Bridgemongal and Ramrattie Karan attended a training programme on standardisation and quality assurance for developing countries in New Delhi, India from October 13-December 05 2003.
- (5) Ms. Candelle Walcott participated in a four (4) day EU-funded workshop in Trinidad on the strengthening of medical laboratory services in the Caribbean from October 14-17, 2003.
- (6) Mr. Jowala Somai and Anthony Ross of Management System Department attended a two (2) weeks conformity assessment – testing, inspection and certification of Management Systems in Trinidad from November 03-14, 2003.

Ms. Candelle Walcott attended monthly meetings of the EU Project – strengthening medical laboratories at the Ministry of Health. The purpose of the meetings was to update stakeholders on the implementation of the project activities and also she conducted a training in the development and maintenance of the laboratory Management System with eighteen (18) representatives from laboratories.

Ms. Shune Vickerie attended monthly meetings for the National Advisory Council on Occupational Health and Safety and FAO project committee.

Mr. Anthony Ross, Technical Officer II, completed a five (5) day training programme on Project Management which was conducted by the Guyana Training Agency. In-house training programme was conducted by him to share the knowledge obtained with other staff members.

The Director, Dr. C. Ramcharran, attended the standardization and metrology symposium in Jamaica from may 5-8, 2003. The overall objective of the symposium was to disseminate updated information on Standardization and Metrology in relation to trade.

The Bureau, in collaboration with Statistical Process Control Management Inc. International, hosted a three day training course on Statistical Process Control from June 17-19, 2003. The objective of the course was to equip participants on the procedures of, and application of the process.

Ms. Candaicy David, Technical Officer I (ag.) attended a training session on "Quality and Safety" from September 29 to October 03, 2003. The course was outlined to facilitate the principles of the HACCP System.

Five Officers participated in a three-day training/workshop on "Implementing and documenting a quality management system using ISO 9001:2000". The key objective of the workshop was to outline the procedures.

Three Officers participated in a one day workshop on "Export Label Requirement" and Esha Genesis Research and Development software. The training and workshop was facilitated by USAID/GEO project and the objectives were to sensitise exporters and regulatory agencies on the requirements and use of labelling specifically for the use when exporting to Canada and the United States of America.

5.2 *Infrastructure Works and Maintenance of Building*

5.2.1 *Information Unit*

Infrastructure works were carried out in the information unit providing an enclosure for the disbursement and receipt of confidential information. Upgrading works were also carried out by replacing rotten boards and broken windows in that unit.

5.2.2 *Metrology laboratory*

With the approval of 1.6M by Central Tender Board, the Bureau was able to construct an extension to the building to house the Metrology laboratory. In addition, partial works were carried out to refurbish the old sanitary block into a rice testing laboratory.

5.2.3 *Rice testing laboratory*

Funds utilized were generated by the Bureau through the cost for fees, fines, etc.

5.2.4 *Floor repairs*

Quotations for the general repairs to the floor were received. However, due to the shortfall in revenue and budgetary cut in allocation, such maintenance and infrastructure works were rescheduled for the year 2004.

5.3 *Information Technology*

5.3.1 *IT Network*

The Guyana Economic Opportunities (GEO), in collaboration with USAID, has made available an intra networking system in addition to supplying five new computers and a server.

During the network installation seven (7) computers were deemed incompatible with the new systems donated. However, those outdated computers were used as parts for upgrading other systems. As a result, there is an overall decrease in the number of systems available.

The new system has its advantages and disadvantages but never-the-less, the disadvantages are tabled to be addressed as soon as the solutions are identified.

5.3.2 *Computer repairs*

There was a high increase in the cost for repairs to computers within the Bureau. That resulted from high voltage fluctuation, unstable flooring and the incompatibility of the old versions of computers with the newer ones. However, the ability to monitor equipment usage has been beneficial in reducing the maintenance cost.

5.4 *Personnel Matters*

For the year 2003, there were three new recruits, five resignations and one dismissal.

Ms. Tarla Parasram, Ms. Desiree Hinds and Mr. Marvin Singh, accepted employment at the Bureau as Records Clerk, Maid Cleaner and Driver respectively. Ms. Hinds replaced Ms. R. Reid, Mr. Singh replaced Mr. S. Mohan and Ms. T. Parasram replaced Ms. M. DaSilva who was transferred to the Accounts Department.

However vacancies exist for the Head, Standards Compliance two Inspectors and one Registry Supervisor.

In an effort to strengthen the Legal Metrology and Standards Compliance Department in the absence of a Head for that Department, Mr. S. Rai, Chief Inspector and Mr. J. Softley, Senior Inspector were both given responsibility allowances. Additionally, Mr. D. Ramcharran, were assigned to act as Senior Inspector, Mr. K. Fyffe was confirmed as Senior Inspector while Mr. E. Melville was promoted to Inspector II.

In the Metrication Department, Mr. F. Mitchell was assigned to act as Technical Officer I and Ms. C. David of the Standardisation Department, in a similar capacity.

5.5 *Procurement*

- 5.5.1 The Ministry of Finance released the sum of twenty million (20M) for the purchase of Metrology and Conformity Assessment equipment. As at December, most of the equipment had been received with the exception of the equipment from Western Scientific and Unique Scales.

One 18,000 BTU Air Conditioning Unit was purchased for the training room. The replacement was necessary due to the units used previously were malfunctioning.

5.6 *Staff Awards*

During the annual quality week celebration, five staff members of the Bureau were presented with gifts in recognition of their outstanding contribution in long services at the Bureau. There were:

Debra Gill	10 yrs
Sheron Daniels	5 yrs
E. Fields	5 yrs
J. Somai	5 yrs
A. Ross	5 yrs

They were honoured at a simple ceremony held in the training room of the Bureau.

5.7 *Finance*

5.7.1 The Bureau was allocated 61M as subvention by the Ministry of Finance. However due to the shortfall in revenue for the year, that allocation was reduced to 58M. The funds was utilized as follows:

- (1) 85% Employment cost
- (2) 15% Other charges

Please see Appendix 11.

In addition the Bureau generated approximately 12.5M as other revenue from the sale of standards (charges of fees and fines, calibration of petrol pumps, sale of metrication charts, verification of scales and masses, registration fees, permits and sampling and testing of rice).

A detail financial report will be submitted after the completion of the Auditorial process. However, an expenditure statement for both subvention from Ministry of Finance and other revenues generated are outlined in appendix 11 and 12 respectively.

Despite the huge budgetary cut, the shortage of sufficient Inspectors, the Bureau was able to achieve most of its objectives for 2003.

5.7.2 At the National Standards Council Meeting held, approval was granted for a new fee structure to be implemented with effect from January 01, 2004. It is hoped that the fees are set in place to offset the cost for services rendered and as a first step towards self sustainability.

6.0 OBSERVATIONS AND COMMENTS

6.1 *Budgetary Allocation*

The Bureau was allocated 61M as subvention by the Ministry of Finance. However due to the shortfall in revenue for the year, that allocation was reduced to 58M and income generated of \$12.5M was expended to carry out the routine activities of the work plan. Efforts were made to adjust spending to match the financial resources available, thus, influencing the extent to which the work programme activities were carried out.

6.2 *Human Resource*

Considering the heavy mandate of the Bureau in relation to societal needs, and thus, the resulting increased specimen of new activities, there is need for more staff of even higher caliber, in each Department of the Bureau. The request made for more staff to the Ministry of Finance, through the Ministry of Tourism, Industry and Commerce was not greeted with success. With operational stress and strain, the current complement tried to cope with the activities.

6.3 *Transportation*

Adequate transportation posed a big challenge to Technical Officers implementing their field activities. Officers from the four (4) Technical Departments particularly the Inspectorate are required to carry out a massive amount of field work. The three (3) vehicles of the Bureau cannot cope with the expressed need of the said Department. Acquisition of another vehicle would be a good asset to the programmes of the Bureau.

6.4 *Income Generation*

In the past, the Bureau did not operate with an income-generation motive, although minimal fees were charged for certain services such as testing and stamping scales, weights and measures, verification of fuel pumps, laboratory and product certification (standards mark). The reason for this was to render the services of the Bureau very economical, if not free, in the drive to promote standardization in all the sectors of the economy so as to win over the various stakeholders to the side of the Bureau and to bring them on board. However, the policy of the Bureau has changed in order to optimize income generation and thus, charge fees for all its services offered to the public. A tariff of fees has been prepared for all services carried out by the Bureau, and this would be implemented in the new year.

6.5 *Improved Legislation*

In pursuing its mandate, the Bureau administers and enforces the Standards Act of 1984 (with Amendments of 1997), and the Weights and Measures Act of 1981, which are both outdated. There is great need to overhaul and thus modernize both legislation to give greater strength to the programmes being implemented, and also, to legally support income generation. It is also necessary to develop regulations under Act, which would provide vital guidelines for implementation and enforcement. The USAID/GEO Project on the Bureau's Legislation did not materialize this year, but it is scheduled for early in the new year.

6.6 *Testing and Calibration Laboratories*

The Bureau has moved this year to establish its measurement traceability system in the country by constructing a Metrology laboratory to the tune of nearly \$2.0M. Government had approved a capital estimate of \$20M to purchase the necessary equipment for the laboratory so that the Bureau could provide calibration services to the various industries in the country, and the operating laboratories. The equipment are gradually being received and the laboratory is expected to be operational in the first quarter of the new year.

6.7 *Mobile Scale-Testing Equipment*

It is difficult for the Bureau to carry out the verification of bulk scales used in the various industries without the necessary equipment and large capacity test weights. There is great need for the Bureau to acquire mobile scale-testing equipment with a few test weights and primary standards, while the working standards can be fabricated locally. It is planned to purchase locally a truck with a hoist with some test weights in the first quarter of the new year.

6.8 *IT System Upgrade*

Through a USAID/GEO Project, a network System was established at the Bureau along with four (4) additional computers provided by the Project. The network is supporting the efforts of the Officers in their daily activities. A website would be launched early in the new year.

6.9 *Representation of Bureau at Overseas Meetings*

The Bureau maintains membership in a number of Standards Organisations such as ISO, IEC, COPANT, SIM, CARIMET and CODEX. It would be a great asset to the Bureau for staff members to be able to participate in the annual meetings of these bodies, attend the associated workshops or seminars conducted, and have access to the manuals or materials disseminated. The attendance of staff at various training programmes in the field of standardization, quality assurance and metrology run in the CARICOM Region and beyond is significant. There is also need for staff to receive specialist training in these areas, particularly in the area of Metrology.

6.10 *Laboratory Services Department*

In complying with the principles of conformity assessment, and thus, transparency and independence in the inspection, testing and certification functions, the Bureau is moving to establish a new Department on Laboratory Services. This Department will consist of the rice-testing laboratory, gold-testing laboratory, and the calibration laboratory.

While tests would be conducted by this Department, the sampling function would be carried out by the Compliance (Inspectorate) Department, and the Certification function, by the Management Systems Department of the Bureau.

APPENDIX I

STANDARDS APPROVED BY NATIONAL STANDARDS COUNCIL FOR 2003

Standards developed

1. Specification for labelling of hazardous industrial chemicals.
2. Specification for labelling of garments.
3. Specification for labelling of textiles.
4. Specification for net content in packages.
5. Specification for load bearing masonry concrete units.
6. Flourescent lamp ballasts.
7. Uninterruptable power supply equipment.
8. Specification for ice-cream and related products.
9. Specification for ergonomic principles in the design of work systems.
10. Glossary of terms relating to chemical and radiation hazards and hazardous chemicals.
11. Safety conditions in industry.
12. General requirements for the competence of testing and calibration laboratories.
13. Specification for mosquito coils – Physical and chemical requirements.
14. Specification for mosquito coils – Method for the evaluation of biological efficacy – Glass chamber method.
15. Specification for lacquer.
16. Methods of sampling and test for thinners and solvents for paints.
17. Specification for ready mixed concrete.
18. Crane code – Mobile and locomotive cranes.
19. Methods of sampling and testing for water and wastewater – Chemical oxygen demand.
20. Methods of sampling and testing for water and wastewater – Solids.
21. Methods of sampling and testing for water and wastewater – Surfactants.
22. Methods of sampling and testing for water and wastewater – Coliform.
23. Methods of sampling and testing for water and wastewater – Lead.
24. Specification for the handling of consumer complaints.
25. Guidelines for good management practices for micro and small enterprises.
26. Building Code – High rise buildings.
27. Code of Practice for assessment, licensing, registration, classification and grading of the accommodation sector.
28. Code of Practice for product recall procedures.
29. Code of Practice for quality in the restaurant service.
30. Code of Practice for tour operators and tour guides.
31. Christmas tree and decorative lighting outfits.
32. Specification for urea fertilizer grade.
33. General requirements for safety in laboratories.

34. Code of Practice for the production of rice.
35. Specification for non-load bearing masonry concrete units.
36. Code of Practice for street vended foods.
37. Specification for safety of toys and playthings.
38. Specification for classification of hazardous chemicals and chemical products.
39. Specification for transmitters and receivers in VHF maritime mobile service bands.
40. Methods of sampling and testing for water and wastewater – Nitrogen (Ammonium).
41. Methods of sampling and testing for water and wastewater – Phosphorous.
42. Quality management systems – Fundamentals and vocabulary.
43. Quality management systems – Requirements.
44. Quality management systems – Guidelines for performance improvements.
45. Quality management - Guidelines for quality plans.
46. Quality management – Guidelines to quality in project management.
47. Quality management – Guidelines for configuration management.
48. Quality assurance for measuring equipment – Guidelines for control of measurement processes.
49. Guidelines for quality management system documentation.
50. Guidelines for managing the economics of quality.
51. Quality management – Guidelines for training.
52. Environmental labels and declarations – General principles.
53. Environmental labels and declarations – Self declared environmental claims (Type II environmental labelling).
54. Environmental labels and declarations – Type 1 environmental labelling – Principles and procedures.
55. Environmental management – Environmental performance evaluation – Guidelines.
56. Environmental management – Lifecycle assessment – Principles and framework.
57. Environmental management – Lifecycle assessment – Goal and scope definition and inventory analysis.
58. Environmental management – Vocabulary.
59. Code of Practice for the grading of hardwoods.
60. Specification for radio apparatus: VHF and UHF fixed and mobile service.
61. Specification for labelling of household chemicals.

Standards revised

62. Specification for labelling of footwear.
63. Specification for labelling of furniture.
64. Specification for labelling of animal feed.
65. Specification for labelling of prepackaged foods.
66. Specification for bottled water.
67. Specification for vinegar.
68. Specification for safety matches.
69. Specification for wheat flour.

70. Specification for biscuits.
71. Specification for gold articles – Marking requirements.
72. Specification for gold articles – Guidelines for manufacturing, alloying and testing.
73. General requirements for the operation of a laboratory.

APPENDIX II

DRAFT GUYANA STANDARDS FOR WHICH PUBLIC CONSULTATIONS WERE CONDUCTED

1. Specification for gold articles – Marking requirements.
2. Specification for gold articles – Guidance for manufacturing.
3. Guidance for good manufacturing practice for small and micro enterprises.
4. Code of Practice for fishery products – Fish.
5. Code of Practice for fishery products – Shrimps and prawns.
6. Code of Practice for the production of rice.
7. Code of Practice for street vended foods.

Numbers 1,2,3,6 and 7 have been approved by National Standards Council and are published. Numbers 4 and 5 were withdrawn from the work programme because they are covered in the Fisheries Regulations.

APPENDIX III

REGIONAL STANDARDS ISSUED FOR PUBLIC COMMENTS

1. Specification for rum.
2. Specification for carbonated beverages.
3. Specification for poultry meats and poultry products.
4. Specification for brewery products.
5. Code of hygienic practice for the collecting, processing and marketing of packaged water.
6. Specification for fruit juices and fruit drinks.
7. Detergent – Synthetic laundry detergent powder -Specification.
8. QAC – Based aromatic disinfectant.
9. Specification for the identification of the contents of pipelines, piping, ducts and conducts.
10. Specification for toilet tissue.
11. Specification for hand/dishwashing detergents.
12. Specification for spices and sauces.
13. Carbon steel bars for the reinforcement of concrete - Specification.
14. Steel nails- Specification.

APPENDIX IV

GUYANA'S COMPULSORY STANDARDS

1. Specification for labelling of commodities – General principles.
2. Specification for labelling of pre-packaged goods.
3. Specification for labelling of cigarettes.
4. Specification for labelling of footwear.
5. Specification for labelling of furniture.
6. Specification for labelling of animal feed.
7. Specification for labelling of household electrical appliances.
8. Specification for labelling of cosmetics.
9. Specification for labelling of pre-packaged foods.
10. Specification for labelling of brewery products (beer, stout, shandy and malta).
11. Specification for safety matches.
12. Definition of terms used in the pneumatic tyre industry.
13. Specification for pneumatic passenger car tyres.
14. General requirements for the operation of a laboratory.
15. Specification for new pneumatic tyres for commercial highway vehicles.
16. Rice – Specification, sampling, tests and analysis.
17. Code of Practice for the storage of tyres, inner tubes and flaps.

APPENDIX V

COMPARISON OF DEVICES VERIFIED FOR THE YEARS 2001,2002 & 2003

YEAR	NEW DEVICES				DEVICES IN USE			DEVICES IN INDUSTRIES		
	SCALES	MASSES	MEASURES	METER RULE	SCALES	MASSES	MEASURES	SCALES	MASSES	FUEL TANKS
2001	3141	3172	541	-	1219	3008	12	199	209	-
2002	1029	2094	512	-	3166	7033	515	194	118	-
2003	1128	2087	298	31	4503	8316	932	309	111	17

APPENDIX VI

COMPARISON OF PETROL PUMPS VERIFIED FOR THE YEARS 2001,2002 & 2003

YEAR	PUMPS TESTED	PUMPS CALIBRATED	BULK METERS TESTED	BULK METERS CALIBRATED
2001	1090	695	33	16
2002	1093	484	3	1
2003	1191	308	14	14

APPENDIX VII

COMPARISON OF WEIGHTS AND MEASURES SURVEILLANCE FOR THE YEARS 2001,2002 & 2003

YEAR	No. OF PREMISES VISITED	DEVICES SEIZED		
		SCALES	MASSES	MEASURES
2001	1789	84	367	129
2002	4294	219	1016	176
2003	3891	273	1405	237

APPENDIX VIII

COMPARISON OF IMPORT CONTROL SURVEILLANCE FOR THE YEARS 2001,2002 & 2003

YEAR	No. OF PREMISES VISITED	COMMODITIES EXAMINED	COMMODITIES SEIZED/DESTROYED
2001	828	Garments, textiles, footwear, fertilizer , safety matches, electrical appliances, tyres , furniture, Animal feed and cigarettes	154 Used tyres 100 Boxes of matches 2 Electrical Appliances
2002	1037	Garments, textiles, footwear, fertilizer , safety matches, electrical appliances, tyres , furniture, Animal feed and cigarettes	449 Used tyres
2003	2497	Garments, textiles, footwear, fertilizer , safety matches, electrical appliances, tyres , furniture, Animal feed and cigarettes	2363 packets of cigarettes 9314 boxes of safety matches 248 packets of razor blades 350 of furniture were place on hold for labeling.

APPENDIX IX

LIST OF LABORATORIES THAT ARE CORRECTING QUALITY AND TECHNICAL MANUALS

1. Guyana Responsible Parenthood Association (Review).
2. Guyana Power and Light Inc.
3. Bio Tec Medical Laboratory.
4. Linden Hospital Complex Laboratory.
5. Woodlands Hospital Laboratory (Technical manuals submitted only).
6. Medical Arts Centre.
7. Standard Medical Laboratory.
8. New Amsterdam Hospital Laboratory.
9. Ogle Diagnostic Centre (Technical manuals submitted only).
10. West Demerara Regional Hospital Laboratory.
11. Institute of Applied Science and Technology.
12. Dr. Leslie Persaud Diagnostic Clinic.
13. Guyana Defence Force Laboratory.

Dr. Leslie Persaud Diagnostic Clinic and Guyana Defence Force Medical Laboratory have completed corrections to their manuals. The Bureau is awaiting a feedback from these laboratories to proceed with certification.

APPENDIX X

LIST OF LABORATORIES TRAINED ON THE ISO 17025 STANDARD

1. Banks DIH Limited.
2. Guyana Water Incorporated.
3. Government Analyst Food and Drug Department.
4. Guyana Gold Board.
5. Demerara Distillers Limited.
6. New Guyana Pharmaceutical Corporation.
7. Guyana Power and Light Inc.
8. University of Guyana.
9. Guyana Rice Development Board.
10. National Agricultural Research Institute.
11. Guyana Geology and Mines Commission.
12. G & S Sanata.
13. Edward B. Beharry and Co. Limited.
14. Sterling Products Limited.
15. Guyana Sugar Corporation.

Chart of Accounts & Line Item	Y.T.D	Exp.	Exp.	Total Exp.	liabilities	YTD	Bal. on	Bal.on
	Releases	Prev. Mth	Curr. Mth	to date	o/s-mth end	Exp & liab.	Releases	Voted Prov.
Maintenance of Infrastructure								
151 Maintenance of Roads								
152 Maintenance of Bridges								
153 Maintenance of Drainage & Irrigation Works								
154 Maintenance of Sea & River Defences								
155 Maintenance of Other Infrastructure								
Transport, Travel and Postage	1,047	862	185	1,047	-	1,047	-	
161 Local Travel & Subsistence	678	638	40	678	-	678	-	
162 Overseas Conference & Official Visits	-	-	-	-	-	-	-	
163 Postage, Telex And Cablegram	24	24		24	-	24	-	
164 Vehicle Spares And Services	345	200	145	345	-	345	-	
165 Other Transport, Travel & Postage	-	-	-	-	-	-	-	
Utility Charges	2,870	2,594	276	2,870	-	2,870	-	
171 Telephone Charges	805	729	76	805	-	805	-	
172 Electricity Charges	1,885	1,685	200	1,885	-	1,885	-	
173 Water Charges	180	180		180	-	180	-	
Other Goods and Services Purchased	1,754	1,679	75	1,754	-	1,754	-	
181 Security Services	180	180	-	180	-	180	-	
182 Equipment Maintenance	225	225		225	-	225	-	
183 Cleaning & Extermination Services	40	40		40	-	40	-	
184 Others	1,309	1,234	75	1,309	-	1,309	-	
Chart of Accounts & Line Item	Y.T.D	Exp.	Exp.	Total Exp.	liabilities	YTD	Bal. on	Bal.on
	Releases	Prev. Mth	Curr. Mth	to date	o/s-mth end	Exp & liab.	Releases	Voted Prov.
Other Operating Expenses	389	389	-	389	-	389	-	
191 National And Other Events	145	145		145	-	145	-	
192 Dietary		-		-	-	-	-	
193 Refreshments	210	210		210	-	210	-	
194 Others	34	34		34	-	34	-	

Education, Subventions and Training	400	400	-	400	-	400	-
211 Education Subventions & Grants	-	-	-	-	-	-	-
212 Training (including scholarship)	400	400		400	-	400	-
Rates and Taxes and Subventions							
221 Rates And Taxes							
222 Subventions To Local Authorities							
Subs.& Contribs.to Local & Int'l Orgs.	-	-	-	-	-	-	-
231 Local Organisation	-	-	-	-	-	-	-
232 International Organisations			-	-	-	-	-
Refunds of Revenue							
241 Refund of Revenue							
Pensions							
251 Non-Pensionable Employees							
252 Pension Increase							
253 Old Age Pensions & Social Assistance							
261 Other Public Debt (Appropriation)							
.....							
ACCOUNTING OFFICER					DATE		

APPENDIX 12

OTHER INCOME

	DETAILS	INCOME	EXPENCES	Balances
	Balance B/F	2,264,683	0	
	Income for January 2003	1,451,150	979,147	
	Income for February 2003	1,028,125	1,057,612	
	Income for March 2003	836,548	776,137	
	Income for April 2003	652,386	814,881	
	Income for May 2003	328,265	1,162,528	
	Income for June 2003	1,158,424	705,820	
	Income for July 2003	523,135	778,527	
	Income for August 2003	810,364	1,485,344	
	Income for September 2003	1,228,017	1,863,699	
	Income for October 2003	1,516,062	1,595,910	
	Income for November 2003	792,133	1,319,168	
	Income for December 2003	1,081,386	870,786	
	TOTAL	13,670,678	13,409,559	261,119

Prepared by:.....

M. Austin

Date...2004-02-11