

## **World Food Summit – Country Submission (Guyana)**

### **SECTION 1: BACKGROUND INFORMATION**

1. **Country:** Guyana
2. **Reporting Institution or Unit:** Ministry of Agriculture
3. **Contact Person:**
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4. **Institutional arrangements established for the follow-up of the WFS Plan of Action:**

Agencies of the Ministry of Agriculture are requested to report to the Ministry of activities and projections, which are in accordance with the commitments of the World Food Summit (WFS) Plan of Action.

In other Ministries where activities and/projections related to commitments of the (WFS) Plan of Action are conducted, reporting to Ministry of Agriculture is done from the relevant departments through their Ministry.

## **SECTION 11: INFORMATION ON PRIORITY FOOD SECURITY ISSUES, WITH DATA ON FOOD SECURITY INDICATORS**

As the world continues in joint efforts to ardently fight against hunger, Guyana has most certainly seen the need to be a part of these collaborative efforts.

In our nation we have recognized the need for agriculture to be highlighted as the foundation sector for reducing malnutrition and increasing food security. While poverty is found mainly in our rural areas, persons within these communities are often quite capable of producing their basic food requirements. In many of these areas promotion of alliances in the form of farmers' Associations and otherwise have helped to alleviate poverty and thus hunger, to a large extent. Additionally, various initiatives have been undertaken to realize the promotion and expansion of our agricultural sector.

In regions 2 and 3, the Poor Rural Communities Support Services Project (PRCSSP), a project funded by the GOG, IFAD and CDB continues its mandate in alleviating poverty through Rehabilitation of Drainage and Irrigation Systems, Technical Support Services, Credit Services, Community Investment Development Initiatives and Project Coordination, Monitoring and Evaluation.

Under this programme, major activities included upgrade of fisheries stations and nurseries; Rehabilitation of D&I; Provision for training of small scale farmers; Provision for credit facilities for farmers; Provision for engineering and supervision services, Provisions for training and technical and socio-economic studies.

Crops and Livestock agriculture is one of the mechanisms put in place to ensure food security, self-sufficiency and sustainability in Guyana with the aim of reducing poverty and realizing higher levels of standard of living. The Crops and Livestock Department of the Ministry of Fisheries, Crops and Livestock, pursues this goal through strategic planning, implementation and monitoring and evaluation. Commodity programmes executed in all ten (10) Regions of Guyana include Animal Health, Livestock Improvement, Plant Quarantine, Orchard Crops, Vegetable Improvement, Edible Oil Crops and development of the Hinterland.

In the fisheries sub-sector the industry there was overall increase in production of over 18%, with fish and shrimp landed being 57,034 metric tonnes in 2003, compared to 48,193 metric tonnes for 2002.

The Fisheries Legislation, passed in Parliament in 2002 was signed in to effect on July 25, 2003 and puts in place the legal framework for effective fisheries management and development. Fisheries Quality Control regulations were also put in place to improve on quality assurance and safety mechanisms in the fisheries sector.

Guyana was able to export fish and fish products to the European Union due to the introduction of Quality control mechanisms and strengthening of the Veterinary Public Health Unit as Competent Authority. We have also maintained certification for exportation of shrimp and other seafood products to the United States of America.

Initiatives for Aquaculture Development are continuous. The FAO of the United Nations agreed to finance and implement a project for aquaculture development – “Introduction of Aquaculture and Other Integrated management practices to Rice farmers”. The general objective of the project is to enhance food security and income through improved and diversified farming practices.

During 2003, farmers in fresh water prawn production benefited from training programmes. The Unit provided extension services to farmers and the Poor Rural Support Communities Support Services Programme (PRCSSP) and collaborated with Iwokrama in implementing the Arapaima Management Plan.

In the area of Organic farming several successes that enhance food security have been achieved. A cocoa demonstration plot was established at Hosororo in Region 1. This consisted of two sections and was done to demonstrate the practices involved in organic cocoa production, with special emphasis on land preparation, field establishment and soil management.

Full organic certification was achieved in 2003.

An organic pineapple germplasm and demonstration plot was established at Mainstay, Region 2. This plot is being used for demonstration, research and training.

Pineapple farmers in Mainstay/Whyaka received organic certification in 2003.

There are about 45 acres under cultivation.

Despite challenges experienced in the traditional agricultural sub sectors, varying levels of successes were achieved. Rice production showed 23 % increase over that of 2002. Yields increased by approximately 3 bags of paddy per hectare when compared with the previous year and exports were 4 % more than 2002.

With the intervention of the Government, loans and advances to the rice sector were reduced by 46 %. The Bank of Guyana Report for October 2003 showed that loans and advances for paddy production was reduced from \$4.04 billion in January 2003 to \$1.8 billion by October of 2003, similarly for rice milling this was reduced from \$6.2 billion to \$ 3.7 billion.

In the sugar industry 2003 production was below budget due to dry weather experienced in the latter half of 2002 and the first crop in 2003. However sales showed a steady improvement, particularly into the CARICOM countries, the major growth being in bagged sugar sales.

The contributions of the livestock industry and more importantly the cattle sub-sector towards poverty alleviation, rural development and as an enterprise that saves on foreign exchange are well recognized. This industry also plays an integral role in the fulfilling of the dietary requirement of Guyana’s population and a source of income to rural farmers.

Significant food security initiatives were achieved within the cattle industry.

Three pasteurization plants were established in regions 4, 5 and 6.

The Dantzig Dairy Plant in Region 5 experienced a change in management and began production of flavoured milk drinks, ghee, panneer, flavoured whey drinks and low fat drinks under the brand “White Gate”. ITEC’s Dairy Expert supported the new management’s production efforts.

A private entrepreneur established a dairy processing unit in New Amsterdam. Low fat plain pasteurized milk, flavoured yoghurts and cream cheese are produced under the brand "Moogoodies".

The Guyana Dairy Development Project (GDDP) collaborated with the Saint Stanislaus College Association farm in Sophia to establish a Dairy products unit. This unit produces flavoured milk drinks, plain pasteurized milk, liquid and solid yoghurts, eggnog, cream cheese and sour cream under the brand "Good Morning".

Relevant legislation in relation to local beef production and export was passed in parliament after consultation with various interest groups.

The Region 5 abattoir owned by a private entrepreneur received continued support and visits from several Caribbean Chief Veterinary Officers. A plan to intensify beef production (for export) in Abary, Region 5 was presented to the Livestock Committee for consideration.

In 2003 beef exports to the Caribbean and the export of beef from Region 9 to the coast by private refrigerated trucks commenced.

## DATA ON FOOD SECURITY INDICATORS

INDICATORS	1996	1997	1998	1999	2000	2001	2002	2003	Source
<b>1. Food Security Indicators</b>									
• <b>Availability</b>									
Average per person dietary energy supply (kcal)									
Food production index									
Food self-sufficiency ratio									
Cereal supply per person									
Animal protein supply per person									
Value of food imports/export earnings									
Debt service ratio									
Value of gross investment in agriculture (in USD)									
• <b>Stability</b>									
Food Price Index									
Index of variability of food production									
Ratio of national food reserves to domestic food consumption									
Export earnings instability									
• <b>Access</b>									
Rate of growth in real GDP per person/per year									
Gini index of income distribution									
Percentage of population living below national poverty line (%)									
Percentage of population living on less than \$1a day (%)							2.0		World bank www.worldbank.org/data
Percentage of income spent on food (%)									
Consumer price index									
Estimated number of undernourished people (%)				14					UN Statistical division www.unstats.un.org



INDICATORS	1996	1997	1998	1999	2000	2001	2002	2003	Source
Rate of population with HIV/AIDS infection (%)									
<b>4. Economic and Trade</b>									
Proportion of total imports by value, excluding arms, from developing countries and from LDCs admitted free of duties <sup>/a</sup>									
Average tariffs imposed on agricultural products and textiles and clothing from developing countries <sup>/a</sup>									
Agricultural support estimate as percentage of GDP <sup>/a</sup>									
Proportion of ODA provided to help build trade capacity <sup>/a</sup>									
Share of primary exports (value) of total export earnings <sup>/b</sup>									
Share of manufactured exports (value) of total export earnings <sup>/b</sup>									
Terms of trade <sup>/b</sup>									
External agricultural income terms of trade									
<b>5. Sustainability of natural resources</b>									
Proportion of land area under forest cover (%)									
Proportion of land area protected to maintain biological diversity (%)				78.5					UN Statistical division www.unstats.un.org

<sup>a/</sup> Applicable to developed countries

<sup>b/</sup> Applicable to developing countries

## **SECTION 111: RECOMMENDED ACTIONS FOR EACH COMMITMENT AND MEASURES TAKEN**

### **COMMITMENT 1**

#### **Policies pursued to create an enabling political, social and economic environment.**

##### **Objective 1**

##### **Strengthening democratic political systems and broad-based participation.**

Civil society highlighted Good Governance as a major issue, both generally and at the community level. To this end government placed emphasis on strengthening democracy and social cohesion. Priorities identified include institutional and regulatory reforms, public accountability, building confidence in judicial and political systems, local government reforms and protection of fundamental human rights.

Areas of commitment included the modernization of the public sector, reforming the tender and procurement system, decentralization of the delivery of public services and improvements in land distribution.

In the area of public sector modernization, staff audits were completed. In agreement with the International Development bank (IDB), focus was placed on completion of studies of the public service functions and vertical institutional capacity assessment of ministries as an introduction to the public sector modernization programme.

In 2003, the Tender and Procurement Act was passed. This act replaced the administrative regulations of 1958 and is designed to maximize economy and efficiency, foster competition between and among suppliers and contractors and promote transparency and public confidence in the procurement process.

Costs of travel to Georgetown from outlying areas are high. To manage this situation, Government committed itself to decentralization of basic services to the various regions. These services included the issuance of birth and death certificates, issuance of passports, issuance of house lots and land titles and processing and facilitation of exports.

At the sectoral level broad based participation is also encouraged.

The Guyana Rice Development Board (GRDB) Board of Directors has statutory representation from farmers, millers and consumer association.

##### **Objective 2**

##### **Improving human rights.**

Approval was given by the National Assembly for the establishment of four (4) Human Rights Commissions. These Commissions are Women and Gender, Indigenous People, Rights of

Children and Elderly Persons. The success of these commissions relies heavily on cooperation among the various political parties.

The Ethnic Relations was established to give equal opportunity to persons of various groups, assist in the elimination of racial discrimination, discourage and prohibit associations and other bodies from promoting discrimination and to promote education and training.

Exploitation of women and girls were the focus as some Non-Governmental Organizations (NGOs) implemented programmes to address human rights issues.

### **Objective 3**

#### **Preventing conflict and creating a peaceful environment.**

Government took immediate actions to deal with increase in violent crimes. These actions have resulted in significant reduction of crime and improvement of social life.

The Guyana Defence Force (GDF) performed civilian law enforcement in support of the Guyana Police Force (GPF).

Resources were diverted and made available for anti-crime measures.

Mechanisms were put in place for the creation and improvement of community police groups.

Contributions from donors also greatly enhanced crime-fighting measures. The Quick Response unit of the GPF benefited from assistance in the form of strategic management training and reform protocols, provided by The British Government through the Department of Foreign International Development (DFID).

### **Objective 4**

#### **Enhancing gender equality and women's empowerment.**

The New Guyana Marketing Corporation (New GMC) provided Marketing information to the Pomeroon Women's Small Cottage Association.

Training sessions on the internet and its use as a business tool, were provided to members of the Pomeroon Women's Small Cottage Association and other women in the Charity area.

The ongoing PRCSSP is designed so that sustainable support services are available to households headed by women.

## **COMMITMENT II**

**Policies pursued and actions taken to eradicate poverty and inequality and to improve physical and economic access to food by all.**

### **Objective 1**

**Specific policies and targeted interventions to generate income and employment for the urban poor.**

The Social Impact Amelioration Programme (SIMAP111) replaced the SIMAP 11 programme and is geared to improve the living standards and economic opportunities of the poorest and most vulnerable Guyanese households. This programme includes the following areas: social infrastructure projects, special assistance to vulnerable groups through partnership with NGOs and technical assistance for effective programme implementation.

SIMAP111 is designed to improve social and economic infrastructure in poor communities and is therefore demand driven and community based. From Needs and Rapid Poverty Assessment, 1082 priority needs from over 230 communities in all regions of Guyana were recognized.

The Basic Needs Trust Fund (BNTF) programme was formally approved by the Caribbean Development Bank (CDB) in 2003. Programme activities have significantly assisted in the government's efforts to reduce poverty. Under this programme 218 projects were executed in poor communities across the country. These included rehabilitation of structures (for example schools, health clinics), extension of other educational and health centres and construction of new market facilities and to encourage local commerce.

A skills training programme was established to assist the poor especially youth in the development of skills for employment and access to the labour market.

The GRDB rice research program is geared to produce pest and disease resistant high yielding varieties. This directly reduces the amount of inputs at the same time increasing their outputs.

### **Objective 2**

**Specific policies and targeted interventions to generate on-farm and off-farm income and employment for the rural poor, women and minority groups, including land reform, protection of property and use rights and other strategies to ensure access to land and water resources.**

Under the PRCSSP, major activities to enhance employment and income generation for rural poor were conducted. These included upgrade infrastructure, rehabilitation of Drainage and Irrigation facilities, training of farmers and provision of credit facilities and engineering and supervision services.

Loan disbursement value for Region 2 was G\$ 47, 850,457 with major activities being those of rice, poultry, crops, fishing and dairy. Disbursement value for Region 3 was G\$ 60,174,345 with major activities being those of Rural Outreach Programme (ROP), Vending, Workshop, Furniture making and logging.

Other activities included rehabilitation and excavation of channels and construction of Structures, upgrading of public facilities including supply of laboratory equipment and rehabilitation of Plant Nurseries.

Community Infrastructure activities included construction of fair weather road, land clearing and excavation of drains, construction of storage bond and bridge, extension of agro-processing unit, construction of Multi-purpose Centre and Bonds.

Supply of Technical Assistance is continuous.

In an effort to utilize excess milk produces on farms The National Dairy Development Programme (NDDP) is involved in method/result demonstrations for the manufacture of a variety of dairy products from fresh cow's milk for both for farm family consumption and sale.

Access to land is heavily dependent on efficient land administration. To this end emphasis has been placed on the introduction of 50 years lease and the right of transfer, sale, subletting renewal and inheritance, development of standard operating procedures for processing of leases, establishment of mechanisms to provide lease services and computerized systems and database for the support of management and policy decisions with respect to leases.

The Guyana Lands and Survey Commission (GLSC) conducted activities in the areas of land Tenure Regularization (LTR), improvement of land administration systems and services and organizational development of the GLSC.

In an effort to inform land policy and other decision making studies on Land market and Region 6 land use plan were conducted. The former is an extensive study of the structure and functioning of land markets in Guyana while the latter, a main strategy for establishing new lands for allocation, was completed in 2003.

Reforms were implemented in the water sector with a view to provide access to treated water for over 90% of the population and to reduce water borne diseases. The Guyana Sewerage and Water Commission (GS&WC) and the Guyana Water Authority were merged to form a single entity, the Guyana Water Incorporated (GWI Inc.). This merger was done with a view to improve regulation of the sector and establish water rates, which are consistent with the company's operating costs. Various mechanisms were established to ensure that the sector is economically viable.

In the year 2003 major activities conducted by the National Drainage and Irrigation Board (NDIB) constituted rehabilitation and construction of Drainage and Irrigation (D&I) canals and structures, installation of pumps and provision for operational costs.

Specific activities included rehabilitation of 300 miles of canals and drains at Pomeroy, rehabilitation of 40 miles earthen embankment and twenty five (25) structures, excavation of outfalls channels and rehabilitation of fixed drainage pumps and all mobile drainage pumps across the regions.

Current efforts under a new IDB funded project – the Agricultural Support Services Programme are being geared towards the creation of Water Users Associations in the operation and maintenance of Drainage and Irrigation services.

Under the Mahaica/Mahaicony Abary Agri Development Authority (MMA/ADA) programme, Civil Works activities conducted include rehabilitation of conservancy dams, primary and secondary D&I channels, roads and access dams and other D&I structures.

Agriculture Development programme activities included on going realignment of freehold agricultural lands designed to benefit all freeholds with D&I and Cadastral Survey and Land Titling to facilitate surveys for demarcation of land boundaries and issuing of freehold/leasehold titles.

Under Survey Conservancy and Main Canal Reserves programme, 20 miles of engineering survey and Cadastral survey of Conservancy Dam were completed.

### **Objective 3**

**Provisions made to develop social safety nets, if any, to meet the needs of the poor, including those affected by HIV/AIDS:**

- **In rural areas**
- **In urban areas**

To combat anticipated effects of restructuring and modernization of the traditional sector and economic growth Government committed itself to design a social safety net aimed at providing the following: support for displaced workers, support for pregnant and lactating mothers and targeted subsidies in electricity and water tariffs.

Initiatives have been taken to strengthen capacity in the Ministry of Labour, Human Services and Social Security (MLHSS) in the management of social safety nets through improved systems, processes and training.

Additionally a social safety net diagnosis of the food feeding programme is being undertaken by Government in an effort to achieve increased coverage and efficiency and probable decentralization.

Options for Social safety nets for vulnerable groups are under review in an effort to target those populations affected by social restructuring.

Guyana recognizes the threat of HIV/AIDS to social and economic development. In this context several initiatives were undertaken. A Presidential Commission for coordination of a multisectoral response to HIV/AIDS was established.

To reduce the incidence of mother to child transmission eight (8) pilot sites for testing were established in regions 4 and 6. HIV positive mothers can receive pre and post natal treatment.

The Ministry of Health (MOH) in collaboration with other governmental and non-governmental organizations conducted several activities to promote public awareness and responsible

behaviour. Some initiatives include provision of condom vending machines and counselling to persons living with HIV/AIDS.

Government collaborated with the New Guyana Pharmaceutical Company to facilitate the manufacture and supply of antiretroviral drugs to HIV/AIDS patients.

#### **Objective 4**

##### **Measures taken to ensure access to basic education and primary health care.**

The Ministry of Education (MoE) developed a Strategic Plan designed to reduce repetition and drop out rates in primary schools, increase secondary school enrolment, reduce overcrowding, reduce absenteeism of students and teachers, increase teacher non-recurrent expenditures and improve teacher training.

Other achievements included a formula-based system for allocation resources allocation, completion of a system design and selection of pilot implementation sites.

UNICEF provided assistance in revision to pre-school level curricula. A primary school timetable was developed for the regulation of weighting given to various subjects.

Through the Competency-based Education (CBE) an alternative learning pathway was developed for secondary level students. Two examination options are presented to graduating secondary students, namely the Caribbean Secondary Examinations Certificate (CSEC) and the Basic Competency Certificate Programme (BCCP).

Teacher Training in the areas of English, Mathematics and Science was delivered to teachers from about 28 schools to enhance their performance with the general Secondary programme. Approximately 103 hinterland teachers were trained under the Guyana Basic Education Teacher Training (GBET) programme. An in-service centre was established in Region 1 for instruction in the Teacher Certificate programme and currently educates 37 trainee teachers.

National Assessment for Grade 2 was conducted with an aim to provide baseline data for assessment of future progress in Language Arts and Mathematics. School-based literacy assessment is on going.

Over forty-five (45) primary and secondary schools were constructed and/rehabilitated through the Primary Education Improvement Plan (PEIP), the Secondary School Reform Programme (SSRP) and the Guyana Education Access Project (GEAP). In an effort to restructure secondary education approximately 15 community high schools were converted to general secondary schools.

A Geographical Information system/School mapping Exercise (GIS/SME) commenced in 2003. This exercise is intended to inform regional planning particularly with respect to decisions for construction of new schools.

In keeping with the introduction of curriculum guides for Health and Family Life Education (HFLE), for grades 1 to 9, facilitators were trained. Teacher Training Programme curriculum was revised.

## **COMMITMENT III**

**Measures taken to pursue participatory and sustainable food, agriculture, fisheries, forestry and rural development policies and practices and to combat pests, drought and desertification.**

### **Objective 1**

#### **Policies and actions taken to intensify and diversify food production.**

As part of the National Agriculture Research Institute's (NARI's) medium term Strategic Research and Development Agenda (SRDA) for 2003-2005, greater emphasis on export capability and potential for processing for value added products for domestic and international markets was identified. As a result of market surveys conducted by the Guyana Economic Opportunities (GEO) Project in collaboration with the New GMC wherein, high potential commodities/products were identified for the Toronto, New York, London, Northern Brazil and Caribbean markets.

Sustained production initiatives were directed in the following areas: Vegetable Seed, Corn, Minica IV and Sorghum Seed, California #5 (Blackeye), Nursery Plants and Ant Bait. Programmes for Improvement in Vegetable and Orchard Crops highlighted Increased vegetable production in depressed areas, Orchard rehabilitation for guaranteed supply to the fruit industry and Increased demand for orchard crops for the jams, jellies and dried fruits.

At NARI programmes were designed to enhance Post Harvest and Agroprocessing initiatives. Information is available on the postharvest treatment of papaya for the control of fungal diseases and postharvest fungicidal treatment of fresh cassava tubers.

Initial agro-processing studies were conducted in several areas including preservation of fruit segment in syrup, utilization of banana in the production of value added product and production and processing of snack foods.

The NDDP has undertaken several activities to enhance both increase and diversification of food production. These include transfer of appropriate technology to increase the production of milk and beef, assisting in the establishment of local milk processing units, preparation of projects to establish milk processing units in Regions 2 and 3, assisting in the upgrading of a privately – owned abattoir to meet requirements for the export of beef to the Caribbean and collaborating with the Urban Rehabilitation Project to establish abattoirs of international standards in Regions 4 and 6.

### **Objective 2**

#### **Actions taken to combat environmental threats to food security in particular:**

- **Droughts and desertification,**
- **Pests**

- **Erosion of biological diversity, and**
- **Degradation of land and aquatic based natural resources**

During 2003 NARI programmes in the area of crop protection were directed to meet the needs of farmers and other producers.

An integrated management system was introduced on farmers' fields to minimize damage caused by the soursop wasp, which reportedly caused extensive damage to farmers.

National organic production activities included the commencement of research on plants with biopesticidal properties for use in the control of pest problems in organic farming. Fourteen (14) native plant species were established in field and laboratory. The results of this research will offer safe alternatives to chemical pest control.

Efforts were initiated to have ant bait produced by NARI registered with the European Authorities for use in organic farming in Guyana. According to the EU 2092/91 regulations that govern the production of certified organic products destined for the EU, the bait meets the minimum standards for use as an approved or allowed substance in the control of arthropod pests. When registered, this product can be marketed to organic producers in Guyana and elsewhere.

GRDB Extension Department through its "Farmer Field School" is promoting an integrated approach in Crop Management. This has a direct link to the reduction of pesticides that have a direct link to erosion of biological diversity.

### **Objective 3**

#### **Transfer and use of agricultural technologies.**

Through collaborative efforts with relevant agencies various training and technical assistance programmes for the transfer and use of agricultural technologies were initiated. Some of these included:

#### **Indian Council for Agricultural Research (ICAR)**

A Memorandum of Understanding was signed between NARI and ICAR in January, 2003 for collaboration research in agriculture for promoting agricultural development. The MOU covered collaboration in both the crop and dairy sectors.

#### **Indian Technical Economic Cooperation (ITEC) Assistance:**

Through the services of an ITEC expert assistance will be directed towards manpower development in seed/technology especially vegetable seed production and its quality testing, germplasm evaluation and its utilization crop improvement programme, evaluation of primary techniques for the availability of disease free propagation material and the development of a systematic seed production programme.

### **Malaysian Technical Assistance –Rambutan Cultivation**

With technical assistance provided by the Malaysian Government, an expert in rambutan cultivation visited NARI in July-August 2003. Technical advice and material provided by the expert have resulted in an effective method of rambutan propagation.

### **Chinese Technical Assistance – Mushroom Cultivation**

Exchange notes were signed by the Ministry of Foreign Trade and International Cooperation and the Chinese Ambassador to Guyana in October 2003 for mushroom cultivation. This will allow a feasibility study followed by experts to train and work with local farmers.

GRDB's Extension Department through its "Farmer Field Schools" is very active in the transfer of technologic developed at the Rice Research Station.

The New GMC conducted training sessions for farmers and technicians in the following areas: the use of bunch covers on plantain and banana bunches, waxing of fruits and vegetables for export, waxing of ground provisions, de-greening of citrus and exporting basics – two training sessions, Export 101 and Export 102.

## **Objective 4**

### **Formulation and implementation of integrated rural development.**

In addition to routine development initiatives, several special projects were established and are ongoing with an aim to improve rural development. Some of these include the following:

#### **Peanut Production in Region 9**

In association with Beacon Foundation and the Universities of Florida and Georgia, NARI were involved in the Peanut Project in Region 9. Research focused on improving per unit and total peanut production in the region in a sustainable manner. Trials involved varietal evaluations, spacing and use of lime and gypsum.

#### **Revegetation of the Kara Kara Mine in Linden**

A project was initiated to revegetate the Kara Kara Mined out site in Linden. This is a five-year project, which aims to establish pastures, orchard crops and agroforestry species.

#### **Poor Rural Community Support Services Project (PRCSSP)**

Under the applied research component of the PRCSSP several research projects were initiated. These included varietal evaluations, optimizing nitrogen fertilizer use and nitrogen fertilizer trials and disease management for a number of crops.

#### **Intermediate Savannahs Project**

NARI continued to maintain a collection of germplasm material identified for the Savannahs. This material included mung, pigeon peas, peanut, soybean, sorghum, corn, minica and blackeye. Seed material was produced for farmers in the Berbice riverain communities and current investors in the savannah.

Appropriate technology made available to investors in the Savannahs resulted in the large-scale cultivation of corn, minica and fruits.

## **COMMITMENT IV**

**Measures taken at national level to ensure that food and agricultural trade and overall policies are conducive to fostering food security.**

### **Objective 1**

**To establish well functioning internal marketing and transportation systems to facilitate better links within and between domestic and external markets.**

During 2003 the New GMC focused heavily on the promotion of Guyana's fresh produce in overseas markets.

Technical services were continually provided to farmers and exporters. This contributed to increase in exports to Barbados. For 2003, 973 tonnes of fresh agricultural produce were processed at the Central Packaging Facility when compared with 698 tonnes in 2002 and 488 tonnes in 2001.

Through technical assistance provided by the corporation market information was sent directly to farmers, overseas buyers were linked directly to farmers and local agro-processors were linked directly to farmers.

Through the USAID/Guyana Economic Opportunities (GEO) Project technical assistance was provided to the New GMC in several areas. These include: Market Survey for Northern Brazil, Presentation of findings from market Surveys done for Toronto, New York City, London and seven Caribbean countries, namely St. Lucia, St. Maarten, Martinique, Guadeloupe, Trinidad and Tobago, Barbados and Antigua, a workshop on "Labelling for Export", courses "Export marketing", "Business Writing" and "Internet as a Business Tool" and Demonstrations on Post-harvest handling techniques.

A Local Area Network (LAN) was set up which allowed for greater efficiency in the execution of functions at this agency.

The Corporation provided assistance to local exporters and agro-processors in registering them with the USDA as a result of the new Bio-terrorism Act of the US.

Three main Buy local Promotional Activities were hosted and the corporation also participated in the GUYANA ON SHOW exhibitions held in Suriname and Antigua.

### **Objective 2**

**To diversify trade.**

During 2003 several programmes were executed by the Agriculture Extension Services.

In an effort to ensure continued diversification of trade and meeting of necessary compliance measures several areas highlighting Regulatory Procedures were emphasized. These included: Farm Certification and compliance, Inspection and certification of plants and plant products for import and export, On-going surveillance and management of pests of plant quarantine importance, Phytosanitary treatment of commodities for export and Pest Risk Analysis for agricultural imports.

Programmes for Improvement in Vegetable and Orchard Crops highlighted Increased vegetable production in depressed areas, Orchard rehabilitation for guaranteed supply to the fruit industry and Increased demand for orchard crops for the jams, jellies and dried fruits.

Programmes implemented by the New GMC encouraged farmers to grow more non-traditional agricultural crops and sourced market opportunities for non-traditional agricultural crops.

### **Objective 3**

**To ensure national policies related to international and regional trade agreements do not have adverse impact on economic activities towards food security, especially women's activities.**

Government is aware of the effects of globalization on the economy. In an effort to improve competitiveness and efficiency in the traditional sector several activities aimed at restructuring of the sector were initiated.

Measures were taken in the core sectors, rice, sugar and bauxite to restructure in order to achieve viability and profitability.

Modernization of the agriculture sector included initiatives such as land reform, improvement of extension services and rehabilitation of drainage and irrigation facilities.

Achievements include the accelerated conversion of leasehold to freehold and expansion of drainage and irrigation programmes.

A strategic plan for the revitalization of the rice industry was completed in 2003. Pledges of support for research and development came from the Inter-American Development Bank and the European Union (EU).

In the sugar industry a new management contract, which focuses on profitability was completed in 2003.

In the Bauxite sub-sector an agreement was signed with OMAI for the privatization and / restructuring of LINMINE.

In an effort to enhance growth of the private sector Government has committed itself to export promotion, invest promotion and development and expansion of small business development.

## **COMMITMENT V**

**Measures taken to prevent and to be prepared for natural and man-made disasters.**

### **Objective 1**

**Institutional arrangements for early warning and advance information on possible emergencies.**

During 2003 US\$ 4,811,825 was allocated for sea defence project between Profit/Belladrum, Region 5.

Profit/Foulis sea defence was breached by high tides and the relevant machinery was utilized to commence sealing of breached areas with boulders.

### **Objective 2**

**Mechanisms in place to combat disasters and to provide rehabilitation for people affected.**

### **Objective 3**

**Measures taken to link post-emergency relief operations to develop programmes.**

### **Objective 4**

**Watershed management strategies put in place.**

## **COMMITMENT VI**

**Measures taken to promote optimal allocation and use of public and private investments to foster human resources, sustainable food, agriculture, fisheries and forestry systems.**

### **Objectives 1**

**Share of national budget allocated for human resource development indicating its impact in terms of primary and secondary school and higher education development.**

Government has recognized the importance of education and training to the reduction of poverty. To this end allocation for the Education and Training sector has been increased from \$G 12.1 billion or 8.4% of GDP, allocated for 2003 to \$G 14.5 billion or 9.4% of GDP for 2004. Priorities include curricular reforms, teacher training, recruitment of ancillary staff, reducing overcrowding, improving facilities, targeting functional literacy in out of school youths and institutional strengthening of the Ministry of Education (MoE).

Under the SSRP \$G 790 million dollars has been budgeted for completion of emergency repairs to twenty (20) schools.

### **Objectives 2**

**Share of the national budget allocated to agriculture and fisheries and food security programmes.**

In terms of enhancing food security, capital and current budget allocations for cattle development in 2004 are \$G 4.3 million and 30.933 million dollars.

### **Objectives 3**

**Nature and extent of investment in infrastructure aimed at improving access to markets and food.**

The New GMC spent over G\$ 8 million since 2001 towards improving the Central Packaging Facility (CPF). The CPF is the only approved “packhouse” for fresh fruits and vegetables when exporting to Barbados and Antigua.

Produce packed at the CPF for the period 2001 to 2003 are as follows: 2001 – 498 tonnes, 2002 – 698 tonnes and 2003 – 973 tonnes.

Several initiatives were conducted in an effort to construct infrastructure, which productive activities. Rehabilitation of sea defences along the coastal belt of Guyana facilitated the protection of farmlands and pastures. Construction of 3,400 metres of earthen dam was completed and rehabilitation of five (5) kilometres of sea defence works commenced.

In an effort to provide links for farm-to-market roads and easier transportation of goods, rehabilitation of 82 bridges and culverts and construction of approximately 26 structures were conducted.

The Ministry of Public Works and Communication completed the development of Routine Maintenance Management Systems to ensure sustainability of these roads.

Feasibility study of the Berbice River Crossing was completed. Rehabilitation of three (3) stelling was completed. Repairs were also conducted on nine (9) vessels.

Activities in the area of Air transportation included: completion and publication of the Guyana Civil Aviation Regulations, passage of legislation on aviation security, air traffic services and accident investigation, development of a procedure manual to guide technical staff and certification of the Rural Aerodromes.

#### **Objectives 4**

##### **Initiatives undertaken and resources allocated to promote technology development and transfers for improved production.**

Over the last 3 years approximately 50% of GRDB's Budget was directed towards research that is responsible for the production of new and improved rice technologies.

The Guyana School of Agriculture (GSA), added to its Programme of Education, a two year Diploma Programme in Animal Health and Veterinary Public Health and a two year Diploma Programme in Livestock Production and Management from September 2003. The Animal Health and Veterinary Public Health Programme also commenced.

GSA managed to complete a Computer Laboratory and introduced an Internet service in the library.

Two new laboratories are completed, which will assist in the delivery of all programmes.

The institution was also able to rehabilitate several buildings including dormitories.

Continued Training activities at NARI resulted in instruction in Principles and practices of organic pineapple production, Fruit vegetable production, Introductory soils, Pest management and Refresher & advanced training in organic cocoa production.

Technology transfer was conducted through on farm demonstration, production of pamphlets, leaflets, radio programmes and newspaper articles.

Through the NDDP several farmers from Regions 3, 5 and 6 were identified and activities undertaken for improvement of husbandry practices and record keeping. These farms were used as "pilot farms" for the purpose of technology transfer.

## **Objectives 5**

### **Strategies for sustainable watershed management and associated investments.**

## **Objectives 6**

### **Measures taken to control deforestation and to enhance national forest cover.**

The Guyana Forestry Commission (GFC) conducted several activities, which enhanced national forestry initiatives.

The Commission collaborated with various donor agencies for the coordination of several activities including the preparation of a strategic plan for the FPA (Forestry Products Association), the resuscitation of the Master of Science (MSc) Programme in Forest Biology, the promotion of lesser used species and the initiation of critical studies such as timber waste management.

Forest operators received training in Reduced Impact Logging with the objective of improving operational practices, leading to greater efficiency.

The Commission coordinated the formation of several Community Forestry Associations. This included allocation of forest lands to the communities to be used for the benefit of residents of the community and the provision of training in management and administration of community organizations.

Training was provided to GFC field staff, and other key Government of Guyana staff in participatory approaches to Community Forestry Management.

The Commission translated most of the key GFC guidelines, manuals, and codes of practices into user-friendly documents that can be easily understood by non-technical persons.

Training was provided to the sector on activities such as the preparation of Forest Management Plans, the implementation of forest inventory methodologies, the identification and grading of timber etc.

There was continued implementation of the Social Development Program and outreach activities.

## **COMMITMENT VII**

### **Steps taken to facilitate the implementation of the WFS Plan of Action.**

#### **Objective 1**

##### **Institutional arrangements at the national and local levels to implement the Plan of Action and monitor the progress of implementation.**

The Ministry of Agriculture monitors its various agencies in relation to activities conducted in accordance with the WFS Plan of Action. This results in a reporting format where the relevant agencies of the Ministry of Agriculture are requested to report to the Ministry of activities and projections, which are in accordance with the commitments of the World Food Summit (WFS) Plan of Action.

It should be noted that other Ministries and organizations do conduct activities and/projections related to commitments of the (WFS) Plan of Action. On request, reports on these activities are submitted from the relevant departments/organizations to Ministry of Agriculture through their relevant Ministries or Heads.

#### **Objective 2**

##### **Food for All campaigns to mobilize stakeholders and their resources at all levels of society in the implementation of the WFS Plan of Action.**

#### **Objective 3**

##### **Mechanisms to ensure food security for every person in the country.**

Government took measures to reduce poverty in several depressed communities. Resources were allocated for skills training, entrepreneurial development, farming and other small business development.

In an effort to reduce pockets of poverty, government implemented a number of special intervention programmes to reduce poverty in Regions 1, 8, 9 and 10.

Under the Linden Economic Advancement Project (LEAP), enhancing of skills and training for private sector growth was done. Emphasis was placed on training workshops, competency

certification, support to craft producers, assessment of institutional strengthening requirements of local authorities and tendering of economic advancement fund for loans to potential and new private community enterprises.

LEAP and relevant clients successfully participated in trade fairs and investment promotions. In 2003 ten (10) clients were sponsored by this organization to participate in exhibition and fairs hosted by the Guyana Manufacturing Association. Additionally two (2) clients were sponsored for the Caribbean Gift and Craft Show in Grenada and three (3) were sponsored for an exhibition in Antigua.

LEAP in collaboration with the Regional democratic Council (RDC) participated in a study tour to business development agencies and a technology incubator centre in Jamaica. A study tour, which fostered deeper relations with Roraima State and Boa Vista in Brazil was conducted.

Government is also rehabilitating physical infrastructure in Linden. Attention was given to roads, the water treatment plant, health facilities and power supply.

In Region 1, support in extension services were provided to cash crop farmers, especially those engaged in organic production. Job opportunities were provided to Amerindians through the Heart-of-Palm project, which was extended to 12 villages.

Health centers were constructed in three (3) villages.

Primary schools and teacher quarters were constructed in three additional villages.

In Region 8, under the Rupununi development project extension services were provided to farmers who were engaged in agricultural activities. Amerindians received training in sustainable use of forest resources at the Iwokrama International Centre. Access to health care and education was improved through the construction of Health centers, primary schools, kitchen and mess halls, medex quarters and health huts.

Farmers in Region 9 benefited from extension services. Organic cocoa and coffee demonstration farms were established. Feasibility study Access to health care and education was improved through the construction of health centers schools and teacher quarters in 10 villages and 5 health huts.

## SECTION IV: LESSONS LEARNED, BEST PRACTICES AND CONSTRAINTS

Policies and Action Programmes that have contributed to Improvement of Food Security	Method of Implementation	Constraints faced
Development and Expansion of Small Businesses and Cottage Industries	The key objective was to generate jobs in an effort to reduce poverty. A Small Business Bill was tabled in Parliament in 2003. The Bill is designed to streamline company registration and provides an incentive programme for small business.	Budgetary constraints and delays in reaching the completion point of the HIPC contributed to prevention of expansion of the capital base of the Institute of Private Enterprise Development (IPED) Progress was made in improving the administration and organization within the agency. New management and relevant staff training assisted in increasing support capacity.
Expanding the Economic base to benefit the Poor	<p>Government has recognized that adding value to resources will enhance job creation and minimize trade shocks. New investments were encouraged, especially in the areas of garment manufacturing, Information Technology (IT) and Tourism.</p> <p>In 2003 the Tourism Authority Board aggressively campaigned to positively market Guyana.</p> <p>The Ministry of Industry and Tourism refurbished guest houses at 2 locations and 3 pavilion stands.</p> <p>Government rehabilitated and upgraded seven hinterland airstrips.</p>	<p>While investments in garment manufacturing were accomplished, only modest progress was achieved in the area of IT due maybe to adverse political environment.</p> <p>Pressure on law enforcement agencies prevented the achievement of required security in hinterland areas.</p>
Restructuring and Modernizing the Traditional Sector	<p>Several activities aimed at restructuring of the sector were initiated to improve competitiveness and efficiency in the traditional sector.</p> <p>Restructuring initiatives were taken in the core sectors, rice, sugar and bauxite.</p> <p>Modernization of the agriculture sector included land reform, improvement of extension services and rehabilitation of drainage and irrigation facilities.</p>	Restructuring would result in some dislocation. Mechanisms such as safety net options, retraining for new jobs and severance packages must be put in place.