IICA

Caribbean Regional Centre

Agriculture in the Dominican Republic

Preface

Mindful of its technical cooperation responsibilities, IICA identified the critical need for improved information on the agricultural sector of member countries to assist them to more rapidly integrate with the global marketplace. The identification of the challenges and opportunities for the agri-food sector of constituent member countries, along with the development of a compendium of the best available comparative statistics for agriculture, was identified as a starting point.

Carlos E. Aquino G.
Director General, IICA

Obtaining information on the agricultural sector in Caribbean countries is generally difficult. While some information, albeit imprecise, does exist, it is often spread over a range of national, regional and international publications and databases, which, in many instances, are of limited circulation and accessibility. Much remains to be done in terms of maintaining a comprehensive agricultural sector information base.

This working document represents one in a series of 13 working documents prepared for the IICA Caribbean member states, compiled for the specific purpose of preparing the document titled "*Performance and Prospects for Caribbean Agriculture*'. The preparation of this working document constitutes another step towards the goal of improving access to information on the agricultural sector.

This working document was the result of a collaborative effort of Ms. Diana Francis of the IICA Caribbean Regional Centre (CaRC), Dr. Rafael Marté, IICA Representative in the Dominican Republic. The information and analysis are based on statistics and descriptive information extracted from various national sources, as well as from reports generated by regional and international counterpart institutions. It is anticipated that the information will be useful, not only to individuals and institutions working in agricultural development in the Dominican Republic, but also to other parties interested in information on the agricultural sector in general.

The guidance of Dr. Patrick Antoine Head, Socioeconomic Policy, Trade and Investment Programme in the preparation of this working document is acknowledged. This report would not have been possible without the full commitment of the IICA Director General, Carlos E. Aquino G. and the Caribbean Regional Centre (CaRC) Director, H. Arlington D. Chesney.

The information will be updated every two years. Comments aimed at improving subsequent reports are welcomed. All remaining errors and omissions are the responsibility of the primary author.

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Socioeconomic Policy, Trade and Investment Programme

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Country Profile

The **Dominican Republic** (alternatively referred to as the DR) is situated in the northern Caribbean. The DR occupies the eastern two-thirds of the island of Hispanolia and has a total land area of 48,670 sq.km (18,792 sq.mi.). The climate, though predominantly sub-tropical, varies from extreme dryness in the valleys and coastal zones in the South West, to the very humid slopes and lowlands in the North East. Annual temperatures average 25°C (77°F) and annual rainfall averages 37.5 inches. Between 1990-1995, the DR was affected by at least 5 hurricanes and severe tropical storms.

The DR is rich in mineral resources, with the extraction of nickel, gold and silver constituting important economic activities. The country also possess petroleum and natural gas reserves which are yet to be commercially exploited. Agricultural land resources are estimated at 64.5% of total land area with irrigated land area exceeding 250,000 hectares (101,173 acres) in five main catchment areas.

The 1997 population was estimated at 9.6 million, with a rate of growth of 2.2% per annum between 1983-1994. A population density of 154.2 inhabitants per km^2 ranked the DR as one of the more densely populated countries in the Caribbean. Approximately 55% of the population reside in the urban areas. It is likely that this percentage may increase as the incidence of poverty and the highly unequal distribution of wealth in rural areas become more widespread.

Following the low growth rates of the 1976-1990 period, the DR government implemented a "home-grown" New Economic Programme in 1990. This programme was based on stringent stabilisation measures, the unification of foreign exchange market and financial, price and tax reforms. Consequently, the economy recovered, with real GDP growth of 8% in 1992. The slowdown in growth in the 1993-1994 period was due largely to the election-induced expansionary fiscal policies. By 1995, however, macroeconomic stability was renewed, and GDP grew by 4.9%.

The economy of the DR is driven by services, commerce and industrial production. Agriculture, however, remains an important economic activity. Excluding the 1993-1994 period, growth in the agriculture sector was generally favourable, averaging 5% between 1991/1992 & 1995. Growth in hotel, bar and restaurant services reflected the continuing success of the tourist industry, which emerged as the leading foreign exchange earner. Gold, nickel and silver mining, which accounted for approximately 3% of GDP, declined over the 1991-1993 period, due mainly to low nickel prices and the depletion in gold and silver ore. Higher nickel prices in the post-1993 period resulted in significant expansion in mining activity. Manufacturing, mainly sugar-cane and products, alcoholic beverages, tobacco, dairy products and construction materials, grew at a much slower rate, of a mere 1.9% per annum, between 1985-1995.

By mid-1996, GDP had expanded by 5.7%, with the most dynamic growth sectors being communications, mining, tourism, agriculture and commerce. Manufacturing was the only sector recording a decline in activity. Among the priority areas for reform included the deregulation of the economy, mainly state divestment of public assets. The implementation of measures aimed at stimulating investment in manufacturing and agriculture was also expected to maintain the favourable growth momentum into the post-1996 period.

Dominican Republic

Key Economic Indicators US$m	*1991*	*1992*	*1993*	*1994*	*1995*
RD-US Average Exchange	12.7	12.8	12.8	13.1	13.5
GDP 1990 prices	6,008	6,499	6,688	6,997	7,841
Agriculture	899	953	960	943	999
Mining & Quarry	222	183	117	220	241
Manufacturing	1,041	-1,167	1,192	1,226	1,218
Other Industry	666	832	922	980	1,023
Services:	3,180	3,363	3,497	3,628	3,860
Government	491	501	517	536	538
Fiscal Balance	3.5	3.9	0.5	-0.1	1.2
Visible Trade Bal	-1,071	-1,612	-1,607	-1,632	-1,492

Source: Inter-American Development Bank

Agriculture in the D.R. - Sector Profile

Socio-Economic Role

Since the early 1970s, the DR economy was transformed from a traditional farming base towards the production of services and manufactured goods. Within this structural transformation, the performance of the agricultural sector has been poor, due both domestic and external factors. During the 1980s, this performance led to a decline in agriculture's share in GDP. However, the agricultural sector continued to be an important economic sector, particularly in terms of employment and output for domestic consumption. Over the 1991-1995 period, the agriculture sector contributed, on average, 14% to the GDP and generated approximately 11% of total export earnings.

The export crops of sugar, coffee, cocoa have traditionally occupied more than 50% of the agricultural lands. These crops combined, generate over 60% of merchandise exports earnings. The bulk of the remaining agricultural land area is dedicated mainly to food crops, of which rice is the most important. Over the 1991-1995 period, crop production accounted for just over half of the sector's total contribution to gross national output (Table 1). Livestock, comprised mainly of dairy cattle, beef, pork and poultry, is the second largest sector, averaging a 40% share of total agricultural GDP over the 1991-1995 period.

Table 1:

DR - Sectoral Composition of GDP

Shares	1991	1992	1993	1994	1995
Agriculture/GDP	14.9	14.6	14.3	13.5	13.6
Sub-sectoral shares					
Crops	55.2	55.4	53.4	52.6	54.0
Livestock	40.1	40.2	42.2	42.9	41.7
Forestry & Fish	4.7	4.4	4.4	4.5	4.3

Source: Dept. of National Accounts & Economic Research, DR Central Bank

From, the mid-1980's, initiatives aimed at strengthening the agriculture sector's integration with the rest of the economy focused on increasing domestic demand for locally produced fresh and processed food products. As part of this thrust, linkages between primary production and the schools feeding programme (School Breakfast Programme) were encouraged. The total number of meals prepared and distributed meals throughout the school system averaged 400,000 per year. These meals consisted of milk, fresh fruit and juice, meat derivatives and some tubers and roots. The projected expansion of the school feeding programme to at least 1 million meals per day, as well as projected increase in tourist arrivals, were expected to greatly strengthen the linkages with the agricultural sector.

Programmes to strengthening the agri-industrial sector, in particular, included improvements in domestic supply capacity, and access to the US markets under the CBI duty free entry. Law 409 on Agro-Industrial Promotion, Incentive and Protection created fiscal incentives for the promotion of an "agricultural industry" and their export activities. Under this Law, agro-industries were granted income tax and import duty exemptions of between 40-100%, based on the local raw material content of the product and the location of the industry. Between 1983-1985, no less than 49 new agro-industries were established, creating an additional 706 and 1,357 employment opportunities in the industrial and agricultural sector, respectively.

In addition to the increased employment in agro-industry, generally, primary agricultural production has traditionally been a significant employer of labour. While official data are scanty, the agriculture sector is estimated to employ approximately 35% of the labour force. Most of these would have been employed in either commercial production, such as sugar, coffee, tobacco, food crop production (rice) and subsistence farming. Approximately 38% of the Dominican population live in rural areas and the participation rate in the active labour force averaged 14.5% for any given year. Over the last three decades, however, the agricultural sector labour force has declined substantially, from an estimated 61% in 1960, to approximately 23% in the 1990s. The factors contributing to this decline included the increase in rural-urban drift as a result of the deteriorating social and economic conditions, the progressive reduction in the real income of producers as a result of discriminatory policies against the sector, lack of bank credit and high rates of interest, absence of adequate avenues for marketing, low salaries paid to agricultural workers and rapid growth of the service sector (Tourism and Free Zones and construction). The loss of the rural agricultural labour force also resulted from out-migration of an estimated 15% of the population.

The disparity in the level of wages offered to agricultural labour compared to the other sectors of the economy also adversely affected the labour supply situation. In 1990, the real minimum salary in the DR fell by 20% compared to its 1989 level, and represented a 60% decline from the 1980 level. By 1992, however, the real level of salaries improved by 28%. Generally, real wages, including that in agriculture, have tended to move upwards over time. While wages in agriculture were generally maintained above the legal minimum wage, the wage levels have traditionally been lower than that of the other sectors of the economy.

Forestry and fishing combined contributed less than 5% of total agricultural GDP. The low contribution of forestry was largely due to a 1962 Law which prohibited the felling of trees, particularly native species, for conservation reasons. In spite of these prohibitions, unregulated production of firewood and charcoal continued. Deforestation, which began in the early 1960s, has led to the virtual disappearance of virgin forests. Practically all of the DR's timber requirements are imported. With the exception of two specific species, all exports of wood have been prohibited since 1966. However, the DR has not exported wood for many decades.

The low contribution of the fisheries sub-sector resulted from the relatively low levels of fisheries development in the DR. The fisheries industry is based largely on coastal activities, with very little deep sea fishing undertaken. Other elements of the fisheries sub-sector include fresh water fisheries and fish farming. Another reason which may account for the low contribution of the fisheries sub-sector is the existence of export restrictions on fish and shellfish products. These restrictions were justified on the basis that domestic supply capacity was insufficient to meet local demands.

Organisational Characteristics

Outside of the primary producer, the general agri-business sector tends to be involved in distribution and processing activities as well as in agricultural marketing. However, this segment of the sector continues to be very small. A few organisations have been established in the DR with the general aim of agri-business development. Of note is the Junta Agroempresarial Dominicana (JAD), a non-profit organisation which is an umbrella body representing a large number of growers and processors. The JAD's objective is to increase the quality and volume of agro-industrial exports from the DR. More recently, an Agro-Exporting Consortium was established comprising the largest fruit and vegetable producers and processors. This new organisation aimed to facilitate increased trade to markets in America, Europe and Asia. Notwithstanding these private sector initiatives, the bulk of activities in the agricultural sector very reliant in public-sector support and resources.

Although Government involvement in economic activities, including direct production activities, has declined in recent years, its remains heavily involved in the agriculture sector. The Government maintains significant control over the agro-industrial sector through its ownership of wheat and sugar mills and the agricultural sector in the DR continues to be heavily regulated. Government policies for agriculture emphasised *"for institutionally democratic, economically sustainable and socially just development"*, which recognised the need to modernize and reorganize the State and public organizations. Strategies pursed in order to achieve macro-economic balance, included the:

- revitalisation of production systems to increase productivity and output,
- reduction of poverty and unemployment and improvement in income distribution to achieve social integration, protection and regulation of natural resources, and
- improvement of social services.

Within agriculture, the sustainable development policies focused on improving market competitiveness and the promotion of greater social equity and sustainability in the handling of natural resources. Sectoral policies highlighted food security and poverty reduction as top priorities and challenges. The agricultural sector therefore, was viewed as one of the channels through which the problems of food security and poverty were to be effectively addressed and minimised. To this end, strategies identified as contributing to the definitive take-off of the Dominican agricultural sector included, among others:

- the strengthening and modernization of the technology generation and transfer system,
- improving the effectiveness and enhancing favourable credit assistance;
- the transfer of the administration of the irrigation system to producers;
- the incorporation of women in programmes of agricultural reform; and
- the formulation of a policy on tenure of rural property.

The main institutions involved in implementing Government policies and in promoting agricultural development in the DR are:

- Secretariat of State for Agriculture (SEA),
- the Dominican Agricultural Institute (IAD),
- the Agriculture Bank of the Dominican Republic (*Banco Agrícola*).

Other institutions established to implement specific aspects of government policy and to facilitate the development of specific crops and other areas include the:

- Price Stabilization Institute (INESPRE), established in 1969 to stabilise agricultural prices and act as a marketing board;
- National Institute of Hydraulic Resources (INDRHI),
- General Forestry and General Parks Centres.

It must be noted that because of the varying capabilities and levels of development of these institutions, achieving effective inter-sectoral coordination, as well as implementation of sectoral policies, presented some difficulties. Among these institutions, the SEA is the lead governing institution which, by law, established the National Agriculture Council (CNA). In collaboration public and private sector participation and representation, the CNA defines the policies of the sector. Although the function of the SEA is largely normative, by law, the agency is responsible for the execution of 26 general functions that covers a broad spectrum. Some of these overlap with the other public organizations. The SEA also provides services to the general farming community, such as, land preparation, sale of inputs, agrochemicals, seeds and small farming implements, as well as undertakes research and technology transfer services; agricultural health (phyto and zoo) and the compilation and dissemination of information. Moreover, it holds exclusive responsibility for the education and training of national producers.

The annual contributions of Central Government to the agricultural production activities averaged RD$3,000 million. Government also provides subsidised inputs to farmers. In addition to direct government expenditures, the state-owned Agricultural Bank was also a main source of concessional credit to small and medium-size agricultural enterprises. Within recent times, however, the Agricultural Bank's interest rates have shifted closer to market rates. Other avenues of credit for agricultural sector development activities were limited to Commercial and Development banks, as well as the National Programme of Export Financing, the Agro-Industrial Programme, the Programme for the Promotion of Agri-Business, the Programme of Lending to Agro-Industry and for Diversification and the Financing Programme Commercial Agricultural Systems, all of which were established between 1982-1988.

In spite of the expansion in the financial system in the DR over the past years, the benefits to the agricultural sector have been limited. The agricultural sector received only approximately 17% of the total credit portfolio of the formal financial/credit system. In the informal financial system, less than 11% of the total credit portfolio was allocated to the agricultural sector. Consequently, credit available to the agricultural sector has generally been insufficient. In addition to the limitations, the Monetary Assembly of the Central Bank recently adopted and implemented decisions aimed at modifying important aspects of credit policy and reducing the amount and the level of borrowing available for the private sector. The short-to-medium term impact of these measures on the agricultural sector was considered to be inherently negative.

Socio-Economic Performance

The pursuit of an import-substitution industrialisation development strategy from the 1960s stimulated growth in the agricultural sector. The increased protection afforded domestic production against imports, virtually assured the infant industries a relatively large captive market. Given the moderate-to-rapid growth in the economy, the domestic market was sufficient to generate an acceptable level of internal dynamism in the sector in the early. However, since the 1970s, the agricultural sector has lacked dynamism, due in part, to the cumulative effects of inappropriate macroeconomic policies and the adverse international market conditions for the main export crops.

The performance in 1991 was partly facilitated by the economic reforms. The lifting of price controls on dairy and meat products contributed to an increase in production. In addition, improved access to credit and inputs and the increased use of mechanisation and irrigation in crop production, particularly in sugar, tobacco and rice production, facilitated recovery in these industries. In real terms (at 1990 prices) the sector grew rapidly between 1991 and 1992 (Table 2).

Table 2:

DR - Real Growth in Agriculture

real growth %	1991	1992	1993	1994	1995
Agriculture	3.2	6.0	0.7	-1.8	5.9
Sub-sectors					
Crops	na	6.4	2.9	3.2	8.8
Livestock	na	6.2	5.8	0.2	2.9
Forestry & Fish	na	0.4	0.4	0.4	2.8

Source: Dept. of National Accounts & Economic Research, DR Central Bank

The general declining performance of the agriculture sector in the 1993-1994 period was part of a wider economic slowdown included by the expansionary policies during the election period. The mixed activity reported in 1994, particularly in crop production, was also due to adverse weather conditions and the incidence of pests and disease. Following the resumption of prudent macro-economic policies in the post-election period (post-1994), the agriculture sector recovered to its pre-elections levels, growing by 6% in 1995. Growth continued in the 1996 period, by 9.5% over 1995, led by a 13.3% growth in crop production, 5.4% in livestock farming and 1.9% in forestry and fishing. Among the traditional crops, sugar cane production increased by 40%, and tobacco and cocoa exports by 36% and 5%, respectively. This growth was stimulated in part, by higher market prices for these export crops.

Other factors which contributed to the favourable growth in agriculture at the end of the review period included improvements in productivity, reorganization of the production processes and favourable climatic conditions, which contributed to the increase in the production of food and other crops. Among the non traditional crops, an expansion in banana harvests facilitated an increase in exports of 17%, with production in yam and nuts increasing by 41% and 24%, respectively, and fresh oranges and processed fruits 14% and 177% respectively. Growth in non-traditional crop production facilitated an increase in the volume of exports to new markets. The forestry and fisheries sector, however, experienced less favourable growth.

Domestic demand for basic agricultural food products also increased and represented approximately RD$1,900 million. Continued growth in food production was expected to generate domestic demand estimated at RD$2,500 million. Much of this demand was driven by growth in tourist arrivals over the 1993-1995 period. Strong growth in food production was expected in the post-1995 period, driven in part, by the continued increase in tourist arrivals, estimated 1.6 million in 1996.

In spite of an increase in domestic supply capacity, the agro-industrial sector performed less favourably. This depressed performance was due largely, to the elimination of Law 409 in the late 1980s, which reduced the level of domestic support to the agro-industrial sector. Compared to the 137 agri-enterprises established in 1989, in 1995, only 16 new agri-businesses were established. The lack of support and incentives to agro-industrial development resulted in the progressive disappearance of 74 agro-industries between 1989-1995. Most of these industries were involved in fruit and vegetable processing, and the production of flowers and ornamental plants for export. The impact of the decline in agro-industrial activity was measured in terms of the loss in both total investment (in excess of RD$695 million) and employment opportunities (approximately 28 thousand jobs).

In 1995, only 16 agro-industries remained operational. These industries continued to be adversely affected by the elimination of Law 409. Many of the fruit and vegetable processors, the flower and ornamental plants exporters operated at between 30 - 50% of capacity. The general uncertainty regarding the investment climate led to low levels of new investments, and ultimately, a slowdown in growth of the agro-industrial sector. The introduction of new investment law and the dismantling of all the protectionist legal mechanisms at the end of 1995 were expected to improve the investment climate for further developments in the agro-industrial sector.

The lack of dynamism in the agricultural sector and the need to maintain agro-industry viability resulted in a systematic growth in food imports from the 1970s. The main agricultural imports, of wheat, maize, soybean and soybean products, were largely for use in the agro-industrial sector. INESPRE functioned as the main regulatory board, both in terms of direct imports of food and in the granting of import licenses to private and public sector importers. Some sectors, such as coffee, pork and tobacco, were afforded high import protection, largely due to their role in generating employment in the rural areas.

The performance of the agricultural export sub-sector was also weak. Traditional agricultural exports of sugar, coffee, cocoa and tobacco, have diminished in importance, falling from 64% of total merchandise trade in 1980 to 15% in 1993. This decline in the share of traditional food exports was also largely associated with a surge in exports of manufactured goods.

Agricultural Diversification

The Dominican Republic has had mixed experiences with agricultural diversification. Much of the early diversification initiatives were introduced by the private sector. Generally, agricultural diversification was also encouraged as a means of increasing the incomes of the producer, increasing the exports of traditional crops and achieving manageable levels of control over pests and diseases.

The main state-led agricultural diversification initiative was the Sugar Diversification programme. Prior to this programme, the state sugar estate utilized the most substantial proportion of land suitable for agriculture. This programme, which was co-financed by the World Bank, largely involved the redistribution of sugar state lands, as well as the various State sugar refineries, to private national and international businesses for the non-traditional crop development. The production of pineapple, citrus and other crops of economic importance was encouraged. Technical assistance and subsidised credit were also provided to beneficiaries. This public-private sector diversification initiative, not only contributed to the broadening of the agricultural production and export base, but also drastically changed land use patterns in the DR.

In 1995, agricultural development initiatives were supported by the Inter-American Development Bank (IBD), which approved two loans, one for the completion of hydro-agricultural infrastructure in the San Juan Valley, and the other to assist in the reform project for the national irrigation system. In addition, in 1996, the Multilateral Investment Fund approved a of US$1.9 million programme to improve the agricultural competitiveness of small-scale producers. Approximately 5,000 beneficiaries were to receive technical assistance in areas such as financing, marketing, lab analysis, production, land management and pest control, with the overall objective of improving efficiency and incomes.[1]

[1] 1997 Caribbean Basin Profile, Caribbean Publishing Co. Ltd., and the Caribbean and Latin American Action

The passing of new legislation in 1996, aimed at facilitating foreign investment for agricultural development, also has a positive impact on the various agricultural diversification initiatives. Reforms in the DR's trade regime and the transformation into a market-oriented economy from 1986, also improved the environment for agricultural production and exports. Such reforms included the elimination of the State's monopoly in the marketing of rice and the dismantling of price controls mechanisms. Generally the impact of these reforms were more apparent in the marketing of food products such as, beans, edible oils and milk products. The lifting of the US-imposed prohibition on Chinese vegetables and other farm produce from the Dominican Republic also facilitated the non-traditional crop production and exports. At its peak, trade in Chinese vegetables and other farm produce between the US and the DR was estimated at R$D 100 million.

The US markets were considered to be of great significance given the estimated 2 million Dominicans residing in these areas. Extra-regional market promotions focused on New York and Miami as well as the European Union,. Apart from the US and the EU, Haiti and some English-speaking Caribbean countries were important destinations for the DR's agricultural exports. Efforts to strengthen trade relations with neighbouring Haiti were supported under the Lomé IV financed integrated market development programmes. This included the creation of technical missions in the respective Ministries of Foreign Relations as a means of defining and implementing joint programmes to increase trade flows between the two countries. Inspite of the similarities in their agricultural sectors, the Haitian market for food products is of great importance to the DR. This augurs well for the expansion of the local food production and consequently, exports to the neighboring country.

Within the wider Caribbean region, greater emphasis was placed on developing strong links with Puerto Rico and Cuba and the main English-speaking Caribbean countries. These efforts were undertaken within the CARIFORUM integration movement, which offers numerous benefits to its members, particularly in the area of reciprocal agricultural trade. Market integration efforts pursued with the Republic of Cuba, were less intensive, However, these focused on regularising trade flows between the two countries. Similar efforts at market integration targeted Latin American countries, particularly Venezuela and Argentina, and countries in Central America, including Panama.

Commodity and Sub-Sector Performance

Primary commercial crops include sugarcane, coffee, cocoa and tobacco, while the main food crops include rice, beans, potatoes, corn and banana. The DR is among the world's leading producers of sugar and coconut, and ranks among the top ten cocoa exporters. Since 1990, accession to the Lomé Convention afforded the DR the benefit of ACP preferences, which included sugar and bananas. However, until recently, this has had limited impact on trade with the EU. The following section provides an indication of the performance of the main export and food crops, as well as the performance of livestock industries.

Export Crops[2]

- *Sugar Cane*

Sugar has traditionally been the leading agricultural export commodity for the DR. The scale of sugar production and exports in the DR is determined by the level of the annual US Sugar Import Quota. The bulk of sugarcane production is concentrated on three large centres, one of which belongs to the State (administered by the State Sugar Council (CEA)) and the other two, to the private sector. Of note is that the State sugar estate is the largest of the three. Over half of the DR's US sugar quota was held by the CEA, with the balance divided between the two private sugar producers. However, the CEA is relatively less diversified and remains very reliant upon annual government subsidies.

Sugar production and exports have exhibited a declining trend since the 1980s. This trend was due, in part, to declining US sugar quotas, as well as declining productivity in the industry.

[2] Augmented with information contained in the WTO Trade Policy Review Report on the DR (1996).

The CEA, in particular, has lacked dynamism, and continued to experience difficulties in adjusting to external market conditions, mainly falling prices and lower US import quotas. The DR's US sugar quota was reduced from 447,000mt in the 1982/83 period to 186,000mt in 1995/96. The DR has been severely affected by the reduction of the US Import quota, which was particularly advantageous since in-quota exports to the US earned twice the market price.

The CEA's share of total sugar production moved from 52% in 1990 to 43% in 1994. The decline in state-owned sugar production contributed to an overall decline in total production, from 6.84 million tons of harvested cane in 1991 to 5.19 million tons in 1995 (Table 3). The level of sugar production in 1992 represented half of the production level in 1984. Sugar production in the 1994/1995 averaged 560,000 tons, representing 224,448 tons from the state-owned estate, the lowest figure in the company's history.

Table 3

Sugar cane Production & Sugar Exports

	1991	1992	1993	1994	1995
Production '000mt	6,844	6,856	7,368	6,257	5,199
Sugar exports,					
US$M	170.5	156.0	143.2	141.0	125.1
'000mt	534.4	547.1	566.5	522.2	418.6

Source: DR National Sugar Institute

In spite of the industry's declining trend, in 1995, sugar was the highest producer in the sector, generating US$125million in earnings. The DR's sugar is exported almost exclusively to the US market. As indicated in Table 3, sugar export earnings declined from US$170 million in 1991, to a low of US$125 million in 1995. Lower export price levels led to a continued decline in the sugar export earnings between 1991-1993 occurred inspite of higher export volumes. In 1994, lower production levels resulted in the import of refined sugar in order to satisfy domestic demand.

The Government has declared its intentions to maintain the operations of the State-owned sugar mills which supply sugar (both raw and refined) to the domestic market. Support to these mills include subsidisation of debt payments, infrastructural improvements and joint ventures with private companies for improved management.

❑ *Coffee and Cocoa*

Coffee is the second most important agricultural export commodity and cocoa production is also an important activity in the agricultural sector. During the 1980s, both coffee and cocoa production declined, due in part, to declining productivity of the plantations. Most plantations are comprised of old trees, and very limited replanting and the introduction of improved varieties have taken place. Consequently, average yields were comparatively low, with coffee yields of 0.36mt/ha, ranked as among the lowest in Latin America. The declining trend in world prices for beverage commodities, also contributed to the poor state of the coffee and cocoa industries in the DR.

Coffee production grew by a mere 1.3 %, from 44,906mt in 1991 to 48,895mt in 1996 (Table 4). This growth was facilitated by favorable increases in the international price for coffee, as well as improvements in the quality of the local bean. Domestic and foreign demand for the coffee product has increased within recent years. If sustained, this growth will strengthen the production of local coffee in the DR.

Table 4

Coffee and Cocoa Production & Exports

	1991	1992	1993	1994	1995
Production '000mt					
Coffee beans	44.9	42.9	46.2	32.7	42.4
Cocoa beans	42.3	50.1	53.3	62.4	59.4
Green Coffee Exports					
US$M	43.3	na	na	na	47.1
'000mt	28.7	22.8	19.9	20.1	27.1
Raw Cocoa Exports					
US$M	29.9	33.2	33.6	51.3	59.2
'000mt	39.0	46.3	45.2	50.7	51.6

Source: DR Secretariat of State for Agriculture

Cocoa production also experienced some growth over the 1991-1996 period, surpassing 42,303mt in 1991 to a level of 61,936mt in 1996 (Table 4). Improvements in the quality of cocoa for export also contributed to the favourable performance in the cocoa industry.

Over the 1991-1995 period, in an effort to reverse the decline in both coffee and cocoa production, the Government implemented a series of producer support measures. In October 1992, coffee producers benefited from an export subsidy programme which subsidised prices in periods of low world prices. In addition, that same year, the export taxes on raw and processed coffee were eliminated. Programmes were also developed to improve the productivity of coffee production. Cocoa producers also benefited from these prgrammes. However, these incentives achieved limited success in terms of increasing coffee and cocoa production and export in the DR.

❑ *Tobacco*

Black tobacco has traditionally been one of the DR's leading agricultural exports. Tobacco production is also important in terms of employment generation among the poorest segments of the population. Given its critical socio-economic role, Government has traditionally subsidised the tobacco sub-sector. Through the National Tobacco Institute, seeds, chemicals and technical assistance have been provided to tobacco farmers at subsidised or no cost. This type of support, however, ensured that high product quality is maintained.

Tobacco leaf production declined from 18,465mt in 1991 to 11,761mt in 1993, before recovering in the 1994/1995 period (Table 5). This recovery continued into 1996, with production of tobacco leaves totaling 29,074mt, representing a 50% increase over 1995 levels. Tobacco exports also experienced mixed performance, with the export earnings reaching a low of US$8.5million in 1992. This was largely due to a 14% decline in production that year. The increase in exports of tobacco from 1993 may have been associated with the manufacturing of tobacco products in the free zones for export to the US. In fact, since 1993, the US has become an important market for the DR's tobacco and cigar exports. The increase in exports to the EU market was also associated with the accession of the DR into the Lomé Convention in 1989.

Table 5

Tobacco Production & Exports

Tobacco Leaf		1991	1992	1993	1994	1995
Production '000mt		18.46	15.96	11.76	17.42	19.40
Exports	US$M	11.1	8.5	12.8	11.5	15.5
	'000mt	9.41	7.21	10.70	7.33	8.81

Source: DR Secretariat of State for Agriculture

Food Crops[3]

❑ *Rice and Corn*

Rice is the main staple food in the DR and since the 1960s, successive Governments have pursued a policy of self-sufficiency in rice. The achievement of this policy was facilitated by expansion of irrigated rice producing areas as well as the introduction of improved rice varieties. Producer incentives, in the form of credit at preferential rates, subsidised machinery, water, fertiliser and technical assistance, also encouraged expansion in rice production. Consequently, since the early 1980s, the DR has become relatively self sufficient in rice, thus reducing its dependence on rice imports. Domestic rice production is not cost competitive with imports.

During the first half of the 1990s, rice production continued to be one of the areas in which Government intervention remained high. This was both in terms of domestic support to producers and price regulation. Domestic rice prices were maintained at levels higher than international market prices, imports were restricted and subsidies provided to low-income consumers. Rice producers also received the bulk of subsidised agricultural credit.

Rice production peaked in 1992, with total harvested area of 367,000 metric tons. Annual growth in output averaged 0.34%, with output moving from 466,172 metric tons in 1991 to 474,200 in 1996 (Table 6). By the end of 1992 and in 1993, rice production had exceeded domestic demand. However, there was virtually no opportunity for exporting the surplus since the prices at which rice was produced in the DR were much higher than international prices.

Table 6

Rice, Potato, Cassava Production

Production '000mt	1991	1992	1993	1994	1995
Unhulled Rice	466.1	564.7	445.9	375.8	486.7
Potato	29.6	34.6	20.7	23.3	33.4
Cassava	133.8	142.6	93.9	98.7	136.8

Source: DR Secretariat of State for Agriculture

[3] Information for rice and bananas augmented from the WTO Trade Policy Review report on the Dominican Republic; option cited in Footnote 2.

Other cereals, mainly sorghum and corn (maize), are used largely as inputs in feeds for livestock and poultry industry. Compared to other producing regions of the world, the DR is a very small producer of corn. This is because corn is produced mainly by small subsistence farmers, using low levels of technology. In addition, domestic demand for corn for human consumption is negligible, compared to the demand for corn as a main component of animal feed (poultry and livestock). Local supply capacity satisfies a mere 10% of the corn requirements for animal feed, and consequently, the bulk of corn requirements is met from imports. Generally, annual corn import volumes average 470,000mt.

Corn production declined considerably, falling from an estimated 47,188mt in 1986 to 28,227mt in 1994. The main reason for its decline was attributed to a decline in cultivated area. Whereas in 1984, corn accounted for 57,867ha., by 1993, this area declined to 29,725ha. Local production grew from 43,228mt in 1991 to 46,766mt in 1996. Price supports for sorghum and corn were maintained over the period of review. Other food crops include potato and cassava. Table 6 indicates the annual levels of potato and cassava production in the DR over the 1991-1995 period.

❑ *Bananas and Plantains*

Between these two crops, plantain has become more important as a food crop, while banana is grown more for the export market. Although plantain exports were revived within recent times, exports continue to be relatively low. Between 1991-1996, plantain production increased by about 2.0%, from 1,43 million units in 1991 to 1.58 million in 1996. Approximately 40,000 ha are harvested annually.

With the accession of the DR to the Lomé Convention in 1989, the DR benefited from ACP preferences under Lomé, Consequently, the production and export of bananas gained impetus. In 1992, the Government created a special commission to implement banana policy, supervise production and marketing and issue certificates of origin. Exports to the EU increased from 4,000mt, valued at US$876,000 in 1990, to 92,000mt in 1994, with an export value of US$16.6million. The DR's EU import quota of was 55,000mt in 1995. In 1996, the level of banana production was almost double that produced in 1991.

❑ *Beans*

Beans are in great demand by the local population. Bean production experienced positive growth over the 1991-1995 period, moving from 32,586mt in 1991 to 37,378mt in 1995 (Table 7). Production declined slightly in 1996 to 37,191mt. The increase in domestic supply capacity of beans has led to a reduced dependence on imports of the legume.

Table 7

Beans Production

Production '000mt	1991	1992	1993	1994	1995
Beans	32.58	37.03	38.55	37.24	37.37

Source: DR Secretariat of State for Agriculture

However, the expansion in bean production in the DR was largely stimulated by the provision of protection measures against competition from imports. Without such protection, growth would have been much slower since domestic bean production is not competitive with the imported product.

❑ *Industrial Tomato*

Large scale tomato production occurred mainly for input in the tomato processing industries. Within recent times, tomato production for processing was severely affected by the incidence of a devastating pest know as White Fly (*Bemisia-tabaci*). However, phytosanitary programmes implemented by producers, agro-industries and the Government, resulted in the recovery of much of the tomato cultivated area. During the 1991-1996 period, tomato production increased at an annual accumulative rate of 26% from 64,938mt in 1991 to 93,507mt in 1995 (Table 8). Control over the White Fly contributed to significant increases in tomato production in 1996, to an estimated 206,363mt.

Table 8

Tomato Production for Processing

Production '000mt	1991	1992	1993	1994	1995
Tomato	64.93	93.98	78.42	82.08	93.51

Source: DR Secretariat of State for Agriculture

❑ *Livestock*

Pork and beef production experienced positive growth over the 1991-1996 period, growing by an annual rate of 9.7% and 5.6%, respectively, over the 1991-1995 period (Table 9). Poultry grew more rapidly between 1991 and 1992. After peaking at 188,741mt in 1993, poultry production averaged 141,000mt in the 1994-1995 period. Both table egg and milk production grew moderately and remained relatively stable over the period.

Table 9

Livestock Production

'000mt	1991	1992	1993	1994	1995
Pork	13.29	15.67	15.87	17.96	18.96
Poultry	158.12	184.47	188.74	141.52	142.88
Beef	55.83	58.24	59.96	66.86	69.54
'000 Litres					
Milk	369.0	366.0	372.0	359.5	373.8
Eggs	773.0	771.0	787.0	820.0	830.0

Source: DR Secretariat of State for Agriculture

Constraints to Agriculture

Agriculture remains a key sector in the economy of the DR. Over the 1991-1995 period, the sector performed fairly favourably. Over the last decade, agricultural production was affected constraints which reduced the sector's productivity. In large part, these constraints tend to be domestic in nature and may generally be summarised as follows:

Low Productivity Levels

- physical (geological) limitations which adversely impact on yields and productivity;
- pests and diseases of economic significance, exacerbated by the inadequate quarantine capabilities;
- small domestic and regional markets;
- low levels of human capital and inadequate application of improved technologies;
- lack of a commercial orientation in farming and propensity to produce for "protected" markets, resulting in slow progress in agricultural diversification programmes;
- inadequate storage, marketing and transportation facilities and services to facilitate and stimulate trade in agricultural commodities.

Institutional & Structural Deficiencies

- weak macro-economic framework, which constrains the development of enabling economic environment for investment in agriculture and the creation of inter-sectoral linkages with tourism and agro-industry;
- weak institutional capacity of Ministries of Agriculture, resulting in inadequate policy analysis formulation and poor planning, evaluation and implementation of appropriate agriculture sector and rural development initiatives;
- the dependence on public-sector resources, which are inadequate to meet the demands of improved facilities, post-harvest and marketing infrastructure, training, research and other essential services;
- undeveloped domestic capital market and low propensity to invest in agriculture due to the sector's comparatively high risks and absence of risk-mitigating facilities such as insurance, market guarantees and compensation;
- lack of labour for agriculture and poor skills of the agricultural labour force;
- undeveloped information systems which constrain the effectiveness of sector planning, produce marketing and trade.

While the above constraints are certainly not exhaustive, they capture the general constraints which are fairly common across all Caribbean countries. However, a few of these require further discussion.

Among the factors contributing to the lack of competitiveness of the majority of the crops produced in the DR, is the high and constantly increasing costs of production which erodes farm income and profitability. The heavy reliance on imported inputs and labor has contributed to the inability to contain costs of production. A study of 16 agricultural crops in the DR revealed that the average costs of production during the last six years increased at rates which varied between 2.0% and 106.0%. Among the crops examined included, rice, corn, bean, garlic, onion, banana, plantain, tobacco and various vegetables. It was also noted that the increases occurred in spite of the reduction in the tariffs applied to inputs and machinery used in agriculture. These tariffs were generally at around 3%. The products which showed the greatest increases in production costs over the 1991-1996 period, were plantain, by 106%, beans by 99%, and potato, by 42.9%.

Among the constraints attributed to the technology, included an inadequate and inefficient system of technology generation, transfer and extension. This constraint derived, in part, from the limited and insufficient state budget and human resources. The limited successes of the sector, in terms of the growth rate and modernization, is due largely to the coexistence of a dual system comprised of a traditional agricultural system and a more dynamic, export-oriented agricultural production and processing system.

In the DR, the prevalence of an anti-agricultural and anti-rural bias is reflected in the inappropriate macro-economic and monetary policies. In addition, tariff, fiscal and price measures, as well as the policies centred around public expenditure have also constrained the emergence of a competitive agricultural sector. The lack of a clear and coherent policy to integrate producers and private organizations in the system, mainly in the processes of decision making, is also a serious deficiency in the policy environment. While the policies of import substitution have generally favored industrial production, they have also acted as a disincentive to production in the primary agricultural sector.

Insufficient credit facilities, coupled with the high financing costs, are also serious impediments to agricultural development in the DR. Other critical constraints include the lack of export market penetration efforts, the voluminous and inopportune importation of food commodities which are often subsidized, inadequate supply of electricity, the chaotic system of land tenure, and the prevalence of a tariff system which penalizes the agricultural sector and which gives incentives to other sectors of the economy.

Agriculture in the DR ~ Prospects

International Environment

Towards the year 2000, world agriculture will be increasingly influenced by an acceleration in the pace of globalisation and trade liberalisation. Trade is identified as the driver of this emerging environment. The dynamics of the globalisation and liberalisation have also been extended to agricultural trade, which, prior to 1994, was very heavily regulated by regional, hemispheric and international agreements. The most significant of these was the 1986-1994 Uruguay Round of negotiations on trade liberalisation.

These negotiations included for the first time, reducing the distortions in trade in agricultural products. These distortions resulted from government intervention in the agricultural sector. The establishment of the World Trade Organisation in January 1995 thus marked the end of an era of protection for the agricultural sector. The main WTO Agreements which impact the agricultural sector are summarized below. While developed countries were given a maximum period of six years for implementing commitments (i.e., 1995-2000), developing countries were allowed a period of ten years (i.e., from 1995 - 2004).[4]

- Agreement on Agriculture: 3 Commitments

  Market Access commitments require the conversion of all non-tariff border measures (import quotas), to tariffs which provide the same protection (process called tariffication). Tariffication is to be followed by a reduction in all tariffs by 24%. Provision is also made for the institution of a minimum-access tariff quota, initially set at 3% in 1995, to increase to 5% by 2004.

  Countries are, however allowed to include special arrangements in their minimum access commitment and to allocate their minimum access to exporters with special arrangements, such as with the EU and sugar. Special safeguard provisions were also included for tariffied products that will allow additional

4 "The Trading System After the Uruguay Round" John Whalley and Colleen Hamilton, Institute for International Economics, Washington DC, July 1996.

duties to be applied in cases where shipments priced in domestic currencies fall below a certain trigger or in the case of import surges. This introduces, at least, the possibility of new protective measures being used in agriculture which may represent a weakness of the agreement.

Domestic Support commitments require reductions in the level of expenditures on domestic agricultural support measures which distort genuine trade (called amber box aggregate measures of support (AMS)), by 13.3% between 1995-2004. AMS include acreage payments, certain subsidised loan programmes, input subsidies and price supports.

Export Subsidies commitments require reductions in the value of direct export subsidies by 21% and in the volume of subsidised exports by 14% between 1995-2004. Developing countries are exempted from commitments on marketing of agricultural exports or internal transport subsidies.

- Sanitary & Phytosanitary (SPS) Agreement
  This agreement covers food safety and animal, plant and health regulations. The agreement stipulates that the use of these measures should only be in instances where human, animal or plant life or health is threatened. Although negotiations towards the development of a globally accepted code of standards are still ongoing, Caribbean countries are encouraged to base their national SPS measures on international standards, guidelines and recommendations; higher standards may only be imposed if there is scientific justification.

- Ministerial Decisions
  The Decisions on Measures Concerning the possible Negative Effects of the Reform Programme on LDCs and NFIDC seek to ensure that these countries are not disadvantaged in terms of higher food prices. The provision of food aid and basic food stuffs provided in full grant form constitutes the key elements of these Decisions.

The basic objective of agricultural trade liberalisation is to reduce the level of protection which imposed constraints to other potential suppliers of the specific agricultural commodities. The agreements may negatively affect some participants in agricultural trade, particularly the least efficient producers. However, for most, tariff reductions and the elimination of quantitative restrictions may impact positively on their production costs, particularly as the cost of imported inputs are reduced. While lower costs of imported inputs is one element in enhancing commodity competitiveness, other factors, such as increased productivity, improved fruit quality and improved commodity marketing are equally important in producing a cost and quality competitive commodity.

International - Domestic Economy Link

The Government of The Dominican Republic is a signatory of the WTO and by virtue of its membership, committed to implementing these reforms within the 10-year period. The WTO also specifies that all commitments are to be included in the country's schedules of agricultural concessions and commitments.

In the DR, the pace of economic and trade reforms, including reform in the agricultural sector, has been fairly progressive since 1990. Trade reforms implemented from 1995, have generally sought to be WTO-consistent. However, several bureaucratic deficiencies still exist in the agricultural sector, such as, permits and import licenses requirements. The existence of these measures adversely impact on food distribution and marketing efficiencies. In addition, some "sensitive" products, notably rice, bean, chicken, full cream milk, garlic, onion, corn and sugar, continue to benefit from high levels of protection. The coffee, cocoa and rice sectors also benefit from direct support to the income of producers.

The DR is in the process of dismantling the main national mechanisms which are not WTO-compatible. The 1990s witnessed a gradual change in the cumulative intervention which thwarted agricultural development and inappropriate policies which penalised agricultural producers. As a consequence, reforms are to be undertaken in the following areas:

Prohibition: modifications to, or the elimination of the following legislation:

- Article 1, of Law 4990 of 1958, which prohibits the importation of plants, fruits, seeds bulbs, rhyzomes, flowers, and any other vegetable matter, alive or dead.
- Article 1, of Law 260 of 1982, which prohibits the importation of solid or powdered milk for industrial processing.
- Decree No.4773, which prohibits the importation of rice.
- Decree 313 of 1970, which prohibits the importation of garlic and onion when this affects national production.

Import license: Authority granted by the Decree 5304, stipulates that the importation of fresh or frozen food products from plants or animals, require special permission from the State Secretariat for Agriculture. In addition, other more specific legal instruments require the procurement of a permit, prior to the importation of a wide range of agricultural products.

Law No. 526, which established the Price Stabilization Institute, is currently under of modification. The Law empowers this organization to grant beforehand, licenses or non-objection certificates for the marketing of agricultural products.

The DR is also engaged in preparations for the Mini-WTO Agriculture negotiations, which are due to begin in 1999. In addition, in spite of the relatively low level of trade with the EU, the on-going process within the EU, to further liberalise its internal agricultural policy (CAP) as well as EU-ACP discussions toward the development of a post-Lomé IV arrangement, may impact the relatively recent banana trade established between the DR and the EU.

Although the DR is a relatively minor player in international trade generally, and agricultural trade in particular, global developments have a profound impact on the country's agricultural sector and economy.

Commodity Market Trends[5]

Exports play an important role in the DR's agriculture sector. Of priority concern, therefore, are the dominant international trends for the major export commodities and the implications for the prospects for primary exports. Only the crops for which information was available is presented.

❑ *Sugar*

Sugar continues to be one of the most highly protected agricultural products. In keeping with the commitments of the WTO Agreements, quotas on sugar exports are to be converted to tariffs, which are to be gradually reduced.

The long-term projections suggest eventual convergence of international prices for sugar towards the actual costs of production. This will occur partly in response to increased local and international market interaction and partly in response to the reduction in government intervention in commodity markets. Much of this market dynamism is occurring in the US with similar tendencies emerging in Europe. Sugar prices on the UK market are also expected to adjust downwards as a result of the EU's commitments to tariff reductions, of 3.3% per annum to 2001.

The dynamics of the US and EU sugar markets, the expected increase in world sugar production and the move towards freer trade and the consequent decline in sugar prices present significant challenges to the DR's sugar industry. In spite of the minor projected increase in US domestic production capabilities, conditions on the US market appear favourable. However, given the lacklustre performance of the sugar industry in the DR, its prospects depend largely on the ability to substantially increase the productivity levels of the major producers, to satisfy both export quotas and domestic requirements.

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[5] International market information for the main export crops extracted from: USDA's "Situation and Outlook Forum'96 Proceedings", February, 1996 and 1997; and CARICOM's "Marketing Developments Relating to the Major Commodities" March 1997; Caribbean Basin Regional Profile 1998 Report.

Coffee and Cocoa

Over the last 10 years, coffee and cocoa world market prices have trended downwards. This resulted, in part, from an expansion in cultivation induced by the 1970s commodity price boom; higher production of perennial crops by lower cost Asian producers, as well as the collapse of the International Coffee Agreement in 1989. In the absence of unanticipated shortfalls in world production, the overall outlook for beverage crop exports, in terms of price increases, is considered to be relatively flat.

Indications are that the growth markets for coffee consumption over the next decade will be Eastern Europe, China, Japan, as the coffee producing regions of North America and Western Europe markets reach maturity. The trend is also towards consumption of milder Arabica coffees in major importing countries. In addition, the specialty and decaffeinated market segments have exhibited rapid growth fueled by the renewed popularity of specialty stores and from high income elasticity of demand for "gourmet" coffees.

The cocoa market is differentiated by the "fine (aroma) flavour", basic flavour (raw cocoa used as a base material for chocolate) and a blend between the two. Fine flavour cocoa (as produced in the Caribbean), is used mainly in the making of dark chocolate and for solid chocolate slabs, and not for chocolate coating.[6] In 1995/96, fine flavour cocoa accounted for less than 5% of world cocoa consumption, the rest, being basic cocoa produced by several countries.

The significant decline in the DR's supply capabilities of coffee and cocoa, the relatively high cost of production and the projected leveling off international prices for beverage crops, have imposed serious limitations in its ability to recapture market share. There may be some scope, however, for entering into the small, but rapidly growing high-value coffee and cocoa specialty market segments.

Tobacco

China dominates the world in terms of tobacco production, producing over 40% of the world's leaf tobacco. This share represents nearly 5 times the level of the world's second largest producer, the US. However, the overall quality of China's leaf tobacco is still relatively low. In addition, while most of China's leaf tobacco is consumed domestically, China is becoming interested in the export potential of leaf tobacco, including exports to the US.

In spite of the importance of quality in the tobacco market, price has become a more dominant factor in the world tobacco market. Many countries are now welling leaf tobacco at nearly half the prices of US (a high quality producer) tobacco. Consequently, the world leaf tobacco market has become very competitive.

The US is one of the world's leading tobacco exporting and importing countries. Within recent times, US leaf imports for consumption have increased significantly. Overall, the leading suppliers of leaf imports in 1994 were Brazil, Turkey, Zimbabwe, Malawi, Argentina, Thailand and Greece. It is observed that another real and current threat to the world tobacco industry is the increase in regulatory pressures.

The DR is a relatively minor supplier of tobacco in the US. This notwithstanding, given the intense competition, the prospects for the continued survival of DR tobacco exports to the US will depend critically on the industry's ability to maintain its quality competitiveness as well as to become cost competitive.

Food Production

As is the situation in most other Caribbean countries, the DR has the potential to produce a wide range of food products, including meat products. In a few instances, the development of sensitive food crops, rice and beans, in particular, was actively promoted under various import substitution programmes.

However, the domestic production of these food products are not competitive with imports and the continued import protection as well as production incentives provided to these crops, represent an inefficient allocation of resources.

[6] Augmented from information presented at an IICA Caribbean/Latin America Workshop on the Marketing of Fine Flavour Cocoa, (09/97), Trinidad &Tobago.

Guidelines for Policy Formulation

In spite of its declining share in GDP, the agricultural sector remains important to rural and national development. However the sector's ability to contribute to economic growth has been eroded by low productivity in traditional industries and the limited success at agricultural diversification. Against this background, all actors in the sector are challenged to develop WTO-consistent mechanisms to increase productivity and competitiveness in the sector.

Competitiveness in agriculture can be viewed as a dynamic economic concept inherent to globalisation, that takes into account the need to adjust to the macroeconomic environment, adapt to the astonishing pace of technological innovation and be flexible in terms of the requirements of sustainable and equitable development.

AGRIFORUM - Towards an Agenda for Agriculture in the Americas, DIREXCOM, IICA Headquarters, Costa Rica, August, 1997.

The challenge continues to be one of sustaining efficient traditional crop production while expanding into a more flexible, diverse agriculture. Policy makers are thus faced with the twin tasks of increasing productivity and competitiveness within a free trade environment while simultaneously keeping the adjustment costs relatively small so as to minimise the negative impact on resource constrained groups. This can only be achieved through an appropriate mix of enabling policies, technological research and development, investment and continuous human resource development.

Policy decision making for Caribbean Agriculture should place priority on the following considerations in the design of an agricultural development strategy.

- An Enabling Policy Environment which combines new public policy for rural areas with current macro-economic policy to enhance competitiveness. This should include policies which ensure rational spending of public resources on direct works that support the market rather than replace it. This strongly suggests an increased role of the private sector in all dimensions of the agricultural sector.

- Dynamic and Flexible Support Institutions through the transformation of the institutional framework. Institutional evolution should be characterised by reform and development of specialist institutions and an integrated and dynamic public and private sector partnership with the capacity to capitalise on strategic and tactical alliances for developing the sector.

  This implies the extension of institutional capabilities which enables the development of mechanisms to secure access for local output to mainstream food distribution centres, which consolidates linkages with the hospitality sector, which provides quality-enhancing marketing services (eg. grading and packaging) and adequate extension and research services for product development.

- Technology Generation based on innovations for improved efficiency. Given the human and financial resource constraints, it may be more feasible for St. Vincent to actively support the establishment and effective operation of a regional or sub-regional research centre for technology generation and transfer. A strong research and technological base is a pre-requisite for achieving and maintaining competitiveness and sustainability of the agricultural sector.

- Human Resource Development and the continuous development of the knowledge base will become a fundamental factor of production Attention must be placed on the provision of high quality and timely education, which takes into account production and social requirements of the sector. Training and investment in human resources, particularly in the rural areas are inextricably linked to the sector modernisation process, competitiveness and equity.

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