INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

INTER-AMERICAN DEVELOPMENT BANK

Program for the Analysis of Agricultural Policies vis-a-vis Women Food Producers in the Andean Region, the Southern Cone and the Caribbean

WOMEN FOOD PRODUCERS IN GUYANA

ASSESSMENT AND POLICIES

Stella Odie-Ali

TECHNICAL COOPERATION AGREEMENT IICA/IDB/ATN-SF-4064-RE

AREA OF CONCENTRATION IV
SUSTAINABLE RURAL DEVELOPMENT

TECHNICAL COOPERATION AGREEMENT IICA/BID/ATN-SF-4064-RE

PROGRAM FOR THE ANALYSIS OF AGRICULTURAL POLICIES VIS-A-VIS WOMEN FOOD PRODUCERS IN THE ANDEAN REGION, THE SOUTHERN CONE AND THE CARIBBEAN

WOMEN FOOD PRODUCERS IN GUYANA

ASSESSMENT AND POLICIES

Stella Odie-Ali

AREA OF CONCENTRATION IV

SUSTAINABLE RURAL DEVELOPMENT

The author of this document was a consultant hired by the Program for the Analysis of Agricultural Policies vis-a-vis Women Food Producers in the Andean Region, the Southern Cone and the Caribbean (IICA/IDB). Therefore, the ideas, interpretations and conclusions expressed must be attributed to her, and do not necessarily reflect those of IICA, IDB or any of their Member States.

IICA's Editorial Service was responsible for the stylistic revision, typesetting and layout of this publication, and IICA's Print Shop for the printing.

Odie-Ali, Stella
Women food producers in Guyana : assessment and policies / Stella Odie-Alie. — San Jose, C.R. : Inter-American Institute for Cooperation on Agriculture, 1996.
210 p. ; 28 cm.

Technical Cooperation Agreement IICA/IDB/ATN-SF-4064-RE. Program for the Analysis of Agricultural Policies vis-a-vis Women Food Producers in the Andean Region, the Southern Cone and the Caribbean.

1. Mujeres rurales - Guyana. 2. Política agrícola - Guyana. I. IICA. II. BID. III. Título

AGRIS E51
Dewey 305.4

February, 1996
San Jose, Costa Rica

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

ACDI	Agricultural Co-operative Development International
BBP	Black Bush Polder
CARDI	Caribbean Agricultural Research Development Institute
CASWIG	Conference on the Affairs and Status of Women
CARICOM	Caribbean Community
CIDA	Canadian International Development Agency
CXC	Caribbean Examinations Council
ECD	East Coast Demerara
EEC	European Economic Community
ERP	Economic Recovery Program
FAO	Food and Agriculture Organization
FCPMP	Food Crop Production and Marketing Program
GAIBANK	Guyana Cooperative Agricultural and Industrial Development Bank
GFWI	Guyana Federation of Women's Institutes
GAPA	Guyana Agricultural Producers Association
GDP	Gross Domestic Product
NGMC	New Guyana Marketing Corporation
GPC	Guyana Pharmaceutical Corporation
GRB	Guyana Rice Board
GREB	Guyana Rice Export Board
GRFHS	Guyana Rural Farm Household Survey
GRMMA	Guyana Rice Milling and Marketing Authority
GSA	Guyana School of Agriculture
GUYMIDA	Guyana Manufacturing and Industrial Development Agency
GUYSUCO	Guyana Sugar Corporation
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IFAD	International Fund for Agriculture Development
IICA	Inter-American Institute for Cooperation on Agriculture
IMF	International Monetary Fund
IPED	Institute of Private Enterprise Development
MMA	Mahaica-Mahaicony Abary
MOA	Ministry of Agriculture
NARI	National Agricultural Research Institute
NGOs	Non-Governmental Organizations
PAHO	Pan-American Health Organization
PNC	People's National Congress
PPP	People's Progressive Party
RA	Regional Administration
REPAHA	Regional Programme for Animal Health Assistants
RPA	Rice Producers Association
SIMAP	Social Impact Amelioration Program

UNDP	United Nations Development Program
UNCHS	United Nations Center for Human Settlements
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USA	United States of America
WAB	Women's Affair Bureau
WID	Women in Development
WPO	Women's Progressive Organization
WRSM	Women's Revolutionary Socialist Movement

PREFACE

The Program for the Analysis of Agricultural Policies vis-a-vis Women Food Producers in the Andean Region, the Southern Cone and the Caribbean, executed by the Inter-American Institute for Cooperation on Agriculture (IICA) and financed by the Inter-American Development Bank (IDB) under Technical Cooperation Agreement ATN/SF-4064-RE, is the second phase of a program which included 18 countries in Latin American and the Caribbean: Barbados, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela.

The first phase of the Program was implemented in 1992-1993 in six countries in Central America, under the auspices of the Council of Central American Ministers of Agriculture. The second phase was carried out by request of the First Ladies during their Summit Meeting on the Economic Advancement of Rural Women, held in Geneva, Switzerland, in February 1992.

This document is one of three reports per country which present the technical results from the four areas of Program research, as well as the recommendations and preliminary action proposals related to women food producers. The three documents are:

***Assessment and Policies.** Assesses the participation of women in the agricultural sector and their contribution as food producers on small-scale farms, and presents an analysis of the agricultural policy and program environment and its effects on rural women.*

***Technology and Marketing.** Analyses the technology utilized on small farms and by women in food production processes, and the role of women in the processing and marketing of farm food production; agricultural technology and marketing policies and programs and their effects on rural women are also examined.*

***National Summary.** Drawing from the above two reports, this document synthesizes the major findings and research results, and presents the principal policy, program, and project proposals.*

Other activities carried out under this Program included the elaboration of regional comparative documents; the formulation of policy proposals and other actions in conjunction with the ministries of agriculture, the Offices of the First Ladies, and other public and private organizations involved in agricultural and rural development; national and regional seminars to present and discuss Program recommendations; and the publishing and distribution of the final results.

GUYANA COUNTRY OVERVIEW

The Cooperative Republic of Guyana[1] is situated on the northern coast of the continent of South America. This tropical country lies between one and nine degrees north latitude and 57 degrees and 61 degrees west longitude. It is bordered on the north by the Atlantic Ocean, on the south and southwest by Brazil, on the east by Suriname and on the west by Venezuela.

The area of Guyana is 83,000 square miles (215.000 square kilometers). For decentralised administrative purposes the country has been divided since 1979 into the 10 administrative regions: 1) Barima-Waini, 2) Pomeroon-Supernaam, 3) Essequibo Islands-West Demerara, 4) Demerara-Mahaica, 5) Mahaica-Berbice, 6) East Berbice-Corentyne, 7) Cuyuni-Mazaruni, 8) Potaro-Siparuni, 9) Upper Talutu-Upper Essequibo, and 10) Upper Demerara-Berbice.

The 1993 Household Income and Expenditure Survey (HIES) estimates a total **population** of 717,458 (364,492 females and 352,966 males). Approximately 70% of Guyana's population is rural (See Table 1), with an estimated ethnic distribution of 50% East Indians, 36% Negroes/Blacks and 7% Amerindians. With the exception of Region 10 where there are more Negroes/Blacks and very few East Indians, Negroes/Blacks and East Indians are clustered in Regions 2, 3, 4, 5, and 6. Amerindians have historically been spread out in the interior areas of Regions 1, 2, 7, 8, and 9. (See Table 2).

Population **density** for the country as a whole is about 9 persons per square mile, but the density varies by region. For example, Regions 7, 8, and 9 have less than 1 person per square mile, while Regions 3 and 5 have a density of 30 and 63 persons per square mile respectively. At the extreme is Region 4 where the density is as much as 345 persons per 3 square mile. (See Table 3).

In Guyana, there are slightly more females (50.8%) than males (49.2%). Table 4 shows the population by sex as reflected in the last three available census year figures.

Some 87 per cent of the population lives and works on the narrow coastal strip encompassing Regions 1, 2, 3, 4, 5, and 6. With an area of approximately 10,000 square miles this strip is between 10 to 40 miles wide and is 270 miles long. It constitutes Guyana's agricultural zone and exhibits the unique feature of being approximately seven feet below sea level.

Therefore there is a constant need for massive expenditures on drainage and irrigation infrastructural works, including repairs to and reinforcement of 212.5 miles (340 kilometers) of sea walls that keep the ferocious waves of the Atlantic Ocean from invading the coastlands. The remaining 73,000 square miles of Guyana's lands -the country's interior- is home to Guyana's mineral wealth, mountains, savannahs and immense rain forests.

---

[1] Formerly British Guiana, renamed Guyana at its independence in 1966 and later the Cooperative Republic of Guyana in 1970, and herein after referred to as Guyana.

Table 1. Estimated regional population distribution by rural and urban in Guyana in 1993.

	Regions	Area Sq. miles	Population			Percentage		
			Rural	Urban	Total	Rural	Urban	Total
Guyana		83 044	494 536	222 922	717 458	68.93	31.07	100.0
1.	Barima-Waini	7 853	18 590	-	18 590	100.00	-	100.0
2.	Pomerroon-Supenaam	2 392	40 289	2 480	42 769	94.20	5.80	100.0
3.	Essequibo Islands-West Demerara	1 450	91 328	-	91 328	100.0	-	100.0
4.	Demerara-Mahaica	862	146 918	150 244	297 162	49.44	50.56	100.0
5.	Mahaica-Berbice	1 610	49 498	-	49 498	100.0	-	100.0
6.	East Berbice-Corentyne	13 998	103 768	39 071	142 839	72.65	27.35	100.0
7.	Cuyuni-Mazaruni	18 229	15 342	-	15 342	100.0	-	100.0
8.	Potaro-Siparuni	7 742	5 737	-	5 737	100.0	-	100.0
9.	Upper Takatu-Upper Esequibo	22 313	15 087	-	15 087	100.0	-	100.0
10.	Upper Demerara-Berbice	6 595	7 979	31 127	39 106	20.40	79.60	100.0

Source: HIES 1993, Table 3.

Table 2. **Estimated regional distribution of population by ethnic group in Guyana in 1993.**

Regions		Ethnic Groups							
		East indians	Negro/ Black	Amer-Indians	Chinese	Portu-guese	Mixed	Others	Total
Guyana		355 092 (49.49%)	255 617 (35.63%)	48 859 (6.81%)	2 433 (0.34%)	4 651 (0.65%)	50 554 (7.05%)	2.52 (0.04%)	717 458 (100.0%)
1.	Barima-Waini	742	1 599	14 075	243	162	1 769	-	18 590
2.	Pomeroon-Supenaam	23 234	10 399	5 728	-	443	2 965	-	42 769
3.	Essequibo Islands-West Demerara	64 699	19 001	289	532	156	6 651	-	91 328
4.	Demerara-Mahaica	126 004	142 226	1 467	1 355	2 981	13 034	95	297 162
5.	Mahaica-Berbice	29 643	15 417	2 383	52	84	1 919	-	49 498
6.	East Beribe-Corentyne	106 192	28 022	2.380	125	511	5 609	-	142 839
7.	Cuyuni-Mazaruni	2 425	5 383	4 614	24	80	2 731	85	15 342
8.	Potaro-Siparuni	242	538	4 218	-	-	739	-	5 737
9.	Upper Takatu-Upper Essequibo	354	1 226	12 194	48	-	1 265	-	15 087
10.	Upper Demerara-Berbice	1 557	21 806	1 511	54	234	3 872	72	39 106

Source: HIES 1993, Table 4.0.

Table 3. Estimated population density by administrative region in Guyana in 1993.

Region	Population		Area (sq. mls)	Density (persons per sq. ml)
	Number	Percentage of total population		
Guyana	717 458	100.0	83 044	8.6
1	18 590	2.5	7 853	2.4
2	42 769	6.0	2 392	17.9
3	91 328	12.7	1 450	63.0
4	297 162	41.4	862	345.0
5	49 498	6.9	1 610	30.7
6	142 839	19.9	13 998	10.2
7	15 342	2.1	18 229	0.8
8	5 737	0.8	7 742	0.7
9	15 087	2.1	22 313	0.6
10	39 106	5.5	6 595	5.9

Source: HIES 1993, Table 3.

Table 4. **Population by sex in Guyana in 1960, 1970 and 1980.**

Census years	Population				
	Total	Female		Male	
		Number	%	Number	%
1960	560 330	281 202	50.1	279 128	49.9
1970	699 848	351 996	50.2	347 852	49.8
1980	759 619	382 778	50.4	375 841	49.6

Sources: 1960 Census, Vol II, Summary Tables.
1970 Census, Vol 3, Age Tabulations.
1980 Census, Table 1.1.

Apart from the soils of the coastal plain, the agricultural potential of Guyana's soils, with few exceptions, is considered to be low, as is their capability to produce crops economically and on a commercial scale. It is felt that only the soils on the coastal plain presently under intensive drainage and irrigation control are suitable for highly productive agriculture. As it is, only about 84 percent of Guyana's 21.5 million hectares of land is arable. Of this, 1.2 million hectares are pasture land; some 500 hectares are suitable and immediately usable for crop cultivation; and another 16.4 million hectares are forests and woodlands.

In terms of utilization, less than 50% of the agriculturally suitable land has been under cultivation.

I. INTRODUCTION

According to the United Nations Center for Human Settlements (UNCHS) in statistics from 1985, 75 percent of the world's population lives in the Third World. It follows that the remaining 25 percent lives in the highly industrialized and developed countries where food production and distribution systems have been established during the 20th century and meet the needs of the majority of their populations.

The continuous capacity of developed countries to produce food in abundance is the major determinant of their international affluence and power. As we hurtle towards the 21st century, the socioeconomic chasm between the affluence of the minority developed countries and the appalling poverty of the majority developing Third World countries continues to widen.

The 1992 Human Development Report by the United Nations Development Program notes that

> ...the richest 20 percent of the world's people are at least 150 times richer than the poorest 20 percent.

Even where there is economic growth, people's lives are not automatically improved -neither within nations nor internationally. In this regard, the report notes the following striking similarity in the breakdown of the link between economic growth and human development at the national and international levels:

> The poor have limited access to credit, capital, technology and other production inputs in their countries. Not regarded as credit-worthy, they often turn to moneylenders and to the informal sector for their needs. The situation is similar, if not worse, at the international level. The poorest 20 percent of the world's population receives only 0.2 percent of global commercial bank lending, 1.3 percent of global investment, 1 percent of global trade and 1.3 percent of global income...
>
> (Human Development Report, 1992:3)

In the preamble of the Report on the Summit on the Economic Advancement of Rural Women (1992), the First Ladies of State or Government from Africa, the Americas, Asia, Europe and Oceania acknowledge the intensification of poverty over the last decade and correctly list among the contributing factors the ongoing crises in the developing world due to: deteriorating terms of trade, the debt crisis, inefficient allocation of government expenditure, capital flight, the social cost of adjustment, political instability, recession in the developed world, environmental degradation, and demographic pressure.

Given this scenario, economic development experts have been preaching the gospel of agricultural development and *ipso facto* food production as the road to economic salvation.

UNCHS (1985) findings report that 75 percent of the world's population is found in the Third World. Further, they report that 75 percent of the Third World population resides in rural areas.

Population figures reveal that women make up more than 50 percent of the world's rural population. It follows, therefore, that when we refer to rural women, we are in fact referring to a major category of women in the world, who, according to the literature of international organizations such as IFAD (1987), FAO (1987), World Bank (1988), IDB (1991), and documentation by the First Ladies of State and Government (1992):

> form the backbone of the agricultural labor force across much of the developing world and produce 35-45 percent of Gross Domestic Product and well over 50 percent of the developing world's food.

This statement on rural women's socioeconomic contribution to agriculture and world food production echoes the 1975 Mexico City World Conference and its unanimous agreement that

When women are left out of development, half of the world is left out!

Nevertheless, a review of literature on development plans and programs in the Third World reveals a general lack of integration of women's programs into general planning processes. In this regard, the IDB, in reviewing the progress of working women in Latin America (1991: 245-6), notes that

> women are still considered as beneficiaries in many development plans, not agents of development. This misperception leads to the designing of macro-economic strategies that do not incorporate women's role as such into the planning process, whether at the macro-level of society or in sectorial and institutional planning.

Referring to the phenomenon of Third World poverty and poverty alleviating strategies, many researchers including Boserup (1970), Brydon (1989), and Afshar (1991) have agreed with Buvinić and Lycette (1988:49) that

> anti-poverty strategies need to be adjusted or tailored to the poverty of women.
>
> ...although women's poverty in developing countries is not intrinsically different from that of men, their share of poverty is disproportionately large. In addition, women's economic contributions to households appear to be more important in periods of economic contraction than in stages of economic prosperity.

The consensus is that the poverty cycle is continuously regenerated because whether women are in male-headed, jointly-headed, or female-headed households, they contribute to family income through both unremunerated home labor and production for income, and the low compensation many of them receive maintains household income at poverty levels. Further aggravating the poverty situation is the fact that female-headed households generally have fewer secondary earners and more dependents than male-headed households.

The situation in the Caribbean is no better than in the Third World in general, despite the fact that all the countries have declared their commitment to the alleviation of poverty.

Antrobus (1988), Massiah (1982), Barrow (1986), Ellis (1985), Reddock (1988) and Senior (1991) are among those researchers to document Caribbean women's dual burden with regard to production and reproduction. In terms of poverty alleviating strategies, they agree with others that despite Caribbean women's vital economic contribution to their countries, historically

> economic analyses of the character and problems of Caribbean economies have consistently ignored the ways in which women participate in economic activity in the formal and informal sectors; the problems that they face as they do so; or the ways in which their contributions in these sectors affect the entire economy. (Ellis, 1985:3)

Other scholars, including Mohammed (1988) and Wiltshire-Brodber (1988), point to the fact that when the Caribbean is placed in its wider Third World context, the percentage of Caribbean women statistically listed as being economically active appears to be even lower in comparison to other Third World societies. The consensus is that the statistics reflect a woeful underestimation of women's economic activity. Any casual observer walking down a city street or moving through a rural area cannot help being struck by the enormous economic presence of Caribbean women. Women are visibly at work: That their labors are officially recognized and recorded is another issue.

In Guyana, as in other Caribbean countries, women's economic activities are also ignored, which is reflected in the 1980 Census[2]: only 55 percent of the adult population is classified as economically active. Women are classified as composing 24 percent of the labor force.

Several questions immediately come to mind:

- Is almost half of the adult population in Guyana idle and economically non-productive?

---

[2] This is the latest census figure available.

- Are 75 percent of adult Guyanese women idle and non-productive, contributing nothing to the economy of the country?

- Is this possible in a country whose economic mainstay is agriculture?

- And further, is this possible in a country where 60 percent of its farms are small[3], and mainly subsistence in nature?

Much of women's economic activity in Guyana may not be remunerated, particularly in agriculture. Nevertheless, they are involved in economically beneficial activities, and their activities are not peripheral to the development of this country. Here, it is contended, lies the endemic virus thath has plagued Guyana in the past, and continues to do so today.

It is hypothesized that there is a direct relationship between the underrepresentation of women's economic activity, their exclusion from development plans and programs, and the development stagnation which continues to plague Guyana. In the agricultural sector, furthermore, there is a direct relationship between this under-estimation and women's exclusion from development plans and programs, and the continuous disappointment in the sector's expected and projected overall performance.

IICA's "other crops" consultant, H. Ramdin of Guyana (August, 1993), sums up the situation:

> Guyana's agriculture has not kept abreast of the development taking place. Several development plans have been attempted, but agricultural development has not been able to "take off."

Supposedly speaking on behalf of the Government of Guyana, Ramdin (1993) declared that:

> Government policy in 1993 advocates food production to meet the nutritional needs of its population, the surplus of some crops to meet some export markets and raw materials for agro-processing, facilitating the development of agro-industries and improving the employment situation.

Even though such policies have been continuously adumbrated since the 1960s, we still find this commendable. With the new era of liberalization embarked upon in 1989, new methods will no doubt be undertaken to increase food production, and the lessons from the past will not be forgotten.

---

[3] Less than four hectares.

Never explicitly considered, perhaps it is now time that women finally be recognized in their true role as agents of development, and that they be included as an integral part of the plans and programs now being conceived for implementation of this policy.

Previous studies by ACDI (1980), Odie-Ali (1986), Mentore (1984), and Roy (1992) have established the importance of Guyanese women's contribution to agricultural production and food security. Recommendations to pay serious attention to women's participation in agriculture have been made since 1980:

> Women's participation in Guyana's Agricultural Development, although present at every level of the Socioeconomic Spectrum, is somehow hidden behind men's activities. Their presence is strongly noticeable at marketing levels. Additional research as to women's potential impact in Guyana's Rural Development should be given serious consideration. (ACDI, 1980:23)

Through this study, it is hoped that the findings and recommendations on Guyanese women - as food producers, marketers, and processors- will succeed in influencing the direction of government policies and actions for improving the living and working conditions of women who are involved in agriculture and agriculture-related activities.

This is done with the blessing of the First Ladies of State and Government who have declared their solidarity and commitment to the social and economic advancement of rural women and "...thereby, to the enhancement of the well-being of the rural family and to equitable, sustainable development" (Report on the Summit on the Economic Advancement of Rural Women, Geneva, 1992).

A. Background: A Historical Overview of Guyanese Women in Agricultural Production

Historically, Guyanese women -be they Guyana's indigenous women, the Amerindians, the women who were brought as slaves, or the women who were brought as indentured servants- have always been involved in agricultural production. This is especially true of rural women.

1. Amerindian women

Guyanese historian Sister Mary Noel Menezes (1982), in discussing the Amerindians under European rule from the 15th century (October 12, 1492 to be more precise) to the 20th century, notes the following:

> In the Indian economy the role of women was vital. All travelers observed that the women worked harder than the men. They planted and harvested the crops, prepared the food and drink, and, of course, looked after the children. (Menezes, 1982:34)

American anthropologist William Curtis Farabee (1918), who conducted his field work among the Wapishiana and Machushi Amerindian tribes in the Rupununi, made similar observations regarding agricultural food production and the important role of Amerindian women (Farabee, 1918:21-35), and went on to comment on the agriculture-related activity of cotton processing and the production of fabric for hammocks and family clothing. He also referred to the economic value of their hammock-manufacturing activities.

> The women do everything in connection with cotton spinning . . . The most important use of cotton thread is in making hammocks, which are the most valuable articles used in trading with the whites today. (Farabee, 1918:28)

British-trained, Guyanese-born anthropologist George Patrick Mentore (1984) conducted his field work in 1978, 1979, and 1981 among the Wai-Wai tribe in the South Rupununi on the division of labor in the production of cassava, the Amerindian dietary staple (Table 1.1). In examining all the activities undertaken in its production and processing, he notes that

> agricultural work as well as work in general is fundamentally sexually divided . . . weeding, harvesting and peeling are female-biased; grating, squeezing, sifting and baking are exclusively... female tasks. (Mentore, 1984:31)

The rationale advanced by Amerindian men to justify and institutionalize their women's continued involvement in subsistence agriculture was that "the women who bore the children would also bring fertility to the crops" (Menezes, 1982:34). Amerindian women continue to take the lead in agricultural production activities.[4]

2. Slaves and indentured servants

During the 18th and 19th centuries, the majority of women who came to Guyana and other Caribbean territories were brought to do agricultural work either under the slavery or

---

[4] It is of interest to note that even when Amerindian women enter into racially mixed marriages or migrate to urban areas, this entrenched primary food producing role still surfaces.

indentureship system. They worked as agricultural laborers alongside the men on sugar cane plantations.

In brief, the primary management imperative on these sugar plantations was maximum return on investment. Everything else in the production process, including the human labor factor, took second place to whatever management strategy assured the least expensive production path. In this scenario of unpaid labor, it was good management practice to treat any inherited sexual division of labor with utmost flexibility. And so all during slavery, Guyanese women plantation workers, like their Caribbean counterparts, were allotted the same field tasks and the same production quotas.

However, the few tasks requiring production skills (such as operational and maintenance work in the boiler room and distillery), and therefore considered to be high status, seemed to have been closed to female workers. "Female physical inferiority" has been used to rationalize female exclusion from skilled agricultural jobs.[5] The repercussion of such historical exclusion has been the relegation of women to non-prestigious agricultural tasks over the years. Perhaps even more detrimental to the industry as a whole in Guyana has been the intentional or non-intentional debarring of capable women agriculturists from access to skills training programs, beginning at the policy and program planning stage.

3. Origins of small scale production systems

In the later years of slavery, the plantocracy shrewdly facilitated peasant agriculture alongside plantation agriculture, since this was economically beneficial to them. Slaves were therefore permitted to cultivate crops such as basic provisions, fruits and vegetables on small plots of land and sell this produce at Sunday markets. Here again, in this small-scale production activity (which was originally meant to be contained at a subsistence level) both men and women labored alongside each other with the women quickly dominating the marketing-of-surpluses scene. This is also the origin of the female trader, huckster or higgler in the Caribbean.

4. Re-categorization of female labor

A flexible sexual division of labor was easily accommodated under the slavery system, where labor, be it male or female, was unpaid. Under indentureship, however, where remuneration was part and parcel of the system, the profit maximization goal of the management system dictated that costs be cut on all fronts. Thus, the re-categorization of female labor as "weakly

---

[5] See Orlando Patterson (1982), Recent studies on Caribbean Slavery and the Atlantic slave trade: A review essay, in Latin American Research Review, Vol. 17(3) Albuquerque, N.M., University of New Mexico, 1982.

men and children," while defying reality, was in fact a highly desirable management strategy. Equal labor for less pay seems to have had its genesis in this scenario.

To compound the problem, there is evidence that the size of the tasks allocated to female laborers (especially indentured women) were increased sometimes two fold without any corresponding increase in pay.

Female labor manipulation continued throughout the 19th and 20th centuries to the extent that the discrimination became institutionalized. But to fully appreciate the virtually irreparable damage done to women's attitude toward agriculture, this gender discrimination and economic deprivation must be placed in the context of physical and psychological abuse which was the order of the day.

5. Aversion to agriculture in the context of slavery and indentureship

In their ancestral Africa and India, agriculture was a way of life for the majority of slaves and indentured servants. But farming was a respected vocation and farmers were free. In Guyana, as in the rest of the Caribbean, the brutality, degradation, dehumanization and repulsion characteristic of the management system and work conditions on slave plantations was so far removed from their conditions as free farmers that agriculture became aversive to them. This aversion was as much psychological as it was physical.

The late Guyanese writer P.H. Daly put it this way:

> they were made to work under dehumanizing conditions on the Caribbean slave plantations where an aversion to agriculture set in against the degrading and brutal conditions under which it was compulsorily done. (Sunday Chronicle, Nov 13, 1983)

This aversive attitude toward agriculture did not change with emancipation and the destruction of the plantation economy. Instead, in keeping with the psychological need to emulate the lifestyle of the rich and powerful, the Guyanese aped the expatriates not only in their tastes for food and drink, clothes, and occupations, but in their career aspirations.

This deepened aversion for agricultural work, which became, according to P.H. Daly (1983),

> an entrenched behavioral pattern. The people continued to gravitate towards the professions and teaching, including training to be clerks, instead of training to be farmers. (Sunday Chronicle, Nov 13, 1983)

This conscious movement away from agriculture as a vocation was bolstered by the ensuing education system, fought for by essentially well-meaning persons, mainly the Christian religious groups of the day.[6]

6. The effects of the early education system on agriculture as a non-prestigious occupation in Guyana

Public education, introduced in 1835 under the British funded NEGRO EDUCATION GRANT, was consciously structured to minimize agricultural ambitions due to its religious bias. Caribbean educator and historian Shirley Gordon (1963) noted that, during the period when the teaching curriculum was being designed,

> the religious teachers would argue that practical or agricultural education was simply a way of tying the people to farm labor, where they would be maintained in conditions akin to slavery. (Gordon, 1963:6)

As a matter of fact, in the first decade after emancipation, popular education was referred to as religious instruction (Gordon, 1963:7). In addition to religious instruction the curriculum taught the 84,915 emancipated Guyanese slaves reading, writing and arithmetic. N.E. Cameron (1966), reporting on the first 150 years of education in Guyana, writes that in 1847 the Committee of the Council on Education in Guyana submitted to the Colonial Secretary a report entitled "Brief Practical Suggestions on the Mode of Organizing and Conducting Industrial Day Schools, Model Farms Schools, and Normal Schools as Part of an Educational System for the Colored Races of the British Colonies." He notes that

> the net result was that a "normal school"[7] was strongly recommended, and the farm schools were deemed impracticable since the people were considered to be averse to "shovel and hoe." (Cameron, 1966:27)

When the primary school curriculum was revised in the early 20th century, it was expanded to accommodate "domestic science" for girls and "handicrafts" for boys. The result of this was an institutionalized prejudice against agriculture as a non-prestigious vocation in Guyana, and the reinforcement of a self-perception on the part of educated women that agriculture was not an appropriate feminine activity. And this was despite the fact that the majority of rural women's activities were agricultural.

---

[6] For a more detailed account, see Shirley Gordon, A Century of West-Indian Education, Longman, London, 1963.

[7] Residential training school for teachers.

B. Objectives

1. General objective

To draw up guidelines for orienting the policies and actions of the government of Guyana, with a view to improving the living and working conditions of women food producers, and, the food security and efficiency of the agricultural sector.

2. Specific objectives

The research presented in this report consists of two interrelated but separate components, the specific objectives of which are as follows:

a. Assessment component

The objectives of this component are to assess the scope of women's participation in, and their contribution to, the production and marketing of agricultural products, taking into consideration their domestic and production responsibilities, including their contribution to family income through non-agricultural activities. Policy recommendations will also be formulated on the role of women in the agricultural sector.

b. Policies component

The objectives of this component are to analyze sectoral policies and their effect on rural women and to formulate policy recommendations on the basis of the findings. Policies on credit and land ownership and use, as well as on training, research and agricultural extension programs, will also be studied.

C. Methodology

The methodology for this study combines "a micro-perspective on the participation of women in production units, with a macro-perspective on the socioeconomic and political system that condition their performance."

In this regard, the research is based on (to a large degree) secondary information -- population census and surveys, agricultural and rural household surveys, published technical and policy documents, and sectoral and case studies. Studies on agricultural production systems and documents on sectoral policies and food security, as well as assessments of the working conditions and position of women in the agricultural sector, were also examined.

In addition to data from any existing relevant studies, use will also be made of data from a small survey to be conducted among 150 women farmers from the following coastal agricultural areas:

- The Upper and Lower Pomeroon in Region 2
- Parika/Salem and the Canals Polder in Region 3
- Cane Grove in Region 4
- The Black Bush Polder (BBP) in Region 6. (See Figure I.1)

These data are expected to provide more detailed information on the participation of women in the production unit, especially with regards to four selected food crops -green vegetables, cassava, rice and fruits- and on the nature and level of their contribution. While the survey data may not be representative of the situation at the national level, they will be employed to qualify available information and, as possible, to fill in any existing gaps in the current information sources on women food producers.

D. Plan of Document

Chapter II looks at Guyana's agricultural sector and its contribution to the national output.

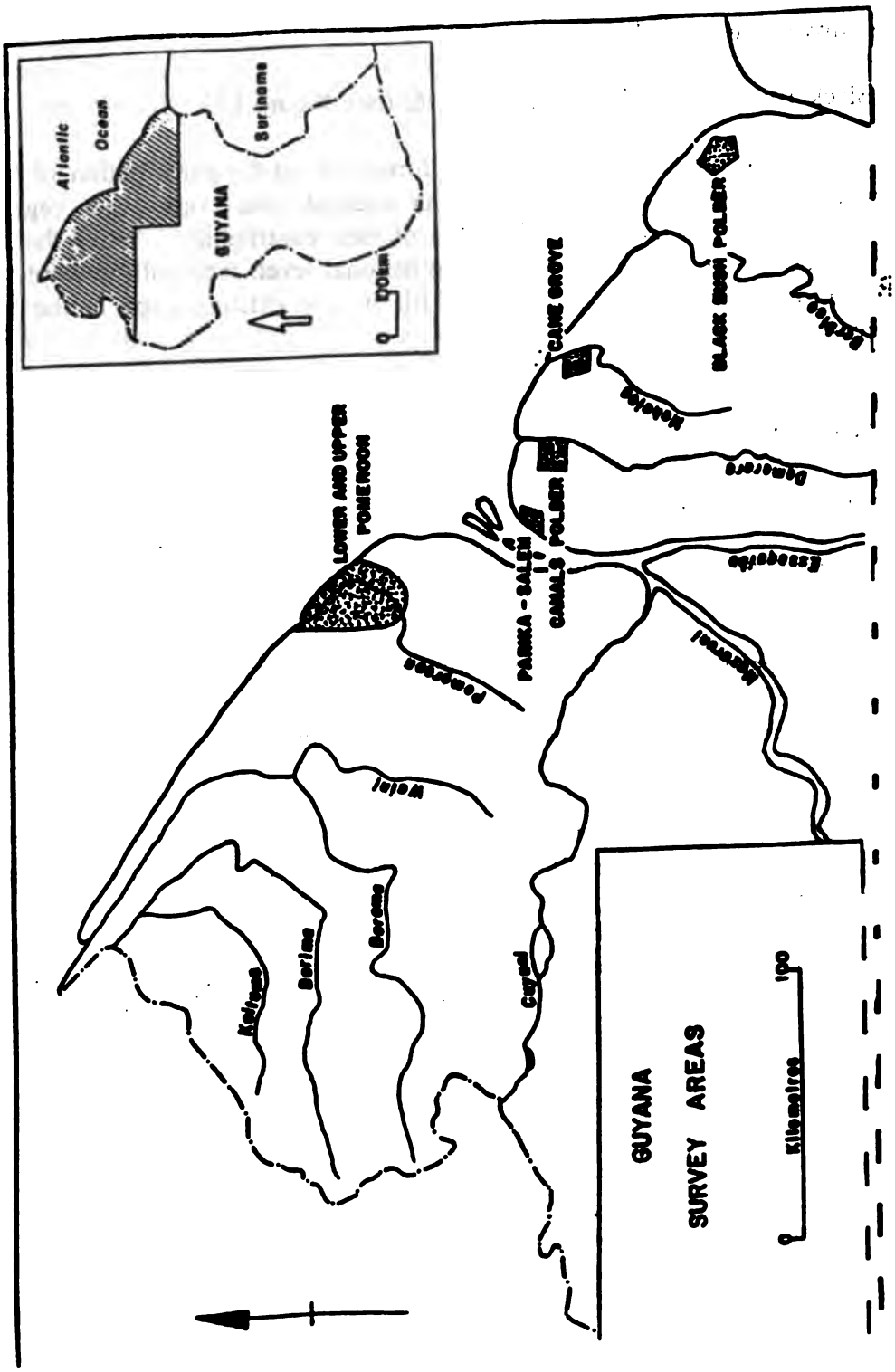
Chapter III examines Guyana's agricultural sector policies and their implications for women food producers.

Chapter IV covers the contribution of Guyanese women to the national agricultural output in terms of employment, examines women's participation in the agricultural sector, and provides a re-estimation of the official figures on the female economically active population in agriculture.

Chapter V focuses on Guyanese women food producers within the small farm production unit. Their activities and participation in small farm production are examined, as well as their potentials and problems.

Chapter VI includes the conclusions, recommendations, and proposals.

Figure 1.1. Guyana IICA/IDB survey areas



II. NATIONAL AGRICULTURAL OUTPUT

Guyanese women, especially those of the three major ethnic groups (East Indian, Negro/Black and Amerindian) have historically been a major force in the country's agricultural efforts at all levels including production, processing and marketing. Women farmers have continuously contributed to national food production, which means not only to the agricultural sector, but to the national wealth and economic well-being of the country.

This chapter presents a brief analysis of the agricultural sector in terms of its contribution to employment and the Gross Domestic Product (GDP) and reviews the national food production sub-sector and its production characteristics by farm size and policies. The role of women within this framework will be discussed in subsequent chapters.

A. The Agricultural Sector in the Economy

1. Contribution to gross domestic product

In predominantly rural Guyana, the agricultural sector has always dominated the economy in terms of volume -during and after slavery, and before and after Independence in 1966. In order to demonstrate this consistency, Table II.1 compares the contribution of the agricultural sector during the pre-independence period from 1952 to 1960, and during the post-independence period from 1982 to 1990.

As the table shows, in the pre-independence era agriculture accounted for an average of 23% of GDP, with a notable declining trend in percentage terms. After independence, however, its contribution to GDP climbed again, remaining close to 25%. Some economists argue that this seeming development is symptomatic of the decline of the Guyana economy, rather than what might seem as better performance by the agricultural sector. However, that it is a mainstay of the economy, is undeniable.

Table II.2 presents a detailed sectoral disaggregation of GDP for selected years from 1977. Although the combined service sector is larger than the agricultural sector, this is primarily due to the contribution of government services. However, this sector only surpassed agriculture in one year. This was during the early stages of structural adjustment (1990), and only due to a drop in agricultural performance in that year.

Excluding the non-food production component of forestry from this sector, agriculture and fishing accounted for 22% of GDP in 1991. If agro-industrial activities were included, then the total contribution of agriculture (as food production) to GDP would be 254 Mn out of the 805 Mn total, or 31% of GDP.

Looking at the agricultural activities in Table II.2, it can be seen that agricultural production has been heavily based on sugar and rice; these have been the traditional agricultural crops in

Guyana for many years. In 1991, these two activities accounted for 33 and 23% of the agricultural GDP, respectively. Fishing and livestock (of which beef production accounts for more than half) contributed 9% and 5%, respectively. Other crops -pineapple, orange, lime, bora, boulanger, pepper, pumpkin, plantain, coffee beans, watermelon, eschallot, cherries and heart-of-palm- accounted for 6.3%.

After 1977, when mining and quarrying dropped dramatically as major contributors to GDP, growth in the economy has been closely related to the growth of the agricultural sector. Within this sector, the most notable growth has been in Other Crops, which almost doubled since 1977. The contribution of the other sub-sectors, with the exception of fishing, declined during the period under review.

Table II.1. Agricultural contribution to GDP (1977 prices) prior to independence, and in a post-independence period, Guyana, 1950-1960, 1982-1990.

($ Mn)

Pre-independence

Year	GDP	Agricultural GDP	%
1952	161	45,079	28.0
1953	178	45,409	25.5
1954	194	54,704	28.2
1955	194	41,753	21.5
1956	210	42,181	20.1
1957	227	54,500	24.1
1958	215	47,100	21.9
1959	220	45,300	20.6
1960	243	51,200	21.1

Post-independence

($ Mn.)

1982	890	220	24.7
1983	804	208	25.9
1984	845	200	23.7
1985	829	215	25.9
1986	831	223	26.8
1987	805	218	27.1
1988	785	198	25.2
1989	751	198	26.4
1990	726	165	22.7

Sources: 1950-1960- The Economy of British Guiana, 1952-60, A National Accounts Study by C.O Loughlin, 1957-60. The Statistical Bureau. Table. 1.4.
1982-1990 - The State Planning Secretariat.

Table II.2. Sectoral origin of GDP at constant factor cost (1977), Guyana, 1977-1991.

(in G$Mn)

	1977	1982	1987	1988	1989	1990	1991
Agriculture	210	216	210	190	188	159	86
Sugar	77	95	80	64	63	50	61
Rice	49	42	39	36	39	26	42
Other crop	35	37	49	49	49	51	51
Livestock	26	22	16	16	16	11	9
Forestry	10	8	8	7	6	6	6
Fishing	13	12	18	18	15	15	17
Mining & quarrying	164	88	75	74	58	68	88
Bauxite & aluminum	155	76	47	46	32	39	44
Others	9	9	28	28	26	29	44
Manufacturing & processing	123	122	86	82	77	65	74
Sugar milling	27	32	26	21	21	16	20
Rice Milling	9	10	10	9	10	6	10
Other	87	80	50	52	46	43	44
Engineering & Construction	77	64	63	60	59	60	61
Services	445	399	403	398	394	399	396
Distribution	100	68	61	62	60	61	64
Transport & communication	58	63	71	64	61	62	62
Rental dwellings	16	16	18	18	18	18	18
Financial services	43	40	45	46	47	50	50
Government	201	191	187	187	187	187	180
Other	27	21	21	21	21	21	22
TOTAL	1019	886	837	804	776	751	805

Source: Bureau of Statistics.

2. Exports earnings

Guyana relies heavily on agriculture for its export earnings, the two major crops of which together contribute 44%. Sugar (37%) is the most important agricultural export, with the great majority of its production dedicated to this end. Rice, fish, and more recently, other crops, are also exported, but the majority of that production is for domestic consumption.

- Sugar

  Sugar exports rose 14% from 1990 to 1991, and resulted in earnings of $114,180Mn Guyana dollars, which accounted for 37% of total export earnings.

  It is estimated that in 1992 exports of sugar increased by 53% and earnings by 45%. Moreover, in terms of national export earnings, sugar is the largest contributor.

- Rice

  Rice exports in 1991 were 54,000 tons, an increase of 6% over the 1990 figure. This accounted for 7% of export earnings.

  Estimates for 1992 have shown an increase of over 100% in export volume and a slightly smaller figure for earnings on the export market.

- Fisheries

  The next major export sub-sector is fisheries, which accounted for another 7% of export earnings in 1991.

- Other crops

  Other crops are also being exported on a small but gradually increasing scale. These include some 15 different crops, the most important of which are fresh and tinned pineapple and plantain.

  In 1989, a relatively new product, heart of palm, began to be exported, and as of 1992 it was the largest non-traditional export crop. (See Appendix 4)

3. Employment

The population census figures from 1891 to 1980 suggest that the percentage of the total population engaged in agriculture has declined steadily and drastically, from 40 percent in 1891 to 10 percent in 1960 to 6.6 percent in 1980. (Table II.3)

Nevertheless, agriculture remains the major source of employment for Guyana's economically active population. It accounted for 26.8% of the total work force in 1980.

Within the formal and renumerated agricultural workforce, sugar is the major agricultural employment sub-sector, accounting for well over 40% in 1980.

Table II.3. Total population and agricultural workforce by census years in Guyana (1891-1980).

Census year	Number in agriculture	Total population	Approximate percentage
1891	108 504	278 328	39.0
1911	106 514	296 041	36.0
1931	74 603	310 933	24.0
1946	146 164	369 678	39.5
1960	56 367	560 330	10.0
1970	46 388	699 848	6.6
1980[8]	50 316	759 619	6.6

Sources: Census Report of British Guiana, 1911, 1931, 1946.
Population Census 1960, British Guiana: Vol. 3, Part G.
Population Census (Guyana) 1970, Vol 4, Part 16, Table 1.
Population Census (Guyana) 1980, Vol 2, Table 2. 4.1.

B. National Food Production

1. Major products

With the exception of sugar and rice, nearly all of Guyana's agri-food production is for the domestic market as indicated in Table II.4.

Thus, of the 55.3 thousand metric tons of agri-foods produced in 1992, 75% can be attributed to sugar and rice. Moreover, sugar and rice account for 98% of agri-food exports. However, these two sub-sectors only supply 36% of domestic consumption needs and this attests to the importance of the "other crops" sector on the domestic market. In plantings under 15 hectares, rice is not cost-efficient.

2. Production characteristics

Agricultural production, with the exception of sugar and to a lesser extent rice, is predominantly small-farm in nature. The most recent rural farm household survey in 1978

[8] The latest available census data.

estimates that farms of less than four hectares accounted for about 60% of the country's 24,635 farms.

At that time, it was estimated that 85% of the small- to medium-sized farms were in rice production and the remainder were either under "other crops" or "livestock" or both.

Table II.4. Area cultivated, output and value of food production in Guyana in 1992.

	Area cultivated (hectares)	V = value G$Mn & P = Total output (Mt)	V = G$Mn & P = Export volume (Mt)	Domestic consumption
Rice	81.3	V N.D P 171 000	V 4 307.0 P 115 000	V N.D P 56 000 (Mt)
Sugar	17.6	V N.D P 246 900	V 16 598.8 P 229 500	V N.D P 17 400 (Mt)
Ground provision	N.D	V 348.0 P 26 300	V N.D P 171	V 345.6 (Mn) P 26 129 (Mt)
Green vegetables	N.D	V 574.0 P 18 600	V N.D P 114	V 571.2 (Mn) P 18 486 (Mt)
Legumes	N.D	V 315.0 P 4 100	V - N.D P - N.D	V 315.0 (Mn) P 4 100 (Mt)
Fruits	N.D	V 1 206.0 P 36 500	V - P 821.0	V 1206.0 (Mn) P 35 679 (Mt)
Beef		V 509.2 P 4 200	V - N.D P - N.D	V 509.2 (Mn) P 4 200 (Mt)
Pork		V 72.7 P 600	V - N.D P - N.D	V 72.7 (Mn) P 600 (Mt)
Fish/shrimp		V 13 095.0 P 44 035	P N.D P 6 110	V 11 205.0 (Mn) P 37 925 (Mt)
Chicken		V 374.0 P 3 100	V - N.D P - N.D	V 374.0 (Mn) P 3 100 (Mt)

NOTE: V = value of output; P = output; N.D = no data
Mt = metric tons; Mn = million

Source: Compiled from Digest of Agricultural Statistics, MOA, 1992.

In the absence of a more recent survey, it is difficult to arrive at more accurate figures, but it is unlikely that the distribution of farms has decreased from 1978 levels.

Over the years, many small rice and sugar cane farms have had to go out of production due to their inability to compete with large-scale farming. The increase in production of other crops would indicate that a number of small farmers have switched production to vegetables and other commodities. The increase has been such, however, that the percentage of small farms may be even higher now than in 1978. Nevertheless, for the purposes of this study, the information provided by the 1978 Guyana Rural Farm Household Survey (GRFHS) is reproduced in Table II.5.

Table II.5. Farm size distribution in Guyana in 1978.

Category	Farm Size (hectares)	Distribution (%)
Small farms	Less than 1	25.3
	1 - 1.96	15.1
	2 - 3.96	19.8
Medium farms	4 - 5.96	13.9
	6 - 9.96	14.5
Large farms	More than 9.96	11.4
		100.0

Source: Guyana Rural Farm Household Survey, 1978.

The following peculiar characteristics and modes of production emerge when Guyana's agri-food sub-sector is divided into three categories, namely:

- small-scale (less than 1 to 3.96 ha)
- medium-scale (4 to 9.96 ha)
- large-scale (more than 9.96 ha)

a. Small-scale production

A full 60% of the farms in Guyana fall into this category, and it is estimated that over 50% of the country's domestic food consumption originates from this sector.

As was observed in Chapter I, small-scale farming had its genesis in the latter days of slavery and has always been a part of the informal sector. Later, it evolved into a "back-yard" or "kitchen garden" operation and inevitably became a combination of cash crop cultivation and raising livestock. The immediate family has always been involved in this activity, and because it was home-based and compatible with housework and child-rearing activities, it quickly became incorporated into rural women's unwaged work.

Initially, such small-scale farm activities may have been a means of supplementing the family's diet, but they later became a means of supplementing the family income. Today, small-farming activity is the only source of income in many cases. In the Black Bush Polder, a land settlement scheme in Region 6, for example, the original intention was that the farm family should cultivate six hectares of rice, and cultivate green vegetables on its homestead of one hectare. But because of the unprofitability of small- and medium-scale rice farming, farmers were informally renting[9] their government-leased six hectares to the highly mechanized large-scale farmer and re-investing the rent on the cultivation of cash crops on less than one hectare of land. The proceeds from this type of small-scale cash crop cultivation is, in most cases, the major source of income.

Nevertheless (and particularly in female-headed farm households, because of reasons which we shall discuss later), operations have remained at the subsistence[10] level because small-scale farmers in Guyana, like their Third World counterparts, have been unable to break out of the vicious circle of poverty associated with peasant agriculture.

In many cases, the amount of crops planted is limited to the supply of labor available in the household; savings, when they exist, are for "family emergencies" and "rainy days" rather than for investment. Technology has remained labour intensive; fertilizers/pesticides are used but the impression is that there is a reluctance to try new and/or more effective brands unless faced with a shortage of the accustomed brand. Livestock rearing is also usually looked upon as a means of storing wealth for that "emergency" or "rainy day."

b. Medium-scale production

This scale of production traditionally involves small rice and cane farmers, ground provisions, legumes, citrus, coconuts, pineapples and other commodities which must be grown on a larger scale if a sizeable income is to be obtained. Therefore, greater use is made of machinery and modern cultivation methods.

---

[9] At the time of writing the average rental of 6 hectares per crop was in the vicinity of thirty thousand Guyana dollars, or 3 months' earnings of an agricultural laborer.

[10] In order to live slightly above subsistence level, these household heads are forced to seek off-farm employment.

Medium-scale farmers are more commercial in outlook. They have greater access to credit, extension facilities and foreign markets. They contribute to rural employment even if on a seasonal basis only, while at the same time using capital intensive techniques where necessary and possible.

c. Large-scale production

This scale of production is the exclusive domain of rice and sugar cultivation and a few coconut estates.

Only the state-owned Guyana Sugar Corporation (GUYSUCO) cultivates sugar on this scale, and it has remained largely labor-intensive.

In the mechanized rice industry, traditionally in the hands of private farmers, the degree of capital utilization varies according to farm size.

An important characteristic of large-scale production is that it is the only one of the three production scales in which some form of vertical integration has taken place.

GUYSUCO and some rice farmers cultivate and process their own crops. They also do their own marketing. Most of the large coconut growers also have some means of producing oil.

The relative importance of each of these production scales may be summarized as follows:

- Small-scale farming produces most of the food requirements of the nation. However, its contribution in terms of export earnings, taxes and employment is marginal.
- Medium-scale farming is more commercialized and spearheads growth in "non-traditional/other crop" exports and agro-manufacturing.
- Large-scale farming provides the bulk of export crops.

C. Governmental Food Production Policies

Food production, while important, was neither the main concern nor the focus of agricultural policies and programs during the colonial era. With independence in 1966, however, food production and security became major issues. In keeping with the Guyana government's basic development philosophy for

> the achievement of a greater degree of self-sufficiency and self-reliance through a strategy of feeding, clothing and housing the population, utilizing to the greatest extent possible, indigenous raw materials and human resources.

The general objectives for agricultural development were:

- the achievement of maximum self-sufficiency in commodities for feeding and clothing the nation;
- an appreciable increase in volume and variety and earning power of export commodities;
- a substantial improvement in the well-being of the rural communities by the more equitable distribution of increased sector incomes.

Stated in 1966, these overall policies for agriculture remained the same throughout the 1970s and 1980s. They translated into an agricultural plan and a number of measures emphasizing food production through a variety of rural development and other programs.

Interestingly, the emphasis on food production seems no less important under the more recent structural adjustment and liberalization of the economy, although the measures to support it are different.

1. Post-Independence to 1989

a. Objectives and efforts to increase food production

In 1966, the Ministry of Agriculture (MOA) outlined a seven-year development plan which was to set out the objectives and guide agricultural development through the 1970s and the 1980s. By the 1980s, deteriorating economic conditions, not only in agriculture, but also in the other sectors of the economy, prevented the finalization of the 1984-1989 agricultural plan.

The 1966 development plan highlighted the fact that agriculture had not only been providing employment for 37% of Guyana's population, but was responsible for 65% of the country's total exports.

It also stressed the need for a 3-4% annual increase in agricultural output over the next ten years and emphasized that such increase was to be achieved by "...sound diversified agricultural output of products that will continue to find growing markets both at home and abroad." (Agricultural Development Plan, MOA 1966:5)

In order to achieve this 3-4% annual increase in agricultural output, the 1966 agricultural development plan concentrated on a nine-point agricultural development program, as follows:

- The provision of improved agricultural data

- Import substitution of a number of agricultural materials
- The spearheading of new investment in export crops
- Provision of improved extension services by the MOA for the benefit of the farming community
- Marketing services
- Agricultural training at all levels
- Improvement of agricultural credit institutions
- A review of the system of land tenure
- Land development

The development plan addressed virtually all aspects associated with agricultural production. Recognizing the importance of small farms in food production, various reforms were made, and programs established to increase production. Attempts were made to put several agri-improvement related mechanisms in place.

Agricultural credit institutions were revisited. Farmers' credit unions were formed and advisory services set up. Plans to establish the Guyana Agricultural and Industrial Development Bank (GAIBANK) were embarked upon.

This bank, with the main office in Georgetown and branches in agricultural districts, was finally institutionalized in 1973.

Training facilities and programmes were reviewed and the Guyana School of Agriculture, which had been established in 1962, was strengthened. Plans were made to establish a faculty of agriculture at the University of Guyana, which occured in 1975.

Efforts were made to provide extension and support services. Land development officers, agricultural officers, and agricultural field assistants were appointed.

Efforts were made to strengthen the Guyana Marketing Corporation (GMC), which was established in 1963 to take marketing problems off the shoulders of the farmers by purchasing from them on farm location.

The Guyana Pharmaceutical Corporation was established in keeping with the plan to link agricultural production with manufacturing and industry.

The twelve major rural land development schemes which were already established, were revisited and new schemes including the Soesdyke/Linden, Mahaica/Mahaicony/Abary, Matthews Ridge/Arakaka/Kaituma were established. (See Fig II.1)

b. Food security

Import substitution in the agricultural sector, also outlined in the development plan, took the form of an overall policy of banning and restricting the importation of agricultural products and foods. The main motive of this policy was to force the consumption and production of national foodstuffs; in other words, to promote self-sufficiency.

Passed in 1972, the immediate effect of this was soaring prices for locally produced food items other than sugar and rice, in response to the demand for food to fill the supply gap created by the shortages of foods no longer imported. As one senior agriculture sector employee remarked:

> If ever there was a period in the history of the country most propitious for the production of provision crops, fruits and vegetables as well as beef, pork, chicken and eggs, it was this period . . . Unfortunately, the small farmers who are the main producers of these items and who have tried in their own way to meet the demand situation, face problems which they cannot solve acting as individuals. (Phillips, 1984:10)

Cooperativism was one policy that was pushed to help the small farmer overcome individual problems. But, as seen in Chapter III, very limited overall success resulted from this.

Price controls were attempted to control the inflation in foods. However, they were never successfully implemented. Efforts to increase food security took the form of more support for national food production, and the encouragement of food processing and preservation.

Specific crop and animal assistance programs were established, including the National Dairy Development Program; livestock research; support to the development of artisanal fisheries; crop diversification by the Guyana Sugar Corporation (GUYSUCO); and assistance to food crops through the Food Crop Production and Marketing Program.

Farmers were encouraged to increase the production of orchard and root crops. Seedlings and other planting materials were distributed by the MOA either free of cost or for a minimal fee. And the proverbial admonition "produce or perish" was proclaimed throughout the coastal belt.

Cottage-based agro-processing was encouraged, and women became the focus of efforts in these areas. Women were encouraged to widen and improve their skills in food preservation and food processing, and to become involved in the production of commodities to replace those

that were banned and at the same time generate income, as a consequence of the ban on imported foods. Various national organizations and agencies conducted country-wide demonstrations and promotions through newspaper publications and leaflets, including: the Community Development Division, Carnegie School of Home Economics, Guyana School of Agriculture, Guyana Federation of Women's Institute, and the Women's Revolutionary Socialist Movement.

Several other governmental and non-governmental organizations also threw in their lot in order to foster the establishment and development of small agri-business enterprises. Among these were the GAIBANK and the Institute of Small Enterprise Development (ISED)[11]. The Institute of Applied Science and Technology (IAST) provided some services in research and food science technology. International institutions such as the Food and Agriculture Organization (FAO) and the United States Agency for International Development (USAID) PL480 program gave technical, technological and financial assistance.

c. Achievement of food production and security objectives

While some successes were achieved in agriculture during this period, the economy declined throughout the 1980s, negatively affecting all these efforts, and *ipso facto* food security in Guyana. Output of every major agricultural commodity declined. Real incomes declined by more than 20%, and at the national level the shortage of foreign exchange continued to restrict the importation of food.

The negative achievement of the development plan objectives is summarized in the following comment by the ministry of agriculture in these introductory remarks of its Draft 1985-1989 Agricultural Development Plan (MOA, 1985:7):

> Against the background of innovative policy measures, programmes and incentives, the overall performance of the agriculture sector during the period 1974 to 1984 has been well below the levels of expectation and projections.

It is interesting to note the one positive response to the ministry's expectations:

> In one important area, the food-crop production sub-sector, it has at least been possible to demonstrate the capacity and responsiveness of the sub-sector to incentives.

What was not mentioned was that in the food-crop production sub-sector, in the main a small- and medium-scale production type of agricultural enterprise, women dominate, mostly in the unpaid laborer category. (We shall look more closely at this phenomenon in Chapters IV and V.)

---

[11] ISED (Institute of Small Enterprise Development) has since been renamed IPED (Institute of Private Enterprise Development).

2. Economic liberalization from 1989

a. Structural adjustment policies

In 1989, an Economic Recovery Programme was embarked upon. Some of the measures introduced with a view to restoring economic growth and internal and financial stability were as follows:

- exchange rate adjustment to correct the overvaluation of the Guyana dollar so as to restore external competitiveness;
- the removal of price controls and a greater reliance on market price mechanism for the allocation of domestic resources;
- provision of appropriate incentives to the private sector to encourage domestic and foreign private investors to contribute to the development process;
- in monetary and credit areas, a restrained credit policy was adopted;
- eliminating import prohibitions;
- adjustment of the composition and structure of the Public Sector Investment Programme with a view to rehabilitating the economic and social infrastructure so as to support economic growth.

b. Effects on the food production sector

These policies have had varying effects on the food production sector. Rice and sugar in particular have responded positively to the policies implemented. Both crops have benefited from:

- exchange rate devaluations which changed the country's relative price structure in favor of exportables rather than importables and allowed for greater competitiveness on the export market and hence scope for higher production levels;
- the removal of price controls, which facilitated cost recovery, particularly on the domestic market; in the case of rice, this provided further incentive through the higher paddy prices being paid to producers;
- the ongoing rehabilitation of economic infrastructure, specifically drainage and irrigation and access roads;

- the restructuring of the Public Sector Investment Programme, facilitating foreign investment in the rice industry by such groups as Caricom Rice Mills (St. Lucia based), the Alesie Group (Curacao-based) and even by a local company, Kayman Sankar Investments Ltd.

Increased sugar and rice production as a result of these benefits was recorded in the 1993 budget address:

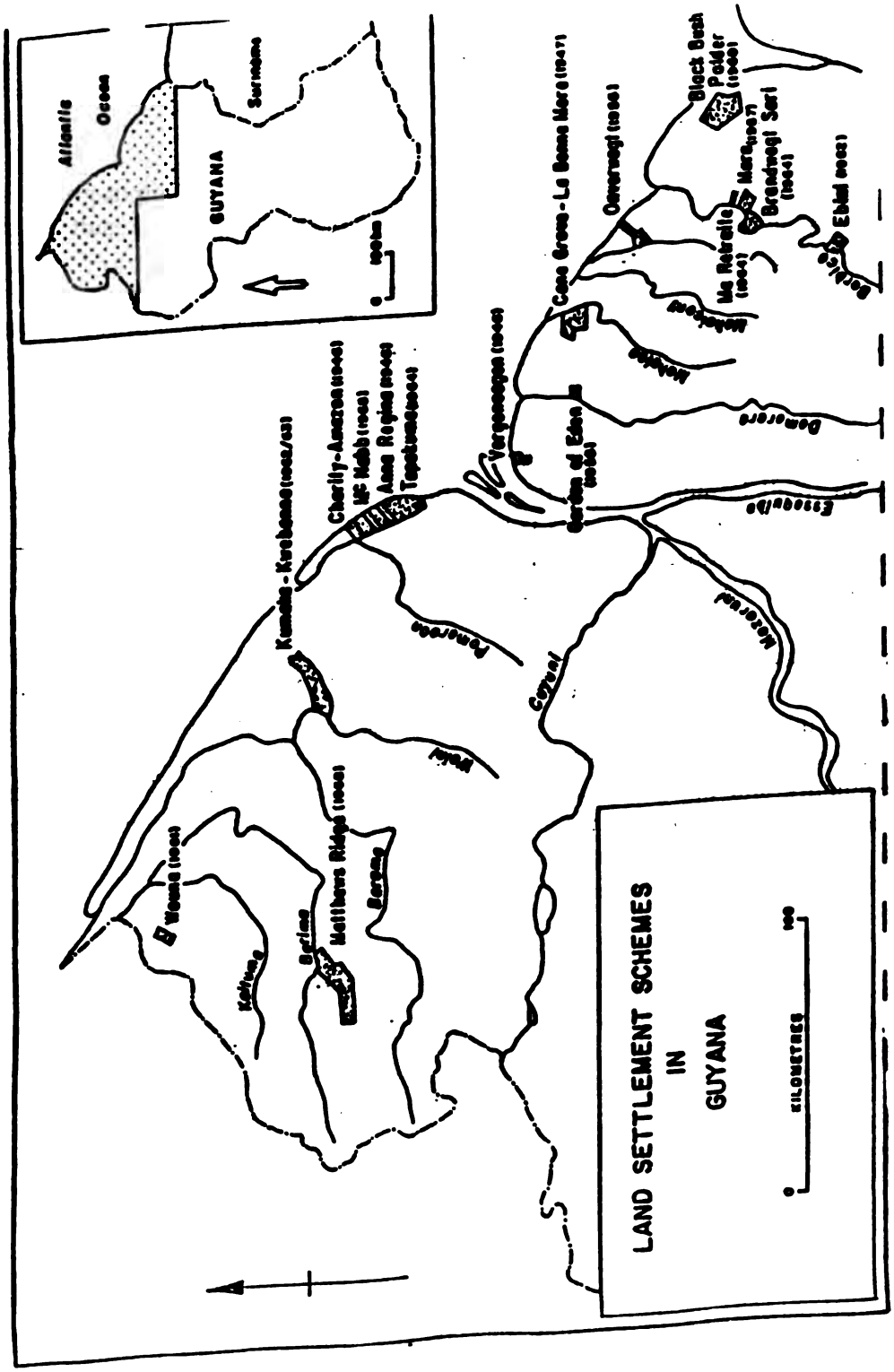
> The implementation of prudent policies. . . has begun to show results. Output grew by 7.7%, led by the agriculture sector which grew by more than 27% as a result of the good performance of the sugar and rice sub-sectors.

The budget document also notes ". . . the unexpected growth of more than 45% in sugar output in 1992 . . ." and " . . an output growth of 11.5% in the rice sub-sector." (See Appendices 1 and 2.)

Because economic recovery programs have been put in place only recently, it is difficult to assess their impact on small farmers and small agro-processing. "Other crops" have shown a tendency to growth, and to the extent that this is associated with small farmers, it is a positive sign. The 1993 survey on agriculture indicates a drop in agricultural employment on a full-time basis, but should not be construed as a negative indicator.

Overall, small farmers have definitely not seen a bettering of their conditions. The efforts made under liberalization have had little effect on them. To a large extent, these farmers remain marginalized in the economy because of the size of the cultivation plots, the limited use of technology, the need for elaborate drainage and irrigation systems, little reliance on credit from the formal economy and the fact that their products are directed towards the domestic market. They are relatively isolated from the current macro-economic policies and incentives.

Figure II.1. Land Settlement schemes in Guyana



III. AGRICULTURAL SECTOR POLICIES

Over the years, Guyana's agricultural sector policies have focused on rural development activities such as land development programs, cooperative agricultural activities and formal training in agriculture, as well as on the establishment of credit facilities for the agricultural community.

But in Guyana, agricultural policy has always been a male prerogative. An absence of recognition and consideration of women -- their roles, their contribution and their needs -- has been evident in most of the programs. Table III.1 identifies some of these policies and programs, and summarizes their major characteristics and orientation in terms of farm size and gender.

With the exception of the programs initiated by local women's groups and the informal credit institution of "box money," the few policies and programs oriented to women have only been recently established. These include the Institute of Private Enterprise Development (IPED), a credit institution which not only encourages women clients but accords them high priority in technical assistance and training programs; recent non-governmental organizations (NGOs); and international assitance agencies, which have women in development (WID) concerns built into their programs.

The following sections present a more detailed discussion of agricultural and women's policies and their gender impact. The agricultural policy structure is presented first, followed by a review of the programs and policies directed specifically to women. The impact on small farmers by gender is analyzed in the final section of this chapter.

A. Policies on Land Use and Ownership, Credit, Training, Research, Agricultural Extension and Rural Development

1. Land tenure and administration

From the time of Columbus' arrival in 1492 to independence in 1966, the Spanish, the Dutch and the British have arrived in Guyana and simply claimed native Amerindian lands. During the 17th and 18th century, in order to facilitate plantation agriculture, property rights were provided to private investors by the European governments.

At independence in 1966, the British Government turned over all of Guyana's lands which they had not already sold or otherwise disposed of to the Government of Guyana (GOG). Known as "Crown lands" prior to 1966, in independent Guyana they became known as state lands. The GOG continues to administer these lands on behalf of the state under the State Lands Act, Chapter 62:01 of the Laws of Guyana. Government lands are free-hold lands, that is, lands owned absolutely and without condition. These lands include those acquired by the GOG by outright purchases from private owners, and nationalization of holdings of expatriate companies.

Table III.1. Agricultural and rural development policies and programs in Guyana in the 1966-1993 period.

Policies and programs	Description	Orientation by size of producer			Gender orientation		Comments
		Small	Medium	Large	Women Farmers	Other Women	
I. LAND TITLING							
(a) Ownership	State and government lands bought by individuals, groups, corporations and companies 1966-present. Titles for free-hold land registered under the Deeds Registry Act or Land Registration Act.	✓	✓	✓			In relation to men, few women own such titles. Cultural and inheritance patterns are among inhibiting factors.
(b) Lease-hold Land Settlement Programs Private lands	State and government lands. Renewable leases to individuals, business and agricultural development enterprises, cooperative groups. Also leases and sub-leases from private holders.	✓	✓	✓			Lands and Surveys Division responsible for issuance of leases for land settlement schemes. Few leases to women.
(c) Nationalization	Post independence (1966) acquisition of land holdings of expatriate corporations and companies such as Brokers, Dawsons, etc.		✓	✓			These lands became Government lands.
(d) Communal Titles to Amerindian Communities	Intention declared since 1975. Some titles already issued. Groupings of small subsistence level farms.	✓	✓	✓			Women can access as part of the community.
II. CREDIT							
(a) Agricultural Credit Institutions facilitating agricultural development.	Guyana Cooperative Agricultural and Industrial Development Bank, established in 1973, mobilizes local and foreign funds. Originally biased in favor of cooperatives. Specified collateral requirements. Interest rates on local currency loans varies with Central Bank rates.		✓	✓			Charges consultancy fees for assistance in preparation of project pre-investment and feasibility studies. No written policy.

Table III.1 (Cont'd)

Policies and programs	Description	Orientation by size of producer			Gender orientation		Comments
		Small	Medium	Large	Women Farmers	Other Women	
(b) Commercial Banks	Higher interest rates. Stricter collateral policies. Faster service. Five local commercial banks.		✓	✓			
(c) Private Sector organized low-interest funding for small agricultural and agro-processing enterprises.	Institute of Private Enterprise Development (IPED), a non-profit organization launched in 1986. Mobilizes funds from local and International donor and lending agencies. Clients are assisted with soft line loans.	✓	✓	✓	✓	✓	Offers technical and management assistance free of cost. Encourages the involvement of women, claims they are credit worthy.
(d) Informal Credit	Private shopkeepers, money lenders, friends and family. Also box money.	✓	✓		✓	✓	Traditional. Little formality. Community sanctions apply.
III. RESEARCH AND TECHNOLOGY							
Extension Services, MOA	Pre-1966-1984 major responsible agency. Post-1984 working in collaboration with other agencies.	✓	✓	✓			Plans and programs have been male-oriented.
GUYSUCO Extension Program	Still focuses in the main on technology related to sugar.		✓	✓			
Mahaica/Mahaicony/Abary (MMA) and Guyana Rice Board	Major focus on rice-related technology transfer.		✓	✓			Few women farmers. Mainly women paid laborers.
Establishment of National Agricultural Research Institute (NARI) in 1984. Works closely with Regional and International Research Institutes and Agencies.	Largest technology extension effort. Produced a new blast-resistant rice, tissue culture for selected crops, pest management and weed control technology. Undertakes research in three agro-eco-zones.	✓	✓	✓			

Table III.1 (Cont'd)

Policies and programs	Description	Orientation by size of producer			Gender orientation		Comments
		Small	Medium	Large	Women Farmers	Other Women	
NGO and international agencies assistance programs. Channelled through such programs as SIMAP and Futures Funds. Also direct to communities.	Cushioning impact of structural adjustment programs since 1989 by way of technical and financial assistance to vulnerable groups.	✓	✓	✓	✓	✓	Rural women are numbered among the vulnerable groups.
IV. TRAINING AND EXTENSION							
(a) Extension and Education Division, MOA	Program of activities impacts on all 10 regions of Guyana since 1979. Presently involved in selected commodity programs on model farms capable of producing above the subsistence level. Works in collaboration with NARI and other local and international agencies.	✓	✓	✓			Women farmers on subsistence level farms are officially excluded from this program.
(b) Policy of formal Training and Education in Agriculture. Programs involve primary schools, secondary schools, Guyana School of Agriculture and University of Guyana faculty of agriculture.	All programs designed in recognition of the importance of agriculture to Guyana's economy.	✓	✓	✓	✓	✓	Overall the male/female training ratio has been 4:1.

Table III.1 (Cont'd)

Policies and programs	Description	Orientation by size of producer			Gender orientation		Comments
		Small	Medium	Large	Women Farmers	Other Women	
NGOs and women's group training programs	NGOs include UNIFEM, UNICEF, PAHO - all of which have Women in Development (WID) components. Women's training programs, especially agro-processing programs by such local women's groups as the Guyana Federation of Women's Institutes (GFWI), Women's Revolutionary Socialist Movement (WRSM), Women's Progressive Organization (WPO) and Red Thread Women's Development.	✓	✓		✓	✓	Some groups (GFWI), have been involved in such training since the 1940s.
V. RURAL DEVELOPMENT							
(a) Land settlement programs	The Lands and Surveys Division of the MOA administers the land settlement program. There are 15 land settlement schemes covering a total area of over 300,000 acres (120,000 hectares).	✓	✓	✓			Many of these lands were meant for rice cultivation. But since it is now unprofitable to cultivate plots of 6 hectares, small farmers are informally renting their plots to larger farmers for amounts exceeding the equivalent of three months of a farm laborer's wages.
(b) Cooperativisation	Ministry of Cooperatives was set up in 1962 to assist, train and guide community members in cooperative-type agricultural enterprises in order to minimize the disadvantages of small- scale farming. The GAIBANK was set up in 1973 to assist such cooperative enterprises.	✓	✓	✓			Cooperativism failed to live up to the government's high expectations. Nevertheless, some 1400 cooperatives still exist. Very few are active. There are only seven functioning agricultural cooperatives in which women play a major role.

Table III.1 (Cont'd)

Policies and programs	Description	Orientation by size of producer			Gender orientation		Comments
		Small	Medium	Large	Women Farmers	Other Women	
VI. WOMEN POLICIES							In Guyana, agricultural policies and programs have always been the male prerogative.
(a) Greater opportunities for girls in technical and vocational training	Since 1988, this provision has been embodied in the policy of the Ministry of Education.				✓	✓	
(b) Reduction of mortality and morbidity rates, especially maternal and child mortality	Since 1988, this has been one of five priority programs at the ministry of health.						The non-consideration and non-recognition of women in policy and program formulation has been, and continues to be, responsible for the failure of plans to live up to expectations. Until this is corrected, progress will be stymied.

a. Forms of land tenure

Basically five modes characterize the Guyana Land Tenure System:

- Owner-operated
- Rental or lease of less than 21 years
- Rental or lease of 21 years or more
- Rental or lease by one person and used by others
- Other types of tenancy

Land can be bought from the GOG or from private land owners. Titles may be issued under the Land Registration Act, Chapter 5:02 of the Laws of Guyana or transfers may be issued under the Deeds Registry Act, Chapter 5:01.

Land can also be leased or rented from a land owner or a leaseholder through a private arrangement or leased from the GOG and formally subleased with the permission of the GOG through the Lands and Surveys Department of MOA.

Leases of state or government lands for agricultural purposes are renewable upon request once there is evidence that the lands have been gainfully occupied by the leaseholders.

i. Land acquisition problems

The Lands and Surveys Department is an arm of the MOA (See Appendix 5). Its objective is to promote the development of state and government lands for agriculture and associated settlement. Much of the department's work has been regionalized. Applications for titles (mainly lease-hold) are first made to the regional superintendent. He steers the applications through a District Land Selection Committee which advises the regional administration and channels the information to the lands and surveys department.

Despite good intentions, these various processes are fraught with delays. Additionally, all the ills of Guyana's economic depression -staff disincentives and shortages, budgetary constraints, low numbers of Land Selection Committee meetings, and insufficient and inefficient logistical support- compound the frustration borne by the small farmer. For example, while we have not been able to ascertain the total number of applications made, only 471 small-farmer applications were approved in all of Guyana for 1991.

ii. Development implications

Many farmers do not have secure tenure. This insecurity affects their willingness to invest in land, especially in improved drainage and irrigation (D & I) facilities. Further, the absence of secure tenure makes it difficult for farmers to obtain credit as they cannot offer land as collateral. As a financier posits, one of the constraining factors is "the lack of individual land titles which could be traded in financial markets as collateral to offset the high cost of loan default." (Hunte, 1993)

Lack of individual land titles impacts not only on direct credit for farm activities but on the D & I System, so vital to agricultural activities on lands which are at least seven feet below sea level.

The current situation is that the financing and maintenance of the D & I Systems are totally dependent on the central government. The historical trend is that "cost-cutting" in times of economic crisis greatly impacts maintenance of infrastructure, the deterioration of which impacts on the capability of controlling floods and other related agricultural hazards. Clearly, the system of D & I maintenance exclusively by the government is flawed.

On the other hand, users of land, especially small farmers, even if they are willing to share the cost of maintaining D & I systems, are economically unable to do so. Without land titles, these small farmers find it impossible to acquire the required financing needed for D & I investments from the banking system. Further aggravating the situation are the vast expanses of under-utilized drained and irrigated lands for which no titles have been issued.

The issuance of land titles will enable the government to transfer some of the financial burden of the D & I system to those private individuals who benefit from the use of lands.

Drainage and irrigation activities are long-term investment activities. The Guyana Agricultural and Industrial Development Bank (GAIBANK), which is the recognized agricultural financing agency, admits to providing more credit for short-term loans as against long-term loans for land development. They feel that a reformation of the land ownership structure is important for long-term investment in land development.

b. Cultural and inheritance practices

In Guyana, there is a cultural perception of the male as the *de jure* head of the household. The male is supposed to represent the family and household in business transactions, including applications for land leases and land tenure.

Historically, land and property inheritance patterns have been skewed towards the males in the family. Many women who may be *de facto* farmers and/or heads of households are unable to

access formal credit since they have no collateral value. Should the leaseholder die intestate the leased land automatically reverts to the Government.

Should a leaseholder die intestate, Guyana's law includes provisions for the surviving spouse along with other kin to be awarded portions of the estate, or they may wish to continue to cultivate the land in the name of the estate of the deceased.

If two people were single and living together, the law includes provisions for the surviving partner. This also applies in the case of leased-hold land. Regarding divorce in Guyana, division of property varies according to individual representation. If ownership and use of land is involved, the court will rule according to the individual case.

c. 1991 proposed agrarian reform

In an attempt to provide small farmers with improved tenure security by converting their leasehold interests into free-hold titles, the National Registration and Agrarian Reform Plan was drafted.

In this Plan, the distinction between state and government lands would have been abolished and all government lands would have become state lands. According to the MOA, the first target group would have been farmers holding title to state lands of six hectares or less.

Other aspects of the Agrarian Reform Plan which were planned for a later date included:

- determination of economic-sized land holdings;
- consolidation of fragmented land holdings;
- organization of the beneficiaries of the reform;
- ensuring the availability of appropriate agricultural credit facilities;
- identification of appropriate infrastructure;
- zoning of areas according to their soil types and other characteristics;
- ensuring adequate markets for the sale of agricultural produce.

2. Rural development policies and programs

Over the years, rural development has been an inherent part of Guyana's agricultural development strategy. Since independence, a number of policies have characterized rural

development in accordance with the general policies governing agricultural development and growth. The most notable rural development schemes have been the Land Settlement Programs and Cooperativization.

a. Land settlement programs

As was mentioned in Chapter II, in keeping with the 1966 policies of the Agricultural Development Plan, attention was paid to land settlement programs as part of the rural development program. Figure II.1 presents the 15 land settlement schemes covering more than 300,000 acres (120,000 hectares) of drained and irrigated land.

The Lands and Surveys Department of the Ministry of Agriculture continues to be the legally empowered authority to promote the development of these lands, but as discussed later, this department now works in collaboration with other agencies on applications for leases, etc.

b. Cooperativization

The agricultural sector in Guyana has always had its own social, cultural and historical problems, such as the fact that there has always been a small number of large-scale farms and a large number of small-scale farms. One of the problems addressed by policy formulators in the late 1960s and early 1970s was how to obtain some of the benefits of the economies of large-scale production while at the same time preserving the benefits arising from the stronger motivation of small producers when they have their own farms.

Cooperativization of farming was promoted as the most effective means of reconciling these objectives. In a system of cooperatives, small farmers would be able to process and market their products more economically; purchase supplies and equipment in bulk; obtain cheaper credit, insurance and other services and facilities; and all of this without sacrificing the psychological incentives and social benefits derived from independence and self-reliance.[12]

Cooperativism was the cornerstone of rural development in the early years of independence, as reflected in a 1965 statement by the minister of economic affairs:

> the cooperative is regarded by my government as the most vital aspect of the nation's economic re-construction. (Sessional paper at opening of Legislature, September 1965:6)

---

[12] Cooperativism was not new to Guyana. Historically, Guyana's Amerindians have led a cooperative existence, and the freed slaves have done likewise (indeed, Guyana's history boasts of freed slaves purchasing entire villages).

Scores of new cooperative societies sprung up literally overnight:

- Agricultural cooperatives grew from 13 in 1966 to 61 by 1969.

- Societies for the purchase or lease and development of land, totalling 69 in 1964, increased to 132 by 1969.

- Agricultural Marketing Societies jumped from 17 in 1966 to 44 in 1969.

Traditional cooperative societies either maintained their original numbers or declined:

- Rice Milling Societies (two) and Farm Machinery Societies (four) maintained their numbers.

- The Agricultural Thrift and Credit societies in existence since 1945 declined from 145 in 1964 to 101 in 1969.

As stated by the cooperatives commissioner in that same year:

> a study of the operations of individual societies from year to year will show that societies have made little, if any, progress and that some ceased to be of interest to their members (Ministry of Cooperatives, Annual Report, 1969:30).

While successful for a short period of time, and strongly supported in other areas of government, numerous abuses plagued the development of agricultural cooperatives.[13] That, combined with problems with either soil or topography, eventually led to their decline.

Today (1993), there are very few agricultural cooperatives truly functioning, despite the fact that 1,490 cooperatives still appear in the records.

Most of the original members of the Land and Farming Cooperatives have either grown old with heirs not interested in farming as a vocation, or they have migrated and left letters of administration to people who are far removed from the spirit of cooperativism.

Among the few functioning cooperatives that are holding their own are the Fisherman's and Credit Cooperatives. Table III.2 lists the functioning cooperatives in which rural women play a major part. Of these, seven are agriculturally oriented and nine are not.

---

[13] The organization of cooperative groups by 'self-seeking' leaders and the pushing 'from above' of people into groups continued. But worst of all was the registration of numbers of non-farmers who became members of land and collective cooperative societies. These people were neither farmers nor persons endowed with the cooperative spirit.

Table III.2. Functioning cooperative societies that had women in their membership in Guyana in 1993.

No.	Name of societies	Region	Type of work
1.	West Demerara Market Cooperative Society Ltd	3	Vendoring
2.	Vergenoegen Peasant Cane Farmers Co-op Society	3	Sugar cane
3.	Vergenoegen Agricultural Producers Co-op Society	3	Ground provisions, plantain, bananas and cassava
4.	Boeraserie Land Co-op Society	3	Ground provisions, plantain, bananas and cassava
5.	Naamryah Land Co-op Society	3	Ground provisions, plantain, bananas and cassava
6.	Hubu Land Co-op Society	3	Ground provisions, plantain, bananas and cassava
7.	Supply/La Bonne Mere Producers Co-op Society	4	Ground provisions, rice and coconuts
8.	Marfriends Land Co-op Society	4	Ground provisions
9.	Gay Craft	4	Handicrafts
10.	St. Cuthbert's Craft Producers	4	Handicrafts
11.	Guyana Craft	4	Handicrafts
12.	East Coast Fishermen Co-op	4	Vendoring
13.	Rosignol Catering	5	Catering
14.	New Amsterdam Catering	6	Catering
15.	Bartica Catering	7	Catering
16.	Essequibo/Pomeroon Co-op Society	2	Fish

Source: Co-operative Division, Ministry of Works, Communication and Regional Development, October 1993.

3. Credit policies and sources

The 1966 Agricultural Development Plan saw credit as a very important input for agricultural development. The policy therefore was to create state lending institutions to supplement private lending institutions.

a. Formal sources of credit

i. Guyana Cooperative Agricultural and Industrial Development Bank (GAIBANK)

This public sector institution was formally established in 1973 as the Guyana Agricultural Bank. In 1978 the bank merged with the Small Industries Corporation to form the Guyana Cooperative[14] Agricultural and Industrial Development Bank (GAIBANK). GAIBANK was established to:

- Promote investment in development projects in agriculture and industry.
- Provide financial credit and related advisory services for the development of agriculture and industry.

Credit policy

According to the Bank's 1992 Credit Policy, priority is given to investments in agriculture, livestock, fishing, forestry, and manufacturing export-oriented and import-substitution projects. Eligible projects may also be newly established businesses, expansion projects, modernization, or the financing of working capital items.

The Credit Policy stipulates that "prospective borrowers are obliged to provide full details of past performance including information on past production and marketing performance, estimates of cost, cash flow projections, the financial statements for the last two years and a detailed list of assets to be offered as security. No credit will be considered unless GAIBANK is satisfied regarding the accuracy of information on the applicant's past and present performance."

Funding

Funding is provided either from GAIBANK's own resources or from those secured through external lending agencies. Loans funded in local currency carry an interest rate established by the Central Bank. At the time of writing, February 1994, we were advised that the rate was 17.5%.

---

[14] In keeping with the policy of cooperativism referred to earlier.

Loans funded in foreign currency carry an interest rate of 15 percent. Interest rates are subject to quarterly revisions by the Bank's Board of Directors and are effected without notice to the client.

Collateral

The types of collateral accepted include insurance certificates, personal guarantees, charges on machinery/equipment, mortgages and debentures on land, buildings and other assets.

Services

GAIBANK provides supervisory credit facilities aimed especially at ensuring effective project implementation. In addition, the bank offers consultancy services in the preparation of project pre-investment and feasibility studies at agreed rates.

From 1987 to 1991, GAIBANK received 10,400 applications for agricultural loans, of which 9,011 (86.6%) were approved, with a total disbursement of 398.5Mn Guyana dollars. However, over those five years, there has been a gradual decline in the number of applications and approvals, falling from 2,443 applications and 2,179 approvals in 1988 to 1,765 and 1,451 respectively in 1991 (See Table III.3).

GAIBANK as a source of credit for agriculture seems to have declined (See Table III.4) relative to the commercial banks, which at the time of this study were five:

- Guyana Bank of Trade and Industry
- Guyana National Cooperative Bank
- National Bank of Industry and Commerce
- Bank of Nova Scotia
- Baroda Bank.

Traditionally, these commercial banks have not lent large sums to the agricultural sector, but in the last two years their share of lending to the sector seems to have increased. Their interest rates on loans in December 1993 ranged from 21% to 24%.

All the commercial banks operate with strict collateral policies. Therefore, it is the larger farmers who tend to benefit from the efficiency and timeliness of loan processing by the commercial banks, since they are able to meet the collateral requirements.

Table III.3. GAIBANK: Five years at a glance (1987-1991).

	SGMn.											
	Applications				Approvals				Disbursements		Repayments	
Year	Agriculture		Industry		Agriculture		Industry		Agriculture	Industry	Agriculture	Industry
	No.	Value	No.	Value	No.	Value	No.	Value	Value	Value	Value	Value
1987-1991	10 400	633.7	336	681.3	9011	412.1	265	621.9	398.5	1924.1	395.3	1228.6
1991	1 765	275.6	37	217.3	1451	152.2	20	24.2	159.0	1108.9	196.9	852.7
1990	2 013	147.5	47	68.3	8141	110.9	36	68.7	96.1	414.4	90.4	218.3
1989	2 221	109.4	199	269.8	1928	80.8	84	221.0	75.1	312.4	52.6	79.6
1988	2 443	69.8	78	64.7	2179	46.8	48	49.1	44.5	65.2	32.2	62.6
1987	1 958	31.4	74	61.2	1612	21.4	77	258.9	23.0	23.2	23.2	15.4

Sources: GAIBANK Annual Reports 1987 and 1988[15].
GAIBANK's Consolidated Portfolio Summary 1989-1991.

[15] The latest annual report put out by GAIBANK is from 1988.

Table III.4. Lending by the commercial banks and GAIBANK to the agricultural sector, 1982-1992.

Year	Annual increase in lending (G$M)	Contribution to increase in lending by:			
		Commercial banks		GAIBANK	
		Subtotal	% of total	Subtotal (G$M)	% of total
	(A)=(B) + (D)	(B)	(C)	(D)	(E)
1982	29.7	-2.6	-8.8	32.3	108.8
1983	21.1	0.9	4	20.2	96
1984	22.4	10.4	46	12	54
1985	47.9	28.3	59	19.6	41
1986	5.6	-5.4	-96.4	11	196.4
1987	49.7	30.6	60	19.1	40
1988	104.4	57.6	55	46.8	45
1989	198.2	120.7	61	77.5	39
1990	190.0	83	56	107	17
1991	624.6	472.8	76	151.8	24
1992	855.9	645.6	76	210.3	24

Source: Bank of Guyana, 1993.

The decline of GAIBANK[16] as a source of credit for agriculture has been attributed, in part, to the Bank's internal problems -poor management and high risk lending- as well as to the devaluations of the Guyanese dollar.

[16] Discussion with senior officials of GAIBANK reveal that these figures are in nominal terms, and while admitting to some decline they feel that the data provided by the commercial banks may have a different interpretation of "loans for agriculture;" that in fact the figures may include loans for "industry" as well. This was not been clarified.

ii. Institute of Private Enterprise Development (IPED)

The Institute of Private Enterprise Development, which lends foreign donor funds on soft credit terms, is assuming increasing importance as a source of non-commercial lending. It lends at a lower rate than the commercial banks and has a more flexible collateral policy. The institute claims that it aims at the micro-level where people have ideas and skills, but lack the finances to put their ideas to work. Apart from assistance by way of soft line loans, technical and management assistance is provided free-of-cost to borrowers.

In its 1993 Annual Report, IPED reported a total disbursement of about 407,000,000 Guyana dollars (G$407Mn) to 2,257 small business activities since its inception in 1986. Seventy-five per cent of the projects IPED has funded have been agricultural or agriculture-related, with rice cultivation projects heading the list at 622 (27.5%). (See Table III.5)

Table III.5. IPED-funded small business activities by total number and percentage for 1986-1992.

Activities	Total number	Percentage
Agriculture-related		
Rice cultivation	622	27.5
Fishing	352	15.5
Pig/poultry rearing	281	12.3
Dairy farming	201	8.8
Food manufacturing and agro-processing	111	4.8
Ground provision	92	4.17
Logging and charcoal	41	1.8
Bee keeping	3	0.13
Total	1703	75.00
Manufacturing-related		
General manufacturing - garment, craft, furniture	343	15.73
Mechanical and other workshops	189	8.3
Soft toys	14	.62
Wooden toys	8	.35
Total	2255	100.00

Source: IPED - 7th Report and Accounts (1992) Table 1.

Training offered by IPED

IPED stipulates that an agreement to receive training, free of cost, particularly in the area of management and entrepreneurial development, is conditional to the granting of a loan to a client. At the management level training includes the preparation of a one year business plan; aspects of marketing including packaging, display, pricing and advertising; record keeping; and specialized training (e.g., agro-processing) done mainly at the client's location and on an informal level.

IPED claims that no less than 95% of its clientele have been the beneficiaries of at least one training program. It is further claimed that despite the relatively low level (8.7%) of recorded female clients (See Table III.6), an estimated 42 percent of all persons trained by the institute are women -daughters, wives, daughters-in-laws, or other family members who will keep the books -women who are clients in their own right, or women who are joint applicants with a male business partner.

Creditworthiness

Of IPED's 197 female clients, 192 (98.5%) have been steadfast in paying their installments. Of the five women who have reneged on their payments, two are alleged to have migrated. The default rate for IPED's male clients averages 15-20%. Because of the creditworthiness displayed by the female clients, a policy decision was taken in 1987 to encourage joint loan applications; as a result, the joint loan classification has jumped from 0% in 1986 to 26.2% in 1992 (Table III.6).

Table III.6. IPED total number of loans by year and classification (1986-1992).

Year	Total number of loans	Male	Female	Joint
1986-1992	2257(100.0)	1468(65.1%)	197(8.7%)	592(26.2%)
1986	25	18	7	0
1987	102	73	17	12
1988	165	87	9	69
1989	303	199	20	84
1990	462	343	32	87
1991	540	367	44	129
1992	660	381	68	211

Source: IPED - 7th Report and Accounts (1992). Classification of Loan Recipients.

b. Difficulties of the small farmer in obtaining formal credit sources

The GAIBANK identifies six categories of collateral security:

- Deposits of title documents with the lender
- Assignment of sale proceeds
- Third party guarantee
- Debenture
- Mortgage
- A charge on assets

Of these six categories of collateral security, the bank seems to favor a charge on assets; and more specifically, a charge on land. The bank claims that the first five collateral security categories have high transaction costs for the bank in the event of loan default problems.

GAIBANK's preferred collateral is skewed towards a charge on transported lands -lands that are privately owned by individuals either singularly, jointly or severally- because such ownership establishes clear property rights and ownership and is recorded in the Deeds Registry of the Supreme Court of Guyana.

But the fact that the land is transported land is not sufficient reason in itself to obtain the bank's favorable consideration. The bank prefers that

- the D & I systems in that location are in working order;
- that the lands contiguous to the lands over which the charge is affected are productive;
- that market prices for lands do not fall significantly at the time of sale.

But these conditions are not easy to meet. Even if they are met, not many parcels of transported lands are currently owned by farmers.

Credit procedures

When the Regional Agricultural Extension Division existed prior to its recentralization, procedures required that the farmer who decided to seek credit from GAIBANK first had to

seek the intervention of the Regional Extension Staff member, since GAIBANK worked in collaboration with the extension services. The Regional Extension Staff member then made a preliminary assessment of the farmer's need for credit based on the following criteria:

- the farmer's capability to manage the proposed enterprise;
- the farmer's technical capability;
- the economic feasibility of the enterprise;
- the financial status of the applicant-farmer.

If the officer was confident of his client, he would assist him in preparing a work plan. This plan was then examined by the GAIBANK credit officer who would do an in-field review to verify the information. If the credit officer was satisfied, an official application was filled out. This official application was then taken to GAIBANK's head office for processing. The farmer was subsequently notified of the acceptance or rejection of his application.

Given all these conditions, it is no wonder that the number, amount and average loan size for food crop production, mainly a small farmer activity, was ranked lowest of GAIBANK's loan disbursements. (See Table III.7)

Table III.7. Number, amount and average loan size by type of investment for the sample of loans disbursed, GAIBANK, 1987-1991.

Type of Investment	No. of loans		Volume of disbursement		G$ Average size
	N	%	G$M	%	
Rice	317	74	7.50	48.0	23 659
Sugar cane	2	1	0.05	0.3	25 000
Food crops	14	3	0.15	1.0	10 714
Livestock	33	7	0.70	4.5	21 212
Fishing	35	8	1.00	6.4	28 571
Other agriculture	22	5	0.30	1.9	13 636
Industry	7	2	5.86	37.9	837 143
Total	430	100	15.60	100.0	36 279

Source: Sample data; GAIBANK. (Hunte, 1992).

We have been advised that with the non-functioning of the regional system, farmers now come directly to the GAIBANK, make their applications, and pay a small fee for assistance in document preparation, and that this sets in motion the process of in-field review.

The impression, however, is that these procedures have not yet been documented and therefore are not available upon request by farmers. We have been advised that farmers know what they have to do. Such undocumented procedures may open the doors to abuse by unscrupulous persons.

Reluctance to pledge land titles

With regard to the use of land titles as loan collateral, there has always been a reluctance on the part of some title holders to pledge their property rights to obtain loans for farm investment.

The main fear is crop failure. The risk of losing all that a farmer possesses is too great. And in Guyana this is not an impossibility. Entire crops have been wiped out because of deteriorated and/or poorly maintained drainage and irrigation systems.

Even in conditions where the D & I systems are maintained, for the small farmer efficiency can only result if all the lands in the system are simultaneously utilized and farmers have the same demand sequence for water. In addition, good farmers suffer when pests from an adjacent plot not under cultivation cross over to the cultivated land and destroy the crop. These are among the reasons why small farmers are reluctant to invest in credit.

c. Informal sources of credit

Informal credit has popularly existed in rural Guyana. The farmer sees such credit as quick and confidential with easy-to-understand repayment terms. Some informal sources of credit include money lenders, private shopkeepers, family members and the historical "box money."

The money lenders and private shopkeepers are usually prominent and/or wealthy community members. The interest rate in many instances far exceeds that of formal credit institutions, but in most cases the mathematics of the interest rate is not even discussed. One repayment figure is agreed upon and a signature may or may not be required. When the lender is a friend or family member, interest may or may not be charged, but there is a moral obligation not only of repayment but of moral indebtedness, sometimes for life.

i. Box money

The Guyanese phenomenon of box money, variously known as "su su," "meeting turn," "partner," or "throwing box," has its roots in Africa and is based on "Ibenne," which according to Amadiume (1987) is "the true spirit of unity binding persons through common motherhood."

Box money demonstrates a spirit of unity that depends on association, confidence and honest dealing. Here confidentiality is in relation to the immediate community, since secrets are few in the small rural communities and the close community relationships which prevail there. Community sanctions have been known to apply in instances where borrowers attempt to renege.

Box money is a method of saving which enables a contributor to obtain a lump sum of money usually used for specific purposes such as investing in agricultural activities, acquiring an animal or even preparing for a wedding.

Shankland (1916) describes how the "box" works:

> If a box is a weekly one with 50 subscribers at 50 cents a week, each subscriber pays his subscription to the box-holder and pledges to continue to do so for 50 weeks, thus allowing each contribution to draw one week's pool.
>
> At the close of each week, a ballot is held and the winner of the ballot receives the value of the box for that week. As a subscriber wins a pool, his name is excluded from the weekly ballot and he then is only required to keep up his subscriptions to the end of the life of the box, or 50 weeks.
>
> It is a simple, but crude method of saving. Although use is made of the lottery system, it is absolutely devoid of any element of gambling.
>
> In point of fact, the ballot closely resembles the drawings for the redemption of debentures. (Shankland 1916)

A traditionally female-dominated informal economic institution, box money is still very much used by women, especially in rural Guyana.

4. Regional and rural administration

In order to promote a local democratic system which would allow people in their different localities to assist in the formulation and implementation of plans to suit their specific aspirations and needs, the government created a system for decentralized administration.

In 1979, when regionalization took place, it was generally agreed that rural development was hindered by plans and programs originating from Georgetown, plans which were sometimes ludicrously incongruent with, and callously insensitive to, the realities of the on-the-spot situation at rural locations.

a. Ministry of Regional Development

Under the regional system, the Ministry of Regional Development (MRD) was created and a complete administrative structure with vast governmental powers was located at strategic points within each of the ten administrative regions.

A resident regional chairman was vested with political policy-making authority, and alongside him a resident regional executive officer, in whom policy-executing administrative authority was vested. Resident regional representatives of all government ministries and departments, including the ministry of agriculture, were responsible to and answerable to the regional executive officer (See Appendix 6). Thus regionalization affected and still affects the operation of the various other ministries and institutions including agriculture and matters pertaining to land generally since all activities have to be coordinated through the MRD.

b. Ministry of Agriculture (MOA)

At the program level, the leading institution in the agricultural sector is the MOA with its five main technical departments and five main administrative departments, as follows:

Technical	Administrative
1. Crops and Livestock	1. General Administration
2. Lands and Surveys	2. Personnel
3. Fisheries	3. Project Administration
4. Hydraulics	4. Finance
5. Hydrometeorology	5. Planning

See Appendix 5.

The MOA has overall technical responsibility for the agriculture sector, its main goal being the total development of the sector.

The functions of the MOA include:

- agricultural policy formulation and implementation;
- sectoral planning and programming;

- identification, execution and management of agricultural projects;
- negotiation of external financing for agricultural projects;
- institutional and program(s) coordination in the sector;
- data collection, analysis and dissemination of information.

The MOA is financed principally through the central government's annual budget. Supplemental funds are provided in the form of loans and grants by bilateral and multilateral agencies to finance specific projects and activities. The ministry's budget comprises two categories, recurrent and capital. (Table III.8 refers)

Table III.8. Ministry of Agriculture: Current and capital budget, 1989-1993.

Years	Current budget		Capital budget	
	G$000	MOA Share in current budget (%)	G$000* G$Mn**	MOA share in the capital budget
1989	20 571	0.4	289 375*	22.1
1990	52 014	0.6	508 789*	14.1
1991[17]	161 594	0.8	809 407**	15.4
1992	465 275	1.8	961 815**	16.7
1993	466 076	1.8	1 562 168**	17.1

Sources: Guyana Estimates of the Public Sector Current, and Capital Revenues and Expenditures for 1991-1993.

As reflected by the MOA share in the current and capital national budget, allocations, especially those for current expenditures, have remained at the extremely low 1980s levels. In fact, allocations have worsened (with the exception of 1992 and 1993).

This worsening of the ministry's financial situation, the gradual deterioration in working conditions, and low salaries have all conspired to produce a negative effect on the overall performance of the sector. Perhaps the hardest hit has been rural farming.

[17] The figures for 1991-1993 give a false impression of increases in releases. In fact, the value of the Guyana dollar was allowed to float and seems to have at the time of writing settled somewhere between 125 and 129 to one US$.

i. Regionalization of services

With the 1979 advent of regionalization and its intended integration and coordination of all support and institutional services, the Irrigation Management and Agricultural Extension Services of the MOA fell under the direct control of the regional system. Provision of technical support continued to be the responsibility of the MOA.

The reality with respect to the agricultural extension services, however, has been that since its transfer to regional administration (RA) there have been more problems leading to a virtual collapse of services.

Apart from severe financial and resource constraints, there were other factors which led to this inevitable collapse, including weak coordination between the MOA and RA, and an absence of a common approach to policy implementation and clear procedures for control, supervision and reporting.

Perhaps the major contributing factor was inefficient management of resources. This happened when some professional staff chose to resign rather than relocate when they were transferred from the central office in Georgetown to the regional locations.

Consequently, the offices were poorly staffed, which affected the operational efficiency of Guyana's agricultural extension services. Again, the brunt of the burden of these problems rippled out to rural farmers.

Beginning in 1993, based on a funding agreement with the Canadian International Development Agency (CIDA) and the Inter-American Institute for Cooperation on Agriculture (IICA), these extension services have been recentralized and are now under the full control of the MOA.

c. The private sector and rural development

Since 1989, in accordance with structural adjustment policies, the GOG has been moving away from a development strategy based on heavy state intervention and marginalization of the private sector, to one based primarily on supporting private sector expansion in the productive sectors.

With the opening up of the economy, particularly the establishment of a floating exchange rate for the Guyanese dollar, and the reduction (or elimination in some cases) of import licensing and import tariffs, the private sector is now able to play its part in the development of rural agriculture.

However, as is the case with other structural adjustment measures, which have only been recently introduced, any true assessment of the impact of the private sector involvement in agriculture and rural development is difficult.

5. Technology generation and transfer

Prior to 1984, no specific policy for local technology generation and transfer existed. The MOA was the major extension service agent, transferring technology from developed countries such as the US, Canada, and England, and to a lesser extent from socialist block countries such as China and the Soviet Union. The National Agricultural Research Institute (NARI), created in 1984, is presently the major technology generation institute with services directed both at large and small farmers.

While NARI is the largest technology extension effort in Guyana, various communities have within the last four years been receiving technology transfer from private businesses, NGOs and international agencies as well.

a. National Agricultural Research Institute (NARI)

NARI is funded primarily by the central government, but some projects receive funding from international agencies.

Its mandate is the following:

> To increase crop and livestock productivity, including fisheries and forestry, for national food self-sufficiency and export. It has to develop sustainable production systems that have a reduced import-dependence and increased aggregate output.

NARI works closely with local agencies, the regional Caribbean Agricultural Research and Development Institute (CARDI), and several international research institutions, including the International Center for Tropical Agriculture (CIAT), the International Rice Research Institute (IRRI), the International Institute for Tropical Agriculture (IITA), the Brazilian Agriculture Research Corporation (EMBRAPA), and the United Nations Development Program and Food and Agriculture Organization (UNDP/FAO).

The Institute's research is undertaken within five broad agro-ecozones:

- the coastal plain
- the intermediate savannahs
- the upland rain forests
- the mountains
- the Rupununi savannahs

NARI reports that it is currently conducting research in two of these five broad Agro-ecozones —the Coastal Plains and the Intermediate Savannahs— while providing technical support for the upland rain forests, the mountains and the Rupununi savannahs.

The Coastal Plains Field Research Unit (CPFRU) emphasizes rice improvement research, but also conducts research on root and tuber crops, plantains, vegetable crops and pasture improvement. The CPFRU also houses the Institute's genetic resource facility and germ plasm collection.

The Intermediate Savannahs Field Research Unit (ISFRU) places emphasis on research activities for large-scale mechanized farming systems for such open-row crops as cotton, cowpea, soybeans, peanuts, corn and sorghum, along with research on pasture improvement and sheep and goat adaptability to the ecozone.

At the Institute's headquarters and central laboratories at Mon Repos on the east coast of Demerara, the laboratories and greenhouse provide back-up services in

- entomology
- plant pathology
- weed science
- biotechnology, which includes tissue culture and soil microbiology
- soil and tissue analyses
- land use surveys

In 1991 a new blast-resistant rice variety was released.

Tissue culture on four crops —plantains, pineapples, cassava and sweet potatoes— is said to have been successful. An estimated 15,000 seedlings of these four crops have been placed in farmers fields for evaluation and are reported to have been performing well.

An integrated pest management (IPM) approach in which natural predators and parasites are identified for rearing and release into particular areas, has been adopted.

For example, it is reported that the Institute has produced and has been putting into pineapple fields a highly effective acoushi ant bait.

b. Ministry of Agriculture (MOA)

Prior to 1984, the Division of Extension and Education of the Ministry of Agriculture was the main agency responsible for the execution of crops and livestock extension services in Guyana. Other agencies have also had an extension responsibility over the years, such as the Guyana Sugar Corporation (GUYSUCO), the Mahaica/Mahaicony/Abary project (MMA), the Fisheries Division of the Ministry of Agriculture, the Guyana Rice Board (GRB), Guyana Cooperative Industrial and Agricultural Development Bank (GAIBANK), and some private organizations and international agencies.

i. Role of the extension and education division of the MOA

In 1981, the role of the extension and education division was perceived as a broad-based generalized service with primarily regulatory functions.

Trotz (1985:2), principal agricultural officer of the extension and education division, claims that

> by 1984, the Division's role seemed to have changed to that of a more specialized agency geared to perform specific professional roles.

The two main tasks were:

- satisfying farmers' needs for appropriate and effective technology which would ensure profitable returns on their investments;
- training field staff in technical agriculture, extension work and communication techniques.

Trotz further states that the Division's other tasks at that time included:

- assisting in the development and implementation of policies designed to facilitate agricultural development;
- facilitating the development and implementation of regional agricultural programs;
- providing moral and professional support and guidance to field staff;
- providing technical extension and communications training to other agencies within the agricultural sector as needed or requested.

ii. Regional extension service

Within the regional system, the regional executive officer (REO) was charged with the daily administration of all executive officers operating under the regional system, including the agricultural officers. It was the REO's responsibility, therefore, to supply agricultural officers with basic infrastructure including housing, transportation, field equipment and field staff.

Agricultural officers (AOs) and livestock officers (LOs) were responsible for the daily management of their respective sub-professional staff —agricultural field assistants (AFAs) and livestock assistants (LAs).

The AFAs and LAs should have been in daily contact with the farming communities. The AOs and LOs should have served as technical advisors to regional agricultural committees which were charged with the responsibility of planning the region's agricultural development.

Unfortunately, the regional system met with limited success in agricultural extension services. Committees experienced problems meeting, and even when they did meet and decisions were made, the extension staff was seldom provided with the wherewithal at the regional level to adequately perform their functions. Additionally, they were cut off from effective leadership at the center due to logistical problems, and the extension services have virtually collapsed in recent years.

In 1992, the decision was made to recentralize the extension services. Beginning in 1993, all staff were once more administered by the MOA.

iii. Commodity programs

The focus in 1993 was on commodity programs. All key commodities must be capable of producing beyond the subsistence level and the focus should be on the ecozones where the commodity is compatible to the extent that it is profitable.

The prime objective is best quality, and the intent is to develop at least ten model farms in each zone. Each commodity program is to be headed by a technical coordinator.

Among the commodities being focused on at the time of this writing are the following: rice, vegetables, coconuts, roots and tubers, seeds and legumes, poultry, livestock.

The strategic program profiles for all the key commodities are included in Appendix 8. For the purposes of this study, the general and specific objectives for the rice, vegetables, and roots and tubers commodities have been extracted, since they relate directly to crops being highlighted in this study. These three commodity objectives are presented in Table III.9.

The Ministry of Agriculture claims that in formulating these plans it has been gender neutral.

Table III.9. General and specific objectives for rice, vegetables, roots and tubers programs in Guyana in 1993.

Rice

General objectives	Specific program objectives/outputs
To improve the quality and productivity of existing cultivations To reduce the incidence of red rice in existing cultivations To promote quality-oriented technical packages To collaborate and work in a participatory manner with all agencies with similar objectives	Upon completion of this project in the fifth year, a total of 200 pilot farms would adopt red rice control technology and water management practices to improve productivity by 25%, and reduce the incidence of red rice by 80% of current levels. This program will influence 5000 farm families to respond likewise over the same period through informal educational field events.

Vegetables

General objectives	Specific program objectives/outputs
To promote quality production of selected crops with export potential To promote market-led technological packages To collaborate and work in a participatory manner with appropriate agencies	Upon completion of this project, 200 pilot farmers in six main regions will adopt export-oriented technology to improve the quality of vegetables by 80% above present standards. Over the same five-year period, this project will influence 5000 farm families to adopt improved practices which will raise quality and productivity by 50% in order to attain export capability.

Roots and tubers

General objectives	Specific program objectives/outputs
To promote the quality and productivity of selected crops To promote post-harvest technology for marketing and export of selected crops To collaborate with appropriate agencies in the promotion of these commodities	In six main regions, 300 pilot farmers would be influenced through formal and informal field events to adopt appropriate technology in order to improve quality by 80% above known levels and reduce post-harvest losses by 70%.

c. Other non-governmental organizations (NGOs) and international agencies

In response to Guyana's structural adjustment program and the liberalization of the economy, many economic activities that were formerly the sole responsibility of the GOG now receive assistance from NGOs, such as technology generation and transfer activities. For example, recently established local companies such as Caribbean Chemicals and Amazon Chemicals are facilitating easier, quicker and constant availability of fertilizers and pesticides.

In 1989, the Social Impact Amelioration Program (SIMAP) was designed to cushion the negative impact of structural adjustment on rural women and other vulnerable groups. SIMAP has been mobilizing funds for this purpose, locally and overseas, and some of this funding is being channeled to the agricultural sector.

The international agencies which channel agricultural project funding through SIMAP include the following:

- The World Food Program
- The World Bank
- The Inter-American Development Bank (IDB)
- The Inter-American Institute for Cooperation on Agriculture (IICA)
- The Federal Republic of Germany
- The European Economic Community
- The French Government
- The United Nations Development Program
- The Australian Government

Since 1989, the Futures Fund, a Guyana/Canada Development Project funded by the Government of Guyana and Canada through CIDA and executed by the Canadian Hunger Foundation, has also been of tremendous assistance to those rendered vulnerable by structural adjustment.

In addition, the International Fund for Agricultural Development (IFAD), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF) and the Pan American Health Organization/World Health Organization (PAHO/WHO) all render assistance through various on-going projects.

6. Formal training and education in agriculture

Over the years, policy statements in Guyana have stressed the importance of agriculture to the economy and therefore the importance of a professional attitude to agriculture, so that in addition to extension services the formal education system also offers training in agriculture. The 1993 Household Income and Expenditure Survey (HIES) estimates a 98% overall literacy rate. This survey also estimates that 96% of the total population —298,157 women and 308,478 women— have had the benefit of a formal education, ranging from primary to post-graduate level (See Table III.10).

Table III.10. Estimated general educational attainment by level and sex in Guyana in 1993.

Level	Male	Female	Total
Below Primary	62 159	62 985	125 144
Primary	165 057	167 089	332 142
Secondary	67 023	74 521	141 544
Graduate & Post Graduate	3 918	3 887	7 805
Total	298 157	308 479	606 635

Source: HIES (1993) Table 1.3.1.

But the survey further estimates that of the 606,635 formally educated members of the population, only 11,621 (1.9%) have technical training. Only 5,655 —a mere 0.9% of the formally educated population— are women with technical training. Worse, only 179 or 1.4% of the technically-trained population, are women with agricultural training. Table III.11 shows the survey's estimates of technically-trained persons.

Table III.11. Estimated resident diploma and certificate graduates by field and sex in Guyana in 1993.

Field	Male	Female	Total
Agriculture	374	179	553
Engineering/technology	2 924	427	3 351
Medicine/medical*	245	606	851
Crafts	1 125	1 345	2 470
Others	1 298	3 098	4 396
Total	5 966	5 655	11 621

Source: HIES (1993) Table 1.4.1.
*Includes laboratory technicians, nurses, etc.

Gender aside, the fact that out of 11,621 technically-trained persons only 553 (4.7%) are estimated to have qualified in the field of agriculture is, to say the least, discouraging. The country in question, after all, is a country where agriculture is not only one of its main pillars but where some 35% of the population is employed in the agricultural sector. It is therefore pertinent that agricultural training in Guyana be examined.

The following local institutions are among those offering training in agriculture:

- Guyana School of Agriculture (GSA), established 1963
- Regional Educational Program for Animal Health Assistants (REPAHA), established 1975
- The Faculty of Agriculture, University of Guyana (UG/FA), established 1977
- Primary and Secondary Schools
- Ministry of Agriculture (MOA) Training and Extension Division
- Guyana Sugar Corporation (GUYSUCO)
- Guyana Rice Marketing Board/Regional Administration, Mahaica/Mahaicony Abary Land Development Authority
- Some private institutions, such as the Institute for Private Enterprise Development (IPED), a credit institution

a. Guyana School of Agriculture (GSA)

The Guyana School of Agriculture is one of the main organizations responsible for providing Agricultural training in Guyana. In 1993, the school celebrated its thirtieth year of operations.

Objectives

On February 5, 1964, when it became a public corporation, its stated objectives were:

- To train persons in the theory and practice of agriculture
- To manage commercial farms and undertakings in accordance with good farming practices

Courses

The school offers two main courses: A sub-professional two-year Diploma Course, the general contents of which are indicated as follows:

Year 1 courses	Year 2 Courses
1. Chemistry	1. Soils
2. Botany	2. Soil Conservation
3. Zoology	3. Agricultural Economics
4. Crops	4. Food Science
5. Physics	5. Microbiology
6. Mathematics	6. Farm Accounts
7. Farm	7. Grasslands
	8. Crops (sugar)
	9. Crops (rice)
	10. Animal Husbandry
	11. Farm

A two-year Certificate Course with a strong practical bias has the following:

Year 1 courses	Year 2 courses
1. English Language	1. Farm Management
2. Biology	2. Crops II
3 Mathematics	3. Soil
4. Chemistry	4. Cooperatives
5. National Policy	5. Animal Husbandry
6. Farm	6. Farm Machinery
7. Crops I	7. Farm

Subsidiary courses

Short vacation courses have also been prepared to assist farm families in all areas of production. GSA's program also provides for attachment courses for community high school students on work-study assignments.

Entry requirements

A secondary education is required for entry into the diploma course —at least four subjects at Caribbean Examinations Certificate (CXC) or its equivalent, the General Certificate Examinations (GCE). Mathematics, English and a science subject must be included.

For entry into the Certificate Course, some secondary education is preferred, but a sound primary school education is accepted.

Gender

There are no overt gender restrictions, but our conversations with rural farm families, especially Indo-Guyanese farm families, reveals a cultural reluctance toward women's participation. The reasons cited include the implications of general dormitory living. Most of the Afro-Guyanese farm families consulted seem to have no problem with this type of residential arrangement, but will give preference to the male child if a family choice has to be made. The preferential family training bias in both cases seems to be toward males.

Graduates by gender

The school claims that approximately 1,600 Certificate and Diploma students have graduated in its 30 years of operation. Some 400 (25%) were women. In the first two years of the school's existence, there were no female applicants. Thereafter, the average male/female application, admission and graduation ratio has been in the vicinity of 4:1. The number of Certificate and Diploma graduates by sex for the years 1983-1993 are reproduced below: (Table III.12)

Table III.12. Guyana School of Agriculture graduates by course and sex (1983-1993).

	Certificate			Diploma		
Year	Male	Female	Total	Male	Female	Total
1983-1993	170(60.3%)	112 (39.7%)	282	305 (78.6%)	83 (21.4%)	388
1983	18	5	23	27	7	34
1984	17	17	34	32	6	38
1985	15	10	25	37	4	41
1986	20	16	36	30	10	40
1987	19	15	34	31	10	41
1988	10	11	21	31	8	9
1989	21	10	31	28	9	37
1990	15	8	23	29	3	32
1991	14	8	22	25	11	36
1992	12	5	17	16	5	21
1993	9	7	16	19	10	29

Source: Guyana School of Agriculture records.

Just under 40% of the graduates in the Certificate course were women. More that 20% were women in the Diploma course.

Employment of GSA Graduates

Very few GSA graduates have taken up farming on their own on a full-time basis. The principal at GSA is of the opinion that the primary disincentive is unavailability of access to credit, particularly with respect to the female graduates. This is due primarily to lack of collateral. According to the principal, even when parents have titled land, they are reluctant to pledge those rights for fear that their female child would be unable to manage the activities, and loss of crops, among other reasons. But Paul (1992) sought the views of 19 second-year students who were prospective Certificate in Agriculture graduates —11 men and 8 women. They were asked about their reasons for their program selection, among other subjects. Table III.13 describes their responses.

Table III.13. Reasons for selecting the certificate in agriculture program.

Reasons	Total # of Respondents[18]	Percentage
1. In order to help in the agricultural development of my country.	18	94.73
2. Because I would like to be a farmer.	1	5.26
3. Because I hope to cultivate state lands.	0	0
4. Because my relatives are farmers and I would like to be one as well.	2	10.53
5. Because most of my friends applied for the course.	0	0
6. Because I felt like continuing my studies.	16	84.21
7. Because this is an opportunity for me to qualify myself.	17	89.47
8. Because I would like to work as an agricultural technician.	14	73.68
9. Provides the necessary qualification for me to enter university.	11	57.89
10. The qualifications will help me to get a good office job.	11	57.89

Source: Paul (1992:25&42).

[18] While secondary education is preferred, a sound primary education is accepted. Therefore admission to this vocational institution is possible without any formal certification.

While 18 respondents (94.73%) claimed that assisting in the agricultural development of the country was one of the motivating factors behind their entry into the GSA, only one respondent would like to contribute to that development by pursuing a career as a farmer in his own right. The majority, 17 or 89.47%, saw entry into GSA as educational advancement, 11 (57.89%) as a stepping stone to a university education, the same number saw it as a nice, clean office job, and 14 (73.69%), almost three-quarters of the respondents, because of the lure of a salaried monthly job as an agricultural technician.

The present situation is that the MOA, the NARI, the GUYSUCO and the GAIBANK are all major employers of GSA graduates; some 80% of the staff at the GAIBANK are GSA graduates.

But Paul's survey reflects another dimension to the lack of motivation for choosing a farming career. Apart from the fact that 37% of the respondents had some exposure to agriculture science as a subject at school,

> about 74% of the parents had nothing to do with farming...approximately 60% of the students never worked at any job, including that of a farmer... (Paul, 1992:18)

Later in this study, in the discussion on admission restrictions to the University of Guyana Agriculture Department, the point is made that, for persons to be motivated to make agriculture their professional career, they would have had to have had a "love" for agriculture as an activity.

With no prior exposure to agriculture, no childhood experience of the joys of watching nature at work and of harvesting and, most importantly, without having experienced the satisfaction of earning an income from the earth, the graduate looks to a secure salaried job.

It seems, however, that after some time most graduates do turn to small-scale farming while still holding their salaried agricultural-related jobs. But very few ever get involved in large-scale farming.

As far as land for farming is concerned, in the absence of specific data, our impression is that there are few GSA graduates among applicants for cultivation plots in the various land development programs. Modalities, even for farm land acquisition by lease in the empoldered/drained and irrigated farming areas, are not addressed in the institution's listed courses.

Restrictions

One of the major restrictions in recent times has been the cost of room and board, approximately G$30,000 annually. The school's administration feels that this is out of reach for most aspiring students, especially those who come from subsistence farming families.

If the findings of Paul's 1992 Survey with regard to the absence of farming parental background are to be used as a guide, then we can assume that the children of subsistence level small-scale farmers have not been benefiting due to a double financial restriction. In addition to the dormitory fees, there is the restriction imposed at the educational entrance requirement level since examination fees for the CXC and GCE 'O' Level entrance requirement for the Diploma in Agriculture course are often out of the financial reach of the subsistence farming family. Private sponsorship has not exceeded 30%.

Over the years, GSA has suffered from a deterioration in its physical plant and facilities, and in 1991 the school principal launched a G$12 million appeal fund for its rehabilitation. Rehabilitation proposals were also made to NGOs and international aid agencies.

b. Primary and secondary schools

Agriculture in Guyanese schools has moved from "yard work" as punishment for bad boys and school gardening for the "not-so-bright" boys and girls, to changing the pre-independence curriculum and activities in schools —especially those in agricultural areas— to help change the production pattern in Guyana.

School gardening

No doubt the efforts on the part of some teachers were sincere, but school gardening, which has been taught since the late 19th century, did not benefit the local people in any substantial way.

Norman Larby studied the Education System of Guyana under the aegis of the UNESCO Planning Unit from July to December, 1964. He commented that:

> The catalogue of reasons for the failure is long. Holidays interfere with the routine seasonal tasks such as planting and harvesting. Pupils regard gardening as unwelcome and unnecessary drudgery interfering with more important lessons.
>
> Some parents are resistant to it because they regard education as a means of moving their children off the land rather than preparing them to return to it.
>
> Teachers have been known to use school gardens as a subsidiary source of income derived from the free labor of their pupils.
>
> There are many other reasons that contribute to the almost inevitable results. (Larby, 1964).

In 1974, P.A. Reid, then Deputy Prime Minister and Minister of National Development, added some other causes to Larby's list, including:

- Negative attitudes toward manual work; too many advisers and too few farmers.
- Headmasters and staff often resent any additional pay to the agricultural teacher.[19]
- Poor teacher quality.
- The belief that agricultural education is an unnecessary appendage to so-called "proper school work," and not an integral part of the curriculum.
- The failure to realize that other subjects, such as biology or chemistry, should be taught through agricultural education as a means of reinforcing all the basic sciences.

By 1974, agriculture was introduced at the primary school level, due to the political sentiment that

> the younger the child makes acquaintance with farming, the better. If we wait until it's too late to introduce farming to anyone, we may get bodies (and that for a time only), but never minds and hearts. (Reid, 1974)

The difference between the new thrust and school gardening was that agriculture was integrated with the other subjects on the curriculum. The intent was that agriculture should become a core subject in the curriculum in all primary schools. But the shortage of specialist teachers and equipment were among the reasons for the limited success of the program.

With regard to secondary schools, the thinking was that agriculture at that level could serve as a useful background to teaching not only subjects like botany and biology, but most subjects in the secondary school curriculum.

By 1975, it was decided that the Ministry of Education should joion the Ministry of Agriculture in order to facilitate the development of agricultural education in schools. Plans included holding short two-, four- and six-week courses for non-GSA-trained agriculture science teachers, for non-agriculture science teachers, and for parents. These courses were to be offered at introductory, intermediate, and advanced levels. The advanced courses were immediately intended for the 50 teachers in the system who were already graduates of the GSA courses.

Agriculture science teachers were to be in the vanguard in promoting rural technology, not only in farming but in farm accountancy and machine mechanics. Rural development was seen as

---

[19]. The situation still existed in 1994 —20 years later. See Agriteachers Need More Incentive 1993.

being linked to the educational system through the production of agricultural advisors and teacher-farmer-technicians for local development programs.

Resistance and decline

By 1983, despite the fact that agriculture (including poultry production) had become a core subject on all curricula in the 880 schools throughout Guyana, only 32 schools had land under constant cultivation. It is true that at most of the remaining 848 schools there was a shortage of adjacent land for agriculture and poultry production. In addition, there was a high incidence of theft and vandalism.

Some observers, however, felt that in the promotion of agriculture, Guyana was at war with tradition, because "In its subconscious psychological significance, this disproportion between the totality of schools and the number involved means that we are fighting the tradition which the expatriates have left us, the tradition of regarding the professions as fit for gentlemen as they were for expatriates and despising agriculture because it was compulsorily done by our ancestors under despicable conditions." (P.H. Daly, Guyana Chronicle, Nov. 13, 1983, p. 7)

Politicians and other policy-makers continued to press for schools to become production units. Sections of the local press claimed that in 1983, Guyanese schools had generated more than G$700,000[20] through sale of produce from their farms. In 1984, in some rivering areas, local farmers were called into schools to guide school children to increased acreage in crop cultivation.

Economic depression

By this time, the pressures emanating from Guyana's economic depression were exacting their toll on the education system as well. Budgetary allocations were being drastically cut and the late President Burnham was calling on communities to take the responsibility for the upkeep and maintenance of their schools. He was calling on schools and their parent-teacher associations to take care of day-to-day expenses, and urged them to raise funds to pay for their own light and telephone bills and to buy teaching aids and miscellaneous articles. By 1989, there was no longer a provision within the MOA for the promotion of agriculture in schools. This sub-head, however, continues to appear in the annual estimates and statements of accounts. Today, agricultural science in schools is limited to the agricultural science Caribbean Examinations Council (CXC) requirements.

CXC Agricultural Science

In Guyana, some 64 secondary schools have been preparing students for the CXC examinations. Just a little over half of these schools —34 out of 64 (53.1%)— have been doing

[20] In 1983 this sum was equivalent to almost US$230.000.

so with respect to agricultural science. Appendix 8 lists those 34 schools. It is interesting to note that only 19 (55.6%) of them are located in rural areas. There are no participating schools in Regions 1, 7, 8 and 9 —four totally rural areas whose combined population is estimated at 54,756 (See Table 1).

In Region 2, where the rural population is estimated at 46,769, there are only two schools offering agri-science. In Region 3, another totally rural region whose population is estimated at 91,328, only three schools offer the subject. And Region 5 with its totally rural population of 49,498 also records only two participating schools. In Region 6 with a rural population of 142,839 there are seven participating schools of which only four are located in rural areas. And in Region 4, where there is a rural population of 146,918, only seven of the 18 participating schools are located in rural areas.

Table III.14. CXC agri-science passes by region, number of schools and gender distribution for sample years 1982, 1987 and 1992, Guyana.

Region	Number of schools	Passes (Grades I, II and III)		
		Male	Female	Total
1	-	-	-	-
2	2	10	3	13
3	3	12	3	15
4	18	49	40	89
5	2	13	11	24
6	7	83	76	159
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	2	19	8	27
10	2	186 (56.9%)	141 (43.1%)	327

Source: CXC Spreadsheets, 1982, 1987, 1992.

Gender distribution

Table III.14 estimates a female pass rate of 43.1% and Table III.15 reflects the total number of passes over the years as 1,765. We may then assume that 43% of 1,765, or approximately 759 women, have been certified as having some degree of technical proficiency in agriculture. It is interesting to note that the number of women recorded as passing in agri-science has increased steadily since 1989. While this may or may not be coincidental, the Ministry of

Education did in 1988 include "the provision of greater opportunities for girls in technical and vocational training" in its policies.

Table III.15. Students participation and performance at CXC Agricultural Science by year and pass grades, Guyana, 1982-1993.

Year	Number wrote	Number passed by grades[21]			Total passes	
		I	II	III	Number	Percent
1982	57	-	6	21	27	47.4
1983	40	-	8	17	25	62.5
1984	130	-	3	55	58	44.6
1985	98	-	19	42	61	62.2
1986	101	1	14	55	70	69.3
1987	92	-	13	50	63	68.5
1988	87	-	13	34	47	54.0
1989	334	-	44	153	197	58.9
1990	319	2	39	135	176	55.1
1991	558	2	275	190	467	83.7
1992	362	4	62	171	237	65.5
1993	465	6	61	270	337	79.2
Total	2603	15	557	1193	1765	67.8

Source: Caribbean Examinations Council Reports on Candidates Work in the Secondary Education Certificate Examination, St. Michael, Barbados, 1982-1993.

1982-1988

Only 605 (23.2%) of the 2603 persons who have taken the exams did so in the first seven years (1982-1988) they were offered. Only 19.9% (351) passed during this period. (Table III.15)

[21] Grades I, II and III may be considered as passing grades.

1989-1993

Ironically, it was in 1989, the year in which food importation restrictions were lifted, that the number of candidates taking the agri-science examination began to increase, indicating a serious interest in the subject. Most (1,988 or 76.8%) of the 2,603 persons who have taken the examination did so in this recent five-year period; 80.1% (1,414) of the total 1,765 passes were also in this period. Fourteen of Guyana's 15 Grade I passes were recorded in this period. (Table III.15). The Caribbean Examinations Council, in its 1992 report on candidate work in agri-science, praises the teachers for this improvement.

c. Regional Educational Program for Animal Health Assistants (REPAHA)

This Caribbean institution was established in 1975 to train animal health assistants, and is located at Mon Repos.

From 1977 to 1993, REPAHA has produced 373 animal health and veterinary public health assistants. One hundred and seven of these graduates were Guyanese —86 men and 21 women— a 4:1 ratio. Table III.16 presents this information.

Table III.16. Graduates of REPAHA by year and sex, 1977-1993.

# from other CARICOM countries			# from Guyana		
Year	Male	Female	Male	Female	Total
1977-1993	218	38	86	21	373
1977	23	5	6	-	34
1978	25	4	6	1	36
1979	22	4	4	2	32
1980	13	5	5	1	34
1981	15	2	8	1	26
1982	21	2	7	1	31
1983	15	5	4	2	26
1984	18	3	5	1	27
1985	12	3	3	1	19
1986	12	1	2	1	16
1987	8	1	6	-	15
1988	11	-	5	2	18
1989	6	1	6	1	14
1990	3	-	8	2	13
1991	4	1	1	2	8
1992	3	1	7	2	13
1993	7	-	3	11	21

Source: REPAHA Records.

The current principal is Dr. Maurice Clarke, a Guyanese veterinary surgeon.

In this residential institution there is no explicit gender discrimination in admission requirements or the curriculum. All students are required to perform satisfactorily in the courses offered, as follows:

First Year

Term I	Term II	Term III
Preparatory	Pre-production/health	Pre-production/health
Animal Husbandry I	Anatomy	Animal Husbandry III
Biology	Animal Husbandry II	Microbiology II
Chemistry	Microbiology I	Parasitology II
English (Communication)	Parasitology I	Pharmacology
Mathematics	English (Communication)	Physiology
Physics	Farm Machinery	Farm Machinery

Second Year

Term I	Term II	Term III
Animal Production & Health	Animal Production & Health	Animal Production & Health
Animal Husbandry IV	Animal Husbandry V	Animal Husbandry VI
Animal Health & Disease I	Extension Services	Government Services and Programs
Pathology	Veterinary Public Health II	Veterinary Public Health III
Veterinary Public Health I	Field Training Cycle I	Field Training Cycle II
Surgical Procedures	Animal Health & Diseases II	Rural Sociology
Principles of Economics	Seminar I	Seminar II
	Farm Management Marketing	Animal Health & Diseases III

The admission requirements for all students are a minimum of four GCE "O" Level/CXC subjects with acceptable grades in English, mathematics and at least two science subjects.

d. Faculty of Agriculture/University of Guyana (UG/FA)

The Faculty of Agriculture was established in 1977 and offers a general agriculture program leading to a Bachelor of Science (BSc) in agriculture.

Courses

Courses include:

- Horticulture and Food Technology
- Crop Production
- Applied Soil Science
- Animal Nutrition
- Livestock Production (including aquaculture)
- Animal and Plant Breeding
- Animal and Plant Physiology
- Cytogenetics
- Micro-biology
- Biochemistry
- Agricultural Economics
- Agricultural Extension
- Rural Sociology.

The faculty is supported by private, state-owned, and international agencies, including the

- Caribbean Research and Development Institute (CARDI)
- Inter-American Institute for Cooperation on Agriculture (IICA)
- National Agricultural Research Institute (NARI)
- Livestock Development Company (LIDCO)
- Guyana Sugar Corporation (GUYSUCO)

UG/FA students are trained in theoretical work, laboratory practices, and practical field work and in joint research activities with staff.

Admission requirements

In addition to the University's general admission requirements, applicants for the BSc (Agriculture) degree must have either:

(a) Passes in at least five different CXC General Proficiency (Grades I and/or II) subjects or at the GCE 'O' Level (Grade A, B, and/or C) examinations at no more than two sittings. The subjects must include English language and mathematics, and any two of the following: biology, chemistry, integrated science (Double Award), agriculture science (Double Award only for CXC General Proficiency Examination), physics and additional mathematics.

or

(b) The Diploma in Agriculture from the Guyana School of Agriculture or its equivalent. Applicants who hold the diploma from the GSA, or its equivalent, with a PASS grade, must also have a high score at the U.G. Open Entrance Examination in order to be eligible for admission. (University of Guyana Bulletin, 1988-1989:45)

Only 174 students have graduated from 1981 to 1993, (see Table 3.19) and only 46 (26.4%) of these have been women.

Table III.17. BSc (Agriculture) graduates of UG/FA by year and sex, Guyana, 1981-1993.

Year	Male	Female	Total
1981-1993	**128**	**46**	**174**
1981	4	1	5
1982	5	0	5
1983	6	2	8
1984	24	1	25
1985	10	3	13
1986	15	5	20
1987	10	1	11
1988	7	3	10
1989	8	7	15
1990	11	5	16
1991	6	7	13
1992	8	4	12
1993	14	7	21

Source: University of Guyana records.

Admission restrictions

Admission requirement stipulates that five CXC or GCE subjects are required (obtained at no more than two sittings).

Most students who opt to make agriculture their professional career have had some aptitude for agriculture in the first place. Therefore, most students are likely to come from farming families, most of which are under economid hardships.

It is a strain on such families to pay their child's examination fees[22] of thousands of Guyanese dollars at one time; if more than one child is studying simultaneously, the strain is even greater.

The practice now with most low-income families is to garner the fees for at least two subjects at a time. This precludes the possibility of the child acquiring five subjects at the required two sittings. The doors are therefore closed to the aspiring applicant from the low-income small farm family.

Gender restrictions

Further, when the traditional farm family is faced with the choice of expending hard-earned dollars on either the bright son or the bright daughter, the choice is invariably in favor of the son, especially with respect to an agricultural career.

Absence of gender planning

Course contents as outlined in the University bulletin show no evidence of gender planning, but the course outline deserves to be readdressed in terms of meeting practical and strategic gender needs. The course is the 15-week AGR 457, Rural Sociology & Agricultural Extension Education, which deals in part with "cultural diffusion and the changing agricultural patterns of Guyanese rural communities."

B. Policies Directed at Rural Women and Women Food Producers

1. Background

Like voices in the wilderness, individual women and a few women's organizations have called for improvement in the daily lives of Guyanese women over the years. Most of the responses

[22] At the time of writing, CXC fees are G$3,040 per subject.

—day care centers, equal pay for equal work, training, job opportunities— have benefited urban women. For rural women and women food producers, there have been a few welfare-type activities by religious groups, the Social Welfare Division of the sugar estates, the Guyana Federation of Women's Institutes (GFWI) and the women's branches of the two major political parties. Prior to 1966, with these exceptions, there were no policies and programs directed at rural women and women food producers.

It was in 1972 that the Conference on the Affairs and Status of Women in Guyana (CASWIG) was established as an umbrella for non-governmental women's organizations. Among its achievements are lobbying activities for the establishment of the national machinery for women's affairs —the Women's Affairs Bureau (WAB).

In 1976, the Guyana Parliament passed a State Paper on Women's Equality and subsequently enshrined in Article 29 of Guyana's 1980 Constitution[23] provisions for equal rights, legal status and opportunities for women and men. However, it was not until 1990 that the Equal Rights Act was passed to put Article 29 provisions into effect. Such long lapses are characteristic of women's policy formulation in Guyana. The WAB, for example, even though it was established in 1981 with an immediate mandate "to contribute to the formulation of policy in relation to the advancement of women in Guyana," did not issue a draft national policy statement on women until September 1993— a lapse of twelve years. A national action plan is still to be formulated.

In addition to the general prescriptions of the International End of Decade Conference on Women (1976-1985), two major local economic events have triggered the establishment of the few programs directed at rural women and women food producers in Guyana. The first was the import restriction on certain food items in the mid 1970s, and the second was the negative impact of structural adjustment programs in 1989.

In the first instance, the nation was called upon to "produce food or perish", and since rural women have always been visibly crucial to both food production and food processing, the policy-makers could not escape focusing on them. Among those groups galvanized into mounting relevant training and other programs was the women's branch of the People's National Congress, the party then in government, the Women's Revolutionary Socialist Movement (WRSM) —renamed in 1994— the National Congress of Women.

In the second instance, the negative impact of structural adjustment programs on vulnerable groups, including rural women, engendered the inclusion of programs to aid rural women. A number of NGOs and international organizations also came to the rescue, but it is too soon to assess their impact.

---

[23] See Appendix 9.

Table III.18 summarizes some of these programs, and briefly identifies some of the activities being undertaken and their gender orientation.

a. Governmental institutions/programs

The following agencies known for their women-directed programs:

- The Ministry of Health
- The Ministry of Education
- The Ministry of Labor, Human Services and Social Security

i. Ministry of Health

In accordance with policy guidelines from the International End of Decade Women's Conference, in 1988 the Ministry of Health included a program directly related to rural women among its five priority programs. The objective of that program was to "reduce mortality and morbidity rates, especially maternal and child mortality." Among its rural programs have been malaria eradication, technical assistance in water and sanitation programs, and the facts for life project which disseminates information on preventative health care.

ii. Ministry of Education

Also in 1988, and within the International End of Decade Women's Conference policy framework, the Ministry of Education conceded that while there were no overt restrictions on women's participation in educational institutions, custom and practice did militate against their seeking access to technical and vocational institutions. The ministry therefore sought "the provision of greater opportunities for girls in technical and vocational training" in its policies. Rural women are included. Recently, the ministry has also attempted to reach rural women through its Distance Education Program run by the Institute of Adult and Continuing Education (IACE)

iii. Ministry of Labor, Human Service and Social Security

Since 1991, this Ministry has been responsible for the Women's Affairs Bureau (WAB). Conceived in 1975 (paragraph 46(n) of the World Plan of Action of the International Women's Year Conference) as "an inter-disciplinary and multisectoral mechanism within government for accelerating the achievement of equal opportunities for women and their full integration into national life," this state machinery was finally born in 1981 as the Women's Affairs Bureau. Since its creation, the WAB has been parented by six different ministries and its staffing and functions have never been fully implemented. Losing its institutional support because of this constant shifting and perpetually understaffed, the Bureau has had limited effect. At the time of writing, the Bureau's full-time staff numbers three.

Nevertheless, the WAB has managed to survive and has some successes. For example, it still manages to collaborate with one of the ten Regional Women's Affairs Committees.[24] The WAB has also been able to work, in a limited way, with women's groups in the development of project proposals, functioning as an implementation and monitoring agency for projects.

They have only been able to provide this type of service for about twenty rural groups, involving 500 rural women.

The Bureau has also been involved in limited policy-oriented action, public education and training. At the moment, it is involved in activities aimed at monitoring the Equal Rights Bill of 1990. In September 1993 it produced a draft national policy statement on women.

iv. Social Impact Amelioration Program (SIMAP)

Created in 1989, this institution has been mobilizing local and overseas funding for projects aimed at ameliorating the plight of vulnerable groups, including rural women, occasioned by the impact of Guyana's structural adjustment programs. For the most part this has been a very effective program. Unfortunately, as of December 1993, it has only been able to reach an average of 1,000 rural women through about 30 rural women's projects.

b. Political groups

i. Women's Revolutionary Socialist Movement (now National Congress of Women)

This group is the women's arm of the political party which headed the government during the 28-year period from 1965-1992.[25]

Their peak involvement with rural women occurred in the 1970s and 1980s, when local food production and substitution for imported foods was being emphasized. During that period, the Movement chairman was herself a successful rice and cattle farmer.

The Movement's programs with rural women ranged from welfare-type and reproductive activities and gender awareness programs to empowering productive activities such as agro-processing, craft work, management and bookkeeping, and local- and export-oriented marketing.

---

[24] Since 1982-1983, these committees have been established in Guyana's ten administrative regions. However, it seems that very few of these Committees actually function.

[25] The People's National Congress (PNC)

ii. Women's Progressive Organization (WPO)

One of the first women's political organizations, WPO has always been involved, first as the women's arm of the party in government, then as opposition for 28 years,[26] and since October 1992, as the party in government. To a limited extent, in its years as opposition, this organization has always been involved in welfare-type and reproductive activities, gender awareness programs, and programs designed to increase family income.

c. Non-governmental organizations (NGOs)

i. The Futures Fund

From its inception in 1989, Women in Development (WID)/Gender components have been part of Futures Fund policies.

This Fund is a Guyana/Canada development project funded by the Government of Guyana and the Government of Canada through the Canadian International Development Agency (CIDA). Executed in Guyana by the Canadian Hunger Foundation, the fund has been of tremendous assistance to those groups, including rural women, who are rendered vulnerable by structural adjustment.

Unfortunately, as of the end of 1993, the Futures Fund has only been able to work with nineteen or twenty rural women's projects throughout rural Guyana; the beneficiaries are fewer than 700.

ii. Conference on the Affairs and Status of Women in Guyana (CASWIG)

CASWIG was established in 1972 as the umbrella organization for all women's groups in Guyana with the intention of providing assistance to its affiliates, engaging in training, disseminating information and implementing projects. Among its achievements is training women, including rural women, for employment as security guards. It has also lobbied for the establishment of the WAB.

iii. The Guyana Federation of Women's Institutes (GFWI)

This organization was established in 1942. It is one of the organizations with the longest history of pursuing rural women's programs. Initially, the program concentration was of a welfare type, with a focus on food processing, needlework, garment-making and craft production using indigenous materials —all geared for local consumption. During the 1970s and 1980s, it focused on agricultural activities, including pre- and post-harvest activities.

---

[26] The People's Progressive Party (PPP).

More recently, GFWI's focus has included what it refers to as self-improvement programs. In a current program, members receive individual and group loans on soft terms through the Institute of Private Enterprise Development. Members also receive technical assistance and training in export-oriented production, simple book-keeping, packaging and marketing of their produce.

iv. Red Thread Women's Development

Established in the 1980s as the women's arm of a political group[27], its members claim that they have changed to a non-political group focusing on programs designed to assist women to earn an income and to work collectively towards self-development and self-organization, while at the same time contributing to activities such as printing and book-binding, embroidery, batik, knitting, nibbi-furniture production, laundering, and marketing of coals and ground provisions.

v. University of Guyana Women's Studies Unit

Established in September 1987 within the Faculty of Social Sciences at the University of Guyana (UG), its primary focus has been the generation of a research base on women in Guyana, one which can inform teaching within the UG and beyond. Published works include:

- The Economic and Social Conditions of Women Heads of Households in Guyana, 1990.
- Needs of Women in Selected Communities in Coastal Guyana, 1990
- Teenage Pregnancy, 1990.
- Discrimination Against the Girl Child, 1990
- Poverty in the 1990s: A Case Study, 1991
- Women in Guyana, 1991.

More recently, the Unit has reached out to women's groups and NGOs through information dissemination and technical advice.

d. International agencies

International agencies have always been involved in development programs in Guyana, but since the International Women's Conference in Mexico in 1975, all these agencies (especially UN agencies) have consistently been incorporating WID/Gender components into their programs. Among those agencies involved in work with women are PAHO/WHO, UNDP, UNICEF, and UNIFEM, the French government, and the German Democratic Republic. Their women's programs have generally been effective, but unfortunately not many rural women in subsistence level agriculture are being reached.

---

[27] The Working People's Alliance (WPA).

Table III.18. Women's programs in Guyana, 1966 to 1993.

Institutions programs & projects	Description	Types of programs							Orientation		Results/comments
		Welfare	Reproductive activities[28]	Productive activities					Rural women	Urban women	
				Animal husbandry	Agricultural		Marketing	Others[29]			
					Up to Harvest	Post harvest and Agro industrial					
1. PUBLIC INSTITUTIONS a. Ministry of Labor Human Service and Social Security/Women's Affairs Bureau	Established in 1981. Policy formulating body, set up to provide administrative, technical and financial assistance to women's NGOs to initiate research and collect data on women and to provide counselling advice service for women - 3 full-time staffers.	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Has only been able to impact on 20 rural groups - 500 women. Badly understaffed, salary disincentive
b. Ministry of Health	Maternal and child mortality reeducation – since 1988.	Yes	Yes						Yes	Yes	
c. Ministry of Education	Provision of greater opportunities for girls in technical and vocational training – since 1988.			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Increase in entrants and passes at CXC Agri Science example of evidence of effectiveness.
d. Social Impact Amelioration Program (SIMAP)	Set up in 1988 to mobilize local and overseas funding to ameliorate the impact of structural adjustment – 30 women's projects.	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Effective, but only about 1000 rural women involved in agriculture have benefited to date.

[28] Includes education, health, nutrition, child care programs and projects.

[29] Includes any program designed to increase family income, e.g, sewing, artisan work, etc.

Table III.18 Women's programs in Guyana, 1966 to 1993 (Cont'd).

II. POLITICAL GROUPS a. Women's Revolutionary Socialist Movement (WRSM)	Women's arm of PNC, founded in 1966, has organized groups throughout the country.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Until two years ago, the leader was one of Guyana's foremost dairy farmers.
b. Women's Progressive Organization (WPO)	Women's arm of PPP in existence since mid-1950s, groups concentrated in coastal Guyana.	Yes	Yes			Yes		Yes	Yes	Yes	Not able to access information re: pre-harvest agricultural programs.
III. NGOs a. Futures Fund	Set up in 1989, a Guyana/Canada Development Project. Has WID/Gender components embodied in policies.	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Effective, but only about 700 rural women have benefited from their agricultural programs.
b Conference on the Affairs and Status of Women in Guyana (CASWIG)	An umbrella organization for all women's groups established in 1972.	Yes	Yes			Yes		Yes	Yes	Yes	Not aware of any animal husbandry or pre-harvest programs.
c The Guyana Federation of Women's Institutes (GFWI)	One of the oldest existing women's groups (since 1942), has always focused on rural women.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Now organizing soft loans and training in export oriented production.
d. Red Thread Women's Development	Established in 1980s as the political arm of the WPA, claims to have become non-political recently. Involved in assisting women to earn an income.	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Not aware of any animal husbandry of pre-harvest program.
e. UG Women's Studies Program	Established in Sept. 1987 within the Faculty of Social Sciences. It generates a research base on women and disseminates information.	Yes	Yes					Yes	Yes	Yes	Effectiveness gradually being enhanced
IV. INTERNATIONAL AGENCIES e.g PAHO/WHO UNDP UNICEF UNIFEM French Government German Democratic Republic	Ever since the 1975 International Women's Year World Conference in Mexico, all these agencies have consistently built into their programs WID/Gender components	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Effective, but unfortunately not many rural women involved in subsistence agriculture have been able to benefit. They are not being reached.

C. The Effects of Agricultural and Women-directed Policies on Small Farmers and Rural Women

1. Women's participation in agricultural policies and programs

Historically, Guyanese women have participated very visibly in all rural development programs. This contrast with their invisibility in the national census and inter-census statistics, discussed in Chapter IV. Policy-making, however, has not been their prerogative. Nevertheless, whether the policy concerned emancipation, cooperativism, regionalism, producing more food, substituting local for imported foods, or managing communities through community groups, women have continuously been working alongside men.

Table III.18 reflects the few agricultural policies and programs directed at rural women food producers by public institutions. It is still difficult to make any assessment of the effects and benefits of NGOs and international agencies; exceptions include the two major women's political groups, the WRSM and the WPO. They have been able to engender awareness among groups of Guyanese women, but much of their energies and efforts have been diverted from working toward the improvement of the conditions of women's lives to supporting the work of their parent organization. The GFWI, which has been steadfast in its agricultural and agriculture-related programs, has only recently began to focus less on welfare activities and more on empowerment possibilities.

a. Socio-cultural blockages

Even as these women-oriented policies and programs are taking root, gender preference more oriented toward the male still exists, both explicitly and implicitly.

i. Institutionalized gender bias

Agricultural administrators at all levels claim gender neutrality, but the documentation belies this claim. In all the development plans, annual reports and international studies on agriculture in Guyana, the farmer's gender is male. For example:

- The average farmer is 40 years old ....
- He farms a piece of land from 3 to 25 acres ....
- Due to fluctuating prices he cultivates ....

- His overall attitude towards technical assistance, credit opportunities and scarce marketing channels ....
- Past experiences have proven negative to him .....
- His average farming experience is over 15 years ....
- His children help out on weekends ....

No recognition is given to women. The document entitled Criteria to be used for Making Selections for State and Government Land is explicitly gender-biased, as is reflected in the following extract:

...3. Size of Family	Points
Unmarried	Nil
For wife and no dependent	3
For wife and less than two other dependents (including adopted children)	5
For wife and more than five other dependents (including adopted children)	15 ...

There is no reflection or any consideration of women receiving land.

The gender bias is likewise reflected in a recent draft document by GAIBANK entitled Procedures Governing Securities Verification:

- if the borrower alone gives false information to the bank, he will be liable to compensate the Bank... (p. 3)
- The person mentioned in the transport as owner or his duly appointed agent are the only persons who can offer transport as security..... (p. 3)
- Where a woman is the owner (or one of them), it is stated in the transport that she is the wife of (name of husband).....(p. 3) .....

- Where a husband and wife are both part of the loan, then insurance is taken only for the husband, unless he is ...(p. 6) .....

- It is then signed by the borrower and his national I.D. number is placed below his signature. Where the borrower cannot sign, his thumb print ... (p. 6)

- A Deed of Gift is a document by which a donor expresses his intention... (p. 7)

Although neutrality may be the intention, the language used conveys an iniherent bias.

The historical socio-cultural roots of this gender bias have already been acknowledged. But untii the authorities are themselves cognizant of the endemic dangers of negative gender bias, Guyana's development will continue to be stymied.

Women's equality was enshrined in Article 29 of Guyana's Constitution (See Appendix 9) more than a decade ago, but gender bias, inimical to national development, still persists.

Women in agriculture in Guyana know that the gender decks are stacked against them. Many a brave woman has endeavored to break out of the shackles of institutionalized subjugation, but few have been able to beat the system.

So they do the best that they can. In Black Bush Polder (BBP) on the Corentyne in Region 6, one official advised us that, in agriculture, the women in that area are the real motivators; that

> the woman pushes the man to come to us and apply for the lease. She comes with him and she either waits for him downstairs or she might, actually come into the office with him. But the actual lease application is made in the man's name.

The impression is that Guyanese women in agriculture may be the *de facto*, but certainly not the *de jure*, authority.

In Black Bush Polder, our informed estimate is that only 154 women have legal leasing rights among the 1,500 parcels of land leased in that region (See Table III.19).

So only 154 women farmers in BBP have the basic equipment to access credit and all the other developmental opportunities that are related to credit availability.

Table III.19. BBP female leaseholders by farm size and category

Category and size of farm	No. of female lessees[30]
1. Homestead - small - 1ha	3
2. Cultivation Plot - medium - 6ha	50
3. Both 1 & 2 - medium - 7ha	101
Total	154

Source: BBP Land Development Office records.

If it is conservatively estimated that three-quarters, or 1,025 of the 1,500 leases were actually issued since 1962, then female leaseholders account for 154 — a mere 15%— of all leases issued.

In the Parika/Salem Agricultural District[31], the situation is even worse. There, only 24 (7.2%) of a total sample of 318 leaseholders are women. (See Table III.20)

Table III.20. Sample of leased farm land in the Parika/Salem Agricultural District by category, size and sex of leaseholders, 1993.

Category	Size	Male	Female	Total
Small farms	less than 1 ha - 3.96 ha	153	18	171
Medium farms	4 ha(s) - 9.96 ha	135	6	141
Large farms	Over 10 ha	6	-	6
		294	24	318

Source: Parika/Salem Local Authority Office records.

This institutionalized gender bias is reflected in credit statistics. For example, the GAIBANK, supposedly the major credit institution for farmers, reports that in a sample of 430 borrowers, only 13 (3%) were women, Their loans accounted for a mere 0.5% of the disbursement volume between 1987-1991. (Table III.21 refers)

[30] There is no information as to the mode of acquisition, whether as original lessees, as inheritance from spouse or parents, etc.

[31] Also one of the survey areas.

Table III.21. **Number, amount and average loan size by type of borrower for the sample of loans disbursed, 1987-1991.**

Type of borrower	No. of loans		Volume of disbursement		Average size
	N	%	G$M	%	
Male	310	72	12.4	79.5	40 000
Female	13	3	0.1	0.5	6 154
Joint	103	24	2.9	18.5	28 155
Group/Company	4	1	0.2	1.4	55 000
Total	430	100	15.6	100.0	36 279

Source: GAIBANK sample data (Hunte, 1992).

But these are not the only manifestations and repercussions of the institutionalized gender bias toward Guyanese women in agriculture. In the field of agricultural technical training, whether at the Guyana School of Agriculture (GSA), Regional Program for Animal Health Assistants (REPAHA) or the Faculty of Agriculture at the University of Guyana, the male/female ratio is seldom better than 4:1.

The 1993 Household and Income Expenditure Survey estimates that with respect to technical education at the Diploma or Certificate level in agriculture, only 179 women, or 32.3% of a total of 553, can be so classified. (See Table III.22).

Table III.22. **Estimated number of persons who have attained a diploma or certificate in agriculture by sex, 1993.**

	Number	%
Male	374	67.7
Female	179	32.3
Total	553	100.0

Source: HIES 1993, Table 1.4.1.

The scarcity of technically trained persons in agriculture in a country which has 24,635 rural farm households (according to the 1978 Rural Farm Household Survey) is, to say the least, an untenable situation for development. While the technical training level is low overall, it is worse for women.

Households Headed by Women

According to the 1980 census, of a total of 149,734 households, 113,193 were male-headed households and 36,541 (24.3%) female-headed households. Widowed or divorced women comprised 38% of those female heads of household, followed by never-married and married women, who comprised 58% of this group.

ii. Gender bias and self-perception

But **Women in Guyana: Facts and Figures,** published by the Caricom Secretariat (1988:51), makes the telling point that

> this issue of self-perception reveals itself in the data for women. In the year preceding the 1980 census, only one-third of the female heads of households reported that they worked.

Further, as Patterson (1992:12)) states,

> recent evidence from census and survey data dealing with the position of women in Guyana has pointed out the growing incidence of female-headed households. This can be attributed to a number of factors, including migration, attitude of men to stable relationships and the conscious choice of women to rear children on their own.

iii. Gender bias and poverty perpetuation

This phenomenon of female-headed households is as old as the history of Guyana, and similar to other Caribbean territories. At issue is the continuing endemic poverty that negatively affects such households. Because, as Buvinic and Lycette (1988:151)) so correctly point out regarding female headed rural households, women-headed households are poorer because they have fewer resident working members than male households, but more dependents and smaller holdings.

The HIES (1993) estimates a national average household size of 4.28, peaking at 5.96 in certain rural areas.

Using the 1978 Guyana Rural Farm Household Survey estimate as a guide, there are 24,635 rural farm households of which 3,039 (12.1%) are headed by women. According to the 1993 HIES estimate, 69% (115,724) of the total 157,716 households are rural. If we assume (based on the 1978 estimate) that 12% of these households are female-headed, then that number will be estimated at 13,886. Since our conservative estimate is that at least 50% of all rural women are involved in farming, then approximately 7,000 farm households are at the moment headed

by women. Given all the negative circumstances of the small farmer, poverty continues to be perpetuated among most of these 7,000 female-headed rural farm families.

iv. Lack of legal rights

Using the Black Bush Polder and Parika/Salem sample estimate of 15% and 7.2%, respectively, of women having legal title to their farm lands, and assuming that approximately 10% of all women farmers have title to their land, then the estimate is that in rural Guyana some 6,300 women (90%) have no legal rights to their land.

b. Inability to access agricultural extension services and credit

On-sight demonstrations, training and experimental work are normally done on better farms where certain resources are available.[32] If 90% of women heads of households who farm have no title to their land, their chances of obtaining developmental credit are almost non-existent. Therefore with no access to credit for farm improvement, their farms (in this case 6,300 farms) must remain at the lowest level of productivity. Indeed, it is a Third-World phenomenon that such female-headed farm households "are much less likely to have access to productive services such as agricultural extension and credit for more explicitly gender reasons." (Buvinic and Lycette in Lewis 1988:151)

As a matter of fact, the planned 1993 Extension Service (See Appendix 7) focuses on commodity programs. The objective is to work with model farms with the capacity to produce beyond the subsistence level.

The implications are distressing to say the least. Informally, the designers of these commodity programs admit that the matter of gender never even occurred to them.

c. Farmer organizations

According to the MOA, there are, at the time of this writing, three functioning farm organizations, as follows:

- Rice Producers Association
- Rice Millers Association
- Cattle Farmers Association

These are all large-farm-oriented and women are not represented in any decision-making positions. It is in the small-farmer organizations, such as the nine agricultural cooperatives in Table III.2, that women hold decision-making positions.

---

[32] The Extension Department admits that the choice of "better farms" for demonstration purposes has always been and is their present policy.

IV. THE CONTRIBUTION OF WOMEN TO NATIONAL AGRICULTURAL OUTPUT

Women in Guyana have historically contributed to national agricultural output. However, documentation of this contribution is unfortunately lacking. Whereas in recent times there has been some attempt at compiling gender-desegregated data, the results have been woeful underestimates.

In the present chapter, Section A examines the 1970 and 1980 census data as well as the 1993 HIES estimates of women's employment in the agricultural sector, before looking at the characteristics and conditions of their work.

In Section B, the matter of re-estimating the number of women employed in the agricultural sector is discussed.

A. Women's Employment in the Agricultural Sector

Women's employment in the agricultural sector is largely confined to labor-intensive, non-professional activities such as planting, nursing young plants, weeding, harvesting by hand, processing and marketing.

Apart from those women who are employed on both a full-time and part-time basis as hired laborers, most of Guyana's women's agricultural employment is unwaged work, which in most cases supplements the household budget. However, this type of work is not usually remunerated, and therefore is misrepresented in census and related data.

1. The importance of the agricultural sector as a source of employment for women

Anyone who looks at the census data to determine the importance of the agricultural sector as a source of employment for women would get the impression that women are of relative unimportance.

a. Reflections on census and inter-census data

Table IV.1 shows a steady decline in the total economically active population[33] (EAP) involved in agriculture; this decline is even more dramatic (from 39.1%% to 11.8%) among the female EAP in the census years 1946-1980.

---

[33] Persons fifteen years and over who are not attending school.

Table IV.1. Percentage of EAP in agriculture by sex and census year, Guyana, 1946-1980.

Census year	Male	Female	Total
1946	41.9	39.1	41.1
1960	37.8	25.4	35.0
1970	33.6	13.0	31.9
1980	31.6	11.8	26.8

Sources: West Indian Census 1946, Part 1) Tables 49 and 50.
Population Census (Guyana) 1960, Vol II; Part B, Tables 14 and 15.
Population Census (Guyana) 1970, Vol 4, Part 16, Table 1.
Population Census (Guyana) 1980, Vol 2, Table 2.4.1.

The suggestion is that Guyanese women have been moving away from agriculture as a source of livelihood and that Guyanese males, on the other hand, are looking more to agriculture as a source of livelihood than to any other industry. (See Table IV.2)

Table IV.2 indicates that in 1980 the majority of the female EAP —a total of 53.5%— were engaged in community services (20.7%), government (18.2%), and commerce (12.6%), as against the 11.8% engaged in agriculture.

Table 1 indicated a rural population of 494,536, and women comprise more than half of this population; it is estimated that there are 247,268 rural women.

Table IV.3 suggests that only 4,991 women are involved in agriculture. If all of these 4,991 women are rural women, then the census is saying that only 2.0% of all rural women have anything to do with agriculture. Even more dramatic is the fact that of the entire labor force of 246,671, only 2.0%, that is, 4,991 economically active women, have anything to do with agriculture in a country where agriculture is the main pillar of the economy.

In fact, Table IV.3 indicates that in 1980 only 4,991 out of 61,033 economically active women were employed in agriculture (8%). The 1993 estimates (Table IV.4) show a slight increase to 15% (12,414 out of 77,714) of all economically active females being employed in agriculture.

The 1993 figures also show that women account for 90.4% (1,056 of the total 1,169) of casual labor. Women also take the lead in the regular salaried category, accounting for 90.9%, or 2,819 out of the total 3,112. But in the self-employed category women are only estimated at 27.1% —8,859 out of a total 32,606 (see Table IV.5). This, as discussed later, is a gross underestimate.

Table IV.2. Industrial grouping of economically active population by percentage and sex, Guyana, 1970 and 1980.

Industrial group	Males percentage		Females percentage	
	1970	1980	1970	1980
Agriculture, forestry	33.6	31.6	13.0	11.8
Mining, refining & quarrying	6.1	6.1	0.8	2.0
Manufacturing	16.2	16.4	11.6	12.9
Electricity, gas and water	0.8	1.8	0.2	0.6
Construction and installation	5.6	4.6	0.2	0.9
Commerce	9.7	6.9	16.8	12.6
Transportation, storage & communication	5.8	5.8	1.4	2.7
Finance, insurance & real estate	-	1.1	-	3.3
Government	-	15.5	-	18.2
Community services	-	3.8	-	20.7
*Other services	22.2	6.3	56.2	14.4

Sources: 1970 Census Vol 4, Part 16, Table 2.
1980 Census, Table 2.5.

* Different categories were used in the two censuses: "Finance," "Government" and "Community Services" were classified as "Other Services."

Table IV.3. Employed labor force by industrial group and sex, Guyana, 1980.

Industrial group	Male	Female	Both sexes
Guyana	185 638	61 033	246 671
Agriculture, forestry, hunting	45 325	4 991	503 316
Mining, refining and quarrying	8 805	864	9 669
Manufacturing	23 486	5 494	28 980
Electricity, gas and water	2 600	250	2 850
Construction and installation	6 649	375	7 024
Commerce	9 892	5 339	15 231
Transportation and communication	8 277	1 135	9 412
Finance, insurance and real estate	1 560	1 384	2 944
Government	22 212	7 736	29 948
Community services	5 400	8 767	14 167
Other services	9 013	6 115	15 128
Not stated/not applicable	42 419	18 583	61 002

Source: 1980-1981 Population Census of the Commonwealth Caribbean, Guyana-Volume 2, Table 2.5.1.

Table IV.4. Estimated number of EAP by industry and sex, Guyana, 1993.

Industry	Male	Female	Total
Guyana	167 778	77 714	245 492
Agriculture, hunting & forestry	54 151	12 414	66 605
Fishing	6 540	893	7 433
Public administration & defence	10 604	7 488	18 092
Education	2 287	6 414	8 701
Health & social work	1 253	3 541	4 794
Other community, social & personal service	6 554	3 267	9 821
Hotels and restaurants	988	2 109	3 097
Private households with employed persons	3 268	5 543	8 811
Manufacturing	19 354	8 150	27 504
Wholesale and retail trade	21 748	18 058	39 806
Transport, storage & communication	11 379	1 244	12 623
Financial intermediation	1 161	1 599	2 760
Real estate, rent and business activities	3 232	1 606	4 838
Construction	9 678	438	10 116
Mining & quarrying	8 630	1 206	9 836
Electricity, gas and water supply	2 170	437	2 607
Extra-territorial organizations & bodies	93	22	115
No Industry	4 648	3 285	7 933

Source: HIES, 1993, Table 1.7.1.

b. Employment status, category and gender

If we group legislators, managers, professionals, clerks, shop sales workers, elementary occupations and the defense force together as SERVICE, and technicians and associate professionals, crafts and related workers, plant and machine operators and assemblers as INDUSTRY, then according to the HIES (1993) estimate (See Table IV.6), more women —51,432 out of the total 77,714 female EAP (66.1%)— are employed in the SERVICES than in all the other occupational categories combined.

It must be noted that the wage levels in most of the services (sales girls, clerks, etc.) are so low that it is difficult to attract the male work force. It must also be noted that while women feature prominently in education, health and other government services, the level of remuneration is again abysmally low. At those low wage levels it is virtually impossible for the female heads of households (the 1980 census estimates them at 36,541) to manage even at the basic poverty level. In order to "make ends meet," they must seek out other inputs to supplement household income. Most of this supplemental work is unwaged and unremunerated work, a fact recognized at the highest levels. In 1991, Guyana's finance minister stated that "Guyanese women feature prominently in the unofficial or unremunerated economy" (1991:5).

There are two key points: one, that women have always had to labor in the unremunerated economy for the sake of their families' and their own survival; and two, that neither the agricultural situation, nor women's position has ever really been understood. This is due to the absence of a thorough statistical estimate of women's activities in, and/or their contribution to, the informal agricultural sector.

Table IV.5. Estimation of agricultural, forestry and fishing workers by employment status and sex, Guyana, 1993.

Employment status	Male	Female	Total
Self-employed	23 747	8 859	32 606
Regular salaried	2 819	293	3 112
Casual Labor	1 056	113	1 169
Total	27 622	9 265	36 897

Source: HIES, 1993, Table 1.8.1.

Table IV.6. Estimated employment category by activity and gender, 1993.

	Agriculture			Industry			Services			Not stated		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Self-employed	32 606	23 747	8 859	20 098	15 855	4 243	39 798	21 169	18 629	4 583	2 480	2 103
Regular salaried	3 112	295	2 819	39 425	30 172	9 257	83 507	53 117	30 390	2 674	1 513	1 161
Casual labor	1 169	113	1 056	4 492	4 350	142	13 347	10 934	2 413	677	566	111
Total	36 889	24 153	12 734	64 019	50 377	13 642	136 652	75 220	51 432	7 934	3 559	3 375

Source: HIES, 1993, Table 1.8.1.

2. Characteristics and conditions of women's work in the agricultural sector

Manual, labor-intensive activities, for the most part compatible with women's reproductive tasks, characterize their work in the agricultural sector.

They are involved in cash crop production activities, as seasonal laborers in the rice industry, and in livestock production activities, the latter falling into the category of women's unwaged work.

The following discussion looks at women's cash crop and rice production activities and their involvement in livestock production. The gender composition and work profile of MOA Extension Services staff is then analyzed to get an idea of whether the general characteristics are carried over to waged and/or salaried agricultural work by women.

a. Women's crop production activities

i. Cash crops

Odie-Ali (1982:73) claims that women's cash crop production activities range from nurturing activities (care of seedlings) to weeding, harvesting, and restoration of planting materials. But she further stated that the male respondents in her sample all claimed that:

> When there is a push, the woman does work equal and straight with me (1982:73).

This includes:

> clearing land and cutting bush, digging drains, applying pesticides, insecticides and fertilizers, and fetching produce (1982:73).

ii. Rice

Informal discussions with farmers in predominantly rice-producing areas reveal that women manually transplant seedlings to ease congestion resulting from broadcasting. Furthermore, in cases where the mechanical harvester cannot function (due to inclement weather, flooding) women manually harvest the paddy. In most cases, this seasonal activity is waged work.

iii. Livestock production activities

For cattle, cleaning pens, milking, sanitation of milk cans, and tending calves are generally women's unwaged work activities. For pigs, cleaning of pens, care of piglets, and general

sanitation are again women's unwaged work activities. Sheep and goat production activities follow this pattern. Further, all activities pertaining to small-scale chicken and duck raising (and other animals) are unwaged women's work.

iv. Ministry of Agriculture - Extension Services Division Field Staff

Since there is a dearth of gender-based data on agricultural work activities, the following is an estimation based on MOA Extension Division field staff work profiles and gender distribution data. (See Table IV.7.) Overall, the extension staff totals 172, of which 70.9% (122) are males and 29.1% (50) are females.

Women comprise 21.2% of all professionals in the extension service —14 out of 66, and 33.9% of all non-professionals— 36 out of 106.

In the non-professional category of the livestock section, 9 of the 34 members (26.4%) are women, while in the professional category four out of six are women, or 66%.

In the crop production section non-professional women account for 37.5% —27 of the 72, while in the professional category women account for 17.8%— 10 out of 56.

Overall, these numbers suggest that there are not many female agricultural officers and technicians presently interacting with the visibly high numbers of Guyanese women who are involved in agricultural work.

B. Re-Estimation of the Number of Women Employed in the Agricultural Sector

The 1980 census lists 41,459 economically active adults —37,526 men and 3,933 women— in the category of agriculture and related occupations; this includes occupations in the state-owned sugar industry. (Table IV.8).

But in the 1978 Rural Farm Household Survey on Guyana's coastal belt, a total number of 24,635 households were surveyed —21,596 male-headed and 3,039 female-headed. If it is assumed that in each of these households there is one other female who works, be it remunerated or unremunerated, then women would be reflected as 21,596 + 3,039 + 3,039 = 27,674, a total approximately nine times greater than the 3,933 women cited in the 1980 Census.

Census personnel should not be blamed for this type of misrepresentation. In Guyana, as in many other societies, the value of work is judged in terms of economic rewards to those who buy or sell labor. So that when the question 'Do you work?' is asked, it is more often than not interpreted as 'Do you earn money?' This is why, for example, persons involved in unpaid

home duties are recorded as economically inactive. This is also why many women engaged in agricultural work on their homesteads are are not reflected as economically active in the census data. The problem here is that even though this underestimation has been articulated in a general sort of way at the macro-level, policy and program planning personnel have continued to be misguided by the underestimated census figures, much to the detriment of the development process.

Table IV.7. MOA extension staff by work profile and gender, Guyana, 1993.

Professional				Artisan (non-professional)			
Livestock Section	**M**	**F**	**Total**	**Livestock section**	**M**	**F**	**Total**
Veterinary Officer	3	4	7	Livestock Assistant	18	5	23
Livestock Officer	2	-	2	Livestock Attendant	4	-	4
Livestock Foreman	1	-	1	Agri-Technical Assistant	3	4	7
Crops Section							
Senior Agriculture Officer	2	-	2	Crop Reporter	20	8	28
Technical Manager	2	-	2	Pest Controller	5	-	5
Agriculture Officer	7	3	10	Propagator	6	5	11
Agriculture Field Assistant	32	7	39	Nurseryman	14	14	28
Senior Field Foreman	2	-	2				
Nursery Foreman	1	-	1				
Total	52	14	66	Total	70	36	106

Source: MOA records.

Table IV.8. Occupational grouping of economically active population by sex, Guyana, 1980.

Occupational group	Males		Females	
	Percent	Number	Percent	Number
Professional and technical	7.5	11 492	23.2	10 341
Administrative and managerial	0.9	1 398	0.5	208
Clerical	6.9	10 511	21.5	9 593
Sales	4.3	6 599	10.8	4 804
Services	8.4	12 872	19.0	8 474
Agriculture and related	24.6	37 526	8.8	3 933
Production and related	47.3	72 069	16.2	7 221
Total number (=100%)		152 467		44 574
Not stated/not applicable		33 171		16 459

Source: 1980 Census, Table II.4.

1. Problems related to recording data and making official calculations of employment in rural activities for women

MOA administrative and planning personnel lament the dearth of information-related data and some even admit to the need for gender-specific data. They name lack of facilities and resources, especially in rural areas, as their number one constraint.

Historically, Guyana has not been inclined towards data collection and statistical activities (outside of census data); even the census data include some serious underestimates, which are nevertheless used as policy and program guidelines by planners and administrators.

a. Economically inactive persons and home duties

In the category of economically inactive persons (EIP) as recorded in the 1970 and 1980 censuses (Table IV.9), the "home duties" category accounted for 7,123 females (4.0%) in the labor force.

Ten years later in 1980, the figure jumped to 134,740 women, representing 62.8% of the labor force —an escalation of approximately 58%. It must be noted that there was no significant change in the total population during this period.

Table IV.9. Categories of economically inactive persons by sex, Guyana, 1970 and 1980.

	Males				Females			
	Number		Percent		Number		Percent	
	1970	1980	1970	1980	1970	1980	1970	1980
Home duties	154	2 677	0.1	1.3	7 123	134 740	4.0	62.8
Student	164	2 754	0.1	1.3	316	4 219	0.2	2.0
Retired	522	10 451	0.3	5.1	296	4 585	0.2	2.1
Disabled	375	4 878	0.2	2.4	327	4 712	0.2	2.2
Total economically inactive	1 215	20 760	0.7	10.1	8 062	148 256	4.5	69.1
Other and not stated	40 025	9 551	23.4	4.6	141 395	11 682	78.6	5.4
Total economically active	129 694	175 878	75.0	85.3	30 404	54 635	16.9	25.5
Total	170 934	206 189	100.0	100.0	179 861	21 4573	100.0	100.0

Sources: Guyana Population Census, 1970, Vol 4, Part 6, Table 1.
Guyana Population Census, 1980, Table 2.1.

The 1993 HIES, however, estimates a slight decrease in the total population, from 758,619 in 1980 to 717,458 in 1993, a difference of 41,161 persons. Nevertheless, it lists the total number of economically inactive persons as 189,095 (Table IV.10), an increase of 20,079 from the 1980 figure of 169,016. The category of home duties, however, fell by 22,599 —from 134,740 in 1980 to 112,141 in 1993.

Table IV.10. Estimated economically inactive persons by category and sex, Guyana, 1993.

Category	Male	Female	Total
At school	17 597	19 949	37 546
Domestic (home) duties	5 585	106 556	112 141
Pensioner	10 763	12 209	22 972
Disabled	4 460	4 097	8 557
Others	4 072	3 807	7 879
Total	42 477	146 618	189 095

Source: HIES, 1993, Table 1.5.1.

Home duties clearly account for the majority of the female economically inactive persons —in 1980, 62.8%, and in 1993, 56.4%. One may hypothesize that **the definition of work, both by the census takers and as perceived by the female respondents themselves, is directly related to this mis-representation of female economic activities.**

Definition of work

The Instruction Manual for Field Staff (1992) issued by the Bureau of Statistics for the HIES defines gainful activity or work that qualifies a person to be recorded as economically active in the following manner:

> the activity pursued by persons for pay, profit or family gain. In other words, the activity which adds value to the 'national product'... (p. 12)

But the definition goes on to contradict itself:

> Execution of household chores or social commitments, etc., are not, however, considered 'gainful' activities. (p. 12)

The definition of work and productiveness have a direct relationship to the efforts to cure the viral poverty infection which plagues Guyana. It is this definition of work and productiveness which so disastrously impacts on planning priorities and permits Guyana's continuing poverty.

ii. Waged and unwaged work

In Guyana, it is conservatively estimated that at least 80% of all rural women are involved in agricultural activities of one form or another, whether waged or unwaged. And as the respondents in the study by Odie-Ali (1982) claimed, agriculture is important to them in the execution of their maternal functions. In times of severe family economic crisis, "when everything else fails, there is always farming to fall back on."

iii. Unwaged housework

Even if the woman is engaged only in unwaged housework (and in Guyana this is rarely ever so), she is still economically active because, as Selma James (1991) so succinctly puts it, "despite such 'disregard and discounting,' every sector of every economy is dependent on women's unwaged housework for its basic ingredient —its work force. Unwaged housework is the heart of every economic sector —formal, informal, waged or unwaged— not merely providing commerce and industry with a new generation of workers, but reproducing every day the human mind and muscle which have been exhausted and consumed by the day's work." (James Instraw: 1991)

Apart from the problem of definition, there are other socio-cultural reasons for this underestimation of women's work.

iv. Interpretation by respondent

It was mentioned earlier that when asked by the census-enumerator "Are you employed?" the interpretation most often is "Do you work?" And in that context the respondent asks herself "Do I earn money?" If the answer is no, she says to the census-enumerator, "No, I'm not employed." Her classification is therefore recorded as "housewife" performing home or domestic duties.

v. Penetration of Eurocentric ideologies

Another reason for the official underestimation of women's work is related to what Reddock (1990) refers to as the penetration of Eurocentric ideologies wherever populations have survived colonialism and imperialism. Her Trinidad and Tobago study illustrated "housewifization" or "domestication" as promoted by the church, the school and the law. In Trinidad, as in the rest of the Caribbean, it became a sign of upward mobility for women to get married and stay at home. Accordingly, agricultural women became farmers' wives. And so Guyanese women who spend hours working on farms, like their Caribbean counterparts, continue to describe themselves as housewives and are so recorded by the census takers.

vi. Agricultural activities as part of women's maternal role

Many rural women involved in agriculture see their involvement as an extension, if not an integral part of, their prescribed maternal role of providing food and nutrition for their families. In many instances, the kitchen garden is the main source of diet diversification and the "creole" chickens and ducks which they raise in the yard provide the only source of meat protein. In this context, farming becomes housework.

In the study conducted by Odie-Ali, 54.3% of the respondents did not consider home services as work, because, as one East Indian respondent claimed, "housework not work, woman born to do housework." (Odie-Ali, 1982:44)

vii. Perception of priorities and gender distinctions

Barrow (1989) posits that it is in the perception of priorities and the allocation of time and energy that gender distinctions become more apparent, hence the statistics reflect that men predominate the agriculture sector. Her argument is that for men, farming performs an essentially economically productive function, whereas for women it is closely related to social reproduction, because "in the Afro-Caribbean context, the economic support of the family is perceived as the joint responsibility of both conjugal partners and women's social reproduction is defined to incorporate productive work, be this in agriculture or another sector of the economy..." (Barrow: 1989:21)

It is posited that these are some of the reasons for the gross underestimation of women's agricultural involvement in the country's statistics.

1V. WOMEN FOOD PRODUCERS

Guyanese women are visibly a dominant force in food production processes, especially in food for local consumption. The data reveal that their involvement covers the entire spectrum of food production-related activities, from procuring planting materials to tending plants, from harvesting to marketing, from agro-processing for home consumption, to packaging and display for sale.

In this chapter on women as food producers, the first spotlight is on socioeconomic characteristics of systems —the socioeconomic characteristics of small-scale production and small-farmer production systems— since these have impacted so significantly on the daily lives of women food producers. In sections B, C, D, E and F some of the secondary information and trends are discussed in light of the data gathered in the survey of 150 rural women farmers, drawn from the following survey areas:

Upper and Lower Pomeroon	- Region 2
Parika/Salem	- Region 3
Canals Polder	- Region 3
Cane Grove	- Region 4
Black Bush Polder, Corentyne	- Region 6

A. Socioeconomic Characteristics of Small-scale and Small-farm Production Systems in Guyana

1. Small-farm characteristics

In Chapter II, the GRFHS (1978) rural farm size estimates (Table II.5) indicated that small farms —less than 1 ha to 3.96 hectares— accounted for approximately 60% of a total of 24,635 rural farms.

To varying degrees, small-farm agriculture involves:

- cash crops
- ground provisions (eddoes, yams, sweet potatoes, cassava and plantains)
- citrus fruits
- rice
- non-traditional crops and livestock
- peasant cane-farming.

a. Economic contribution

Bank of Guyana (BOG) statistics estimate that over the ten-year period 1980-1989, the small-farm contribution to agricultural GDP fluctuated from as high as 43% in the early 1980s, when food import restrictions were in force, to 19% in the late 1980s as import restrictions were lifted. (See Table V.1)

Table V.1. Small- and large-farm contribution to agricultural GDP, Guyana (1980-1989).

Year	Small-farm agriculture (%)	Large-farm agriculture (%)
1980	26.50	73.4
1981	31.4	68.5
1982	39.7	60.1
1983	43.5	56.4
1984	37.8	62.0
1985	33.2	66.6
1986	33.8	66.0
1987	19.3	80.5
1988	31.6	68.2
1989	19.7	80.2

Source: Bank of Guyana, 1990.

b. Types of small farmers

Generally, in terms of occupancy, persons on small farms

- squat
- rent from owners or lease holders
- lease from state or government
- own the land.

i. Squatters

Squatters may be classified as landless small farmers who, without legal rights, without the payment of any fees, without any form of permission, cultivate state or private lands. Mainly out of fear of eviction, squatters tend to cultivate short-term crops, principally:

- root crops (eddoes, yams, and sweet potatoes)
- vegetables (egg plant and pumpkin)
- greens (shallot, amaranth and celery)
- livestock (mainly poultry)

Their access to agricultural credit from the formal system is nonexistent.

ii. Tenant farmers

Tenant farmers, who rent either formally from owners (titleholders) or informally utilizing the various categories of state leases, tend to cultivate crops similar to the squatter. Like the squatters, their access to formal agricultural credit is virtually non-existent, since their tenancy is regarded as tenuous.

iii. Formal leaseholders

This category of small farmer may benefit from the formal agricultural credit institutions. They tend to have more permanent crops and livestock.

iv. Small landowners

These tend to focus on a variety of crops and raise livestock. This category of small farmer is better off because their land titles may be used as collateral for credit from the banking sector.

2. Problems characterizing small-scale production

In summary, the principal problems related to small-scale production are land tenure, credit, economies of scale, drainage and irrigation, access roads, training, extension services, and praedial larceny.

These are all interrelated, but a brief historical review is necessary to put these problems in their proper perspective.

a. Small-scale agriculture by Amerindians in non-coastal Guyana

Because of their nomadic lifestyle, a shifting cultivation system to meet subsistence needs has traditionally defined small-scale production in Amerindian communities. Despite the fact that today most Amerindians have given up the traditional nomadic lifestyle, small-scale production is still the order of the day.

To begin with, before any farming can commence, an enormous amount of vegetation must be cleared away. (To cut down one hectare of forest by hand is no mean task.) So that in the absence of heavy-duty machinery and equipment, the Amerindian is bound to small-scale farming.

In the few recent historical interventions when heavy duty machinery and equipment have been provided through government intervention and farmers entered into larger-scale production, problems relating to transportation and marketing of produce have quickly put a bitter end to any enthusiasm for producing on a commercial scale.

Absence of training and extension services have also led to some ill-advised enthusiasm. For example, Van Dongen (1993) noted that

> Amerindian farmers very often took large-scale coastal mono-cropping systems as their examples and ... started to plant peanuts on a large-scale basis.
>
> These systems, however, do not prove to be very sustainable in the fragile and relatively infertile sandy soil areas of Guyana. These areas required completely different solutions for their problems, using a new agricultural conception. (Van Dongen, 1993, Stabroek News, Nov. 1, 1993:14)

Farm expansion is therefore very limited and production remains at a subsistence level.

b. Small-scale agriculture by other peoples in coastal Guyana

As seen in Chapter 1, small-scale agricultural involvement in the coastal belt was a direct result of initiatives by the plantocracy. Initially, slaves were encouraged to cultivate estate-owned plots of about 0.01 hectares. Crops included plantains and tubers and were intended for subsistence only.

When the plantocracy realized that produce from these subsistence plots was actually being marketed and that this would adversely impact on the size of the much-needed plantation labor force, steps were taken to minimize farm size. And so, upon emancipation in 1838, the freed slaves sought ownership of land as their salvation.

i. Land size and tenure

Historically, much ado has been made about the movement of free blacks into villages in spite of the powerful opposition by the planter class and the colonial legislature.

In his study of local government in British Guiana, Young (1958) makes the point that despite the fact that colonial land policy was carefully shaped toward "keeping black people landless,"

ex-slaves managed to purchase lots on the front lands of estates and sometimes acquired abandoned plantations in their entirety, at highly inflated prices.

He concluded that "... the important point is the fact that the freed apprentice had surmounted the initial barrier of a restrictive land policy to emerge as a landed proprietor." (Young, 1958:23)

Rodney (1981) feels that "this emphasis is misdirected." He argues that to emphasize proprietorship of such small holdings (1/4 acre [0.01 ha] to 5 acres [2 has]) is socially meaningless, since "more than 7,000 persons in proprietary villages owned freehold plots of only 0.25 to 5 acres, while in communal villages scores of ex-slaves jointly owned properties of 100,200 or 500 acres. One does not become a "landed proprietor" in any socially meaningful sense with a holding of between 1/4 acre and 5 acres or with a tiny part-share in communal lands." (Rodney, 1981:61)

Guyanese banker C.K. Hunte (1993) testifies to Rodney's observation when he specifies that title documents pertaining to land to be cultivated is in itself not sufficient. He cites the classic example of the historic Victoria Village, an area of some 200 hectares, purchased out of the personal savings of some eighty ex-slaves in the year 1838.

This was a collective investment; no separate titles were issued. And so to the formal lending institution, this "block lease was, and still is, useless in the financial markets, because unanimous agreement by all owners to surrender the collective block title as collateral security is required." (Hunte, 1993:3)

Further, the heirs to such communal proprietorship find the process of transferral tedious and daunting.

Today, in 1993, Hunte notes that because of high legal costs and long waiting periods, "transfers, which are started in earnest, are usually not concluded, because of the bureaucratic maze in which legal fees are incurred. Many times, financial instruments and legal authority over those instruments are not issued." (Hunte, 1993:4)

To compound the situation, ownership of small farms legally inherited from 150 years ago has no legal basis for use as collateral for formal credit today.

With regard to the indentured servants —The East Indians in particular— assistance with individual small-scale settlements was granted to the colonizers in reciprocation for repatriation expenses. In neighboring Trinidad, crown lands were opened up and successfully offered to time-expired immigrants in 1869 in lieu of return passage.

Potter (1992) notes that, following the Trinidad example, an abandoned cattle farm on the East Coast of Demerara was chosen as the site for the first East Indian village settlement. He states

that "each settler was to be allotted one house lot (1/4 acre), one provision lot (1-1/2 acres) and a section of communal pasture (3/4 acre)." (Potter, 1992:4)

The records indicate that apart from the meager size of the offering, the land was insufficiently drained and the East Indians were not enthused. By 1894, the system of free grants in lieu of passage rights was again offered, but this time on lands with some modicum of drainage.

By the early 1890s, rice lands were made available for moderate rentals rates as bait to retain resident sugar cane plantation laborers. And in order to make rice cultivation and sugar production compatible, the size of the rice field allotment was restricted to about 0.2 hectares, so that "given their physical limitations, the East Indians could engage equally in both activities."

Furthermore, on many estates the grinding season was delayed by adjusting cane planting times to avoid major clashes of interest. The point to note, however, was that the farmer was relegated to small-farm activities.

Guyana's history therefore goes far to explain the phenomenon of small-scale farming.

ii. Land tenure and development

As in other Third World countries, the evidence shows that in Guyana the formal lending sector is more inclined to give favorable consideration to borrowers with proper legal titles to the land being offered as collateral security, since it is claimed that "better financial contracts can be prepared."

But credit aside, the experience is that "rights of exclusive use and control over particular resources" serve to motivate farmers to engage in long-term developmental activities. The World Development Report (1989) claims that

> without land tenure, they have no incentive to invest in irrigation or other improvements that would repay the investment over time. Efficiency can be further served by making property rights transferable. A farmer might then sell his land to a more productive farmer and take up another occupation for which he is better suited ... the assignment and transferability of property rights promote economic efficiency directly by creating new incentives, but also indirectly by making financial intermediation possible. (World Development Report, 1989)

iii. Tenured small-scale farmers and inaccessibility to credit

The evidence is that even in cases where the right to legal land ownership exists, small-scale farmers are experiencing difficulty in accessing formal credit. The banks are disinclined to disburse credit to small farmers for various reasons, including:

- the parcels are too small to establish any viable agricultural investment activity that is socially desirable and which provides full-time employment and an attractive income;

- the use of modern agricultural equipment in rice cultivation, such as a tractor, would be inefficient and costly unless custom hiring or the rental of contiguous plots could be arranged;

- drainage and irrigation systems can only be efficient if all the parcels in a system are simultaneously utilized and farmers have the same demand sequence for water. (Hunte, 1993:5)

In historical summary, small farming in Guyana had its genesis in the colonial policy of restricting the size and number of plots owned by former slaves and indentured servants. Independence did little to change the policy of granting short-term leases and the structure of public investment in agriculture which favors large farmers.

Today, in the era of structural adjustment, the policies still seem to favor the larger farmers, leaving small farmers to continue their struggle at the subsistence level.

Compounding small farmers' problems has been the historical lack of attention by the authorities to infrastructure, extension services, research, credit and marketing. Small-farm income, technology and productivity has, therefore, always remained at a low level; the income deficiency has rippled out and negatively affected educational and other developmental opportunities for their families.

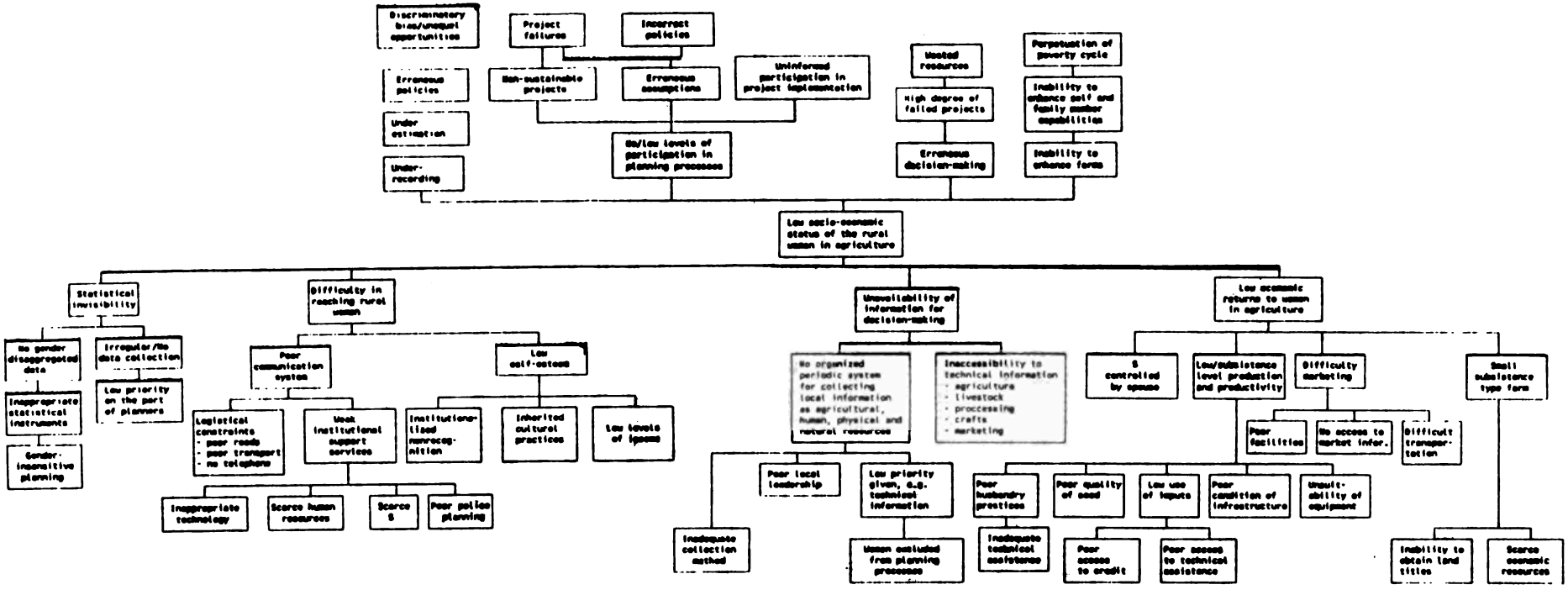
In all of this, rural women small farmers —both those who are heads of household and those who are not— have had to bear the brunt of the burden. Male-oriented agricultural and rural development policies and programs have kept women in the status of uninformed participants in every day agricultural work; women have been made invisible by the statistics.

Not only have rural women —who are the nation's food producers— been denied the opportunity for their own development, but the woes of the agricultural sector, and therefore the national economy, have become endemic.

In Figure V.I, based on a model developed by La Gra (1990), we present our rural women food producers in Guyana PROBLEM TREE which has deep-seated and far-reaching negative historical roots.

The fruits include unequal opportunities contrary to Article 29 of Guyana's 1980 Constitution (Appendix 9), incorrect policies, wasted resources, project failures and the perpetuation of the poverty cycle. It is our hope that this problem tree, its roots and its fruits, will positively impact on the planning process.

Figure V.I: The Rural Women Food Producers Problem Tree, Guyana, 1993.



B. Characteristics of the Small-farmer Production Unit

This section discusses the following characteristics of the farms surveyed: kind and size, principal crops, and output destination. There is also focus on the family units in the survey: number of persons, gender, age, education, etc.

1. Characteristics of the small farms surveyed

A total of 150 farms were surveyed in five farming areas, as follows:

Survey Areas	No. of Farms
Upper and Lower Pomeroo	30
Parika/Salem	30
Canals Polder	29
Cane Grove	31
Black Bush Polder	30

(See Figures V.2, V.3, V.4, V.5 and V.6.)

a. Size of farm and type of tenure

Table V.2 indicates that of the total of 150 farms, 88 (58.7%) were small farms of under four hectares, 47 (31.3%) were medium-sized farms measuring 4 to 10 hectares, and 15 (10%) were large farms of ten hectares and over. Small farms, therefore, predominate in this survey.

Almost half of all the surveyed farms —73 out of 150 (48.7%)— were owned. Of these, 60% were small farms. Six percent of all farms were rented and of these, 90% were small farms. Of the 28% of leased farms, 60% were small farms. Farms on family-owned land accounted for 12% of the sample and of these, 83% were small farms. Squatting accounted for only 2% of the sample and these were all small farms.

A little less than half of all the farms (46.7%) were located within two kilometers from the respondent's homes. So were half —43 out of 88— of all the small farms. A total of 21 farms, 14% of the sample, were located between four and ten kilometers from the home. Of those, ten (47%) were small farms. Of the three farms which were more than ten kilometers away from the home —29% of the sample— only one was a small farm.

b. Principal crops and their destination

The principal crops produced in the survey areas included rice, coffee, roots and tubers, green and yellow vegetables, amaranth, peas, beans, fruit and coconut.

Rice was only grown in two of the survey areas, Cane Grove and Black Bush Polder, where in excess of 90% of the annual crop was sold. The Upper and Lower Pomeroon was the only survey area where coconuts were produced and 83.8% of the crop was sold. The trend is the same for all other crops, as is reflected in Table V.3. The only crop produced in one survey area exclusively for home consumption was yam.

c. Livestock

More than half the farms surveyed (56%) raised chickens at an average of 40 chickens per farm; 29% raised cattle at an average of five heads per farm; and 22% raised ducks at an average of 20 ducks per farm. A few farms also raised turkeys, pigs, goats, sheep and rabbits in small quantities. The impression was that most of these were raised for domestic consumption.

2. Family characteristics

The average farm family size in all the survey areas and among all ethnic groups was six members, each family having at least four people (2 males and 2 females) between the ages of 15 and 55, at least 2 children under the age of 15, and 2 senior citizens of 55 years and over. There was an overall average in all survey areas and in all the ethnic groups of 60% male and 40% female heads of household. (See Table V.4)

a. Household head, farm size and ethnic group

As the size of the farm increases, the percentage of female heads of households decreases. Table V.4 shows that on the farms of less than four hectares, 42 out of 88 (47.7%) are headed by women; on farms of between 4 and 10 hectares, 12 out of 47 (25.5%) are women; while on farms of 10 hectares and over there are 6 out of 15 (40)% women.

Among the East Indian farm households, this relegation to small farms is even more evident. Out of 67 small farm households, 34 (50.7%) are female headed; on the 39 medium-sized farms, 9 (23%) have women heads of households; and of the 11 larger farms, four (36%) are women.

The same is true for the Amerindians in the sample. It is only among the Negroes that this does not necessarily apply (See Table V.5).

b. Ethnic group, age group and sex of household members

There were a total of 766 persons in all the households surveyed: 144 were Negro, 570 East Indian and 52 Amerindians.

There were 243 men and 231 women considered as most economically active in the 15-55 age group, a total of 474 persons (61.9%) of the total sample. The East Indian men outnumbered

the women in the other age groups but among the Negroes and Amerindians the male/female distribution was similar to that at the national level.

3. Family member activities

Children age 15 and under were not found to be very much involved in on-farm work as their principal or secondary activity. Instead, they form 70.4% of the student/other category. The impression is that while children may be called upon to assist, farm work does not take precedence in their daily lives. The elderly —60 years and older— show a similar trend. (See Table V.7)

a. On-farm work

Of the total sample, 42.3% are involved in on-farm work as a principal activity, and 8.9% as a secondary activity. 93.5% of those for whom on-farm work is the principal activity are in the economically active 15-60 year age group. The impression is that on Guyana's farms the adults see farming not only as their source of livelihood, but as their principal occupation.

Within the ethnic groups, the data show that more Negro and Amerindian women work on the farm than their male counterparts, and that slightly more East Indian men than women work on the farm as their principal activity. (See Figs V.7 and V.8)

b. Off-farm work

Of the total sample, 13.8% are involved in off-farm work as a principal activity. While more Amerindian women than their male counterparts work off the farm as a principal activity, both East Indian and Negro males outnumbered their female counterparts in this type of activity.

c. Domestic activities

Very few members of the farming families surveyed —five out of 766 persons (0.6%)— see domestic activities as a principal activity. However, 22.6% of the entire sample claimed these as a secondary activities. Fig V.4 indicates that of the three ethnic groups, Negro women (76%) and East Indian men (64%) are the most involved.

d. Students/others

Two-hundred and fifty-seven people (33.6% of the total sample) claimed student/other as their primary activity. Of these, 181 (70%) were children under the age of 15. Among the ethnic groups, Negro women outnumbered their male counterparts in this category. The situation, however, is the reverse for East Indians and Amerindians. No Negro or Amerindian woman claimed "student" as a secondary activity. Their male counterparts accounted for 100% of the sample in this regard. (See Fig V.5 and V.6)

Figure V.2. Upper and Lower Pomeroon

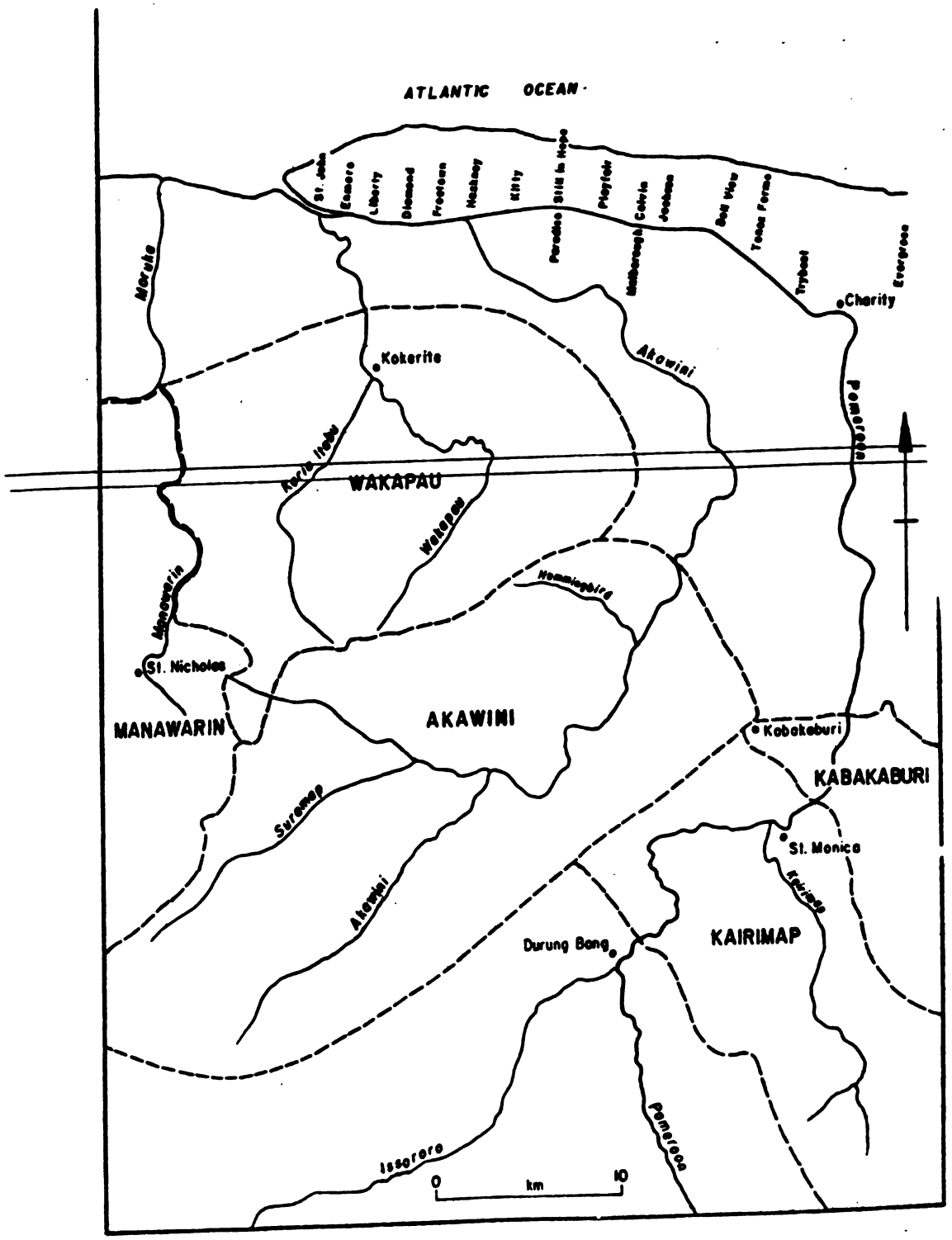


Figure V.3. Parika-Salem District

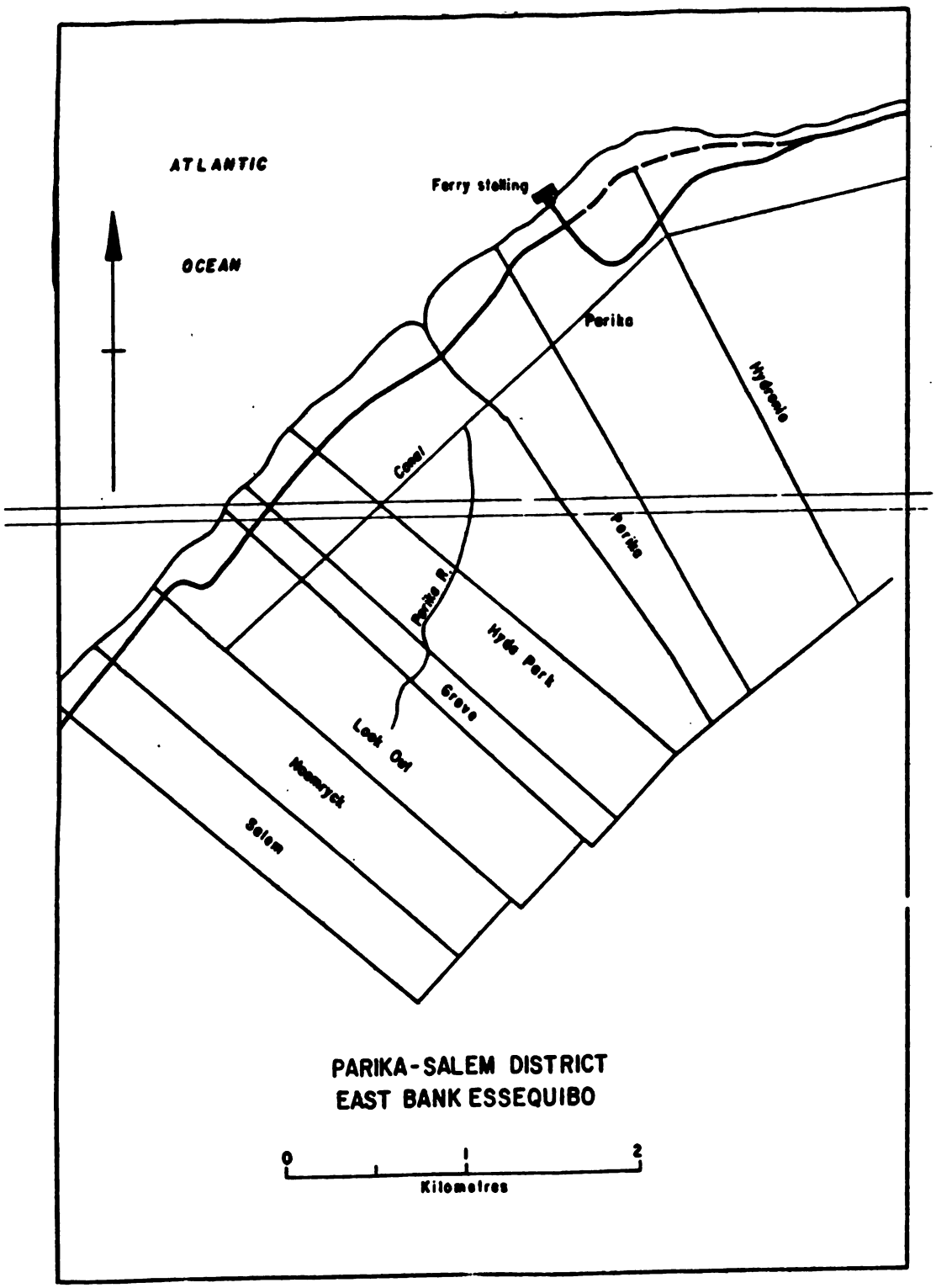


Figure V.4. Canals Polder

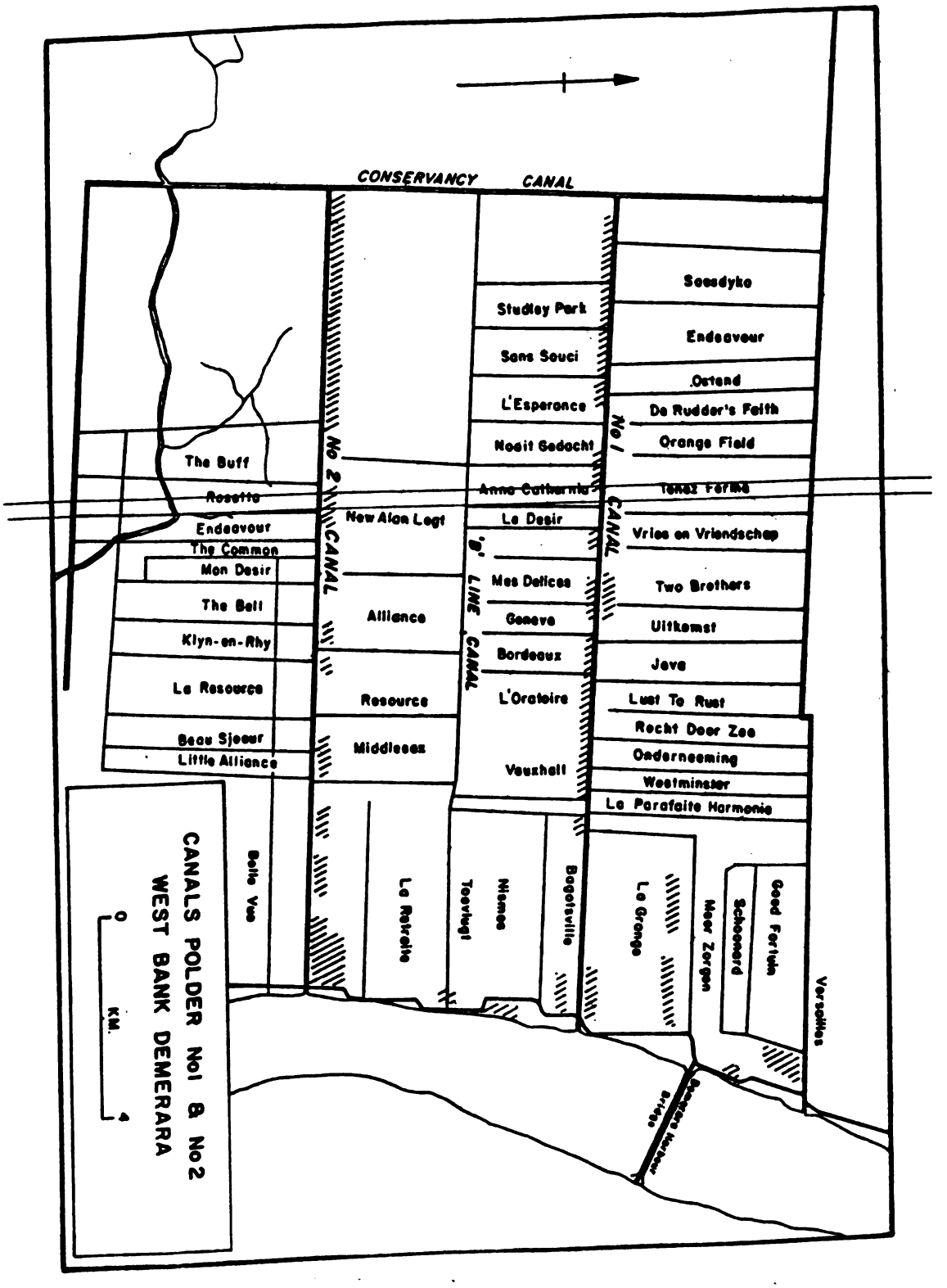


Figure V.5. Cane Grove

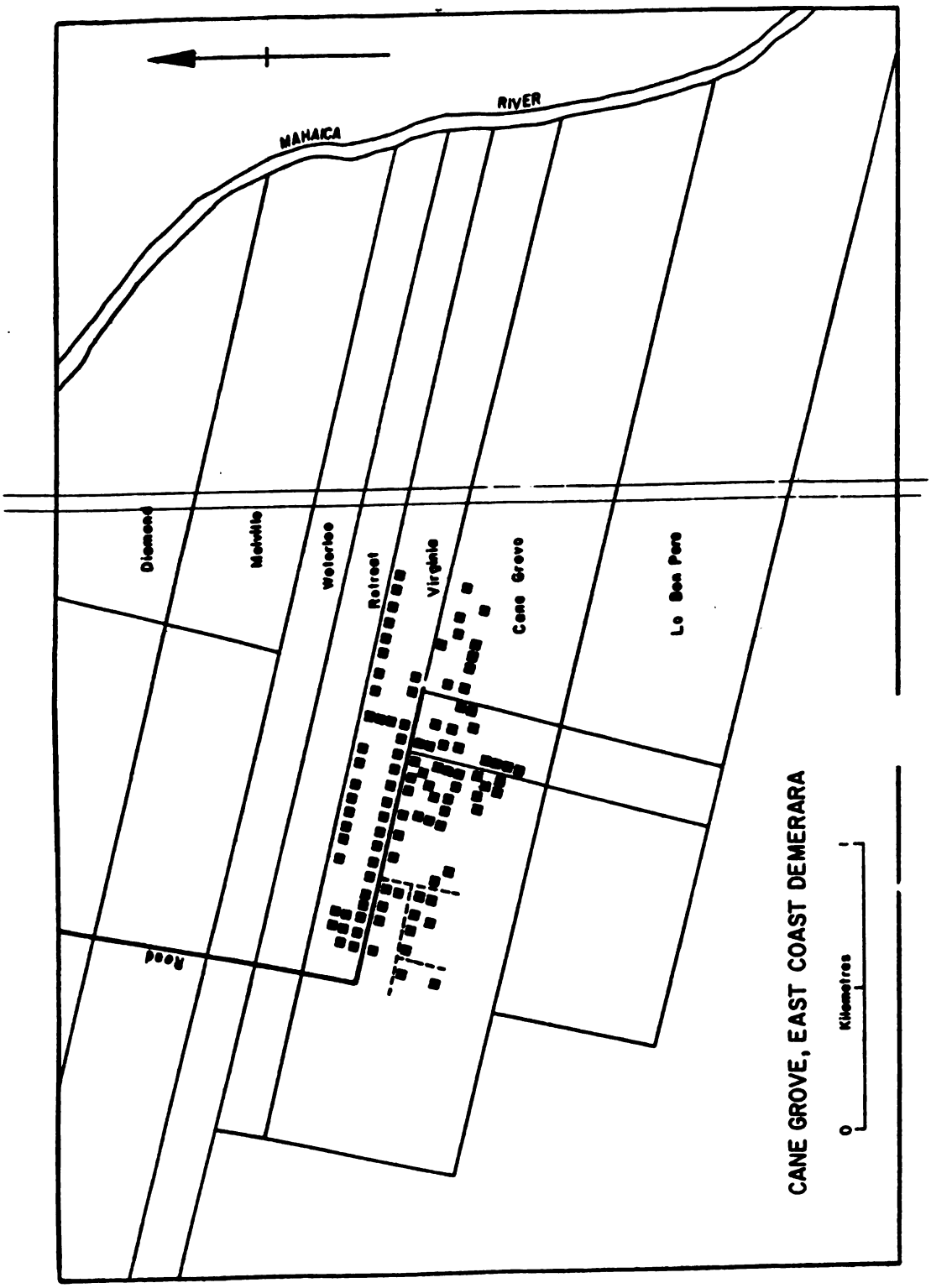


Figure V.6. Black Bush Polder

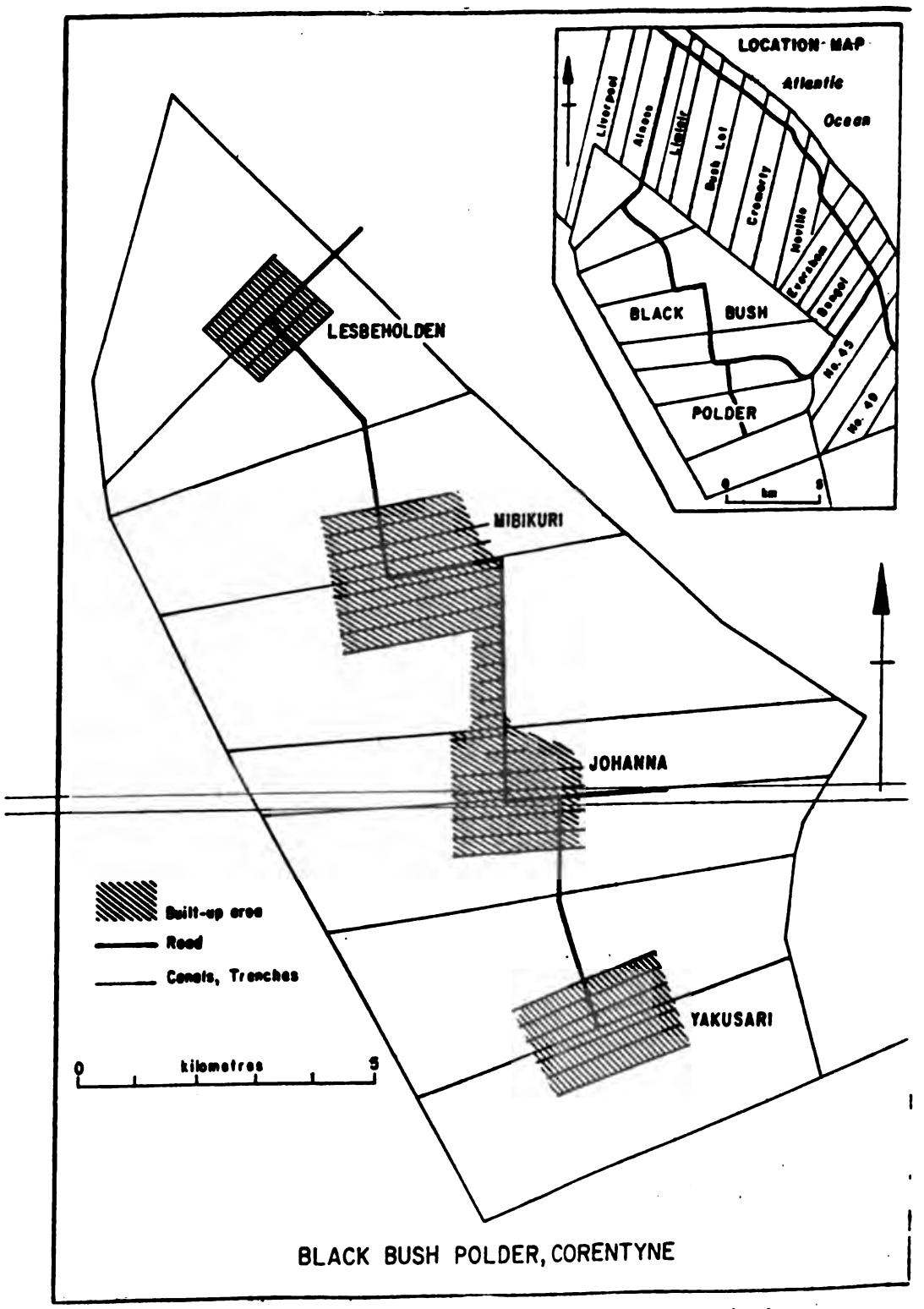


Figure V.7. Males: principal activities

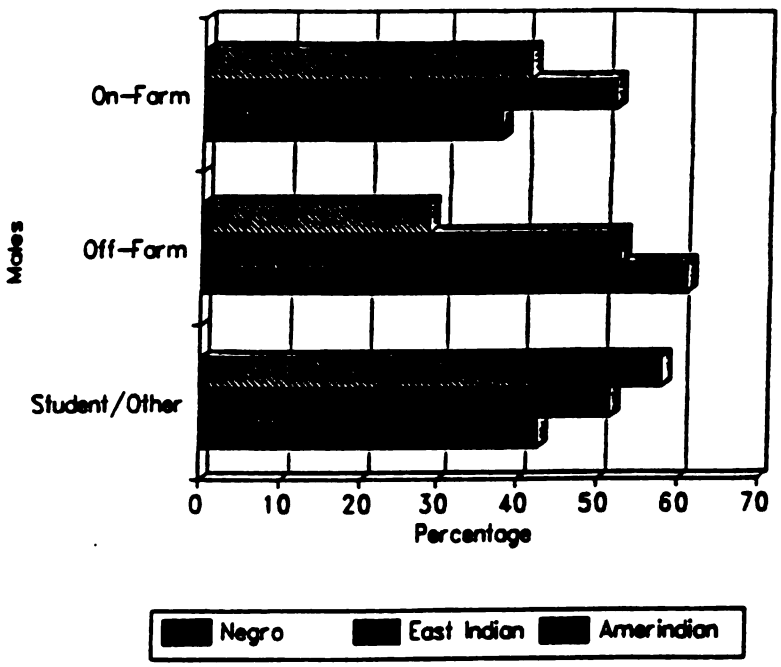


Figure V.8. Females: principal activities

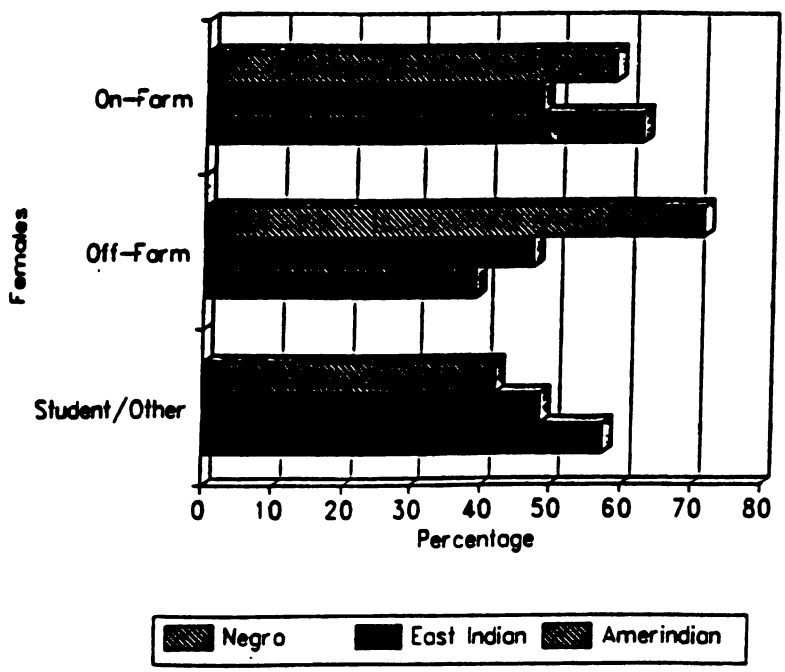


Figure V.9. Females: secondary activities

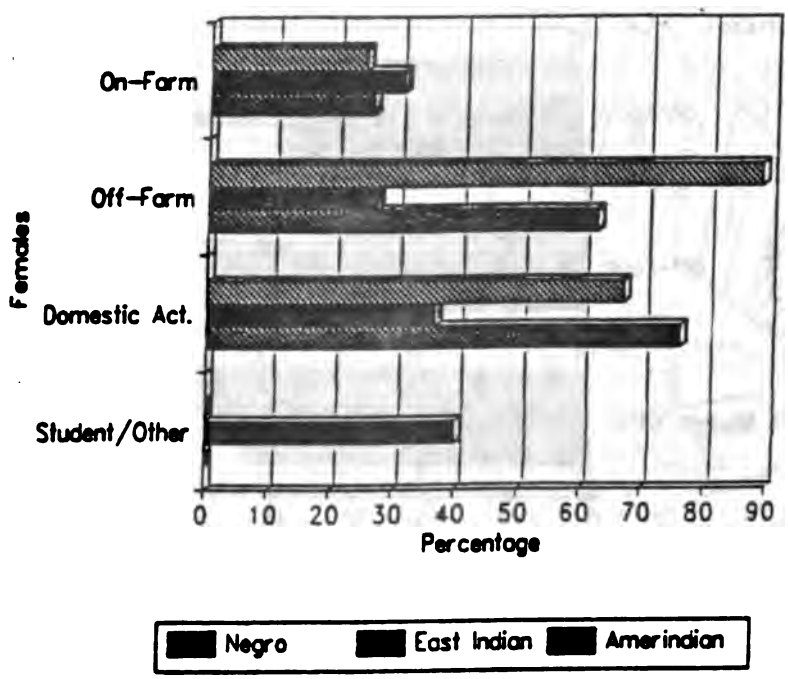


Figure V.10. Males: secondary activities

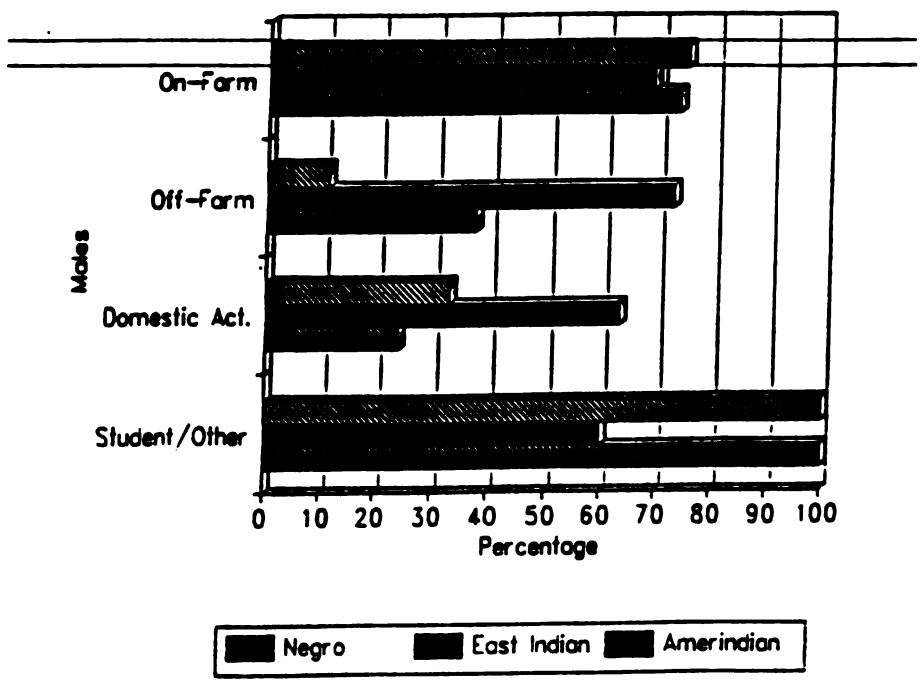


Table V.2. Number and size (in ha) of small farms, by survey areas in Guyana in 1993.

Type of Tenure	All Farms				Upper & Lower Pomeroon				Parika/Salem				Canals Polder				Cane Grove				Black Bush Polder			
	N=150				N=30				N=30				N=29				N=31				N=30			
	Total	< 4.0	4 to <10	10 and over	Total	< 4.0	4 to <10	10 and over	Total	< 4.0	4 to <10	10 and over	Total	< 4.0	4 to <10	10 and over	Total	< 4.0	4 to <10	10 and over	Total	< 4.0	4 to <10	10 and over	Total
	150	88	47	15	30	18	6	6	30	15	14	1	29	20	8	1	31	19	9	3	30	16	10		
Own	73	44	22	7	17	11	3	3	9	5	4		21	13	7	1	16	9	5	2	10	6	3		
Rent	10	9		1					5	5			1	1			1	1			3	2			
Lease	42	17	20	5	3	1	1	1	14	4	9	1	1	1			11	6	4	1	13	5	6		
Family Land	18	15	2	1	6	4	1	1	1	1			5	4	1		3	3			3	3			
Share	1		1																						
Squatting	3	2	1		2	1	1						1	1											
Joint Ownership	1			1	1			1																	
Other	1	1		1		1																			
Not Stated	1		1						1		1														

Table V.3. Agricultural production and destination.

Crop production	N=150 farms in all survey areas			N=30 farms, Upper & Lower Pomeroon			N=30 farms, Parika/Salem			N=29 farms, Canal Polder			N=31 farms, Cane Grove			N=30 farms, Black Bush Polder		
	Annual production amount	Production sold		Annual production amount	Production sold		Annual production amount	Production sold		Annual production amount	Production sold		Annual production amount	Production sold		Annual production amount	Production sold	
		Amount			Amount			Amount			Amount			Amount			Amount	
	tonnes	tonnes	%	tonnes	tonnes	%	tonnes	tonnes	%	tonnes	tonnes	%	tonnes	tonnes	%	tonnes	tonnes	%
For sale	3 857.4	3 472 6	90															
Rice	1 574	1 456	92.5										712.2	672.6	94.4	862	782.2	91
Coffee	3.4	2 8	82.4	907.2	725.7	80				2.4	2	83.3						
Roots & tubers	1 470 2	1 282 2	87.2	428	332	77 6	720	652 6	91	228 4	205.2	90	94	92.8	99			
Green & yellow vegetables	266 6	244 8	91 8	594 4	510 4	86	36	32	89	12.2	10.8	89	55.6	52 2	94	103.4	98.2	
Amaranth	10	9 4	94	1.2	1	83.3	1.6	1 4	88	2.6	2 4	92 3	0.6	0.6	100	3.6	3 5	97
Peas & beans	269	257.4	95 7	2 6	2	77	12	10	83.3	53 4	50.8	95.1	76 8	74.6	97.1	123.2	119 2	
Fruit	264.2	220	83 3	112	86 2	77	2.4	2.2	92	105.8	91 8	87	1 4	1 2	86	42.6	38	89
Coconut*	889 000	745 200	83 8	889 000	745 200	83.8												
For self consumption	45.4			45.4														

* Unit for coconut is each.

Table V.4. Family characteristics in Guyana in 1993.

	Avg. no. of people on the farm					% of family whose head of household is	
		Adults		Over	Under		
		15 - 55 yrs		55	15		
	Total	M	F			M	F
All Districts	6	2	2	2	2	60	40
All Ethnic Groups	6	2	2	2	2	60	40

Table V.5. Distribution of farms by ethnic group, farm size and heads of household.

	Size of farm and sex of head of farm household						
		< 0.4 - 4.0		4.0 - <10.0		10.0 and over	
Ethnic group	Total	M	F	M	F	M	F
All	150	46	42	35	12	9	6
Negro	26	11	6	3	3	1	2
East Indian	117	33	34	30	9	7	2
Amerindian	7	2	2	2	-	1	-

Table V.6. Distribution of household members by ethnic group, age group and sex.

Ethnic group	Total	M	F	Age Group and Sex of Household Members							
				Adults 15 - 55 yrs		Over 55		Under 15		Not Stated	
				M	F	M	F	M	F	M	F
All	766	372	394	243	231	22	20	105	138	2	5
Negro	144	61	83	34	37	3	5	23	40	1	1
East Indian	570	288	282	194	180	18	14	75	86	1	2
Amerindian	52	23	29	15	14	1	1	7	12		2

Table V.7. Family member activities in Guyana in 1993.

		Principal Activities, Age Group & Sex																													
		Work on Farm							Work off Farm						Domestic Activities						Student/Other						No Response					
		15 - 60 > 60 < 15							15 - 60 > 60 < 15						15 - 60 > 60 <15						15 - 60 > 60 < 15						15 - 60 > 60 < 15					
	Total	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All ethnic groups	766	149	154	9	8	2	2	53	47	2	1	1	2	1	2		1		1	43	31	1	1	84	97	4	3	3	3	20	41
Negro	144	13	24	8	1	1		14	7		1		1		1				1	9	5			17	30				3	6	10
East Indian	570	129	120	1	7	1	2	38	35	1		1	1	1	1		1			28	25	1	1	62	60	3	3	3		12	24
Amerindian	52	7	10					1	5	1										6	1			5	7	1					27
		Secondary activities, age group and sex																													
All ethnic groups	766	44	19	2		2	1	31	22		1			55	105	4	7	1	1	11	3			6	1	109	88	9	6	98	140
Negro	144	12	5			2		3	5					6	17		1		1	3				4		12	10	1	4	18	40
East Indian	570	30	13	1			1	27	9		1			48	86	46	1			4	3			2	1	90	74	8	2	73	86
Amerindian	52	2	1	1				1	8					1	2					4						7	4			7	14

C. Contribution of Women to Production: Activities and Type of Work

This section summarizes some of the characteristics of the 150 female agrarian women surveyed —their union status, average age, average level of education, status as head of household, and the level of their responsibility for running the farm. The division of labor regarding reproductive and agricultural production activities is also discussed.

1. Characteristics of the respondents

a. Union status and age

The average full-time agrarian woman is between 35 and 40 years old and living with a man in legal marriage (59%) or in a common-law relationship (22%). Only seven respondents (4.6%) claim to be single. A total of 20 respondents (13.3%) claim to be either widowed, divorced or separated from their men, bringing the total number of respondents living without men to 27 (17.9%). Only one respondent admitted to a visiting relationship. See Table V.8.

b. Level of education

The sample reflects the educational trend at the national level with 96% (144 out of 150) claiming to have been the recipients of formal education (7.8% primary, 13% secondary, 3% tertiary and 2% vocational). Only 1% claimed to have not received any formal education.

c. Head of household

Slightly less than two-fifths (38.7%) of the sample saw themselves and were seen as heads of households. More East Indian women (40.2%) claimed this status as against their Negro (34.6%) and Amerindian counterparts (28.6%). These findings are three times the 1978 GRFHS estimate of 12% of households needed by women.[34]

d. Responsible for running the farm

Running the farm year-round is clearly a female responsibility, with almost 90% of all the respondents claiming to do so. (See Table V.8) The exceptions —all East Indians representing 10% of the sample— claimed part-time responsibility. All these East Indian women were living with a man in legal marriage or a common-law relationship.

---

[34] When the question 'Are you the head of household?' was asked, both the Negro and East Indian women who answered in the affirmative did so in the presence of their spouses.

Table V.8. Characteristics of the respondents.

Union status	Total # of respondents	Average age	Average level of education							Head of household		Responsible for running farm	
			Pri	Sec	Voc	Ter	N.F.	Other	N.S.	No	%	All year %	1-6 mth %
All ethnic groups													
Total	150	40	117	20	2	4	2	1	4	58	38.7	89.55	10.45
Single	7	33	4	2	-	1	-	-	-	4	57.1	5.22	-
Married	89	40	72	12	2	1	-	1	1	20	22.5	50.0	8.21
Widowed	14	48	10	2	-	-	1	-	1	14	100.0	10.45	-
Divorced	3	54	1	1	-	1	-	-	-	2	66.7	2.24	-
Separated	3	41	3	-	-	-	-	-	-	3	100.0	2.24	-
Common-law	33	37	26	3	-	1	1	-	2	14	42.4	18.66	2.24
Visiting	1	55	1	-	-	-	-	-	-	1	100.0	0.75	-
Negro													
Total	26	35	15	8	-	2	-	1	-	9	34.6	17.91	-
Single	5	33	2	2	-	1	-	-	-	3	60.0	3.73	-
Married	12	33	8	3	-	-	-	1	-	2	16.7	8.21	-
Divorced	2	50	-	1	-	1	-	-	-	1	50.0	1.49	-
Common-law	7	36	5	2	-	-	-	-	-	3	42.9	4.48	-

Table V.8. (Cont.)

Union Status	Total # of respondents	Average age	Average level of education							Head of household		Responsible for running farm	
			Pri	Sec	Voc	Ter	N.F.	Other	N.S.	No	%	All year %	1-6 mth %
East Indian													
Total	117	40	96	12	1	2	2	-	4	47	40.2	67.16	10.45
Single	1	38	1	-	-	-	-	-	-	1	100.0	0.75	-
Married	74	41	62	9	1	1	-	-	1	16	21.6	39.55	8.21
Widowed	14	48	10	2	-	-	1	-	1	14	100.0	10.45	-
Divorced	1	64	1	-	-	-	-	-	-	1	100.0	0.75	-
Separated	3	42	3	-	-	-	-	-	-	3	100.0	2.24	-
Common-law	23	35	18	1	-	1	1	-	2	11	47.8	12.69	2.24
Visiting	1	55	1	-	-	-	-	-	-	1	100.0	0.75	-
Amerindian													
Total	7	45	6	-	1	-	-	-	-	2	28.6	4.48	-
Single	1	30	1	-	-	-	-	-	-	-	-	0.75	-
Married	3	53	2	-	1	-	-	-	-	2	66.7	2.24	-
Common-law	3	41	3	-	-	-	-	-	-	-	-	1.49	-

Table V.9. Division of labor of the farm: Reproductive activities.

Reproductive activities	Total			Negro			East Indian			Amerindian		
	Women		Men	Women		M	Women		Men	Women		Men
	R* (%)	OW** (%)	%	R (%)	OW (%)	%	R (%)	OW (%)	%	R (%)	OW (%)	%
Prepare food	93.3	9.9	3.7	92.3	36.4	11.8	95.7	6.3	1.5	57.1	-	13.3
Gather firewood	23.3	-	16.9	11.5	-	11.8	25.6	-	18.0	28.6	-	13.3
Carry water	35.3	7.4	17.7	23.1	18.2	11.8	37.6	6.3	19.6	42.9	-	6.7
Wash clothes	89.3	7.4	1.2	100.0	18.2	2.9	95.7	6.3	0.5	85.7	-	6.7
Iron clothes	66.0	3.7	0.4	88.5	9.1	-	62.4	3.2	-	42.9	-	6.7
Clean house	79.3	16.0	0.8	88.5	27.3	2.9	78.6	14.3	-	57.1	14.3	6.7
Child care	30.0	7.4	1.2	57.7	27.3	5.8	24.0	3.2	0.5	28.6	14.3	-
Shopping	82.7	1.2	4.9	84.6	-	5.8	84.6	1.6	4.1	42.9	-	13.3
Repair house and furniture	5.3	-	2.4	-	-	2.9	6.8	-	2.1	-	-	6.7
Sew/mend clothes	15.3	1.2	-	34.6	-	-	11.1	1.6	-	14.3	-	-
Pay bills	32.7	1.2	14.4	61.5	-	17.6	27.4	1.6	14.4	14.3	-	6.7
Clean yard	42.0	6.2	14.0	30.7	-	20.6	45.3	7.9	13.4	28.6	-	6.7
Tend garden	16.0	-	7.4	15.4	-	8.8	17.1	-	7.7	-	-	-
Transport children/ other	6.7	1.2	1.2	15.4	-	2.9	4.2	1.6	1.0	1.43	-	-

* - Respondent, xx - Other Women

The indication is that, in general, Negro and Amerindian men leave the activity of managing the farm to their spouses.

2. Division of labor on the farm

Agricultural production activities at the small-farm level appeared to exhibit no rigid sexual division of labor.

This supports the findings of Odie-Ali (1986). However, with regard to reproductive activities, whether the household is Negro, East Indian or Amerindian, the lines seem to be clearly drawn.

a. Reproductive activities

With women's participation at 93%, 89%, 66%, 79% and 83% respectively, food preparation, washing clothes, ironing clothes, cleaning house and shopping (Table V.9) are clearly not the work of the men in the household.

This clear-cut division of household labor carries through the three ethnic groups. The only household chore that seems not to be offending to the men in the household is "cleaning the yard."

b. Agricultural production activities

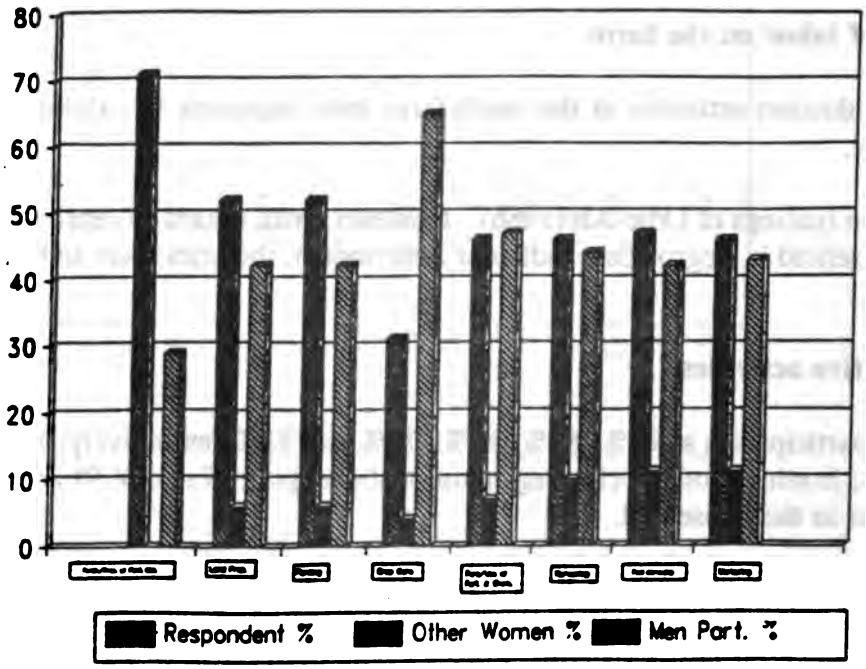
In agricultural production activities, women (both our respondents and the other adult women) participate more than their male counterparts. Table V.10 quantifies their involvement in pre-harvest, post-harvest and marketing activities. During the pre-harvest, the women of the household contribute 50% of the crop reproductive activities, during the post-harvest 57%, and for marketing 54%.

Table V.9. Percentage involvement of family members in crop production activities, Guyana, 1993.

Activities	Respondents (%)	Other Women (%)	Men (%)
Pre-harvest	43	7	50
Post-harvest	46	11	43
Marketing	46	9	45

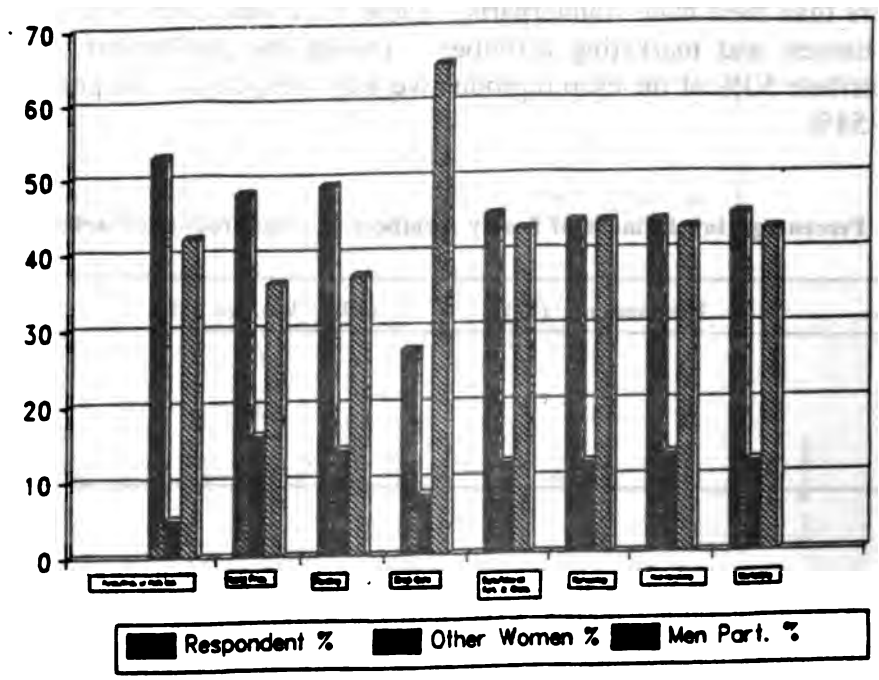
Figures V.10, V.11, V.12, V.13, V.14 and Appendix 11 show that women's participation in crop production is greater than men's, except in the case of rice, a mechanized crop, where male participation is greater.

Figure V. 11. Family member participation in vegetable production by type of activity, Guyana, 1993.



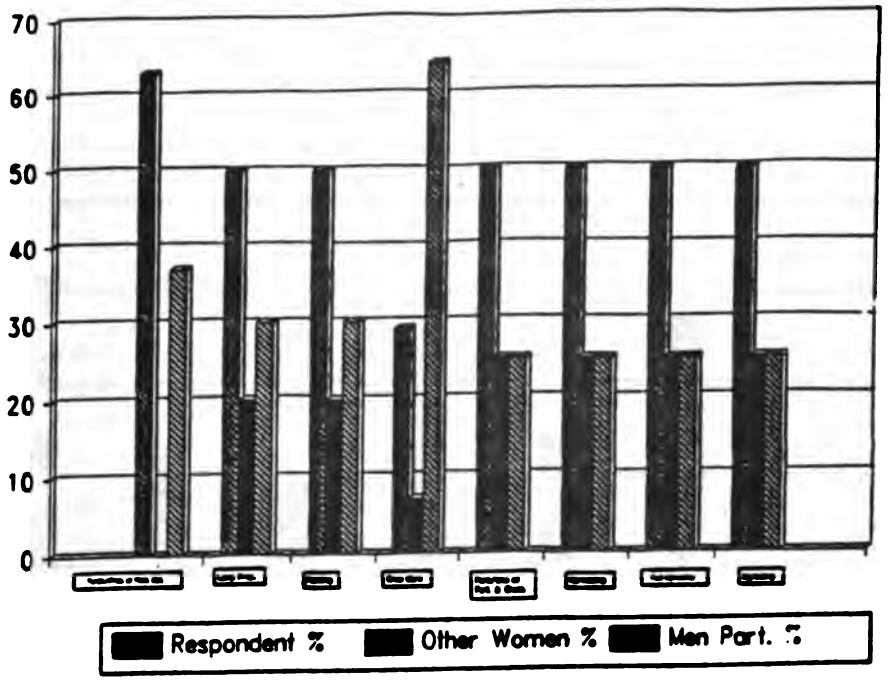
Crop (1) Vegetable

Figure V. 12. Family member participation in cassava production by type of activity, Guyana, 1993



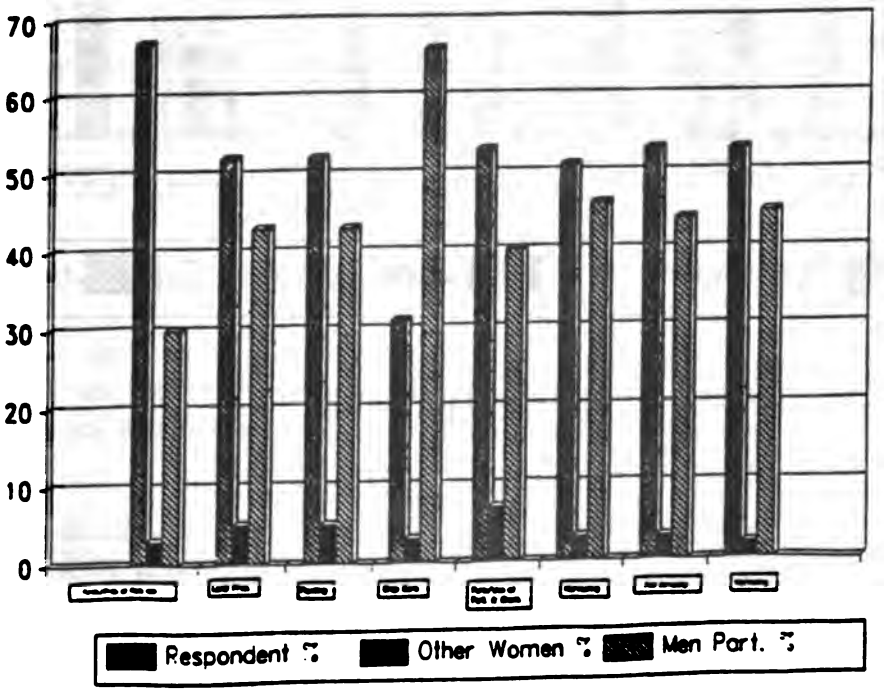
Crop (2) Cassava

Figure V. 13. Family member participation in sweet potato production by type of activity, Guyana, 1993



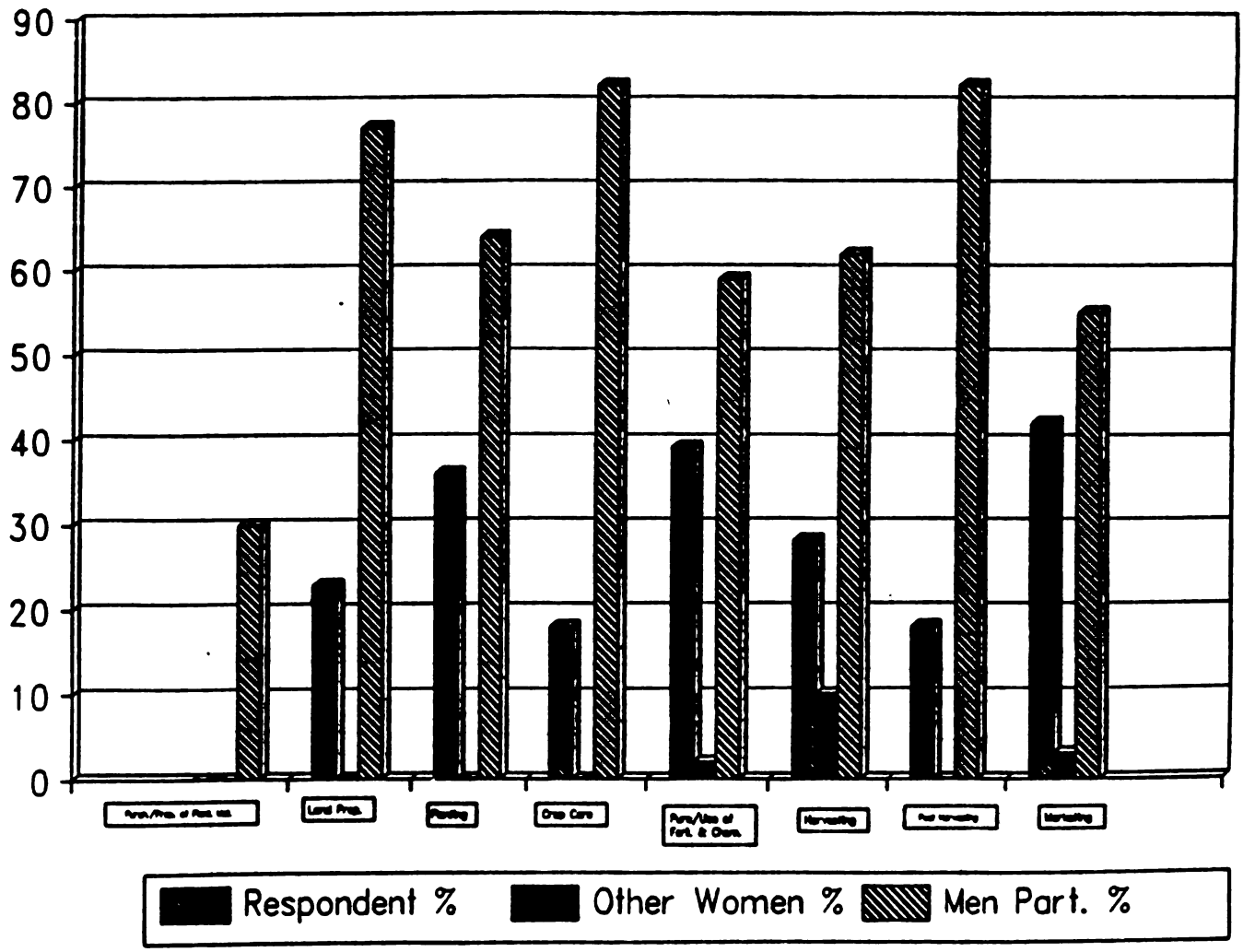
Crop (3) Sweet Potato

Figure V.14. Family member participation in fruit production by type of activity, Guyana, 1993



Crop (4) Fruit

Figure V.15. Family member participation in rice production by type of activity, Guyana, 1993



Crop (5) Rice

c. Livestock production activities

The number of households with large animals encountered in this survey were too few to form any conclusions.

3. Implications

Rural women's responsibility for the daily running of the farm, their responsibility for the time-consuming and labor-intensive reproductive activities in the household, and their high level of participation in the pre-harvest, post-harvest and marketing activities suggest that the rural woman food producer is shouldering the role of beast of burden.

The unfortunate reality, as depicted in our Problem Tree, is that despite her labor-intensive lifestyle, she continuously suffers from the chronic deprivations occasioned by her low socio-economic status.

Do these women have any social life? Is there any leisure in their lives? The evidence shows that they somehow manage to weave activities which they consider as leisure into their lives.

4. Leisure activities

Listening to the radio and watching television are the two major activities considered as leisure and are engaged in by 98% and 68% of the respondents respectively. Of those who listen to the radio and watch TV, 79% and 22% do so on a daily basis.

These two activities were interwomen into the respondents' daily program of activities in such a manner that reproductive and productive activities were carried on simultaneously.[35]

Other activities listed as leisure include getting together with neighbors, speaking to persons considered as leaders, and leaving the community to go visiting; there are engaged in by 74%, 78%, and 77% of the respondents respectively. The day of the week that affords them the most free time is the traditional Sunday.

D. Contribution of Women to Family Income

Section C looked at the unequal division of labor in the reproductive and productive spheres of work activities on the farm, with women single-handedly bearing the burden of the reproductive activities and sharing more than equally in the productive activities.

---

[35] For example, one Black Bush Polder respondent whose family runs video shows as an evening business claimed that after collecting the fees from patrons, she settles in to "bundle bora" and other similar post-harvest and pre-marketing activities while watching the show.

In Section D, it is shown that the participation of rural women food producers in both income-producing and non-income-producing activities is higher than that of their male counterparts, although the actual income contributed to the family is lower.

1. Income-producing activities

Table V.11 presents a frequency distribution of the declared primary and secondary activities by family members between the ages of 15 and 50.

Activities are divided into income-producing and non-income-producing, and permit a general assessment of the importance of women's contribution to family income.

Table V.11. Primary and secondary activities by family members between ages 15-50, Guyana, 1993.

Family members between ages 15-50	Primary activities1			Secondary activities2		
	Income producing		Non-income3 producing	Income Producing		Non-income producing
	On farm	Off farm		On farm	Off farm	
Women	133 62%	46 21%	36 17%	17 8%	18 8%	180 84%
Men	149 60%	53 21%	48 19%	44 18%	31 12%	175 70%

1. Activities to which the person dedicates most of his or her time.

2. Supplementary activities to those declared as primary.

3. Includes housewives, students, pensioners, and other family members who do not contribute income.

As can be seen, income production within the family unit is definitly a shared responsibility among men and women; in fact, a higher percentage of women than men declare their primary activity to be an income-producing one: 83% of adult female family members, compared to 81% of male family members.

While the proportions are almost the same between men and women in terms of their dedication to income-producing activities, there is a slightly higher percentage of women than men whose primary activity takes place on the farm.

The proportion of women and men working off-farm is identical, although in both cases, on-farm work is a much more important source of income.

A fairly large percentage of men (30%) have a secondary income-producing activity, compared to only 16.5% of female family members, although most family members do not have either a secondary activity or a secondary income-associated activity.

Of those that do have a secondary activity, 18% work on the farm. Men and women with secondary income-producing activities may be mainly occupied in income-producing activities (e.g. they work off-farm and help on the farm), or they may be mainly occupied in non-income producing activities (e.g., sons and daughters that study and help on the farm).

Table V.12 analyzes participation in income-producing activities and presents a frequency distribution by gender in on- and off-farm activities.

Table V.12. Participation in on- and off-farm income-producing activities by gender in Guyana in 1993.

	On-farm	Off-farm	Total
Men	.39	.14	.53
Women	.35	.12	.47
Total	.74	.26	1.00

The table shows that 26% of family members work off-farm as their primary activity, while 74% work on-farm. Figure V.11 shows that this trend runs through all the ethnic groups. However, men participate slightly more in farm activities than women, and account for .39 out of .74 (53%) of family member participation.

This high degree of on-farm participation may give the impression of relative profitability compared to off-farm sources of labor. However, this should be seen in the context of the location of the five farming communities surveyed.

There are not many other employment options in these locations. If and when other employment opportunities present themselves, in most cases the home-to-work transportation

cost would render the family worse off than if the member had stayed at home and did nothing at all!

E. Women's Labor Allocation

In Sections C and D, the data confirmed the labor-intensive pace of women's daily lives in order to combine her reproductive work with her agricultural production tasks. The data also revealed that, despite the fact that no income is attributed to women's reproductive tasks, they contribute an average of 47% of the household income. In Section E, the use of time is examined.

When women's reproductive tasks are examined separately, it is seen that the average rural woman food producer spends as much as 140 hours per week ensuring that the family's nutritional and other needs are met.

Coping with these multiple labor-intensive domestic tasks requires an ability to juggle them and at the same time supervise assistance on chores and responsibilities alotted to other family members. The two all-important nutritional and nurturing activities of food preparation and child-care together consume almost 60 hours of her week.

a. Food preparation

This is the most time-consuming of all the reproductive activities, occupying an average of 31 hours per week for the total sample. The Amerindian woman, however, who must complete the labor-intesive and time-conuming preparation of cassava bread as the dietary staple, spends more time —an average of 50 hours per week— than the Negro and East Indian woman. (See Table V. 13.)

Very few men, 3.7% of the 243 men in the 150 households, ever engage in food preparation. (See Table V.14)

b. Child care

Thirty per cent of the respondents claim to be involved in child care. They spend an average of 28 hours per week in an activity that requires a high degree of alertness. Only 1.2% of the men ever get involved in this activity.

In summary, reproductive activities in farming households fall squarely on the shoulders of the women. Table V.14 summarizes this.

Table V.13. Female respondents' use of time on domestic (reproductive) activities.

Domestic activity	Average Hours per Week Spent by Percentage of Respondents							
	Total		Negro		East Indian		Amerindian	
	Av. hrs	% of 150 Resp.	Av. hrs	% of 26 resp.	Av. hrs	% of 117 resp.	Av. hrs	% of 7 resp.
Prepare food	30.78	93.3	34.56	92.3	29.24	95.7	50.43	57.1
Gather firewood	3.97	23.3	2.33	11.5	4.53	25.6	3.00	28.6
Carry water	8.38	35.3	10.21	23.1	8.17	37.6	8.75	42.9
Wash clothes	7.28	89.3	6.41	100.0	7.62	95.7	9.67	85.7
Iron clothes	2.67	66.0	2.04	88.5	2.92	62.4	1.50	42.9
Clean house	9.21	79.3	9.21	88.5	9.24	78.6	7.62	57.1
Child care	28.25	30.0	24.75	57.7	30.67	24.0	21.0	28.6
Shopping	3.71	82.7	3.57	84.6	4.12	84.6	2.60	42.9
Repair house and furniture	1.00	5.3	-	-	1.00	6.8	-	-
Sew/mend clothes	1.04	15.3	1.00	34.6	1.00	11.1	1.50	14.3
Pay bills	1.75	32.7	1.27	61.5	1.95	27.4	2.00	14.3
Clean yard	5.80	42.0	6.45	30.7	11.15	45.3	2.50	28.6
Tend garden	22.62	16.0	24.00	15.4	16.47	17.1	-	-
Transport/children others	6.94	6.7	6.25	15.4	8.50	4.2	5.00	14.3

Table V.14. Percentage of family members who participate in reproductive activities.

Reproductive activities	Percentage of		
	150 respondents	81 other women	243 men
Prepare food	93.3	9.9	3.7
Gather firewood	23.3	0.0	16.9
Carry water	35.3	7.4	17.9
Wash clothes	89.3	7.4	1.2
Iron clothes	66.0	3.7	0.4
Clean house	79.3	16.0	0.8
Child care	30.0	7.4	1.2
Shopping	82.7	1.2	4.9
Repair house and furniture	5.3	0.0	2.4
Sew/mend clothes	15.3	1.2	0.0
Pay bills	32.7	1.2	14.4
Clean yard	42.0	6.2	14.0
Tend garden	16.0	0.0	7.4
Transport children/ others	6.7	1.2	1.2

F. Women's Participation In Decision-Making and Access to Credit, Land, Training and the Problems and Limitations They Face

In this section, the discussion focuses on the respondents' responses on decision-making, financing sources, training and technical assistance, problems and improvement measures, ambitions for children, and their awareness and participation in productive and community organizations.

1. Decision-making

In Section C, 80% of the respondents claimed that there were men resident on the farm —either as legally married or common-law husbands. Like income-producing activities, decision-making on the farm is a shared activity. However, there are some decisions which are most often the woman's prerogative.

a. Decision-making in the family and household

The findings indicate that the traditional pattern of male/female division of labor is present in the rural farm household where reproductive activities are concerned. Decisions with regard to household activities, nutrition and clothing are almost exclusively made by the woman, with some participation by the man in decisions related to education and health, and to a greater extent in housing and leisure matters. (See Table V.15)

Table V.15. Decisions on use of family income and items of expenditure in Guyana in 1993.

Item of expenditure	Decision-making			
	Respondent	Man	Both	Other
Household activities	85.8	2.0	12.2	-
Food	83.3	3.3	13.3	-
Clothing	78.7	3.3	18.0	-
Education	64.7	4.4	30.1	0.7
Health	60.8	3.4	35.8	-
House construction/ repairs	29.8	14.9	54.6	0.7
Leisure	29.8	14.9	54.6	-

b. Decision-making about producing activities

The male/female dyad predominates in this area. Nevertheless, with regard to such decisions as what livestock should be raised, the pricing of the woman's produce and where to market it, the prerogative is mainly the woman's. This agrees with the historical trend mentioned in Chapter IV of women raising livestock to contribute to the nutritional needs of the family, and therefore seeing it as part and parcel of their maternal role. Historically, women have also been the marketers of produce. In Table V.16 decisions are categorized under inputs, marketing and management.

i. Decisions pertaining to iInputs

With the exception of what livestock to raise, other input decisions on what crop to produce (and how much) and what machinery and/or equipment to purchase are shared decisions skewed mainly in the direction of the man. It must be noted that these are high-risk decisions.

ii. Decisions pertaining to marketing

This is clearly the domain of the women with men sharing in the decisions to a lesser extent.

Table V.16. Women's participation in productive decisions on the farm, Guyana, 1993.

Decisions pertaining to	Decision-makers															
	Only woman*				Only men**				Shared men and women				Other			
	N = 150 All	N = 26 Negro	N = 117 East Indian	N = 7 Amer-Indian	N = 123 All	N = 19 Negro	N = 98 East Indian	N = 6 Amer-Indian	All	Negro	East Indian	Amer-Indian	All	Negro	East Indian	Amer-Indian
Inputs																
Crop production	29.5	41.7	26.3	42.9	29.5	12.5	33.9	14.2	40.9	45.8	38.8	42.9				
Purchase Machine/equipment	16.5	27.4	13.6	50.0	34.0	36.3	34.1	25.0	49.5	36.3	52.3	25.0				
Crops to be planted	30.0	41.7	21.8	42.9	16.0	12.5	17.6	-	54.0	45.8	55.5	57.1				
Livestock to be raised	56.9	54.5	57.3	60.0	6.9	4.5	7.9	-	35.3	36.4	34.8	40.0	0.9	4.6		
Marketing																
Products to be sold	37.9	62.5	32.8	40.0	13.8	4.2	15.5	20.0	47.6	33.3	50.9	40.0	0.7		0.9	
What markets	46.2	75.0	40.5	40.0	13.8	8.3	14.7	20.0	38.6	16.7	43.1	40.0	1.4		1.7	
Price of goods	42.9	78.3	35.4	50.0	34.3	8.7	8.8	-	23.6	8.7	26.5	25.0	25.0	4.3	29.2	25.0
Management																
Use of loans	18.6	37.5	12.5	33.3	16.3	12.5	18.8	-	62.8	50.0	65.6	66.7	2.3		3.1	
Farm management	31.7	45.5	27.4	66.6	18.6	13.6	19.6	16.7	49.7	40.9	53.0	16.7				
Use of profit	30.0	58.3	23.7	40.0	6.8	-	7.6	20.0	63.2	41.7	68.6	40.0				
Organization of production	30.5	50.0	25.7	50.0	20.5	13.6	22.1	16.7	50.0	36.4	52.2	33.3				
Hiring of farm labor	27.0	55.6	22.0	-	37.0	22.2	40.0	-	36.0	22.2	38.0	100.0				
Other	50.0	100.0	-	-	-	-	-	-	50.0	-	100.0	-				
N.B: Household heads	*60	*11	*47	*2	**90	**15	**70	**5								

iii. Decisions pertaining to management

Two factors seem to skew such decisions toward men. Historically, Guyanese men of all ethnic groups have always been seen as the "business person," with whom the world outside of the home must deal.

Also, decisions on loans and their use are high-risk; crop-failure, among other eventualities, may cause the family to cross the thin line between subsistence living and abject poverty.

Whether by choice or by psychological or physical coercion in the man/woman power relationship, the utilization of profits is in 63% of the responses a shared decision. The decisions as to whether, when, and whom to hire for farm labor are the man's, in keeping with the perception of the "male as the family business person."

But since decision-making in any activity is related to several other factors, including knowledge and the confidence that arises from such activity, the findings with regard to training and technical assistance will now be examined.

2. Training and technical assistance

Of the entire sample, a mere 2.6% claimed to have ever received any agricultural training or technical assistance; most (72%) respondents claimed that they did not even know who their extension officer was. They listed their major sources of information as relatives and friends (85%), radio (36%), and newspapers (18%).

However, when asked to indicate their desire for training, relatively few respondents seemed to be motivated. (See Table V.17) The gender bias of formal agricultural education in Guyana has already been discussed in Chapter III.

Of the few who responded positively, training and technical assistance in farm management, use of fertilizers and pesticides, marketing, seed selection/production, post-harvest storage, and processing and packaging were priorities, in that order.

But the seeming lack of desire for agricultural training on the part of more than half of the respondents must also be viewed from the perspective of their daily labor-intensive reproductive and productive lives.

Already burdened, the last thing that these women need is more work. Additionally, with little or no access to financing sources for farm improvement, training has little appeal for these agrarian women.

Table V.17. **Percentage of women who have received training or technical assistance and areas in which it is desired.**

Type of training/ assistance	Respondents who received training/assistance		Respondents who want training/assistance	
	Total = 4	Percentage of total	Out of the total 150	Percentage of total sample
Seed selection/ production	-	-	31	21
Use of fertilizers/ pesticides	2	1.3	35	23
Post-harvest storage	-	-	22	15
Marketing	-	-	34	23
Feeding and grazing	1	0.6	14	9
Farm management	1	0.6	47	31
Packaging	-	-	12	8
Processing	-	-	21	14
Other	-	-	1	0.7

3. Financing Sources

Table V.18 shows the percentage of farms and the sources of financing as indicated by the respondents. For all the farms, production/previous sales is the major source of financing, followed by savings. Formal bank loans were accessed by only 3% of the small farms, compared to 27% of the medium and large farms.

But commitment to credit must be viewed from the perspective of the small farmer. Against the background of serious infrastructure and transportation problems, credit for which existing collateral will have to be pledged becomes a seriously risky matter. On the other hand, from the point of view of the banking community access to formal agricultural credit is greatly dependent on the type of land tenure held by the applicant.

4. Types of Tenure

Table V.18 indicates that almost half (48.7%) of the farms surveyed were owned, 12% were family land, 28% were leased and 6.7% rented. Yet no more than 30% of all the farms had accessed formal credit.

Table V.18. Financing sources, Guyana, 1993.

Size of farms (Ha)	Total (%)	% of farms and sources of financing					
		Production /previous sales	Family	Savings	Bank loans	Coop advances	Other
Total N = 150	100.0	79.40	1.12	13.15	6.08	0.12	0.12
2 < 0.4 - < 4.0	100.0	77.56	1.61	17.63	3.07	0.12	-
4.0 - < 10.0	100.0	79.48	-	15.67	4.48	-	0.37
10.0 & over	100.0	61.25	-	16.25	22.5	-	-
Negro							
Total N = 26	100.0	82.46	-	12.28	4.39	0.88	-
2 < 0.4 - < 4.0	100.0	65.87	-	29.53	3.65	0.95	-
4.0 - < 10.0	100.0	100.0	-	-	-	-	-
10.0 & over	100.0	92.31	-	-	7.69	-	-
East Indian							
Total = 117	100.0	80.54	1.91	11.07	6.37	-	0.22
2 < 0.4 - < 4.0	100.0	81.81	2.85	12.8	2.53	-	-
4.0 - < 10.0	100.0	80.69	-	14.11	4.89	-	0.63
10.0 & over	100.0	53.30	-	20.05	26.65	-	-
Amerindian							
Total N = 7	100.0	91.30	-	8.70	-	-	-
2 < 0.4 - < 4.0	100.0	90.0	-	10.0	-	-	-
4.0 - < 10.0	100.0	100.0	-	-	-	-	-
10.0 & over	100.0	100.0	-	-	-	-	-

Table V.19. Type of tenure by number and percentage of farms, Guyana, 1993.

Type of tenure	No. of farms	Percentage of 150
Own	73	48.7
Family land	18	12.0
Lease	42	28.0
Rent	10	6.7
Squatting	3	2.0
Joint Ownership	1	0.6
Other	3	2.0

Subsequent conversations with some of the women showed that the situation remains similar to that reflected in the Odie-Ali study of 1986. That is, women in small-scale agricultural production have a fear of credit, not only because of the fear of crop failure, but because of the physical and psychological burden of their commitment to repayment. Chapter III noted IPED's intentional inclusion of women in the loan agreements because of their creditworthiness. But such commitments put more weight on the women's shoulders, and such weight will only add to their already overburdened lives. In fact, only 2% of the entire sample saw access to credit as one of their principal problems.

5. Principal problems

The respondents in this survey, like those in the Jackson (1990) study on the basic needs of rural women, see their principal problems as being related to infrastructure development, production and marketing. Table V.20 groups their stated principal problems in four categories: infrastructure, institutional, production and marketing.

The infrastructure problems of drainage and irrigation are most important, with unavailability of transportation and poor roads following closely.

Infrastructure problems combined with unsuitable equipment for women renders fetching heavy loads and strenous work as the number one production problem; pest and animal damage combined with theft also rank high.

At the marketing level, input/packaging cost is the number one problem, followed by the limited market for produce and poor marketing facilities. In general, most of what the respondents listed as problems can be resumed in nine categories:

- poor drainage and irrigation
- poor roads
- pest and animal damage
- diseases
- theft
- unsuitability of equipment for women
- access to land
- soil problems
- poor marketing facilities

6. Principal improvements needed

Table V.21 lists the respondents'views on the principal improvements needed for farming, marketing and processing. These match the problems which these agrarian women face. Improved drainage and irrigation, roads and dams, and cheaper inputs are the major farming improvements listed as needed.

More export markets and improved local market facilities, together with better produce prices, are seen as necessary for better marketing.

Only 12% of the total sample saw training in processing as an improvement measure. Again, this must be understood from the perspective of the rural woman food producer. With liberalized import policies, locally processed food cannot compete in the open market in most cases.

It would seem that small farmers have not yet been able to benefit from structural adjustment programs. Therefore, in this changing economic and social milieu, the responses with regard to their daughters and sons continuance in the business of farming and mothers' ambitions for their children differ from those recorded by Odie-Ali (1986), when farming was seen as a desirable activity for children of both sexes.

7. Desire for daughters and sons to continue as farmers

Of the 150 women interviewed, only two expressed the desire for their daughters to continue as farmers, one because she felt that farming was manageable and the other because she felt that there was no alternative.

With regard to their sons, however, 54 respondents thought that their sons should continue farming, 40 because farming was manageable, four because of the independence it would afford them, another four because they see no other alternative, three because farming was their family tradition, two because successful farming offers a better standard of living, and one because the child was already a farmer.

Despite the fact that 97% of the respondents considered farming as a business, 64% did not wish for any of their children to continue as farmers.

8. Ambition for children

There were no responses from 10% of the respondents. Of the 90% who did respond, 37% wanted their children to become businessmen, 35% professionals, another 12% tradespersons, and 5% other ambitions.

Again, these responses must be viewed in the context of the changing social and economic milieu. With the opening up of the economy, small importers/traders have blossomed overnight into millionaires. Television has reached most of rural Guyana with its high profile commercialization.

Advances such as fiber-optic telecommunications networks and the shrinking of the media-connected world have all served to influence rural parents' images of success and therefore their ambitions for their children.

9. Woman's participation in productive and community organization

The survey revealed that 94% of the total sample are unaware of any women's programs. Of the nine women (6% of sample) who were aware, five were acquainted with the government social welfare department, three with the Women's Affairs Bureau and one with what she called a Woman's Center.

Table V.22 shows that, despite the existence of some of these organizations in the communities surveyed, with the exception of parent-teacher associations and church clubs, there is very little participation. Again, this must be viewed in light of the realities of the burdered lives of rural women food producers.

Table V.20. Principal problems which respondents face, Guyana, 1993.

Principal problems	No. of women	As percentage of all 150 women
I. Infrastructure		
Poor roads	18	12.0
Poor drainage/irrigation	44	29.3
Unavailability of transportation	23	15.3
No electricity and water	1	0.7
II. Institutional		
No access to land/market	2	1.3
Support from MOA	5	3.3
III. Production		
Strenuous work/fetching heavy loads	40	26.7
Applying chemicals/fertilizers	9	6.0
Pest/animal damage	20	13.3
Time/household chores	14	9.3
No/little access to credit	3	2.0
Lack/unsuitability of equipment for women	23	15.3
No/unknown extension service	2	1.3
Theft	10	6.7
Unavailability of inputs	6	4.0
Disease/natural disaster	10	6.7
Soil problems	1	0.7
IV. Marketing		
Transportation cost	8	5.3
Poor marketing facilities	17	11.3
Input/packaging/cost	23	15.3
No price control	8	5.3
No/limited market	18	12.0
Advantage by middle men	1	0.7

Table V.21. **Principal improvements needed for farming/marketing/processing.**

Principal improvements needed	No. of women	% of total sample N = 150
I. FARMING		
Improvement drainage/irrigation	81	54.0
More readily available credit	5	3.3
Cheaper inputs, equipment/chemicals	42	28.0
Easier process for land ownership	1	0.7
Increased social services	4	2.7
More farming equipment/spares	22	14.7
Training/crop husbandry	7	4.7
Lenient credit agencies	59	3.3
Availability of inputs (seeds)	6	4.0
Improved roads/dams	76	50.7
Visits/extension officers	14	9.3
Improved portable water/electricity	12	8.0
Less problems (soil/insect/pest)	3	2.0
Improved infrastructure	1	0.7
Capital to expand	9	6.0
II. MARKETING		
Improved market facilities	20	13.3
Restrict foreign imports	1	0.7
Improved transportation services	12	8.0
More markets (exports)	27	18.0
Better price for produce	16	10.0
Government should buy produce	8	5.3
III. PROCESSING		
Training/processing	18	12.0
Provide processing factory	3	2.0

Table V.22. Women's participation in productive and community organizations, Guyana, 1993.

	Types of organizations operative in surveyed zone						Respondents participation				
	Upper & Lower Pomeroon	Parika/ Soesa	Canal Polder	Cane Grove	Black Bush Polder	% of Total No. of 150 respondents	Upper & Lower Pomeroon N = 30 (%)	Parika/ Soesa N = 30 (%)	Canals Polder N = 29 (%)	Cane Grove N = 31 (%)	Black Bush Polder N = 30 (%)
A. Productive											
Organizations											
Cooperatives	Yes	Yes	No	No	-	-	-	-	-	-	-
Farmer Organizations	Yes	Yes	Yes	Yes	Yes	1.3	3.3	-	3.4	-	-
B. Community											
Organizations											
Sports Club	No	Yes	No	No	No	0.6	-	3.3	-	-	-
Church Club	Yes	Yes	Yes	Yes	Yes	18.0	23.3	33.3	13.8	16.1	3.3
Community Group	Yes	Yes	Yes	Yes	Yes	2.7	6.7	3.3	3.4	-	-
Parent/Teacher Associations	Yes	Yes	Yes	Yes	Yes	24.0	50.0	16.7	31.0	12.9	10.0
Other	Yes	Yes	Yes	Yes	Yes	2.0	-	3.3	-	6.5	-
C. Women's Programs											
Women's Affairs Bureau	Yes	Yes	No	No	No	1.3	-	6.7	-	-	-
* GFWI	No	Yes	No	No	No	-	-	-	-	-	-
** WRSM (NCW)	Yes	Yes	Yes	No	Yes	-	-	-	-	-	-
*** WPO	No	No	Yes	Yes	Yes	-	-	-	-	-	-
Social Welfare	Yes	Yes	Yes	Yes	Yes	0.6	-	-	-	3.2	-
Other	Yes	Yes	Yes	Yes	Yes	0.6	-	-	-	3.2	-

* Guyana Federation of Women's Institute
** Women's Revolutionary Socialist Movement (Now National Congress of Women)
*** Women's Progressive Organization

vi. Agricultural activities as part of women's maternal role

Many rural women in agriculture see their involvement as an extension, if not an integral part of, their prescribed maternal role of providing food and nutrition for their families. Often, the kitchen garden is the main source of diet diversification, and the "creole" chickens and ducks which they raise in the yard provide the only source of meat protein. In this context, farming becomes housework.

In the study conducted by Odie-Ali, 54.3% of the respondents did not consider home services as work because, as one East Indian respondent claimed, "housework not work, woman born to do housework." (Odie-Ali, 1982:44)

vii. Perception of priorities and gender distinctions

Barrow (1989) posits that it is in the perception of priorities and the allocation of time and energy that gender distinctions become more apparent; hence the reflection in the statistics that men predominate the agriculture sector. Her argument is that for men, farming performs an essentially economically productive function, whereas for women it is closely related to social reproduction. This is because:

> In the Afro Caribbean context, the economic support of the family is perceived as the joint responsibility of both conjugal partners and women's social reproduction is defined to incorporate productive work, be this in agriculture or another sector of the economy... (Barrow: 1989:21).

It seems that these are some of the reasons for the gross underestimation of women's agricultural involvement in the country's statistics.

According to Barrow, even where parents have titled land, they are reluctant to pledge those rights because of doubt in the ability of their female child to manage the activities, and the possible loss of crops.

But Paul (1992) sought the views of 19 second-year students who were prospective Certificate in Agriculture 1992 graduates - 11 males and 8 females. Their views were sought, among other things, in relation to their reasons for their program selection. Table III.13 shows their responses.

VI. CONCLUSIONS, RECOMMENDATIONS AND NATIONAL PROPOSALS

A. Conclusions and Recommendations

1. Numerical supremacy

The 1993 HIES estimated (Table I) that out of a total population of less than three-quarters of a million, almost 69%, or close to half a million persons, live and work in rural Guyana.

Of this rural population, 51%, or conservatively one-quarter of a million (one-third of the country's entire population) are rural women. Therefore, in terms of the development of the country's human resources, rural women, if for no other reason than their numerical supremacy, deserve special attention.

2. Role trilogy

Rural women in small-scale agriculture in Guyana perform a multiplicity of roles, which can be grouped in the following three categories:

- reproductive
- productive
- community managing

Generally, only women's productive work is recognized. Reproductive and community management work have historically been seen as "natural" and "non-productive" and, therefore, not valued. Added to this, planning in Guyana —on all levels, including community organization— has always been a male prerogative. The consequences, of course, have been and continue to be serious.

The recognition of this role trilogy has important implications for policy-making since it brings to the fore the severe constraints faced by women in the burdensome task of balancing their reproductive, productive and community management tasks.

3. Community managing

Consider, for example, the opening and closing hours of health centers and clinics (if and where they exist). Do the women have a say? Is their advice sought? Do they take into account the hours which the local women must devote to both on-farm and off-farm productive activities? The planting and harvesting seasonal variations? Or are their hours standard all year round? Are rural women left to juggle their tasks as best as they can in order to benefit from such facilities?

Consider, for example, the school. Are the opening and closing dates standard throughout the country? And if so, how does this impact on the small-farm family —especially the female-headed small farm family— in which school age children are compelled to help out at home or on the farm during certain critical periods.

What about school opening and closing hours? Do rural women have a say? Or are they here again left to juggle their tasks to accommodate these hours? And if accommodating is not possible, are children of rural subsistence farm families deprived because their mothers can do no better?

4. Social traditions

The tendency is to see women's and men's needs as similar. The reality, however (as we have seen), is that women's daily lives are a very different. Given their reproductive and community management tasks, productivity programs for women usually require some restructuring of the cultural fabric of society.

In Guyana, it seems that there is an institutionalized reluctance to tamper with social traditions, and when matters come to a crunch, planners take shelter under the umbrella of gender neutrality.

5. Productive tasks and gender neutrality

One of the policy consequences of structural adjustment with regards to agriculture has been concentration on export-oriented production so as to generate the foreign exchange needed to facilitate external debt repayment.

6. Commodity programs

As an example, the Commodity Programs devised by the Extension Services Division is examined. These programs focus only on commodities capable of producing beyond the subsistence level.

The extension division has that, given its present limited resources, it will only concentrate on "medium to large farms for specialized programs," and that it will "leave domestic small farmers for generalized mass education programs."

Therefore, whether as "*de jure*"[36] or "*de facto*"[37] heads of households, or in joint partnership with spouses or others, rural women in small-scale agricultural production have been officially excluded and are officially non-beneficiaries.

According to the MOA, demonstrations with respect to the commodity programs are to be conducted on enhanced model farms —farms which already have most, if not all, of the required resources. These are, of course, not very many; and women-headed farms are not among them.

Within the ministry's context of gender neutrality, women farmers are seen as free to attend. But the ministry has admittedly given no thought to facilitating such reproductive and community management concerns as advance publicity, hours of demonstration, and location of the event and travel distances.

In short, gender neutrality in planning is a further disadvantage for rural woman farmers and acts as an added disincentive to adopting any agricultural innovation.

Here is a clear case of structural adjustment-motivated, export-oriented production militating against the rural woman and grinding her further into poverty.

It is recommended that the MOA revisit, rethink, and restructure its programs to accommodate gender-specific needs.

7. Definition of work

The problem of the recognition of the ramifications of the role trilogy is not confined to the MOA. This recognition problem is a national one, as the definition of work by the Bureau of Statistics illustrates:

It is recommended that the definition of WORK be reviewed, and that household chores and community management activities be incorporated so that national and other statistics are able to reflect the reality of women's work lives.

---

[36] *De jure* women-headed households are those in which the male partner is permanently absent due to separation or death, and the woman is legally single, divorced or widowed.

[37] *De facto* women-headed households are those in which the male partner is temporarily absent. Here the woman is not legally the head of the household, and is often perceived as a dependant despite the fact that she may, for the majority of her adult life, have primary if not total responsibility for the financial and organizational aspects of the household.

8. Training and gender consciousness

Up to the CXC level, women's and men's participation is 43% to 67%, respectively. Thereafter, at the vocational/tertiary level, the participation is 20% to 80%, be it at GSA, REPAHA or FA/UG.

It has been jokingly said that the recipe for economic success includes "adding women and stir." The assumption is that "all that is needed is for women to gain access to male domains."

This might be one step, but a very minor one indeed. The major step, if there is to be a leap forward, would be the development of gender consciousness and the clear articulation of gender concerns.

8. Model building

In advertising its 30 years of existence, the G.S.A highlighted the fact that some 80% of the staff at GAIBANK and at the Extension Section of the MOA are products of that institution. Only one female farmer was profiled among its post-G.S.A success stories.

In short, there is an absence of models reflecting the successes of women, both the sixty-year-old female farmer or the thirty-year-old one.

In the absence of such realities, stereotypes still exist of wizened women in blackened and tattered clothes balancing benches of plantains on their "old cloth-tied" heads, cutlass in one hand and firewood in the other.

The perception is that women in agriculture are far removed from the good life that unfolds with development processes. In effect, the motivation to reach for and to sacrifice for a worthwhile career in agriculture cannot be fired.

It is recommended that vocational/tertiary level agricultural institutions give more exposure to the realities of successful farming as part of their course component.

Chapter 3 discussed the FA/UG B.Sc program, which carries a half-course (15-week) component on rural sociology and agricultural extension education (AGR 457).

It is recommended that AGR 457 be expanded into a full course.

It is further recommended that the vocational/tertiary level institutions work in collaboration with the Women's Studies Unit, the UG, and the WAB with regard to gender planning in their courses in order to meet practical and strategic gender needs.

9. Access to land

Historically, there have been culturally inhibiting factors regarding access to land, such as kin property inheritance patterns, cultural perception of the male as the "*de jure*" business person, or a pattern of male-oriented land development plans and programs.

Nevertheless, courses at the agricultural training institutions mentioned above do not include a section to inform the students of available cropland, nor advise them on the modalities for acquiring such land through lease or ownership. The bureaucratic maze with which the inexperienced students are faced is, to say the least, daunting.

It is recommended that agricultural training institutions incorporate the modalities for access to and acquisition of land into their courses.

The present Land Selection Committee procedures and rationale for issuing land are not clear, but it is said that they are gender neutral. In Appendix 13, the criteria used in Black Bush Polder are presented. If that is an example of gender neutral criteria, then

It is recommended that the criteria be reviewed and revised to accommodate women as farmers in their own right and not simply as wives and daughters.

10. Reaching rural women

In Guyana, the serious negative impact of structural adjustment on rural women —including those involved in small-scale subsistence-level agriculture— has been generally acknowledged.

There have been unmistakable signs of good intentions both at the national and international donor level. Unfortunately, very few women have been able to benefit from these good intentions because most of the agencies through which the assistance is channelled have been unable to make much contact with them.

Section B of Chapter III noted that the contact made by government ministries and agencies to assist vulnerable persons, including rural women since 1989, has been limited. Both the means for reducing the limitations of rural women in development activities and for optimizing the use of services and facilities afforded by donor agencies through projects are severely lacking.

It is recommended that attention now be focused on rural women in terms of accessibility to development activities and funding.

It is also recommended that the implementation agencies work in collaboration with the ministries of agriculture and regional development among others, to access rural women.

11. Non-governmental organizations (NGOs)

Workers in the women's section of government agencies like the WAB (mentioned above) are paid abnormally low and unattractive salaries. But women who manage NGOs are volunteers. Some NGOs, such as the Guyana Federation of Women's Institutes (GFWI), are fifty years old and rooted in social welfare activities. With the best will in the world, the type of income-generating projects now being funded is out of their immediate area of competence simply because they lack the technical qualifications.

It is recommended that existing NGOs be reviewed and technical assistance and guidance be offered to them.

12. Access to credit

At the time of writing, a National Policy Statement on Women has been drafted by the Women's Affairs Bureau (Appendix 15). This document on rural women's access to credit and land ownership provides the basis for a national action plan.

It is recommended that, if for no other reason than their numerical supremacy, more attention be focused on rural women in the anticipated national action plan.

It is also recommended that lending institutions now expand their categories to include women both as '*de jure*' and 'de facto' owners and cultivators of land.

13. Credit for micro-enterprises

The Institute of Private Enterprise Development (IPED) has successfully been promoting micro-enterprises by delivering short-term flexible loans with few collateral requirements to entrepreneurs who operate small-scale agroindustrial and other businesses, which have proven to be successful vehicles for helping poor women.

It is recommended that lending institutions include access to credit for rural women's micro-enterprises.

14. Redefinition of the term "employed"

In Chapter 4, the implications of the definition of the term "employed" as used by the National Bureau of Statistics are discussed. The WAB National Policy Statement on Women also fails to provide a definition of the term "employed."

It is recommended that, given the implications of women's role trilogy, the term "employed" be re-examined to reflect the realities of rural women's reproductive and community managing tasks.

15. Education for upliftment

Learning needs for rural children and adults are numerous and diverse. In the context of subsistence level farm families, learning for survival is a dominant concern.

It is recommended that educational programs for rural areas be designed to permit rural peoples to lift their heads above the survival level.

Learning needs of rural people vary greatly according to their socio-economic circumstances; they also vary according to family, community, occupational role, ecology and the development level of their particular geographic area. Distance education is arriving in Guyana, a developement both desirous and commendable.

It is recommended that emphasis be given to generating relevant and timely local specific educational content and materials.

This recommendation is made in light of the MOA's stated intention to "leave domestic small farmers for generalized mass education programs." Surely innovations, new technology and other information relevant to fruit and coffee producing farmers in the Pomeroon is different from those for green vegetable farmers in the Black Bush Polder and different still for peanut farming at Tapacuma. In short,

It is recommended that the idea of "generalized mass education programs" be re-examined and that appropriate adjustments be made.

Therefore, in summary,

It is recommended that policy reform be balanced with effective sectoral strategies for raising the productivity of rural women's work in agriculture and micro-enterprises.

B. National Proposals

In attempting to provide solutions to any problem, it is necessary to tackle it at its root. The national proposals outlined in this section emerge from the problems reflected at the base of the problem tree in Figure V.1.

The following proposals, which of necessity overlap and which inform and support each other, are all intended to improve the socioeconomic status of rural women in agriculture:

- statistical visibility
- reaching and providing information to rural women
- increasing returns to rural women food producers

1. Improving Rural Women's Statistical Visibility

Definition/justification

Under-recording and underestimations of statistics reflecting women's involvement in the agriculture sector have resulted in erroneous policies with a discriminatory bias that lead to unequal opportunities, a situation contrary to the provisions of Article 29 of Guyana's 1980 Constitution (Appendix 9).

Goal

To provide planners with the statistically-visible, gender-desegregated data necessary for gender-sensitive policy and program planning.

Specific objectives

- To provide gender-desegregated data on a continuing basis.
- To train decision-makers in the use of gender information.

Expected outputs

- Greater priority placed on data collection on the part of policymakers and planners.
- Design appropriate statistical information instruments.
- Gender desegregated data collection on a regular basis.
- Improve rural women's statistical visibility.

Activities to be executed

a. Preparatory activities

i. Redefinition of the following census terms:

- work
- head of household
- self-employment activities
- agricultural activities

ii. Building gender specificity into all data collection and compilation processes.

b. Pilot project

Conducting a pilot project for the collection of gender-desegregated data on rural farm households in five communities (in preparation for conducting a new national rural farm household survey).

c. Training of decision-makers in the use of gender information

Expected duration: 6 months

2. Increasing Involvement and Gender Awareness Among Rural Women

Definition/justification

Agricultural policies, programs and projects often fail due to either non-participation or very low participation by women in the planning processes. Erroneous assumptions are made which result in incorrect policies that cast rural women in the role of uninformed participants at the project implementation stage. When the planners leave the projects become non-sustainable and project failure results.

Goal

To actively involve rural women food producers in agricultural development, in all stages from policy formulation to project implementation.

Specific objectives

- To strengthen communication systems
- To make women more aware of their capabilities as food producers
- To increase their cash income

- To foster higher self-esteem

Expected outputs

- More and stronger communication systems
- Institutionalized recognition of women as food producers
- Better policy planning
- Stronger institutional support
- Higher self-esteem

Activities to be executed

- Training program for planners, implementors, NGOs and rural women leaders for involvement in communication/gender-sensitizing activities
- Strengthening NGOs at the community level by providing technical help
- Involving women food producers in policy and program planning

Expected duration: 6 months.

3. Generating and Accessing Information for Decision-Making

Definition/justification

Because of a lack of information at the local community level, as well as the technical level, there is much erroneous decision-making by rural women food producers. This leads to a high degree of failure and therefore wasted resources. All of this is reflected in the continued low socioeconomic status of rural women in agriculture.

Goal

To provide the legal and technical data base for informed decision-making on the farm, thereby ensuring a higher degree of success and increased economic returns.

Specific objectives

- To institutionalize organized and periodic information compilation on community resources
- To organize the availability of technical information

- To put systems in place that afford easy access to this important decision-making information

Expected outputs

- Inclusion of women in planning processes
- Priority given to technical information
- Better leadership
- Information on the community's agricultural, human, physical and natural resources collected in an organized and periodic system
- Accessibility to technical information

Activities to be executed

- Training in leadership
- Community resource compilation
- Selection and training of resident women food producers to serve as extensionists
- Making technical information available and easily accessible

Expected duration: 6 months

4. Improving Economic Returns of Rural Women Food Producers

Definition/justification

The perpetuation of the poverty cycle among rural women food producers is embedded in their inability to enhance their own capabilities and those of their family members. This is a direct result of their inability to improve on the economic returns of their farming activities, because they operate with the disadvantages of inadequate technical assistance, poor access to credit, and scarce economic resources.

Goal

To improve the economic returns of women in agriculture.

Specific objectives

- To provide access to technical assistance
- To provide access to credit
- To improve the low/subsistence level of production and productivity
- To provide marketing information and opportunities

Expected outputs

- Better husbandry practices
- Better use of inputs
- Increased production and productivity
- Easier marketing
- Increased economic returns

Activities to be executed

- Training in husbandry, recognition of quality seeds and other inputs
- Training in use of suitable equipment
- Training in use of fertilizers, herbicides and pesticides
- Information-related activities regarding modalities and procedures of agricultural land acquisition and farm enhancement credit facilities

Estimated duration of simultaneously run exercises in five selected communities: 6 months.

BIBLIOGRAPHY

GUYANA

ACDI (AGRICULTURAL COOPERATIVE DEVELOPMENT INTERNATIONAL). 1980. Diagnostic Report. Food Crop Production and Marketing Programme. Guyana.

AGRITEACHERS NEED more incentive. 1993. Stabroek News, Guyana. Dec. 10. p. 7.

CANTERBURY, D.C. 1993. Rural poverty in Guyana. IDS Colloquim on Poverty in Guyana: Finding Solutions.

CARIBBEAN COMMUNITY SECRETARIAT. 1988. Women in Guyana: Facts and figures. Guyana, 1988.

CLARKE, M. n.d. A brief background of REPAHA. Guyana.

COMMONWEALTH ADVISORY GROUP. 1989. Guyana: Economic recovery programme and beyond. Barbados.

CHANDRA, R. 1967. Black bush polder land development scheme 1960-1967. Georgetown, Guyana.

_____. 1975. Black bush polder Project Rehabilitation and Expansion, 1975. Georgetwon, Guyana.

FARABEE, C. 1918. The Central Arawaks. Philadelphia, The University Museum, University of Pennsylvania, Humanities Press.

GAIBANK. 1993. Procedures governing securities verification. Guyana.

GOVERNMENT OF GUYANA. 1970. Annual Report 1969, Ministry of Cooperatives. Georgetown.

_____. 1993. Reconstruction for human development, Budget Speech.

GREENIDGE, C.B. 1991. Women in structural adjustment: Some notes on Guyana. Inter-Regional Meeting on Economic Distress, Structural Adjustment and Women (1991, London, Lancaster House).

HOLDER, Y. 1988. Women traders in Guyana. Guyana, Economic Commission for Latin America and the Caribbean.

IFAD (INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT); IICA (INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE). 1991. Guyana agricultural sector assessment. Guyana. (Unpublished).

IPED (INSTITUTE OF PRIVATE ENTERPRISE DEVELOPMENT). 1992. 7th report and accounts. Guyana.

JACKSON, J. 1990. Basic needs of women in rural communities. University of Guyana, Women's Studies Unit.

MENTORE, G.P. 1984. Shepariymio: The political economy of a Wai-Wai Village. Doctoral Thesis. University of Sussex.

MENEZES, S.M.N. 1982. The Amerindians and the Europeans. Great Britain, Collins.

MOA (MINISTRY OF AGRICULTURE). 1978. Guyana rural farm household survey. Guyana.

_____. 1985. Draft agriculture development plan, 1985-1989. Georgetown, Guyana.

_____. 1985. Role of the New Guyana Marketing Corporation. Georgetown, Guyana.

_____. 1992. Annual Report 1991. Georgetown, Guyana.

NATHAN, R.R. 1974. Guyana's foodcrop systems: An analysis for development planning. Guyana.

_____. 1989. Guyana: Agricultural sector survey and policy review.

ODIE-ALI, S. 1986. Women in Agriculture: The case of Guyana. Social and Economic Studies 35:2.

PAHO (PAN-AMERICAN HEALTH ORGANIZATION; WHO (WORLD HEALTH ORGANIZATION). 1988. An analysis of the food and nutrition situation in the Cooperative Republic of Guyana.

PATTERSON, S.A. 1990. The economic and social situation of women heads of household in Guyana. University of Guyana, UNESCO and Women's Studies Unit.

PAUL, C.A. 1992. Perceptions of prospective graduates of the Guyana School of Agriculture Certificate Programme as it relates to farming as a career choice. University of Guyana.

PHILLIPS, A.T. 1984. Small farmer cooperatives in Guyana: Problems and prescriptions. (Unpublished).

Presented at: Annual Conference of the Caribbean Food Crop Association, Georgetwon (20., 1984, Guyana).

POTTER, L.M. 1992. The paddy proletariat and the dependent peasantry: East Indian rice growers in British Guiana, 1895-1920. History Gazette no. 47.

_____. 1992. Indian and African-Guyanese Village settlement patterns and inter-group relationships, 1871-1921. History Gazette no. 48.

RAMDIN, H. 1993. Non-traditional crops. Review of the Agricultural Sector in Guyana.

REID, P.A. 1974. Address delivered at the launching of the Guyana Teacher's Association Agricultural Science Teacher's Section.

RODNEY, W. 1981. A history of the Guyanese working people, 1881-1905. Baltimore, The Johns Hopkins University Press.

ROY, S. 1992. Women in agriculture. Georgetown, Guyana, Ministry of Agriculture.

SAM, I. n.d. The agro-based cottage industry in Guyana. FAO, Regional Office for Latin America and the Caribbean, Ministry of Agriculture, Trade and Commerce of the Bahamas.

Presented at: Round-Table on the Reduction of Post-Harvest Fruit and Vegetable Losses through the Development of the Cottage Industry in Rural Areas in the CARICOM Countries (1991, Nassau, Bahamas).

SHANKLAND, C. 1916. Box-money and cooperation. **In** The Chronicle August Holiday Number.

TROTZ, R. 1984. The role perception of the division of extension and education. Georgetown, Guyana.

VAN DONGEN, R. 1958. The problems of Amerindian farmers today. Stabroek News, Nov. 1:14.

WOMEN'S AFFAIRS BUREAU. 1993. Ministry of Labour, Human Services, and Social Security. National policy statement on women. Guyana.

YOUNG, A. 1958. The approaches to local self-government in British Guiana. London,

CARIBBEAN

ANTROBUS, P. Women in development Programmes: The Caribbean experience (1975-1985). **In** Gender in Caribbean development. P. Mohammed, C. Shepherd (Eds.). Trinidad, Hem Press.

BARROW, C. 1986. Finding the support: A study of strategies for survival. Social and Economic Studies 35:2.

CARIBBEAN EXAMINATIONS COUNCIL. 1992. Report on Candidates' Work in the Secondary Education Certificate Examination, June 1992. Agricultural Science (Double Award). St. Michael, Barbados.

DAVIDSON, W.A. 1983. Role of non-governmental organisations in rural development in the Caribbean. FAO.

DEMAS, W.G. 1987. Agricultural diversification in the Caribbean community: Some issues. Barbados, Caribbean Development Bank.

ELLIS, P. (Ed.). 1986. Women of the Caribbean. London, Zed Books.

FAO (FOOD AND AGRICULTURE ORGANIZATION). 1976. Agricultural credit in the Caribbean Area.

GILL, M.; MASSIAH, J. 1986. Women, work and development. Social and Economic Studies 35:2.

IICA (INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE). 1988. Plan of action for the reactivation of agriculture in Latin America and the Caribbean. San José, C.R.

MASSIAH, J. 1982. Women who head households. Women and the family. Barbados, Cave-Hill, Institute of Social and Economic Research, Women in the Caribbean Project. v.2, p. 62-121.

_____. 1986. Work in the lives of Caribbean women. Social and Economic Studies 34:2.

MOHAMMED, P. 1988. The Caribbean family revisited. In Gender in Caribbean development. P. Mohammed, C. Shepherd (Eds.). Trinidad, HEM Press.

PAHO (PAN-AMERICAN HEALTH ORGANIZATION); WHO (WORLD HEALTH ORGANIZATION). 1989. Food and nutrition planning and coordination in the commonwealth Caribbean.

REDDOCK, R.; HUGGINS, J. 1988. The itinerary of discrimination. In Caribbean women in agriculture. Santiago, Chile, FAO.

SENIOR, O. 1991. Working miracles. Women's lives in the English-speaking Caribbean. London, James Curry.

WILTSHIRE-BRODBER, R. 1988. Gender, race and class in the Caribbean. In Gender in Caribbean development. P. Mohammed, C. Shepherd (Eds.). Trinidad, HEM Press.

THE WEST INDIAN COMMISSION. 1992. Time for action: The report of the West Indian Commission. Barbados.

INTERNATIONAL

AFSHAR, H. 1991. Women, development and survival in the Third World. New York, Longman.

AMADIUME, I. 1987. Male daughters, female husbands: gender and sex in an African society. London, Zed Books.

BOSERUP, E. 1970. Women's role in economic development. London, St. Martin's Press.

BRYDON, L.; CHANT, S. 1989. Women in the Third World. Gender issues in rural and urban areas. New Jersey, Rutgers University Press.

BUVINIC, M.; LYCETTE, M.A. 1988. Women, poverty and development in the Third World. In Strengthening the poor: What have we learned? J.P. Lewis *et al.* Oxford, U.K. Transaction Books.

FOLBRE, N.; BERGMAN, B. (Eds.). 1993. Women's work in the world economy. New York, New York University Press.

FAO (FOOD AND AGRICULTURE ORGANIZATION). 1987. Rural Development. no. 8.

_____. 1990. Women in agricultural development: Gender issues in rural food security in developing countries.

FERRAN, J.U. 1991. Measuring women's contribution to the informal agricultural sector.

HUNTER COLLEGE WOMEN'S STUDIES COLLECTIVE. 1983. Women's realities, women's choices: An introduction to women's studies. New York, Oxford University Press.

IADB (INTER-AMERICAN DEVELOPMENT BANK). 1990. Economic and social progress in Latin America, 1990 report. Washington, D.C., Johns Hopkins University Press.

_____. 1991. Economic and social progress in Latin America, 1991 report. Washington D.C., John Hopkins University Press.

INTER-AMERICAN FOUNDATION. 1991. Grassroots Development Journal 15(1).

IFAD (INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT). 1987. Greater farmer participation in development projects and strengthening farmers organisations. Rome.

LA GRA, J. 1990. A commodity systems assessment methodology for problem and project identification. University of Idaho.

OECD (ORGANIZATION FOR ECONOMIC COOPERATION (OECD). 1987. Economic policies and agricultural performance of low-income countries. France.

PATTERSON, O. 1982. Recent studies on Caribbean slavery and the Atlantic slave trade: A review essay. Latin American Research Review 17(3).

SOODEEN-KARAMATH, S. 1990. Women in agriculture. A selected annotated bibliography. Trinidad, Women and Development Studies.

Presented at: Fourth Disciplinary Seminar in Women and Development Studies (4.).

STROMBERG, A.H. 1978. Women working. Theories and facts in perspective. California, Mayfield Pub.

UNCHS (UNITED NATIONS CENTRE FOR HUMAN SETTLEMENTS). 1985. Women and human settlements. Nairobi.

UNDP (UNITED NATIONS DEVELOPMENT PROGRAM). 1992. Human development report, 1992. New York, Oxford University Press.

VICKERS, J. 1991. Women and the world economic crisis. London, Zed Books.

WORLD BANK. 1988. Rural development: World Bank experience, 1965-86. Washington, D.C.

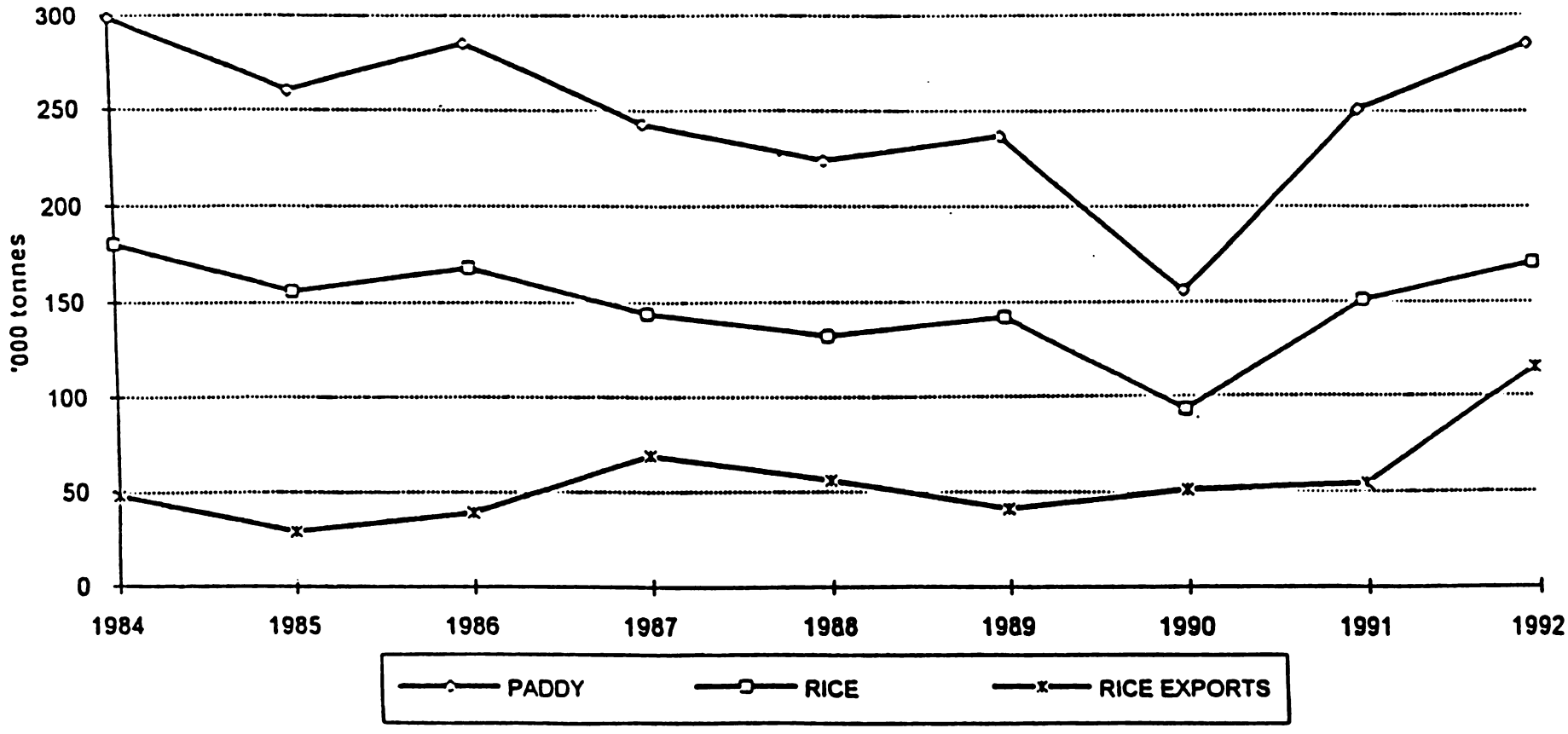
WORLD RESOURCES INSTITUTE. 1992. World resources. A guide to the global environment. Oxford University Press.

ZEIDENSTEIN, S. 1979. Learning about rural women. Studies in Family Planning 10(11-12).

APPENDICES

Appendix 1

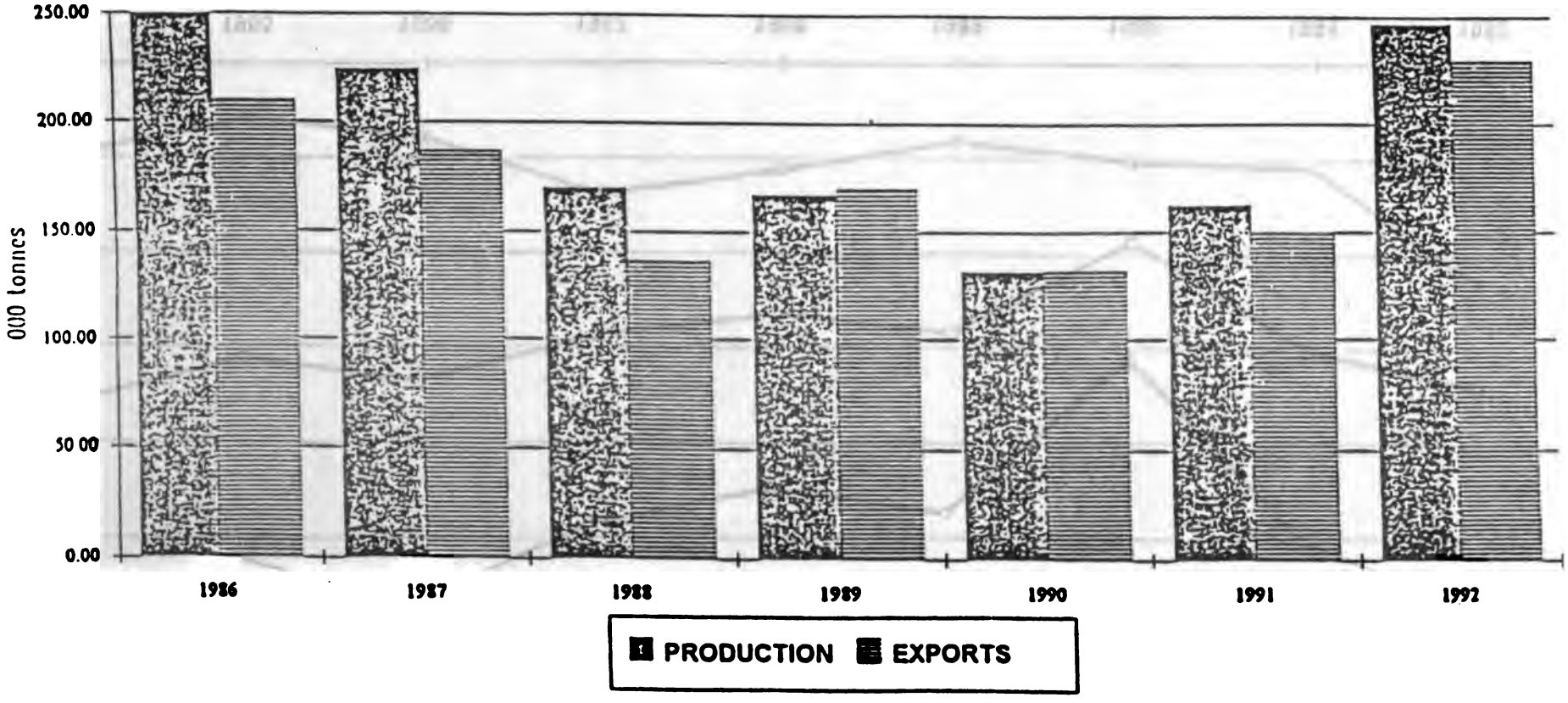
Production and Export of Rice in Guyana in the 1984-1992 Period



Source: Ministry of Agriculture, Guyana, 1993.

Appendix 2

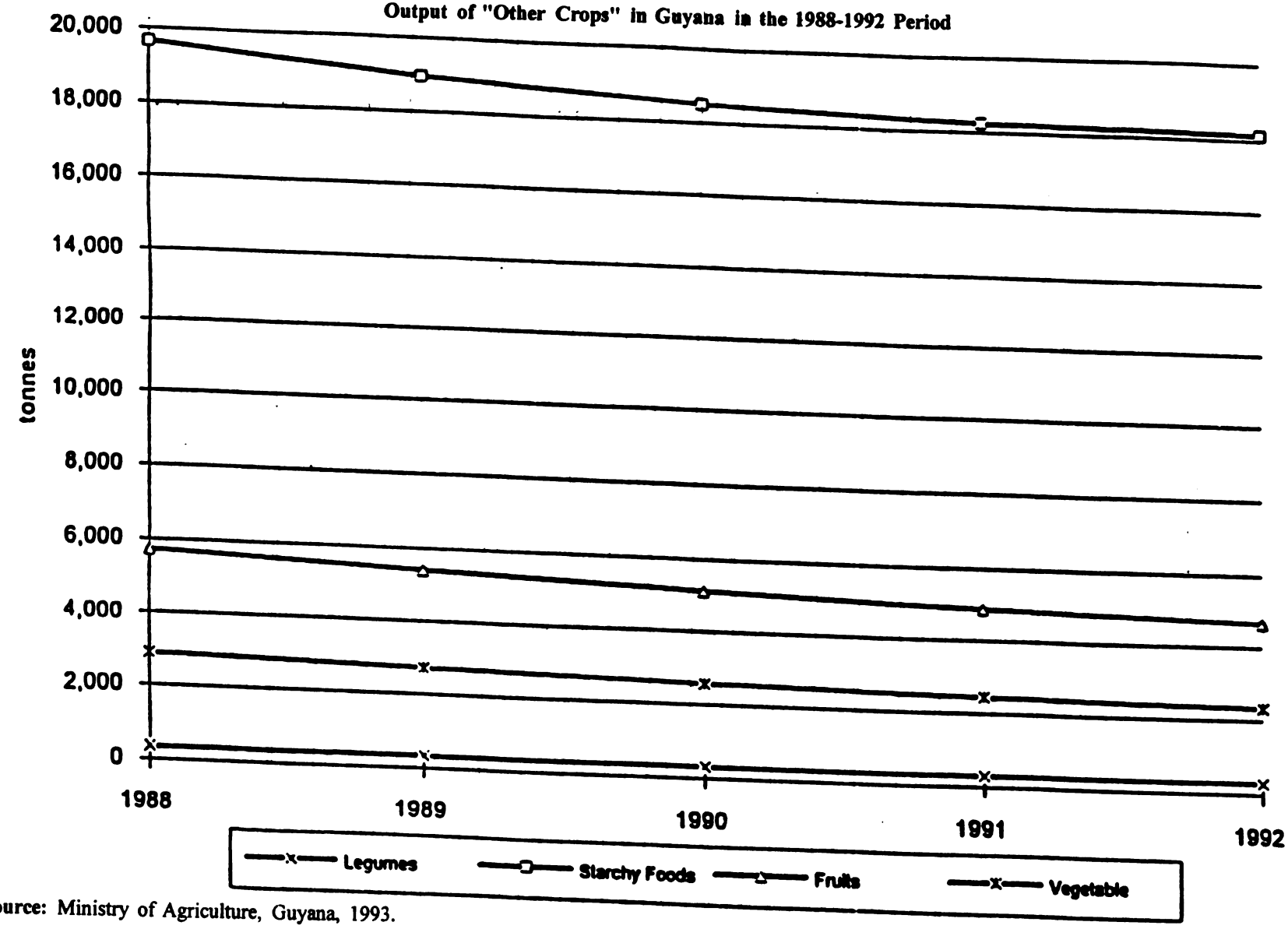
Production and Export of Sugar in Guyana in the 1986-1992 Period



Source: Ministry of Agriculture, Guyana, 1993.

Appendix 3

Output of "Other Crops" in Guyana in the 1988-1992 Period



Source: Ministry of Agriculture, Guyana, 1993.

Appendix 4

"Other Crops" Main Commodities Exported (Non-Traditional Agricultural Exports) in Guyana in the 1987-1992 Period

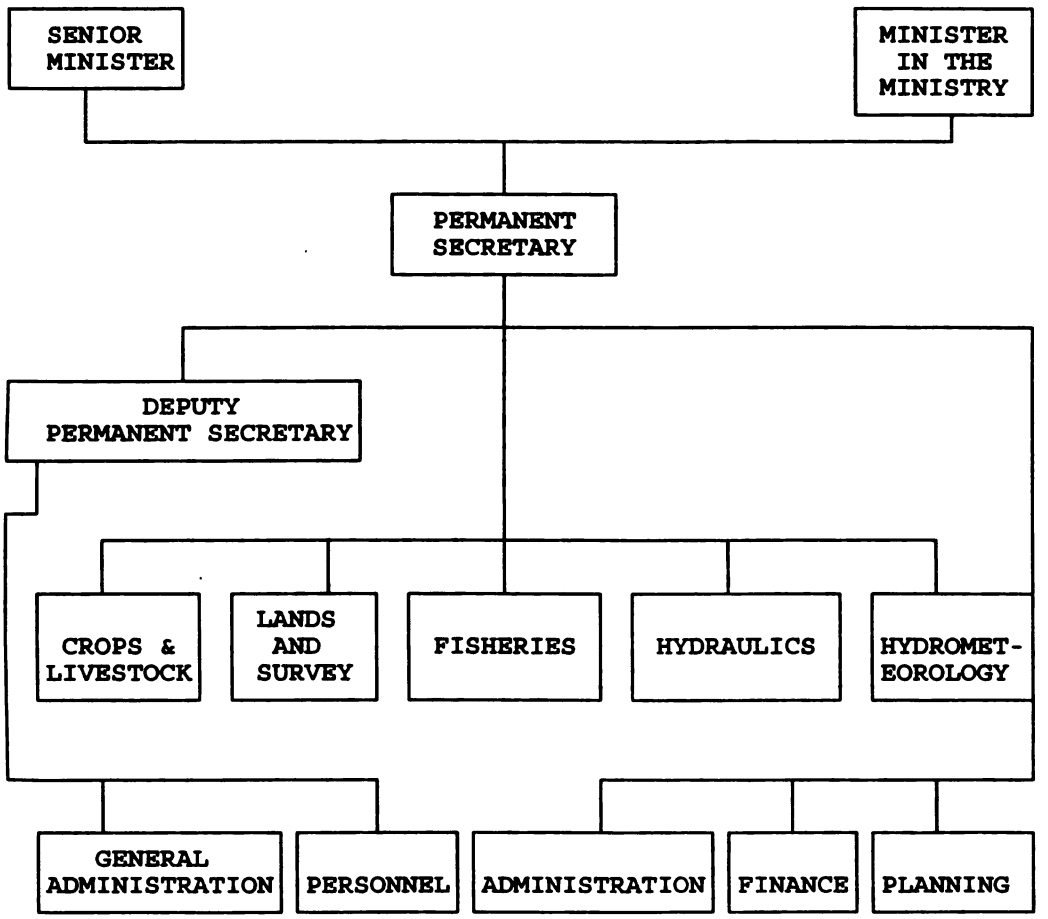
(in tonnes)

No	Crops	1987	1988	1989	1990	1991	1992
1	Pineapple	522	718.73	603.54	665.33	634.13	390.03
2	Orange	-	6.07	49.16	5.91	2.41	2.27
3	Lime	0.2	-	24.92	27.63	39.97	9.17
4	Coconut	6.2	-	134.92	6.54	29.19	48.64
5	Bora	2.2	0.63	2.89	3.44	5.03	17.10
6	Boulanger	0.4	0.10	2.50	3.74	5.22	6.45
7	Pineapple chunk	-	-	-	22.84	111.70	192.45
8	Pepper (hot)	0.5	0.2	7.89	1.92	20.06	15.19
9	Pumpkin	54.4	161.54	123.64	4.96	67.34	14.82
10	Plantain	158.4	108.85	13.30	220.84	163.32	274.67
11	Coffee beans	-	68.18	0.15	0.41	2.7	-
12	Watermelon	39.4	83.10	160.47	0.01	-	0.21
13	Eschallot	11.5	24.60	3.95	0.25	0.34	0.02
14	Cherries	-	-	-	113.13	48.32	-
15	Heart-of-Palm	-	-	320.0	520.0	734.00	797.00

Source: New Guyana Marketing Corporation

Appendix 5

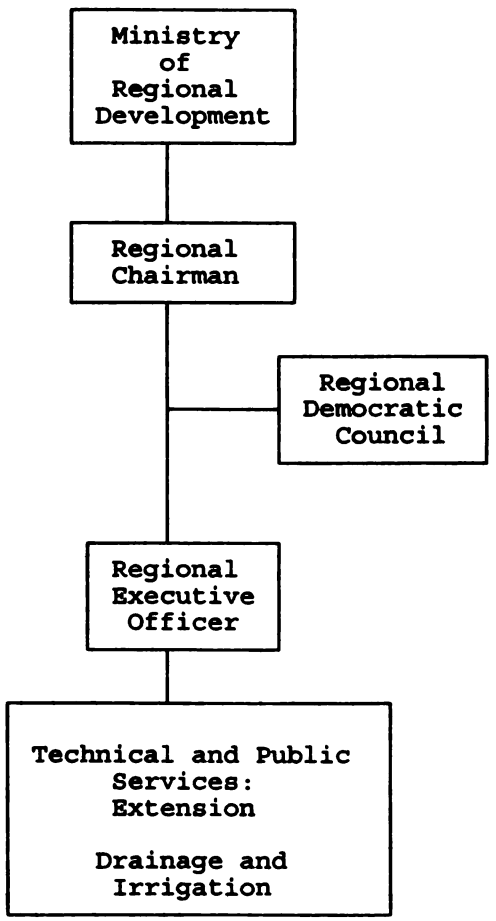
Ministry of Agriculture
Organisation



Source: Ministry of Agriculture.

Appendix 6

Regional Administration: Organizational Structure



Source: Ministry of Regional Development.

Appendix 7

Ministry of Agriculture (Guyana)
Extension - Crops and Livestock Department (Extension Services)

Strategic Programme Profiles

Commodity Programme	General Objective	Specific Programme Objectives/Outputs
Rice	To improve quality and productivity of existing cultivations. To reduce the incidence of Red Rice in existing cultivations. To promote quality-oriented technical packages. To collaborate and work participatively with all agencies which have similar objectives.	Upon completion of this project, in the fifth year, a total of 200 pilot farms would adopt appropriate technology of Red Rice control and water management practices, to improve productivity by 25%, and reduce the incidence of Red Rice by 80% of current levels. This programme wil influence 5000 farm families to respond likewise over the same period through informal educational field events.
Vegetables	To promote quality production of selected crops which have export potential. To promote market-lead technological packages. To collaborate and work participatively with appropriate agencies.	Upon completion of this project, in the fifth year, a total of 200 pilot farmers, in six main regions will adopt export-oriented technology to improve the quality of vegetables by 80% above present standards. Over the same five year period, this project will influence 5000 farm families to adopt improved practices which will raise quality and productivity by 50% in order to attain export capability.
Coconut	To improve crop production through better field and estate management. To improve quality and productivity through phenotypic selection of mother palms. To monitor and control the incidence and outbreak of seasonal pests.	Over a five-year period, 12 large and 30 small coconut estates will be influenced to adopt genetic selection and improvement programmes in order to improve their productivity by 30%. In the same time frame, more than 200 pilot farmers will be influenced to integrate and diversify their estates with biannuals and small ruminant stock. The aim is to improve productivity by 30%.
Roots & tubers	To promote the quality and productivity of selected crops. To promote post harvest technology for the marketing and export of selected crops. To collaborate with appropriate agencies in the promotion of these commodities.	In six main regions, 300 pilot farmers would be influenced through formal and informal field events to adopt appropriate technology in order to improve quality by 80% above known levels and lower post harvest losses by 70%.
Seeds, legumes, tissue culture	To enhance the production and availability of quality seeds in all regions. To improve the seed production capability of contracted seed growers. To collaborate with appropriate agencies in the pursuit of common objectives.	Contracted to produce 90% of regional seed requirements. Over the same five-year period, these farmers would be trained in grading quality control.

Appendix 7. (cont.)

Commodity Programme	General Objective	Specific Programme Objectives/Outputs
Nurseries	To improve the productive capabilities of all existing nurseries. To equip present and future staff with a wide range of nursery skills. To promote the development of privatised operations to diversify and eventually divest this programme into private hands. To promote export orientation of non-traditional fruit crops.	Propagators with skills in propagation of plants in Regions 2, 3, 4, 5, 6. This project will increase the availability of plants by 100% over the same period. In Regions 1, 7, 3, 10, this programme will improve propagating skills by 80% and plants by 70%. Enhance export potential by 90% over the same five-year period.
Youth	To promote leadership capabilities among senior secondary school youths. To promote healthy competition among youth groups. To motivate, promote and reward youth groups through "special emphasis" programmes. To collaborate with appropriate agencies.	Over a five-year period, this programme will attract and equip 300 youths of CXC grade and clubs, to be equipped with relevant training and experience in leadership, debating skills, and healthy competitive endeavours. Through special emphasis programmes, youths will be encouraged to compete for awards and prizes.
Poultry	To improve the quality of products made available on the local market. To improve the quality of local creole stocks through cross breeding with exotic cockerels. To promote quality-oriented technological packages with pilot farmers in selected regions. To monitor private commercial agencies which enhance the production and availability of meat and eggs.	Over a five-year period, in Regions 2, 3, 4, 5, a total of 400 pilot farmers would be encouraged to adopt appropriate technology through educational and training programmes to adopt improved practices aimed at quality output of meat and meat products. All pilot farmers would adopt cross breeding programmes aimed at overall productivity increases of 60%.
Livestock development	To promote the quality, availability and sale of pork, mutton, venison, locally. To promote quality-oriented technological packs. To work through pilot farmer schemes to promote better farm management. To collaborate with appropriate agencies.	Over a five-year period, 400 pilot farmers would be influenced to improve the quality of meat and meat products of pork, chicken, mutton, and venison. Over the same period, farmers would be influenced to diversify their outputs to reflect a wider range of meat products, especially valued added products. These 400 pilot farmers would be used to influence 2000 other farm families to adopt quality technology.

Appendix 7. (cont.).

Commodity Programme	General Objective	Specific Programme Objectives/Outputs
Quarantine	To establish and strengthen the first line of defence against disease occurrance and outbreak. To reduce the total dependance on pesticides. To monitor the incidence of known pests and diseases and to detect and prevent the entry of exotic pests and diseases. To establish and maintain monitering out posts at ports of entry.	Over a five-year period, in Regions 2, 3, 4, 6, 10, the major ports of entry would be staffed and empowered with diagnostic skills and legal facilities to enforce quarantine regulations. Over the same period, Regions 1 & 8 would be provided with facilities and manned by trained quasi-professionals for disease surveillance.
Animal health	To monitor and control the occurrance and incidence of exotic diseases. To provide veterinary ambulatory and diagnostic services to principal livestock rearing areas. To train and update staff with skills to manage animal health problems.	Veterinary Services. To provide each region with resident veterinarians and regular and reliable health services capable of responding rapidly to disease outbreaks. Bovine Tuberculosis. To create TB-free Regions (2,3,4) and subsequently to delegate the meat inspection function to public health authorities. Vampire Bats. To reduce the population by 50% and the subsequent diseases incidence by 90%. Foot & Mouth. To place and maintain the services of a resident vet. in Region # 9, to develop and implement collaborative programmes with Brazil for the surveillance and control of this disease. Brucellosis. To reduce the incidence of this disease to internationally acceptable standards through random sereological monitoring.
Special services and visits	To provide interior subsistence-oriented communities with special training and services in order to improve their productive capabilities. To provide communities with integrated development packages for sustained agricultural programmes.	Upon completion of this programme, Regions 1, 7, 8, 9 would be endowed with 12 communities each having a community-integrated development programme.
Communication training & conferences	To host annual, quarterly, half-yearly, monthly review meetings to evaluate annual calendar programmes. To upgrade and retool all staff in technical and group oriented skills in order to function as interdisciplinary work teams.	Formative and summary reviews would be done of annual calender programmes. Annual, quarterly, monthly and weekly training would be conducted at university, School of Agriculture, AITCC, to upgrade and retool all staff. Non-governmental agencies would be solicited to sponsor these programmes.

Appendix 8

List of Schools by Region and Passes by Gender for Sample Years 1982, 1987 and 1992

Region	Name of School	1992		1987		1992		Total
		M	F	M	T	M	F	
1		-	-	-	-	-	-	-
2	Anna Regina Secondary	-	-	-	2	2	3	5
	Abrahams Zuil Secondary		-	-	-	8	-	8
3	Patentia Secondary	-	-	6	2	-	-	8
	West Demerara Secondary	-	-	2	-	-	-	2
	Zeeburg Secondary	-	-	4	1	-	-	5
4	Alleyne's High	-	-	-	-	4	2	6
	Annandale Secondary	-	-	-	-	-	-	-
	Bishops High	2	4	-	-	-	-	6
	Bladen Hall Multilateral	-	-	-	-	-	-	-
	Charlestown Secondary	-	-	-	-	1	1	2
	Covent Garden Secondary	-	-	-	-	1	-	1
	Cummings Lodge Secondary	-	-	-	-	5	1	6
	East Ruimveld Secondary	-	-	-	-	-	-	-
	Golden Grove Secondary	1	-	-	-	3	4	8
	Cove and John Secondary	-	-	-	-	-	3	3
	Richard Ismael Secondary	-	-	-	-	4	2	6
	North Georgetown Secondary	3	1	-	-	-	-	4
	Queen's College	-	-	-	-	12	3	15
	Ruimveldt Multilateral	-	-	-	-	4	7	11
	St. Joseph's High	-	-	-	-	-	2	2
	St. Rose's High	-	-	-	-	-	1	1
	St. Stanislaus High	2	4	5	4	1	-	16
	Dora Secondary	-	-	-	-	1	1	2
5	Bygeval Multilateral	-	-	2	-	9	8	19
	Mahaicony Secondary	-	-	1	-	2	3	5

Appendix 8. (Cont.)

Region	Name of School	1992		1987		1992		Total
		M	F	M	T	M	F	
6	Berbice Educational Inst.	-	-	8	11	8	10	37
	Berbice High	4	-	4	11	12	4	35
	Canje Secondary	-	-	-	-	-	9	9
	Corentyne Comprehensive	-	-	-	-	14	10	24
	Winifred Gaskin Secondary	-	-	-	-	4	1	5
	J.C. Chandisingh	-	-	-	-	16	12	28
	New Amsterdam Multilateral	3	-	1	-	9	8	21
7	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
10	Christianburg/Wismar Sec.	-	-	-	-	-	-	-
	Mackenzie High	-	-	9	4	10	4	27
Total	(34 Schools)	15	9	41	33	131	100	27

Gender Summary

	Total	Percent
Male	186	56.9
Female	141	43.1
Total	327	100.0

Appendix 9

Article 29*

Equality for women.

29.(1) Women and men have equal rights and the same legal status in all spheres of political, economic and social life. All forms of discrimination against women on the basis of their sex are illegal.

(2) The exercise of women's rights is ensured by according women equal access with men to academic, vocational and professional training, equal opportunities in employment, remuneration and promotion, and in social, political and cultural activity, by special labour and health protection measures for women, by providing conditions enabling mothers to work, and by legal protection and material and moral support for mothers and children, including paid leave and other benefits for mothers and expectant mothers.

* Excerpt from the Constitution of Guyana, 1980.

Appendix 10

Criteria to be Used for Making Selection for State and Government Land

		Points
1.	**Land Owned or Rented**	
	Over 15 acres	NIL
	Between 10-15 acres	5
	Between 5-10 acres	10
	Between 3 and 5 acres	12
	Under 3 acres	15
	No Land	20
2.	**Employment**	
	Average weekly earnings ever 12 months	NIL
	For ever $2.000.00 per week	5
	For $1.000.0 and less per week	10
	Unemployed	15
3.	**Size of Family**	
	Unmarried	NIL
	For wife and no dependent	3
	For wife and less than 2 other dependents (including adopted children)	5
	For wife and more than 5 other dependents (including adopted children)	15
4.	**Farming experience**	
	For no experience	NIL
	For 1-3 years	5
	For over 5 years	10

5. No. of heads of cattle owned by applicant. The allocation of land for such purpose being 3 acres to every 2 heads.

The committee appointed to make recommendations for the selection of suitable applicants should bear in mind that the Criteria for Selection is based on the need of the applicant. In the case of cattle grazing, the applicant may need land for expansion, because of multiplication of his stock.

Need can be determined thus:

(a) Unemployed

(b) Under employed

(c) Dependents (size of family)

The aplicants should have same practical experience in agriculture.

Source: Lands and Surveys Office, Black Bush Polder, Corentyne, Berbice, Guyana, 1993.

Appendix 11

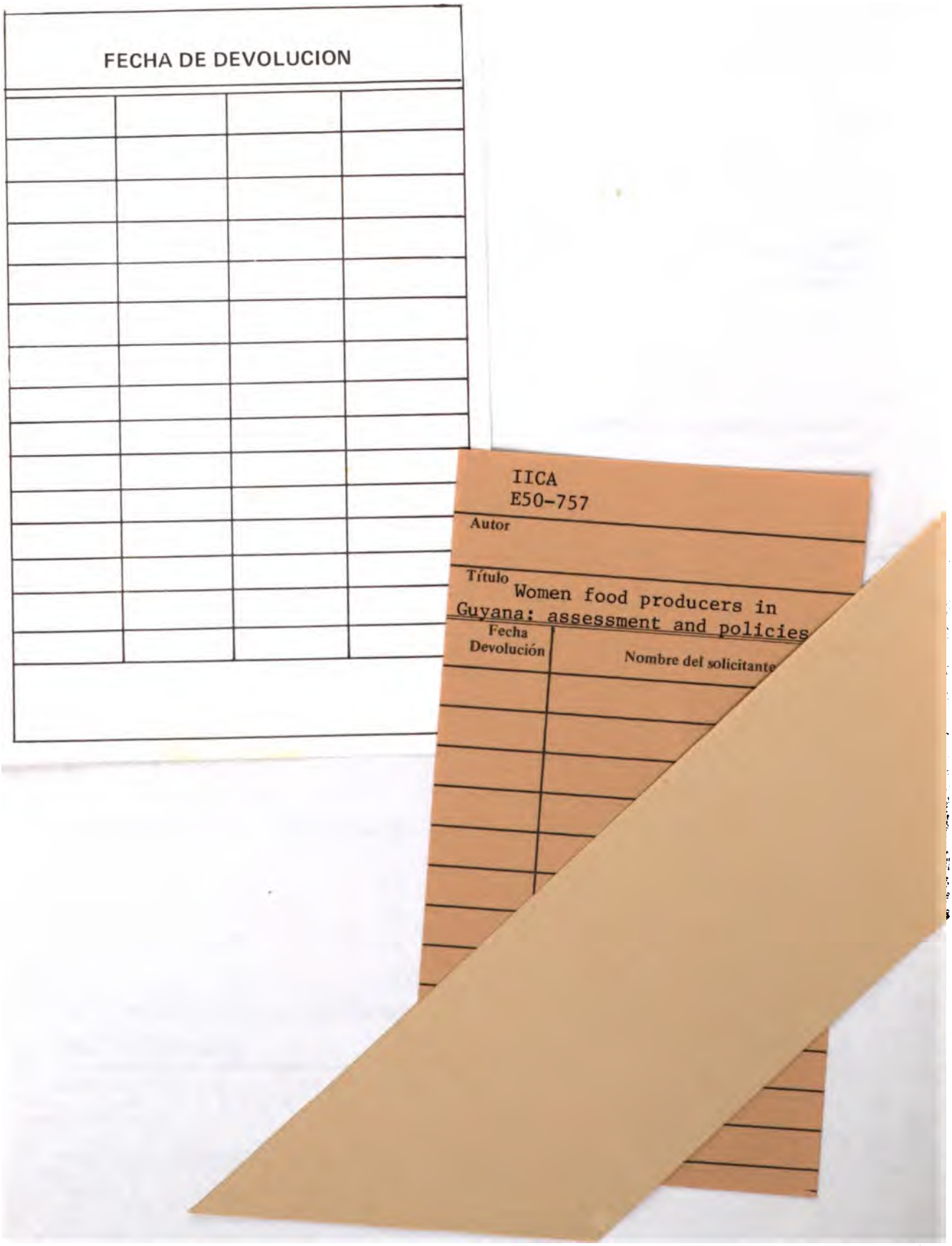
Family Member Participation in Agricultural Crop Production by Type of Activity in Guyana in 1993.

Activities	Crop (1) - Vegetable		
	Women participation		
	Respondent %	Other women %	Men's participation %
i. Purchasing/preparation of planting material	71	-	29
ii. Land preparation	52	6	42
iii. Planting	52	6	42
iv. Crop care	31	4	65
v. Purchase/use of fertilizers and chemicals	46	7	47
vi. Harvesting	46	10	44
vii. Post harvest	47	11	42
viii. Marketing	46	11	43
Crop (2) - Cassava			
i. Purchasing/preparation of planting material	53	5	42
ii. Land preparation	48	16	36
iii. Planting	49	14	37
iv. Crop care	27	8	65
v. Purchase/use of fertilizers and chemicals	45	12	43
vi. Harvesting	44	12	44
vii. Post harvest	44	13	43
viii. Marketing	45	12	43
Crop (3) - Sweet Potato			
i. Purchasing/preparation of planting material	63	-	37
ii. Land preparation	50	20	30
iii. Planting	50	20	30
iv. Crop care	29	7	64
v. Purchase/use of fertilizers and chemicals	50	25	25

Appendix 11. (Cont.)

Activities	Crop (1) - Vegetable		
	Women participation		
	Respondent %	Other women %	Men's participation %
vi. Harvesting	50	25	25
vii. Post harvest	50	25	25
viii. Marketing	50	25	25
Crop (4) - Fruit			
i. Purchasing/preparation of planting material	67	3	30
ii. Land preparation	52	5	43
iii. Planting	52	5	43
iv. Crop care	31	3	66
v. Purchase/use of fertilizers and chemicals	53	7	40
vi. Harvesting	51	3	46
vii. Post harvest	53	3	44
viii. Marketing	53	2	45
Crop (5) - Rice			
i. Purchasing/preparation of planting material	-	-	30
ii. Land preparation	23	-	77
iii. Planting	36	-	64
iv. Crop care	18	-	82
v. Purchase/use of fertilizers and chemicals	39	2	59
vi. Harvesting	28	10	62
vii. Post harvest	18	-	82
viii. Marketing	42	3-	55

This book was printed
at IICA Headquarters
in February 1996, with a press
run of 100 copies.


FECHA DE DEVOLUCION
IICA
E50-757
Autor
Título
Women food producers in Guyana; assessment and policies
Fecha Devolución
Nombre del solicitante

PROGRAM FOR THE ANALYSIS OF AGRICULTURAL POLICIES VIS-A-VIS WOMEN FOOD PRODUCERS IN THE ANDEAN REGION, THE SOUTHERN CONE AND THE CARIBBEAN

This Program, executed by the Inter-American Institute for Cooperation on Agriculture (IICA) and financed by the Inter-American Development Bank (IDB) under Technical Cooperation Agreement ATN/SF-4064-RE, covered 18 countries in Latin America and the Caribbean. The first phase was implemented in 1992-1993 in six countries in Central America, under the auspices of the Council of Central American Agricultural Ministers in its XII Ordinary Meeting in March 1992. Results were published in the book *Mujeres de Maíz* (IICA/IDB 1995).

The second phase was carried out in the Andean Region (Bolivia, Colombia, Ecuador, Peru and Venezuela), the Southern Cone (Brazil, Paraguay and Uruguay) and the Caribbean (Barbados, Guyana, Jamaica and Suriname), by request of the First Ladies during their Summit Meeting on the Economic Advancement of Rural Women held in Geneva, Switzerland in February 1992.

Three documents were prepared for each country presenting the technical results from the four areas of research of the Program: a) assessment of the participation of women in the agricultural sector and their contribution as food producers on small-scale farms; b) analysis of agricultural policies and programs and their effects on rural women as food producers; c) evaluation of the technology used on small farms by women in food production processes; and d) analysis of the role of women in processing and marketing farm food products.

Other Program activities included the elaboration of regional comparative documents, the formulation of policy proposals and related actions, national and regional seminars for discussion of Program recommendations, and the publishing and distribution of the final results.

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE
Headquarters / P.O.Box 55-2200 Coronado, Costa Rica / Tel.: 229-02-22
Cable: IICASANJOSE / Telex: 2144 IICA CR / FAX (506) 229-47-41, 229-26-59 IICA COSTA RICA