

2007
St. Lucia Census of Agriculture

GENDER DIMENSIONS
OF THE
AGRICULTURAL SECTOR

Analysis by :

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INTRODUCTION

In the context of a developing small island economy, the net transfer of land, labour and other productive resources from agriculture to other emerging sectors such as tourism, as well as the urbanization of agricultural and rural areas is inevitable. As evidenced in Figure I, the total areas of holdings has declined steadily based on the results of five (5) censuses of agriculture conducted in St. Lucia in the years 1961, 1974, 1986, 1996 and 2007. In the last inter-censal period, there was a 25.4 percent decline in the number of holdings, from 13366 in 1996 to 9972 in 2007.

According to the *2006 Assessment of Poverty in St. Lucia* report, St. Lucia witnessed massive rural-urban flight during the last decade. The consequence has been the rise of squatter settlements and crowded tenements in urban areas [p155]. Figure 2 clearly demonstrates that the greatest percentage change (of near 50 percent) in the number of holdings occurred in the Castries Urban administrative district (AD), from 244 in 1996 to 125 in 2007. Though the absolute number is small, the extent of the change is indicative of the rapid transfer of land, in and around the capital city of Castries, from agriculture to other uses. Other administrative districts, such as Soufriere, Canaries and Anse-la-Raye in the west as well as Gros Islet in the north, Dennery in the east and Vieux Fort in the south of the island, all exhibit appreciable decline in the number of holdings.

Figure I

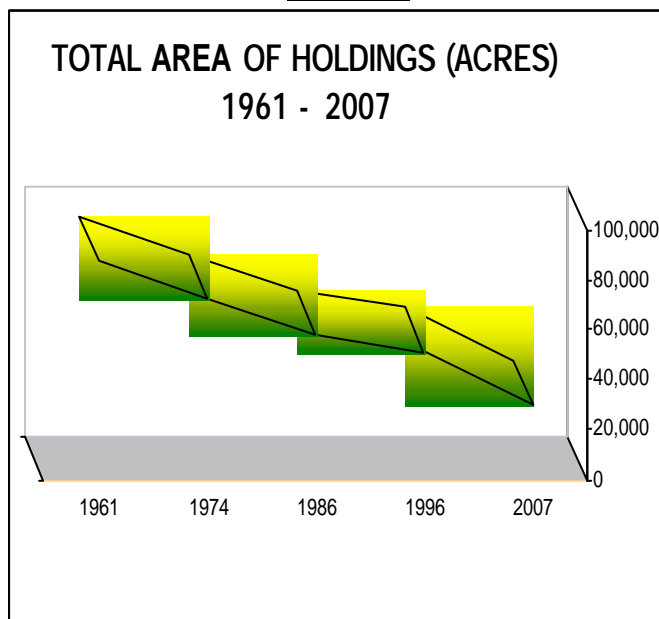
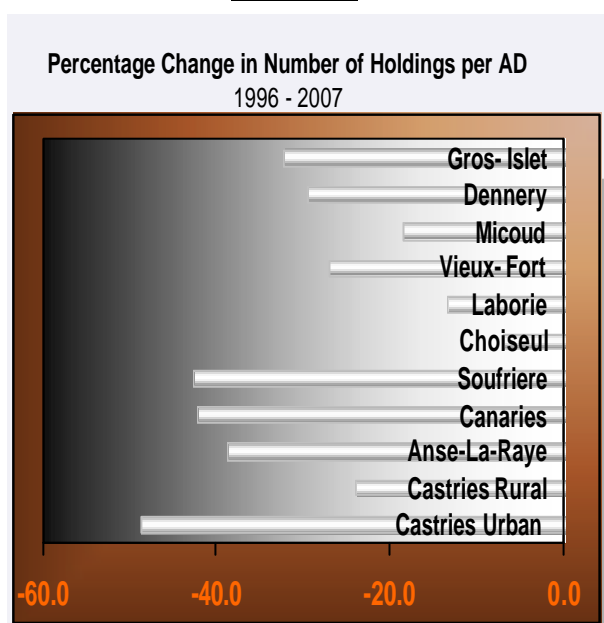


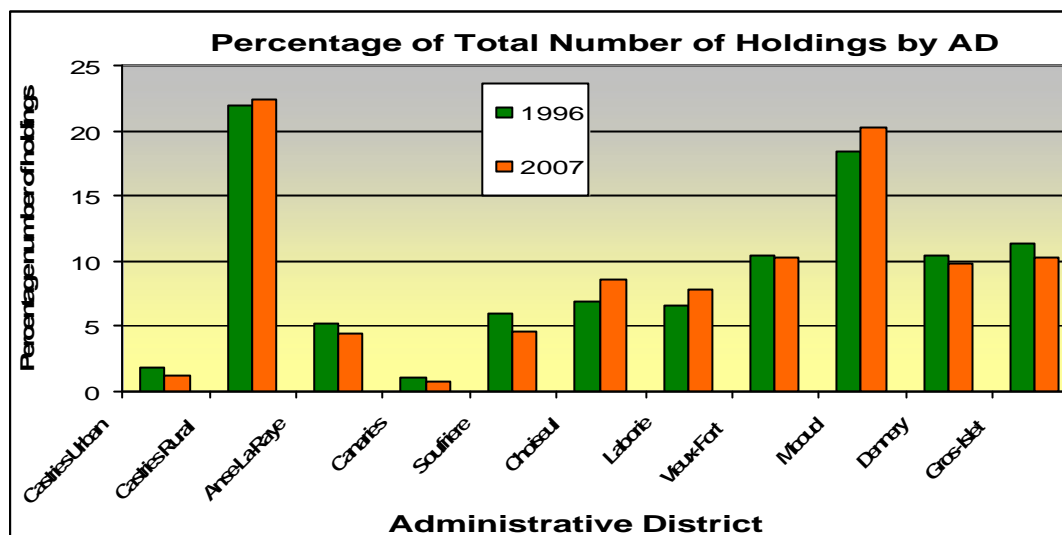
Figure 2



Castries Rural continues to be the AD with the most holdings, although the number decreased by 23.9 percent from 2916 holdings in 1996 to 2220 holdings in 2007. Reference to Figure 3 indicated that Canaries has less than one percent (0.81%) of the total number of holdings in 2007. The other AD with less than 10 percent of the total number of holdings are Castries Urban (1.25%), Anse-la-Raye (4.35%), Soufriere

(4.56%), Laborie (7.71%), Choiseul (8.51%) and Dennery (9.90%). While every AD experienced a decline in the absolute number of holdings, there was a relative increase in the percentage of total number of holdings in Micoud, Choiseul, Labour and Castries Rural to a lesser extent [ref:Figure 3].

Figure 3



The distribution of holdings by AD bears some resemblance to the geography of poverty on the island. Data from the 2006 poverty assessment exercise show that “poverty in St. Lucia is primarily a rural phenomenon” [pXIV]. While 28.8 percent of the overall population are deemed to be below the poverty line [US\$1,904.87 per annum], districts outside/south of the north-west urban/suburban corridor namely: Anse-la-Raye, Canaries, Soufriere, Choiseul, and Laborie on the west and Micoud and Dennery on the east coast all have poverty rates above 30 percent. The report proffers that “informal activity in the urban areas of the north-west of St. Lucia and the occasional formal sector jobs in the emerging sectors around tourism offered greater hope than the surety of declining income in agriculture...”[pp155].

PERFORMANCE OF THE AGRICULTURE SECTOR

In 2006, the agricultural sector showed signs of stabilization following consecutive years of decline as indicated in Figure 4. According to the *Economic and Social Review 2006*, this overall increase in the output of the agricultural sector “was led by an appreciable growth of 1.4 percent in the banana industry alongside higher production in all active sub-sectors with the exception of livestock”[p2]. While the imperatives of globalization and trade liberalization have impacted very forcefully on the agricultural sector during the 1997 – 2006 inter-censal period and in spite of the implementation of the new EU banana regime in January 2006, banana exports increased by 13.3 percent in 2006, following a appreciable decline of 29.1 percent in 2005. As illustrated in Figure 5, the contribution of the agricultural sector to total GDP declined from 10.6 percent in 1996 to a projected 3.2 percent in 2006.

The declining performance of the agricultural sector over the inter-censal period is the consequence of a myriad of factors. Chief among these is the decreased access to and control over the factors of production: namely land, labour, income/capital and technology necessary to achieve comparative advantage and international competitiveness within agriculture. In this scenario, due attention must be paid to the more efficient and effective utilization of available resources, so as to safeguard the country's rural and agricultural livelihood systems as well as social and economic stability.

Figure 4

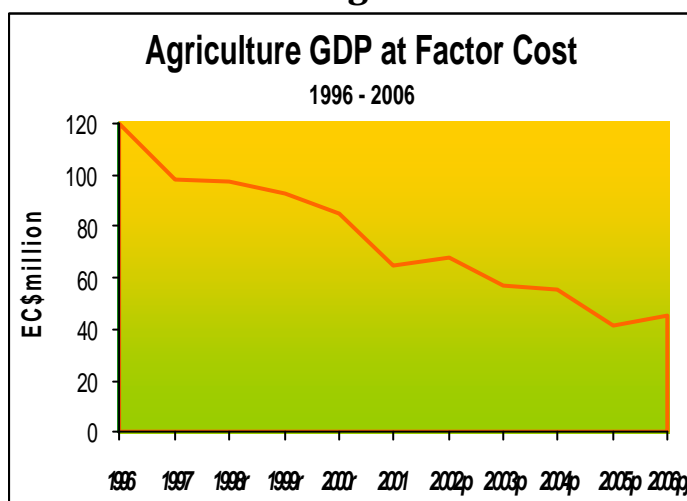
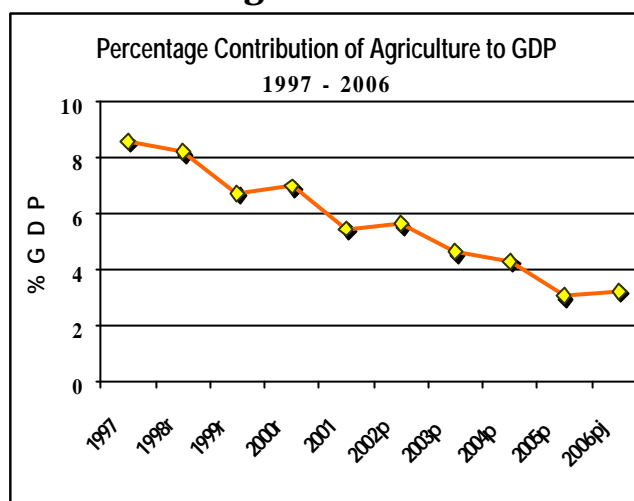


Figure 5



Agriculture is a characteristic feature of the rural milieu and given the connectivity between rurality and poverty, St. Lucia is challenged to ameliorate stressors not only in relation to agricultural output per se but very importantly the sustainability of rural livelihood systems. In this context, the influence of the social relations of gender on the supply/demand responses, as well as the dynamics of household income must be duly recognized and taken into account in the process of policy formulation and action oriented towards poverty alleviation, food security and economic diversification.

The incorporation of gender concerns into the scope and objectives of the agricultural census provides for the collection of gender-disaggregated data that can serve to develop the references needed to guide the process of gender sensitive and participatory agricultural and rural development. Consequently this analysis seeks to:

- highlight the opportunities and constraints which influence the demand / supply responses of women and men in agriculture in St. Lucia
- and
- discern the gender biases that support the gender hierarchies that exist within the establishment.

FACTORS AFFECTING SUPPLY / DEMAND RESPONSES

Evidently, the push away from the “no rules situation” as regards agricultural production and marketing has resulted in a contraction of the traditional export market for bananas and a depletion of agricultural income. In responding to this challenge of diminishing economic returns from agriculture, an important first step is the reconciliation of policy objectives in respect of trade liberalization, poverty reduction, food security and sustainable livelihoods.

In light of the resource constraints within the sector, there is the absolute need for the national focus on not only agricultural output expansion, but more importantly on how the social relations of production influence the structure and character of demand / supply responses in the market place. In this regard the domestic capacity to adequately respond to the dictates of the increasingly competitive international trading environment requires due analysis from the stand point of the people involved in the production of agricultural goods and services.

Using data from the 2007 Census of Agriculture and by comparison with other relevant data sources this analysis will focus on distinctions as regards female and male holders access / control over *land, labour, agricultural income and technology*. The ensuing analysis will highlight the sex differentiation as regards the:

- | | |
|--|---|
| I. Legal Status of Holder | VI. Labour and Employment on Holdings |
| II. Age of Holder | VII. Agricultural Machinery and Equipment |
| III. Holder’s Household Size | VIII. Holding Income from Agriculture |
| IV. Land Tenure and Land Use / Number of Parcels | |
| V. Area of Holding | |

The nature and scope of the difference in the scale of participation of women vis a vis men will serve to highlight the salient issues that influence people’s responses to the dictates of the marketplace.

GENDER ISSUES EMERGING FROM THE 2007 CENSUS OF AGRICULTURE

I. Legal Status of Holder

The 2007 Census of Agriculture captured a total of 9972 holders out of the 41,257 dwellings screened. This represents a contraction by 25% from the 13,366 holders identified in the previous census. Of the 9972 holders, 9800 or 98% of the population holders are categorized as individuals. As indicated in Table 1, only one co-operative is registered and 156 or 1.6% of the total number of holdings have the legal status of joint individuals.

Table I

Legal Status of Holder	Number of Holdings		
	Total	Male	Female
Individual	9800	6894	2906
Joint Individuals	156	121	35
Cooperative	1	0	0
Company/Corporation	8	0	0
Government	2	0	0
Other	5	0	0

The prevalence of individual holders, both female and male, reflects the high degree of autonomy in the sector. Further the change in the sex differentiation of the individual holders, during the inter-censal period, point to a relative increase in the proportion of female holders.

Figure 6

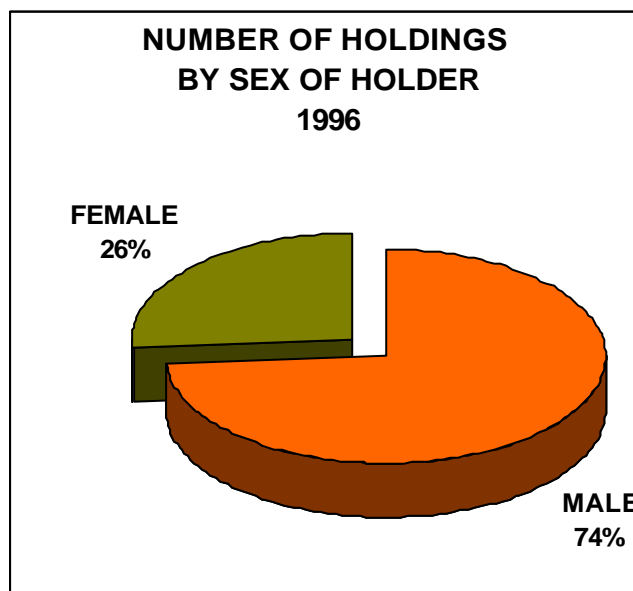
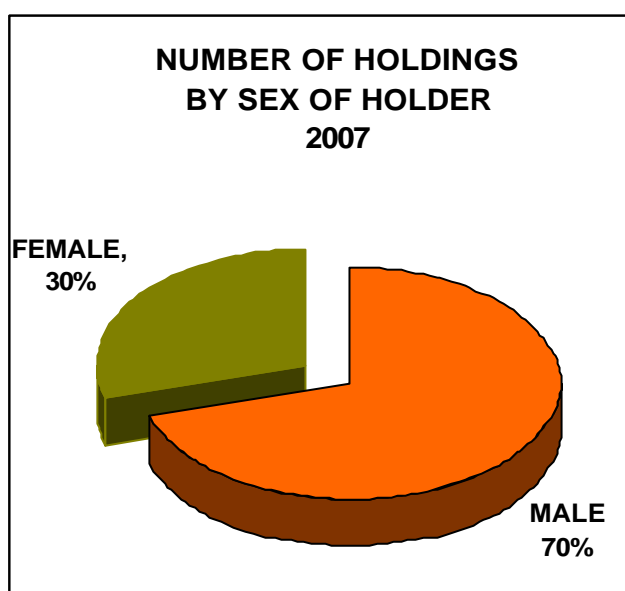


Figure 7

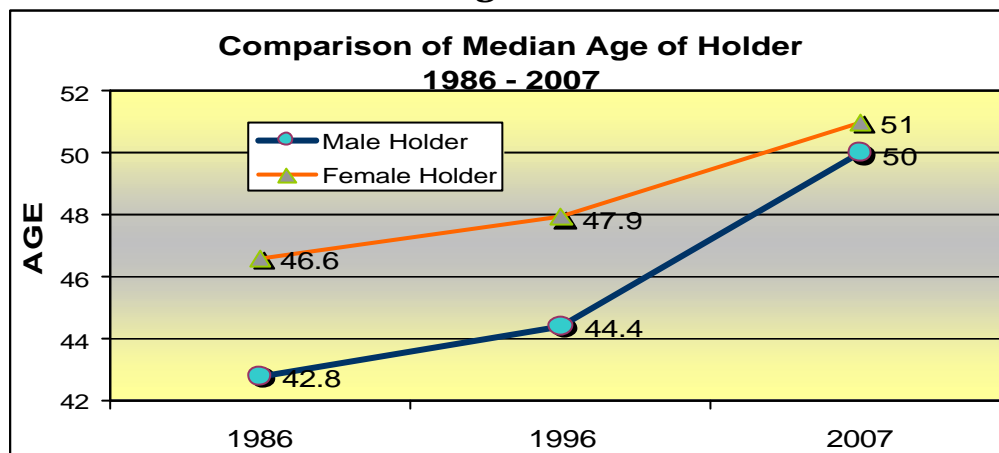


As evident in the Figure 6 and 7 above, the proportion of female holders increased by four (4) percent from 26% in 1996 to 30 % in 2007; although the number of female holder holdings decreased by 15.5% from 3439 in 1996 to 2906 in 2007. As regards the male holdings, the number decreased by 28.3%, from 9620 in 1996 to 6894 in 2007. In contrast with the female holders, there was a drop in both absolute and relative terms for the male holders from 74% in 1996 to 70 % in 2007.

II. Age of Holder

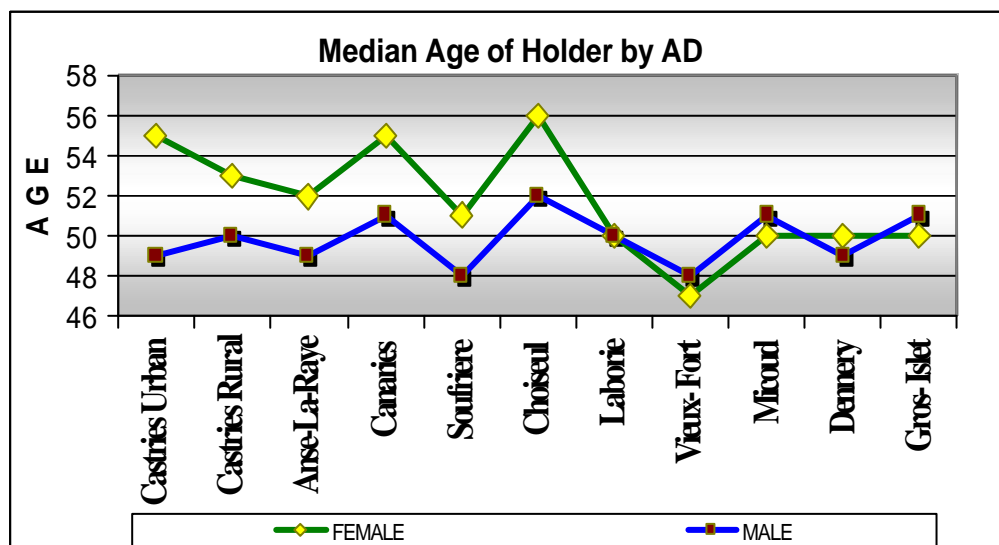
The tradition of female holders being older than their male counterparts continues in 2007. Over the last two decades, the age of both the female and male holders have been increasing. The trend as depicted in Figure 8 illustrate that the median age of the male holders increased more sharply relative to the females, by 5.6 years as compared to 3.1 years for females during the period 1996 – 2007. f

Figure 8



The median age of both male and female holder is now 50 years and 51 years respectively. This may be the highest in St. Lucian recorded history.

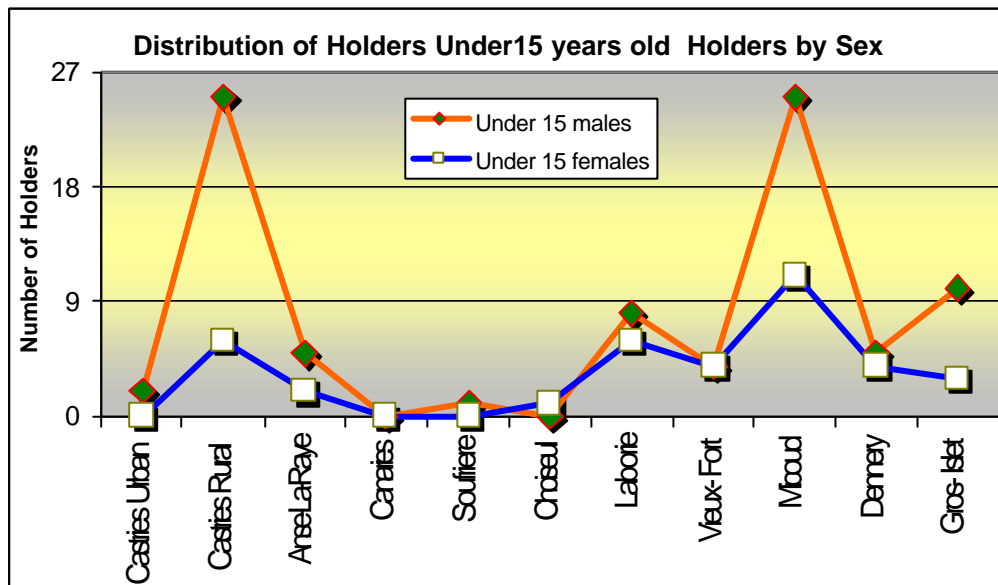
Figure 9



According to the results of the 2007 Census of Agriculture and as demonstrated in Figure 9, the oldest female and male holders are concentrated in Choiseul. In Vieux Fort, Micoud and Gros Islet the females are generally one year younger than the males. In these aforementioned three ADs as well as in Dennery and Laborie, the median age of both sexes is less than 52 years. In Laborie, the median of the females match that of the males – 50 years. In Dennery the males are generally one year younger than the females. The difference in the age of the female and male holders is most pronounced in Castries Urban, where the females are generally six (6) years older than the males.

As regards the age categories and by comparison with the 1996 census results, the share of holders under 15 years old is on the increase. In 1996, there was no female holder under-15 years old, while 7 males in that age category were recorded. However in 2007, 37 – under-15 years old - females holders are recorded while the number of males increased by over 1000 percent to 85 (under 15 years old) male holders. As evident from Figure 10, the emerging trend of young farmers is most prevalent in Micoud [25 males, 11 females] and Castries Rural [25 males, 6 females].

Figure 10

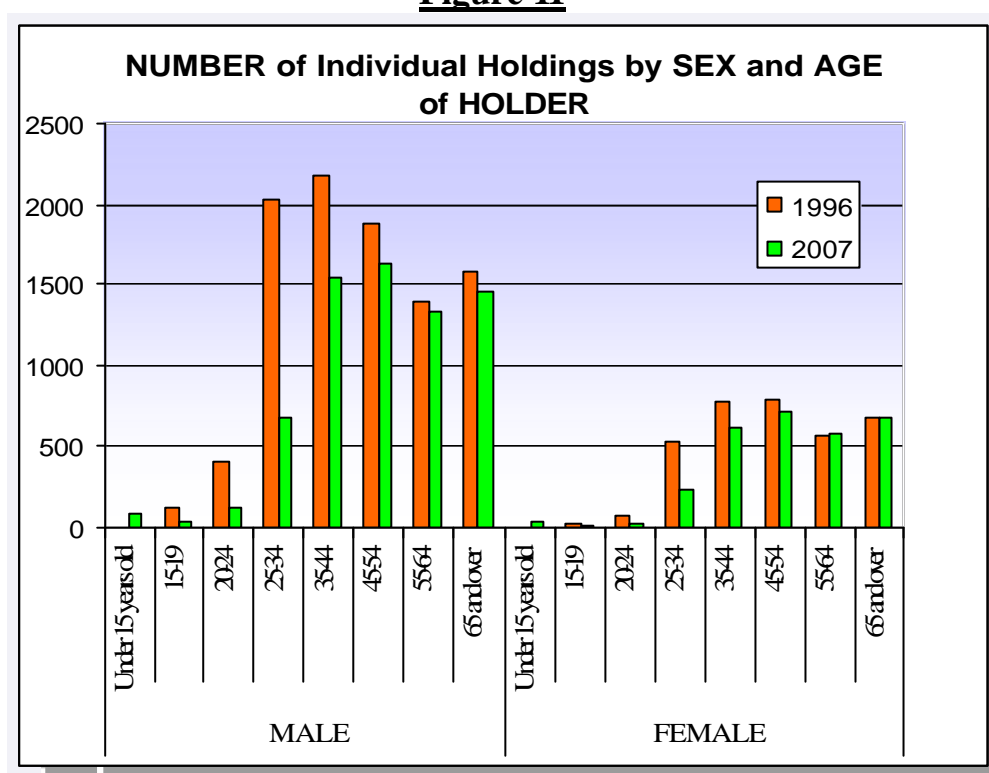


While there were significant increases in the number of under-15 years old holders of both sexes, the most drastic decreases occurred in the 15 to 34 years range for both females and males. In the case of the males, the 15 – 19 age category experienced the greatest slump (72.3%), while for the females the 20 -24 age category was the most affected (63.2% decline). The number of males in the 25 - 34 age category declined by 66.4% from 2021 in 1996 to 679 in 2007. In the case of the females the decline was by 56.2% from 539 in 1996 to 236 in 2007.

Notably both males and females in the 15 – 19 and 20 – 24 years age categories are fast disappearing. While the absolute number of females is more marked, from 99 in 1996 to 40 in 2007, the rate of desertion is more pronounced for the young male holders. For the males 65 years and over, the decline is greater (7.9%) than for males in the 55-64 age category.

As evident in Figure 11, males holders of all ages are on the decline. However in the case of the female holders, those in the 55 – 64 and 65 and over age categories have increased by 4.1% and 0.9% respectively, notwithstanding varying degrees of decline in the number of females in the ages categories below 55 years.

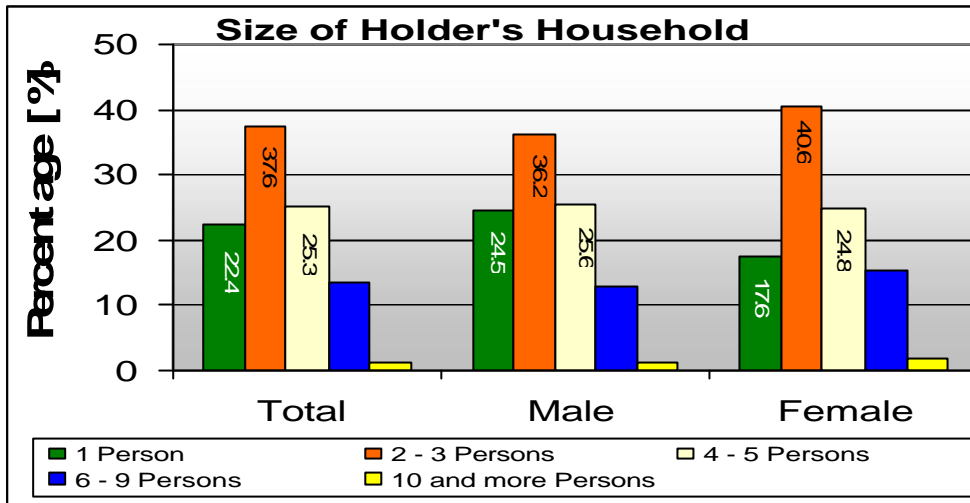
Figure 11



III. Holder's Household Size

According to the *2006 Assessment of Poverty in St. Lucia* report, the average size of households seems to have fallen slightly from 3.8 persons to 3.6 persons. As per the results of the 2007 Census of Agriculture, the average size of a holder's household is 3.3 persons. As illustrated in Figure 12, the majority of individual holder households contain 2-3 persons, however there are relatively more female holder households (40.6%) than male holder households (36.2%) with 2-3 persons. Large households of 10 and more persons are very infrequent.

Figure 12



There is also a significant number of one person female and male individual holder households. however the proportion of male one person households exceeds the female one person households by 6.9%. In absolute terms, of the 2198 one person households, 76.8% are male holders.

Figure 13

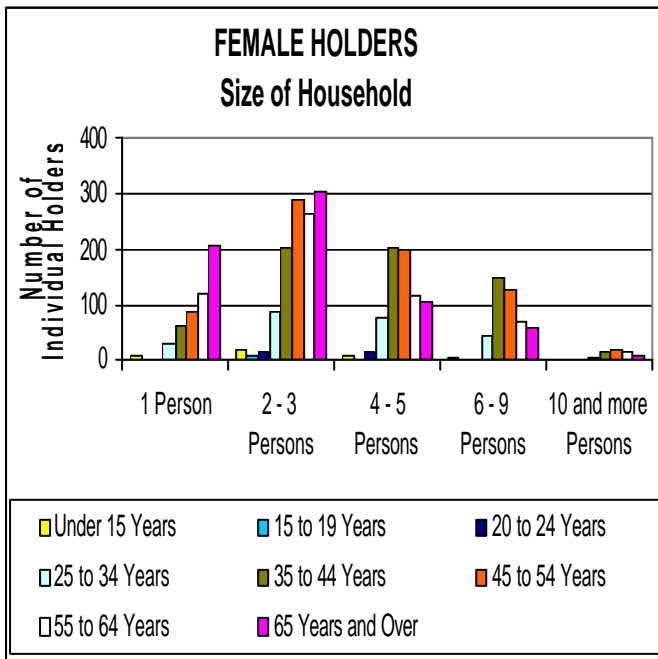
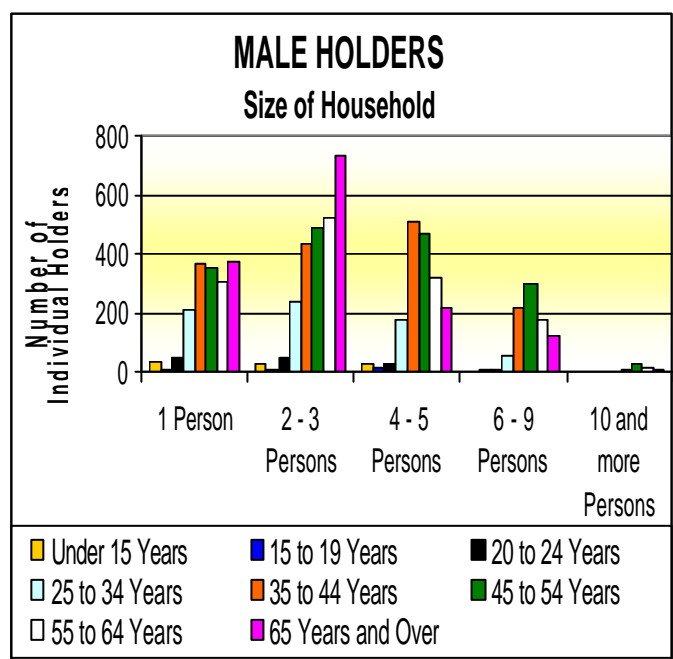


Figure 14



It is worth noting that 31 of the 85 under-15 years old male holders live alone, as compared with 10 of their female counterparts. Interestingly, 17 of the 37 under15 years old female holders reside in 2 – 3 person households. Figure 13

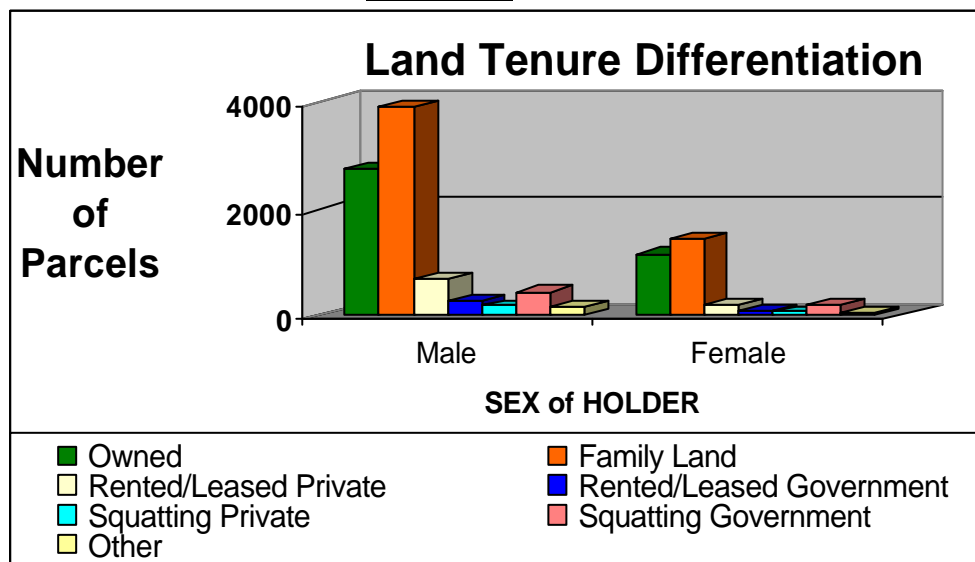
indicates an appreciable number of female holders aged 65 years and over in one person and 2 – 3 persons households. As evident in Figure 14, in the case of male holders, there is a greater concentration of males 35 years and upwards living alone, as well the 10 and more persons households are more infrequent among male than for female holding households.

IV. Land Tenure and Land Use/Number of Parcels

While the total area in agricultural holdings decreased by 41.1%, overall, the proportion of family land increased by 12.1% and the proportion of freehold land decreased by 12.3% overall. Rented and leased private lands increased by 1.8% and the amount rented and leased from government decreased by 1.8% as well. Squatting on private and government lands increased by 0.2 % and 0.7% respectively.

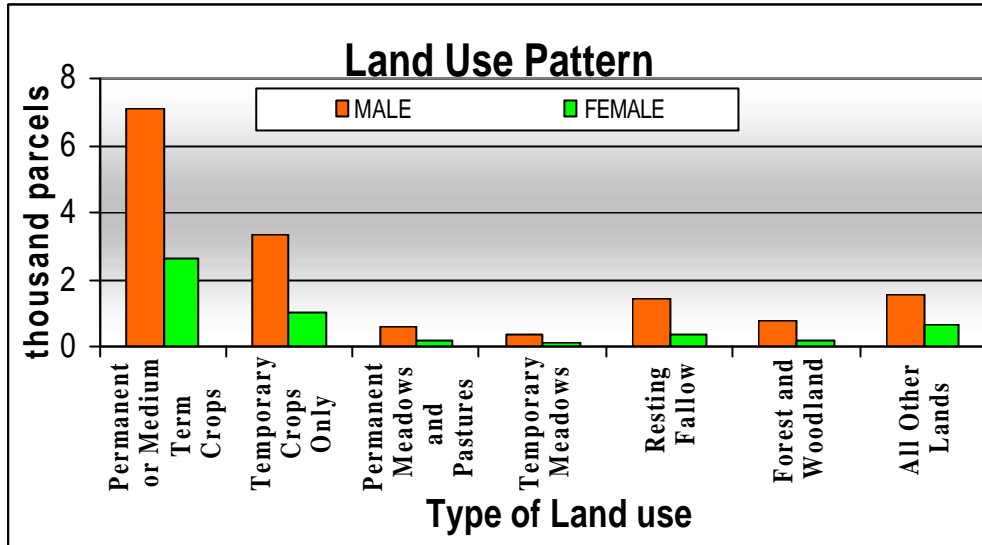
In keeping with the national land tenure pattern and as illustrated in Figure15, family land is the predominant form of land tenure for both female and male holders, freehold land ranks second. By comparison, the variation in the amount of land owned and held under family tenancy is greater as regards male vis a vis female holders. Relative to owned and family land, the use of rented/leased private or government lands by both sexes is very infrequent, and more so as regards squatting on both private and government lands. However in all instances, female holders have more restricted access than their male counterparts.

Figure 15



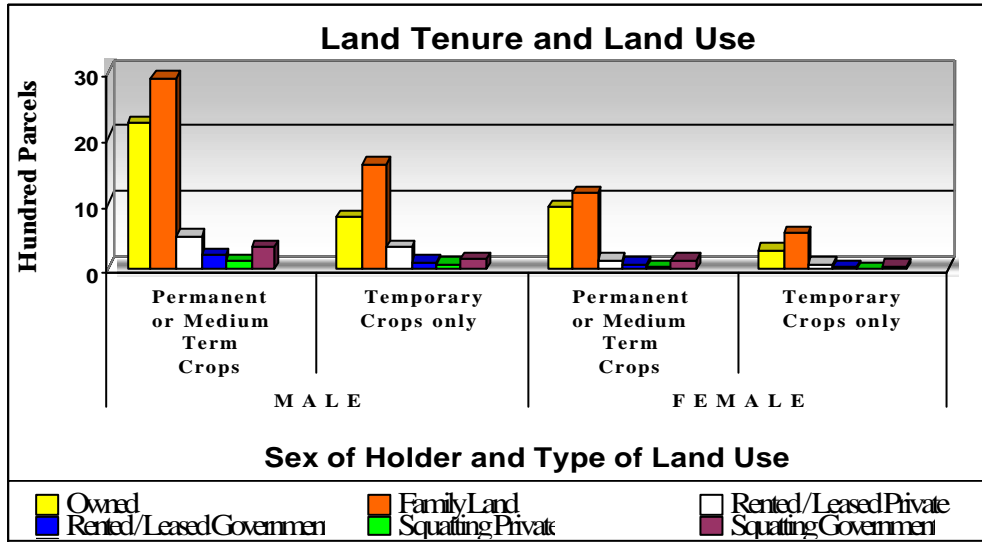
As evident in Figure 16, the majority of the land held by male and female holders is occupied by permanent and medium term crops.

Figure 16



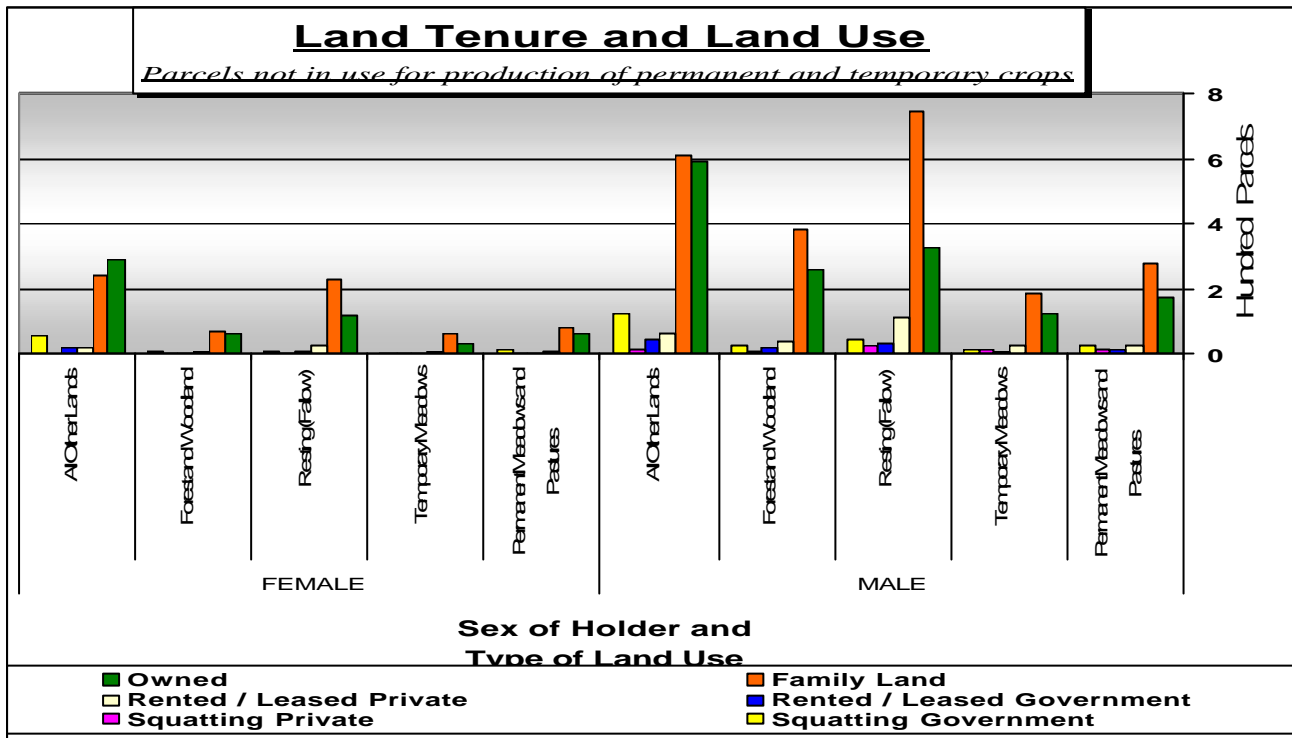
As illustrated in Figure 7, with respect to permanent or medium term crops as well as temporary crops, family land followed by freehold land are the most prevalent forms of land tenure engaged for these aforesaid land uses.

Figure 17



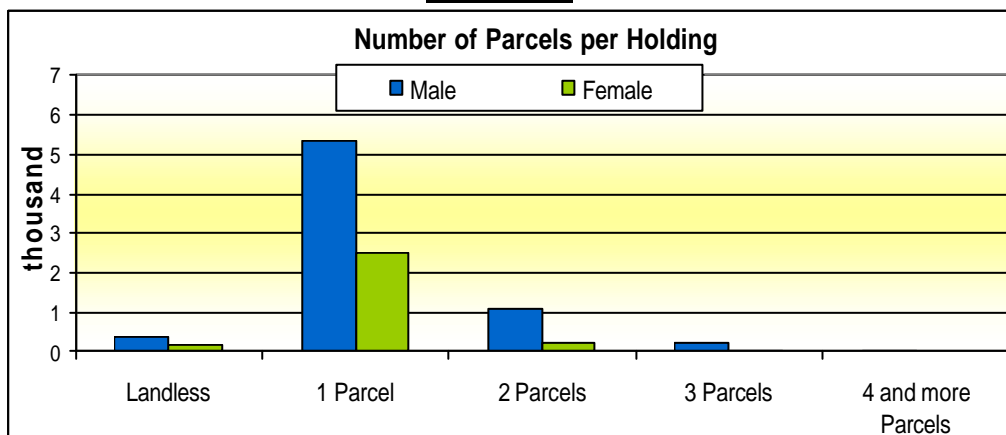
A cursory look at other land uses [ref: Figure 18], reveal that a significant number of parcels owned by male holders are resting(fallow). The female holders hold an appreciable amount of un(under)productive lands as well.

Figure 18



As shown in Figure 19, in 2007, the majority of holders of both sexes operate one parcel of land. Of the 524 landless individual holdings, 344 are operated by male holders and 180 by female holders. The number of holders of both sexes operating 3 parcels holdings is less than the those with landless holdings. A mere seven (7) female holders operate four and more parcels as compared with 51 males.

Figure 19



The level of land fragmentation within holdings in 2007 decreased relative to 1996; with the average number of parcels per holding moving from 1.32 to 1.23.

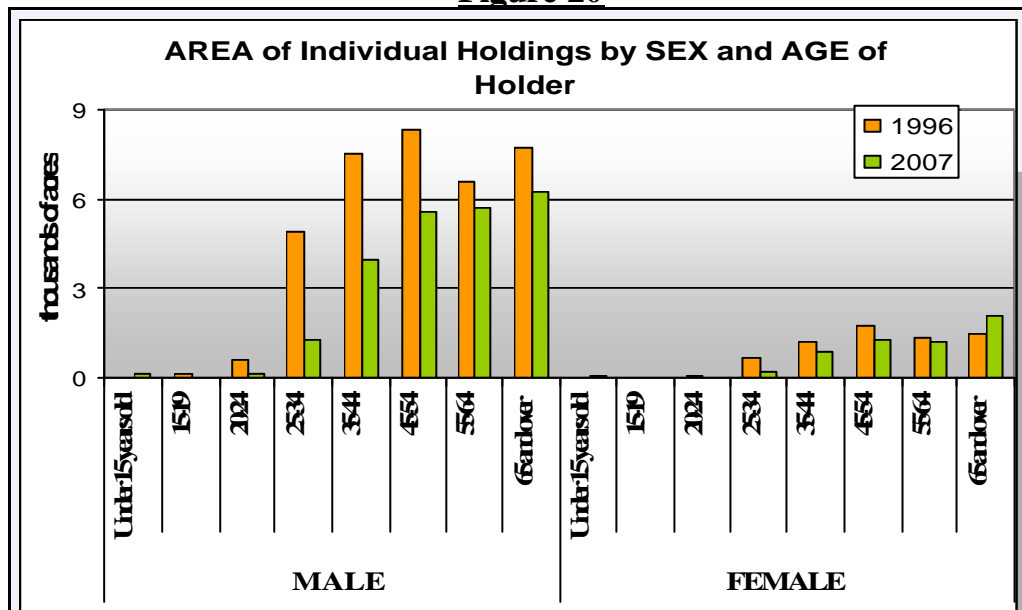
In 1973/74, the average level of fragmentation was 1.12 parcels per holdings and increased to 1.31 parcels per holding in 1986. Taking into account the 28.3% decrease in the number of male holders, the number of parcels operated by male individual holders decreased from 11,645 parcels in 1996 to 7015 parcels in 2007. In respect of the females, with the 15.5% decline in the number of holders, the number of parcels operated by female individual holders dropped from 3493 parcels in 1996 to 2941 parcels in 2007. In the main, both female and male holdings consist of just one parcel of land. This reflects a tendency towards land concentration, as a consequence of the desertion and competition for land under agriculture.

V. Area of Holdings

The total land area of female holders declined by 13.5%, from 6485 acres in 1996 to 5611 acres in 2007. For male holders the contraction in the total area of individual holdings is 36% from 36 064 acres in 1996 to 23076 acres in 2007. The percentage decline in the area of individual male holdings exceeds the national figure of 32.6%.

As evident in Figure 20, most of the land is held by older males and females. Interestingly, the land area controlled by both under15 year old holders of both sexes has increased appreciably. As well, the land area of the 15 – 19 years female holders increased by 138.3%; however for the corresponding male holders, the total land area declined by 72.5% . Notably, the under15 holders of both sexes have secured more land than their counterparts in the 15 – 19 age category.

Figure 20



The total land area of all holdings except (a) the under 15 years old of both sexes and (b) the 15 – 19 and the 65 and over females are on the decline. As indicated in Table 2, the decline is most pronounced (over 60%) for the 15-19 males and all in the 20 to 34 age range.

Table 2
Area (acres) of Individual Holdings by Sex and Age of Holder

AGE OF HOLDER	1996		2007		% CHANGE	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Under 15	0	0.38	31.76	150.61	N/A	39534.7
15-19	2.35	83.15	5.60	22.85	138.3	-72.5
20-24	69.9	623.24	25.36	189.79	-63.7	-69.5
25-34	627.75	4911.7	225.33	1269.22	-64.1	-74.2
35-44	1175.49	7513.56	859.26	3975.46	-26.9	-47.1
45-54	1728.51	8321.32	1253.17	5565.77	-27.5	-33.1
55-64	1384.94	6605.73	1121.80	5696.02	-19.0	-13.8
65 and over	1479.25	7760.69	2088.88	6206.50	41.2	-20.0

According to the data in respect of the size category of individual holdings, 4.7% and 5.9% of female and male holders respectively are landless. The majority of both female (68%) and male (51%) holders operate holdings under 2 acres in size. In respect of the male holders, many (38.3%) operate holdings between 2 and 10 acres in size. By comparison, 23.9% of the female holders operate holdings between 2 and 10 acres in size.

The large holdings are fast disappearing, as evident in Figures 21 and 22. The two only female holders with holdings 100 acres and over are themselves in the 65 and over age category. On the other hand, the seven (7) males holders with holdings 100 acres and over are in the 45 to 54 (3 holders), 55 – 64 (2 holders) and the 65 and over (2 holders) age category. Less than one percent of the female and male holders operate holdings 25 acres and over and 5.3 % of the male holders and 2.3% of the female holders operate holding of 10 to fewer than 25 acres.

Figure 21

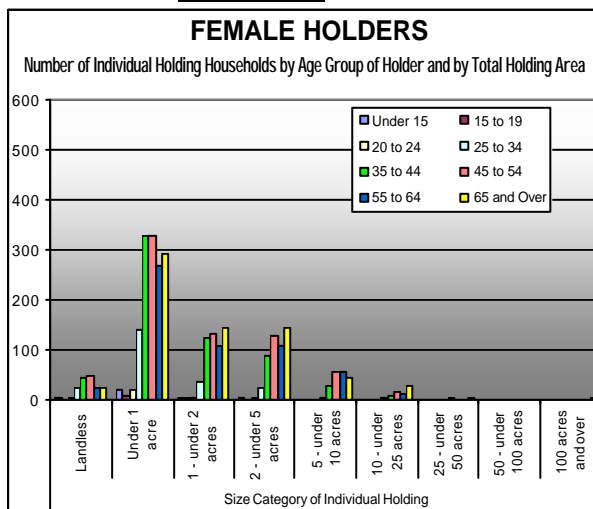
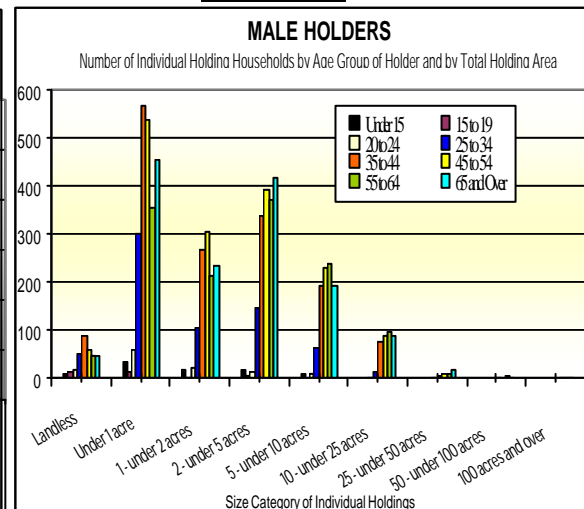


Figure 22



The average size of a female holding increased by 2.1 percent from 1.89 acres in 1996 to 1.93 acres in 2007. This is indicative of increased land concentration by individual female holdings. On the other hand, the average size of the male holdings decreased by 10.7% from 3.75 acres in 1996 to 3.35 acres in 2007. The desertion of land is more prevalent among youth of both sexes. However the reverse trend in respect of under-15 year old holders needs closer scrutiny. As well, female 15 – 19 years and 65 and over appear to be acquiring more land. Generally much of the land is held by older holders of both sexes and there is a trend towards equity as regards land distribution.

VI. Labour and Employment on Holdings

The process of urbanization in St. Lucia is evidenced by the reduction in the total holding household population, in both absolute and relative terms. In 1986, 58,000 persons or 37% of the national population lived on holdings. In 1996, there was a decline to 51553 persons or 37% of the national population living on holdings. In 2007, the 32,919 members of holding households are in the region of 21% of the national population.

The waning of the population in holding households over the years has impacted on the labour supply available to agriculture. With the out-migration of especially the males, there appears to be a trend towards the increased prominence of female holders in the sector from 26% in 1996 to 30% in 2007. This is an indication of a livelihoods coping strategy for women and further reflects the systemic differences in the choices of females and males in response to economic shocks within the agricultural sector.

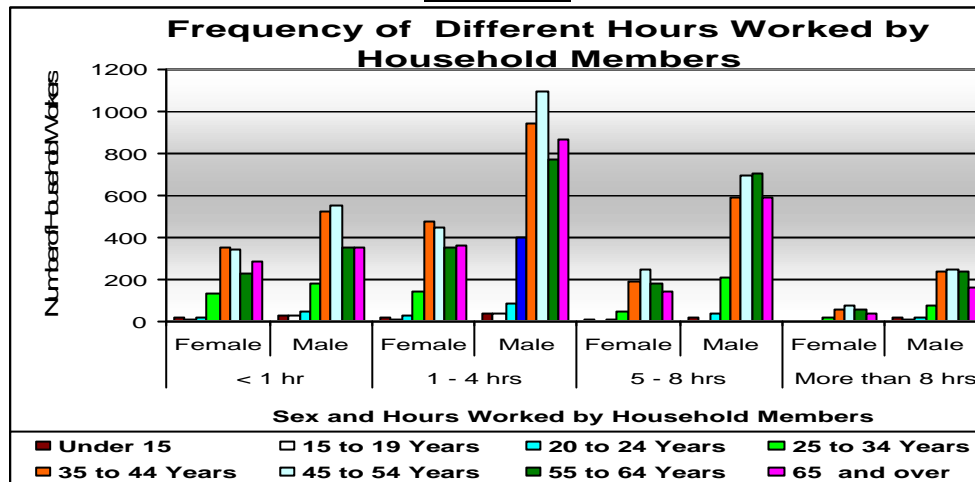
The 2007 Census of Agriculture captured 14,233 workers of individual holding households. Of this amount, 10,055 (71%) are male workers and the remaining 4178 (29%) are female worker. According to data on the average number of hours worked daily on the holding by members of individual holding households (in the last 6 months), 32% of females workers and 20% of male workers devote less than one hour daily to work on the holding(s). This may be an indication of the subsistence type activity, primarily by the females, a significant number of whom are 65 years and over [ref: Figure 23].

Notably, just 5% of female workers and 10% of male workers belonging to a predominantly elderly household workforce have the habit of working on the holdings for more than 8 hours a day. The custom appears to be 1-4 hours of work on the holdings per day, for 43% of the female workers and 42% of the male workers. As regards the pattern of 5 – 8 hours work daily, 19% of the females and 28% of the males invest this amount of time.

The data reveals that the majority of both female and male workers within holding households work for no more than 4 hours daily on the holdings. As

shown in Figure 23, the majority of the workers are 35 years and over. The prevalence of the 65 years and over females and males is diametrically opposed to the virtual absence of workers (both sexes) in the 15 – 19 and 20 – 24 age groupings.

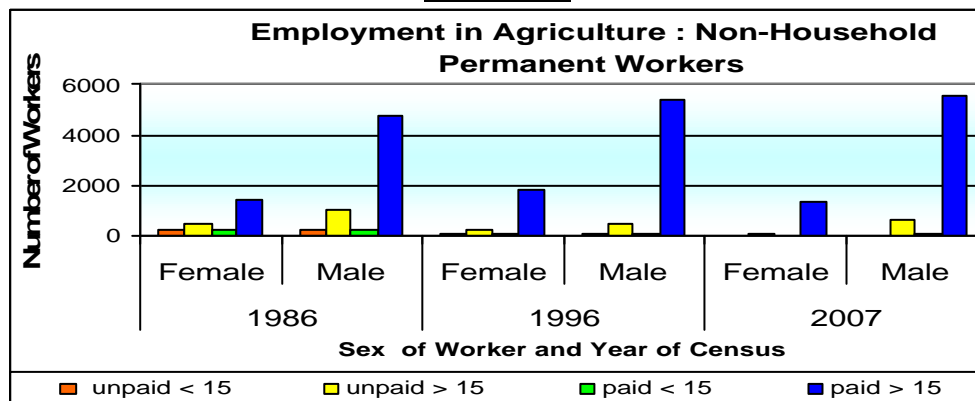
Figure 23



As regards the characteristics of non-household permanent workers, the number of unpaid permanent male workers declined from 1268 workers in 1986 to 529 in 1996 and increased to 669 in 2007. As regards unpaid permanent female workers, there has been a steady decline from 688 workers in 1986 to 256 in 1996 and 132 in 2007. Interestingly, there was absolutely no unpaid permanent female worker recorded in 2007.

The pattern of decline during the period 1986 to 2007 in respect of the unpaid and paid permanent workers by sex is depicted in Figure 24. As shown, the number of unpaid under-15 permanent workers is decreasing in the case of both the female and male workers. According to the data, the paid under-15 years male permanent workers declined from 243 workers in 1986 to 72 workers in 2007. As regards the females in the aforesaid employment category, the number of workers dropped from 205 in 1986 to 11 in 2007.

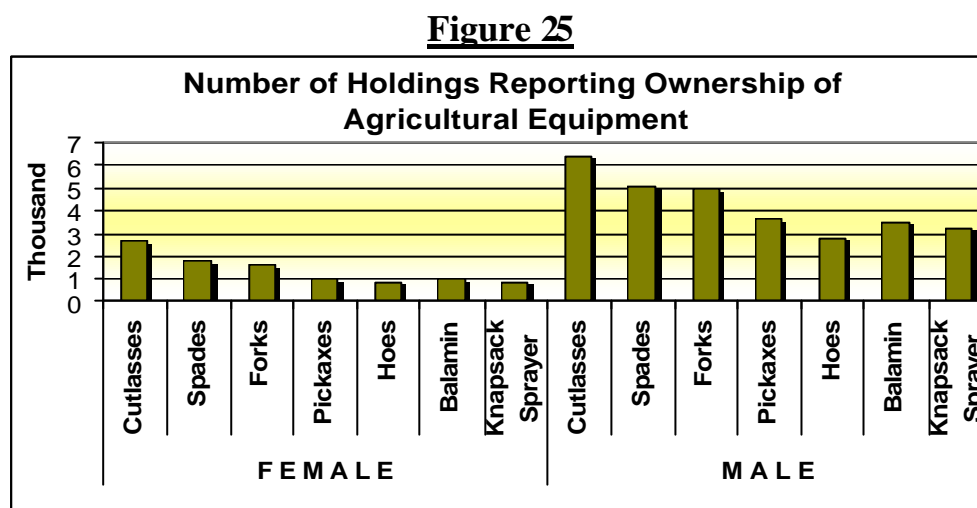
Figure 24



The majority of the non-household permanent workers are in the “paid over -15 years” employment category. The male non-household permanent workers in that category continue to increase from 4720 workers in 1986 to 5404 in 1996 to 5559 in 2007. With respect to the females in that employment category, the number of workers (1874) in 1996 was the highest during the period 1986 – 2007.

VII. Agricultural Machinery and Equipment¹

The cutlass is the most common implement owned by holders and used on the holdings. Among the 6894 male holders, 6414 cutlasses are owned and used. In the case of the 2906 female holders, 2631 cutlasses obtain. As indicated in Figure 25, male holders own and use more of all the implements listed.



When taken together, on average, each female or male holder owns 0.9 of a cutlass. However, generally female holders have a slightly lower ownership ratio. The ratio in respect of a spade or fork is 0.6 and for a pickaxe or hoe or balamin or knapsack sprayer the ratio is 0.3. By comparison, a male holder owns on average 0.7 of a spade or fork, 0.4 of a hoe, 0.5 of a pickaxe or balamin or knapsack sprayer. In effect, neither every female nor every male holder owns a full complement of these implements.

In respect of agricultural machinery, the number of trucks/vans or sprayers and sprinklers used has decreased dramatically in 2007 relative to 1996, prior to the severe contraction of the banana industry. Among the male holders, they own 853 trucks/vans and the females own 159. The other five (5) most utilized

¹ In the 1996 Census of Agriculture, machinery and equipment “used” on the holding was reported, however in 2007 the number of machinery and equipment “owned and used” on the holdings was captured.

machinery/appliances by both females and males (in order of decreasing frequency) are water tanks, brush cutters, sprinklers, mist blowers and pumps. The absolute number recorded in respect of male and female holders are indicated in Figures 26 and 27 below. Notably, 0.24% or 7 of the female holders and 0.27% or 19 of the male holders own a computer.

Figure 26

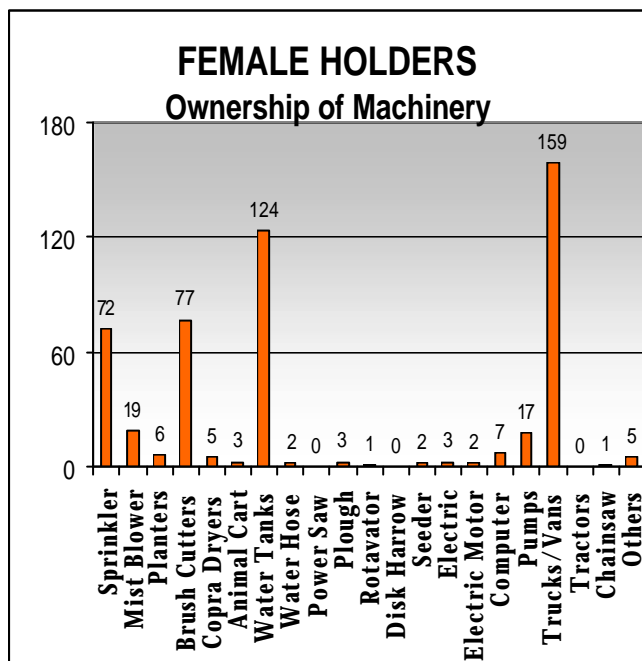
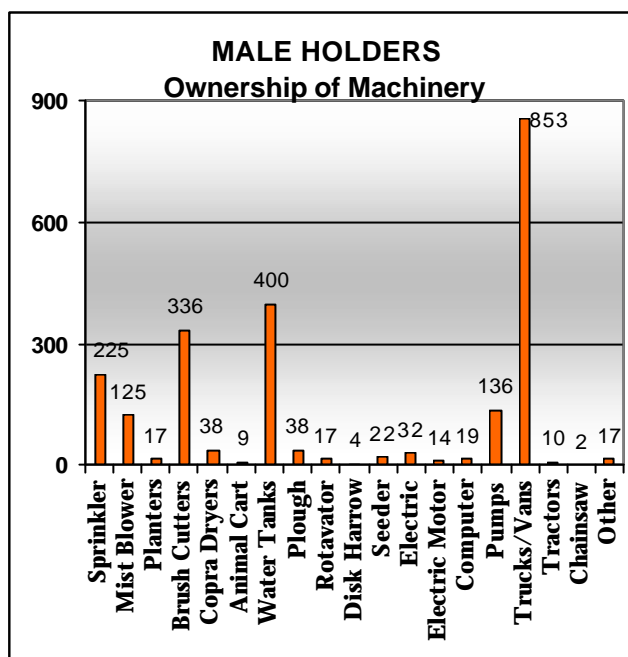


Figure 27



VIII. Income from Agriculture

Relative to 1996, the percentage of individual holdings with more than 75% of income from agriculture slumped by 20% from 34% in 1996 to 14% in 2007. In that income category the absolute number of individual holdings dropped by 67% from 4300 in 1996 to 1418² in 2007. In the case of the males, the decline mirrored the national slump of 20% in the total income from agriculture for those with more than 75% of income from agriculture and the number of individual holding in that category dropped by 67% as well from 3438 in 1996 to 1126 in 2007. However for the females the drop in earnings was 15% for those individual holdings with more than 75% of income from agriculture. As well, the number of female individual holdings in that category decreased by 66% from 862 in 1996 to 292 in 2007. Notably, relative to 1996 the decline in the number of female holders in that income category was just one percent less than the corresponding males, but the percentage decline in income was 5% lower for the females.

² The number of banana farmers in 2007 equals

As regards the percentage of individual with less than 25% of income from agriculture, in that category there was an increase of 17% overall, from 36% in 1996 to 53% in 2007. In effect, more than half of the income from agriculture generated by individual holders (of both sexes) is derived from holding households with less than 25% of income from agriculture. In respect of the female individual holdings, the proportion of income from agriculture increased by 17% as well from 45% in 1996 to 62% in 2007. For the corresponding male holders, the proportion of income increased by 16% from 33% in 1996 to 49% in 2007.

By comparison of the data presented in Tables 3 and 4, the percentage increase in income of the less than 25% category (17%) is almost double the percentage increase (9.8%) in the number of individual holdings (of both sexes). For the males in the aforesaid income category, the number increased by 6.5% but the proportion of income more than doubled by 16%. In the case of the corresponding females, the number increased by 16.5% and the increase in the percentage of income was comparable at 17%.

Table 3

PERCENTAGE OF INDIVIDUAL HOLDINGS BY PROPORTION OF INCOME FROM AGRICULTURE AND BY SEX OF HOLDER			
	1996	2007	% CHANGE
TOTAL			
< 25%	36	53	17%
26% - 50%	17	18	1%
51% - 75%	11	14	3%
> 75%	34	14	-20%
MALE			
< 25%	33	49	16%
26% - 50%	17	18	1%
51% - 75%	12	15	3%
> 75%	36	16	-20%
FEMALE			
< 25%	45	62	17%
26% - 50%	17	16	1%
51% - 75%	10	11	1%
>75%	25	10	-15%

Table 4

NUMBER OF INDIVIDUAL HOLDINGS BY PROPORTION OF INCOME FROM AGRICULTURE AND BY SEX OF HOLDER			
	1996	2007	%CHANGE
TOTAL	13059	9800	-25.0
< 25%	4702	5161	9.8
26% - 50%	2208	1728	-21.7
51% - 75%	1487	1380	-7.2
> 75%	4300	1418	-67.0
MALE	9620	6894	-28.3
< 25%	3160	3364	6.5
26% - 50%	1641	1261	-23.2
51% - 75%	1131	1063	-6.0
> 75%	3438	1126	-67.2
FEMALE	3439	2906	-15.5
< 25%	1542	1797	16.5
26% - 50%	567	467	-17.6
51% - 75%	356	317	-11.0
> 75%	862	292	-66.1

As evident in Table 3 above, the percentage change as regards individual holdings households with 26% - 50% and 51% - 75% of income from agriculture was 1% and 3% respectively; both at the national level and in respect of the male holders. However for the females, the proportion of income increased by 1% in the 51% - 75% income category and decreased by the same percentage in the 26% - 50% income category

In respect of the individual holdings with 26% - 50% of income from agriculture, although the percentage increase for both the males and females was 1%, the rate of desertion by the males (23%) was greater compared with the females (18%).

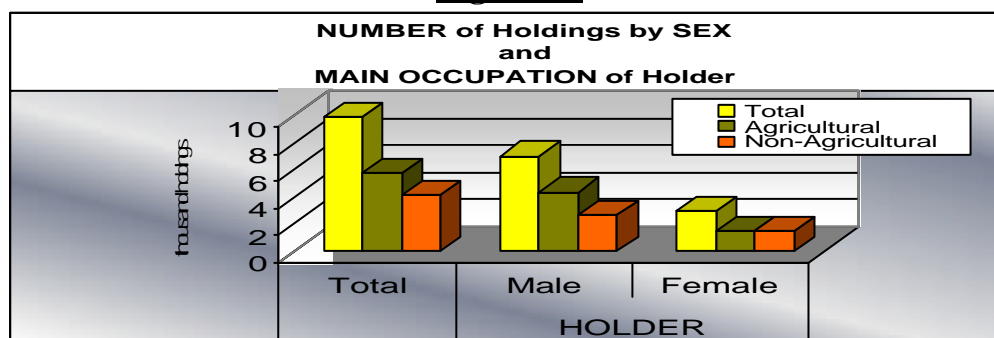
This may be an indication that the males in that income category are more efficient than the females. However, the dynamics for individual holdings with 51% - 75% of income from agriculture was different. In that category, although there was a decline (7%) in the total number of individual holdings, there was an increase (3%) in the income generated by the remaining holdings (of both sexes). For the females, the rate of desertion was more (11%) as compared with the males (6%) and correspondingly the percentage increase in income was less (1%) than the males (3%).

As indicated in Table 4, overall there was a 25% decrease in the number of individual holders from 13059 in 1996 to 9800 individual holders in 2007 and in respect of each of the income categories there were shifts in the proportion of female and male holdings deriving respective levels of income from agriculture. All the same, the greatest shift (the highest rate of desertion) and the only instance of income loss were in the more than 75% income category. Proportionally, the loss of income in respect of females was less (15%) than the males (20%) in the more than 75% income category. The lowest percentage change in income as well as the number of individual holdings of both sexes occurred in the 26% - 50% and 51% - 75% income categories.

Relative to 1996, while both female (66.1%) and male (67.2%) individual holdings lost the capacity to earn more than 75% of household income from agriculture in 2007; there was an increase in the number of individual holdings of both sexes at the other end of the income spectrum. These findings point to a decreasing reliance, of both female and male individual holdings, on agriculture for household income. In times of economic downturn, the females seem pushed to mitigate household income loss from agriculture. As evidenced in the less than 25% income category, the rate of entry was greater for the females (16.5%) than for the males (6.5%) and the percentage increase in income for the females (17%) exceeded that of the males (16%).

As indicated in Figure 28, agriculture is the main occupation of a greater number of male holders. By comparison, the number of female holders with agriculture as their main occupation is near the same as the number that derive income principally from non-agricultural sources.

Figure 28



Notably, the majority of the households derive no income from agriculture. Nineteen percent (19%) of total area occupied by female individual holdings, which belongs to 1082 households, generated no household income from agriculture in 2006. As well, another 19 % of area occupied by female holders belongs to 292 households that derive 75% and more income from agriculture. The 715 female holdings that derive less than 25% of household income from agriculture occupy 20% of the land operated by female holders. The greatest proportion of the area (23%) belongs to 317 female holders, whose households income fits into the “50% and less than 75%” income category. The least percentage of the land belongs to 467 female holders with households that obtain between 25% and less than 50% of their income from agriculture.

As evident in Figure 29 and 30, a significant number of female (18%) and male (20%) individual holdings derive no income from agriculture. From Figure 29, the total area of female holdings occupied by households that derive 75% and more of their income from agriculture (19%) is the same as the land area used for subsistence production (18%). In respect of the males (see Figure 30), the greatest proportion of the land (31%) is occupied by holdings that derive 75% and more of their household income from agriculture. Ten percent of land occupied by male individual holdings derive no income from agriculture.

There is little variance in the proportion of the total area of female individual holdings within the various household income categories.

Figure 29

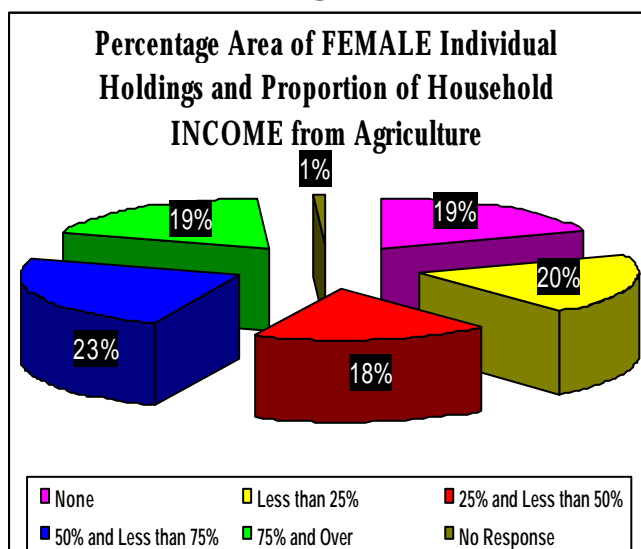
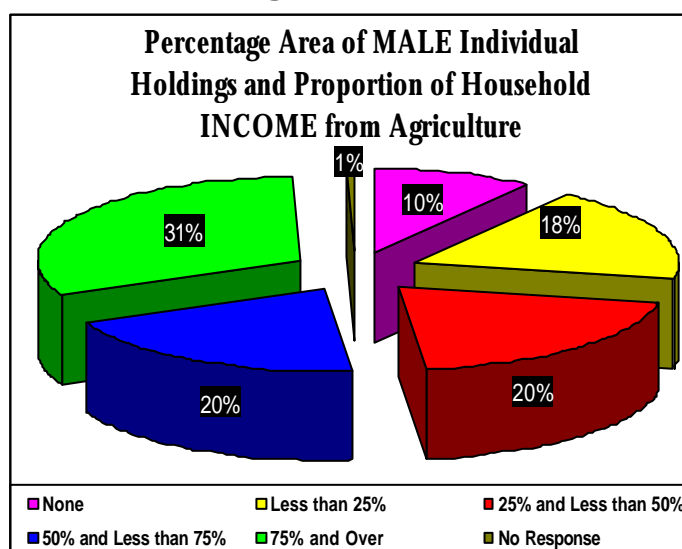


Figure 30



By reference to Figure 30, it is observed that most of the land area (31%) occupied by male individual holdings enlist with households that correspond to the “75% and over” income category. By comparison most of the area occupied by female holders (most of the female holders) enlist with households that

correspond to the “50% and less than 75%” income category. Although the households to which 1817 of the 6894 male holders belong derive no income from agriculture; only 10% of the total area of male holdings corresponds to subsistence production. It appears that on the whole, male holdings are able to derive more income from agriculture.

GENDER DIMENSIONS OF THE AGRICULTURAL SECTOR

According to the World Bank, gender is one of the factors inhibiting the increase of agricultural productivity in the developing countries. The gender analysis of the 2007 Census of Agriculture provides critical information to facilitate gender sensitive policy formulation and programme implementation oriented towards the optimization of the factors of production within the agricultural sector. The assessment of the results of the census from a gender perspective points to some subtle differentiation in respect of the female and male holder’s relationship to labour, land, technology and income.

The available sex-disaggregated data provided little scope for an analysis of the relations of subordination and domination that underpin gender as a power relationship. However there is sufficient capacity to highlight the constraints that need to be overcome and the opportunities that must be explored in order to guarantee the fuller integration of women and men in the process of building sustainable rural and agricultural livelihood systems, in the face of the increasingly liberalized and competitive global trading environment.

1. Constraints identified

- (a) Legal Status of the Holder : Essentially the sector is populated by mostly autonomous holdings that have no obligation to take responsibility for the national economic and social agenda. Generally, holder decision-making and the organization of production occurs without due regard to the national objective(s). In such a scenario, a major challenge is the alignment of established practice with governance and regulatory imperatives.

The highly individualistic nature of participation by both female and male holders has implications as regards the efficacy and translation of policy into action at the holding level. There is indeed the absolute need for the bridging of the institutional divide between national objectives and holding decision making as regards the organization of production and marketing within the agricultural sector.

Essentially, holders’ decisions regarding what to plant, where, when, how and why inevitably impacts on the marketability and competitiveness of overall agricultural output. Therefore in order to enhance the impact of agricultural policies and programs, partnerships and co-operatives must be encouraged and supported in order to strengthen the institutional capacity within the sector. As well, due attention must be paid to the increased prevalence of female holders which signals a subtle feminization of the sector.

- (b) Age of the Holder: The “old age” character of the agricultural sector inevitably limits the capacity for innovation and technological advancement. Notably, the majority of both female and male holders are over 35 years, with a significant proportion over the age of 65 years.

Though there continues to be more male holders in absolute terms, the relative number of females at both extremities of the age spectrum is increasing at an appreciable rate. The median age of the male and female holder is 50 years and 51 years respectively. This is the highest in St. Lucian recorded history.

Are holders, commonly referred to as farmers, a dying phenomenon? Lamentably youth participation in agriculture is seriously lacking. However an emerging phenomenon is the under-15 year old holder of both sexes. The seemingly voluntary entry of very young (under 15) holders requires further research to ascertain the underlying factors that push these ‘minors’ to establish their own holdings.

- (c) Holder’s Household Size: The prevailing small size (3.3 persons) of individual holders’ households and the frequency of holders aged 65 years and over in these households has implications with respect to the elasticity of the household labour supply as well as the productivity of the holding, particularly for the females. Such encumbrance is further exacerbated by the appreciable number of holders aged 65 years and over (of both sexes) in one-person households.

The continued contraction of the individual holding household size points to the depletion of household labour for agriculture. In respect of both female and male individual holding households, large households of 10 and more persons are rare and those with 6 and more persons are infrequent. The six (6) and more persons households are more infrequent for the male holders,

Notably, there is a greater concentration of males 35 years and upwards living alone. As well, a significant number of under-15 years old male holders (31/85) live alone; as do 10/37 of their female counterparts.

- (d) Land Tenure and Land Use / Number of Parcels: Secure access to land is a precondition for the sustainability of agricultural livelihoods and the stimulation of appropriate supply responses to the dictates of the market. Family land followed by freehold land is the most prevalent form of land tenure for both female and male holders. Customarily female holders have more restricted access to land than their male counterparts, although there is no institutionalized gender inequality in relation to land tenure.

Relative to freehold and family land, the use of rented/leased private or government lands by both sexes is very infrequent, as well squatting on both private and government lands is uncommon.

The majority of the land held by male and female holders is occupied by permanent, medium term and temporary crops. A significant number of parcels owned by male holders are resting(fallow) and female holders have an appreciable amount of un(under)productive lands as well.

On average, both female and male holdings consist of one parcel of land and as a consequence of the desertion and competition for land under agriculture. The

decline in the level of fragmentation of holdings points to a pattern of holding consolidation, particularly among the females.

- (e) Area of Holdings: Most of the land is held by older males and females and there appears to be a trend towards equity as regards land distribution. The average size of a female holding increased while that of a typical male holding decreased.

While males continue to hold more land, the percentage decline in the area of male individual holdings exceeds the percentage decline in the case of female individual holdings. This is indicative of increased land concentration by individual female holdings.

The large holdings are fast disappearing and less than one percent of the female as well as male holders operate large holdings (i.e. 25 acres and over).

Interestingly, the land area controlled by under-15 year old holders (of both sexes) has increased appreciably. Notably, the under-15 holders of both sexes have secured more land than their counterparts in the 15 – 19 age category.

Notwithstanding the fact that the desertion of land is more prevalent among the youth of both sexes, female holders in the 15 – 19 years age category (as well as females, 65 and over) appear to be acquiring more land.

- (f) Labour and Employment on Holdings : The process of urbanization in St. Lucia is indeed impacting on the labour supply on holdings, because of the out-migration of especially the young women and men from the rural households to the city.

Women's innate ability to survive and grow in times of economic downturn seem to hold true with the apparent trend towards the increased prominence of female holders (35 years and over) in the sector, although the males outnumber the females by more than 3 to 1.

The majority of both female and male workers within holding households work for no more than 4 hours daily on the holdings and most of the workers within holding households are 35 years and over.

The prevalence of the 65 years and over females and males is diametrically opposed to the near invisibility of both male and female workers between 15 and 24 years of age.

In respect of the unpaid non-household permanent workers, the number of unpaid permanent male workers increased in 2007 relative to 1996; however there is a steady decline in respect of unpaid permanent female workers. Interestingly, there is absolutely no unpaid permanent female worker, below the age of 15, recorded in 2007.

The majority of the non-household permanent workers are in the "paid over -15 years" employment category. The male non-household permanent workers in that category continue to increase, while female non-household permanent employment in 2007 declined relative to 1996.

The "short" day's work and the shortage of youth labour and employment as well as the waning of holding household labour supply contribute to the low productivity of labour and wages in agriculture.

- (g) *Agricultural Machinery and Equipment* : The use of technology by individual holdings is very limited and consequently contributes to the low productivity of available land and labour. On the whole, male holders own and use more agricultural implements than their female counterparts. The cutlass is the most common implement owned by holders and used on the holdings. By and large neither the female nor the male holder possesses a full complement of equipment/implements.

On average, 9 in every 10 male or female holders own and use a cutlass. As regards other implements, 3 in every 5 female holders have access to a spade or fork and 3 in every 10 have access to a pickaxe or hoe or balaamin or knapsack sprayer. By comparison, 7 in every 10 male holders own and use a spade or fork; 2 in every 5 own and use a hoe and about 50 % of male holders own and use a pickaxe or balaamin or knapsack sprayer.

As a consequence of the severe contraction of the banana industry, the number of trucks/vans, sprayers and sprinklers owned and used on the holdings have decreased dramatically in 2007 relative to 1996. As regards trucks/vans, the ratio is 3 in every 25 male holders and one in every 20 females. The other five (5) most utilized machinery/appliances by both females and males are water tanks, brush cutters, sprinklers, mist blowers and pumps in that order. Notably, 0.24% or 7 of all female holders and 0.27% or 19 of all male holders own a computer.

Generally, male holders have more access to the current stock of agricultural machinery and equipment (implements and appliances) in the sector. Then again the type and quantum of machinery and equipment owned by holdings and used on the holdings reflect a low level of technology in agriculture.

- (h) *Holding Household Income from Agriculture* : More than half of the income from agriculture is generated by individual holders (of both sexes) and is derived from holding households with less than 25% of income from agriculture.

Comparatively, more females entered the lowest income category (less than 25%), more males deserted the second lowest category (26% - 50%), more females disappeared from the second highest income category (51% - 75%) and slightly more males (67.2%) than females (66.1%) dropped out of the highest income category (more than 75%).

There is little variance in the proportion of the total area of female individual holdings within the various household income categories. Female holdings are equally involved in subsistence and income generating production. The total area of female holdings occupied by households that derive 75% and more of their income from agriculture is the same as the land area used for subsistence production.

Agriculture is the main occupation of a greater number of male holders. By comparison, the number of female holders with agriculture as their main occupation is near the same as the number that derive income principally from non-agricultural sources.

The analysis of income data points to a proclivity for the females to mitigate income loss while the males seem better able to derive increased income from agriculture.

Given the fact that historically it is women who carry the greatest responsibility for subsistence production and social reproduction, due attention must be given to the dialectic relationship between gender differentiated labour in production for use and for exchange in the market place. Therefore policies and programmes need to take into account the differing needs and conditions of women and men in the sector if they are to be truly effective in facilitating increased food security and reduced poverty, as well as unemployment – particularly among the youth.

Apropos in the last decade a tremendous amount of human and financial resources have been invested in strengthening the technical and institutional infrastructure to facilitate the transformation of the low-input, low productivity and high cost systems of agricultural production and marketing into technologically appropriate and trade-efficient mechanisms. By and large these policy interventions have not achieved the intended results because of unattended/unforeseen externalities. One of the principal reasons for goal displacement is the failure to understand the nature and scope of the social relations that characterize “holding households”.

In summary the predominance of small and autonomous female and male holdings operating on family land, in the main, presents a major challenge to the process of generating the requisite supply responses and market reforms. Essentially both female and male holding households are populated by risk averse, non-youth (over 35 years) with limited control over land and capital resources and whose *raison d'être* is not profit maximization but the maintenance of their households’ ‘labour-consumer balance’.

Much limited success in respect of meaningful agricultural diversification results from improper utilization of the human capacity within the sector and the gender neutral approach that is not participatory and people centered. Gender mainstreaming provides for an analytical approach that contributes to a better understanding of the social relations of (re)production. Further this approach affords opportunity for the deepening of process of participatory democracy.

Alas, the agricultural sector continues to be dominated by holding household units, whose structure and character is essentially non-competitive and non-responsive to the imperative of trade liberalization and globalization. The current situation calls for tactical interventions to buffer and mitigate the negative impact of globalization and trade liberalization on the agricultural sector. In this regard, due attention must be paid to the minimization of policy conflicts that contribute to the fragmentation of the complex process of agricultural development and poverty reduction into a series of inept and unsustainable interventions.

GENDER MAINSTREAMING - A Prerequisite for Prosperity

Although the overall contribution of agriculture to economic prosperity continues to decline, the rural and agricultural sector remains indispensable to the expansion of emerging sectors such as tourism and services. The large holdings are fast disappearing and less than one percent of the female as well as male holders operate large holdings (i.e. 25 acres and over). The divestment of large estates and the persistence of the small holdings speak to the “survivability” of the holding households. As well, the data as regards income sources indicate the capacity of especially the females to access benefits from mobility and growth in both the agricultural and non-agricultural sector. This dynamic also speaks to the opportunities presented by this sector even with its declining fortunes given the rigidities in other labour market sectors such as construction particularly for women.

The 2006 – 2009 Medium Term Development Strategy recognizes that the St. Lucian economy has moved from a mono crop to largely a mono-service, but the skills base required for a service economy has not fully emerged. Therefore responses to the main challenges of agricultural economies in transition must be concerned with social cohesion and productivity as the main pillars of the structural adjustment and transformation programme. Inevitably this requires the collectivity and collaboration at the micro (among holdings), meso (among institutions) and the macro (government and civil society) in order to develop the comparative advantage needed to enhance productivity of the factors of production, in particular land and labour .

Globalization and trade liberalization do pose a threat to the viability of the agricultural sector and the sustainability of livelihoods therein. However, in this scenario, opportunities do exist for the emergence of non-banana livelihood systems; in order to more effectively and collectively contend with the challenges of economic development, poverty alleviation and food security. The sustainability of agriculture is indeed a major challenge to the political, social and economic stability of the country. With the majority of households dependent on rural and agricultural systems for their livelihood, the transition to tourism and a services based economy coupled with the resulting net transfer of resources has implications for “survivability” in an increasingly competitive and seamless global market place.

In light of limited natural and financial resources, the most valuable resource is the people. Available data and information from the census validate the resilience of the individual holding household notwithstanding the absence of an entrepreneurial culture. There is the need for modernization and change that can serve to attract the youth into the sector; so as to achieve a higher trajectory of agricultural productivity and income. Strategies to engage the youth in the transformation process will undoubtedly contribute to establishing the technology base necessary to better manage risk and reduce vulnerability in the sector. In this regard, due emphasis will need to be placed on the development and use of effective policy instruments in the areas of investment and technological advancement in agriculture, as well as initiatives that that can quicken the emergence of a robust agricultural private sector.

Therefore in the movement towards WTO compliance there must be the broadening of the obligations as regards trade liberalization to include non-trade concerns such as food security, poverty alleviation, sustainable livelihoods and rural development. St. Lucia must seek out creative ways to generate the supply responses required to cope with the radical shifts in trade policy and to facilitate the realization of the full potential of its limited resource base and restrictive domestic market. In this scenario, due attention must be paid to the social and (re)productive adjustments in the lives of women and men. This in effect provides a strategic entry point for gender-aware and gender-sensitive approaches to trade liberalization in agricultural sector.

The extent of the impact of agricultural development and trade liberalization initiatives on the dynamics of livelihood(s) within holding households is conditioned by the interplay of socio-economic, political, demographic, institutional and environmental influences. Therefore in seeking to implement a strategy to reduce vulnerability and exclusion, the policies and actions must be grounded in the expectations and capacities of the “holding households”; whose experiences and priorities have some bearing on the real direction and pace of progress in the sector and by extension the society in general. Invariably the informal systems and survival strategies operating within these households have a dynamic which is at variance with the culture of the formal market place.

Indeed there is the urgent need for a new agenda that responds to the call for sustainability of the sector, increases in the income of holding households and the upgrading of technology owned and used on holdings. Conclusively, the neglect of gender considerations in agricultural policy formulation and implementation eventually leads to economic depression and social instability. Therefore a first step towards the revitalization of the agricultural sector is the strengthening of participatory democracy as well as the human and institutional capacity to incorporate gender considerations in the process of agricultural policy formulation and programme implementation.

Traditionally the female gender function has been largely excluded from mainstream macro-level policy making. Albeit, female-gender activity consistently exerts tremendous power and influence on the shape and direction of the market as well as the performance of the economy. In the search for approaches to manage the impact of the WTO and CARICOM Single Market (CSM), domestic competence is a critical dimension which must be encouraged and sustained by “organized farmers”. Lamentably, the 2007 St. Lucia Census of Agriculture has recorded the existence of only one farmers’ organization on the island. There is definitely the need to cause the individual holders to build cohesion in order to achieve the bargaining strength necessary to foster strategic alliances with other stakeholders in the agricultural sector. Rich interaction among stakeholders is a sine qua non for the development of the domestic competence required to facilitate appropriate market reforms and supply responses.

The traditional approach to agriculture and rural livelihoods has failed to provide the elasticity and resilience necessary to cope with internal pressures and external shocks. In order to effectively overcome the challenges posed by globalization and trade liberalization, gender must be incorporated into the equation for development in the sector. Gender is not about adding women, if that was the case there would be no need to

make a case for gender mainstreaming since women are already involved in all aspects of agriculture in St. Lucia; albeit the women's influence at the macro-level may be wanting.

Essentially, the missing dimension in the process of establishing a rational and sustainable policy and action framework is the incorporation of gender-sensitive and participatory planning methods for agricultural and rural development in St. Lucia. The prerequisites for a gender-responsive agricultural sector are (1) a genderised agricultural information system, starting with the gender-sensitive re-tabulation of agricultural data sets, (2) Time Budget Analysis, so as to capture the "invisible" contributors that are "hidden in the reproductive (care) economy and the informal market and (3) Analysis of the Relations of Production, in order to negate the institutional gender biases and power relationships that influence the degree of control over the means of production, as well as the tenacity of the relationship among the factors of production, in particular labour and technology.

St. Lucia, like other small island developing countries remains vulnerable to both economic and natural shocks and is challenged by similar socio-economic and environmental phenomena. These include slow rates of transition from a monoculture economy; displaced agricultural workers; the need for economic reforms, poverty alleviation and food security. In seeking to effectively deal with the myriad of problems/challenges within and around the agricultural sector, public institutions such as the Ministry of Agriculture needs to enhance its capacity for the development and maintenance of an appropriate blend of policy, legislative and regulatory frameworks to facilitate the effective governance and regulation of the agricultural sector.

Additionally extension service delivery systems will need to become more client-focused and the research and development function will need to be injected with the finances to facilitate recovery from years of under-funding and relative neglect to a status of relevance in the new agricultural environment, which requires a demand-led rather than a supply-led approach to technology adaptation and transfer. At the same time, the agriculture private sector – especially farmers' organizations – need to be supported in addressing issues such as market access, technology, land tenure, financial services, input supply, market intelligence and praedial larceny.

An approach to building the capacity of institutions must also be concerned with enhancing the self-determination, autonomy, skills, knowledge and organization of especially the poor and seemingly marginalized individual holding households. A stronger voice for pro-poor growth through agriculture will be created in this way, thereby shifting policy and action away from the dictates of competing vested interests to more evidence-based dialogue that draws attention to disadvantaged groups, in particular women and youth.

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