Table 6.1
Type of Dwelling

	Separate Detached House	Part of a House	Semi-detched, Apt Bldg,Twn Hse, Imprvsed unit, comm Bldg Other
Region			
KMA	56.7	34.2	9.1
Other Town	70.6	21.9	7.4
Rural	90.5	7.7	1.7
Quintile			
1	93.2	5.0	1.7
2	86.4	10.6	2.8
3	81.9	14.9	3.0
4	75.4	21.2	3.2
5	66.2	27.3	6.4
Total	78.0	17.9	3.9

Table 6.2
Materials used for Outer Walls

Item	Concrete	Non-concrete
Region		
KMA	25.9	74.0
Other Towns	19.2	80.8
Rural	22.7	77.2
Quintile		
1	26.1	73.8
2	22.3	77.6
3	23.7	76.2
4	24.2	75.8
5	21.0	78.9
Total	23.1	76.8

160. For the quintiles, the predominant type of dwelling is also separate and detached However, this was more common in the poorest groups than in the richest quintile. For the poorest quintile, 93.2% fell into this category and for the richest quintile 64.5% fell in this category. Note must be taken of the fact that 50.8% of all the semi-detached and 74.4% of the apartment buildings also fall in the wealthiest quintile.

161. Therefore, despite the optimistic comments made in a World Bank study on Housing in 1975, that the "low market response now experienced with semi-detached and row houses in rural areas should be regarded as a temporary reaction to new patterns of housing", there is still a strong inclination towards detached housing units. This is less so for the more affluent residents one-third of whom reside in other types of dwellings such as semi-detached apartment buildings, and townhouses. This more high-density life style is, of course, a characteristic of urban areas in which one finds a greater proportion of the wealthy population.

162. The responses to the question on the main materials used in construction of outer walls were broken down into two categories: concrete and non-concrete materials - the non-concrete materials here being wood, stone, brick, wattle and daub and other materials. These non-concrete types are called traditional materials because of the historical significance to the building industry over time.

163. Nationally, the traditional materials were the leading materials used in the construction of outer walls. These were used in 77.03% of the dwellings, while concrete, a modern type of material introduced on a more widespread scale after Hurricane Charlie in 1951, accounted for 22.96%. This pattern was found both on a regional and a quintile basis although the KMA region and the wealthiest quintiles, used more concrete than the other regions and quintiles. (Note must be taken that in the poorest quintile concrete accounts for only 15.1% of the material used.)

TENURE

The issues covered in this section are, the ownership or rental of the dwelling and the payment of mortgages and property taxes by the household.

164. Jamaicans have historically showed a strong inclination to individual ownership of dwellings and there appears to be a continuation of this trend in 1989, as supported by **Table 6.3** Nationally, 64% of the dwellings are occupied by owners and 36% by non-owners, of whom 27.6% are renters. Of special interest here, is the small group, 8.4% who neither own nor rent. This group might represent the squatters and occupiers of family dwellings whose owners are abroad.

Table 6.3
Tenure Pattern

	Owners	Renters	Not Owner nor Renters
Region			
KMA	41.5	47.9	10.5
Other Towns	60.8	31.1	7.9
Rural	66.4	13.5	19.9
Quintile			
1	82.0	10.2	7.7
2	74.7	16.3	8.9
3	67.7	23.5	8.7
4	59.1	33.0	7.7
5	51.8	39.6	8.6
Total	64.0	27.6	8.3

165. On a regional basis owner-occupancy appears to be stronger in the non-KMA regions - Other Main Towns and Rural areas where 61% and 66% respectively, of the dwellings, were occupied by owners. More dwellings in the KMA region, 48%, were occupied by non-owners as compared to 42% occupied by owners. As a corollary, the frequency of renting is highest among the wealthiest quintile with 33% and 39% of quintiles 4 and 5 respectively, being renters.

166. Of significance is the wide disparity between the proportion of owners and non-owners in the poorest quintile, and that in the wealthiest quintile. In the former, 82 % of the dwellings were occupied by owners while the incidence of this was only 52 % in the richest quintile. It may be theorised, that this is related to the fact that owner-occupancy is more characteristic of rural areas where there is a greater concentration of the less well-off residents.

167. From the data above, there appears to be a strong pattern of owner-occupied dwellings in the rural areas and among the poorer groups, while there is a strong pattern of renting in the KMA region and among the wealthier groups.

Mortgage Payments

168. Of the total number of owners of dwellings, 89% were not paying mortgages. This was strongest in the rural areas with 96% of the owner-occupied dwellings not paying mortgages. The KMA region showed the greatest frequency of mortgage payments as 35% paid mortgages and 65% did not.

169. 167. Traditionally, mortgage financing has not been easily accessible to the very poor. Consequently, it is not surprising that 22 % of the wealthiest group pay mortgages and only 2% of the poorest quintile do so.

Table 6.4
Mortgage Payments

	Mortgage Payers	Not Paying Mortgage
Region		
KMA	35.3	64.7
Other Towns	10.7	89.1
Rural	4.4	95.6
Quintile		
1	1.6	98.3
2	3.1	96.8
3	8.6	91.3
4	14.2	85.7
5	22.3	77.6
Total	10.9	89.0

Property Taxes

170. On the issue of the payment of property taxes, while an overall 70.6% paid taxes, there was a higher frequency of payment in the Rural Aeas and Other Towns than in the KMA region. On a quintile basis there were more tax payers among the wealthier groups than in the poorer groups.

Table 6.5
Property Tax Payments

	Tax Payers	Not Paying Taxes
Region		
KMA	60.0	39.9
Other Towns	66.7	33.3
Rural	74.8	25.1
Quintile		
1	65.4	34.6
2	73.4	26.6
3	67.1	32.9
4	68.1	31.9
5	76.9	23.1
Total	70.8	29.2

QUALITY OF HOUSING CONDITIONS

171. The variables considered here are (i) sanitation, which includes the sharing and availability of toilet and kitchen facilities, and (ii) utilities: water, light. Of specific interest here is the availability of drinking water and sanitation as there is ample evidence to show how this directly affects the health of the population.

Sanitation

172. The main facilities available were pit latrines 51%, water closets linked to sewage systems 24.58%, and not linked, 21.58%. Only 2% of the sample said that they had no such facilities. On a regional basis, KMA showed a predominance of water closets (53.2%), never the less, 16.7% of this group used pit latrines.

Table 6.6
Sanitation

	Linked	Not Linked	Pit Lat	Other	None
Region					
KMA	53.2	28.3	16.7	0.5	1.3
Other Towns	18.2	31.2	48.2	0.5	1.7
Rural	10.7	15.1	70.9	0.6	2.6
Quintile					
1	6.6	4.1	85.6	.6	3.1
2	10.0	11.1	75.3	.5	3.0
3	21.4	22.4	53.8	.7	1.5
4	28.6	24.6	44.0	.5	2.0
5	36.7	33.2	28.3	.4	1.2
Total	23.9	21.9	51.5	.5	2.0

Outside the KMA region however the dominant facilities available were pit latrines. These facilities predominated in Rural Areas with 71.0% of the dwellings using this facility. In the rural areas, 2.6% reported no facilities at all - the greatest representation of lack.

173. With regard to the quintile, the predominant available facilities used by the poor are pit latrines (85.66 %), while the wealthy used primarily water closets linked to sewage systems. 36.7%, and not linked, 33.2%.

174. A notable feature of these results is the fact that very few households were involved in the sharing of these facilities. Overall, 78% of the toilet facilities and 82% of the kitchen facilities were used exclusively by the particular household. The KMA region however has the most incidence of sharing, with 63% for toilet facilities and 69% for kitchen facilities. The Rural Areas had the highest incidence of exclusivity with 87% and 90% of the dwellings not sharing toilet and kitchen facilities respectively.

Table 6.7
Sharing of toilet and kitchen facilities

	Toilet facilities		Total	Kitchen facilities			Total
	Exclu	Shared		Exclu	Shared	None	
Region							
KMA	63.5	36.5	100	69.8	19.8	10.4	100
Other Towns	73.6	26.4	100	78.1	13.9	8.0	100
Rural	87.7	12.3	100	90.1	6.1	3.8	100
Quintile							
1	86.9	13.0	100	88.5	5.9	5.4	100
2	81.5	18.4	100	87.1	6.8	6.0	100
3	77.8	22.1	100	85.0	8.7	6.1	100
4	74.5	25.4	100	79.0	13.8	7.0	100
5	75.3	24.6	100	77.6	15.8	6.5	100
Total	78.1	21.8	100	82.2	11.4	6.4	100

Utilities

175. The main sources of water supply were indoor taps 34%, outside taps 22% and public standpipes 20%. Regionally, the sources for KMA are highly concentrated in a piped supply whether inside, 62.9% or outside 32%. For Other Towns there is less of this facility, with 41.3% having indoor piped supply and 29.1% outside piped supply. Minor sources are public standpipe, rain/tank water and other sources. The Rural areas show a more diverse pattern of sources; public standpipes account for 32%, tank & rainwater 22%, while minor sources include indoor taps, outdoor taps, rivers, lakes and other sources.

176. On a quintile basis, the pattern for the poorest quintiles is similiar to that of the rural areas, the major sources of water are public standpipe (41.6%) and rainwater or tanks (21.7%). By contrast, 55% of the richest quintile have an indoor piped source, and 21% outdoor pipes as their main source of supply.

Table 6.8
Main Sources of Water Supply.

	In-door	Out-side	Publ	River /lake	Rain/ tank	Othr
Region						
KMA	62.9	32.3	2.9	0.0	0.1	1.6
Other Towns	41.4	29.2	17.2	0.9	8.0	3.1
Rural	16.7	14.6	31.8	11.2	22.4	3.1
Quintile						
1	8.3	10.4	41.7	13.6	21.7	4.1
2	14.4	22.8	29.5	10.2	18.7	4.2
3	28.6	29.1	20.0	6.9	12.5	2.8
4	39.8	25.9	17.9	3.9	10.1	2.2
5	55.4	21.0	10.3	1.5	9.9	1.7
Total	34.3	22.3	20.9	6.1	13.4	2.7

Lighting

177. For the total population, electricity (61.6%) is the main source of lighting, followed by kerosine (36.46%). Two per cent of the dwellings had no lighting.

Table 6.9
Lighting

	Electri-city	Kero-sine	Other	None
Region				
KMA	82.4	11.2	0.5	6.0
Other Towns	66.7	32.8	0.3	0.3
Rural	48.0	51.2	0.3	0.5
Quintile				
1	26.3	71.1	.5	1.9
2	44.2	53.7	.0	2.0
3	60.1	37.4	.4	1.9
4	67.8	29.2	.4	2.4
5	81.2	16.7	.2	1.8
Total	61.6	36.4	0.3	1.7

178. On a regional basis, KMA listed electricity (82.4%) as the main source followed by kerosine 11.2%. KMA also showed the largest proportion of persons having no source of lighting. For the Rural areas kerosine was the main source of lighting with 51% followed by electricity 48%. By quintile, the chief source for the poorest quintile is kerosine (71%) while for the richest groups electricity (81.1%) is the main source of lighting.

SUMMARY AND CONCLUSION

179. It may be concluded from this examination that there are significant variations and interesting contrasts in Jamaican housing patterns between the three main geographic areas and the different socio-economic levels.

180. To begin, the data reveal that the poorer the household, or the more rural, the more likely it is to be owner-occupied and the less likely it is to be rented. Furthermore, the poorer and more rural residents apparently have less encumberance on their properties because considerably fewer of these home-owners are paying mortgages. On the other hand, while a significantly larger proportion of rural than urban residents pay property taxes, the differences between the consumption quintiles are less marked.

181. Since it is not normally expected that the poor own their own homes, it has been theorised in this chapter that the determining factor is a socio-cultural one. A large proportion of the poor live in rural areas where home-ownership is traditional; in urban areas traditional norms tend to disappear. From Chapter 2 (**Table 2.7**), it is seen that indeed 81% of the poorest quintile live in rural areas, with 12% in other towns and only 7% in the Kingston Metropolitan Area.

182. The data presented here on the quality of housing conditions provide further support for this theory, in that the homes occupied by the poor have facilities which are more typical of the rural than the urban areas.

183. At the same time, high density conditions in the urban areas have their own negative impact on the lifestyle of residents there, including those who are "better-off". The result is that according to the survey findings, far more "better-off" households in Jamaica share facilities than do poorer households; they are also less likely to occupy a separate detached house.

184. It is interesting to note that in relation to payment of property taxes, larger percentages of the wealthier quintiles pay property taxes. On the other hand, only 60% of property owners in the KMA pay property taxes as against 75% of those in the rural areas. This difference is surprising and investigations to ascertain the related circumstances should prove instructive.

185. Finally, it may be observed that according to these data, national housing conditions do not bear much similarity to those for the Kingston Metropolitan Area as a region. Rather, the national averages tend to lie somewhere between the averages for Other Towns and Rural Areas. With regard to the consumption quintiles in general, the national average closely resembles the median quintile, that is, quintile number 3.

CHAPTER 7: Fertility

INTRODUCTION

186. The Fertility Module is a part of the 1989 November round of the Survey of Living Conditions (SLC) of the population in Jamaica. Taken in this context, it is possible to analyse the data in conjunction with the data on other socio-economic aspects, and thus explore relationships in a wider data base that allows for cross-references and more profound interpretation.

187. Analysis of socio-economic differentials in relationship to changes in fertility is a prerequisite for providing guidelines to planners and policy makers concerning fertility control. In Jamaica fertility reduction is a goal of the National Population Policy. It is necessary, therefore, to identify and target high fertility groups so that the resources of population programmes can be utilised most efficiently. The study of socio-economic differentials also has another policy implication - socio-economic variables (e.g., education and employment) can be manipulated to bring about changes in the fertility behaviour of the population.

METHODOLOGY

188. For the purposes of the Fertility Module, one woman within the age group 15 to 45 was intended to be selected on a random basis from each of the 3,950 households in the survey. However, only 2,210 households were found to have women between 15-45 years. These 2,210 women therefore form the sample for the analysis presented in this work.

189. Educational status, place of residence (rural/urban), economic welfare, religious affiliation (church denomination) and union types will be examined in terms of their influence on the levels of current and desired fertility.

190. The critical variables when considering reproduction are the current age and the age at entry into a union. The current age signifies the level of fecundity, ie., the biological capacity of a woman to reproduce. (Fecundity varies with age; the younger the age, the higher the fecundity.) The next variable is the age at entry into a union. A higher age at entry into a union reduces the period during which a woman can conceive. This tends to limit the fertility rate. However, with more widespread access to and use of contraceptive methods (especially 'modern' methods), the importance of age at entry into union as a major determinant of fertility may be declining.

191. Education acts indirectly, through other variables, such as higher levels of participation in the labour force and greater knowledge and practice of effective means of fertility regulation, in the process of fertility reduction.

192. Consumption rather than income is used as an indicator of household welfare in the present study. Based on the per capita consumption data of the SLC, households are ranked in five consumption quintiles and these are taken to indicate the welfare position of households. For example, the first quintile contains the lowest 20% of households; the fifth contains the highest 20%.

193. One of the aims of the present study is to provide some parallel and complementary information on contraceptive use and fertility determinants to the 1989 Contraceptive Prevalence Survey (CPS).

194. In its investigation of contraceptive use as a basis for fertility regulation, the present survey revealed that 98% of the respondents desired children. Therefore, contraceptives are used mostly to prevent additional pregnancies and/or to regulate pregnancy intervals.

Limitations

195. The Fertility Module, being only a part of a much wider survey on living conditions, could not explore extensively any specific aspect of fertility as was done in demographic surveys conducted earlier in Jamaica. The module contains a limited number of questions on fertility (about 18); some of which are not adequate to fully measure certain important aspects of fertility. Thus, the absence of a direct question on recent fertility (e.g. during 12 months preceding the survey) and the exclusion of women above 45 years of age from the survey, has implications for the statistical and demographic analysis of fertility.

196. On the statistical side, these limitations preclude the estimation of some conventional measures of fertility including the Age Specific Fertility Rate (ASFR), the Total Fertility Rate (TFR) and the Crude Birth Rate (CBR). Previous studies conducted in Jamaica and in the wider Caribbean, have pointed to a strong association between fertility and the union status of a woman. In the case of women of completed fertility (e.g. women of 45-54 years), it was found that women who remained in visiting unions throughout their childbearing period exhibited a relatively lower completed fertility in comparison to those who moved into residential (more 'stable') unions of marriage and common-law. Therefore, the exclusion of women of this age group (45-54 years) from the study rules out the possibility of verifying this relationship between fertility and union type.

197. There are also limitations on the questions concerning fertility regulation. For example, no questions to elicit information on the respondents' level of knowledge of contraception are included in the questionnaire. In addition, the subjects of breast feeding, contraceptive use and pregnancy histories were not clearly dealt with in the questionnaire. Consequently, issues centering on birth spacing (e.g., linking the type of contraceptives used to specific pregnancies) cannot be adequately treated from the survey questionnaire. Notwithstanding these limitations, the survey provides useful findings on other important aspects of fertility.

COMPARISON OF THE SLC (1989) AND THE CPS (1989) ON BACKGROUND VARIABLES

198. A comparison of the SLC with the CPS on the variables of age, education, religious affiliation, union status and place of residence is attempted, mainly as a basis for determining the validity of the results of the two surveys.

199. The comparison reveals a similar distribution of respondents in the two surveys in terms of age, religion affiliation and place of residence. However, some differences are manifested in the variable of education (**See Tables 7.1 - Table 7.4**). These differences must be kept in mind while making comparisons.

Table 7.1
Percentage distribution of women by age
CPS and SLC 1989

	CPS, 1989 N=5739	SLC, 1989 N=2,210
15-19	24.3	20.3
20-24	21.1	21.9
25-29	20.1	19.6
30-34	14.7	17.7
35-39	10.9	12.4
40-45*	9.0	8.1
Total	100.00	100.0

Table 7.2
Percentage distribution of women by educational level
CPS 1989, SLC 1989 and Census 1982

	CPS, 1989 N=5,789	SLC, 1989 N=1,930	CENSUS, 1982 N=454,438
Primary & Below	33.8	42.7	47.9
Secondary	53.8	46.8	40.7
Post Secondary	8.0	7.6	2.1
Other	4.4	2.9	9.2
TOTAL	100.0	100.0	100.0

Table 7.3
Percentage distribution of women by religious affiliation CPS and SLC, 1989

	CPS, 1989 N=6,112	SLC, 1989 N=2,210
Anglican	6.7	5.3
Baptist	18.1	9.7
Roman Catholic	4.8	2.6
Church of God/Pentecostal	32.0	31.0
Methodist/Moravian/ United Church	7.4	6.5
Other	28.5	24.9
Seventh Day Adventist/ Jehovah Witness	-	(10.0)
Other Christian	-	(12.8)
Non Christian	-	(1.1)
Not Stated	-	(1.5)
No Religion	-	20.0
Total	100.0	100.0

Table 7.4
Percentage distribution of women by place of residence CPS 1989, SLC 1989 and Census 1982

	CENSUS 1982 -	CPS 1989 N=6112	SLC 1989 N= 2210
KMA	36.4	30.7	30.5
Other Towns	Not Classified		19.5
Rural	63.6	69.3	49.5
Not Classified	-	-	0.1
Total	100.0	100.0	100.0

FERTILITY REGULATION

200. Fertility regulation has received considerable attention in Jamaica during the past two decades. The National Family Planning Board (NFPB) was established in 1967 and had been charged to coordinate and administer the family planning activities in the country. In order to implement these activities more effectively, studies were conducted to investigate the levels of knowledge and practice of fertility regulation among the population.[9]

201. The present study indicates that the desire to bear children is almost universal among the women of the sample (approximately 98%), and that the contraceptive prevalence rate is relatively high in Jamaica. Thus, of the women who answered the question on the practice of contraception, about 75% had used a method to avoid pregnancy during the twelve (12) months preceding the survey (**See Table 7.5**). Comparison with other studies on the use of contraceptives is only partial because of the differences in the categories employed in the present study and those used in other studies. Thus, the 1983 CPS and 1989 CPS employed the categories of 'ever users' and 'current users' but these categories were not explicit in terms of the duration/period to which they refer.[10] However, the 75% usage of contraceptives found in the present study, compares favourably with 71% 'ever users' obtained in the 1989 CPS. By comparison, in the 1975 JFS, about 66% of all women in a union had at some time used a contraceptive to prevent pregnancy. This comparison is approximate but, nevertheless, indicates that there has been an increase in the contraceptive prevalence rate during the past 15 years in Jamaica.

202. Extending this comparison further, some trends in contraceptive use can be noted. The reported increase in contraceptive use has largely taken place among women with primary level education (from 63% in 1975 to 74% in 1989), and among those living in rural areas (from 59% in 1975 to 73% in 1989) (**See Tables 7.6 & 7.9**). In both the 1975 JFS and the present study, the highest percentage of women who had never practised contraceptives are to be found in the youngest (15-19) and oldest (40-45) age groups (**See Table 7.5**).

The 1975 JFS also found that women in urban areas recorded a higher proportion of 'ever users' compared to women in rural areas, but this finding is not confirmed by the present study (**See Table 7.9**). Similarly, in the 1975 JFS, the proportion of contraceptive users among women increased with education level. However, the present study indicates that there are no significant differences in contraceptive use among women of various social groups (**See Tables 7.6 -7.8**). This finding confirms that the use of contraceptives is relatively high in most sections of the Jamaican society.

203. The use of effective contraceptives can be expected to be higher among women with higher education because of their exposure to modern ideas in general, and because of increased knowledge and access to more effective methods of contraceptives.

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9 Some of these studies were mentioned earlier in this study (1975 JFS, 1983 CPS and 1989 CPS). A study by Roberts and Sinclair also dealt with some aspects of fertility regulation. See George W. Roberts and Sonja A. Sinclair **Women in Jamaica: Patterns of Reproduction and Family** New York 1978.

10 The CPS (1989) indicates a current Contraceptive Prevalence Rate (CPR) of approximately 55 percent and knowledge of at least one modern method of around 100 percent.

Table 7.5
Percentage of ever users of a contraceptive method by Age SLC 1989

AGE	USERS	NON-USERS	TOTAL
15-19 (N=403)	53	47	100
20-24 (N=439)	80	20	100
25-29 (N=391)	77	23	100
30-34 (N=352)	77	23	100
35-39 (N=239)	78	22	100
40-45 (N=155)	64	36	100
Total	75	25	100

Note: Women in 'no response' categories were omitted from the table

Table 7.6
Percentage ever users of a contraceptive method by Education SLC 1989

	USERS	NON USERS	TOTAL
Primary & Below (N= 732)	74	26	100
Secondary (N=805)	76	24	100
Post Secondary (N=137)	74	26	100
Other (N=51)	71	29	100
Total*(N=1725)	75	25	100

Note* Women in 'no response' categories were omitted from the table.

Table 7.7
Percentage of ever users of a contraceptive method by Union Status SLC 1989

	USERS	NON USERS	TOTAL
Married (N=364)	79	21	100
Common-law (N=464)	84	16	100
Visiting (N=450)	81	19	100
Casual (N=105)	78	22	100
Not Currently in union (N=415)	56	44	100
Total* (N=1798)	75	25	100

Note*:Women in 'no response' categories were omitted from the table.

Table 7.8
Percentage of ever users of a contraceptive method by Consumption Quintile SLC 1989

	USERS	NON USERS	TOTAL
QUINTILE 1 (N=305)	77	23	100
2 (N=333)	74	26	100
3 (N=393)	70	30	100
4 (N=456)	72	28	100
5 (N=492)	68	32	100
TOTAL* (N=1979)	75	25	100

Note*: Women in 'no response' categories were omitted from the table.

Table 7.9
Percentage of ever users of a contraceptive method by Place of Residence SLC 1989

	EVER USERS	NON USERS	TOTAL
KMA (N=637)	69	31	100
Other Towns (N=376)	75	25	100
Rura Areas (N=964)	73	27	100
Total* (N=1977)	75	25	100

Note*: Women in 'no response' categories were omitted from the table.

SOURCES OF CONTRACEPTIVES

204. The limited information available on the purchase of contraceptives and the related services indicate that about 40% of the women in the sample utilise public-sponsored clinics to obtain contraception - pills, condoms, and injections - free of cost (See Table 7.11). However, of the women visiting the hospitals, a higher proportion (82%) do not make any payment for the services rendered. These services comprise injection and female sterilisation **(See Table 7.11).**

Table 7.10
Sources of obtaining pills, injections and condom and services of female sterilisation CPS 1989 and SLC 1989

SOURCE	PILL		INJECTION		CONDOM		FEMALE STERILISA-TION	
	CPS N=828	SLC N=548	CPS N=331	SLC N=205	CPS N=357	SLC N=241	CPS N=569	SLC N=152
PHAR.	30.4	41.8	5.1	-	46.8	41.5	-	-
CLINIC	62.8	54.4	87.6	91.2	40.5	30.7	-	9.2
HOSP.	1.5	0.6	4.9	3.9	1.2	1.7	95.4	87.1
OTHERS	5.3	3.2	2.4	4.9	11.5	26.1	4.6	3.7
TOTAL	100	100	100	100	100	100	100	100

NOTE: Others include: **For SLC:** Midwife, Doctors, Friends, don't knows, frequency missing and others.
For CPS: Private Doctor/Clinic, Supermarket/shop, outreach workers and others.

Table 7.11
Percentage source of obtaining contraceptives and services and payment SLC 1989

SOURCE	PAID	NOT PAID	DON'T KNOW/NO ANS.	TOTAL
Total (N=1,177)	58.7	34.5	6.8	100
Pharmacy (N=332)	91.3	2.1	3.6	100
Clinic (N=567)	58.6	39.9	1.5	100
Hospital (N=137)	16.9	81.6	1.5	100
Others (N=142)	23.2	43.7	33.0	100

NOTE: "Others" as in Table 7.10.

ACTUAL AND DESIRED FERTILITY

The Survey also dealt with the differences between desired and actual fertility among women of different social groups. At the aggregate level, both desired and actual fertility have fallen considerably in Jamaica since the mid-seventies and the differences between desired and actual fertility have also narrowed. Thus, in the 1975 JFS, the desired fertility was 4.1 children per women while in the present study it is estimated at 2.8 (**See Table 7.12**).

Similarly, in the 1975 JFS, the actual number of children per woman in the age group 15-45 was 3.3, but this has declined to 2.1 in the present study (**See Table 7.12**). One of the variables accounting for this change is the increase in the level of current use of contraceptives by women. Thus, it was noted that the current CPR has increased from 38% in 1975 to 55% in 1989 (1975 JFS and 1989 CPS.)

The tendency to desire and bear a smaller number of children is evident among women of all social groups in the present study, as compared with those in the 1975 JFS, including those in different age and education groups and those living in rural and urban areas (**See Tables 7.12 - 7.14**).

Table 7.12
Actual and desired fertility by age SLC 1989

	MEAN NO. OF CHILDREN		
	DESIRED (D)	ACTUAL (A)	DIFFERENCE (D-A)
15-19	2.390	0.310	2.080
20-24	2.585	1.195	1.390
25-29	2.870	2.083	0.787
30-34	2.887	2.969	-0.082
35-39	3.056	3.744	-0.688
40-45	3.318	4.369	-1.051
Total	2.772	2.075	0.697

Table 7.13
Actual and desired fertility by age and education SLC 1989

AGE	MEAN NO. OF CHILDREN							
	DESIRED (D)				ACTUAL (A)			
	Prm	Sec	P Sec	Other	Prm	Sec	P Sec	Other
15-19	2.4	2.6	2.1	1.7	0.6	0.5	0.6	-
20-24	3.0	2.4	3.2	3.3	1.7	1.1	1.0	1.1
25-29	2.9	3.0	2.4	2.2	2.5	2.0	1.1	1.0
30-34	2.8	3.1	2.5	3.2	3.4	2.8	1.9	2.5
35-39	3.1	2.6	3.1	4.0	4.2	2.7	2.1	3.3
40-45	3.3	3.8	1.9	5.0	4.7	3.3	1.9	5.5
Total	3.0	2.7	2.7	3.0	3.3	1.6	1.5	1.7

Table 7.14
Actual and desired fertility by age and place of residence SLC 1989

AGE	MEAN NUMBER OF CHILDREN					
	DESIRED (D)			ACTUAL (A)		
	KMA	OTHER TOWNS	RURAL	KMA	OTHER TOWNS	RURAL
15-19	2.6	2.4	2.2	0.2	0.4	0.4
20-24	2.4	2.7	2.7	1.2	1.1	1.2
25-29	2.7	3.2	2.9	1.8	2.2	2.2
30-34	2.8	3.0	2.9	2.7	2.7	3.2
35-39	2.8	2.9	3.2	3.7	3.7	3.8
40-45	3.2	4.1	3.1	4.0	3.7	4.8
Total	2.7	3.0	2.8	1.9	2.1	2.2

DETERMINANTS OF FERTILITY

Socio-economic Factors

205. As indicated earlier in this study, educational status, economic welfare, rural/urban residence and age at entry into sexual relationship are considered the main factors affecting fertility preferences and fertility behaviour. In this section, a more in-depth analysis of these variables will be undertaken.

Education and Fertility

206. Education is an important factor in accounting for fertility differences within populations. Educational attainment is also an indicator of social status. In this section, attention will be focused on the link between fertility and educational levels through intermediate (indirect) causal factors such as, postponement of entering into union and age at entry into the labour force.

207. An examination of the data in the present survey confirms the hypothesis that an increase in education would result in a decrease in fertility. This is true both in rural and urban areas. The data indicate that, on an average, respondents with primary education and below bore a greater number of children than those at higher educational levels (**See Table 7.15**). However, the situation in respect of desired fertility is slightly different, while respondents with primary education and below desired to bear a greater number of children than those with a higher educational level, there is no significant variation in the average between respondents with secondary and post secondary education, in both rural and urban areas (**See Table 7.15**).

208. In the 1975 JFS, it was observed that there is an inverse relationship between educational attainment and fertility preferences and fertility behaviour. However, it must be noted that during that period, the mean preferred fertility ranged between 3.1 and 6.4 children per woman; current fertility is estimated at between 1.7 (for women with secondary level and above) to 4.7 (for women with less than 4 years of education). With the considerable fall in fertility preferences and fertility behaviour over the period 1975 - 1989 (2.1 and 3.0 children per woman for fertility preference and 1.5 to 3.3 children per woman for current fertility in the present study), it is apparent that the differences in actual and desired fertility between various social groups will tend to disappear at the attainment of a certain level of education.

Table 7.15
Actual and Desired fertility by place of residence and education SLC, 1989

	MEAN NUMBER OF CHILDREN EVER BORN				MEAN NUMBER OF CHILDREN DESIRED			
	KMA	OTHER TOWNS	RURAL	SMPL MEAN	KMA	OTHER TOWNS	RURAL	SMPL MEAN
Primary & Below	3.4	3.3	2.2	3.3	3.0	3.0	3.0	3.0
Secondary	1.5	1.6	1.7	1.6	2.6	3.0	2.7	2.7
Post Sec-ondary	1.5	1.3	1.6	1.5	2.4	2.8	2.9	2.7
Other	0.9	2.4	1.9	1.7	2.4	3.4	3.1	3.0

ECONOMIC WELFARE AND FERTILITY

209. Material welfare as measured by per capita household consumption does not seem to be of major significance in fertility differentials between rural and urban areas. There seems to be, however, a general tendency to have a smaller number of children as economic welfare increases (**See Table 7.17**). This is evident in both rural and urban areas.

210. In respect of desired fertility, the general tendency for respondents in rural areas to desire more children than those in the KMA seems to be confirmed (**See Tables 7.15 - 7.18**). However, there seems to be a number of unexpected results. For example, respondents in the KMA, in the age group 15-19, as well as those in casual unions, desired to have more children than their counterparts in rural areas.

211. An unexpected finding relates specifically to respondents in intermediate sized towns (Other Towns). On average, these respondents tend to desire a higher mean number of children than their counterparts in the KMA and in rural areas.

212. The study reveals that women from rural areas tend to enter into sexual experience earlier than those in the KMA; 16.3 years on average for rural women compared to 16.9 for women in urban areas. In both rural and urban areas, the mean number of births is also higher for women who start sexual activity earlier than average. The mean, however, is still slightly higher in rural areas, particularly among women who had sexual intercourse before age 15. (**See Table 7.18**).

Table 7.16
Actual and Desired Fertility by place of residence and union status
SLC 1989

	MEAN NO. OF CHILDREN EVER BORN				MEAN NO. OF CHILDREN DESIRED			
Union Type	KMA	OTHER TOWNS	RURAL	SMPL MEAN	KMA	OTHER TOWNS	RURAL	SMPL MEAN
Married	1.1	2.9	3.6	2.2	2.7	2.8	3.0	2.9
Common-law	3.0	2.7	3.1	2.9	2.9	3.2	3.1	3.0
Visiting	1.4	1.9	1.8	1.7	2.5	2.9	2.7	2.7
Not Currently in Union	1.7	1.6	1.5	1.6	2.7	3.1	2.8	2.9
Casual	0.6	1.0	0.7	0.8	3.0	2.3	2.0	2.4
Never in Union	-	-	-	-	2.0	2.9	1.8	2.0
Total	1.9	2.1	2.2	2.1	2.7	2.9	2.8	2.8

Table 7.17
Actual and Desired Fertility by place of residence and consumption quintiles
SLC 1989

	MEAN NO. OF CHILDREN EVER BORN				MEAN NO. OF CHILDREN DESIRED			
QUINTILE	KMA	OTHER TOWNS	RURAL	SMPL MEAN	KMA	OTHER TOWNS	RURAL	SMPL MEAN
1	2.2	2.1	2.5	2.5	2.9	2.8	2.7	2.7
2	2.4	2.5	2.3	2.4	2.5	2.9	2.7	2.7
3	2.3	2.5	2.2	2.3	3.1	3.1	2.9	3.0
4	1.9	2.2	2.0	2.0	2.7	2.9	2.9	2.8
5	1.5	1.4	1.6	1.5	2.4	3.0	2.8	2.6

Table 7.18
Mean number of children ever born by age at first sexual experience and place of residence
SLC 1989

AGE AT FIRST SEXUAL EXP.	KMA	OTHER TOWNS	RURAL	TOTAL
BELOW 15	2.5	2.9	3.2	3.0
15-19	2.1	2.1	2.3	2.2
20-24	1.6	1.6	1.7	1.7
25-29	1.0	1.0	1.1	1.1
30-34*	0.5	-	-	0.5
35-39	-	-	-	-
40-45	-	-	-	-
TOTAL	1.9	2.1	2.2	2.1

* Based on small frequency

RURAL/URBAN RESIDENCE AND FERTILITY

213. Socio-economic differentials in fertility between urban and rural areas have been widely investigated.[11] Some studies have shown that variations in fertility are often related to variations in place of residence. Others have indicated that the urban area has created changes in fertility behaviour because of its distinctive life style and its pattern of organization, and that these are spreading to rural areas and creating similar results.

214. The distribution of respondents by desired fertility and current fertility (fertility behaviour) by urban/rural residence is presented below (**See Table 7.16**). It is indicated that the differences in fertility between rural and urban areas are not really appreciable. However, although differences were not manifested at the aggregate level, there may still exist significant differences when the rural and urban sub-samples are disaggregated by other social characteristics. The desired and actual fertility in rural and urban areas, therefore has been differentiated by age, union status, welfare status and age at first sexual experience. These are shown below (**Tables 7.14 - 7.16**).

215. It is indicated that in terms of age, differences in fertility are apparent in the age groups 30-34, and 40-45 (**See Table 7.16**). For example, in rural areas, women in these age groups have higher fertility compared to their counterparts in urban areas.

216. Similarly, women in married unions in rural areas have higher fertility than married women in the urban areas (**See Table 7.16**).

AGE AT ENTRY INTO SEXUAL RELATIONSHIP

217. An important determinant of fertility is the age at entry into a union. In conventional demographic analysis of European societies, nuptiality (marriage status) was taken to mean, until recently, initiation into sexual relationship. The vast majority of child-bearing took place within this institution; the small fertility occurring outside the marriage union was termed "illegitimate". Therefore, age at marriage was a good indicator of a woman's exposure to child-bearing and this age was directly related to fertility: the earlier the age at marriage, the longer was the duration of exposure and the higher the fertility. However, in the Caribbean context, a substantial proportion of fertility takes place before the relationship between the two partners is legitimized through marriage. Therefore, age at entry into sexual relationship is a more relevant variable to be considered in the context of fertility behaviour in Jamaica.

218. The findings in the present study confirm those observed in other studies that age at entry into sexual relationship and subsequent fertility are directly related (**See Table 7.18**). Also, women who entered earlier into sexual relationship manifested higher fertility, regardless of their socio-economic characteristics and place of residence (**See Table 7.20**). There is a general tendency for women to change from non-residential to residential unions as they progressed through their reproductive and family life cycle. There is also a distinct movement towards formal marriage later in life, with the result that a relatively high proportion of women at the end of the reproductive cycle are found to be in marital unions. (**See Roberts: Mating and fertility in four West Indian Populations, 1976**).

11 All the fertility studies conducted in Jamaica so far (**Jamaica Fertility Survey (JFS), 1975** and various contraceptive prevalence surveys) have treated this variable extensively. For studies particularly in the Latin Amarican region see, among others, United Nations, Department of Economic and Social Affairs, Population division, **Levels and Trends of Fertility Throughout the World, 1950 - 1970**, Population Studies No. 59 New York.

Table 7.19
Mean number of children ever born by education and age at first sexual relationship SLC 1989

AGE AT FIRST SEXUAL RELATIONSHIP	PRIMARY & BELOW	SECONDARY	POST SECONDARY	OTHER
BELOW 15	3.9	2.3	2.2	1.3
15-19	3.3	1.6	1.7	2
20-24	2.2	1.6	0.9	0.8
25-29*	0.8	1.0	1.2	1.0
30-34	-	1.0	-	-
35-39	-	-		
40-45	-	-	-	-

Data based on small frequencies

Table 7.20
Mean number of children ever born by consumption quintile and age at first sexual relationship SLC 1989

AGE AT FIRST SEX. REL	1	2	3	4	5	SAMPLE MEAN
10-14	3.47	3.23	2.97	2.73	2.22	3.02
15-19	2.52	2.49	2.36	2.28	1.61	2.21
20-24	2.22	2.00	1.00	1.55	1.45	1.66
25-29	1.00	0.67	2.00	2.00	1.00	1.07
30- 34*	-	-	-	0.50	-	0.50
35-39*	-	-	-	-	-	-
40-45	-	-	-	-	-	-

Data based on small frequencies

TRENDS IN FERTILITY

219. During the past 30 years, two distinct periods corresponding to two definite trends in fertility can be observed - an increasing trend and a decreasing trend. In the first period, 1960-1975, the average births per woman recorded increases in all age groups (**See Table 7.21**). In the second period 1975-1989, the average number of births per woman indicated consistent declines over the 1975 estimates, in all age groups.

220. Fertility, measured in terms of average births per woman consists of two components: firstly, the proportion of women who are mothers and secondly, the number of children ever born per mother.[12] Fertility is a combination (or product) of these two components and any change in either, or both, causes change in the overall fertility level of the population. Therefore, the study of changes in these two components should contribute to an understanding of the trends in fertility.

221. With regard to the proportion of women who are mothers, two distinct patterns emerge over the past 30 years (1960-1989). These correspond closely with the trends in fertility observed above. First, the proportion of women who are mothers, cross-tabulated by age, reached the highest levels (except for those in the age group 35-45) in 1975 (**See Table 7.22**). Of particular importance is the relative increase in the proportion for the 15-19 age group ranging from 219 per 1000 in 1960 to 376 per 1000 in 1975. Second; by 1989, the proportion of women who are mothers in all age groups declines over the 1975 levels.

222. Of special significance is the level of decline experienced by the 15-19 age group ranging from 376 per 1000 in 1975 to 229 per 1000 in 1989. However, in spite of the declines after 1975, the proportion of women who are mothers in 1989 is still higher than the 1960 levels.

223. The other component in the measurement of the overall level of fertility in the population is the average number of births per mother. This component has shown a decline over the the past 30 years. The decline, however, is evident among women of all age groups except that of 15-19 years (**See Table 7.23 - cols 4+5**). In the case of this age group, fertility has increased by about 6%.[13]

224. Based on the foregoing discussions, a number of observations can be highlighted. First, the proportion of women who are mothers has increased in all age groups since 1960. Second, the average number of children per mother has decreased for all age groups except for the 15-19. The increase in both the proportion of women who are mothers and the average number of children per mother for the 15-19 age groups attests to the relative importance of teen-age fertility to overall fertility between 1960 and 1989.

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12 This part of the chapter is based on the method adopted by Prof. Roberts in the analysis of fertility. See G. W. Roberts Fertility and Mating in Four West Indian Populations Trinidad and Tobago, Barbados, St. Vincent, Jamaica's Kingston ISER, 1975, chapter on fertility trends pp 36-80.

13. It is to be noted that the observed increase in fertility of the 15-19 age group is a result of the period of comparison i.e. between 1960 and 1989. If the initial year were 1975, which registered a higher fertility in the age group as compared to 1960 and 1989, then teenage fertility would have also indicated a decline. (See Table 7.21)

Table 7.21
Mean number of children ever born per woman by age
1960 CENSUS, 1975 JFS, 1983 CPS, 1989 CPS & 1989 SLC

AGE	1960a	1975b	1983c	1989d	1989e
15-19	0.28	0.54	0.30	0.20	0.31
20-24	1.35	1.57	1.20	1.00	1.20
25-29	2.39	2.79	2.20	1.90	2.08
30-34	3.14	4.10	3.30	2.80	2.97
35-39	3.69	5.20	4.60	3.80	3.74
40-44*	3.95	5.40	5.40	4.40	4.34

*40-45 YRS FOR SLC

Sources: a.1960 G.W. Roberts **Fertility and Mating in Four West Indian Populations, Trinidad and Tobago, Barbados, St. Vincent, Jamaica** Kingston ISER 1975 p. 55.

b.1975 Government of Jamaica and World Fertility Survey (WFS) **Jamaica Fertility Survey 1975/76 Country Report Volume 1** Kingston Department of Statistics 1979 p. 52.

c.1983 Dorian L. Powell **Contraceptive Prevalence Survey Jamaica 1983** Kingston National Family Planning Board (NFPB), 1984 p. 38.

d.1989 Carmen McFarlane and Charles Warren 1989 **Jamaica Contraceptive Prevalence Survey Final Report** Kingston: National Family Planning Board (NFPB) 1989 p. 119.

e.1989 SLC

Table 7. 22
Mothers per 1,000 women, 1960, 1975, 1983 and 1989 SLC

AGE	1960	1975	1983	1989
15-19	219	376	264	229
20-24	649	717	672	658
25-29	782	883	801	786
30-34	809	934	897	893
35-39	818	931	952	923
40-45	809	932	934	910

Sources for basic data: As in Table 7.21

Table 7.23
Mothers per 1000 women, children ever born per 1000 mothers and per 1000 women, Percentage increase in children per 1000 women
Jamaica 1960-89

AGE	MOTHERS PER 1000 WOMEN		CHILDREN PER 1000 MOTHERS		CHILDREN PER 1000 WOMEN		% CHANGE IN CHILDREN /WOMEN
	1960	1989	1960	1989	1960	1989	1960-1989
15-19	219	229	1282	1359	281	311	10.7
20-24	649	658	2081	1814	1351	1195	-11.5
25-29	782	786	3056	2651	2390	2083	-12.8
30-34	809	893	3877	3337	3137	2969	- 5.4
35-39	818	923	4512	4056	3690	3744	1.5
40-45	809	910	4887	4798	3953	4369	10.5

Source for 1960 data: G.W. Roberts Fertility and Mating in Four West Indian Populations op cit p.55.

APPENDIX 1

I. SAMPLE SIZE

In each round of LFS, the sample consists of 434 EDs drawn from 17 strata, with 18 dwellings selected from each ED - a total of 7,812. For the SLC November 1989, out of the 217 strata, a sample of 144 strata were selected circular systematically with a random start. The 288 sample EDs and the sample dwellings in these strata were covered in the survey, excepting those dwellings which were vacant or closed or where the households refused to give information in the corresponding LFS.

II. INVESTIGATIONS

The interview method was followed in conducting the SLC, that is, the Interviewers of the STATIN visited the households in the selected dwellings and recorded the information which was elicited by oral enquiry. All surveys conducted by STATIN follow the same method of investigations.

The interview method was followed because of its several advantages. In this method, the interviewer can be trained intensively in the concepts, definitions and details of classifications so that a high degree of consistency in the replies can be obtained. Since the interviewers make personal visits and contact the households, non-response can be reduced to a minimum. The use of interviewers also makes it possible to employ a variety of techniques to maintain the interest of the respondent and increase the reliability and completeness of the data collected.

The main disadvantage of the interview method, however, is that the data collected, especially on topics such as consumption expenditures, are largely based on the recollection of the respondent; but experience has shown that many of the households are neither capable of nor willing to keep accounts, nor to follow adequately the concepts, definitions and instructions.

III. QUESTIONNAIRE

The survey instrument for the survey of living conditions is a household questionnaire, the core of which is basically the same from round to round for ensuring continuity and comparability for effective monitoring of the HRDP. However, in each round, emphasis is placed on obtaining a wide spectrum of data on one particular social sector which will form part of the basic data used in policy formulation.

Emphasis was placed on Health sector in the third round of the survey conducted i November 1989; on Education sector in the fourth round conducted in November 1990; an on Housing in the fifth round proposed to be conducted in November 1991.

The questionnaire for the SLC, November 1989 round was divided into the following 17 parts

Part A: General Health of all household members of age 14 years and above

Part B: General Health of all household members

Part C: Education of all household members of age 3 years and older

Part D: Anthropometric measurements and immunization data on children 0-59 months o

Part E: Daily Expenses (past 7 days)

Part F: Non-food Consumption expenditures (past 4 weeks and in most cases past 12 months)

Part G: Non-Consumption Expenditures such as insurance, taxes, gifts and donations (pas 30 days and past 12 months)

Part H: Food Expenditures (past 7 days and past 4 weeks)

Part I: Consumption of home production and food received as gift (past 7 days and p 4 weeks)

Part J: Housing conditions and related expenditures

Part K: Inventory of durable goods owned by the household

Part L: Miscellaneous income received by the household

Part M: Receipt of food stamps and reasons for not receiving

Part N: Distance to public services and travel time to public services (schools, medical facilities, etc)

Part O: Fertility among women between ages 15 and 45 and pregnancy roster

Part P: Last pregnancy detail

Part Q: Household roster of all members

As mentioned earlier, the third round of SLC conducted in November, 1989, placed emphasis on Health and, therefore, apart from expanding parts A and B to include more questions than in earlier rounds, parts O and P were added to the basic questionnaire. The periods given in brackets against parts E to I are the reference periods adopted for collecting the expenditure data.

IV. DATA ENTRY/CLEANING

Before data entry, the questionnaires were edited and coded, where necessary, by the Editor-Coders of the Surveys Division of STATIN. All clerical errors were removed at this stage. The data entry was done on personal computers and adequate computer checks for ensuring consistency in totals, codes etc, which are feasible at this stage were introduced in the data entry programme.

Immediately after the data were entered and the data sets were formed, checks for area classification, that is, Kingston Metropolitan Area, other Towns and Rural areas were undertaken through a computer programme.

Then, the consumption expenditure data collected in Parts E to I were annualised. The method followed is described in a succeeding paragraph. At this stage, four indicators were adopted for cleaning the data, namely, (i) per capita annual household consumption expenditure; (ii) the percentage expenditure on Food group; (iii) the percentage expenditure on Meals taken away from home; and (iv) the percentage expenditure on Housing. These indicator values were calculated for all households along with the corresponding mean and standard deviation for these four variables. This operation was done for households falling into each of the five per capita consumption expenditure quintiles for ensuring adequate dispersal of the cleaning process.

In each quintile, the questionnaires which fell beyond the range "Mean plus or minus two standard deviations" for any of the four indicators were taken up for detailed scrutiny. About 304 questionnaires came up for this detailed scrutiny. Out of these, 47 were found to contain valid data but missed punching (either totally or for some parts) beyond the identification code; and 89 questionnaires were from households who refused to provide information either for some or all the parts, or which contained abnormal data. The remaining questionnaires for which data on some or all parts were not entered were re-entered and included in the data sets; while the 89 questionnaires which were part or total refusals or contained abnormal data were eliminated from the data sets.

Thus, against 3,950 questionnaires received, 3,861 households questionnaires were considered in the final processing- 1,074 from the Kingston Metropolitan Area (KMA); 738 from Other Towns; and 2,049 from Rural Areas.

The above systematic procedure of data cleaning could not be followed in the first two rounds and, therefore, to that extent, the comparisons of estimates from the three rounds are affected.

V. CONSTRUCTION OF AN ANNUALISED CONSUMPTION DATA SET

The method of annualising the data on household expenditures was given in the earlier report on the second round of the survey conducted in July 1989. However, for ready reference, the procedure is briefly mentioned below.

The household expenditure data was collected in parts E to I of the questionnaire. Out of these, part G relates to specified non-consumption expenditures of the household. The expenditures were collected for the various items with different reference periods depending on their frequency of purchase etc.

To arrive at a total consumption expenditures figure the consumption data in each part were annualised and a sum made of the different parts. However, since several parts ask about consumption expenditures for two different periods of time, one of the two time periods must be selected, or an average of the two.

Different time periods are affected by different problems. The short reference period may be affected by catching expenditures of the previous period; it may be that the item was not purchased in that period. On the other hand, the long period may be affected by the respondent's "recall lapse", that is, the respondent not being able to recall all the purchases in that period.

The method followed so far in all the rounds of SLC for annualising the consumption expenditure is to take an average of both the short and long reference periods. This tends to smooth out possible distortions by choosing a middle ground between the two time periods. Technically, the portion of the long term expenditure that does not include the short term expenditure (e.g. the 11 months previous to the last month if the long period is one year and the short period is one month) was calculated and then annualised, and an equal weighted average of this annualisation and the short period annualisation was taken. For all items for which only one time period is used, the consumption figure is annualised by straightforward multiplication (i.e. weekly figures are multiplied by 52 and monthly figures are multiplied by 12).

The PIOJ have entrusted to the Institute of Social and Economic Research (ISER) in the University of West Indies, a research project to examine and suggest measures for improving the quality of the household consumption expenditure data collected in the SLC. Among other issues, the ISER has been examining the appropriateness of the reference periods for different items and the procedure to be followed in annualising the data when two time periods are used. The procedure of annualising the consumption data will be rationalised for the future rounds of SLC, on the basis of the findings of the ISER study.

VI TABULATION PROGRAMME

A standard tabulation programme was developed for the basic questionnaire adopted for the SLC. This programme is followed, with marginal variations, in all the rounds of SLC. Some of these tables are generated in the STATIN; some in the PIOJ; and some in the related Ministries of Government.

VII. NON-RESPONSE

The dwellings which were vacant, closed or demolished or households which refused to give information in the LFS were excluded from the assignments for the related SLC. Therefore, the non-response in SLC will be a cumulation of the non-response rate in LFS and that in the SLC itself. The non-responses in LFS were excluded for the corresponding SLC, to ensure matching of both surveys for an integrated analysis.

In the SLC 89-2, the overall non-response was of the order of 25%. Out of this, about 9% was due to the dwelling being vacant, demolished or merged, and the rest due to the dwellings being closed at the time of the visit by the interviewer or refusals by the households.

The non-response affects the self-weighing nature of the sample. In the case of LFS, adjustment factors for non-response are applied at ED level. A similar procedure is under consideration to improve the precision of the SLC estimates of aggregates such as consumption expenditure.

Glossary

ASFR	=	Age Specific Fertility Rate
BCG	=	Baccilus Calmette Guerim (Vaccine against Tuberculosis)
CBR	=	Crude Birth Rate
CPI	=	Consumer Price Index
CPR	=	Contraceptive Prevalence Rate
CPS	=	Contraceptive Prevalence Survey
DPT	=	Diphtheria Pertussis Tetanus
ED	=	Enumeration District
HES	=	Household Expenditure Survey
HRDP	=	Human Resources Development Programme
IBMS	=	Institution Based Monitoring System
ISER	=	Institute of Social & Economic Research
JFS	=	Jamaica Fertility Survey
KMA	=	Kingston Metropolitan Area
LFS	=	Labour Force Survey
MOE	=	Ministry of Education
N	=	Number of responses (Note that non-responses are not shown in the Tables and would account for discrepancies from the total)
OPV	=	Oral Polio Vaccine
PIOJ	=	Planning Institute of Jamaica
PSU	=	Primary Sampling Unit
SLC	=	Survey of Living Conditions
STATIN	=	Statistical Institute of Jamaica
TFR	=	Total Fertility Rate