



**SOCIO-CULTURAL AND ECONOMIC
DISINCENTIVES AND INCENTIVES FOR
REDUCTION IN FAMILY SIZE IN
CROSS RIVER STATE OF NIGERIA**

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**A Publication of
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Introduction

Statement of the Problem

For about three decades now, there has been a renewed interest in the adverse consequences of population explosion not only for developing countries but the world over. The enormity of this problem was first highlighted at the first World Population Conference held in Bucharest in August 1974. At that time the belief, mostly from developing countries, was that rapid population growth was a manifestation of more fundamental problems of underdevelopment and unequal utilisation of global resources between the rich and poor nations. Accordingly, it was felt that population growth rate would be slowed down if socio-economic development was accelerated sufficiently. Population was seen more as a resource that ought to be developed. This was further amplified in the 1984 Mexico city and Arusha, Tanzania Population Conferences. The general agreement was that a population policy was necessary to guide population growth in a positive direction. Each government especially from developing countries was encouraged to formulate its population policy. Consequently, Nigeria formulated the National Policy on Population for Development, Unity, Progress and Self-reliance in 1988. This policy, among others, seeks to lower population growth rates through reduction of birth rates by voluntary fertility regulation methods that are compatible with the attainment of economic and social goal of the Nation.

Prior to 1988, the government of Nigeria adopted a *laissez-faire* attitude towards population issues. The First National Development Plan of 1962-1968 simply noted that the country was experiencing a high rate of population growth but did not contain any specific population programme. The Second National Development Plan (1970 - 74) added that the demographic situation did not constitute a serious obstacle to the country's socio-economic development. Although the Third National Development Plan (1975-1980) contains explicit statements on fertility, mortality, migration and urbanisation, it argued that higher rates of economic development, if achieved, would bring down the fertility rate in the long run. However, from the Fourth National Development Plan

(1981-1985), provisions were made for greater encouragement of voluntary family planning with the objective of promoting smaller average family size.

The overall consequences of this attitude to population issues is high fertility rate, declining mortality rate and high population growth rate. In 1963 for instance, there were 55.7 million people with a population growth rate of at least 2.5 per cent. Twenty eight years later (1991) official population of Nigerian was put at 88.52 million. This rose to 97.2 million in 1995 growing at about 2.1 per cent per annum (Table 1). Presently, Nigeria's population is put at about 104 million people. The present population growth rate of 2.83 per cent is still very high compared to other developing countries of Asia and Latin America. It is perhaps because of this worrisome situation that the 1988 population policy sought to reduce the population growth rate to 2.5% by the year 2000. This is expected to be achieved through voluntary reduction in family size. In fact, one notable feature of "the Nigerian Approach" is respect for the right of each couple to determine voluntarily the number and spacing of their children. The success of this approach will, therefore, depend on the magnitude of social, cultural, religious and economic influences on the couples desire for small families.

Table 1: Nigeria's Population and Growth Rate 1989 - 1995

Year	Population (Million)	Growth Rate
1989	84.9	2.1
1990	86.7	2.1
1991	88.5	2.1
1992	91.3	3.2
1993	93.3	2.1
1994	95.2	2.1
1995	97.2	2.1

Source: CBN, Annual Report and Statement of Account/Various Years.

Justification

It has been argued that African countries have been less successful in their population policies and programmes than Asian countries despite the fact that national family planning began at the same time in both regions. This poor situation has been described as arising from lack of efficiency in African Programmes. Caldwell and Caldwell (1988) have identified lack of demand to control family size and unwillingness of administrators and politicians to be identified with failure and with promoting programmes reportedly at odds with the African way of life as the major components of the inefficiency. They further argued that African governments would never be able to impose Chinese-type family planning programmes or those in India or Indonesia because of a strong belief that individuals and communities know more about the morality of fertility than do belief the governments, because fertility is the central concern of traditional religion.

There are evidences of a major shift towards approval of fertility control by African governments after the 1974 and 1984 World Population Conferences. Lesthaeghe (1989, pp. 475-79) ascribed these changes to increasing concern over food and lack of economic growth and to the hope that successful population policies will help to overcome these crises, together with the realisation that traditional African birth spacing through post-pactum sexual abstinence is being eroded. Due to the fact that one-fourth of the population of Sub-Saharan Africa lives in Nigeria (Caldwell, 1990), success of Africa's population policies and programmes hinges on just how the Nigerian government implements its new population policies and on, how successful the implementation proves to be. Again since the Nigerian approach is based on voluntary fertility regulation method and the respect for the right of each couple to determine voluntarily the number and spacing of their children (family size), it becomes imperative that the success of the scheme will depend greatly on the identification of the basic sociocultural and economic incentives and disincentives for reduction in family size: It is on the basis of such findings that appropriate strategies for successful implementation of the population policy could be formulated.

Moreover, the 1988 population policy, it is argued, contains rather ambitious targets. For instance the policy aims at reducing the

proportion of women bearing more than four children by 50 per cent by 1995 and by 80 per cent by the year 2000. It also seeks to reduce the number of children a woman is likely to have during her lifetime to four by the year 2000. Such targets cannot be met without proper identification of the social, cultural, religious and economic factors which will tend to encourage or discourage the acceptance of such targets by the women. This is even more important since as Caldwell (1982) has suggested, fertility decline depends to a considerable extent on the increasing emotional and economic nucleation of conjugal relations.

It is clear from the above that this study is justified on the grounds of the need to provide an input into the successful implementation of Nigeria's population policy. The study will also inform policy-makers on how best to formulate and implement robust population matters for Nigeria.

Objectives of the Study

As mentioned above there is a major shift in policy by the Nigerian government towards small family size (even though voluntary) as a way of containing the rapid fertility and population growth. The success of such a policy hinges on the identification of the basic social, cultural and economic factors influencing the desire of couple to maintain small or large family sizes. The study aims essentially at identifying these factors in Nigeria. Specifically it seeks to:

- a. identify social, cultural and economic factors that influence family size;
- b. assess the perception of the people about the relative importance of these groups of factors in determining family size over time;
- c. quantify and measure the relative importance of these groups of factors in determining family size under the prevailing sociocultural and economic situation; and
- d. provide suggestions for the design and implementation of intervention policies and programs necessary to secure reduction of family size in line with the National Population Policy.

Literature Review, Research Scope and Methodology

Literature Review

The literature on population and population related issues are varied and diverse. This covers both the theoretical and empirical literature on demographic transition and demographic - economic theory among others. The demographic transition theory describes and seeks to explain a process whereby, as economic development occurs and as a global economy comes into being, both mortality and fertility ultimately and inevitably will decline to low levels. Caldwell's (1990 p. 210) review of earlier studies points to the fact that economic and social development not only would bring down fertility and population growth but would eventually help stimulate parents to new aspirations for themselves and their children - aspirations that are incompatible with large families. However, the empirical evidence on a variant of this theory - the threshold theory - which seeks to postulate a relationship between development and the onset of fertility decline in terms of economic and social indexes (per capita income, urbanisation, mortality levels, female literacy and cinema attendance) has shown it to be of little value. Van de Walle (1986), showed that there was some doubt about whether low child mortality was a threshold for fertility decline, or low fertility a threshold for mortality decline, and concluded that both occurred in Europe with modernisation.

The demographic - economic theories try to explain how the demographic change - especially declines in fertility - due to economic development may be self-sustaining and may accelerate economic development. Early proponent of this macroscopic aspects of demographic - economic interactions (Labenstein, 1957 and Nelson, 1956), argued that high levels of population growth could prevent both economic take off and the onset of demographic transition. But the rapid economic growth in parts of East and South-East Asia despite high rates of population growth tends to make such observations of little use. Even the Malthus demographic trap (that is a situation where any economic growth would lower mortality levels thus speeding up population growth

to a point where the original per capita income and mortality gains were nullified) has also been faulted by the Asian experience.

Another area which has received considerable attention in the past twenty years is the economics of family fertility decline. The central focus is on the conditions for the existence of high fertility even where new family planning programmes to control family size exist and the circumstances under which fertility declines first occurred. The central argument for high fertility has been that each child represents a net economic gain to the parents because of such contributions as child labour or support to parents in their old age, especially in circumstances in which child rearing is not very expensive. Easterlin (1975), Easterlin, Pollak, and Wachter (1980), examined this situation in a 'market' context. Thus where the demand for children is higher than their supply and where the cost of reducing that demand (that is, the cost of practising contraception - both economically, in terms of money and time, and psychically, in terms of disapproval of relatives and community) are high, high fertility and large family sizes are bound to occur. Becker (1960) and Schultz (1969), argued that fertility decline and hence small family size will occur when the cost of children (that is, expenditure on the children, the costs to mothers both in income forgone and also in the value of their time) become greater.

Caldwell (1976, 1978, 1982), used wealth flow theory to argue that fertility decline is inevitable when there is a reversal of the net flow of resources - towards children rather than parents - but that this economic change was the result of social changes that concentrated greater family concern on the children.

Ben-Porath (1980), argued that where family transactions are preferable to external transactions in markets, there is bound to be high fertility implying therefore that fertility decline begins as the market competes ever more effectively with family produced goods and services. Most of these theories, as noted by Caldwell (1990), emphasise that fertility decline arising from social change affect family economic calculus, as does market penetrations. It is also suggested that market penetration may affect social change and that family change may allow similar market penetration.

In Africa, the high fertility rate and the consequent pronatalist nature of most families has been blamed on a number of factors. Prominent among these are religion and family economics which mutually reinforce the demand for high fertility. Lineage structure represented in terms of religion by the cult of the ancestors, who intervene in this life and who favour high fertility is stressed. The usual return from children that traditional societies offer to parents is reinforced by feeling of guilt, and even fear of filial duties are not adequately performed (Caldwell, 1990). The deep horror of barrenness, which led to the ill-treatment of barren women and to a dread among women of either having no children or of becoming childless through the death of all their children underscores the pronatalistic nature of African societies. There is also massive fostering of children implying little relationship between reproductive decisions and reproductive economic burdens. The prevalence of polygamy, the payment of bride price by men and increase burden of day-to-day child rearing on mothers place men in a situation where they make reproductive decisions with little extra economic burden in raising children and with near certainty of support in old age. This is because of the weakness of the spousal economic bond, women become increasingly dependent on their children, and few feel safe without a considerable number. Equally important is the decline in the durations of post-partum abstinence which according to Lesthaeghe and Eelens (1989 p. 90), is because of early and thorough 'christianisation', the lack of gerontocratic rulers, and the encapsulation of women in their husbands' patrilinealities. To these factors are added low level of economic development and education.

Apart from theories citing economic and socio-economic determinants of fertility, there is also the "innovationist" theory which maintains, that the decline in fertility in developing countries is due to the diffusion of ideas about controlling fertility or even knowledge of and access to contraceptives. Empirical evidences tend to support the innovationists. Mauldin and Berelson (1978), for instance concluded that about 55 per cent of the 1965-75 fertility decline in developing countries could be explained by the new availability of contraceptives. Further buttressing the innovationist submission are several studies on Asian countries reported in Caldwell (1990 p. 273). It is stated that

respondents attributed their own ability to control fertility to the availability of family planning facilities and that they attributed the inability of their parents to do so to the lack of such facilities. Cleland and Wilson (1987 p. 29) concluded, "that attitudes towards birth control, broadly defined, are of central explanatory importance for the timing of fertility transition even though it merely actualises and legitimises the existence of latent demand.

In Sub-Saharan Africa, contraceptive use is at a lower level than any other region in the world and less likely to be related to the control of family size (Caldwell, 1990). He further shows that the relationship between the use of family planning programmes in Asia, and fertility decline does not hold in Africa. Caldwell and Caldwell (1976), found that in Southwest Nigerian, 40 per cent of first contraceptive use was to substitute for post-partum sexual abstinence, with the obvious possibility of raising fertility, while other major uses were to prevent conception during premarital and extramarital sexual relations or after terminal abstinence was supposed to begin. Mauldin and Segal (1988, p. 341), show that even of Africa's limited use of contraceptive, only the birth control pill has been found to be particularly acceptable. The use of other techniques such as sterilisation, Intra Uterine Device (IUD) and tubectomies which are the major means by which contemporary developing world fertility transition have been achieved is very low.

Research Scope and Methodology

This study basically concentrates on the specific socio-cultural and economic factors militating against or which may encourage voluntary adoption of small family size in Nigeria. In doing this we concentrated on Rivers State of Nigeria. The state is often regarded as minority and contain a great number of ethnic groups in addition to being educationally disadvantaged.

In carrying out the study we used both primary and secondary sources of information. For the primary source, we used field survey based on oral interview and structured questionnaires. To facilitate the administration of the questionnaire, we had to select five local government areas in each of the focused states.

For each of the selected local governments, at least an urban and rural settlements were chosen and equal number of questionnaires were

administered in each of the settlements. In administering the questionnaires, the focus was the family household and either the ever married men or women were interviewed. The choice of the household was done randomly. The selection was done such that none of those interviewed were outside the 15-69 year age group for men and 15-49 years for women. In all between 1000 and 2000 questionnaires were administered out of which 1,096 were retrieved.

The types of information collected from the questionnaires covered the background of the respondents, the prevailing types of marriage, the reproductive behaviour of the respondents, as well as the level of awareness and use of family planning techniques by the respondents.

In addition to the administration of questionnaires, we used Focus Group Discussion (FGD) technique. The size of the participants was restricted to between seven and nine and comprised of males and females from both urban and rural areas. The participants were mainly men of between 25 and 34 years and women of between 20 and 29 years. Apart from the general information on the participants (e.g sex, age, religion, marital status, types of marriage, number of children and occupation, the FGD sought to identify from the participants, the prevailing socio-economic and cultural factors in the areas and their influence on family size; the influences of the extended family system and family planning methods on family size as well as actual family size determinants and constraints to small family sizes. Here the participants were asked already prepared questions and their responses were recorded using audio tape recorder.

These primary information or data was supplemented by secondary sources especially journal articles, World Fertility survey, Demographic and Health survey, Demographic year book and National Population Commission (NPC) of Nigeria. Apart from supplying demographic information on Nigeria, these sources also provided comparable information on other countries and regions of the world.

The data, especially those collected through questionnaire were coded and analysed at the Nigerian Institute of Social and Economic Research (NISER), Ibadan using SPSS/PC+. For each of the questions information on frequency, percentage distribution of the responses,

mean, median, mode, standard deviation, standard error, variance, kurtosis, skewness, range and minimum and maximum values were provided. This report uses extensively this information. In the case of FGD the participants' responses were carefully transcribed and classified for easy analysis.

Furthermore, in order to assess the influence of socio-economic and cultural factors and family planning on family size, we used multiple regression technique with total number of children per household as the dependent variable.

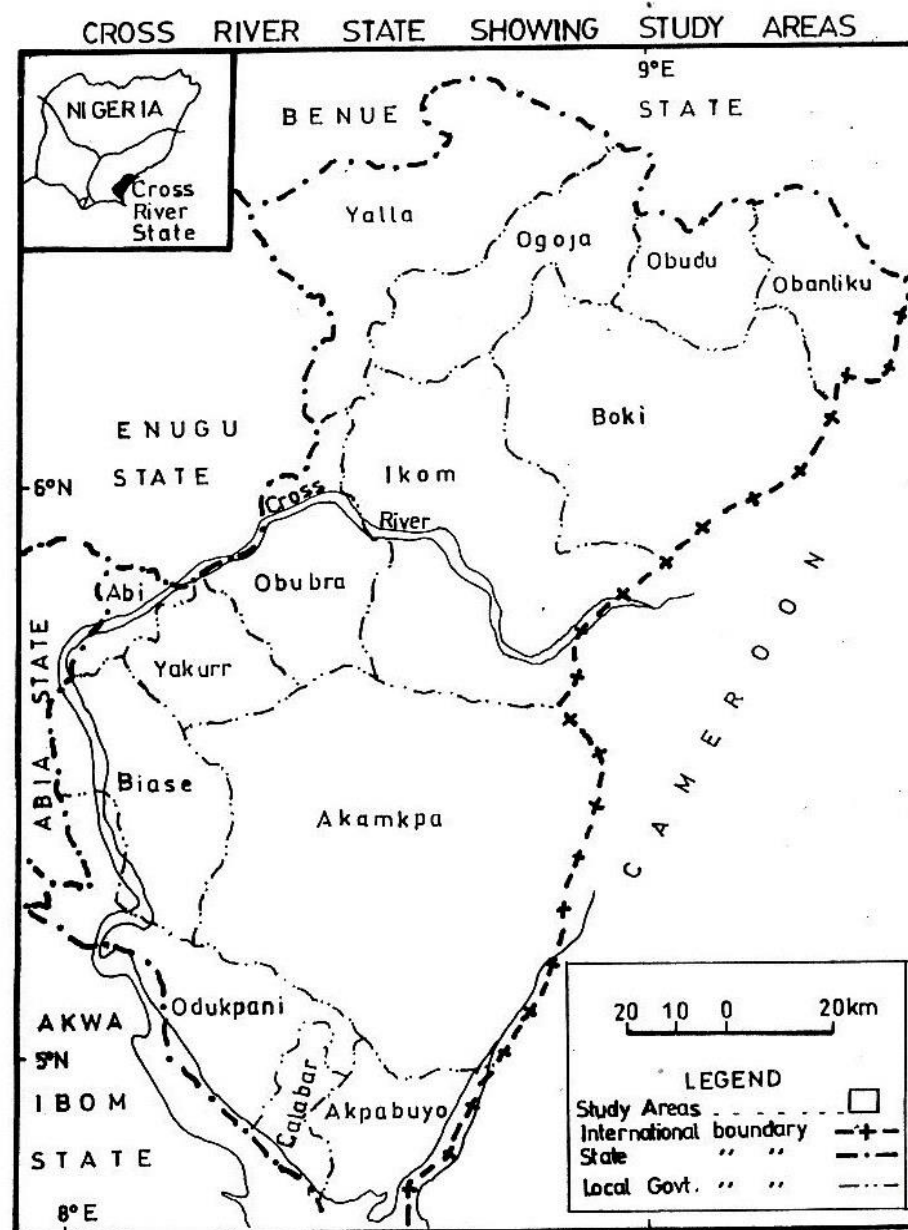
Study Area

Cross River State is found in the extreme South-Eastern Part of Nigeria. It is located between latitude $04^{\circ} 20'N$ and $07^{\circ} 00'N$ and longitude $07^{\circ} 30'E$ and $09^{\circ} 30'E$. The state has a land mark of 20,156 sq km. It was created in 1967 under the name South-Eastern State but was later changed to Cross-River State. In 1987, the mainland part was carved out to form Akwa Ibom State leaving the Northern part to form the present Cross River State. The state is bounded in the North by Benue State, in the West by Enugu, Ebonyi, Abia and Akwa Ibom States, in the East by then Republic of Cameroon and in the South by the Atlantic Ocean. Presently there are about fifteen local government areas in the state.

The state capital is Calabar and is the home of the First Nigerian Export Processing Zone at 1991 the population of Cross River State was put at 1,865,604. Cross River State is basically a civil service state as there is absence of strong industrial base.

A small proportion of the population in the urban areas are civil servants, while majority of the people engage in farming; the major Occupation of the people. Fishing is practised by those in the riverine areas. Many people also take to trading as a secondary occupation.

The study was restricted to five local government areas of the former Akamkpa, Calabar, Ikom, Odukpani and Yakurr. In each of these LGAs, one urban and one rural communities were selected. The study areas is shown on the map below.



Socio-economic and Demographic Characteristics of Respondents

Socio-economic Characteristics of Respondents

A total of 1,478 people were interviewed. out of this number, 67.8 per cent were males and 32.2 per cent females. Most of them (about 76.5 per cent) were in the 30-49 age group. 0.3 per cent were below 20 years, 10.4 per cent were in their twenties while 12.4 per cent were 50 years and above. About 53.2 per cent of the respondents live in urban areas while the remaining 46.8 per cent are rural dwellers. It was also found that most of them (about 78 per cent) have stayed in their place of residence for at least five years. Specifically 38.9 per cent have stayed for over 20 years, 19.6 per cent between five and nine years, 17.6 per cent between one and four years and 11.7 per cent between 10 and 14 years. In terms of the highest level of education attained, it was found that about 77 per cent of the respondents and 69 per cent of their spouse have completed at least primary education. In fact 45.8 per cent of the respondents and 39 per cent of their spouses have completed at least secondary education. The corresponding figures for those with no schooling are 14 per cent and 21 per cent respectively (Table 2.1). Available information also showed that health and social facilities are not only available but are also in functional state. It is only comprehensive health centres that is not widely available. The average distance to the location of these facilities is about one kilometre (Table 2.2).

Majority of the respondents about 88.2 per cent are christians of catholic and protestant faith. Only 3.5 per cent of the respondents practise traditional religion. It is also found that the major ethnic groups of the respondents are Ekoi (46 per cent), Ibibio (27.2 per cent), Efik (15.3 per cent) and Igbo (6.4 per cent).

In terms of occupation, farming is the most common primary and secondary occupations for both the respondents and their spouses (Table 2.3). This is followed by public sector employment and trading in that order. Farming is also the most important type of job. This is followed by middle level professional and labour/cleaner/artisans for th e

respondents and trading and low level professionals for the spouses (Table 2.4). These occupations and jobs together with other sources of income make the annual income to be ₦47,528.80 for the respondents and their spouses (Table 2.6). This compares less favourably with a mean annual expenditure (like remittances and gifts yield a mean annual income) of ₦53,361.80 (Table 2.7). While primary occupation is the main source of income, food, education and clothing are the main items of expenditure of the respondents.

Table 2.1: Highest level of Education Attained by the Respondents and their Spouses in Cross River State

Educational Status	Self (respondents)		Respondents' Spouse	
No Schooling	13.7		20.8	
Quranic	0.3		0.8	
Adult Literacy	1.3		1.1	
Primary Incomplete	7.2		8.5	
Primary complete	25.2		21.3	
Secondary Incomplete	6.4		8.5	
Secondary Complete	21.5		21.9	
Tertiary/Post Secondary	24.3		17.2	

Source: Field Survey

Table 2.2: The State of Facilities in Respondents Communities in Cross River State

Facilities	Available		Functional		Distance (mean) km
	Yes	No	Yes	No	
Health workers	84.2	15.8	98.0	2.0	0.847
Traditional birth attendant	67.3	32.7	96.5	3.5	1.179
Health clinic/primary health centre	76.3	23.7	99.4	0.6	1.371
Comprehensive health centre	17.7	82.3	94.6	5.4	0.286
Hospital	53.0	47.0	99.1	0.9	1.270
Electricity	75.2	24.8	88.1	11.9	0.406
Bore-hole	71.4	28.1	78.2	21.8	1.005
Pipe-borne water	47.5	52.5	68.7	31.3	0.851
Good roads	63.0	37.0	98.8	1.2	0.053
Primary schools	95.9	4.1	100.0	0.0	0.689
Secondary Schools	82.3	17.7	100.0	0.0	0.825

Source: Field Survey

Table 2.3: Type of Occupation of Respondents in Cross River State (Percentage Distribution)

Type of Occupation	Self (Respondents)		Respondents' Spouse	
	Primary	Secondary	Primary	Secondary
Farming	41.0	73.5	45.9	71.1
Trading	14.9	15.2	20.8	19.7
Public Sector	32.7	5.4	23.7	5.2
Org. private sector	2.5	1.6	2.6	0.8
Informal Private sector	8.9	4.2	7.0	3.3

Source: Field Survey

Table 2.4: Types of Job of Respondents in Cross River State (Percentage Distribution)

	Self (Respondents)		Respondents' Spouse	
	Primary	Secondary	Primary	Secondary
Fanning	27.3	67.3	37.2	62.6
Trading	15.9	14.4	19.4	18.9
Labour/Cleaner/Artisans	17.2	1.0	7.5	1.6
Low level professional	13.6	10.6	18.7	10.2
Middle level professional	18.1	4.7	11.7	4.5
High level professional	7.9	2.0	5.5	2.2

Source: Field Survey

Table 2.5: Self and Spouse Participation in Decision Making in Cross River State

	Self				Spouse			
	None	Low	Average	High	None	Low	Average	High
No. of children	6.4	5.4	57.8	30.4	8.2	12.7	61.7	17.5
Spacing of children	4.7	9.8	53.9	31.6	5.9	18.9	56.2	19.1
Children's Discipline	0.1	5.2	34.1	60.5	2.2	25.4	37.7	34.7
Children's Education	0.6	6.8	25.6	67.0	5.9	33.0	31.8	29.3
Employment Decision	5.1	12.1	37.7	45.0	11.6	27.7	39.9	20.8
Spending of family income	4.0	9.8	36.8	49.5	6.6	27.4	42.3	23.7
General Decision Making	1.1	5.9	39.0	54.1	3.5	24.1	46.5	25.9

Source: Field Survey

Table 2.6: Mean Annual Income of Respondents in Cross River State (Naira)

Item	Self (Respondents)	Respondents' Spouse
Primary Occupation	18,684.6	12,194.3
Secondary Occupation	5,894.6	4,307.0
Remittance	2,980.6	1,758.6
Gifts	1,248.2	808.2
Others	1,050.5	590.2
Total	27,455.8	20,073.0

Source: Field Survey

Table 2.7 Mean Annual Expenditure of Respondents in Cross River State (Naira)

Items	Amount
Food	15720.9
Rent	1272.4
Transport/Car Maintenance	4545.1
Electricity	315.5
Water	286.2
Extended Family Reihittance	3328.3
Health Help	3844.9
House Help	1092.2
Education	8153.2
Clothing	6788.2
Entertainment	2959.4
Gifts/Donation	2382.5
Savings	3043.9
Others	569.7
Total	53361.8

Source: Field Survey

Marital Characteristics of the Respondents

About 91.3 per cent of the 1,478 respondents were married. Some 3.4 per cent are widowed while 3.7 per cent are separated. Only 1.6 per cent are divorced. About 69 per cent of the respondents and 58 per cent of the spouses first got married in their twenties. For the respondents 14.1 per cent were first married at below 20 years while 16.7 per cent married in their thirties. The corresponding values for the spouses are 26.8 per cent and 14.1 per cent respectively. In fact the mean age at first marriage is 24 for the respondents and 23 for their spouses. As noted by FGD participants people marry early in the state and the ripe age for a woman to marry was put at 18 years and above. Most of them

(about 89 per cent) have married only once while 8.6 per cent and 1.7 per cent have married twice and thrice respectively. The most common type of marriage is monogamy which accounts for 88 per cent of the respondents. Of the 12 per cent of the respondents that are polygamous, 79 per cent have two wives, 18 per cent have three wives while three per cent have four wives and above. It is also observed that the most prevalent form of marriage is traditional contracted by about 85 per cent of the respondents. This is followed by church marriage (16.6 per cent) and court (one per cent).

Reproductive Behaviour of the Respondents

The various types and forms of marriage discussed earlier result in an average family size of five children (three males and two females). However, the actual number per household varies greatly. About 62.2 per cent of the respondents reported a family size of five children and below while the remaining 37.8 per cent have six children and above. As noted by participants in the FGD, the family size varies between three or four in Calabar and six to eight in the northern part of the state because of the polygamy. A breakdown by sex shows that 23.4 per cent had one male child, 27.4 per cent had two, 21.3 per cent had three and 13.6 per cent had four male children. In the case of female children 25.5 per cent reported one, 29.5 per cent reported two, 20.6 per cent reported three while 12.3 per cent reported four.

This number of children would have been higher if there were no cases of deceased children. Of 286 respondents who reported cases of deceased children 61.2 per cent lost one while 19.2 per cent lost two children. The rest lost more than two children of both sexes. In fact 71 per cent reported losing one male child and 22.5 per cent losing two male children. Again while 69.8 per cent reported losing one female child, 19.8 per cent reported losing two.

In spite of the reported family size about 60.6 per cent of the total respondents indicated that they are not satisfied with their present number of children. This, as indicated by 388 respondents, is because they have only one child (50.5 per cent), want to have more (21.6 per cent), have small families (9.3 per cent) and want to have own children (5.7 per cent). Some 35 per cent of the respondents indicated their desire for more children. This desire arises from the fact that they want old age care (27.8 per cent), every family requires certain number (27.1 per cent), want a baby boy (21.1 per cent), want a baby girl (7.5 per cent) and help with household and farm work (7.3 per cent). In terms of the number of more children wanted there is no preference for a particular sex over the other but as FGD participants noted the male-female children ratio desired are either 3:1 or 2:2. However, 24.1 per cent of the 453 respondents wanted a total of three children while 23.8

per cent wanted two more children. Meanwhile, the mean number of additional children desired is three.

Available information showed that there is high degree of participation of both the respondents and their spouses in household decisions especially concerning number of children to have and the spacing of children among others. This also presupposes that such decisions are made either at marriage or after. About 51 per cent of the respondents said they did discuss the number of children to have with the spouse at marriage. Of the 646 respondents that indicated the number, 28.3 per cent planned to have four, 26.8 per cent planned five while 20.3 per cent planned eight and above. A breakdown by sex shows that 37 per cent planned to have three males while 30 per cent planned to have two males. Again while 50 per cent planned to have two females, 20 per cent planned to have four. However, the mean number of children planned to have is five. This number obtained despite the fact that 64 per cent of the be aware of National policy of four children per woman. The major sources of this national policy, as indicated by 886 respondents, are radio/newspaper/TV, clinics/hospital, friends and acquaintanes and spouse.

Table 2.8: Distribution of Respondents in Cross River State by Sex and Number of Children Ever Born (Percentages)

Number	Male	Female	Total
1.	23.4	25.5	7.0
2.	27.4	29.5	11.8
3.	21.3	20.6	13.5
4.	13.6	12.3	15.3
5.	8.0	5.9	14.5
6.	3.0	3.2	12.5
7.	1.5	0.8	9.2
Over 7.	1.8	2.1	16.1

source: Field Survey

Table 2.9: Distribution of Respondents in Cross River State by Sex and Number of Deceased Children (Percentages)

Number	Male	Female	Total
1.	71.1	69.8	61.2
2.	22.5	19.8	19.2
3.	3.2	5.8	8.7
4.	1.6	1.2	4.2
5.	1.6	2.9	4.9
6.	-	-	-
7.	-	0.6	0.7
Over 7	-	-	1.1

source: Field Survey

Table 2.10: Reason for Non-Satisfaction with the Number of Children by Respondents in Cross River State

Reasons	Percentage
Want to have more	21.6
Has only one	50.5
Has none	2.3
Want to have own children	5.7
Want to have large family	0.0
I like baby	1.3
Has small family	9.3
Up to God	4.4
Cannot say but need more	3.6
Help at old age	1.3

Source: Survey.

Table 2.11: Reasons for Wanting More Children by Respondents in Cross River State

Reasons	Percentage
Want a Baby boy	21.1
Want a Girl	7.5
Every family requires certain number	27.1
Help with household/farm work	7.3
Pleasure from playing with children	2.9
Spouse's desire	5.6
Old age care	27.8
Pressure from family	0.8

Source: Field Survey

Table 2.12 Distribution of Respondents in Cross River State by sex and Number of Additional Children Desired (Percentages)

Number	Male	Female	Total
1.	26.6	49.9	10.2
2.	39.3	36.5	23.8
3.	21.6	8.1	24.1
4.	7.2	2.5	19.6
5.	2.9	2.5	10.6
Over 5.	2.4	0.6	11.7

Source: Field Survey

Table 2.13: Number of Children Planned to have when Married by Respondents in Cross River State

Number	Male	Female	Total
1.	1.9	11.8	0.2
2.	29.9	49.9	0.9
3.	36.5	20.4	2.8
4.	13.0	7.8	28.3
5.	10.8	5.8	26.8
6 and above	3.6	1.9	14.1
7.	1.7	0.8	6.7
8 and above	2.6	1.7	20.3

Source: Field Survey

Family Planning: Awareness and Adoption

Family planning is not new among the respondents. It has been a method of child spacing. The average number of years between children as pointed out by FGD participants is two and three years or one and two years in the case of late marriage. This is achieved using traditional methods (such as lock and key, herbs and Talisman), pills, condoms, diaphragms, abstinence and long period of breast feeding. In fact it is emphasised that there is no cultural and religious barriers to family planning. About 85 per cent of the respondents indicated that they have ever heard of family planning and the various family planning methods. The major sources of information on family planning as indicated by the respondents are health centre (58.6 per cent), the press - radio/TV/newspaper (49.3 per cent) and friends/acquaintances (37.3 per cent). The major family planning methods ever heard of in descending order of importance are condom, rhythm method, withdrawal, oral tablets, abstinence, traditional methods, injectables, spermicidal jelly/cream, diaphragm/cervical cap and intrauterine devices.

Table 2.14: Family Planning Methods Heard of, Ever used and currently being used by Respondents in Cross River State (Percentage)

Methods	Heard of	Ever Used	Currently Used
None	15.2	38.5	37.7
Condom	81.6	39.7	28.1
Diaphragm/cervical Cap	22.6	1.1	0.4
Spermicidal jelly/cream	29.4	3.4	1.3
Rhythm method	64.0	39.6	34.6
Oral tablets	53.1	7.9	3.0
Injectables	33.8	7.1	3.9
Implants (Nor plant)	16.8	1.5	0.6
Intrauterine devices	20.2	5.4	7.7
Tubal ligation	12.6	0.6	0.0
Vasectomy	14.5	0.6	0.1
Abstinence	41.8	14.9	10.0
Withdrawal	59.9	22.7	13.3
Traditional methods	39.0	4.2	2.9
Others	0.3	0.1	0.3

Source: Field Survey

The methods ever used follow the same pattern. However, the methods currently being used in descending order of importance are rhythm method, condom, withdrawal, abstinence, intrauterine devices, injectables, oral tablets and traditional methods. These methods are largely approved in marriage and have been used by 49 per cent of the respondents for between one and three years, 18 per cent for between four and six years and 15.8 per cent seven years and above (Table 2.14). These methods are used because they are convenient, affordable, readily available and because of ease of discontinuation. Other major reasons are medical counsel/indications and effectiveness. The effectiveness of these methods is confirmed by 54.3 per cent of the respondents (Table 2.15).

Table 2.15: Reasons for Preference of the Family planning method used by Respondents in Cross Rivery State

Reasons	Percentage
Spouse's Preference	21.4
Affordable	39.0
Readily Available	37.3
Minimal Side effects	11.5
Highly effective	22.8
Ease of discontinuation	27.9
Convenient	41.1
Medical counsel/indications	25.4
Religious beliefs	10.6
Reference Group influence	2.4
Others	0.3
Not applicable	2.0

Source: Field Survey

Determinants of Family Size

It is generally believed-that family size is determined by socioeconomic factors, cultural factors, extended family influences as well as the family planning methods used. The major socioeconomic factors are income, level of education, type of occupation and availability of health and social facilities.

The results of the multiple regression of these and other factors on total number of children per household (family size) are shown in Table 2.16.

It is observed that income of the respondents (self) positively (even though not significantly) influences family size while that of the spouse negatively influence. The level of education of the spouses also negatively influences family size while that of the respondents has positive influence. This implies that the higher the level of education attained by parents the lower the number of children. This may be due to increased awareness of family planning techniques and the high cost of maintaining children. The type of primary occupation is seen to have negative but not significant influence on family size. In this particular case, majority of the respondents are farmers and the bulk of income comes from this source. A one way ANOVA of the relationship between health and social facilities and family size produces F-ratio of 1.3969. This shows that available facilities have no influence on family size.

The cultural factors include religion, type and age of marriage, number of times married and total number of wives in the household. Empirical results showed that religion positively but not significantly influence family size. Since majority of the respondents are christians and given the fact that christianity encourages monogamy as well as family planning among married people, the result is as expected.

The results also showed that the age at first marriage of the spouse, number of times married, type of current marriage and total number of wives in the household significantly affect the family size. Empirically, it is shown that the level of involvement of spouses in decision making concerning the number and spacing of children also affects the family size. In fact the result of ANOVA on the relationship

of family size and the level of involvement of spouses in decision making produce F-ratio of 4.2813 compared to 0.6874 for non involvement.

Table 2.16: Regression Result of the Determinants of family size in River State.

Variable	Coefficient	T-ratio	Sig. T
USITRADM	-7.748	-0.395	.696
TOTWIVES	-0.005	-0.051	.960
TOTAN	-2.978	-0.495	.624
USIDIACP	-0.673	-0.288	.775
USITUBAL	1.940	1.060	.267
AGEATMAR	-6.219	-2.161	.039
USEWITVID	-3.135	-1.406	.170
USISPERM	-0.441	-1.414	.168
SPHIEDUC	-10.059	-2.216	.034
RELIGION	4.022E-06	0.255	.801
USIORTAB	4.264	3.083	.004
TPROCC	1.404	1.537	.135
HIGHEDUC	4.509	3.260	.003
AGEFSTMA	-0.940	-0.275	.786
STOTANU	-0.301	-2.969	.006
USIRHYTH	-1.481E-05	-1.629	.114
USESperm	6.942	1.749	.091
NTIMESMA	-2.844	-1.011	.320
USECONDM	1.987	2.028	.052
USERHYTH	-0.058	-0.109	.914
Constant	73.005	1.460	.155

multiple R	=	.866
R square	=	.750
Adjusted R Square	=	.491
standard error	=	2.952
F	=	2.897
signif F	=	.0023

The various aforementioned family planning methods as having been used or currently being used have diverse effect on family size. The most important method based on t ratio is condom. This is followed by withdrawal method (ever used and currently using), traditional methods, sperm jelly/cream and oral tablets. While condom and withdrawal methods ever used have positive impact on family size, the rest of the methods have negative impact. It thus appears that condom and withdrawal methods are not very effective in reducing family size. It is also seen that the coefficient of methods ever used has positive signs implying positive impact while that of currently using methods has negative signs. On the whole, all the factors explain about 75 per cent variation in the family size.

Summary of Major Findings, Conclusions and Recommendations

What emerges from the foregoing analysis is that the family size is still large in the state. This is as a result of interplay of two major factors - Socio-economic conditions of parents and cultural factors. Generally, the economic power (income) of parents are generally low compared with expenditure. The main source of this income is farming. Farmers are generally associated with large families because of the needs for help with household and farm work. Probably because of their low levels of education they hardly adopt the modern and effective techniques of family planning. Where family planning is adopted at all, they rely more on the traditional methods. Besides polygamy is very common among the farmers and it is associated with large families.

Perhaps the most significant influence on family size in the state are cultural factors. In this state and as identified by FGD participants heritage is patrilineal. Thus, if a woman has only female children she will not be so regarded and the husband will not be satisfied. Since the society values male children very much, the husband will be forced into polygamy. Women with only female children are often treated with great sympathy and pity. The worst case is a woman who has no child. In fact infertility is regarded with disdain and can be considered punishment for transgressions. In this state, there is general preference for large families probably because of having children with different professions in the family and help in farm work in the villages. This also explains why about 27 per cent of those that wanted more children felt the need for them because every family desires certain member. The need for old age care is also a very important reason for maintaining large families. Child fostering especially under the extended family system is still very common.

In spite of the prevalence of these cultural and societal influences, it is also found that they do not adversely affect the use of family planning. Even religion is not against it. In the state the level of awareness of family planning is very high. However, the method of family planning used (condom, rhythm and withdrawal) are not capable

of significantly reducing the family size. Instead they help raise the level of fertility.

In the light of the above findings the following recommendations are made: First, there is great need for enlightenment campaign on the need to have small families. This campaign should be carried right down to the rural areas where the desire for large family is strongest. These campaigns and slogans must be made in different local languages for easy understanding. In this case church leaders, health workers and the press (mainly radio) will be of great help.

Second, the people must be properly educated on the more modern and effective family planning methods. As pointed out above, the commonly used family planning methods tend to increase fertility. Serious enlightenment campaigns should be mounted to convince women and even their husbands to use them.

Thirdly, there is great need to improve the conditions of our health facilities and even provide more especially in the rural areas. Furthermore, the entire secondary school curriculum should be modified to incorporate issues that relate to family planning and the effective family planning methods. It is also suggested that there is need to heavily subsidise the various family planning methods. As noted above, some of these ineffective family planning methods are adopted because they are affordable. This means that more effective methods could have been adopted if they were within the reach of beneficiaries.

Finally, there is also need to improve social facilities like schools and water especially in the rural areas. Such improvements could help reduce a lot of water borne diseases which may cause death among children, thereby increasing the desire for more children. While these measures are useful, we feel the long term solution lies in the improvement in the economic well being of the citizens. This means higher level of economic growth and development.

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