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WOMEN'S INCOME AND FERTILITY IN RURAL KENYA

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WOMEN'S INCOME AND FERTILITY IN RURAL KENYA

ABSTRACT

Data collected in two economically contrasting rural communities in Kenya indicate that education is not an important determinant of contraceptive use although it importantly determines the age at marriage. It is observed that women's status (as measured through women's income) is a critical factor for women's contraceptive behavior through the determination of the cost of children to mothers and the direction of flow of social and economic resources from children to mothers. Thus when women earn a high income that permits a fair degree of autonomy, their aspirations for children (especially for their education) rise and consequently they spend more on children. In absence of labour contribution by children when women's income is high, a new mother-child relationship emerges in which the child becomes a cost and not an economic asset to the mother, thus, encouraging contraceptive use in order to lower the fertility level.

WOMEN'S INCOME AND FERTILITY IN RURAL KENYA

The fertility level in Kenya has been high since 1962. The 1977-78 Kenya Fertility Survey reported a total fertility rate of 7.9 and the 1984 Kenya Contraceptive Prevalence Survey a total fertility rate of 7.7. The 1984 Kenya Contraceptive Prevalence Survey, on the other hand, reports considerable ethnic and regional variations as well as variations among women of different educational achievements with regard to current use of contraceptives as well as to age-specific fertility. In view of these findings, it becomes important to examine through in-depth studies what forces of change are underway that could be further strengthened through appropriate policies and programmes. Since agriculture is the key factor in Kenya employing 75% of the working labour force and agricultural development is closely linked to population growth (Senga, Faruque and Ateng, 1981), the undertaken comparative community studies are focusing on the examination of the dynamics involved in such linkages in two provinces at different stages of agricultural development. Agricultural development has been often differentially oriented toward men and women farmers with very different consequences for men's and women's income, the necessity of children's labour and fertility. In recent years, increased recognition has been given to the fact that as long as agricultural development does not help improve women's status (or is even responsible for its deterioration), women's dependence on children and their demand for children remains high and no fertility decline can be expected (Faruque and Gulhati, 1983).

According to the stratification theory (Safilios-Rothschild, 1982a, 1982b), women's direct access to income is the most powerful indicator of significant change in the status of women that can challenge the foundation of a prevailing sex stratification system. Indeed, there is considerable evidence that women's access to income is a key determinant of fertility through its impact on women's age at marriage and contraceptive use (Safilios-Rothschild, 1985). Prevailing institutional conditions such as the extent to which agricultural extension services, credit and marketing facilities are oriented toward women and whether or not women participate in groups and cooperatives determine the extent to which women are able to earn an income from farm and nonfarm activities. Furthermore, according to Caldwell's theoretical framework, the organization of women's

groups that allows women to depend on each other rather than on men and children and their direct access to income may be two of the most important factors responsible for the reversal of the "flow of resources" from children to parents to that from parents to children (Caldwell, 1982).

It could be, therefore, hypothesized that the more are women organized and the higher is their income, the higher are their aspirations about the standard of living of the family and the education of the children and, therefore, the more they tend to spend on food, school-related expenses and children's clothes. In this way, the resource flow no longer follows the traditional model in which children contribute more (mainly in terms of labour) to their parents than what parents contribute to them. Since women's higher income makes children more costly, it can also be hypothesized that the higher is the women's income, the more they will be motivated to use contraceptives in order to limit the number of children.

The traditional direction of the flow of resources from children to parents can be also reversed when parents utilize little or not at all their children's labour because they have high educational aspirations for them and they hire labour whenever there is a labour bottleneck. We could, therefore, also hypothesize that the higher the women's income, the less they rely on their children's labour. Furthermore, we could also hypothesize that the lower the labour contributions of children, the greater the propensity of mothers to use contraception in order to limit the number of children.

In order to obtain data concerning women of predominantly low status on the one hand and of predominantly high status on the other, two contrasting Kenyan rural communities were selected on the basis of existing information.

METHODOLOGY

The data were collected between September 1985 and March 1986 in two selected rural communities in Kenya: Mbogoini in Mathira Division, Nyeri District, Central Province and Hamisi "A" in Hamisi Division, Kakamega District, Western Province. Mbogoini was chosen as a rural community in which women have a high status and have access to agricultural and family planning services. It is located near (about 4 km away from) the Karatina Market, an important rural market dominated by women farmers and the Tumutumu Hospital with an active family planning programme is almost at the centre of the community. Primary school enrollment is about equal for boys and girls (412 boys, 428 girls) and the drop-out rate is practically nil and two very well reputed secondary schools serve the community. Furthermore, Mbogoini has ll active, well organized and financially successful women's groups which were started in the last 5 years.

Hamisi "A", on the other hand, was chosen as a rural community in which women have a low status in terms of education, limited access to agricultural and family planning services as well as in terms of a limited degree of organization into groups. Hamisi "A" was of special interest for yet another reason. An intensive family planning campaign was conducted in the Vihiga - Hamisi area in the early 1970's under the Special Development Programme. An evaluation study showed that there was a significant differential effect between the intensive family planning efforts -in Vihiga-Hamisi and the rest of Kokamega District in terms of first visitors to the clinics. The differential rate of increase, however, was not sustained after 1973. The conclusion of the evaluation study was that in an area in which land pressure is most intense and farm holdings are reduced in size, an intensive family planning programme failed to generate a momentum ("Second Overall Evaluation of SRDP", 1976).

The interviews were carried out on as a representative sample as it was possible of 50 couples in Mbogoini and 40 couples in Hamisi "A" and of an additional 9 wives in Mbogoini and 13 wives in Hamisi "A" whose husbands were not interviewed primarily because they were working in Nairobi. Thus, in all 59 wives were interviewed in Mbogoini and 53 in Hamisi "A". In addition, a number of single mothers and of unmarried young women were also interviewed but the results from these interviews as well as from the husbands' interviews do not fall within the scope of this paper.

The average length of women's interviews was 3 hours. A second wave of interviews with wives lasting, on the average, 45 minutes was also

undertaken in order to obtain complete and reliable information. In this second wave of interviews, a revised format for key questions related to income sources and utilization and labour contributions of different family members was utilized that proved to be quite effective.

FINDINGS.

(a) The Status Profile of Women

The obtained data clearly indicate that the status of women in Hamisi "A", is low. Our sample of women has a low educational achievement: Table 1 shows that 19.6 percent of the women have had no schooling and 27.5 percent have completed Standard 1-4 while only 19.6 percent have completed Standard 7 and only 9.8 percent have completed more than Standard 7.

Very few women are organized in active groups. Only four groups have been reported in Hamisi "A" and one of them is dormant. Even more serious, these groups are seldom income-generating. This low degree of organization among women is due to: lack of a special departmental office up to 1985; the lack of literacy and training in cooperative management, accounting and marketing; and the lack of technical assistance in developing viable projects. Thus, only one woman in our Hamisi "A" sample reports belonging to a woman's group while all others were not even aware that any such groups existed; and no woman belongs to a cooperative.

With regard to the size of land cultivated by the women, the average size is 0.97 and is almost always an individual plot allocated to them by their husbands (only in 4 cases, it was allocated by the father-in-law). When they were asked how secure they felt that their right to this land was, they said that they were pretty sure they would have this land as long as they stay married since they were married for many years and have already had many children.

The extent to which women in Hamisi "A" remain in the margin of development is evidenced by the fact that none of them has ever been visited or contacted by agricultural extension agents. Similarly, none of them has ever attended agricultural meetings and demonstrations either because

they are not told when such demonstrations take place (in 47 percent of the cases) or because such demonstrations take place far away and they do not have the time and/or the money to attend or because such meetings and demonstrations are attended only by men (in 32 percent of the cases).

The high status of women in Mbogoini, Mathira in Nyeri District contrasts sharply with the low status of women in Hamisi "A". First in terms of educational achievements, the majority of women (72.7 percent) have completed at least Standard 7 and more than one-third of women (37.3 percent) haved completed Form 1-6. At the other end, only 6.8 percent of the women have had no schooling and 15.3 percent have completed only Standard 1-4 (Table 1).

Second, with regard to membership in women's groups, the majority of the women (67.8 percent) belong to an active women's group and in practically all cases the women report receiving a sum of money each year from their group usually ranging from 2,400 to 3,600 Kshs. In addition, 25 percent of the women belong to a cooperative and more than half of them to a cooperative that accumulates funds to buy land to be divided between members. Another one-fourth of them belong to a credit and savings cooperative and two women to a coffee cooperative.

Third, with regard to the size of land cultivated by the women, three fourths (74.6 percent of the women) in Mbogoini cultivate the entire plot because the husband has another occupation in Nyeri or Nairobi or works as an agricultural labourer and the average size of land they cultivate is 1.13 acres. Another 22 percent of the wives cultivate only their own individual lot and the average size of the land is 0.79 acres.

Fourth, most Mbogoini women are reached by agricultural extension agents and attend agricultural meetings and demonstrations. 61 percent of the women report being regularly visited by agricultural extension agents but not so by livestock agents who had to be specially invited. Only 10 percent of the women report not to have even been visited by extension agents. Similarly, more than half of the women (52.5 percent) attend agricultural demonstrations and report having learned proper plantation methods, crop rotation and spraying of crops. Only 20 percent report that they do not attend agricultural demonstrations, most of them (12 percent) because they are not coffee growers and the demonstrations are only for coffee.

(b) Women's Educational Achievement and Fertility

Table 2 shows that women's educational achievement is not an important determinant of whether or not women currently use modern contraceptive methods. What is important is whether or not the woman is literate. None of the illeterate women in both communities is using a modern contraceptive method. The higher, however, the woman's educational achievement, the lower the level of fertility. It seems that education is a more important determinant of women's age at marriage than of contraceptive behavior. The data show that women's education is significantly related to women's age at marriage in Hamisi "A" but not in Mbogoini.

Table 3 further shows that the younger generations of women (below 35 years of age) are the best educated ones and especially, women in the 25-34 age group. Finally, Table 4 shows that women's level of education is not related to women's access to income in Mbogoini. When, however, women's age is held constant, women's education is significantly related to their income in both communities. Partial correlations between women's education and number of children born controlling for women's income and between women's income and number of children born controlling for women's education have been found to be significant for both communities thus, suggesting that both variables, women's education and women's income are equally powerful determinants of fertility.

(c) Women's Income and Fertility

In Mbogoini, more than half of the women (55.2 percent) have an income of KShs 6,000 and over per year and about one-third (31 percent) of the women have an income of KShs 10,000 and over per year (Table 5). Furthermore, Table 6, 7 and 8 show that the higher the women's income in Mbogoini, the more they spend on food, school-related expenses and children's clothes. Table 5 also shows that when the women's income is 10,000 and over they use more often modern contraceptives than other women and none of them abstains from all types of family planning methods. 83.3 percent of these women are currently using modern contraceptives and 38.9 percent of them have had tubal ligation, the latter mostly being in 35-44 age group (Table 9).

It seems, therefore, that the first hypothesis is supported by the data in Mbogoini: When women's income is high, there is a high probability that they will use modern contraceptives in their effort to keep the number of children low. Tables 10 and 11, further show that the cost of children is an important determinant in women's decision to use family planning but only when the cost is considerable and such cost is considerable for women only when their income is high. Thus, when women in Mbogoini have a high income and the cost of children is high, they tend to more often use contraceptives than women whose income is low and the cost of children is also low.

Turning now to examine the role played by children's labour contributions, we find that the higher the woman's income the higher the percent of agricultural and domestic labour contributed by children (Tables 12 and 13). When, however, woman's age is examined in relation to children's labour contributions, we find clear generational differences (Tables 14 and 15). The majority of women under 35 do not use their children's labour particularly for agricultural tasks while the majority of women of 35 and over use their children's labour for both domestic and agricultural tasks.

Table 16, furthermore, shows that women below 35 have a smaller number of children than women 35 and over and Table 9 shows that more 25-34 than all others use modern contraceptives while none of them abstains from all methods. It seems, therefore, that drastic generational changes are taking place in Mbogoini in terms of the direction of the flow of resources from children to parents and women's willingness to use contraceptives. Tables 17 and 18 also show that women who do not use their children's labour at all or use it very little (below 10%), have significantly fewer children than women who use more heavily their children's labour (and are predominantly over 35). It seems, therefore, that age rather than level of income is the important determinant of the degree to which mothers will use their children's labour.

We can conclude that a significant decline in fertility will most probably occur in Mbogoini when the women who are now under 35 will complete their reproductive cycle since all the data examined point to the increasing costs and diminishing labour value of these children for these mothers. There is a high probability that these women will not have more than 5 children

In addition, even the generation of 35-44 may not have more children than the present average of 6.77 since more than half of them have had tubal ligation and the others derive already sizeable labour contributions from the children they already have.

Turning now to Hamisi "A" where the status of women is low, we find as it could be expected that women's income is low. Only 30 percent of the women have an income of 4,000 Kshs. and over while 70 percent of the women in Mbogoini have the same income. Furthermore, only 5 women (9.4 percent) have an income of KShs 10,000 and over while 18 women (30 percent) in Mbogoini enjoy this level of income (Table 19).

Tables 20, 21 and 22 show that the higher the woman's income, the higher the children's cost born by the woman only when her income is Kshs 4,000 and over. But even despite this relationship, only slightly more than one-fourth (26.7 percent) of women at this income level currently use a modern contraceptive. This may be explained by the overall level of women's income and the overall very low current contraception prevalence rate in the entire community (15 percent in contrast to 67.8 percent in Mbogoini). Indeed, the 8 women who use modern contraceptives are predominantly 35-44 years old (Table 23) and started using them after they had 6 or 7 children.

When it comes to the role played by children's labour, the analysis of the data in Hamisi "A" shows little differentiation. Thus, the women's level of income is not related to the degree they use children's labour. Similarly, women's age is not related to the degree to which women use children's labour. It seems that in Hamisi "A" children's labour is a vital resource which is fully used by practically all women, especially in the case of domestic tasks which are heavily passed on to daughters.

Table 24 shows a high level of fertility for all age groups in Hamisi "A" (except those under 24). The overall fertility level for women of all ages in Hamisi "A" is 5.0 and there are no indications of a breakthrough. Concrete steps need to be taken toward increasing women's income through orientation of agricultural extension services toward women small-holders and the organization of well-managed women's groups with economically

viable projects. Only then the Mbogoini pattern may also emerge in Hamisi "A".

(d) Size of Land Cultivated by Women and Level of Fertility

The size of land cultivated by women is an important variable because it is related to the level of agricultural labour requirements but also because land pressure may act so as to depress fertility. The latter may be particularly true in areas in which the land must be divided among sons as is true in Hamisi "A".

Table 25 shows that in Mbogoini, the highest current contraceptive prevalence rate can be found among women who cultivate over one acre of land but the differences are slight. Table 26, however, shows significant differences in the average number of children among women who cultivate different sizes of land. It must be kept in mind, however, that over half (57.9 percent) of women who cultivate up to 0.25 of an acre are under 24 years of age while 62.5 percent of those with over one acre are 25-34. In the other land categories, women's age seems to be randomly distributed. We can, therefore, conclude that women who cultivate 0.26-0.50 of an acre have the highest fertility than all other women while those who cultivate more than 1 acre have the lowest fertility. It seems, therefore, that in Mbogoini women's income (related to the size of land) is a more important fertility determinant than the size of land cultivated by the woman per se.

In Hamisi "A", the data show that/greater the size of land cultivated by the woman, the higher her income. The size of land cultivated, however, is not related to their current use of contraceptives or the number of children and more particularly the number of sons they bear.

It seems that in Hamisi "A", women's status is primarily based on the traditional mother/wife role and the economic role remains marginal and unimportant. The demand for children remains, therefore, high since they constitute a key factor in their lives.

CONCLUSION AND DISCUSSION

The data collected in Mbogoini show a much higher current contraceptive prevalence rate with regard to modern methods than the 31.1 percent rate reported by Kenya Contraceptive Prevalence Survey for Central Province. This may be due to the fact that the Central Province demonstrates a considerable degree of heterogeneity with regard to socio-economic development and the status of women and Nyeri is an outstanding District on both counts. The data from Hamisi "A" on the other hand show only a slightly higher current contraceptive prevalence rate (15 percent) than the 11.8 percent reported by the Kenya Contraceptive Prevalence Survey for Western Province.

The data presented in this paper indicate that women's level of education does not seem to be an important determinant of contraceptive behavior although it tends to be an important determinant of the age at marriage. Literacy, on the other hand, seems to be a basic condition for women's willingness to use modern contraceptives. In addition to literacy, the data highlight the importance of women's income as a crucial factor for women's contraceptive behavior through the determination of the cost of children to mothers and of the direction of flow of resources from children to mothers. Only when women earn a high income that allows them a degree of autonomy, they begin to have high aspirations for their children and to spend considerably for their education and clothing. Also the younger generations of women begin to rely little or not at all on their children for labour. Thus, a new mother-child relationship emerges in which the child is a cost and not an economic asset to the mother and becomes, thus, conducive to a lower fertility level. In order, however, for rural women to have access to income and for this mother-child relationship to emerge, a number of important institutional conditions must be fulfilled that provide women with direct access to agricultural extension information and guidance as well as to agricultural credit and rural markets. Such access, on the other hand, can be facilitated (if not assured) through women's organization into well-managed income-generating groups that can serve as "contact farmers" for extension purposes and that can channel agricultural credit and inputs to women small-holders. ings suggest specific policies and programmes that could help change the status profile of women in communities such as, Hamisi "A" and create favourable conditions for family planning programmes. There is a need for

the Ministry of Agriculture and Livestock Development, the Women's Bureau and the National Council for Population and Development in Kenya to begin to coordinate policies and activities so as to create the institutional conditions for rural women's lesser demand for children and greater degree of acceptance of family planning. An effective cooperation between these institutions could help women gain access to income through mainstream institutionalized activities and efforts rather than through small, isolated and often short-lived and low-success income-generating projects as has been most often the case up to now.

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REFERENCES

- John C. Caldwell, 1982 Theory of Fertility Decline New York: Academic Press.
- Rashid Faruque and Ravi Gulhati, 1983. Rapid Population Growth in Sub-Saharan Africa Washington, D.C.: The World Bank Staff Working Papers, No. 559.
- Constantina Safilios-Rothschild, 1982a. "Female Power, Autonomy and Demographic Change in the Third World." In: Interactions Between Women's Roles and Population Trends in the Third World, R. Anker et al. eds., pp 117-132. London: Croom Helm.
- , 1982b. "A Class and Sex Stratification Model and its Relevance for Fertility Trends in the Developing World". In: <u>Determinants</u> of Fertility Trends: Major Theories and New Directions for Research, C. Hohn and R. Mackensen, Eds., pp 189-202. Liege: International Union for the Scientific Study of Population.
- 1985. The Status of Women and Fertility in the Third World in the 1970-80 Decade New York: The Population Council, Center for Policy Studies Working Papers No. 118.
- W.M. Senga, R. Faruque and B.A. Ateng, 1981. <u>Population Growth and Agricultural Development in Kenya</u>. Nairobi: University of Nairobi, Institute for Development Studies, Occasional Paper No. 40.

Table 1.
Women's Educational Achievements in Hamisi "A" and Mbogoini

Level of Educational	Hamisi	"A"	onol Mb	ogoini
Achievement	No.	%	No.	25
No Schooling	10	19.6	4	6.8
Standard 1-3	5	9.8	5	8.5
Standard 4	9	17.7	: 4	6.8
Standard 5-6	11	21.6	3	5.1
Standard 7	10	19.6	17	28.8
Standard 8	1	2.0	4	6.8
Form 1-6	, siden e ni	7.8	22	37.3
Total Total	51**	98.1	59	100.0

^{*} The total is 51 instead of 53 because in 2 cases there is no information as to the level of women's educational achievement.

Table 2.

Women's Educational Achievement by Current use of Contraceptive and Average Number of Chilren in Mbogoini.

Current use of	au L	Wome	en's	Educat	iona,	l Achieve	ement		w,
Contraceptives	No	ne -	1	- 4	5 -	- 8	19 a	ind o	ver
	No.	. %.	No.	%	No.	%	No.		%
		11	1	-4, <u>1</u> ,					vel an
A. Modern Methods			3						ucelo P
Pill	~		; 5	62.5	5	20.8	.11		47.8
Coil	-	-	1 -	_	4	16.7	3		13.0
Tubal				3.1			i		
Ligation	-		.1	12.5	8	33.3	. 3		13.0
TOTAL MODERN	-	14	6	75.0	17	70.8	17	JC	73.9
B. None Used	3	75.0	1	12.5	6	25.0	2		8.7
C. Natural Method	1,	25.0	1		1	4.2	4		17.4
TOTAL COMMENT	erani 4 i	100.0	8	100.0	24	100.0	23	2 1.17 Lib (1)	100.0
Average Number of children	5	. 5	6	. 4	L	1. 9		2.7	

Table 3

Age group		None	. 1 -	4 years		5 - 8	g a	nd over
	No.	% .	No.	8	No.	%	. No.	8
Up to 24	00,01		1	12.5	9	37.5	7	30.4
25 - 34	. 2	50.0	2	25.0	6	25.0	15	65.2
35 - 44	2	50.0	3	37.5	7	29.2	-	grown fig.
45 and over			2	25.0	2	8.3	1	4.3

Table 4
Women's Educational Achievement by Women's Income Groups in Mbogoini

					. (2.	1		t Dost
	1.4 2.7	. V	Vomen!	s Educat	iona	l Achiey	ement	smjsi
Women's	No	ne .	1.	4	5	- 8		nd over
Income Group	No.	%	No.	8	No.	%	No.	%
Up to 1,	1. 12	ali <u>d</u> emo	s was		.5	21.7	3	13.0
2,000 - 5,999	2	50.0	3	37.5	7	30.4	5	21.7
4,000 - 9,999 10,000 and	2	50.0	3	37.5	4	17.4	6	26.1
Over	-	7 %	, . 2	25.0	, 7.	. 30.4	9	39.1
TOTAL	4	100.0	8	100.0	23	99.9	23	99.9

Table 5

Current Contraceptive Use by Women's Income Groupings In Mbogoini

Use		"',0	1.1	Wor	nen	s Incom	e Group	os**	No.	**************************************
		Up to Kshs. No.	1 999	2,000 No.) -	5 , 999	1	- 9,999	10,000 Over	and %
Α.	Modern	. –	S., P.		7	37.5	ε	50.0	2	Au = 3
	Methods		8.8						- 1	
	Pill	4	50.0	7		18.9	4	28.6	6	33 . 3
	Coil Tubal	23-	-0.00	1		5.6	4	28.6	2	11.1
	Ligation	1	12.5	3		6.7	1	7.1	7	38.9
	tal. thods	5	62.5	11		61.1	9	64.3	15	83.3
В.	None Used	3	37.5	5	. " .	27.8	3	21.4	_	_
C•	Natural Methods	o bnis	rement	2 	A L	ucation 11.1	2	14.3	3	16.7
TO	CAL	8	100.0	18		100.0	14	100.0	18	100.0

^{*} The total N = 58 because in the case of one woman there is no information about the level of her income.

Table 5
Women's Income Groups by Women's Income Spent on Food in Mbogoini

Women Income		w	omen'	s Incom	e Spent	on Food					
Groups (In	None Up to 300" 300" and over										
KShs.)	No.	2	No.	. %	No.	%	No.	%			
Up to 1,999 2,000 -	6	75.0	1	12.5	1	12.5	8	100.0			
3,999 4,000 -	4	44.4	-		5	55.6	9	100.0			
5,999 6,000 -	1	11.1	2	22. 2	6	66.7	9	100.0			
9,999	2	14.1	50900	- 025 u.s.	12	85.7	14	100.0			
and over	1.,	5.6	-	-	17	94.4	18	100.0			
TOTAL	14	24.1	3	5.2	41	70.7	58	100.0			

Supplied that have been accommon to the large to the

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Table 7

Women's Income Groups by Women's Income Spent on School-Related
Expenses in Mbogoini

Acres 12		Women	:Incc	me Spen	t on So	chool-R	elate	ed Expe	nses		
	1	Vone	.Up.to	.500"	501-1,500". 1,501 and TOTAL						
34707	No.	%	No.	8	No.	% .	No.	%	No.	%	
Up to 1,99	4	80.0	1	20.0	-	The second section of the second	-		5	100.0	
2,000-8,999	o)1 4	66.7	2	33,3		4 -7		of L	6	100.0	
4,000-5,999	· 2	33.3	3	50.0	· · <u>-</u>	· ;- · ·	1	16.7	6	100.0	
6,000-9,999	. 2	22.2	5	55.6	2	22.2	-	1 1	9	100.0	
10,000 and Over	6	42.8	2	14.3	4	28.6	2	14.3.	14	100.0	
TOTAL	18	45.0	13	32.5	6	15.0	3	7.5	40	100.0	

Table 8
Women's Income Groups by Women's Income Spent on Children's Clothes in
Mbogoini

Women's	W	omen's In	çome Sp	ent on (Childre	en's Clo	thes					
Income Groups	None Up to 500 500" and Oyer TOTAL											
	No.	8	No.	%	No.	%	No.	8				
Up to 1,999	. 4	66.7	2	33,3		apticality & ORIC April Signature, August	6	100.0				
2,000-3,999	4	50.0	4.	50.0	-		8	100.0				
4,000-5,999	2	22.2	. 4	44.4	3	33.3	9	99.9				
6,000-9,999	3	23.1	8	61.5	2	15.4	13	100.0				
LO,000-and Oyer	3	16.7	. 8 .	44.4	. 7 .	38.9	18	100.0				
, TOTAL	16	29.6	. 26	48.2.	12 .	22.2.	. 54	100.0				

Table 9

Current Contraceptive Prevalence by Women's Age Groups in Mbogoini,

Mathira, Nyeri in 1985

Modern Contraceptive	1277 1277 1377	Women			Inco	E 10670)		ry a vijs geog
Currently Used	· Und	ler 24 ars	25	- 34	35	- 44	45 and	
	N	%	Ň	ક	N.	%	N	%
Pill Coil	8	44.4	10 5	41.7 20.8	2 · 1	15.4 7.7	1	25.0 25.0
Tubal Ligation		- 4	4.	16.7	. 7.	53.8	1	25.0
Total of Women Currently Using			37	£.	,C,,			and Top
Contraceptives	. 8	44.4	19	79.2	10	76.9	3	75.0
No Contraceptives	- AN AREA MANAGEMENT (STOCKED ASSAULT)		ette Prijetingtorijiti. es			over the state of		beel size
Used Natural Methods	8	44.4	_	-	3	23.1	1	25.0
Used	2	ï1.1		20.8	, P	·	-	· · · · · · · ·
TOTAL	18	99.9*	24	100.0	13	100.0	4	100.0

^{*}Percentages do not add to 100.0 due to rounding

Table 10

Current Contraceptive Use by Women's Income Spent in School-Related

Expenses in Mbogoini

	rent traceptive	Wor	men's	Inc	ome Sp	ent c	n Sch	ool-Re	lated I	Expense	s ssatata	oo ma
Use		No					118	501 No		. 0	,500" ver No,	and
Α.	Modern Me	hod	8	M/	9	И		N	a Contribute des distributes de			
	25.00	1 0					P.					1
	Pill	. 6	3	33.3	3	3	7.5	-	-		1	14.3
	Coil	4	.63	22.2	2	2	5.0	-	-	1	l Dirbs	14.3
	Tubal Ligation	: 4	2	22.2.	. , , 3	. 3	7.5	1.	50.	,0	nemo W	57.1
Tọt	al Modern	14	, Ac.	77.7.	8	10	0,0	1	. 5.0	Ο.	Usal Vilved	85.7
в.	None Used	. 2		1.1	-	-		1	50,	0,	Trateou	Contra
c.	Natural Method	2	28,	1,1.				ин — , — ,			1	14.3
TOT	ral .	18	ç	9.9	8	10	0.0	2	100.	0	7	100.0

Table 11

Current Contraceptive Use by Women's Income Spent on Children's Clothes in Mbogoini

Current Contraceptive	Wo	men's In	come Sp	ent on Chi	lldren's	Clothe
Used				500 %		
A. Modern Method	6	40.0	12	42.9	.3	25.0
Coil Tubal Ligation		_ 33.3	4	14.3		25.0 33.3
Total Modern	11	73.3	19	67.9	10	83.3
B. None Used	3	20.0	4	14.3	Ĺ	8.3
Ç. Natural Method	1.	6. 7	5 ,	17.9	i	8.3
Total	15	100.0	28	100.1	.,12	99.9

Women's Income Groups by Percent of All Agricultural Labour

Percent of all:	Women's Income Group (In KShs)											
agricultural labour contributed by	Up to	1,999"	2,000 - 3,999"		4,000 -	5,999"	6,00	0 - 9,999"	10,000" and ove			
children	No.	%	No.	%	No.	%	No.	%	No.	8		
None	5	83.3	1	16.7	3	42.9	5	62.5	6	40.0		
Up to 10% :	1-8	-	1	16.7	1		~	-	1	6.7		
10 - 20%	-8		5-3	8-13	E 4 9	-	-	-	~	-		
21 - 33%	-	- 124	2	33.3	2	28.6	2	25.0	11	26.7		
34% and over	. 1	16.7	2	. 33.3	. 2	28.6	1	12.5	4	26.7		
TOTAL	6	100.0	6	100,0	7	100.1	8	100.0	15	100.1		

Table 13

Women's Income Groups by Percent of All Domestic Labour Contributed
by Children in Mbogoini

Percent of all domestic labour						groups		-		
contributed by children	Up to	1,999	2,000	3,999	4,000	- 5,999	6,000	9,999	10,000	and Ove
	No.	%	No.	%	No.	8	No.	%	No.	%
an Kiri saman saman saman kan manan saman sa E				index has the advantage of the second se		telestre Authority (Articulary Particulary Particulary)	the state of the state of		ananan manini kanan dan Jaba Jaba Jaba	
None .	4	66.6	2	33.3	, 2	25.0	3	37.5	8	48.1
Up to 10% .	1	16.7	1	16.7	2	25.0	2	25.0	2	11.8
10 - 20%	-	1 1		1-1-3		_	2	25.0	1	5.9
21 - 33%	<u> </u>	- '	2	33.3	1	12.3	1_	4 12	1.	5.9
34% and Over	1	16.7	1	16.7	1	12.5	1	12.5	5	29.4
TOTAL	6	100.0	6	100.0	6	100.0	8	100.0	3.7	100.0

Women's Age Groups and Percent of All Agricultural Labour

Table 14

Contributed by Children

Percent of All Agricultural Labour	Women's	Age Groups		
Contributed by Children	Below 35 No'. %	35 and Over	78.1	0.0
None	18 66.7	2 12.5		
Under 21%	3.7	1 6.3		
21% and Over	8 29.6	13 81.3		1. 8
ŢOŢ Ą L	27 . 100.0	16 100,1		

Table 15: Women's Age Groups and Percent of all Domestic Labour Contributed by Children

Percent of All omestic Labour			Women's Age Groups			
Contributed by Children	Below No.	35 %		35 and No.	Over %	
None	17	56.7		3	21.4	1
Under 21%	8	26.7		3	21.4	
21% and Over	5	16.7		8	57.1	
Total	30	100.1		14	99.9	

Table 16: Number of Children Born by Married Women by Women's Age Groups in Mbogoini, Mathira, Nyeri.

No. of		1		Age	Groups			
Children	Up	to 24	25	5-34	35	-44	44 aı	nd Over
	No.	85	No.	c ₅	No.	%	No.	%
None	3	16.7			_	_	_	
One	9	50.0	1	4.2	ı	7.7	_	- 1
Two	3	16.7	5	20.8	-	-	-	+ +
Three	2	11.1	6	25.0	_	-	[-	- 1
Four		-	6	25.0	1	7.7	2 j-	_
Five	ı	5.6	1	4.2	6.	-	j-	-
Six	-	_	2	8.3	2	15.4	-	-
Seven	-	-	2	8.3	4	30.8	-	4
Eight	-		1	4.2	3	23.1	3 -	-
Nine	-	-		· .	ı	7.7	1	25.0
Ten	-		<u>-</u>	j - 1	1	7.7	3	75.0
Total	18	100.1	24	100.0	13	100.1	4	100.0
Average Number of Children		1.44	3	3.79	6	5.77		9.75

Table 17: Number of Children Born by Percent of Agricultural Labour Contributed by Children in Mbogoini

No. of	N	one	Bel	ow 10%	10	. 20%	21 -	- 33%		34%	& above	Tot	al
Children	No.	%	No.	%	No.	%	No.	%		No.	%	No.	Olo
None	3	100.0	_	- 97	- 6	0	an 160 1	or 1 _ w		_	- 1	3	100.0
1 -	5	100.0	-	- 위점	1 - 2	1 - 8	3-5	d <u>-</u>		-	- 5	5	100.
2	6	100.0	-	- 33			0_1			-		6	100.
3	5	100.0	ő _	- 1	1-1	1	-	-		-	-	5	100.
4	2	40.0	1	20.0		24	1	20.0		1	20.0	5	100.
5	w-10	F 10 70	3	· - 8 8	- 3	-	-			1	100.0	1	100.
6	-	-	-	- 1	\$	-	3	75.0		1	25.0	4	100.
7	-	-	-	- 8	-	14	2	28.6		5	71.4	7	100.
8	-	-	-	- 3	-	-	-	-		3	100.0	3	100.
9	-	-	-	- 35	1-21	185 T	1	50.0		1	50.0	2	100.
10	-	-	-	- 8	200	-	2	66.7		1	33.3	3	100.
11	-	~	-	- 9	-	1 4	_	_		_	+ 8	1	
12	ω 23	-		- 3	-	16 - 1	-		= 51	1		-	
Total	21	47.7	1	2.3	-	is i	9	20.5		13	29.5	. 44	100.
Average number of children	2	.29	6.82	4.0	- e bas		7.	. 33	1		6.77	1 6	-

Table 18: Number of Children Born by Percent of Domestic Labour Contributed by Children in Mbogoini

of	No	ne	Belo	w 10%	10	- 20%	21 -	33%	34%	& above	To	otal	
Children	No.	%	No.	%	No.	%	No.	çó	No.	%	No.	%	
None	5	100.0	-,		0	_		_	_		5	100.0	Π.
1	5	100.0	-	A -	234	-	- T	-	-	,	5	100.0	;
2	4	66.7	2	33.3		- 1	E -	-	_	-	6	100.0	
3	5	83.3	1	16.7	-	-	-	-	-		6	100.0	
4	1	20.0	3	60.0	1	20.0	8 -	~	-	-	5	100.0	
5	1	-	-	-		+	_		1	100.0	1	100.0	
6	1 %-	-	-	-		1 2 1		-	4	100.0	4	100.0	
7		-	1.	16.7		-	3	50.0	2	33.3	6	100.0	
8	1.	25.0	-	· -	-	-	2	50.0	1	25.0	4	100.0	
9	1	50.0	1	50.0	_		-	~	_	-	2	100.0	
10	1	33.3	-		1	33.3	-	-	1	33.3	3	100.0	, .
11			- ,	-	-	-	-	-	_	-	: 3 <u>-1</u>	_	
12		·		3 5	1		-	·	-	-	2 -	_1 =	
Total	23	48.9	8	17.0	2	4.3	5	10.6	9	19.2	47	100.0	1
Total Average number of children		.57		17.0		7.0		10.6		19.2	47	100.0	1

This table excludes women who do not have children or whose children are below 2 years of age.

Table 19: Percent Distribution of Women By Income and Age Groups in Hamisi "A"

	8		Income	in KShs	•					
Age	Up	to 999	1000) - 1999	2000	- 1999	4000	& above	Т	otal
Groups	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 24	1	20.0	1	20.0	1	20.0	2	40.0	5	100,0
25 - 34	7	26.9	8	30.8	6	23.1	5	19.2	26	100.0
35 - 44	6	30.0	3	15.0	3	15.0	8	40.0	20	100.0
45 and above	图表	11.64	(a) I	9191	1	50.0	i	50.0	2	100.0
Total	14	26.4	12	22.6	11	20.8	16	30.2	53	100.0

Table 20: Income Groups By Women's Income Spent on Food in Hamisi "A"

Women				Women's	Income	Spent on 3	Food			
Income Groups	Non No	e %	Belo No	w 100 %	100 - No	- 299 %	300 No	and over	No_	Total %
Up to	3	0		1 1 1 60 3	21 1 1	- 1 (0)		1 9.		
999	3	20.0	3	20.0	8	53.3	J	6.7	15	100.0
1000 -										
1999	2	22.2	2	22.2	3	33.3	2	22.2	9	99.9
2000 -	18									
3999	3	25.0	1 - 1	41.5	7	58.3	2	16.7	12	100.0
4000 and										
Over	2	13.3		4 5 6	2	13.3	11	73.3	15	99.9

Table 21: Women's Income Groups By Women's Income Spent on School-Related Expenses in Hamisi "A"

Income	None			100		- 299		nd Over		Cotal
Groups (In Ksh.)	No.	%	No.	%	No.	%	No.	%	No.	%
lp to 999	4	28.6	6	42.9	3	21.4	1	7.1	14	100.0
.000-1999	4	50.0	2	25.0	2	25.0	-	-	8	100.0
2000-3999	2	40.0	2	40.0	1	20.0	-	-	5	100.0
1000 & Ove	r 7	35.0	1	5.0	5	25.0	7	35.0	20	100.0
Total	17	36.2	11	23.4	11	23.4	8	40.0	47	100.0

Table 22: Women's Income Groups by Women's Income Spent on Children Clothes
In Hamisi "A"

Women's		Wo!	men's Inco	ome Spent	on Chil	dren's Clo	othes	
Income Groups	No	ne	- Up to	300	300 a	nd Over		Total
(In KShs.)	No.	%	No.	. &	No.	%	No.	ક
Up to 999	10	62.5	6	37.5			16	100.0
1000 - 1999	8	88.9	1	11.1	-	-	9	100.0
2000 - 3999	5	45.5	4	36.4	2	18.2	11	100.0
4000 and Over	8	50.0	4	25.0	4	25.0	16	100.0
Total	31	59.6	15	28.9	6	11.5	52	100.1

Table 23: Current Contraceptive Use by Women's Age Groups in Hamisi "A"

Current			Won	nen's Age	e Groups	5		1.2
contraceptive	0	- 24	25	- 34	35 -	- 44	45 a	and Over
use	No.	%	No.	%	No.	Q,	No.	8
A. Modern Method	1 14		111.25	, 10 - 10		D 4		
Pill	-		-	-	2	10.0	_	_
Coil	-	-			1	5.0	=	
Tubal ligation	-		10	3.8	2	10.0	- "	-
Injection (Depo Provera)		<u> </u>	1	3.8	2	10.0	-	. J. (1000)
Total Modern	-	-	2	7.2	7	35.0	-	p. 6 46.
11.8				A	11			
3. None used	5	100.0	24	92.3	12	60.0	1	100.0
C. Natural Method	. 2		-		1	5.0	, -	
TOTAL	5	100.0	26	100.0	- 20	99.9	1	100.0

Table 24: Number of Children Born by Women's Age Groups in Hamisi "A"

Number			Women	n's Age	Groups				
of	Up	to 24	25	- 34	35	- 44	45 an	d Over	
Children Born	No.	R	No.	%	No.	o,	No.	%	
None	ı	20.0	·	7.1	-	- 7.48	18	0_[-	
1	2	40.0	1	3.8	-	-	-	-	
2	1	20.0	5	19.2	2	10.0	4	144 E	
3	ı	20.0	5	19.2		- 0.08	9	Tevo - To	
4	-	a.r.	4	15.4	7.7	kc	Ī	-45	
5-	-	-	4	15.4	5	25.0	_ · · ·		
6	-	-	4	15.4	4	20.0	_	-	
7	_	-	2	7.7	4	20.0	-	-	
8		ai . . j uc	Afc Cr	3.8	2	10.0	cht - Con	11 - L	. 3.
9	-	-	-	-	-	-	-	-	
10		_		_	2	10.0			
11	-	-	stoons	nor , s Ags	- W	-	2	100.0	
12	-	-		40 -	15	5.0	-	- L	
verage No. of Children		.40		4.54	6	.45	11	.00	

Table 25: Current Use of Contraceptives by Size of land Cultivated by Women in Mbogoini

Current use of contraceptives	A. O		Size of Cultivated Land.				weight Lady's		
	Up 1	to 0.25	0.26 - 0.50		0.51 - 1.00		Over 1 Acre		
	No.	%	No.	%	No.	%	No.	%	
A. Modern Methods	O _o ef								
Pill	7	43.8	4	33.3	4	30.8	4	26.7	
Coil	1	6.3	F 10	8.3	2	15.4	3	20.0	
Tubal Ligation	3	18.8	3	25.0	2	15.4	. 4	26.7	
TOTAL	11	68.8	8	66.7	8	61.5	11	73.3	
B. None used	3	18.8	3	25.0	4	30.8	l	6.7	
C. Natural Method	2	12.5	1	8.3	1	7.7	3	20.0	
TOTAL	16	100.0	12	100.0	13	100.0	15	100.0	

^{*} All three women who have no land are currently using the pill.

Table 26: Number of Children Born By Size of Land Cultivated By Women in Mbogoini

Number		Size of Cultivated Land											
of Children	Up t acre	o 0.25 s	0.26	- 0.50	0.15	- 1.00	Over 1.00 acres						
	No.	8	No.	8	No.	8	No.	ક					
None	2	11.1	_	_	1	7.7	_	_					
ı	6	33.3	ı	8.3	2	15.4	2	13.3					
2	3	16.7	2	16.7	3	23.1	3	20.0					
3	4	22.2	-	-	-	-	4	26.7					
4	2	11.1	1	8.3	2	15.4	2	13.3					
5	-	-	-	-	-	-	2	13.3					
6	2	11.1	-	-	1	7.7	1	6.7					
7	_	-	5	41.7	-	-	1	6.7					
8	-	-	1	8.3	2	15.4	-	-					
9	-	-	-	, -	1	7.7	-						
10	-		2	16.7	1	7.7		-					
11	-	-	-	-	-	-	· -	-					
12		_	-	-	_	-	-	_					
TOTAL	18	100.1	12	100.0	13	100.1	15	100.0					
Average number of children	2.	3	6.0		4	. 4	3.4						