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AN ANALYSIS OF MARITAL STATUS, EDUCATION, ETHNIC, RELIGIOUS AND OCCUPATIONAL COMPOSITION

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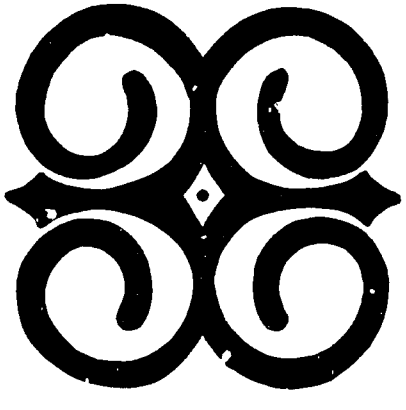

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AN ANALYSIS OF MARITAL STATUS, EDUCATION, ETHNIC, RELIGIOUS AND OCCUPATIONAL COMPOSITION

Monograph Series, Number 7

DANFA COMPREHENSIVE
RURAL HEALTH AND FAMILY PLANNING
PROJECT, GHANA

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The data appearing in this paper are preliminary. The paper may not be quoted in whole or in part or otherwise used except with the written permission of the project co-directors.

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FOREWORD

The Danfa Comprehensive Rural Health and Family Planning Project is a teaching, research, demonstration and service programme initially developed by the Department of Preventive and Social Medicine of the Ghana Medical School in 1965 and implemented under contractual agreement with the School of Public Health at the University of California, Los Angeles, and the Agency for International Development in 1970. The eight year project is closely associated with other Ghanaian agencies and institutions such as the Ministries of Health, Social Welfare, and Finance, the Ghana National Family Planning Programme, and other University of Ghana departments.

The Ghanaian institutions have primary authority and responsibility for project administration. Ghanaian staff are hired by the institutions at prevailing terms of employment. All service costs are borne by the Government of Ghana as well as some of the training and evaluative costs. UCLA/AID are responsible for most of the research costs.

The project includes a longitudinal study of approximately 50,000 rural inhabitants, 10-50 miles from Accra. The project area has been divided into four sub-areas to investigate alternative methods of delivering health and family planning services, summarised in the chart below.

	Service Provided			
Area	Comprehensive Health Care	Health Education	Family Planning	Standard Health Services
I	Yes	Yes	Yes	Yes (equivalent)
II	No	Yes	Yes	Yes
III	No	No	Yes	Yes
IV	No	No	No	Yes

One of the principal goals of the project is to provide information about project activities and findings to concerned agencies on an ongoing basis to assist in health planning. A project monograph series has been developed to aid in this information sharing process, and we hope that the data contained in these papers, although often preliminary in nature, will prove useful to those involved in the project and to others interested in obtaining current information on rural health projects in developing countries.

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The Basic Demographic Characteristics of the Danfa Project Areas--An Analysis of Marital Status, Education, Ethnic, Religious, and Occupational Composition

1. Introduction

The Danfa Rural Health and Family Planning Project is an experimental program designed to investigate the relationship between the provision, utilisation, and effectiveness of different levels of health services and the desire for, utilisation of, and effectiveness of family planning services in a rural Ghanaian population. Key parameters in the measurement of effect are demographic *per se* (e.g., age-specific fertility and mortality rates), and many of the action-oriented components of the Project, such as family planning services, maternal and child health services, and health education require detailed knowledge of demographic characteristics of the research population. Moreover, any attempt to understand the interactions of the many variables which affect the child-bearing behaviour of people must include an examination of the family unit itself. As a consequence of these requirements, the Danfa Project incorporates a strong ongoing demographic component. This paper reports on certain basic demographic characteristics of the population residing in the Danfa Project area.

The first paper on the demographic characteristics of the Danfa Project Area (Monograph 6) dealt exclusively with the size of the population and the age/sex composition of the population of the four project areas. The purpose of this report is to describe selected social and economic variables for marriage, education, ethnic, religious, and occupation characteristics of the population in these areas.

The study of these variables is important to provide a clear understanding of the complex inter-relationships operating within the project areas. Marital status is a demographic characteristic which involves biological, social, economic and legal as well as religious aspects of life. It is one of the most important factors in population dynamics as it affects fertility tremendously and mortality and migration to a lesser extent. It also affects other social and economic characteristics such as school attendance and labour force participation in the late adolescent and young age groups. Thus, marital status is recognised not only as a useful indicator of marital experience of the adult population, but also as a factor affecting other important aspects of demographic behaviour.

Education is another important demographic variable in analysing demographic behaviour. It is one of the social characteristics which is very useful in analyses relating to fertility, mortality and migration. The study of ethnic composition is also relevant in the Ghanaian setting. It is well known that there are physical, cultural, linguistic and other differences among various large groups of persons that are relatively persistent over time. These groups are often of interest to research workers because they have different geographic distributions and different demographic characteristics. Several studies in Ghana have shown that there are substantial fertility differentials among ethnic groups and that migration patterns are also different for the various ethnic groups. (Gaisie, 1968, Caldwell, 1968). Large differences in the vital events rates of certain ethnic groups may be a result of group differences in socioeconomic status and differences in infant mortality may reflect major differences in level of living or the education of parents.

2. Marital Conditions (Table 1, Figures 1-5)

As we go from the more biological characteristics of the individual such as sex, age, ethnic group to those characteristics involving social or economic relationships with other individuals, organisations and institutions, the problems of definition become more complex because these relationships are affected by and are often subject to control by customs and laws that vary from one area to another. In most African cultures marriage has a definite meaning, but as pointed out earlier, it is difficult to define. One finds a whole range of marital situations varying both in their degree of permanence and in their relationship to law, religion and custom.

Radcliffe Brown states (1950)..."marriage is a developing process...." and there are often several stages between preliminary rites and full recognition of the couple as a social unit. There are thus not only several kinds of unions, but each type may pass through several stages before it is completed. The multiplicity of marital categories distinguished by variable conditions poses a dilemma for enumerators throughout Africa. As with marriage, the definitions of widowhood and divorce are also beset with difficulties. Divorce/separation covers an array of situations ranging from protracted grass-widowhood to divorce by court decisions. Definitions of widowhood are subject to uncertainties and difficulties because in Africa the death of the husband does not often sever the ties between the two kinship groups involved.

In spite of these difficulties, the baseline enumeration of the project collected information about four types of marital status: married; the never married; widowed; and divorced/separated. The most important of these, marriage, included both formal and consensual unions. Response to questions about marital status may vary between spouse and respondent--vigorous probing

Table 1A

Marital Status According to Age/Sex by Areas (Percentages) AREA I

Age Group	Total Number-Males	Male Marital Status (percentages)					Total Number-Females	Female Marital Status (percentages)				
		Never Married	Presently Married	Widowed	Divorced/ Separated	Total		Never Married	Presently Married	Widowed	Divorced/ Separated	Total
10-14	954	100.0	0.0	0.0	0.0	100.0	794	99.7	0.4	0.0	0.0	100.0
15-19	566	100.0	0.0	0.0	0.0	100.0	499	73.6	23.9	0.0	2.5	100.0
20-24	334	83.0	15.6	0.3	1.2	100.1	408	18.4	75.0	0.3	6.4	100.1
25-29	301	42.6	54.5	0.4	2.5	100.0	313	5.1	90.1	0.4	4.5	100.1
30-34	295	25.5	67.2	0.4	7.0	100.1	322	1.3	92.2	1.0	5.6	100.1
35-39	262	10.0	74.5	0.8	14.7	100.0	272	1.2	90.1	1.5	7.3	100.1
40-44	223	8.6	81.5	1.8	8.1	100.0	257	0.8	91.1	2.0	6.2	100.1
45-49	230	5.7	80.0	2.2	12.2	100.1	224	0.0	82.2	7.2	10.7	100.1
50-54	218	4.2	78.9	2.3	14.7	100.1	231	0.5	77.5	11.5	10.4	100.1
55-59	156	2.0	80.2	3.9	14.1	100.1	132	0.8	69.0	21.2	9.1	100.1
60-64	156	1.3	71.8	6.5	20.5	100.1	159	0.0	61.1	27.6	11.4	100.1
65 +	403	1.2	75.4	11.2	12.2	100.0	288	0.0	34.0	58.7	7.3	100.0
ALL	4,098	50.6	41.2	2.0	6.2	100.0	3,899	32.3	54.8	7.6	5.3	100.0

Table 1B

Marital Status According to Age/Sex by Areas (Percentages) Area II

Age Group	Total Number-Males	Male Marital Status (percentages)					Total Number-Females	Female Marital Status (percentages)				
		Never Married	Presently Married	Widowed	Divorced/ Separated	Total		Never Married	Presently Married	Widowed	Divorced/ Separated	Total
10-14	685	99.6	0.4	0.0	0.0	100.0	569	99.9	0.2	0.0	0.0	100.1
15-19	492	99.3	0.7	0.0	0.0	100.0	421	71.3	27.1	0.0	1.7	100.1
20-24	361	79.2	20.0	0.0	0.9	100.1	417	14.0	81.3	1.2	3.6	100.1
25-29	312	41.3	56.1	0.4	2.3	100.1	322	1.8	93.5	0.7	4.1	100.1
30-34	282	18.1	74.2	1.5	6.3	100.1	345	0.0	95.4	0.6	4.0	100.0
35-39	240	13.3	77.1	0.5	9.1	100.0	233	0.5	93.1	1.3	5.1	100.0
40-44	202	11.3	79.3	1.0	8.4	100.0	254	0.4	91.8	3.2	4.7	100.1
45-49	236	6.4	83.5	2.1	8.0	100.0	206	0.5	85.5	6.3	7.7	100.0
50-54	214	2.8	83.3	4.2	10.8	100.1	232	0.5	77.2	12.0	10.3	100.0
55-59	128	2.4	80.5	1.6	15.6	100.1	148	1.4	73.0	16.8	8.8	100.0
60-64	132	3.8	74.3	10.6	11.3	100.0	115	0.9	50.5	41.7	7.0	100.1
65 +	316	1.9	70.3	12.0	15.8	100.0	276	0.0	27.5	64.2	8.3	100.0
ALL	3,573	47.6	44.8	2.1	5.4	99.9	3,538	26.5	60.2	8.9	4.4	100.0

Table 1C

Marital Status According to Age/Sex by Areas (Percentages) Area III

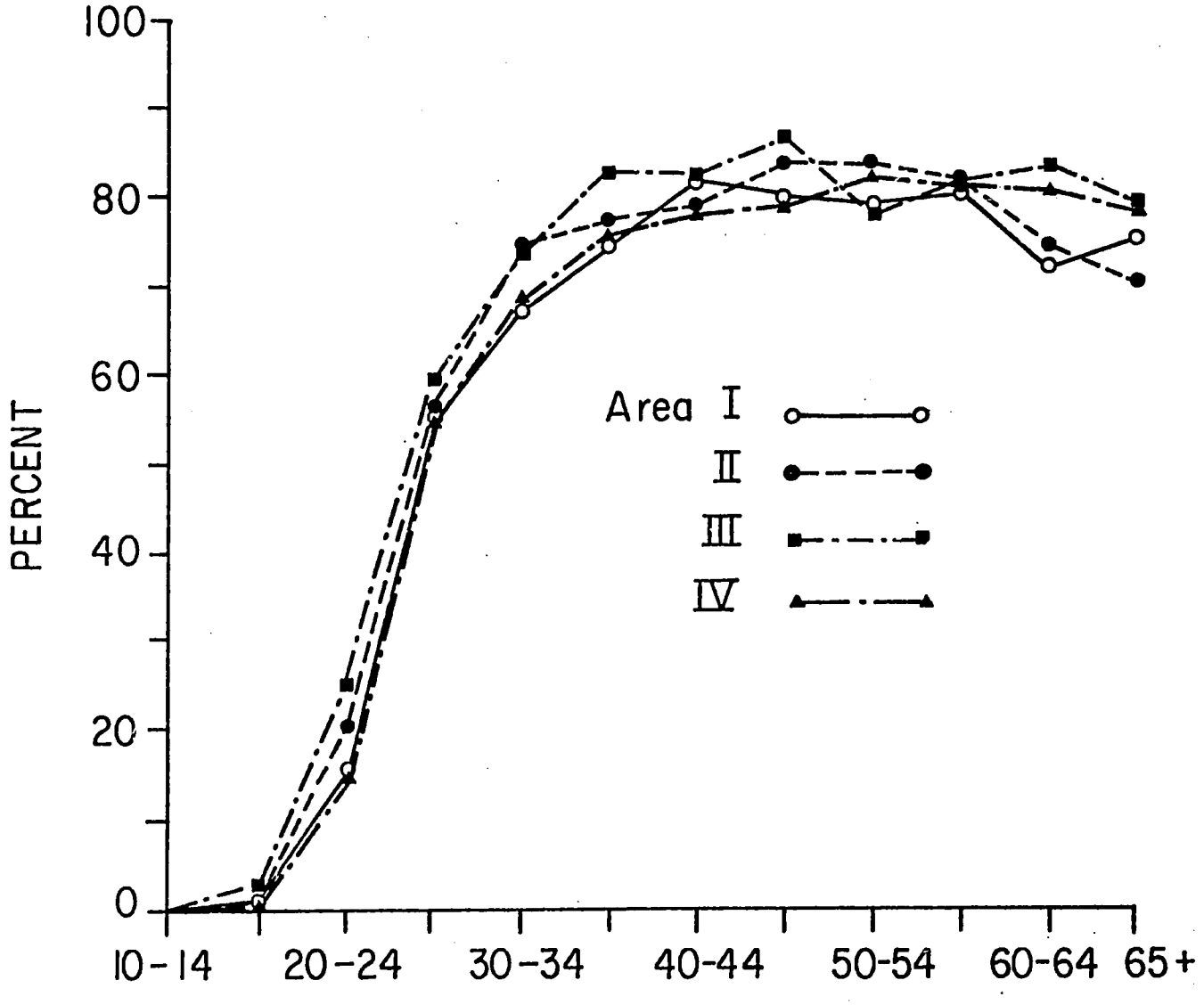
Age Group	Total Number-Males	Male Marital Status (percentages)					Total Number-Females	Female Marital Status (percentages)				
		Never Married	Presently Married	Widowed	Divorced/ Separated	Total		Never Married	Presently Married	Widowed	Divorced/ Separated	Total
10-14	851	100.0	0.0	0.0	0.0	100.0	699	99.8	0.3	0.0	0.0	100.1
15-19	568	97.5	2.3	0.0	0.1	100.0	589	66.0	32.1	0.4	1.5	100.0
20-24	458	73.7	25.2	0.3	0.9	100.1	594	10.5	85.5	0.4	3.7	100.1
25-29	353	36.5	59.5	0.9	3.2	100.1	534	1.2	97.2	0.4	1.3	100.1
30-34	386	19.0	73.5	0.8	6.7	100.0	406	0.5	93.6	1.3	4.6	100.1
35-39	300	8.7	83.0	1.4	7.0	100.1	332	0.0	94.0	1.9	4.2	100.1
40-44	250	6.8	82.8	2.4	8.0	100.0	266	0.4	90.3	4.5	4.8	100.0
45-49	253	6.0	86.6	2.4	5.1	100.1	292	0.4	86.4	6.5	6.8	100.1
50-54	214	3.7	78.1	3.7	14.5	100.0	269	0.4	82.2	11.8	5.6	100.0
55-59	146	1.4	81.6	4.8	12.3	100.1	154	0.0	74.1	18.8	7.1	100.0
60-64	146	0.7	83.5	4.2	11.6	100.0	142	0.0	57.9	31.6	10.5	100.0
65 +	317	1.3	79.8	10.7	8.2	100.0	260	0.0	31.9	58.9	9.2	100.0
ALL	4,242	47.7	46.1	1.8	4.4	100.0	4,537	25.6	63.9	6.8	3.8	100.0

Table 1D

Marital Status According to Age/Sex by Areas (Percentages) Area IV

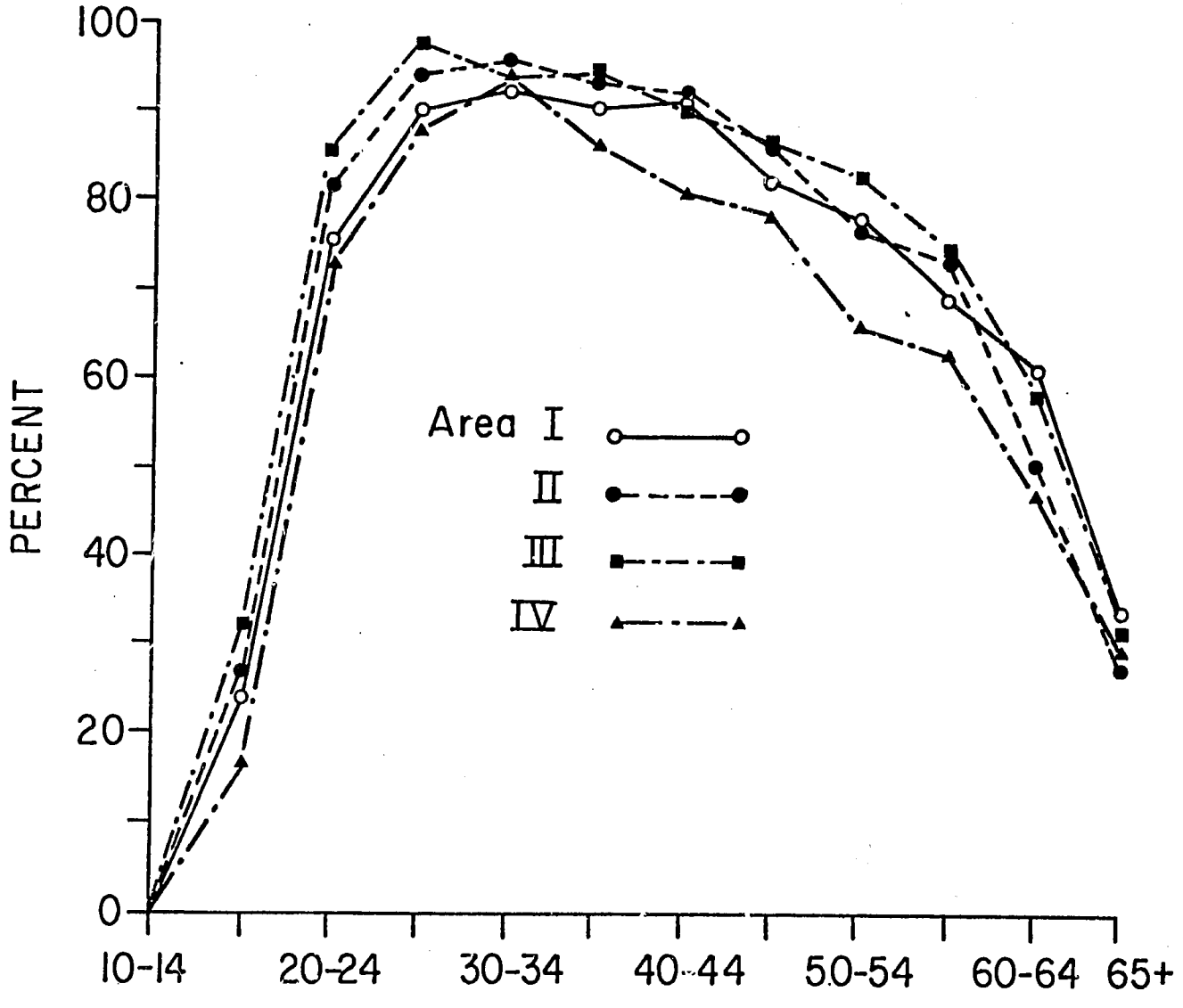
Age Group	Total Number- Males	Male Marital Status (percentages)					Total Number- Females	Female Marital Status (percentages)				
		Never Married	Presently Married	Widowed	Divorced/ Separated	Total		Never Married	Presently Married	Widowed	Divorced/ Separated	Total
10-14	937	99.9	0.1	0.0	0.0	100.0	886	99.7	0.3	0.0	0.0	100.0
15-19	761	94.9	0.7	0.0	0.0	100.1	583	81.0	16.5	0.0	2.6	100.1
20-24	435	83.3	15.6	0.0	1.1	100.0	572	17.7	73.0	0.7	8.7	100.1
25-29	330	38.2	55.4	0.0	6.4	100.0	418	2.4	87.7	1.0	8.9	100.0
30-34	372	22.1	68.2	0.9	8.9	100.1	401	1.0	92.3	1.5	5.2	100.0
35-39	280	15.4	74.3	1.0	9.3	100.0	302	0.7	85.5	4.4	9.7	100.1
40-44	249	9.6	78.4	1.6	10.5	100.1	278	0.4	80.6	5.4	13.6	100.0
45-49	265	7.0	78.6	1.9	12.5	100.0	242	0.0	78.1	7.5	14.5	100.1
50-54	199	3.5	82.0	3.1	11.5	100.1	298	0.7	65.5	16.7	17.2	100.1
55-59	130	0.8	80.0	3.9	15.3	100.0	152	0.0	62.5	23.7	13.8	100.0
60-64	165	1.9	80.7	4.3	13.3	100.0	159	0.0	47.1	36.5	15.7	100.1
65 +	292	1.4	78.7	8.2	11.6	100.0	289	0.0	29.4	59.5	11.1	100.0
ALL	4,365	54.0	39.2	1.3	5.5	100.0	4,580	32.2	51.8	8.2	7.8	100.0

Figure 1A



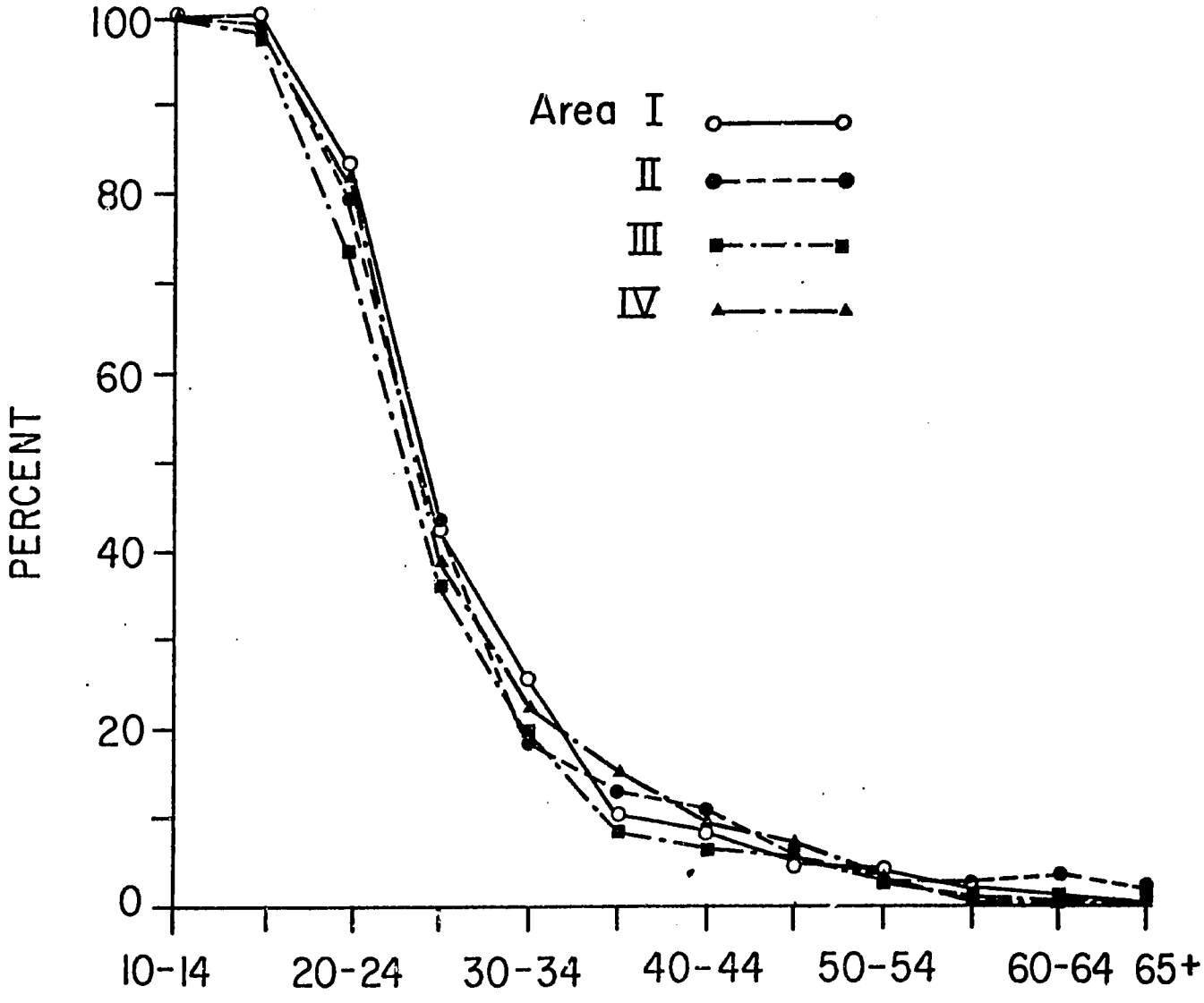
PERCENT DISTRIBUTION
OF MARRIED MALES BY AGE GROUP AND PROJECT AREA

Figure 1B



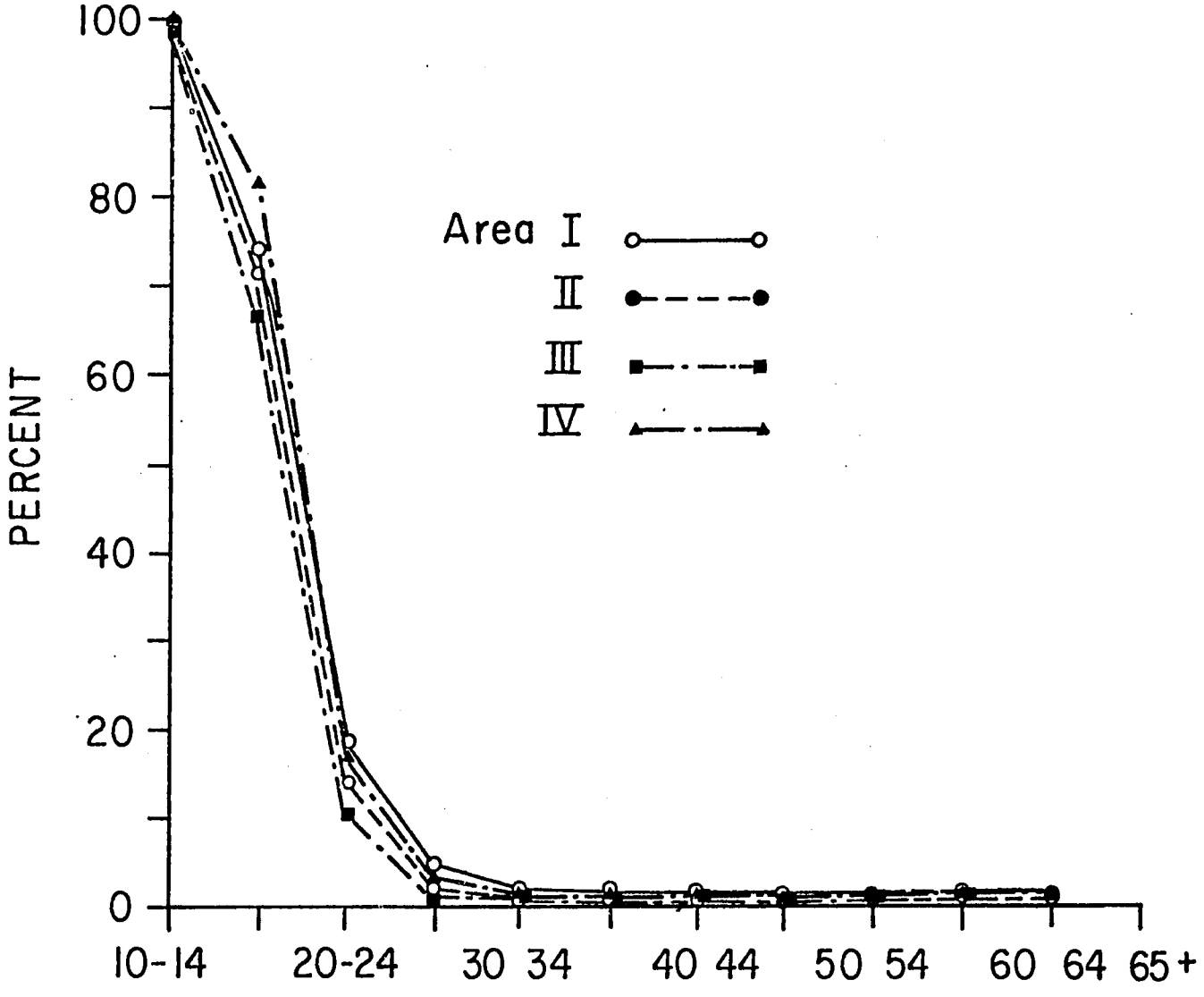
PERCENT DISTRIBUTION
OF MARRIED FEMALES BY AGE GROUP AND PROJECT AREA

Figure 2A



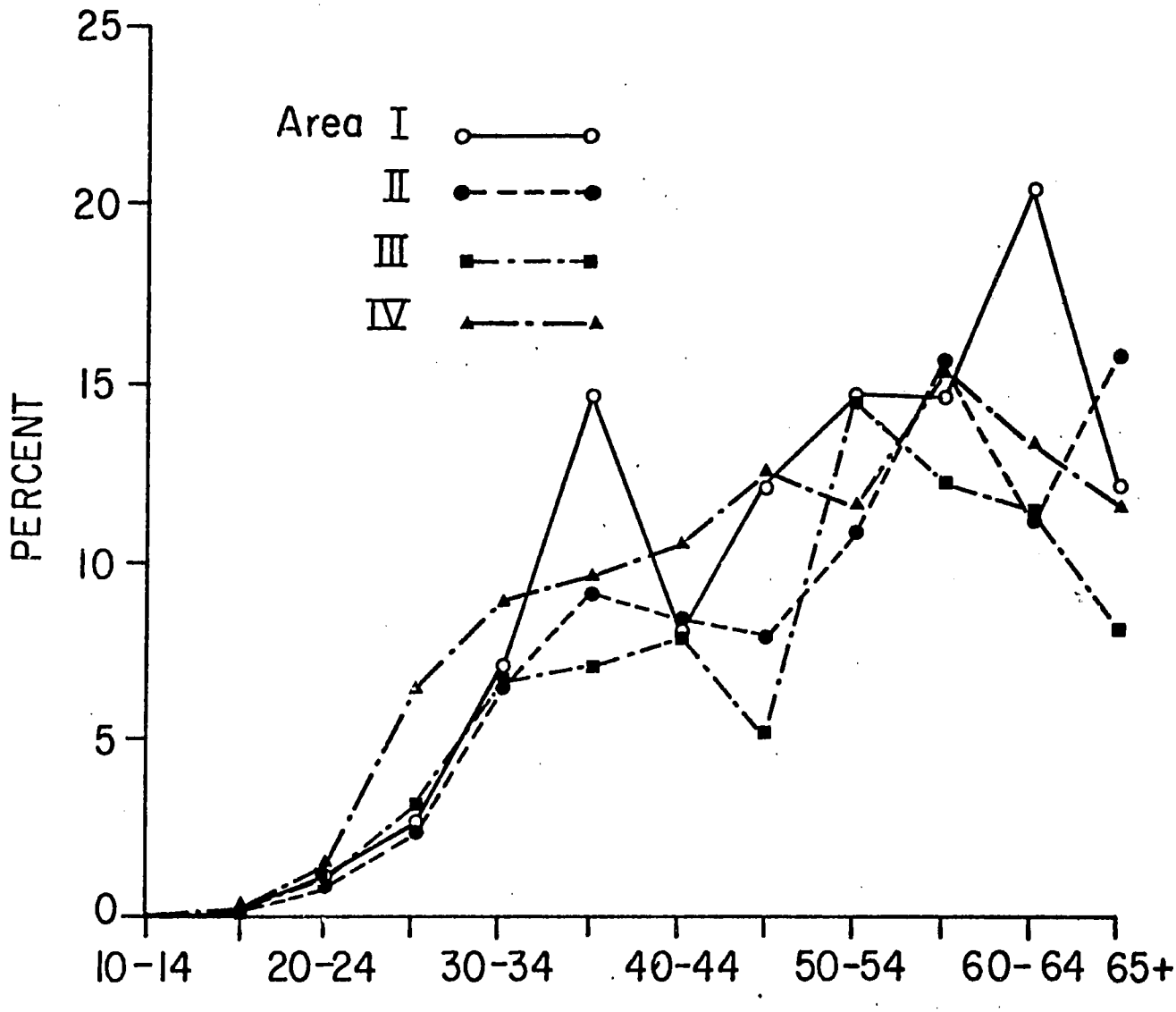
PERCENT DISTRIBUTION
OF NEVER MARRIED MALES BY AGE GROUP AND AREA

Figure 2B



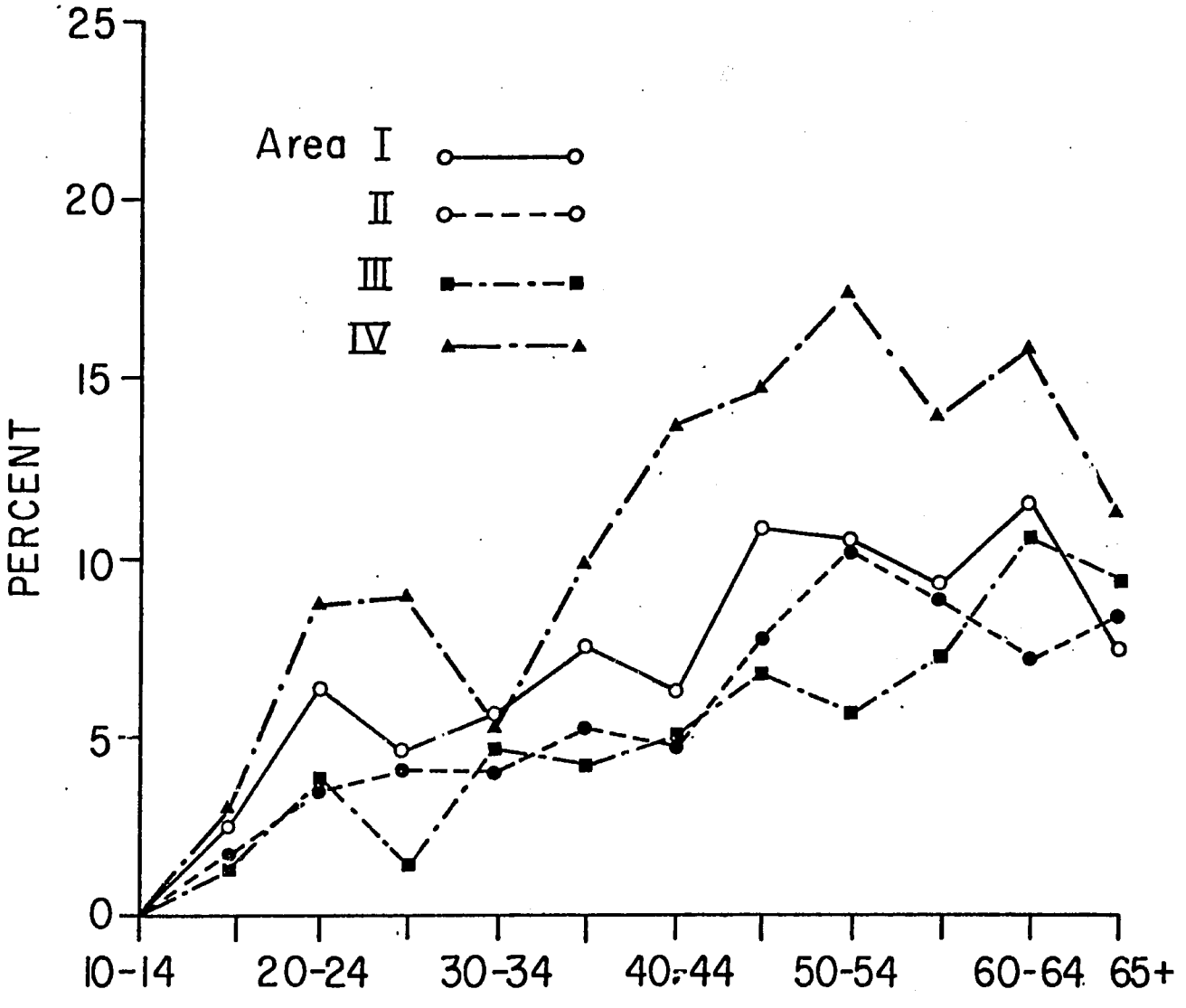
PERCENT DISTRIBUTION
OF NEVER MARRIED FEMALES BY AGE GROUP AND AREA

Figure 3A



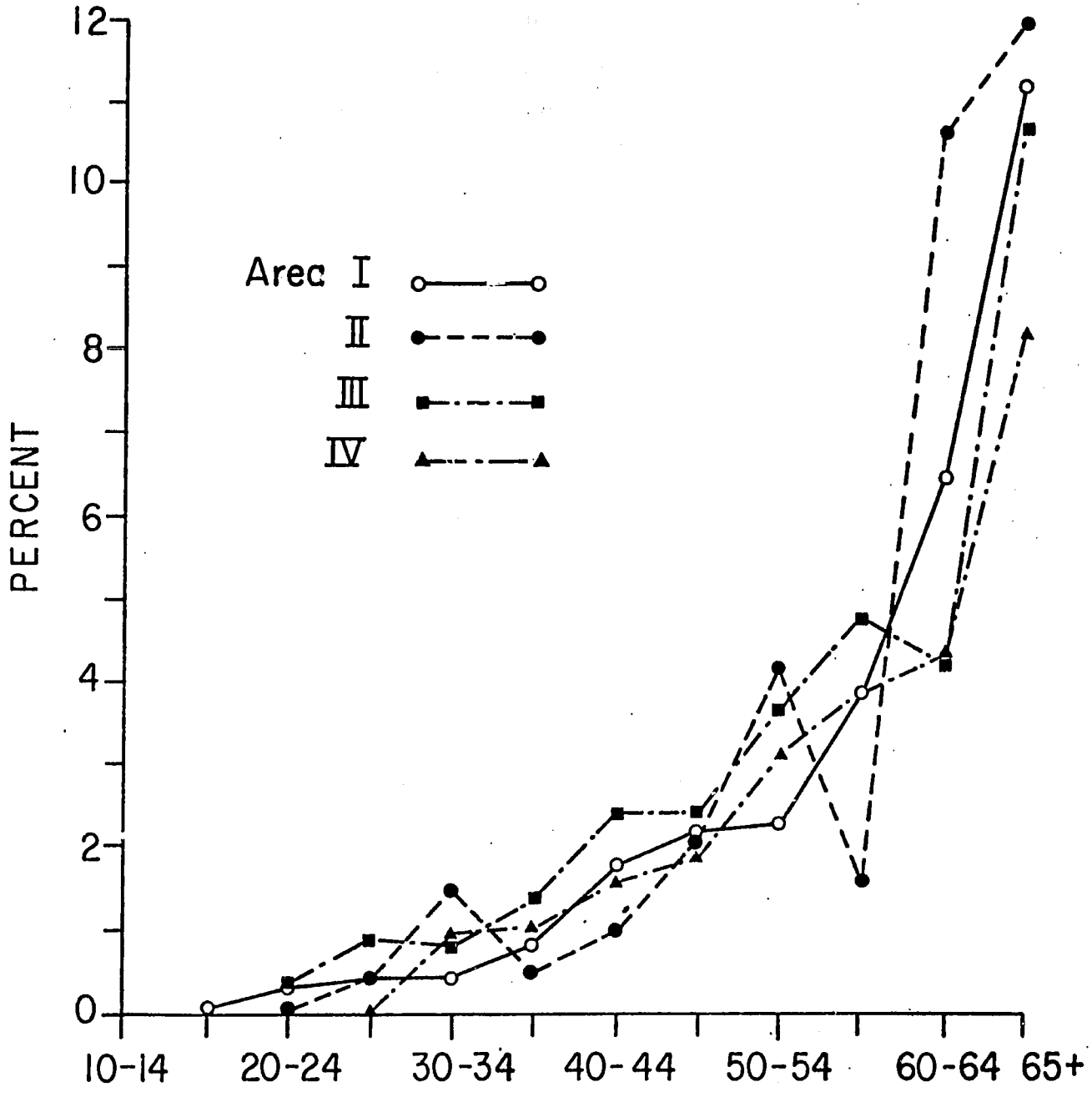
PERCENT DISTRIBUTION OF DIVORCED / SEPARATED MALES BY AGE GROUP AND PROJECT AREA

Figure 3B



PERCENT DISTRIBUTION
OF DIVORCED/ SEPARATED FEMALES BY AGE GROUP AND PROJECT AREA

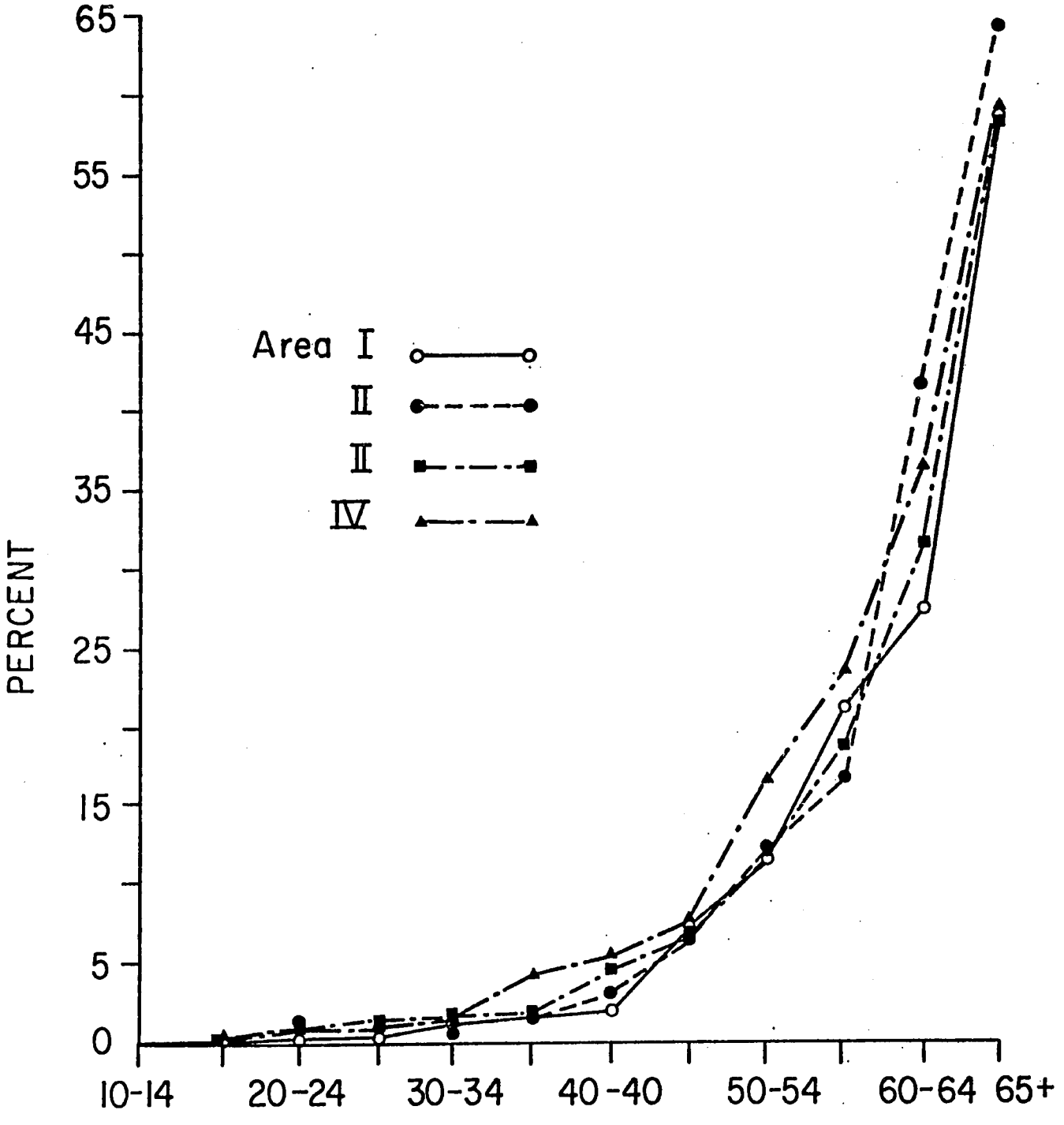
Figure 4A



PERCENT DISTRIBUTION
OF WIDOWED MALES BY AGE GROUP AND AREA

N.B. The y-axis in Fig. 4A is over a lower percent range than used in Fig. 4B.

Figure 4B



PERCENT DISTRIBUTION
OF WIDOWED FEMALES BY AGE GROUP AND AREA

of their answers might cause offence. Therefore, the technique used was to allow the respondent to select the marital status appropriate to his or her status. The analysis of marriages by status categories for the four areas is presented in Tables 1A to 1D.

3. Proportions Married, Single and Divorced/Separated

From the demographic point of view, the level and future course of marriage rates are most important in relation to their influence on fertility. Indeed, it is impossible to separate fertility rates from the age and marriage duration structure of the population of married women supporting these rates. Fertility, therefore, must always be considered against the marriage experience. In general, higher marriage rates, especially at younger ages, tend to imply higher fertility, simply because more married women are exposed to the risk of conception for longer periods.

Tables 1A to 1D show the proporations married, single, widowed, divorced-separated. The series of marriages by ages of women reached its maximum around the later parts of the childbearing ages. The small number of current marriages reported by the older women might be due to an increasing instability of marriages, but more probably is a reflection of bias in age reporting which tends to be increasingly inaccurate at older ages. Where death rates are high, mortality among husbands is more important in accounting for the disruption of marriages than even high divorce/separation rates. The proportions of never-married drops precipitously by the age of 35 for men and by age 25 for females and becomes even negligible in these cases of females by age 40. The most striking conclusion one can draw from this is that nearly all women eventually marry by the age of 40 in these areas.

The proportions widowed and divorced are also shown in the tables on marital status. These proportions are small, at least during the reproductive years. Since the death toll is known to be heavy and marriage instability is evident in many ethnic groups, rates of remarriage must generally be high. The proportions widowed increases sharply at ages over 45 among women. The most remarkable feature of the tables is that there is a continuous increase for both sexes in the proportions of widowed persons with age but that the proportions divorced does not usually show any appreciable trend. It may be noted that, although mortality of both husbands and wives increases with age, changes in the proportion of widowed persons of either sex, at any given moment, is dependent on the rate of remarriage.

Many studies on marriage in Africa show that men at all ages and women of reproductive age remarry rapidly rather than remaining in the divorced-separated or widowed categories. Remarriage of women over 40 is rather infrequent in most African populations. A study in depth of the demographic aspects of marital status calls for data on several closely related variables. These variables provide information on the circumstances surrounding entry into or exit from a given marital status. For example, the potential to analyse marriage patterns in the project areas would have been increased had baseline registration data been collected on monogamous and polygamous marriages, the number of wives, and the number of children born to each of these wives.

4. Age at First Marriage in the Study Population (Table 2)

The age at first marriage is a major factor in the length of the reproductive period during which a woman is exposed to the risk of pregnancy.

The age at which men and women first marry, the forms that marital unions take, and the prevalence of polygamy, divorce and separation all have a bearing upon the number of children ever born. Table 2 provides the singulate mean age at marriage for males and females as devised by Hajnal (1953).

Table 2

Singulate Mean Age at Marriage by Sex & Areas

AREA	M	F	M + F
I	27.6	19.9	23.7
II	27.4	19.3	23.4
III	26.3	18.8	22.6
IV	27.6	20.1	23.9

Table 2 shows these singulate mean ages at marriage for males and females for the various areas in the project. The data describing single persons are available in Tables 1A to 1D for the comprehensive type population (all persons physically present at the time of survey plus all those usually resident but temporarily away). The singulate mean age at marriage is sensitive to biases in age-reporting that one expects in illiterate societies as well as selective omission or over-reporting of marital status. Two types of errors in the data could cause differences in the singulate mean age of marriage--(1) errors in classification according to marital status and (2) errors in age-reporting. The first type of error is limited to the classification single and ever married. This problem occurs in cases where girls under age 15 would be systematically classified as single even though they are

married. Errors in the reporting of marital status are probably not sufficiently important to affect the singulate mean age at marriage strongly.

It has been shown in several studies (e.g., Van de Walle, 1968) that ages have usually been particularly mis-reported around the age of marriage in practically every African census/survey. The various measurement of age at marriage are without any doubt affected by various biases, but they all point towards a relatively high age at marriage for males. Age at marriage for each sex in the project areas, however, does not vary widely from area to area and the differences between the sexes are almost the same.

It is interesting to note that Area III has the lowest mean age at marriage for both males and females. Area III is more likely to have a higher fertility compared to the other areas. If all other things are equal, an earlier age at marriage for females would result in a larger completed family because younger wives are subjected to the risks of conception during a longer part of their fecund life. There may be social or physiological mechanisms that reduce the subsequent fertility of women who marry early or enhance it for those who marry late. We must note, however, that the difficulty in evaluating the possible influence of age at marriage on fertility in Africa is increased by biases in age reporting associated with marital status.

5. Educational Characteristics (Table 3, Figure 6)

In the baseline registration survey, data were collected on education for persons aged six years and over. The information includes literacy, school attendance and level of education attained. The basic data were tabulated according to persons who have never been to school, are currently

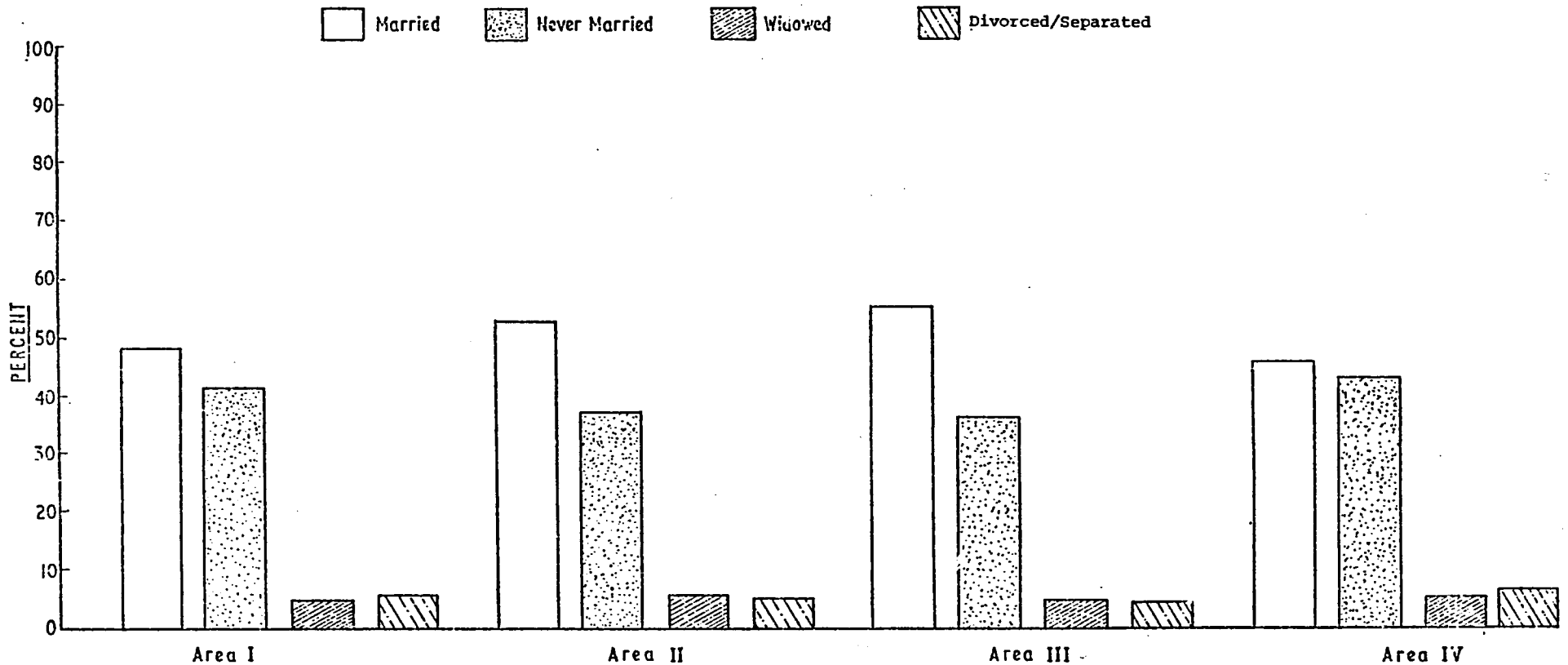


Figure 5

PERCENT DISTRIBUTION OF INDIVIDUALS IN AREAS I TO IV ACCORDING TO MARITAL STATUS (32,832 PERSONS AGED 10 AND ABOVE)

Table 3

Percentage Distribution of Individuals in Areas I, II, III, and IV

According to Current and Past Enrollment and Level Attained

Grade Completed	Area I			Area II			Area III			Area IV		
	M	F	M+F	M	F	M+F	M	F	M+F	M	F	M+F
1. Never Attended School But												
(i) Can Read	3.2	1.1	2.2	1.9	0.7	1.3	1.4	0.2	0.8	1.4	0.3	0.8
(ii) Cannot Read	25.3	40.9	32.9	30.2	53.9	42.0	45.9	63.3	54.6	24.8	43.9	34.4
Sub-total	28.5	42.0	35.1	32.1	54.6	43.3	47.3	65.5	55.4	26.2	44.2	35.2
2. Current Enrollment												
(i) Attending School now and can read:												
Primary (1,2,3,4,5, or 6)	16.3	12.8	14.6	10.5	5.7	8.1	6.6	2.7	4.6	12.8	9.1	10.9
Middle (1,2,3,4,7)	8.4	5.7	7.1	6.5	3.1	4.8	4.6	1.5	3.1	8.8	5.5	7.0
Secondary or Higher	1.0	0.4	0.7	1.5	0.4	0.9	0.1	0.0	0.1	0.4	0.2	0.3
(ii) Attending School now and cannot read.	4.8	4.2	4.5	5.7	3.6	4.6	3.9	1.5	2.7	5.9	5.5	5.7
Sub-total	30.5	23.1	26.9	24.2	12.8	18.4	15.2	5.7	10.5	27.9	20.3	23.9
3. Past Enrollment												
(i) Attended School in the past and can read:												
Primary (1,2,3,4,5, or 6)	5.4	5.5	5.5	3.6	2.2	2.9	3.5	1.5	2.5	5.2	4.3	4.7
Middle (1,2,3,4)	10.9	5.9	8.5	13.0	4.2	8.6	5.5	1.5	3.5	13.7	6.8	10.3
Secondary or Higher	3.5	0.9	2.2	2.7	0.6	1.7	0.9	0.0	0.5	2.3	0.4	1.4
(ii) Attended School in the past and cannot read.	1.7	2.4	2.1	3.3	3.5	3.4	4.3	3.8	4.0	3.0	3.5	3.3
Sub-total	21.5	14.7	18.3	22.6	10.5	16.6	14.2	6.8	10.5	24.2	15.0	19.7
SUB-TOTAL ALL	80.5	79.8	80.3	78.9	77.9	78.3	76.7	76.0	76.4	78.3	79.5	78.8
Not Applicable (Infant/Pre-School)	19.4	20.1	19.7	21.0	22.1	21.6	23.2	24.0	23.6	21.7	20.5	21.1
TOTAL: Percentage	99.9	99.9	100.0	99.9	100.0	99.9	99.9	100.0	100.0	100.0	100.0	99.0
TOTAL: Number	6,114	5,845	11,959	5,375	5,306	10,681	6,755	7,058	13,813	6,762	6,912	13,674

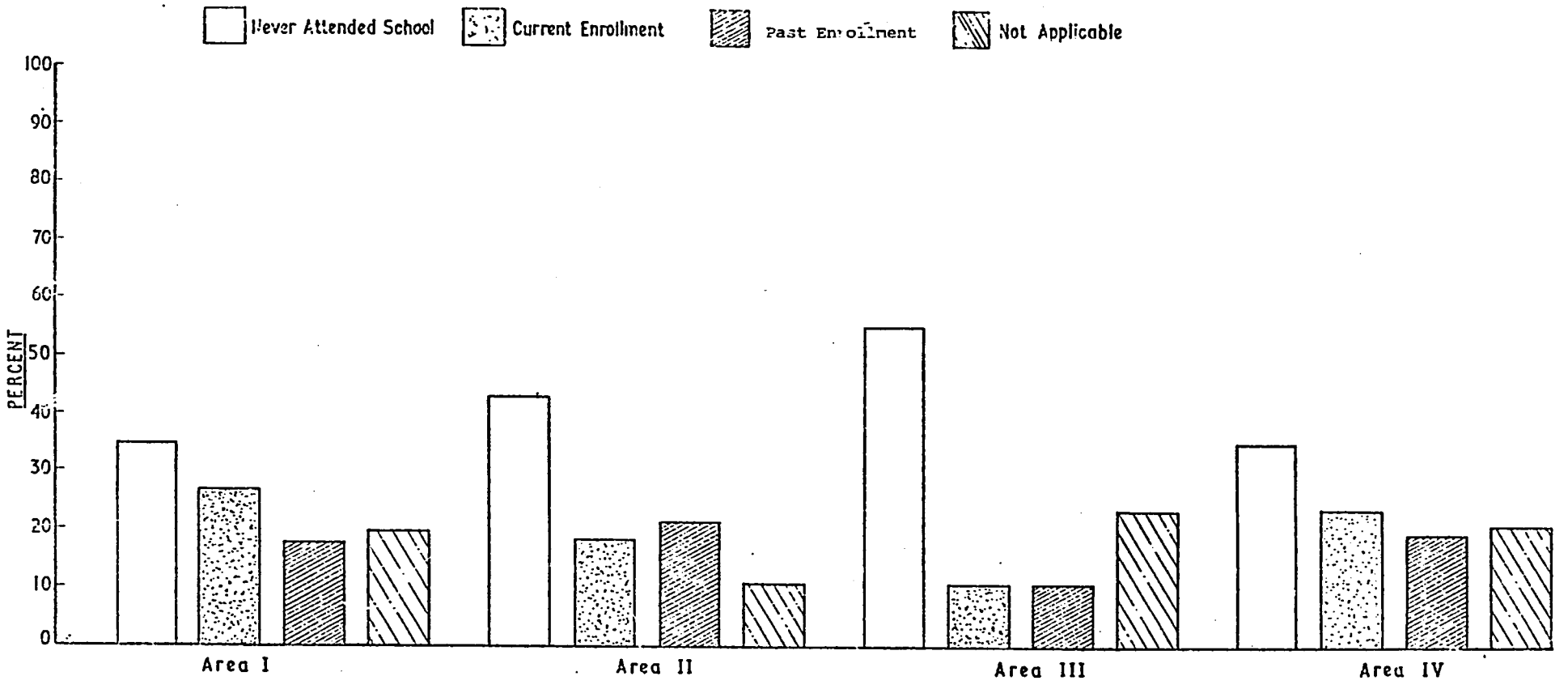


Figure 6 PERCENTAGE DISTRIBUTION OF INDIVIDUALS IN AREAS I TO IV ACCORDING TO CURRENT AND PAST ENROLLMENT AND LEVEL ATTAINED.

enrolled or previously attended school. For those who have never been to school, a distinction was made between those who can read and those who cannot read. Currently enrolled students are grouped for level and grade and by ability to read. The same classifications are used for the past enrollment where the data were divided into those who attended school in the past and can read by level and grade and those who attended school in the past but cannot read. The precentage distributions are shown for the comprehensive population only.

The percentage distributions show some interesting features on the literacy, the pattern and level of education from one project area to another. The following striking points can be noted:

(i) On the whole, the percentages enumerated and classified by education characteristics varies from 76.4% in Area III to 80.3% in Area I of the total population. Those enumerated as infants and pre-school children constitute about 20% with minor variations around this figure.

(ii) The percentages who have never been to school vary from 35.1% for Area I to 55.4% for Area III with generally higher percentages of female respondents claiming that they have never been to school.

(iii) A breakdown of this percentage according to those who can read and thosewho cannot read indicates that a large proportion among this group cannot read, with a sharp differential among the sexes for all areas.

(iv) Those who are currently enrolled and were at school at the time of the survey constituted varying proportions from one area to another (26.9% are currently enrolled in Area I, 18.4% in Area II, 10.5% in Area III and 23.9% in Area IV). There is, on the whole, a small group who, although currently

in school, claimed that they could not read. A further examination of the data reveals that the greater proportion of this number were in Primary I at the time of the survey.

(v) There is some sex-differential in the percentages enrolled in the various grades, although the differential is not as great as among those who have never been to school.

(vi) The past enrolled figures shown by levels indicate some considerable variation with percentages of past enrollment in Areas I, II, III and IV as follows: 18.3%, 16.6%, 10.5% and 19.7% respectively. As with current enrollment, there is a small percentage of the respondents who maintained that even though they had been to school in the past they could not read. Most of these persons had only been to Primary I and II in the past.

In summary, the percentages of the population who cannot read at the time of the survey including pre-school children are as follows: Area I, 59.2%, Area II, 71.6%, Area III, 84.9% and Area IV, 64.5%, indicating that the four areas are not homogeneous in terms of literacy level and education. It must be pointed out that questions on literacy have often been shown to give unreliable results. Many persons claim to be able to read and write when in fact they cannot. The questions are therefore of little use unless they are backed by a test, but such tests have rarely been administered and none was administered during our baseline survey. It is therefore not difficult to explain the anomalous situation in which some persons were currently at school in Primary II and yet claimed they could not read while others in Primary I stated they could read.

6. Ethnic and Religious Composition (Table 4, Figures 7-8)

During the baseline enumeration, the major ethnic groups were identified

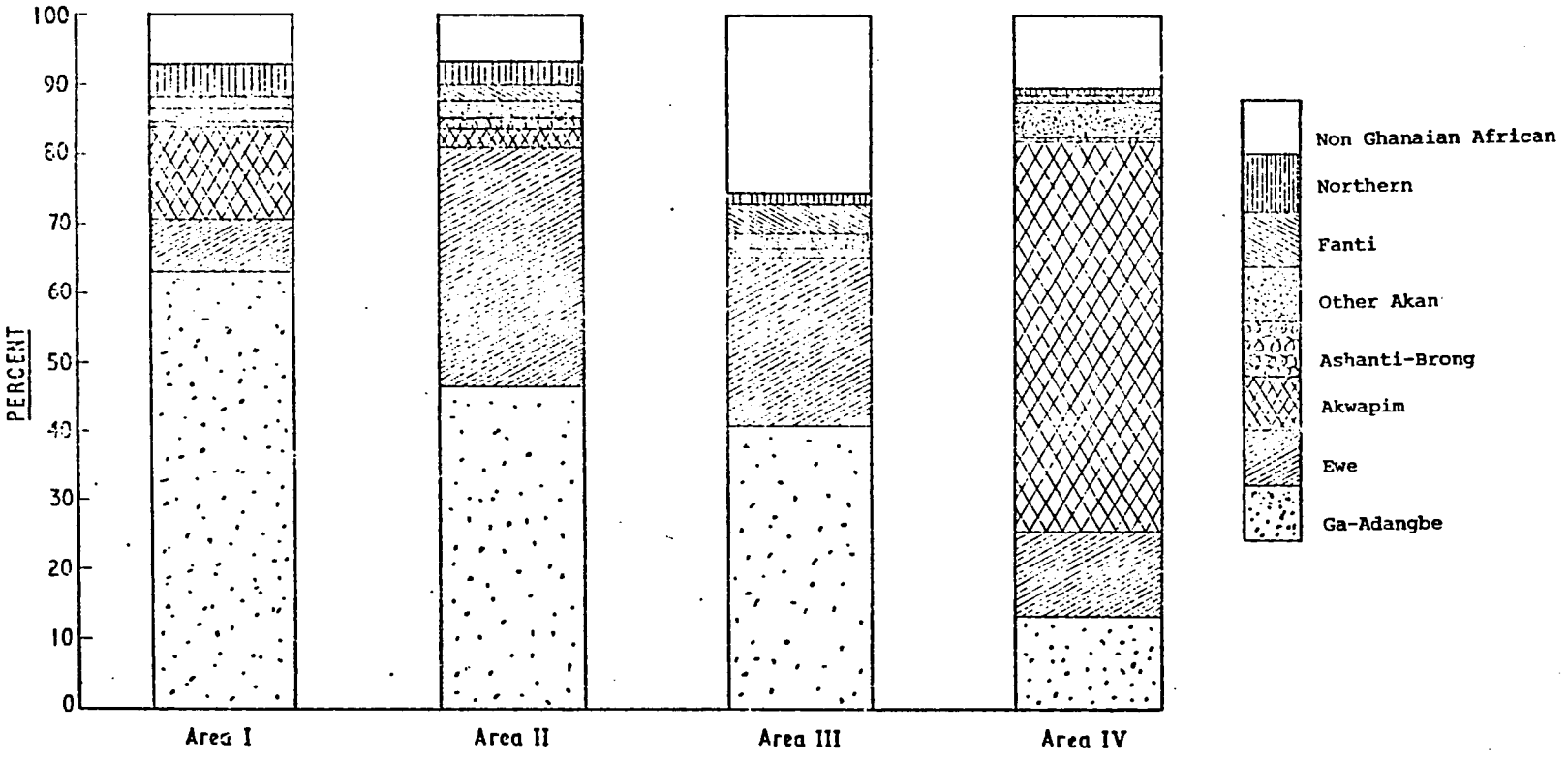


Figure 7 NUMBERS AND PERCENTAGE DISTRIBUTION OF PERSONS BY ETHNIC COMPOSITION, SEX, AND PROJECT AREAS

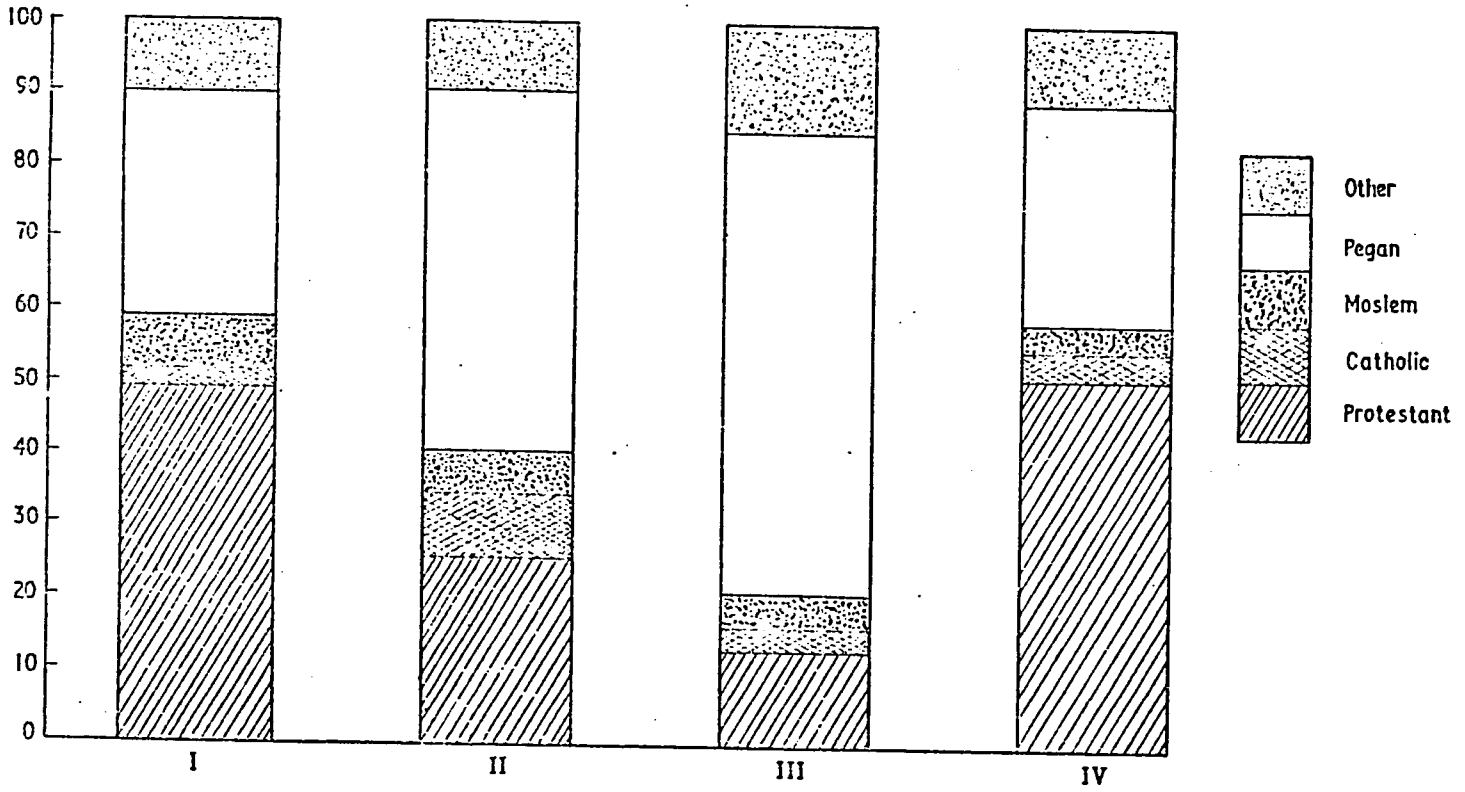


Figure 8 PERCENTAGE DISTRIBUTION OF PERSONS BY RELIGION AND PROJECT AREA.

Table 4

Numbers and Percentage Distribution of Persons by

Ethnic Composition, Sex and Project Area

Project Area	Sex	Nr. Pc.	Ga-Adangbe	Ewe	Akwapim	Ashanti	Other Akan	Fanti	Northern	Non-Ghanaian Africans	Non Africans	TOTAL
	Both Sexes	Nr.	7,458	881	1,620	78	196	209	640	877	0	11,959
		Pc.	62.4	7.4	13.6	0.7	1.6	1.8	5.4	7.3	0.0	100.1
I	Male	Nr.	3,846	464	704	51	106	110	373	460	0	6,114
		Pc.	62.9	7.6	11.5	0.8	1.7	1.8	6.1	7.5	0.0	99.9
	Female	Nr.	3,612	417	916	27	90	99	267	417	0	5,845
		Pc.	61.8	7.1	15.7	0.5	1.5	1.7	4.6	7.1	0.0	100.0
	Both Sexes	Nr.	4,957	3,691	289	160	267	257	307	746	6	10,681
		Pc.	46.4	34.6	2.7	1.5	2.5	2.4	2.9	7.0	0.1	100.1
II	Male	Nr.	2,405	1,889	155	83	142	130	160	410	1	5,375
		Pc.	44.7	35.2	2.9	1.5	2.6	2.4	3.0	7.6	0.1	99.9
	Female	Nr.	2,551	1,803	134	77	125	127	147	336	5	5,306
		Pc.	48.1	34.0	2.4	1.5	2.4	2.4	2.8	6.3	0.1	100.0
	Both Sexes	Nr.	5,601	3,403	92	70	294	612	210	3,534	0	13,816
		Pc.	40.5	24.6	0.7	0.5	2.1	4.4	1.5	25.6	0.0	99.9
III	Male	Nr.	2,673	1,639	43	43	141	266	123	1,830	0	6,758
		Pc.	39.6	24.3	0.6	0.6	2.1	3.9	1.8	27.1	0.0	100.0
	Female	Nr.	2,928	1,764	49	27	153	346	87	1,704	0	7,058
		Pc.	41.5	25.0	0.7	0.4	2.2	4.9	1.2	24.1	0.0	100.0
	Both Sexes	Nr.	1,868	1,615	7,682	126	678	182	153	1,387	0	13,691
		Pc.	13.6	11.8	56.1	0.9	5.0	1.3	1.1	10.1	0.0	99.9
IV	Male	Nr.	959	859	3,607	70	348	88	85	756	0	6,772
		Pc.	14.2	12.7	53.3	1.0	5.1	1.3	1.3	11.2	0.0	100.1
	Female	Nr.	908	756	4,075	56	330	94	68	631	0	6,918
		Pc.	13.1	10.9	58.9	0.8	4.8	1.4	1.0	9.1	0.0	100.0

and classified as shown in Table 4. In the classification of the main ethnic groups for the purposes of our analysis, we had to be content with much broader classifications than used elsewhere. The classification tends to be based on how members or groups identify themselves. This definition of ethnic group is perhaps more meaningful from the standpoint of demographic analysis than those defined by purely anthropometric criteria.

Table 4 shows the number and percentage distribution of persons by ethnic composition, sex and geographical areas. The dominant ethnic group in Areas I-III is Ga-Adangbe, while in Area IV the largest group is Akwapim. Since the traditional Ga villages are located on the coast in or near to Accra, considerable population movement to and from project Ga villages occurs. Such mobility presumably affects the knowledge, attitudes and patterns of life in rural communities. Although the Akwapim group has similar patterns of movement to their traditional communities in the Aburi-Larteh-Akropong districts at festival and holiday periods, they may have less exposure to highly urbanised communities.

Forty to fifty percent of Area II and III is comprised of Ewe or non-Ghanaian residents who have recently migrated into these areas. Such groups are probably less mobile than either the Ga-Adangbe or Akwapim groups because great distances are involved in returning to their original areas. In addition to external influences, immigrants have other characteristics which affect their fertility and health patterns, major concerns in the Danfa Project. Additional analysis is needed to learn if immigrants are characterised by younger age distribution, more rural background, lower proportions of extended families, higher proportion involved in farming, and less education when compared to more established long-time residents. Based on

experience during annual project census registration and health surveys, recent arrivals are less secure in their land tenure and are apt to receive fewer health services. Further studies are needed to correlate ethnicity and associated factors with fertility, behaviour patterns, and health status.

Demographers also use the Index of Dissimilarity (one half of the sum of absolute differences between the percentages falling into each group in the respective areas) to compare the percent distribution of ethnic groups of two or more areas. When this index is used in analysis of Area I-IV, the only significant pattern which emerges is that Area IV is very different from Areas I-III. The difference in interpretation of ethnic group distribution may serve to underline the limitations of the index when applied to rural African populations.

A further interesting point to note is that the ethnic composition of heads of households closely follows the ethnic composition pattern for the total population shown in Table 4 except for a few minor details.

Information sought from respondents regarding their religious status was classified according to the following groups: Protestants, Catholics, Moslems, Pagans or Others. Clearly the major religious groups in Area I are the Protestant group (48.8%) and the pagan group (31.0%) as shown in Table 5. These two groups constitute 79.8% of the total population in Area I. There are no great sex differentials when these numbers were examined by sex. In Area II, the same two groups constitute the major religious groups (Protestant, 25.8% and Pagans 50.1%) to form 75.9% of the total population in the area. In Area III and IV the same pattern emerged with the Protestant and Pagan groups forming about 77.4% of the total population in Area III and 81.6% in Area IV.

In Ghana, Christianity tends to be correlated with education (Caldwell, 1968). Since Areas II and III have 50-60% of their population practicing traditional (pagan) religions, there may be less likelihood of innovational behaviour than that found in more educated groups (Protestants constitute the majority in Areas I and IV). Furthermore, traditional customs and beliefs influence perceptions about disease and desirable action to alleviate symptoms when sick or to prevent the occurrence of disease. Additional analysis will be needed to determine if religion is a significant determinant in behaviour patterns and health status.

Another interesting feature on the data collected on religion is that members of a particular household usually follow the religion of the head of the household.

7. Occupational Status (Table 6, Figure 9)

Information was collected on the economically active population which comprises all persons of either sex who furnish the supply of labour for the production of goods and services, employed or unemployed. A one-month time reference period was used for this group as well as the non-economically active population which is comprised of students, homemakers, etc. Three major classifications were used: (1) economically active and employed, (2) economically active but unemployed, and (3) not economically active. Under the economically active and employed category, eight sub-divisions were identified: Professional, Sub-Professional and Technical grades; Administrative-Managers; Clerical, Salesworkers and Traders; Farmers, Quarrymen and Related Workers; Workers in Transport Occupations; Craftsmen, Process Workers and Labourers; and Service, Sport and Recreational Workers. A number of items fall under each of these categories. It may be argued that these classifications are too gross for any meaningful statistics to be obtained on employment status,

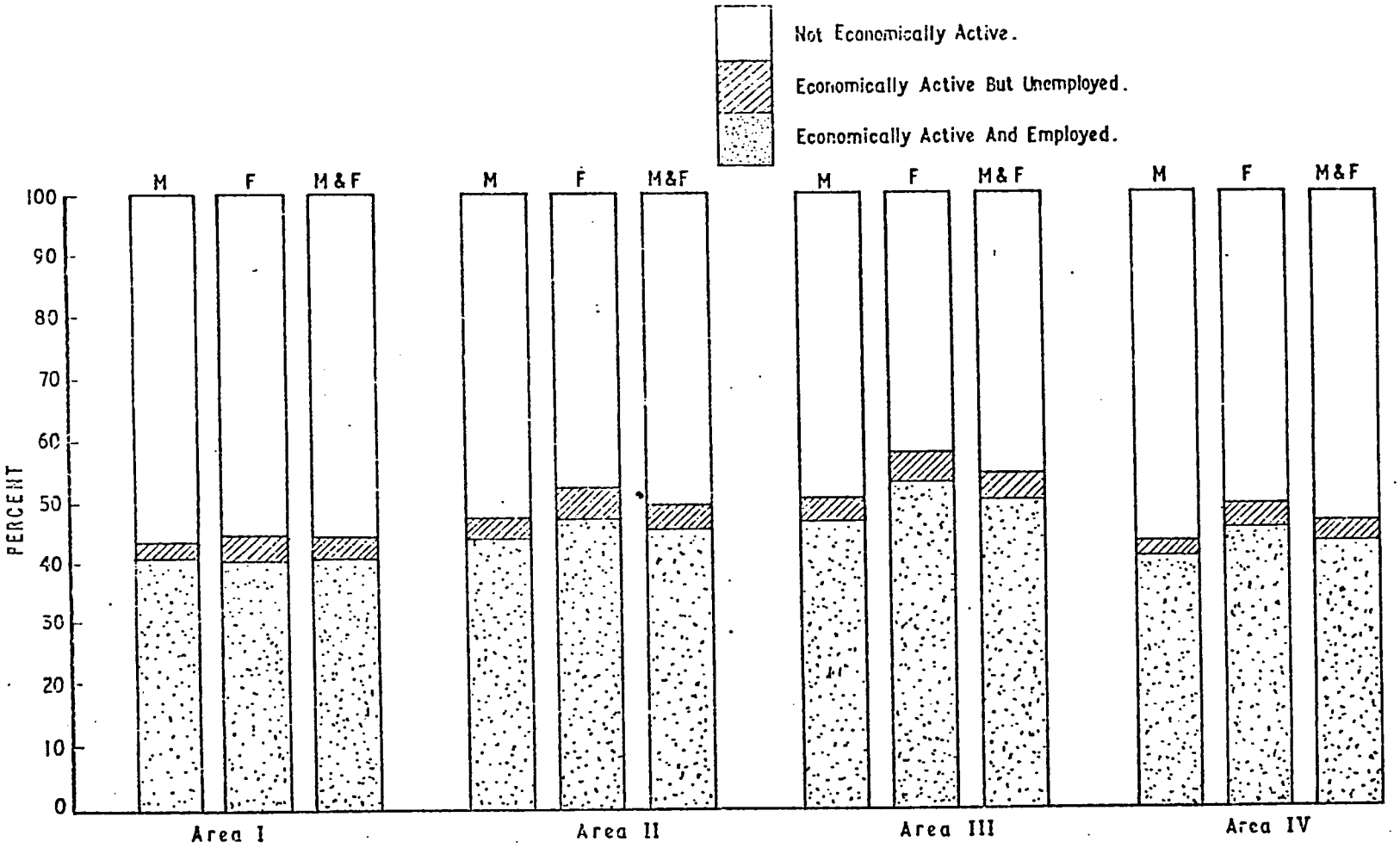


Figure 9 EMPLOYMENT STATUS OF INDIVIDUALS IN AREAS I, II, III, IV, ACCORDING TO STATED OCCUPATIONS BY SEX.

Table 5

Number and Percentage Distribution of Persons by Religion, Sex and Project Area

Project Area	Sex	Nr. Pc.	Protestant	Catholic	Moslem	Pagan	Other	TOTAL
	Both Sexes	Nr.	5,832	451	760	3,708	1,208	11,959
		Pc.	48.8	3.8	6.4	31.0	10.0	100.0
I	Male	Nr.	3,012	275	416	1,858	553	6,114
		Pc.		4.5	6.8	0.4	9.0	100.0
	Female	Nr.	2,820	176	344	1,850	655	5,845
		Pc.	48.3	3.0	5.9	31.6	11.2	100.0
	Both Sexes	Nr.	2,755	928	645	5,351	999	10,681
		Pc.	25.8	8.7	6.0	50.1	9.4	100.0
II	Male	Nr.	1,474	548	368	2,519	467	5,376
		Pc.	27.4	10.2	6.9	46.9	8.6	100.0
	Female	Nr.	1,279	380	277	2,832	533	5,305
		Pc.	24.1	7.2	5.2	53.4	10.1	100.1
	Both Sexes	Nr.	1,780	459	638	8,863	2,076	13,816
		Pc.	12.9	4.3	4.6	64.2	15.0	100.0
III	Male	Nr.	964	269	384	4,265	876	6,758
		Pc.	14.3	4.0	5.7	63.1	12.9	100.0
	Female	Nr.	816	190	254	4,598	1,200	7,058
		Pc.	11.6	2.7	3.6	65.2	17.0	100.1
	Both Sexes	Nr.	6,949	564	564	4,213	1,419	13,691
		Pc.	50.8	4.1	4.0	30.8	10.4	100.1
IV	Male	Nr.	3,458	332	309	2,065	608	6,772
		Pc.	51.1	4.9	4.6	30.5	8.9	100.0
	Female	Nr.	3,491	232	237	2,148	811	6,919
		Pc.	50.5	3.3	3.4	31.1	11.7	100.0

but it is worthy to point out that the concept of employment, unemployment and underemployment is perhaps one of the more difficult concepts to define and classify within a rural setting.

The other component of the economically active group--the unemployed--was divided into two parts (1) those unemployed voluntarily and (2) those looking for work unsuccessfully. This distinction is necessary because compiling all unemployed persons does not give an accurate picture of the unemployment problem at any given time.

Ten categories were identified under the "not economically active group" consisting of homemakers, students, disabled persons, etc. Specific classifications are shown in Table 6.

As indicated in Table 6, there is quite a substantial area differential for numbers of persons employed out of the total population in the four project areas. In Area I, 40.5% of the population are employed; in Area II, 45.7%; in Area III, 50.1% and Area IV, 43.2%. There are no substantial sex differentials in the percentages employed in each area. Those who are economically active but unemployed constitute a rather small percentage of the overall population (about 3.0%). Those who are unemployed but looking for work constitute a greater percentage of the total unemployed persons, and those who are unemployed voluntarily constitute a small percentage.

It is significant to note that well over one fifth or more of the population are in farming, fishing or firewood cutting categories. This percentage increases from 21.0% in Area I to 39.2% in Area III with Area II and IV having percentages between these figures. In other words, those who are employed or engaged in agricultural activities of some sort constitute almost 50% or more of the employed group but only a quarter or more of the total population in the project areas. It would be useful if some monetary value

Table 6

Employment Status of Individuals in Areas I, II, III and IV According to Stated Occupations by Sex (Percentages)

OCCUPATIONAL STATUS	Area I			Area II			Area III			Area IV		
	M	F	M+F	M	F	M+F	M	F	M+F	M	F	M+F
1. Employed												
(i) Professional, Sub-Professional, Technical	2.3	1.1	1.7	2.3	0.7	1.5	1.0	0.3	0.6	3.1	0.5	1.8
(ii) Administrative/Managers	0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
(iii) Clerical, Salesworkers, Traders	0.8	15.8	8.1	1.7	20.8	11.2	0.5	10.7	5.7	0.8	6.3	3.6
(iv) Farmers, Fishermen, Firewood Cutters	25.6	16.1	21.0	27.5	19.4	23.5	41.9	36.6	39.2	31.9	32.8	32.3
(v) Miners, Quarrymen and Related Workers	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(vi) Workers in Transport Occupations	2.9	0.0	1.5	2.7	0.0	1.4	0.8	0.0	0.4	1.0	0.0	0.5
(vii) Craftsmen, Process Workers and Labourers	7.6	6.8	7.2	8.6	5.4	7.0	2.5	5.6	4.0	3.7	6.0	4.8
(viii) Service, Sport and Recreation Workers	1.5	0.3	0.9	1.0	0.9	1.0	0.2	0.1	0.2	0.2	0.1	0.2
Sub-Total	40.9	40.1	40.5	44.0	47.2	45.7	46.9	53.3	50.1	40.7	45.7	43.2
2. Economically Active But												
(i) Unemployed-Voluntarily (Under 65)	0.4	0.8	0.6	0.8	1.2	1.0	0.6	0.8	0.7	0.3	0.7	0.5
(ii) Unemployed, Looking for Work but Cannot Find It	2.4	3.9	3.2	2.4	4.1	3.3	3.2	3.8	3.5	2.5	3.3	2.9
Sub-Total	2.8	4.7	3.8	3.2	5.3	4.3	3.8	4.6	4.2	2.8	4.0	3.4
3. Not Economically Active												
(i) Home-maker	0.1	5.4	2.7	0.0	4.0	2.0	0.0	1.1	0.6	0.0	1.7	0.9
(ii) Student (In School Now)	30.6	23.2	27.0	24.1	12.8	18.5	15.2	5.7	10.3	27.9	20.3	24.1
(iii) Vocational Trainee (Apprentice)	0.5	0.1	0.3	1.2	0.5	0.9	0.4	0.2	0.3	0.8	0.5	0.6
(iv) Disabled	0.8	0.6	0.7	0.5	0.5	0.5	0.2	0.4	0.3	0.4	0.4	0.4
(v) Infant Below 1 Year	3.5	3.5	3.5	3.8	4.0	3.9	4.1	4.5	4.3	3.8	3.9	3.8
(vi) Pre-School 1-6 Years	15.6	16.3	16.0	17.2	18.0	17.6	19.2	19.4	19.3	18.0	16.6	17.3
(vii) Ages 6-9 Not in School and not Working	4.4	5.0	4.7	5.3	6.5	5.9	9.9	9.8	9.9	5.2	5.8	5.5
(viii) Old Age 65 + and Not Working	0.6	1.1	0.8	0.5	1.3	0.9	0.4	1.0	0.7	0.4	1.1	0.8
(ix) Retired 65 + and on Pension	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-Total	56.3	55.2	55.8	52.7	47.6	50.3	49.4	42.1	45.7	56.5	50.3	53.4
TOTAL PERCENTAGE	100.0	100.0	100.0	99.9	100.1	100.0	100.1	100.0	100.0	100.0	100.0	100.0
TOTAL NUMBER	6,114	5,845	11,595	5,376	5,303	10,679	6,758	7,058	13,816	6,773	6,918	13,690

could be imputed to the numbers in the employment group if data on the earning capacity of the categories could be obtained. This measure would perhaps provide a better index of the economic standing or potential of each area and thus serve as a basis for differentiation in any attempt to construct a socioeconomic index for the project areas.

8. Summary of the Main Conclusions

(i) The pattern of marriage is surprisingly similar in all four areas, and age at marriage for both males and females was estimated at 23.7, 23.4, 22.6 and 23.9 years for Areas I, II, III and IV respectively. There is, however, a differential in the male and female ages at marriage but this differential is essentially the same in all areas.

(ii) There is considerable differential among the educational and literacy levels from one project area to another with Area I in the favoured position relative to the other three areas.

(iii) With respect to the ethnic composition of the project areas, Areas I, II, III and IV show significant variations in the proportion who are Akwapim, Ewe, or non-Ghanaian. In addition, Areas II and III have a large number of residents who follow traditional religion practices.

(iv) The major occupation of persons in the economically active group in the project areas is farming and other agricultural activities. The proportion employed in farming in each area does not vary greatly.

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