

PRELIMINARY RESEARCH REPORT

THE HEALTH AND NUTRITION SITUATION IN ISMANI, IRINGA

A Health Survey undertaken
jointly by BRALUP and LIDEP

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The medical nutrition survey team of the National Food and Nutrition Commission of Zambia was attached to the field team for approximately one week for training purposes.

THE HEALTH AND NUTRITION SITUATION IN ISMANI, IRINGA
A Preliminary Research Report

by U. Oltersdorf, J. Kreysler and B. Kreuter *

1. Introduction

a. Area Description

Ismani is an area in the north of Iringa with a high maize growing potential (1968 production over 15,000 tons) of about 200 square miles. The average altitude is 1000 - 1200 meters. The population is very mobile, with people moving into the area in the planting and harvesting seasons. This rather unstable population might also be a reason for the large amount of illegal land-rent etc. (3). In order to increase the number of stable population it was decided to build a domestic water supply for the area in two stages. In the first stage a 44 mile water pipe was established with a capital input of TSh 3,000,000. In the second stage it is planned to supply seven villages with pipelines. The present pipeline has a capacity of 480,000 gallons per day, which is sufficient for a population of 48,000 (at 10 gallons per day per person) (8). As to health institutions there is a rural health centre without satellites or mobile clinics and one dispensary (at Isasi).

The present study was carried out in order to get baseline information on the nutrition and health status of the population in the catchment area of the present and future water supply comprising about 30,000 people.

b. Sample and Methods

The present survey was carried out in November ^{October} 1969, i.e. in the dry season. The total sample consisted of 917 persons of both sexes and all age groups. The sample was [?] equally divided into people living directly at the pipeline and those living in villages far from the new water source, therefore drawing their drinking water from traditional dams or wells. The sample was stratified in so far as a cluster sample was selected by giving random numbers to "ten house cell leaders". After this primary sampling the whole ten house cell population was examined. Standards for anthropometric comparisons were taken from JELLIFFE (5) and those for biochemical data from IGND (4). Methods of laboratory investigations are described in detail in KREYSLER and SCHLAGE (7).

Acknowledgement: The BruceLose tests were carried out by Dr. Protz and Dr. Stark, Arusha.

* This study was conducted jointly by the Bureau of Resource Assessment and Land Use Planning and the Tushoto Integrated Development Project, in November 1969.

2. Socio-economic Findings

a. Tribal Distribution

Table 1

Two tribes, the Hehe and the Bena, form with nearly 80% the biggest share of the tribal pattern in the survey area.

Of the Hehe tribe our sample comprises more female than male persons.

The total sample consisted of 917 persons of both sexes and all ages.

TABLE 1

TRIBAL DISTRIBUTION OF SURVEY SAMPLE

TRIBE	MALE		FEMALE		TOTAL	
	%	n	%	n	%	N
Hehe	40	179	44	209	42	388
Bena	36	160	36	171	36	331
Kinga	7	33	6	30	7	63
Others	16	71	14	64	15	135
Total		443		474		917

b. Education

Table 2

Evaluation for school education was carried out for those mothers whose children were examined during the survey. Thus the educational pattern of a total of 320 mothers has been evaluated.

Table 2 shows the figures of different kinds of formal education (lower and upper primary school and above) for age groups of 10 years each.

Out of the mothers younger than 20 years, one-third had some form of school education. In the age groups above 39 years there was no mother with any schooling. In the total sample we found that 20% of the mothers had some kind of formal education.

Comparing these results to the study in the Pangani Basin (7) we find that there are up to 20% of educated female persons above 39 years. An explanation could be that in these traditional missionary areas (Kilimanjaro, Upare, Usambara) schooling for women generally started earlier than in the central regions of Tanzania.

BURGESS and MALINLEMA (2) found a percentage of 7% of educated mothers in Dodoma whereas a survey in Kisarawe District (1) revealed that only 2% of mothers in the rural coastal area had some kind of formal education. This fact cannot be directly related but might well be contributory to the generally worse nutrition situation in the coast region (see Table 3).

TABLE 2

MOTHER'S AGE IN RELATION TO SCHOOL EDUCATION

EDUCATION	YEAR											
	0 - 19		20 - 29		30 - 39		40 - 49		50+		ALL AGES	
	%	n	%	n	%	n	%	n	%	n	%	n
None	66	53	79	137	86	66	100	19	100	1	80	256
Std. 1 - 4	24	12	17	29	12	9	0	0	0	0	16	50
Std. 5 - 8	10	5	2	3	3	2	0	0	0	0	3	10
Above Std. 8	0	0	1	1	0	0	0	0	0	0	1	1
Unknown	0	0	1	2	0	0	0	0	0	0	1	2
No. of mothers		50		172		77		19		1		319

c. Marital Status

Table 3.

Table 3 shows the same sample of mothers as Table 2, but here the sample is separated according to marital status. In the age groups below 30 years we found 94% of mothers living with husbands; above 30 years 100% of the mothers were married. The overall figure of married mothers (96%) is higher than the result in the coast area (1), where both parents of only 89% of all children were alive and living in the same household.

TABLE 3

MARITAL STATUS OF MOTHERS RELATED TO AGE

MARITAL STATUS	YEARS										TOTAL	
	0 - 19		20 - 29		30 - 39		40 - 49		50+		%	N
	%	n	%	n	%	n	%	n	%	n	%	N
Married	94	47	94	163	100	77	100	19	0	0	96	306
Divorced	2	1	2	3	0	0	0	0	0	0	1	4
Separated	0	0	1	2	0	0	0	0	0	0	1	2
Unmarried	4	2	1	2	0	0	0	0	0	0	1	4
Widowed	0	0	0	0	0	0	0	0	100	1	1	1
Unknown	0	0	2	3	0	0	0	0	0	0	1	3
No. of Mothers		50		173		77		19		1		320

d. Fertility Rate

A total of 318 mothers was asked for the number of children born. The results for different age groups are given in Table 4.

TABLE 4

NUMBER OF CHILDREN BORN IN RELATION TO AGE OF MOTHER

NO. OF CHILDREN	YEARS										TOTAL	
	0 - 19		20 - 29		30 - 39		40 - 49		50+		%	N
	%	n	%	n	%	n	%	n	%	n	%	N
1	70	35	8	14	3	2	0	0	0	0	16	51
2	24	12	14	25	1	1	0	0	0	0	12	38
3	6	3	26	45	8	6	0	0	0	0	17	54
4	0	0	20	34	17	13	5	1	0	0	15	48
5	0	0	17 19	19	17	13	11	2	0	0	14	44
6 - 8	0	0	12	21	35	27	32	6	100	1	18	55
9+	0	0	2	3	20	15	53	10	0	0	9	28
No. of Mothers		50		171		77		19		1		318

