I. Introduction

The Infant Feeding Study in Kenya started in May 1981. Interim financial and technical reports 1 and 2 have already been submitted covering the period from 5/1/81 to 11/15/81 and this material will not be repeated here. Central Bureau of Statistics staff directly involved with the project include:

K. Okoth-Agunda, Director of Statistics  
John Kekovole, Senior Economist/Statistician  
Terry Elliott, Scientific officer  
John Owuor, Statistical officer  
Rekha Shori, Statistical officer  
Moses Kibet, Economist/Statistician  
Rajiv Shori, Field enumerator

Additional staff support has been utilized from time to time especially in the areas of field supervision, computer programming, and sampling. Sixteen field interviewers also joined the staff in February.

II. Technical Progress Report

A. Ethnographic study

Penny van Esterik's visit at the beginning of this report period culminated in a day long session with the junior ethnographers from AMREF and CBS staff to review the field material already collected and to critique and improve the latest IFPS questionnaire draft in light of it. (see attachment 1). Penny also worked with Norman Scotney and his staff on a suggested format for the phase I report and helped outline research suggestions for phase II. (see attachments 2-4).
Write up of phase I continued concurrently with phase II interviews through the end of the report period when an advanced draft of the phase I report was sent to Penny, Michael, and Terry for comments. A final report incorporating suggestions from the above should be ready sometime in July. Phase II interviews with mothers of malnourished children being treated in Kenyatta Hospital were drawing to a close at the end of this report period and a draft report of the findings should be available sometime in July.

B. Medical Infrastructure

A shorter form of the medical infrastructure questionnaire was produced and sent to New York for approval. Interviews started in January and have continued throughout this report period. Problems were encountered pinning down high ranking health officials for extended interviews and repeated follow ups have been necessary to meet the requirements of the proposed sample. It has been necessary to leave questionnaires with some officials for them to fill and to return later. This will have to be taken into consideration during analysis. Meetings will be held in May-June with John Kigondu and Chris Wood to write an analysis plan and budget.

C. Government Study

The Government report was finished in mid December and copies were sent off to Trost Associates and The Consortium. Upon its completion, Kibet was transferred to another project, John and Rekha continued working with the IFPS.

D. Marketing Study

Industry interviews with Wyeth, Glaxo and Food Specialities Kenya (Nestles) were carried out in December and early January,
followed by the retail audit. As per their agreement with Trost Associates no final reports were required for the industry interviews or retail audit and collected data were forwarded directly to Trost. The report of the retail outlet census was sent in February 1982.

E. The Infant Feeding Practices Survey

Work on the draft IFPS questionnaire was completed during Penny's visit and was carried back with her for typing and approval. Simultaneously, translations into Swahili, Kikuyu, and Luo were begun in Nairobi using both CBS staff and consultants from the University of Nairobi. The English version of the questionnaire was finalized in mid-January and the rest of the month was spent revising the translations and working with CBS programmers on pre-coding.

Early in February a training manual was drafted (see attachment 5) which was subsequently modified after the questionnaire was pre-tested. Sixteen interviewers were hired at the end of January, all conversant in Swahili and English plus either Luo or Kikuyu and were put to work on back translating the questionnaires.

Interviewer training began on 8 February with trial interviewing on 16 February and field testing on 17 February in a low income area adjacent to an actual cluster area. Slight modifications from the field testing were incorporated later that week and final typed copies were sent for printing. Field data collection began on 8 March and continued through the end of this report period.

Sampling was done using the standard CBS urban sampling frame
for Nairobi. Forty three clusters of approximately 100 households each were selected to be visited in Nairobi's low and middle income areas (as designated by Nairobi City Council) where a household listing form was filled out for each household. In every household where an eligible baby was listed and in every household where a household member had given birth in the last 18 months, but that baby had since died, a mother and child questionnaire was filled out. Follow ups were done on Saturday afternoons and Sundays to include mothers who work outside of their home and were otherwise unavailable. It was decided to over sample low income areas with high baby densities to ensure an adequate sample size. For this purpose whole enumeration areas of 200-300 households with known probabilities of selection within the sampling frame were chosen in Mathare Valley, Kariobangi, Kibera and Makongeni. The total projected sample size was between 900 and 1,000 infants. Rough editing of the questionnaires is done by field supervisors in the field and final editing is done back at CBS by Rajiv Shori who has been assigned the tasks of organizing and checking completed forms.

A data analysis proposal (see Attachment 6) was written, submitted to the Consortium and approved in March.

F. Workshop Proposal

Early in April a meeting was held with John Kekovole, Rose Britanak (Health/Population/Nutrition Officer for the Kenyan USAID Mission) and Terry Elliott to discuss the possibilities of the Kenyan Mission funding a workshop for Kenyan policy makers on the
results of the Kenyan Infant Feeding Study. Dr. Britanak was encouraging and a proposal (see Attachment 7) was drafted, approved by the Consortium and submitted. A decision on funding should be made by September.

G. The Kenyan Infant Formula Marketing Code

In May 1981 the Ministry of Health published an industry drafted Kenyan Infant Formula Marketing code for consideration. The Breastfeeding Information Group (BIG), a Nairobi based organization which promotes breastfeeding, challenged the draft code in the local press as being much less stringent than the WHO code where the Kenyan government voted for as a 'minimum standard'. The Kenyan Bureau of Standards (KBS) was then given the draft to modify and pass into regulation. The BIG requested and was granted membership on the industry stacked Baby Foods Technical Committee (BFTC) which was the group within the KBS charged with finalizing the code. At BIG's insistence representatives from UNICEF, the Kenyan Paediatrics Association, the Kenyan Nurses Association, Maendeleo ya Wanawake (an umbrella agency for Women's groups), and a public interest consumer organization were co-opted to the committee and a long battle has begun to pass and give teeth to a local formula marketing code at least as strong as the WHO code.

H. Other Related Studies

Marijan Vezdhuis, a BIG member working with the Medical Research Centre in Nairobi is coding the data she has collected in her national infant feeding survey of hospital and clinic practices/ practitioner knowledge, attitudes and practices. Preliminary data
- 6 -

analysis should become available by August.

The Kenyan National Nutrition Survey carried out by the CBS will this year include a series of questions on infant feeding practices (see attachment 8). The lower end of the age range for eligible infants has been dropped from 6 months to 3 months and John and Rekha drafted many of the questions. Field data collection is scheduled to begin in July.

Jennifer Mukolwe, a project administrator for Maendeleo ya Wanawake has gotten preliminary approval for funding for a study of tribal/cultural differences in infant feeding practices between rural Kikuyus and Luos. The study will especially examine the use of herbs to increase milk production.

Dr. M. Bekeze from the WHO will be coming in May or June to research a proposal for a WHO funded study of breastfeeding and infant and young children feeding patterns of working women.

III. Timetable

A timetable of activities for the IFPS and other remaining study components is included as attachment 9.
Integrating the ethnography into the cross sectional survey

Although a final report for the phase one ethnography is not yet complete, the experience of the field researchers is very important for the CBS team constructing the cross sectional survey instrument. We are meeting to share information relevant to the infant feeding practices study. The meeting has the following objectives:

1) to review preliminary findings of the ethnography
2) to advise on problems of administration and language
3) to suggest new questions and new content areas
4) to assist in the construction and phrasing of questions for the survey
5) to review or generate new hypotheses for the study.

Topics to be discussed

1. Overview of Kibera research
2. Problems of Administration
   - explaining the purpose of the study
   - length of interview
   - timing of interviews and access to working mothers
   - biases and honesty in reporting
   - order of topics
   - topics to avoid
   - problems encountered in interview situation.

3. Problems of Language
   - Kikuyu, Luo, and Swahili instruments
   - words which may be awkward to translate
     (weaning, refusing the breast, insufficient milk, colostrum, food categories, etc)

4. Information needed by survey team
   - marriage, female headed households, temporary mates and multiple wives (how important is this for understanding infant feeding)
   - birth - facilities used
   - most common diseases
   - measures of income
   - reasons for weaning
   - insufficient milk
   - milk products given to babies
   - other liquids
   - semi solid foods given to babies
   - caretakers of babies
   - sources of income for women
   - problems of breastfeeding

5. Review draft survey instrument

6. Knowledge, beliefs, and attitudes
   - suggest statements (agree, disagree)
   - suggest other measures of beliefs

7. Hypotheses generated from the ethnography
   - hypotheses tested in cross sectional survey
   - in phase two ethnography
   - hypotheses for future research.
At present, the field officers are preparing a report on the results of the phase one ethnography. We expect that the report will be completed by Dec. 31 and will then be forwarded to the consortium.

The following is a tentative outline of the report:

1. Introduction
2. Methods (selection of community and households) of study
3. The Community Setting - Kibera
   - physical environment
   - amenities (roads, lighting, electricity, water, sewage, gardens, schools, transportation, health services).
4. Case Studies of Mothers and Infants
   - household from Olympic village
   - " Fort Jesus (village)
   - two households from shanty villages
   - 1 Luo household.
5. Infant Feeding Practices
   - present feeding of index child
   - past feeding of index child
   - past feeding of other children
   - attitudes and beliefs about infant feeding
   - food preferences
   - availability
   - constraints and difficulties in obtaining family food.
6. Factors Influencing Infant Feeding Patterns
   A Socio - economic factors
      - marital status, household composition, parity, migration patterns, mother's age, education, and occupation.
   B Women's Activities
      - women who work in the household
      - " " have casual temporary work
      - " " permanent employment
   C Health Services
      - prenatal care
      - delivery
      - postnatal care
      - influence of medical personnel
      - morbidity
7. Conclusions and Recommendations
   - questions for future research
Glossary
Appendix (any relevant documents)
Notes on Phase 2 Ethnography

Based on the phase one ethnography, the following points could usefully be developed in phase 2:

1. Use of oral rehydration liquids as preventative medicine
2. Delivery practices in Pumwani & Kenyatta Hospitals.
3. Feeding advice from Child welfare clinics
4. Follow-up case studies of malnourished infants
5. Weaning foods.

After discussions with the ethnographers, Norman Scotney, Michael Larham, and Terry Elliott, we decided to focus phase two ethnography on a follow-up study of malnourished infants from Kenyatta Hospital. These case studies would emphasize the socio-economic factors influencing malnutrition. Reasons for this choice include:

1. There were no malnourished infants in the Kibera study
2. Kibera sample was only currently breastfeeding mothers
3. The project has good contacts at Kenyatta Hospital (Dr Kinoti, Dr Bwibo, Sheila Lakhane, Margaret Okello, and others)
4. This will complement Dr Kigondu’s study of health professionals
5. This topic is unlikely to cause problems or termination of research (an investigation of hospital delivery practices is likely to)
6. It will provide an opportunity to study the hospital setting informally - (practices of clinics and hospitals, and the attitude and knowledge of health personnel are important determinants of infant feeding practices in Nairobi).
7. AMREF is interested in both the social and economic factors influencing malnutrition, and in understanding local community problems.

Administration

Dr Latham suggested that it might be valuable to reserve one month research time for questions which might arise during and after the cross sectional survey. Since phase two is funded for at least three months, it might be feasible to have one ethnographer (or 2 if funds permit) to work on the case studies of malnourished infants for two months in early spring (Jan., Feb.). Then, should a question arise from the survey, one month could be spent in May or June following up that question.

Suggestions for research plan:

1. Have Kenyatta notify AMREF when a malnourished infant under six months (?) of age is admitted.
2. Review medical records on condition, age, delivery, past feeding etc.
3. Talk with mother in hospital during the time of treatment, emphasizing her perception of malnutrition
   eg) --- What do you think caused this condition?
   --- Why did baby get diarrhoea?

(observer in particular her understanding of the use of oral rehydration solution ... has she used it at home? ... for other children? ....+)
(4) make appointment to visit mother at home after baby is released ... or go home with her at the time of release

(5) - follow the topic outline used in Kibera with particular attention to past and present infant feeding patterns, socio-economic conditions, and mother's activity pattern

(6) during time in hospital, make careful use of unobtrusive observation of hospital context;
   eg) - physical setting (posters, bottles etc)
       - interpersonal relations - (treatment of mother by medical personnel)
       - communication (-mother's understanding of medical advice and instructions; health workers understanding of mother's problems)
       - family support (help from relatives ... other children with her etc ...)

(7) Dr Latham has noted that it would be very valuable to know more about the infants that have died after being admitted. This is difficult to do, but the ethnographers may find that a mother needs a sympathetic ear after her loss, and may be willing to talk to someone about the baby. Perhaps the ethnographers can explain that if we knew more about the problems mothers face, perhaps we could learn how to reduce the losses. It may be possible to understand something of the problem from examining medical records. The Medical personnel would know best how to handle this.

Please outline your plans and send them to me at Cornell as soon as possible so that I can send papers or ideas which may be of use to you.

Penny Van Esterik
For the guardian, the following information should be gathered:-

1. Name, ethnic group, religion, home district, her residence in the city and her relationship to the hospitalised child.
   If the guardian is not the mother of the child, we'll want to know why the mother is not with the child.

2. Marital status - and how the marital status affects the whole family and the child in hospital. Examples:
   (i) If mother is widowed, when was she widowed and how did it affect the upbringing of her children?
   (ii) If the marriage is polygamous, does it affect the family negatively?
   In this Section, we'll also try to find out the stability and instability in relationships.

3. Education and occupation of the mother or both parents if they are together.
   Occupation: We'll find out whether the mothers occupation forces her to neglect the baby for a good part of the day. Examples are those women who sell in the kiosks and have to leave their houses very early or those who hawk vegetables in the town. Who takes care of the child in mothers absence?
   Is the head of the household employed? On permanent or temporary terms?
   If the head of household is terminated from his job, when did it happen and how did it affect the family?
   Income:- Average income of household per month.

4. How many children does the mother have? Number of boys and girls. Does she plan to have more? If she only has females or males, does she want to try until she has a male or a female child? Has any of her older children suffered the same condition as the one in hospital? Do they go to school?
   Why don't they go to school? Does the mother feel there is a difference between past feeding of her children and the new one?
   - Has any of her children died? At what age did they die and what were they suffering from?
5. Roaming facilities, toilets, bathrooms, water, rubbish disposal etc. (Cost of the above facilities). Are these facilities shared?
   - Sources of food for family apart from buying e.g. garden in Nairobi or at home in the rural areas.
   - Do they own dogs, goats, chicken etc. in Nairobi? Where do the animals stay overnight.
   - Number of people who live in that house and their relationship to the guardian.

6. Nearest health Centre - what are the mothers impression of what is offered at these centres.
   - school,
     What does she feel are the major problems in her community? What are her major problems (raising school fees, food, rent, water).

7. Does the mother use Family Planning methods to space births? What are her reasons for not doing so? Does her menstruation come soon after birth of child?

For the Index Child

1. Name, age and sex

2. Birth history:
   a. (i) Antenatal Period
      (ii) Any illnesses during pregnancy?
   b. Delivery
      Was it in hospital or home delivery?
      Was it a normal or abnormal delivery?
   c. Puerperium - list illnesses experienced in this period by both mother and child.
   d. Immunizations given to this child up to this age.
      If not immunized, why not?
      Have the other siblings been immunized?

3. Growth of the present baby.
   at what stage of development was the child when it got sick? (walking, sitting etc.) How did the illness affect the growth of the child?
Previous illnesses - to be explored.
Has child been hospitalised before? Any accidents - falls, burnings, etc.
Diarrhoeas, measles, rashes, boils etc.
Find out whether she knows about ORT and where she learnt it.

Present Breastfeeding History:
- Bias on colostrum
- Schedule or demand feeding
- Attitudes towards breastmilk.
- If she never breastfed, or has stopped, to explore the reasons.
* The researcher to get as much information as she can on breastfeeding and attitudes from the mother.

Types of food given to baby at home before being brought to hospital.
(Type of food, when it was introduced, how it is prepared, and the frequency.)
What is the ideal food mother would give to her baby if she had all the resources?
Why does she prefer these foods? (We expect that the mothers will already be biased by the food given and the teaching in the hospital. We have to go home to verify most of the above issues.)

Present condition of the child and mothers perception of the condition.
Why did she take the child to hospital?
What does she feel about the treatment? If child has improved, is it the drugs or the food given or both that have helped the child?
What has mother learnt about infant feeding in this hospital?

From the patient files we'll get information on.
a. Doctors diagnosis and management of the condition.
b. Weight at admission and weight at interview.
c. Date of hospitalisation etc.

We'll leave a whole section of this checklist open for the researchers to probe the precipitating factors that led the child to malnutrition. We shall explore certain issues like -
a. Was there a shift from rural to urban areas just before child got sick?
   How did it affect the family?
b. Marital problems - (instability, alcoholism, desertion; etc.)
c. Loss of employment or very sporadic employment
d. Death or illness of the breadwinner.

e. Frequent child births and therefore short breastfeeding spells.

Many more factors will be explored if the researcher allows for free discussion between herself and the mother.
INFANT FEEDING PRACTICES SURVEY

Introduction to the Study

The Infant Feeding Practices Survey is one part of a larger study being conducted in Nairobi by the Central Bureau of Statistics in conjunction with the African Medical Research Foundation (AMREF) and Research Bureau (E.A.) Ltd. (RBL). The study includes an ethnographic component which was done in Kibera where a few mothers were visited many times to collect in depth information on their feeding practices; a medical infrastructure component which looks at health facility practices and health worker attitudes about infant feeding, and a marketing component which looks at the marketing of breastmilk substitutes. Similar studies are being done in Thailand, Indonesia, and Colombia.

The Infant Feeding Practices questionnaire which you will be administering has been written using ideas from the other components to collect information about babies in Nairobi who were born in the last 18 months (since 1 September 1980). We are interested in information on Nairobi babies whose mothers live elsewhere and on babies who were born in the last 18 months, but have since died, as well as babies living in Nairobi households with their mothers.

The questionnaire consists of three parts: a household information section which will be administered to all households in the cluster, a mother information section which will be administered to mothers of eligible babies, and a child information section for eligible babies. For babies whose mothers are not household members a substitute mother is chosen and she responds to the mother information section. For babies that were living in the household but have died the same child and mother information questionnaires are used, but certain questions are deleted.
General Notes on Interviewing

The most important key to good interviewing is politeness and considerations for the respondents. Remember you are taking up ½ or 1 hour of the mother's time, and will need her cooperation for you to collect complete and accurate answers. Always introduce yourself and carefully explain the purpose of your questions. If the mother is not available and you make an appointment to come back, make sure that you keep it and arrive on time. Always thank the mother at the interview's end.

Interviewers should be interested in the responses of the mother and should be non-judgmental. You should be careful not to suggest answers either by the way you ask questions or by your reactions to a response. If, for instance, you say "of course, this baby is being breastfed isn't it?" you may get a different response than if you asked the more neutral "Is this baby being breastfed?". If a mother tells you that all she fed her baby yesterday was fanta orange, and you look surprised or disapproving, she may start to invent answers which she thinks you want to hear. For these reasons it is important to read the questions exactly as they appear on the questionnaire form and to be careful not to suggest answers by your reactions to responses.

Finally you should remember that all the information that you collect for the Bureau is strictly confidential. This means that if the interviewers or any other person handling the forms were to disclose the information on the forms to an unauthorized person, she or he could be prosecuted. If the respondents understand and trust the confidentiality of their responses, they will make your data collection easier.
General Instructions for Filling the Questionnaire

Within the questionnaire itself, you will find two kinds of instructions: "go to" directions and interviewers' notes. The "go to" directions tell you which question should follow the one you are asking and follow either a question itself or one of the response choices. If the "go to" follows a question as in example 1 then follow the direction regardless of the response. In example 1 for instance you would go to question 11.15 regardless of whether the response was 1, or 2.

Example 1

11.3 Has this baby ever been breastfed? - (GO TO 11.15)
1=YES
2=NO

If the "go to" follows one of the responses, then only follow the direction if the mother chooses that answer. In example 2, if the response was 2(NO), then you go to question 11.15. If the response is 1(YES) you simply continue to the next question, in this case 11.4.

Example 2

11.3 Has this baby ever been breastfed? — (GO TO 11.15)
1=YES
2=NO (GO TO 11.15)

The interviewers note directions in the questionnaire are placed to give you special reminders. For instance in a few questions the interviewers are asked to read out the response choices to the mother. Since generally this is not done, an "interviewer note" is inserted to instruct you that that question is a special case. Interviewers' notes are printed in capitals and start at the extreme left hand margin.

As mentioned above, unless specifically noted, interviewers are not to read out the coded responses. In example 3 the interviewers
Example 3.

10.2 How is cow's milk usually given to this baby?

1. BOTTLE AND TEAT
2. CUP AND SPOON
3. CUP
4. BOWL
5. OTHER

"How is cows milk usually given to this baby?" and wait for the mother's answer. If the mother responds "I use a cup and spoon" then your job is easy and you code a "2" for "cup and spoon". If she answers "he drinks it out of a sprite bottle", then you choose "5" for "other" and write sprite bottle in the blank space. You must not ask "Do you usually give this baby cow's milk with a cup, bottle and teat, cup and spoon, or bowl??".

Because the questionnaire is precoded and because the choices are not being read to the mother you will sometimes have to make a decision as to which of the coded responses best matches the answer given by the mother. When you are unsure which code to choose, note the mother's exact response near the question and ask one of the supervisors for help after the interview is complete. Do not write in the right hand column outside of the response code boxes.

When filling the questionnaire all the number codes must be placed in the response code boxes provided in the column along the right hand side of each page. The only exceptions would be when filling tables in the household information questionnaire or in the consumer behaviour section of the mother information questionnaire (both of which
will be examined later in more detail) or when you have to specify an "other" choice as in example 3. As in example 3, remember as well as specifying what the "other" is you also have to fill the code for "other" in the response boxes in the right hand column. This response code boxes must be filled using a pen, and all boxes must be filled except in the few cases where it is specifically noted otherwise. Boxes for questions that you are directed to skip must be filled with zeros.

In example 4 below, if the mother's response was "no" you would code "2" for the response and then go to question 12.6. The boxes for the responses to items 12.4 and 12.5 would be filled as zeros.

Example 4

12.3 Are you presently working outside of your home for a wage or salary?  
1 = YES  
2 = NO (GO TO 12.6)  

12.4 0 0  
12.5 0  
12.6  

Whenever you are uncertain about the coding or have any other question, ask one of the supervisors. They will be checking over each completed interview when it is done and will be happy to try to explain anything or help you in any way they can.

The Household Information Questionnaire

The household information questionnaire will be administered to all households in the cluster and consists of two sheets: a household listing sheet and an amenity/eligibility sheet. The household listing sheet is filled first as follows:

First fill in the "supervisor" "interviewer" and "structure No" codes spaces in the upper right hand corner of the form and enter
Item (1) The cluster number and
Item (2) the household number
Item (3) -the check digit should be left blank.

Introduce yourself and read or recite the statement on your information card explaining that you work for the Bureau and what you are doing.

At this point you need to make sure that there is a competent respondent in the household. A competent respondent is either the household head or a mature household member. You should not take information from a child, a maid, or household worker, or visitor. If these are the only people home, ask when it would be convenient to return, code "2" in the box labelled "VI" in Item (24) of the eligibility sheet, and go on to the next household.

Item (4) Household composition. To fill in table 1 you need first to understand what is meant by "household" and "household head".

I. Definition of Household

For all the surveys conducted by the Central Bureau of Statistics, a household is defined as follows:

"A person or group of persons generally bound by ties of kinship, who normally reside together under a single roof or several roofs within a single compound and who share a community of life in that they are answerable to the same head and have a common source of food or income".

II.1 Three Question Test

It sometimes becomes difficult to identify a household. The above definition looks wordy, but should never confuse an interviewer. The three-question test greatly simplifies the matter.
Always whenever in doubt, an interviewer should ask himself/herself the following three questions:

i) Do these people normally reside together within a single compound?

ii) Are they answerable to the same head? In other words, is there one particular person who may be present or absent to whom all the household members look upon as having the final decision making authority.

iii) Do they have a common source of food. In rural areas this could generally be interpreted as "Are they all dependent on a common holding for food?".

To ensure that you are dealing with one household, the answers to all 3 questions MUST be Yes, Yes, Yes. However, there will be some difficult cases where it may be necessary to consult your supervisor, or P.S.O.

1.2 Examples from Real Life

i) Suppose you come across a polygamous home which falls within the cluster and consists of wives living on the same compound. Suppose each wife lives in a separate dwelling and cooks her own food and the husband is served with food by the three wives. In this particular case the answers to the three-question test are:-

a) Yes they live together

b) Yes, they are answerable to the same head

c) Yes, they are dependent on same holding.
In such a case, the wives are members of the same household.

ii) You may come across two families living in a particular compound in the cluster. Each family owns a holding but they pool their land output in one store and cook and eat together.

Here the answers to the three-question-test will be Yes, No, Yes. Since each family is operating independently on a separate holding, the answer to that question is No, they do not have a common source of food. Only one "No" is enough to disqualify them from being considered as one household.

iii) Suppose there are three spinsters or bachelors sharing a house. The 3 spinsters/bachelors share the rent, water and electricity expenses on an equal basis, but they eat out and simply come to sleep.

Now apply the three-question-test. The answers are Yes, No, No. Such implies three households.

iv) Suppose there are two families and one bachelor living in one house. Each of the families cook separately, and the bachelor eats at his place of work.

Apply the test.

Yes, No, No.

These are clearly three separate households.

v) A possible difficulty could occur in urban areas when an interviewer is confronted with a married couple both of whom are employed and both of whom earn separate incomes.
If the interviewer were to ask himself/herself the three questions, he/she might come up with the answers, Yes, Yes, No (i.e. they appear not to have a common source of food).

In actual fact the answer to question 3 should be Yes, because in a sense the husband's and wife's income should be considered as being pooled. This would therefore mean that married couples would be treated (as they should obviously) as a single household.

1.3 Important

If the answer to any of the above questions is No, then the interviewer has established that he is dealing with more than one household. Only if the answer to all three questions is Yes, can an interviewer be satisfied that he is dealing with One Household.

The three-question-test should always be your guide. It is therefore important to make sure that you know all the three questions off-hand.

II. Definition of Household Head

The Household Head is the person - either female or male on whom the other household members depend for decisions.

Starting with the household head list all the members of the household, one name on each line.

Item (5) has already been filled.

Item (6) - Relationship to household Head: Listing the column codes for item (6) fill in the code that describes the relationship of each household member to the household head. The relationship code for
the first person listed (the household head) has already been filled.

**Item (7) - Age:** Ask the age of each household member. For members less than or equal to two years old code 1 in the first box and the number of months in the next two boxes. For example if a baby is 1½ years old you would code 118. If a child is 3½ years old you code 203 "2" for years and "03" for 3 year old. Always use the person's age at their last birthday. For example, someone who was 45 years in June 1981 will have their age coded as 245 even though they will be 46 years in 3 months.

**Item (8) - Sex:** For each household member code "1" for female and "2" for male.

**Item (9) - Tribe:** Record the tribe of each of the household members using the column codes for item (9). Mijikenda tribes include most of those from along the coast.

**Item (10) - Education:** For each household member code the highest level of education completed. If an adult is a form 4 leaver you would code 24. "2" for "form" and "4" for the highest form she or he completed. For a child who is presently studying in standard 5, you would code 14 "1" for "standard" and "4" because the highest standard she or he has completed is the fourth.

**Item (11) - Occupation:** For each household member choose the occupation code which best reflects the work that they do. Examples of the kinds of jobs that fall into each category are as follows:

01 PROFESSIONAL, TECHNICAL AND RELATED - lawyers, medical, scientists, teachers, statisticians, engineers, etc.

02 ADMINISTRATIVE, MANAGERIAL, CLERICAL - clerks, managers, secretaries, administrators, supervisors, etc.

03 SALES WORKERS - anyone selling any goods, shopkeepers, kiosk workers, insurance sales
- 11 -

04 SERVICE WORKERS - askaris, policemen, restaurant or hotel staff, house servants, etc.

05 AGRICULTURAL, FORESTRY AND RELATED WORKERS - farmers, fishermen, forestry workers

06 PRODUCTION, MANUFACTURING AND MAINTENANCE WORKERS - factory workers, construction workers, mechanics, shoe repair people

07 PACKING, STORAGE AND TRANSPORT WORKERS - loading and storage workers; matatu, bus, or truck drivers, turnboys

08 GENERAL LABOURERS - unskilled manual labour, day labour requiring no special skills

09 MEMBERS OF THE ARMED FORCES

10 NOT WORKING

11 STUDENTS

12, 13 OTHER (SPECIFY)

Item (12) - Tick the box opposite each eligible baby (infant 18 months of age or under) and their mothers.

Item (13) - Add the number of ticks in the baby and mother column and put the totals where it is marked "total".

Item (14) - Add up the number of household members in each age and sex group and fill in the total. The "total" household members should equal the sum of the total female and male adults and female and male children.

The amenity/eligibility sheet of the household information questionnaire is filled as follows:-

Items (1) + (2) - Cluster number and household number from the listing sheet.

Item (3) - check digit. Interviewer leave this blank.

Item (4) - Already filled.

Item (5) - Today's date - fill all boxes. For example 5 March 1982 would read 050382
Item (6) - Amendment Number (already filled)

Item (7) - Language the interview is to be conducted in. Codes are on listing sheet of the household information questionnaire in the lower left hand corner. Code 1 Kiswahili
2 Kikuyu
3 Luo
4 English.

Item (8) - Respondent serial number - found as item (5) on Table 1 of the listing sheet.

Item (9) - Interviewer I.D: Enter the I.D. number that each of you will be given.

Item (10) - Dwelling: Enter the number of rooms in the household which are used for sleeping, the correct ownership code and if rented, what is the monthly rent (code 9777 for "doesn't know", 98888 for "won't say" and 0000 for "doesn't rent").

Item (11) - (a) Water Source: Select the code which best describes where the household gets its water from for cooking, drinking, bathing and washing dishes.

(b) Ask if any of the household members ever boil water and code. If the response is 1 (YES), ask what they use the boiled water for and mark the appropriate code.

Item (12) - Toilet Code: What type of toilet the household has.

Item (13) - Code if the household has electricity or not.

Item (14) - Code whether or not the household has a refrigerator.

Item (15) - Ask what kind of fuel is usually used by the household to cook its meals.

Item (16) - Income: (a) Code how often the household head is paid.

(b) Ask if the household receives either food or money from outside Nairobi and code the response.
Item (17) - Ask if any of the women household members (between ages 15 and 50) have given birth to a baby in the last 18 months (since 1 Sept. 1980) which has since then died. Code the number of babies.

Item (18) - Read the directions on the form and fill in Table 2 with the name of each eligible baby (ticked on item 12 of the listing sheet) from Table 1 and the name of any baby from Item (17) (babies who have died). For all babies whose mothers are household members, fill in the mother's name. For all babies whose mothers are not household members identify a substitute mother - the household member who acts as its mother and makes most of the decisions as to its care - and enter her name.

Items (19) + (20) + (21) - Code the number of eligible babies mothers, and mother substitutes from Table 2.

Item (19) - Enter the number of eligible babies from Table 2.

Item (20) - Enter the number of biological mothers from Table 2. If the mother has 2 or more eligible babies then only list her once. You will only do one questionnaire for her, and one for each baby.

Item (21) - Enter the number of mother substitutes. Do not count a mother substitute if she is already being counted in Item (20) as the mother of another eligible child. You will only fill one mother questionnaire for each eligible woman even if she has more than one child or substitute child.

Item (22) - Total interviews to be filled. Total items 19, 20 and 21 and write in the total.

Item (23) - At the end of the interview for the household enter the number of child mother and mother substitute questionnaires filled. If the total in item 23 does not equal the total in item 22 explain in the "comments" section.
Item (24) - Results of Household Interview: Fill the results of your visit to this household using the box for VI (visit one). If all the interviews for the household have been completed enter "1" in VI and "0" in V2 and V3. Make a note in the "comments" space for the time and date you have agreed to return to complete interview.
**CORE INFORMATION**

Core information appears five times in the Mother and Child information sections - twice in Mother information and three times in the Child information section. Core information consists of the following:

- **Cluster number** - Three digit numbers assigned by CBS to differentiate sampling areas
- **Household number** - Three digit number to be assigned by the interviewer to differentiate households in a cluster. No two households in the same cluster can have the same household number
- **Check digit** - Two digit number to be used only by the computer analysts. Interviewers always leave these boxes blank.
- **Record number** - Two digit number again for use only by computer analysts. These boxes have been printed already filled. Interviewers ignore these boxes.
- **Mother substitute I.D. number** - One digit number taken from Table 2 (eligibility) of the household information sheets. No two different women in the household can have the same mother I.D. number. Interviewers must always fill in this box in the core information.
- **Baby I.D. number** - One digit number taken from Table 2 (eligibility) of the household information sheets. Two babies from the same household can have the same baby number only if they have different mothers/mother substitutes. For the core information in the mother information section, Baby numbers are pre-printed and can be ignored.
- **Sort number** - One digit number for use only by computer analysts. Pre printed on all forms. Interviewers ignore.
- **Hash totals** - Five digit numbers that appear just before core information. These are used only for computer analysis and in all cases must be left blank.

**MOTHER INFORMATION**

(TO BE FILLED IN FOR EACH MOTHER OR MOTHER SUBSTITUTE LISTED IN TABLE 2 OF THE HOUSEHOLD QUESTIONNAIRE).

**MOTHER:** The biological mother of the baby.
Age for imparting information for questionnaire has to be 12 years and over.
MOTHER SUBSTITUTE: This person is not the biological mother, but is the household member who acts as the mother, and makes most of the decisions as to its care. This person could be a relative of the baby (aunt, grandmother, father) or not related. Information is only taken from mother substitutes if the biological mother is not a household member.

4.5 Mother/mother substitutes (M/MS) Marital status

4.6 M/MS's age
Calculate age carefully by SUBTRACTING FROM 1981

4.8 Enter the highest level of education that the M/MS has finished as in the Household Information

4.9 CAN THIS MOTHER OR SUBSTITUTE MOTHER READ ENGLISH?
Ask the mother/substitute if she reads English well enough to read the Daily Nation or Standard

4.10 CAN THIS MOTHER OR SUBSTITUTE MOTHER READ KISWAHILI?
Ask the mother/substitute if she reads Kiswahili well enough to read Taifa Leo

4.11 Find out the length of stay in Nairobi of the respondents as accurately as possible. Round response to the nearest month for stays under 2 years.
If the respondent has lived in Nairobi for 2 weeks - code 1 month (101) if less than 2 weeks code 100.
6½ months would be coded 107. 1½ years 118. 2 years 202.

4.12 HAVE YOU SPENT MOST OF YOUR LIFE IN RURAL AREAS OF CITIES/TOWNS?
Rural areas may refer to their upcountry homes.
Cities - like Nairobi, Mombasa, Kisumu, Nyeri, Nakuru.

4.13 Code as in 4.11

5 CONSUMER BEHAVIOUR
This section refers to TABLE 3

5.1 For this question ask mothers/mother substitutes what brands of infant formula and milks they have heard of or know names of?
DO NOT GIVE ANY NAMES YOURSELF
Fill in the column 1'. Code '1' for names that mothers give and code '2' for names mothers do not supply.

5.2 NOW READ OUT NAMES 02 TO 12 TO MOTHERS SLOWLY AND FILL "1" FOR NAMES MOTHERS SAY HAVE HEARD OF AND "2" NAMES MOTHERS SAY THEY HAVE NOT HEARD OF
5.3 Now ask mothers names of milks and formulas they have ever used to feed their babies - read names in list from 01-72 - reading only those names which the m/m has said she has heard of in col. 2. Fill '1' if she has used a kind of milk. Fill all other spaces with '2'. (Mothers may have used the brand once or even twice)

5.4 Ask mother if she has ever received a free sample of any of these milks? Code 1=Yes and 2=No

5.5-5.7 If mother says yes in 5.4 then ask her to give the name of brand given to her as a free sample and also the source of this free sample

Code in response from codes supplied in Table 3

If "other" then specify the brand mentioned by mother

5.8-5.9 Ask mother as to the number of tins of free samples she received and if she was able to get more

5.10-5.12 Ask mother if she has ever seen or heard of any kinds of milk for babies advertised on the radio or television

- For kinds of milk mother says she has seen, use codes given in Table 3

- If mother gives 3 brands - complete 5.10 to 5.12

- If no response, enter 00 in spaces

Enter 97 if respondent has heard advertising - but doesn't know which brand

Enter 96 if respondent has never heard advertising

5.13 Ask respondent if she has ever seen any kinds of milk for babies advertised in magazines or the newspapers - Ask for the kinds

For 5.13 Code in Kind 1
For 5.14 Code in Kind 2
For 5.15 Code in Kind 3

[Use brand codes from Table 3]

5.16-5.18 Ask respondent if she has seen advertising on any posters

Code in Kind 1
Code in Kind 2
Code in Kind 3
5.19-5.21 Ask respondent if she has ever seen or heard any information saying it is GOOD TO BREASTFEED.

Code in 1 = Yes
           2 = No - IF RESPONDENT SAYS NO, GO TO 5.22

5.20-5.21 Code in response for place/person according to codes given

5.22 Ask if baby has a Clinic Card?
       If yes = 1
              No = 2 - GO TO KNOWLEDGE AND ATTITUDES

5.23 Ask what BRAND OR COMPANY is advertised on it?
       Code in for names supplied

KNOWLEDGE AND ATTITUDES

INTERVIEWERS: FILL IN CORE INFORMATION (as expressed in the section on Core Information)

INTERVIEWERS: READ OUT "KENYAN MOTHERS HAVE MANY DIFFERENT OPINIONS AND IDEAS ABOUT INFANT FEEDING. PLEASE TELL US WHAT YOU THINK ABOUT INFANT FEEDING BY ANSWERING THESE QUESTIONS ABOUT YOUR IDEAS".

6.7 Ask mothers which feeding method she thinks takes more of a mother's time?

Code in responses: 1 = Breastfeeding
                  2 = Bottle feeding
                  3 = No difference

6.8 Ask mother if a relative of hers was sick in hospital would she breastfeed the relative's baby?

Code: 1 = Yes
      2 = No

6.9 Ask mothers what they think is the reason for a woman's breasts to sag

Code: 1 = Pregnancy
      2 = Breastfeeding
      3 = Aging (as she grows older)
      4 = Other (specify)

6.10 Ask mother if a baby is breastfed should the mother continue breastfeeding or stop till the baby is well again?
Code in for responses
6.11 Ask mothers how long (number of months) is breastmilk without other foods enough for the baby assuming mother is having enough milk to feed?

6.12 Ask mothers what age should babies completely stop being breastfed? (NOT EVEN ONE TIME A DAY). Record the number of months

6.13 Ask mothers, for how long after the birth of a baby should mothers abstain from sexual intercourse: Record the number of weeks or months according to the response

6.14 PROBE "HOW ABOUT IF SHE IS BREASTFEEDING COMPLETELY"? If mothers give the same response as for 6.13 record
1 = SAME
2 = LONGER ABSTENTION
3 = SHORTER ABSTENTION

6.15 Ask mothers if they would like to bottlefeed instead of breastfeed if they had more money and code in response

INTERVIEWERS READ OUT: "I AM GOING TO READ SOME STATEMENTS ABOUT INFANT FEEDING. PLEASE TELL ME IF YOU AGREE OR DISAGREE WITH EACH ONE".

INTERVIEWERS CODE: 1 = AGREE
2 = DISAGREE
3 = NO OPINION
(If mother says that she does not know, code '3' - No opinion)

for 6.16 to 6.24 READ OUT THE STATEMENTS AND CODE RESPONSES ACCORDINGLY

INTERVIEWERS NOTE: THIS SECTION - WOMEN IN THE WORK FORCE - TO BE ASKED TO MOTHERS ONLY. FOR SUBSTITUTES FILL ALL ZEROS

7.0 WOMEN IN THE WORK FORCE

7.1 THIS SECTION IS FOR MOTHERS ONLY. FOR MOTHER SUBSTITUTES CONTINUE WITH CHILD INFORMATION - SECTION 9

For this section interviewers work very carefully through questions taking care to work the "GO TO" for the responses very carefully

7.2 Code work using the following occupational classifications:

01 PROFESSIONAL, TECHNICAL AND RELATED - lawyers, medical, scientists, teachers, statisticians, engineers, etc.

02 ADMINISTRATIVE, MANAGERIAL, CLERICAL - clerks, managers, secretaries, administrators, supervisors, etc.

03 SALES WORKERS - anyone selling any goods, shopkeepers, kiosk workers, insurance sales
04 SERVICE WORKERS - askaris, policemen, restaurant or hotel staff, house servants, etc.

05 AGRICULTURAL, FORESTRY AND RELATED WORKERS - farmers, fishermen, forestry workers

06 PRODUCTION, MANUFACTURING AND MAINTENANCE WORKERS - factory workers, construction workers, mechanics, shoe repair people

07 PACKING, STORAGE AND TRANSPORT WORKERS - loading and storage workers; matatu, bus or truck drivers; turnboys

08 GENERAL LABOURERS - unskilled manual labour, day labour requiring no special skills

09 MEMBERS OF THE ARMED FORCES

10 NOT WORKING

11 STUDENTS

12, 13 OTHER (SPECIFY)

If a woman is doing more than one kind of work outside her home then code the kind of work she usually spends the most time doing in a typical week. If you are not sure how to code an occupation, write down exactly what the woman does and ask one of the supervisors for help after the interview.

These are to aid you to ask only relevant questions for women who are working presently, and others who had previously been working.

8.0 FAMILY PLANNING

This section is for MOTHERS only. For Mother Substitutes continue with Child information - section 9.

Information in this section is sensitive so ask your questions carefully and patiently. Explain carefully anything you ask that the mother does not understand.

8.6 Birth control methods - do not read the choices. The following explanations will help you to correctly code the mother's response.
01 Pill - Birth control method where a woman takes an oral contraceptive or pill each day to prevent pregnancy

02 IUD - Method where a health worker inserts a loop or coil of plastic or metal in the woman's womb to prevent pregnancy

03 Injection - Method where a woman gets an injection every 3 or 6 months of a drug such as Depo-Provera to prevent pregnancy

04 Female sterilization - A surgical procedure or operation usually irreversible such as tying a woman's tubes to prevent pregnancy

05 Male sterilization - A surgical procedure or operation performed on men called a vasectomy

06 Other female scientific methods - Methods used by a woman such as placing a diaphragm or tampon or sponge or foam tablets or jelly or cream inside themselves before sex

07 Condom - A rubber, plastic or membrane sheath worn by men during sex to prevent pregnancy

08 Douche - A method where the woman washes herself immediately after sex with water or other liquids to prevent pregnancy

09 Withdrawal - A method where the man pulls out before climax

10 Rhythm - A method where couples avoid having sex on particular days of the month between menstruating periods when the woman is most able to become pregnant

11 Abstinence - Method where a couple goes without sex for several months or longer to avoid getting pregnant

CHILD INFORMATION

The Child information module is to be filled for all babies listed in TABLE 2 of the household questionnaire. For babies who have died a special child questionnaire is filled which is exactly like the full child questionnaire except that it eliminates certain sections of questions which are not applicable for babies who have died.

9.1-9.6 Fill in core information as explained in the section on Core Information
9.8 Code the child's age now to the nearest week or month. Round half months or weeks up. A three day old baby would be coded as '100' or zero weeks. A four day old baby is coded as '101' or 1 week.

10 ANTHROPOMETRY AND CHILD HEALTH

10.1 Child's length to the nearest .5 cm.

A. The child's length will always be measured using the infantometer with the child lying down.

B. Place a blanket, towel, or other thin padding on a firm, level, flat surface such as a table or bench.

C. Have the mother place the baby on the padding on its back holding the baby as flat as possible. The baby's knees need to be pressed until they are against the padding and unflexed.

D. Open the infantometer making sure that the hinged faces are perpendicular to the long back piece.

[Diagram: THIS NOT THIS]

E. Place the infantometer along side the baby so that the fold-out face at the low end of the number scale rests on the top point of the baby's head.

F. If the baby is shorter than the infantometer measure the length where the baby's heel comes on the measuring scale. Only read the lower scale - centimeters - which starts at 50. Never read the inch scale - which starts at 20. If the baby's heel stops at the mark between 75 and 76 then the measurement is 75.5. With babies shorter than the infantometer you must then subtract 50 cm from the figure you read. This is because the scale starts at 50. In the above examples you would code 25.5 (75.5 - 50 = 25.5).

G. If the baby is longer than the infantometer slide the face at the baby's foot until it fits snugly against the upright bottom of the baby's foot. Read the measurement from the edge of the sliding block far along the centimeter scale. Again never read the upper or inch scale (which starts at 20). For babies longer than the infantometer record directly the number read off the centimeter scale. Do not subtract 50.
F. Code the length in the three boxes provided - remembering that the last box is for fractions of centimeters. A baby which is 76 centimeters long is coded as 460. A baby measuring 36.5 centimeters is coded as 365.

10.2 Child's weight to the nearest .1 kg.

A. The child's weight will be measured using a salter scale which is marked to the nearest .1 kg.

B. Before each use the scale must be zeroed with either the weighing bag or the plastic points. Use the weighing bag for infants under 6 months and older infants who are very small.

C. Remove the child's clothing except for underpants or nappy and place the child in either the pans or bag.

D. Attach the bag or pans to the scales hook and raise the scales until the dial is at eye level.

E. Read and record the weight on the dial to the nearest .1 kg.

10.3-10.8 CHILD HEALTH

These questions refer to CHILD HEALTH. Work through questions carefully to get correct health status of infants and young children. Ensure mothers understand what a particular disease means before coding in response - e.g. malaria, pneumonia. Ask mothers to explain or describe symptoms of these if given as responses.

10.9-10.12 FOR DEAD BABIES ONLY

This is a very sensitive area. Ask mothers very tactfully.

11-11.3 BREASTFEEDING

This is an important section for the INFANT FEEDING PRACTICES STUDY. Go through the questions carefully and slowly. In case mothers do not understand any questions, repeat them carefully.

For 11.11 Let mothers tell you of the problems faced or experienced themselves concerning BREASTFEEDING. Code in as responses given on form.
- 10 -

11.14-11.15 FOR MOTHERS MENTIONING RESPONSE 04 - INSUFFICIENT MILK - IN QUESTIONS 11.11, 11.12 AND 11.13

This is a further probe for mothers who gave insufficient milk as a response for the previous questions.

11.16-11.20 GO CAREFULLY THROUGH QUESTIONS AND CODE ACCORDINGLY. FOLLOW "GO TO"s CAREFULLY.

11.21-11.23 FOR BABIES WHO HAVE STOPPED BREASTFEEDING COMPLETELY

Work through the questions carefully and for 11.23 give time for recall.

11.24-11.25 ONLY FOR MOTHERS MENTIONING INSUFFICIENT MILK IN 11.23

11.26 For this question ask the mother how old was the baby when she decided that she did not have enough breastmilk to feed her baby.

BREASTMILK SUBSTITUTES

12.0 Rewrite the Core Information as inserted earlier.

For questions 12.4a: If mother is not currently feeding her baby COW's MILK, go to 12.15

12.1-12.15 All questions refer to COW's MILK as the breastmilk substitute.

For questions 12.7, 12.8 and 12.9, get the first three reasons cited by mother as to why she is giving the baby this kind of COW's MILK. If only one reason is given code '00' for reasons 2 and 3.

12.15-12.35 All the questions are concerning INFANT FORMULA.

INFANT FORMULA

This is milk in powdered form made to a formula by different manufacturers with different brand names specifically to feed babies. The formula is supposed to be modified to be similar in composition to BREASTMILK. For example, S-26, Nan, Lactogen, Cow and Gate, Ostermilk, etc.

12.22 For this question ask mothers if baby is only fed on this formula or is another formula ever used?
12.23 Ask mother the reasons for giving the particular formula. Code in three reasons for 12.23, 12.24 and 12.25

12.27 SIZE OF THE CONTAINER

INTERVIEWERS: FAMILIARIZE YOURSELVES WITH THE DIFFERENT SIZES OF CONTAINERS AVAILABLE FOR DIFFERENT BRANDS OF INFANT FORMULA. ALSO THE QUANTITIES (i.e. gms. kg) CONTAINED BY DIFFERENT SIZES

12.35 FEEDING BOTTLES

13.0 MIXED FEEDING

Mixed Feeding: Babies which are breastfed, plus given Cow's milk, or breastfed babies fed with infant formula also are getting mixed feeding

THIS SECTION IS FOR MIXED FEEDING. FOR BABIES NOT GIVEN MIXED FEEDING FILL IN ZEROS FOR RESPONSES

13.2 DO YOU USUALLY GIVE BOTH COW'S MILK/FORMULA AND BREASTMILK AT THE SAME FEED?

- That is, is mother giving baby both kinds of feeding, breastfeed and Formula or Cow's milk at the same FEED?

13.4 Ask mother her reason for practising mixed feeding. Code in for 13.4 and 13.5

- Work through "GO TO" carefully

13.6 Ask mother why she felt she did not have enough breastmilk to feed her baby? Code in the reason.

FOR OTHER - Give the SPECIFIC REASON

13.7 For this question ask mother whether more of the food for baby is being fed to it by her breastmilk or from COW's MILK/FORMULA or if it is in equal amounts of food. Code in for responses

COMMERCIAL CEREALS

DEF: Commercial Cereals are cereals which have been packaged or tinned and produced by manufacturers for feeding babies. Examples are Cerelac, Farex, Farleys, Robinsons, etc.

14.1 Ask mother if she has ever fed COMMERCIAL CEREAL to her baby? If No = 1 as the response, "GO TO” 15
14.6-14.8 Give three reasons responded to by mothers and for OTHER - specify reason mother gives

14.9 Ask size of container/package carefully, and code

**CODED RECALL**

15.1-15.6 WRITE CORE INFORMATION CAREFULLY

15.7 LET MOTHER HAVE TIME FOR RECALL.
IF MOTHER DOESN'T KNOW, GO TO 15.14

15.8-15.12 CODE IN FOR ITEMS MOTHER SAYS SHE HAS GIVEN TO BABY FROM LIST OF ITEMS PROVIDED

15.13 FILL IN NUMBER OF TIMES CHILD WAS FED THE ITEMS IN 15.8-15.12

SIMILARLY FOR 15.21 TO 15.27

GET THE ITEMS AND THE NUMBER OF TIMES FED FOR THE EVENING

CODES USED ARE SAME FOOD CODES

FOR 15.28-15.33 WORK OUT ITEMS FED AND NUMBER OF TIMES, FOR BABY DURING THE NIGHT

15.34 Ask mother if the items mentioned are the usual kinds of food fed to her baby

15.35 Ask mother how she decides when she should feed her baby. Code in for response given.

15.36 INTERVIEWERS READ OUT CHOICES AND CODE IN ACCORDINGLY

**HEALTH CARE PRACTICES**

THESE QUESTIONS ARE FOR MOTHERS ONLY AND NOT FOR SUBSTITUTE MOTHERS. FILL IN ZEROS FOR SUBSTITUTES.

16.2 If mother answers OTHER = 4 - ask her to SPECIFY where she was seen when she was pregnant

16.5 Let mothers give you responses as to what they were told. DO NOT AID MOTHER WITH THE CODES

16.11-16.13 Ask mother what baby was first fed
Code in for 16.11, 16.12 and 16.13

16.14-16.21 Work through questions and code in responses as provided by mother
Proposed Data Analysis Budget for the Kenyan Infant Feeding Study

I. General

Data analysis will be done at the government computer center within the Ministry of Finance using an IBM 360 series and the Statistical Package for the Social Sciences (SPSS) program. The questionnaires are pre-coded and are being initially edited in the field. Further editing which will precede punching will be done by selected enumerators and supervised by CBS staff.

II. Timetable

15 May - 1 June  Final editing
1 June - 30 June  Punching
1 June - 31 August Validation/cleaning
Creation of SPSS file
WORKSHOP PROPOSED FOR KENYAN POLICY MAKERS ON INFANT FEEDING PRACTICES

A. Program Content

The purpose of this workshop is to discuss the policy implications of the AID funded Kenyan Infant Feeding Practices Study conducted in Kenya between May 1981 and December 1982. The intent of this gathering will be to translate study results into concrete policies, programs and legislation to improve infant nutrition. The workshop itself will consist of 1 day of preliminary working sessions with consultants followed by a 3 day session for policy makers. Concerned non-governmental organizations (NGOs) will be invited as observers.

Workshop sessions will include:

1) Placement of the study in its international context
2) A presentation of collected ethnographic research
3) A summary of marketing practices in Kenya
4) A presentation on current health services practices and practitioners' attitudes affecting infant feeding
5) A summary of the cross-sectional survey carried out in Nairobi on current infant feeding practices
6) Discussions on how present government policies affect infant feeding and what policy changes might promote improved infant feeding

B. Date and Venue

The proposed dates for the workshop are 13-16 April 1983. The proposed workshop site is in Salt Lick Lodge in Taita.

C. Background

The AID funded Kenyan Infant Feeding Practices Study is one section of a larger study also being carried out in Colombia, Thailand, and Indonesia by a Consortium of Cornell and Columbia Universities and The Population Council. The study has five major components: ethnography, medical infrastructure, government, marketing, and a cross-sectional infant feeding practices survey. The ethnographic research was designed to study in depth the ideas, attitudes and feeding practices of a small
number of women; to provide information necessary for the design of
the cross-sectional questionnaire; to make observations not obtainable
in a one-off interview process and to suggest further areas of study.
The medical infrastructure study was designed to examine medical facility
practices and medical practitioners' attitudes and how these influence
mothers' decisions on infant feeding. The government study examined
the present government policies and programs involving infant feeding
and MCH and the structures and policy responsibilities of those govern­
ment agencies concerned with these issues. The marketing study examined
current cow milk and infant formula marketing and promotional practices
in Kenya. This study included interviews with manufacturers and
distributors as well as a retail audit of shops. Finally, the cross-
sectional infant feeding practices survey examined the knowledge,
attitudes, experiences and practices of 1,000 low and middle income
women from the Nairobi area who had given birth in the previous 18 months.

Infant feeding issues have gained wide interest with health
professionals, policy makers and the general public since the WHO market­
ing code was passed in May 1981. In that same month a workshop on
"Breastfeeding and Problems of Weaning" organized by the Dept. of
Paediatrics, University of Nairobi was held which was well attended by
health professionals, professional organization representatives, medical
school staff, industry and other interested government and NGO repre­
sentatives. A draft Kenya formula marketing code was presented which
is still under consideration, and weaning and MCH nutrition policy
issues were discussed. A second meeting along these lines, this time
with the benefit of extensive research results giving a clear picture
of Nairobi's infant feeding practices, would provide both the material and
forum for wise policy choices.

D. Workshop Results

Expected workshop results are twofold. The first is to inform
policy makers of the current state of infant feeding in Nairobi. The
second is to elicit their suggestions, given this information as to policy
changes which could be made to encourage better child nutrition. These
suggestions could be in the form of specific legislation, directives,
projects or programs and interaction between policy makers in different
government and NGO agencies should serve as a catalyst to constructive
recommendations. These recommendations will then be published as the
consensus of the workshop and can serve as guidelines for policy
decisions. Areas for further research will be discussed to determine
the additional information needs of those formulating policy on infant
feeding issues.

E. Consultants

Dr. Michael Latham: The Consortium
Dr. Lani Stephenson: The Consortium
John Kekovole: Central Bureau of Statistics
Rekha Shori: Central Bureau of Statistics
John Owuor:
Terry Elliott:
John Kigondu: African Medical and Research Foundation
Norman Scotney: African Medical and Research Foundation
Wambui Kogi:
Wamucii Njogu:
Margaret Kasekende: African Medical and Research Foundation
Roger Cormack: Research Bureau (E.A.) Ltd.

F. Proposed Participants

Ministry of Health
Ministry of Economic Planning and Development
Ministry of Agriculture
Ministry of Commerce
Ministry of Labour
Kenya Bureau of Standards
Office of the President
Nairobi City Council Health
Members of Parliament

Total = 30 Representatives

Invited Observers:

U.S. Agency for International Development
Kenya Paediatrics Association
Kenya Nurses Association
Breastfeeding Information Group
Catholic Relief Services
Freedom from Hunger Foundation
Kenya Family Planning Association
Maendeleo ya Wanawake
UNICEF, etc.
### MINISTRY OF ECONOMIC PLANNING AND DEVELOPMENT
### CENTRAL BUREAU OF STATISTICS: KENYA GOVERNMENT
### NATIONAL CHILD NUTRITION SURVEY (RURAL) 1982
### TARGET POPULATION: All Children Aged 3 - 60 Months

<table>
<thead>
<tr>
<th>DATE OF VISIT</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CL. NO. | HH NO. | CARD TYPE | AMEND NO. | NO. OF CHILDREN | NEITHER SEQUENCE |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8</td>
<td>9 10</td>
<td>11</td>
<td>12 13 14</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### CHILD MEASUREMENTS NUTRITION AND MORBIDITY

<table>
<thead>
<tr>
<th>NAME</th>
<th>SERIAL NUMBER</th>
<th>BIRTH ORDER</th>
<th>DATE OF BIRTH</th>
<th>AGE IN MONTHS</th>
<th>HEIGHT (Length) in Cm</th>
<th>WEIGHT (Kg)</th>
<th>MONTHS OF BREAST FEEDING (If still breast feeding)</th>
<th>ANY OTHER FEEDING (In Months)</th>
<th>AGE (Years)</th>
<th>HEIGH (Height) in Cm</th>
<th>WEIGHT (Kg)</th>
<th>MOTHER'S AGE</th>
<th>RURAL mother</th>
<th>AGE OF FATHER</th>
<th>HEIGHT (Height) in Cm</th>
<th>WEIGHT (Kg)</th>
<th>MOTHER'S AGE</th>
<th>RURAL mother</th>
<th>AGE OF FATHER</th>
<th>HEIGHT (Height) in Cm</th>
<th>WEIGHT (Kg)</th>
<th>MOTHER'S AGE</th>
<th>RURAL mother</th>
<th>AGE OF FATHER</th>
<th>HEIGHT (Height) in Cm</th>
<th>WEIGHT (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CODES

**OTHER MILK (G4.11):**
1. Cow Milk
2. Goat Milk
3. Other Livestock Milk (specify)
4. Whole Milk (Powder)
5. Not applicable

**TYPE OF SUPPLEMENT (G4.18):**
1. Milk other than Breast
2. Parriage
3. Milk (specify)
4. Not applicable

**INGREDIENTS FOR PORRIDGE (G4.19):**
- Milk only
- Millet only
- Cassava only
- Others (specify)
- Not applicable

**ADDITIVES (G4.19):**
0. Nothing
1. Milk only
2. Sugar only
3. Millet and Sugar
4. Other (specify)
5. Not applicable

**TYPE OF SICKNESS (G4.21):**
- Fever
- Diarrhea
- Other (specify)
- Not applicable

**ACTION TAKEN (G4.22):**
1. Taken to H/Center or Dispensary
2. Taken to Hospital
3. Taken to Private Doctor
4. Purchased Medicine
5. Used Home Medicine
6. No Treatment
7. Not applicable

**DURATION OF SICKNESS (G4.23):**
1. Not Sick
2. Sick for 1 day
3. Sick for 2-3 days
4. Sick for 4-7 days
5. Sick for 8-15 days
6. Sick for 16-20 days
7. Sick for more than 20 days
8. Not applicable

### ATTACHMENT 8
MINISTRY OF ECONOMIC PLANNING AND DEVELOPMENT
CENTRAL BUREAU OF STATISTICS: KENYA GOVERNMENT
NATIONAL CHILD NUTRITION SURVEY (RURAL) 1982

DATE OF VISIT

<table>
<thead>
<tr>
<th>CL. NO.</th>
<th>HH NO.</th>
<th>CARD NO.</th>
<th>AMEND NO.</th>
<th>MOTHER SEQUENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>3, 4</td>
<td>5, 6</td>
<td>7, 8</td>
<td>9, 10</td>
</tr>
</tbody>
</table>

A. MOTHER'S STATUS

<table>
<thead>
<tr>
<th>NAME</th>
<th>AGE IN YEARS</th>
<th>PARITAL STATUS</th>
<th>NO. OF CHILDREN EVER BORN</th>
<th>NO. OF CHILDREN EVER DIED</th>
<th>ETHNIC ORIGIN</th>
<th>HIGHEST EDUCATION ATTAINED</th>
<th>REB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Single</td>
<td></td>
<td></td>
<td></td>
<td>Std.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Married</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Widowed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Divorced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

B. HOUSEHOLD AMENITIES

<table>
<thead>
<tr>
<th>SEASON</th>
<th>WATER SUPPLY</th>
<th>BEEFAGE DISPOSAL</th>
<th>COOKING FACILITIES</th>
<th>TYPE OF FLOOR</th>
<th>SINCE WHEN</th>
<th>FOR OFFICE USE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEASON</th>
<th>SOURCE</th>
<th>DISTANCE (Miles)</th>
<th>FREQUENCY OF DRAWING (No.)</th>
<th>CONTAINER USUALLY USED</th>
<th>CAPACITY (In Ltr)</th>
<th>1-Chemical</th>
<th>2-Paraffin</th>
<th>3-Wood</th>
<th>4-Brick</th>
<th>5-Electricity</th>
<th>6-Other</th>
<th>6-Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>WET SEASON</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>1-Chemical</td>
<td>2-Paraffin</td>
<td>3-Wood</td>
<td>4-Brick</td>
<td>5-Electricity</td>
</tr>
<tr>
<td>DRY SEASON</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>1-Chemical</td>
<td>2-Paraffin</td>
<td>3-Wood</td>
<td>4-Brick</td>
<td>5-Electricity</td>
</tr>
<tr>
<td>MAY</td>
<td>JUNE</td>
<td>JULY</td>
<td>AUG.</td>
<td>SEPT.</td>
<td>OCT.</td>
<td>NOV.</td>
<td>DEC.</td>
<td>JAN.</td>
<td>FEB.</td>
<td>MARCH</td>
<td>APRIL</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>ETHNOGRAPHIC STUDY</td>
<td>PHASE I WRITE UP</td>
<td>PHASE II FIELDWORK</td>
<td>PHASE II WRITE UP</td>
<td>PENNY VAN ESTERIK VISIT</td>
<td>MEDICAL INFRASTRUCTURE</td>
<td>INTERVIEWING</td>
<td>DATA ANALYSIS</td>
<td>INFANT FEEDING PRACTICES STUDY</td>
<td>FIELD DATA COLLECTION</td>
<td>PUNCHING</td>
<td>CLEANING/PROGRAMMING</td>
<td>PRELIMINARY ANALYSIS</td>
</tr>
</tbody>
</table>