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KENYA NUTRITION CRSP

Quarterly Report (12/1/82-2/28/83)

Field Report (2/10/82-3/22/83)

C.G. Neumann, M.D., UCLA

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TRAVEL

International

Dr. Gerald Gardner, Kenya: January 10-27, 1983. Trip report submitted.

Dr. Charlotte Neumann, Kenya: February 10-March 22, 1983. See below.

Mrs. Anne Coulson, Kenya: February 9-24, 1983. Trip report pending.

Dr. Robin Gorsky, Kenya: February 13-March 5, 1983. Trip report submitted.

Domestic

Dr. Charlotte Neumann, Berkeley, CA:

External ~~Advisory~~ Evaluation Panel, ~~December 15-19, 1982~~ January 15-19, 1983.

Follow-up Principal Investigator meeting, January 21-25 1983, to finalise the core design.

Dr. Robin Gorsky, UCLA: January, 1983, to meet with Dr. Gardner and Dr. Neumann.

Miss Susan Weinberg, UCLA: January, 1983, to interview for the field nutritionist position; March 25-26, 1983, for orientation for field work in Kenya.

RECRUITMENT

University of California

Susan C. Weinberg, Master of Science, Nutritional Science, Cornell University, Field Nutritionist position commencing March 25, 1983 for a minimum of 2 years.

Susan B. Roberts, PhD candidate, Cambridge University, England. Mrs. Roberts will go to Kenya for a minimum of three months commencing at the end of April, 1983, to help with the food intake and lactation pilot studies. There is a possibility she will be able to remain for 1-2 years.

Physician position is now under recruitment. Supervision of morbidity, disease, and clinical aspects of the study will be the main responsibilities.

Dr. Eric Carter has been named field director as of March 15, 1983.

Kenyan Staff

The Kenyan group are recruiting for the following: field coordinator, social scientist, physician, public health nurse, administrator, secretary and additional field workers.

Mrs. Ann Pertet, a field nutritionist, has been secunded from the Kenya Medical Research Institute (KEMRI).

Mr. Ben Mururia has been secunded as the senior field supervisor from the Central Bureau of Statistics for the duration of the field work.

An administrator will be secunded from KEMRI.

MAJOR ACTIVITIES IN KENYA

Completion of mapping

Preliminary survey

Training and retraining of field staff

Pilot studies

Subcontract finalisation with the University of Nairobi

Vehicles, bus rental

US-Kenya AID Mission visit to project site

Review clearance procedures for duty-free importation of project supplies and equipment

Retreat - entire Nutrition CRSP Senior Staff

Major Activities in Kenya

1. SUBCONTRACT

The formal subcontract between the University of Nairobi and the University

of California (UCLA) was signed on February 28, 1983 by the Registrar, Mr. Gicuhi, and the Vice-Chancellor, Professor Mungai, for the University of Nairobi, and by Robert Pierce on behalf of the Regents of the University of Cailfornia for UCLA. This will now allow for an orderly flow of funds into the University of Nairobi for their component in the Nutrition CRSP field work.

As for the current status of the University of Nairobi, classes have resumed in order to allow seniors and graduate students (masters and doctoral level) to take their examinations and submit final theses so they can graduate. Classes will probably resume for the entire University by September or October 1983.

The flow of monies will be into a Nutrition CRSP research account with its own account number at the University of Nairobi, to which Dr. Kagia and co-directors Drs. Bwibo and Thairu will be signatory (any two at one time). Monies (Kenya shillings) will then be periodically transferred to the Embu bank account for the Nutrition CRSP Kenya Project and will be under the control of the field director, Dr. Eric Carter, for day to day disbursement and accounting. This will allow strict monitoring of expenditures and accounting. Receipts will be submitted to the Financial Officer, University of Nairobi, for submission to UCLA. A duplicate system of submission of receipts by Dr. Carter will be made to UCLA. Requests for funds and receipts of expenditures will be submitted quarterly rather than monthly since it takes about one month from the time of sending requests and monies from UCLA to the University of Nairobi and then to have cash flow into the field. The local auditing firms, Delloitte and Sills, have been contacted.

A direct benefit and immediate effect of the signing of the subcontract has been to give the Kenyan group a feeling of being fully involved and "bonded" to the project, and the feeling that the project is now their own as

as well as the University of California.

PRELIMINARY SURVEY

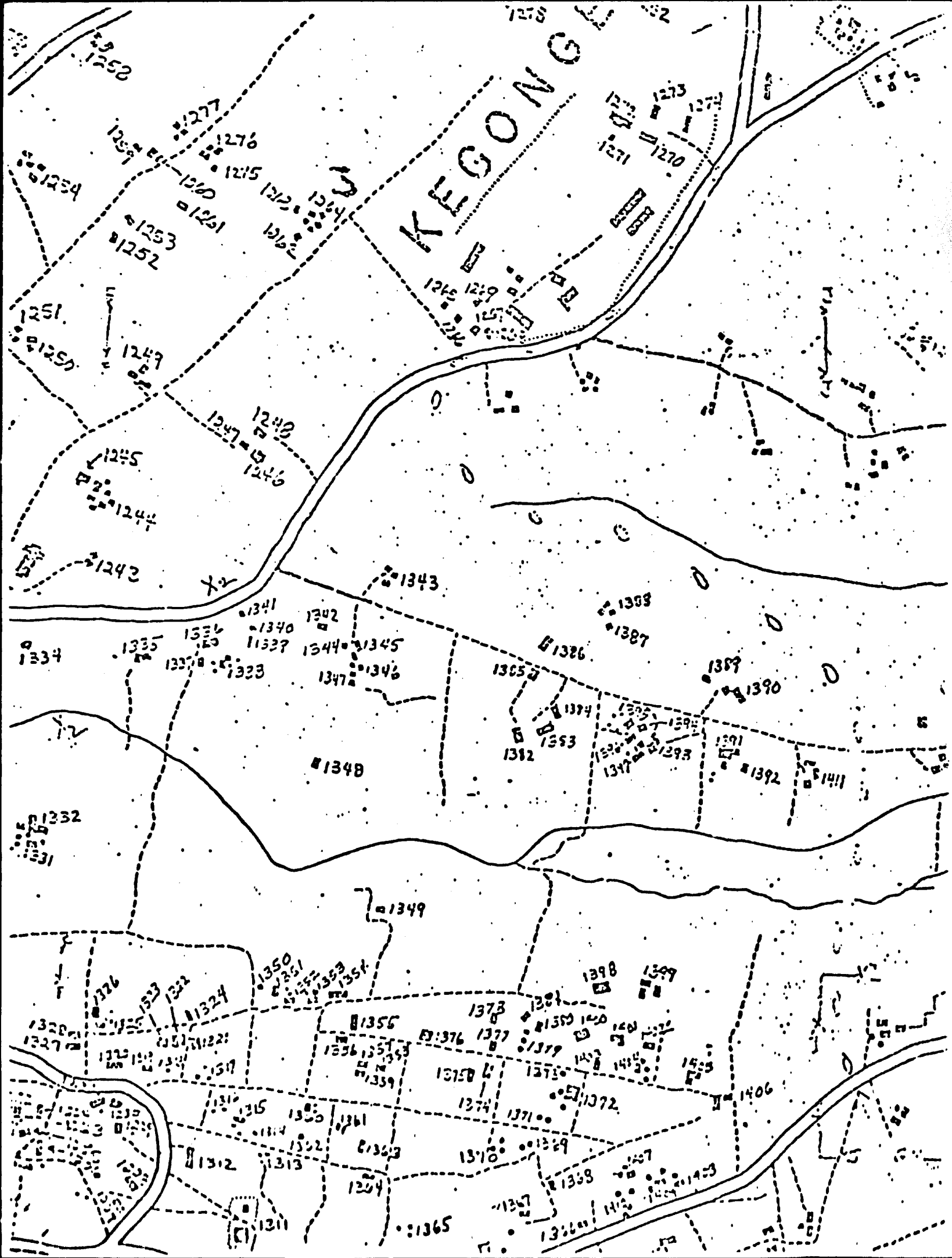
Map Completion

Aerial photography was carried out in November, December 1982, but because several corridors were missed and because cloud cover interfered with clear photographs, mapping was incomplete and still being improved upon. Nonetheless, a functional map has been produced locating househoulds, rivers, tracks, water pipelines, and land features allowing field work to progress. The households were prenumbered on the map and now are being checked out in the course of the preliminary survey in small sections at a time so as to compare the location of a houshold on the map with the actual existence of such a household. Revisions and renumbering are made day by day by the field staff. (See a portion of the map). The mapping has been welcomed as a great benefit by the lcoal government groups, particularly the chiefs and district officer, as being a great service and benefit to the project.

Preliminary Survey Field Work

The preliminary survey is now in full swing. The plan is to do about 100 households in each of the three sublocations, then return to the first sublocation to complete that area, and then the following two. This will allow us to be certain that the three sublocations continue to yield suitable households for potential inclusion in the final study. (See the Gantt chart). Kararumo sublocation has now been completed and appears to have more cases of malnutrition than Kathanjure.

The approach has changed somewhat from the original 140 households in the earlier part of the preliminary survey although the basic elements are the same. Registration and the preliminary survey have been combined in that a set of questions (see questionnaire) are asked by the enumerator to see if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the household should be elimiated immediately from the study, after recording the ages and who resides regularly in the household.

During the preliminary survey, food prepared and consumed during the previous 24 hours is inquired into and a household eating score is being obtained in terms of energy consumed. A combination of weighment, recall and observation is being used. The total calories are divided by the number and type of persons eating. All food intake data (drawn from the one-day HH food preparation form (TABLE I) is related to a HH eating score; this is derived from the type and number of persons eating a meal. Based on literature figures for energy needs FAO):

To obtain a HH Eating Score

Member			Recommended energy intake			
adult	AM	is	multiplied	by	1	(2700)
adult	AF	"	"	"	0.75	(2000)
young male	YM	"	"	"	1.1	(2900)
young female	YF	"	"	"	0.8	(2100)
school age	SC	"	"	"	0.9	(2400)
pre-school	PS	"	"	"	0.5	(1400)
infants	"	"	"	"	0.3	(800)

and the amounts added up.

The overal HH nutrient intake are then divided by the HH eating score. The data collected by the Kenya CRSP on HH intake only includes dishes prepared and eaten in the HH and does not include snacks which may contribute significant amounts of nutrients to the HH. Although this is a crude method, we are quite satisfied that this will give us a good idea of the range of energy intake among the households and can serve much better as a stratifier than SES used as an intake proxy in the Kenya project. Household measures and

volumes are being hand calculated in grams of raw ingredients (edible portions) in the field and then will be submitted to computer programs for energy content of foods using existing FAO and USDA tables. Although these may not accurately reflect the foods eaten, these are all that exist. Extensive recipes have been collected. There has been a pilot weighment of food stuffs of various sizes obtained in the market, and a food catalogue has been started.

The anthropometry is now being done within the household rather than at measuring stations. Arm circumference, weight of all children 5 years and under, and weight and height and arm circumference of mothers is being obtained. Six teams of census workers and supervisors, and six teams of food intake staff and their supervisors are now at work under the direction of Drs. Cattle, Carter, Janson and the senior field supervisor from CBS. Data entry from the preliminary survey will be done at the University of Nairobi at the computer center, and simple analyses provided there. A duplicate set of data are being sent to UCLA and will be processed and analyzed in California as well.

Economic Indicator

The number of structures in the household compound and the number of structures having iron corrugated roofs versus thatch are being counted. It was felt by the Kenya investigators that more SES data collection at the first home visit would not be welcomed and that unreliable answers might be forthcoming.

PROPOSED METHOD OF HOUSEHOLD SELECTION FOR DEFINITIVE STUDY

Criteria

Household Composition

1) Children 0-2 years, 6-10 years; mated pair with the mother under 35 years.

2) If no children, then an adult mated pair with mother under 35 years is required. This includes those households with and without deaths in children under 5 years.

3) Presence of the father as a regular household member and usually not away from home.

Disqualifiers

1) Polygamous households.

2) Presence of 2 or more severely malnourished children; children whose weight for age is $\leq$60% NCHS standard.

3) A mother whose weight for height is less than 75% of standard.

4) A father away from home greater than three months at a time.

5) A house completely non-cooperative or inaccessible.

Approaches

1) Preliminary survey data will be used to determine potentially eligible households.

2) Calculation of household intake score for each eligible household will be made, and households will be ranked by intake scores and list ranked intake scores, household number and composition.

3) Cross tabulation on intake score versus household composition will be performed.

4) Look at proportions in target households; proportion of households with 0-3 years, 6-10 years.

5) Divide the ranked households into three groups: low, medium, and high ranges of food intake. Divide each group into HH with 0-3, 6-10 year olds.

6) Choose randomly in each subgroup the number of HH to give the same proportion of 0-3 and 6-10 year olds.

An alternate method is to decide beforehand on 3 levels of energy intake

based on HH intake scores* - severely deficient, mild-moderate deficient, and "adequate" energy intake. In the final sample include:

- all in the severely deficient group (predict 3-5%)
- all in the mild-moderately deficient group (predict 25-30%)
- no more than a subsample of 25% from the "adequate" group (predict total group will be 65-70% of all studied).

Match the households in the "adequate" group with the age composition of the households at least in the mild-moderately deficient group. It would be useful to cluster the sample for convenience and to control for other variables.

PERSONNEL AND TRAINING

Field Personnel

The Kenyan field staff, at present, numbers 45 field enumerators, 10 supervisors, a senior field supervisor from CBS, and the part-time involvement of a senior scientist, Dr. A.A. Janson. The enumerators are, for the most part, women between 20 and 30 years old.

It has taken about 4 months of training and retraining for the group to be able to carry out the preliminary survey, obtaining census information, limited illness information, anthropometry, and simple household food intake. A group of ten are involved in a pilot on activity observations. The supervisory group are mainly male with A level (junior college) education. A second CBS field supervisor will be secunded to the project. The CBS supervisors are experienced in nutritional surveys and will be helpful in the training of the supervisory group.

In terms of the enumerators, they have been trained to do height, length and weight using Salter scales, adult spring scales, and arm circumference. The group did very well on the standardization tests, requiring little in the way

of retraining for these measures. Dr. Jansen, from the Department of Community Health, comes into the field on a regular basis, two to three days a week, to help with the general field work along with Drs. Cattle and Carter. There are 6 teams of two that collect census and illness information and 6 teams of two that collect food intake information. Every 4 workers are supervised by one supervisor. The other Nairobi Medical School senior scientists come into the field periodically. Mr. Mekke, a post graduate student, will work full-time on the activity work performance pilot representing Professor Thairu in the field.

Recruitment will shortly take place for 25 enumerators to start their training for the final study since training takes so long, and to enable the pilot and preliminary study to go on simultaneously. The preliminary survey serves as excellent training ground.

Staff recruited from the University of California, Susan Weinberg and Susan Roberts, are both arriving in April. They will help primarily with the training for food intake and the pilot weighment versus recall method. Mrs. Roberts will also assist with lactation pilot studies. Now that Dr. Eric Carter has been officially designated as the Field Director, both by the Kenya and American group, he will need to be freed up for this overall management function, and Dr. Cattle must be freed up more to enable her to do ethnography studies.

Nutrition CRSP Retreat, Nyeri

Both Professor James Kagia and Dr. Neumann felt it essential to hold an in depth meeting for the senior research team. Nyeri, which is about two hours away from Nairobi, removed from the University and from the Embu field site, was chosen and Dr. Cattle acted as the coordinator. The main purpose (see the letter and agenda) was to have each of the senior Kenya investigators fully consider their own areas of interest and involvement, think out all the

steps, contents, methodology, training, piloting and core studies, and become completely familiar with the core requirements of their own sections as well as those of the others. They also were to indicate any other research non-core interest they might have and to become acquainted with the overall project. Close attention was given also to administrative, management, fiscal matters, as well as ethical considerations and service benefits of the research to the study population. Training and staff requirement was also covered quite thoroughly. The agenda and some of the available minutes are enclosed. The meeting was judged by all as an unqualified success.

As for the non-core areas, this is not extensive. The following are non-core areas: chronic adult morbidity will be identified; studies on the behavior of diarrheal disease due to rotovirus under different levels of energy intake; work capacity and activity will be studied among adolescents; activity observations will be made as well as recall. There may be some work on hepatitis and measles. All non-core studies will have to await final approval as noted by ME.

Logistic planning received detailed attention. Based on the core requirements of January 1983 (see "logistic" charts), enumerator requirements as well as the household intrusion load in terms of number of days of study per month were considered. It was projected that a field staff of 90 would be required as well as 11-13 days per month for household visits to obtain all that was needed for the core measures. Because the households in the study area are far flung and households are not located in villages, it was felt that three study sublocations would each require a sublocation office. The maximum number of households that could be covered per day are from 4 to 5. Also, it was felt that the enumerators could not be too multi-purpose as their educational backgrounds were quite limited, and one would not want

to overload them. However, for morbidity collection and anthropometry, we will try to obtain services of nursing school graduates, or community nurses. The personnel needs have been spelled out (see list).

Dr. Eric Carter was chosen as the field director for the next year. It is hoped that an assistant field director, a Kenyan social scientist, will work with him, and after 1 to 2 years, the Kenyan would then become the field director. Professors Inairu and Bwibo have been designated co-directors, Prof. Kagia the project director (PI) in Kenya, and Dr. Neumann the UC project director (PI). Dr. Carter will report to Professor Kagia as well as to Dr. Neumann.

DATA, COMPUTER SITUATION

Please refer to the trip report, Mrs. Anne Coulson, (not appended). E. Njeru is to be trained for the supervision of data entry, data editing and simple analyses, using the University of Nairobi computer center. Negotiations to use the Government of Kenya IBM computer, a much larger capacity computer, for more detailed and complex analyses is under way. There will be a triplicate flow of data: one set to the University of Nairobi, one set to the University of California, one set stays in the field.

The Apple Microcomputer will be used by the three projects in Mexico, Egypt and Kenya. The Apple computer will be used primarily as a field research management and logistic tool to act as a "tickler file" indicating which households and individuals are due for which studies, and who have missed tests and observations.

The preliminary view of logistics is that the three sublocations will need sublocation offices to be used for cognitive testing, clinical and other examinations, and to serve as a field enumerator headquarter and supervisor office. The staff will report, check-in and receive day to day instruc-

tions here. Kararumo, the rural health training center, has furnished the Nutrition CRSP with two large rooms, a waiting area, and a house which can accomodate several people. The rooms will serve as the work performance laboratories, as well as those for blood drawing and physical examinations.

COMMUNICATIONS

A medium range radio set-up will be installed with the base station at the Embu office and receivers and senders in the vehicles or hand carried by the supervisors which can be placed in the homes with no phones when the vehicles are not in use. Dr. Carter is obtaining a radio license and the Carters have already obtained a telephone which is on the standard dialing system. One can dial the USA directly!

OFFICE/LABORATORIES

In Nairobi, on the grounds of the Medical School, there is an old but solid structure in which four offices and a bathroom will be renovated, and will house the administrative, secretarial staff and any of the statistical clerk staff, and will serve as the University of Nairobi project headquarters. This will cost about $4000.

In Embu, a new building for laboratory, dormitory, and office space is now being built on the grounds of the Embu Provincial Hospital. This has the advantage of being a secure location with water and electricity. The building will be donated to the hospital at the end of the project. The building will have an office for the administrative staff and field director. The laboratory will enable such routine work as hematology, parasitology, to go on plus the processing of blood, urine, and other laboratory work. There will be a freezer and a refrigerator, a base radio and also the microcomputer will be kept here. This is being built at the cost of $14,000. The building

will also have 4 dormitory spaces which can house staff coming from the University of Nairobi, and food can be obtained close-by. This will greatly cut down on per diem field expenses. In terms of living quarters, Dr. Carter, Dr. Cattle, and Susan Weinberg each have their own residences. There is still the possibility of renting, very inexpensively, a large house at Kyeni School or Hospital for other temporary or permanent staff.

TRANSPORT

A school bus belonging to the Kyeni Girls' School is being used on a rental basis to transport the 45 field workers daily to various work sites. The project now owns two four-wheel-drives, one used from UNICEF, and one station wagon for commuting primarily to Nairobi. Because the school bus is available during school holidays and during school only from time to time, we are badly in need of a large capacity van, and this is being requested. There is a 15-passenger Nissan Microbus (right-hand drive) available in Kenya, duty-free, and quickly obtainable. This will help with the transporting of study subjects as well as staff in this far flung study area.

TIME TABLES

See the Gantt chart.

TRAVEL - UPCOMING

Anticipated travel in the next six months:

Dr. Emmy Werner, Psychologist - training and pilot testing of cognitive studies.

Dr. E. Stiehm, Immunologist - to work with Dr. Bovry in the pilot testing and to check out the Immunology methodology.

Dr. Gerald Gardner, Kinesiologist - to set up the final phase for the work performance studies.

Dr. Charlotte Neumann to return during the summer - overall direction of the project and launching of the definitive study, picking of study households.

Mrs. Anne Coulson - to set up the data management flow techniques prior to the final study.

Dr. Robin Gorsky - for general overally direction, implementation of the final study and finalisation of the activity observation studies.

Dr. Afifi, Statistician - currently on sabbatical in Europe and may visit the project site and consult with the Kenyan investigators.

Dr. James Cherry - to check out the possibility of rotovirus and other infectious disease work and morbidity.

Drs. Calloway and Balderston are urged to visit the project site first-hand so they have a much clearer understanding of the possibilities and the problems of working in the Kenya Project.

Professor Thairu is anticipating a two-month study trip to the United States to work with Dr. Gardner in work performance and neurophysiology.

FINAL STUDY DATE

It is anticipated that the definitive study will start in September.

Duty-free Importation

A long list of possible equipment and supplies has been submitted to the Ministry of Finance to obtain advance clearance for these items so they may be brought in duty-free without any delays. The first batch has already been cleared. Clearance is also now being obtained from US AID.

RELATIONSHIPS WITH THE USAID KENYA MISSION

Dr. A. Rose Britanek and Mr. Chuck Mantione spent a day at the project site in Embu District visiting the households with the field team and observing their work in order to have a better understanding of the scope of the project. Dr. Britanek has arranged for the block clearance of the people anticipated

coming in the next six months. The American Ambassador is not happy about having so many consultants coming at one time, but Dr. Britanek has explained the necessity for this and anticipates no problems with future clearances. Mr. Wasonga of the Ministry of Finance and Economic Planning met with the Project to understand what is going on and see how the data might be used. He is interested in short term training at the University of California for some of his staff in the School of Public Health.

The principal investigators and A. Coulson met several times with the Director of the Central Bureau of Statistics (CBS). He assigned two of his field staff to the Project for the field phase and also shared some very valuable background nutritional and economic data. Mr. Agunda would welcome any of the Project findings.

A committee on post graduate training was set up, chaired by Prof. Bwibo. Other members are Prof. Thairu, and Drs. S. Kinote and Eric Carter. They are to review the applications for master or doctoral level training within the project site and set up selection criteria. First priority is to be given only to those students enrolled at the University of Nairobi in a masters or doctoral program, and University of California (UCLA, UC/Berkeley, or UC/Davis) for graduate field work within the project area. Students from outside the universities will probably not be given permission to carry out research in these areas.

An ethics committe met under Dr. S. Kinote and the benefits and degree of intervention has been defined.

APPENDIX

KENYA PROJECT GANTT CHART

MONTHS / WEEKS	APRIL 1 2 3 4	MAY 1 2 3 4	JUNE 1 2 3 4	JULY 1 2 3 4	AUGUST 1 2 3 4	SEPTEMBER 1 2 3 4
PRELIMINARY SURVEY (PS)	250 hh	250 hh	100 hh			
FIELD STAFF (NEW)						
- ADVERTISE	—					
- RECRUIT	—					
- TRAIN	—	—				
- INTEGRATE INTO PS		—				
SENIOR/ADMIN. STAFF						
- ADVERTISE						
- RECRUIT						
- INTEGRATE INTO CRSP						
PILOT TESTS						
- Food Intake			—	—		
- Activity	—		- - -	— — —		
- Work			—	—		
- Morbidity			—	—		
- Reproduction			—	—		
- Anthropometry			—	—		
- Cognitive			—	—		
- Lab. Work			—	—		
ANALYSIS - PS	- - - -	- - - -	- - -	- - - -	—	
ANALYSIS - PICOS			- - -	—		
HH SELECTION				- - - -	—	
HH RECRU					—	
MAIN STU						—

SCHEDULE OF PROPOSED MEASUREMENTS:

Weekly: (regular)

EI Morbidity HH visit: recall and observation for target individuals.

EI Morbidity HH visit: current illness subroutine-target individuals ill with key sicknesses.

EI Morbidity HH visit: anthropometry on target individuals ill with key sicknesses.

Weekly: (special)

EI_A Newborns' anthropometry - 1st week of life.

EI_A Breastmilk samples - initial 72 hours and 8th day.

EV Social Performance - subroutine on hh "crisis" (coping strategies).

Monthly:

1. Reproduction Question - lead females.
2. Anthropometry - all targets.
3. Food Intake - all targets, all households.
4. SES - lead males, lead females.
5. Activity Frequency Recalls (covering 1 week) - target individuals plus teens (not 0-2).

Every 3 months:

1. Anthropometry - Height of school-age children (7-10).
2. Activity Observations (continuous) - all targets (not 0-2).
3. Cognitive - young children (0-2).
4. Work (RMR-VO_2 submax - finger prick - medical exam) - target individuals (not 0-2) plus teens.
5. Breastmilk samples - all target lactating females.
6. Breastmilk volume - all babies born during study.
7. Socail Performance - lead males, lead females.
8. Activity Observations (discontinuous) - 7-10 (once per school term).

SCHEDULE OF PROPOSED MEASUREMENTS: (continued)

Every 6 Months

1. Blood drawing - 0-2, 7-10.
2. Saliva - 0-2, 7-10
3. Stool (parasites) - 0-2, 7-10.
4. Urine (parasites, glucose) - 7-10.
5. General medical exam - 0-2, 7-10.

Yearly

1. Cognitive tests - target adults, 7-10.
2. Blood drawing - lead males, lead females.
3. Stool and urine - lead males, lead females.
4. General medical exam - lead males, lead females.
5. Ethnographic - initial and update - hhs.

(OR ONCE ONLY)

6. Anthropometry - height - lead males, lead females.
7. General medical hisotry - all targets at entry.

(OTHER)

1. Withdrawal data - as appropriate.

ENUMERATORS:

Enumerators I:	Morbidity, Reporduction, Anthropometry 15 enumerators + 3 supervisors
Enumerators I_A:	Birthweights, Milk samples, other measurements 3 enumerators + 1 supervisor
Enumerators I_B:	Breatmilk Volumes 6 enumerators + 2 supervisors
Enumerators II:	Food Intake 30 enumerators + 6 supervisors
Enumerators III:	Cognitive 6 enumerators + 1 supervisor
Enumerators IV:	Work/Activity (Cog. obs. - school activity/social performance - HH ratings) 16 enumerators + 4 supervisors
Enumerators V:	SES/Census/Social Performance/Ecol. 15 enumerators + 3 supervisors

(Est.) Total field enumerators: 91

(Est.) Total field supervisors: 20

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EXAMPLE HOUSEHOLD (MONTHS)

1	2	3	4	5	6	7	8	9	10	11	12	13
Morbidity Repro? Anthro FI SES Act Freq Ht Act Abs Cog 0-2 Work GI sam BM vol Soc Perf Act Obs-Sch. Gen med history Anthro-ht adults Cog-adults 7-10 Ethnogrphc	Morbidity Repro? Anthro FI SES Act Freq	Morbidity Repro? Anthro FI SES Act Freq	Morbidity Repro? Anthro FI SES Act Freq Ht Act Obs Cog 0-2 Work BM sam BM vol Soc Perf Act Obs - Sch.	Morbidity Repro? Anthro FI SES Act Freq	Morb Repro? Anthro FI SES Act Freq Blood Exam 0-2,7-10	Morb Repro? Anthro FI SES Act Freq Ht Act Obs Cog 0-2 Work BM sam BM vol Soc Perf Act Obs - Sch.	Morb Repro? Anthro FI SES Act Freq	Morb Repro? Anthro FI SES Act Freq	Morb Repro? Anthro FI SES Act Freq Ht Act Obs Cog 0-2 Work BM sam BM vol Soc Perf Act Obs - Sch.	Morb Repro? Anthro FI SES Act Freq	Morb Repro? Anthro FI SES Act Freq Blood Exam 0-2,7-10, adults Anthro-ht adults Cog-adults 7-10 Ethnogrphc	Morb Repro? Anthro FI SES Act Freq Ht Act Obs Cog 0-2 Work BM sam BM vol Soc Perf Act Obs - Sch.

EXAMPLE HOUSEHOLD (DAYS)

1	2	3	4	5	6	7	8	9	10	11	12	13
Morbidity Anthropm Repro.	FI	FI	SES Act Freq FI				Ht-School Age Act Obs	Act Obs	Cogntv	Work	Breast milk sample Social Perf	Breast milk volume

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NUTRITION CRSP - KENYA PROJECT

PERSONNEL NEEDS

NYERI RETREAT

GREEN HILLS HOTEL, March 16 - 19, 1983

March 19, 1983

PERSONNEL FOR THE NUTRITION CRSP - KENYA PROJECT

PRESENTER: Prof. Thairu SECRETARY: Prof. Thairu

The following are the break down of the posts which are needed in CRSP KENYA. Some have been filled while others are still vacant.

A. SCIENTISTS

The following Divisions within CRSP need to appoint permanent scientists or trainee scientists who will be located in Embu.

1. Community Health (one) VACANT
2. Paediatrics (one doctor & one child psychologist) VACANT

NB The other divisions i.e. Nutrition & Physiology already have identified their scientists.

B. ADMINISTRATION OFFICE NAIROBI

1. Computer Person (one) FILLED
2. Secretary (one) VACANT
3. Accounts Clerk (one) VACANT
4. Messenger/Clearer (one) VACANT

C. ADMINISTRATION OFFICE EMBU

1. Accountant (one) VACANT
2. Administrator (one) VACANT
3. Senior Field Supervisors (ex Central Bureau of Statistics (two) FILLED

D. FIELD IN EMBU

1. Co-ordinator (either Sociologist or Doctor with MPH) (one) VACANT
2. Medical Doctor from U.S.A. (one) VACANT
3. Senior Technician Medical (one) VACANT
4. Technician Food Technology (one) VACANT

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PERSONNEL NEEDS

5. Technician Physiology (one) VACANT
6. Senior Laboratory Analyst for Foods etc located at MRC (one) VACANT
7. Physician (Kenyan) (one) VACANT
8. Community Nurses 12(twelve) VACANT
9. Registered Nurse 1(one) VACANT
10. Enumerators 91 CURRENTLY VACANT
11. Supervisors 18 PARTIALLY VACANT

E. In addition to these there are at present the investigators from University of California and University of Nairobi as well as the enumerators and their supervisors and the one secretary and driver.

Dr. S. Kinote 3/19/83

MEETING MINUTES

Ethical Questions Related to Intervention:

Questions:

1. Do we need to intervene?
2. Will it change results?
3. Does CRSP take over health services of area?
4. Are results of tests given to the subjects?
5. Is there an intervention phase?

Answers:

1. M.D. obligated to treat and/or refer.

2. How much does intervention interfere? We will have affect on subjects by being there. Special interventions such as immunizations might have too great an effect on the subjects. Immunization should be encouraged.

What to intervene on: Imunizable disease.

Immunizations: Refer to Health Center for immunization. Project should facilitate cold chain and availability of vaccine.

All life-threatening conditions:

- contact with appropriate facility and immediate emergency treatment, and then refer to usual health care facility; will supply transport.

Minor illness: Keep simple medications for minor treatment, first aid kits for nurses, etc. and simple treatment.

3. Does project take over health services for the area? Answer is no re: Dr. Oyoo, Provincial Medical Officer.

4. Results of blood tests should be given to the patients and referral for treatment of conditions such as anemia and hookworm.

5. Intervention component, is it part of the program? During the third year,

depending on what is found, these could be an intervention phase.

<u>Anemia</u> - Most of the anemia is iron deficiency. Below 5-8 gram % advise about diet and suggest therapy. Below 5 grams - refer to hospital for treatment.

NUTRITION CRSP—KENYA PROJECT
Community Health Faculty of Medicine
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University of California, Los Angeles, U.S.A.
Field Address P.O. Box 1002, Embu, Kenya

Functional Effects of Mild-Moderate Malnutrition
Research Permit No. OP/13/001/12C78(9)

March 1, 1983.

C G Neumann

Dear

The Kenya Nutrition CRSP Project will be holding a retreat from the evening of March 16 to midafternoon of March 19 at Greenhills Hotel, Nyeri.

The principal investigators feel that it is essential for all senior investigators to meet together to thoroughly review the project in terms of the overall core* and items of each functional areas, food intake, nutrional status and socioeconomic status (not only in terms of an overview of the core project but also in terms of each functional area, food intake, nutritional status and socioeconomic status). This important meeting is to help all participants gain a common understanding of the Nutrition CRSP.

To accomplish this, each senior investigator is being asked to prepare a short written paper (concerning their understanding of the core requirements of their area of interest). To facilitate the preparation of this paper the appropriate summary core section from the management entity will reach you shortly. Each of your papers will then be duplicated and distributed to all participants during the first evening of the retreat. This will allow the senior investigators to become aquainted with the contents of each other's functional area prior to your oral presentation and discussion on the two following days. The CRSP Project driver will pick up your papers from your University Offices on Friday morning March 11th.

The senior investigators responsible for the following core areas are:

Food Intake & Nutritional Status	Dr. Kinoti Dr. Carter (discussant)
Disease:	
Morbidity	Prof. Bwibo
Immunology	Prof. Bowry Dr. Neumann (discussant)

* Core* that data required by the Kenya, Mexico and Egypt projects by the Management Entity, University of California, Berkeley.

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NUTRITION CRSP—KENYA PROJECT
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[illegible] Address: P.O. Box [illegible], Embo, Kenya

[illegible] Effects of Mild Moderate Malnutrition
Research Permit No. [illegible]

NUTRITION CRSP - KENYA PROJECT March 9, 1983.

AGENDA

March 16 - 19 1983	Green Hills Hotel - Nyeri	
March 16, Wednesday		
4.00 to 6.00pm	Arrival, check-in	
7.30 to 8.30pm	Dinner	
Session Begins		
8.30 to 9.30 P.M.	Welcome	Prof. Karia
	Current Status and Overview of CRSP Projects	Prof. Neumann
March 17, Thursday - Core Studies		
9.00 to 9.30am	Introduction and Definition of core studies and Data Collection	Prof. Neumann
9.30 to 10.30am	Food Intake and Nutritional Status	Dr. Kinoti Dr. Carter (discussant)
10.30 to 11.00am	Tea/Coffee break	
11.00 to 12.30pm	Disease	
11.00 to 11.45am	Morbidity	Prof. Bwibo
11.45 to 12.30pm	Immunology	Prof. Bowry Prof. Neumann (discussant)
12.30 to 2.00pm	Lunch	
2.00 to [illegible]	Reproduction	Dr. Jansen Prof. Bwibo (discussant)
[illegible]	Cognition	Dr. [illegible]
[illegible] to [illegible]	Tea break	

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4.30 to 5.00pm	Work/Activity	
4.30 to 5.15pm	Work Performance	Prof. Thairu Dr. Carter (discussant)
5.15 to 6.00pm	Activity	Dr. Cattle
6.00 to 6.30pm	Socioeconomic	Prof. Kamia Dr. Cattle (discussant)
6.30 to 7.30pm	Dinner	
8.30 to 9.30pm	Summary of core	Prof. Kamia

Friday, March 18 - Pilot Studies

9.00 to 9.30am	Objectives of Pilot Studies and Timing	Prof. Neumann
9.30 to 10.00am	Food Intake Anthropometry	Dr. Carter
10.30 to 11.00am	Coffee/Tea Break	
11.00 to 12.30pm	Disease	
11.00 to 11.45am	Morbidity	Prof. Bwibo Prof. Neumann
11.45 to 12.30pm	Immunology	Prof. Bowry
12.30 to 2.00pm	Lunch	
2.00 to 3.00pm	Pregnancy	Dr. Jansen
3.00 to 4.00pm	Cognition	Dr. Mema
4.00 to 4.30pm	Tea Break	
4.30 to 6.00pm	Work/Activity	
	Work Performance	Prof. Thairu
	Activity	Dr. Cattle
6.00 to 8.30pm	Dinner	
8.30 to 9.30pm	Review Preliminary Survey & Selection of Final Study Households	

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Saturday, March 12- Administrative Session

9.00 to 10.00am	Organization Lines of Authority Decision Making Committees	Prof. Kagia (Chairman)
	Personnel Needs Field Laboratory Building, remodelling	Dr. Carter
11.00 to 12.30pm	Field Logistics	
12.30 to 1.30pm	Lunch	
1.30 to 2.30pm	Publication	
2.30 to 3.00pm	Training	
3.00pm	Adjourn	
3.00 to 4.00pm	Executive Session if needed Kagia, Bwibo, Thairu, Neumann & Carter.	

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