



Memorandum

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Subject Foreign Trip Report (AID/RSSA): Family Health Survey, Sine-Saloum Region,
Senegal, October 25-November 18, 1982

To William H. Foege, M.D.
Director, Centers for Disease Control
Through: Dennis Tolsma
Acting Director, CHPE *Tolsma*

SUMMARY

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SUMMARY

We traveled to Senegal to assist in the final preparation for and implementation of the Sine-Saloum Family Health Survey. USAID/Senegal first requested CDC technical assistance for this survey late in 1981. Our previous work, as well as a description of the survey and its objectives, can be found in a CDC/RSSA trip report by Friedman and Goldberg dated June 21, 1982. In addition to USAID/Senegal, most of our consultations were with the Senegalese Census Office (BNR), particularly with Mr. Fara M'bodji, a BNR demographer who is the survey director.

During this TDY assignment, we carried out several tasks related to the implementation of the survey: (1) Finalization of the survey questionnaire; (2) field work, including 2 days visiting villages in the Sine-Saloum region in order to determine the second-stage sampling procedures to be followed at the village level; (3) assistance in the training of interviewers and of the staff who were to do anthropometric measurements on young children; (4) resolution of any remaining budgetary and administrative questions; and (5) assistance in the supervision of the first week of field work. In addition, we discussed plans for data processing and analysis once field work is completed.

At the time of our departure from Senegal, the survey field work had been underway for 1 week, and no major problems had been encountered. We expect the field work to be completed on schedule by late December. Coding and keypunching will take place in Senegal, but editing and analysis of the data will take place at CDC, because the BNR has limited access to computer facilities. The survey director will be invited to CDC to assist in data analysis and for consultation on the survey report.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

Dakar and Kaolack, Senegal: Friedman, October 25-November 6, November 12-18; Goldberg, October 25-November 13; Morris, October 26-30, at the request of USAID/Senegal and AID/S&T/POP/FPSD, to provide technical consultation on the final questionnaire design, sample design, interviewer training, and field work procedures for the Sine-Saloum Family Health Survey being conducted by the Bureau National de Recensement (BNR, National Census Office) for USAID/Senegal. Friedman's travel was in conjunction with TDY travel to Gambia and Morris' was in conjunction with TDY travel to Brazil. This travel was undertaken as part of the Resource Support Services Agreement between AID/POP/W and CDC/CHPE/DRH.

II. PRINCIPAL CONTACTS

A. USAID/Senegal

1. Dr. Michael White, Health, Nutrition, Population Officer
2. Dawn Liberi, Deputy Health, Nutrition, Population Officer
3. Mary Diop, Project Administrator
4. Moussa N'Diaye, Project Administrator

B. Bureau National de Recensement (BNR)

1. Ibrahim Lamine Diop, Director
2. Fara M'Bodji, Demographer and Survey Co-Director
3. Matar Gueye, Survey Field Coordinator (Superviseur)

C. Sine-Saloum Rural Health Care Project

1. M. Souleymane Diene, Governor of the Sine-Saloum region
2. Dr. Ismael Kane, Medical Chief for the Sine-Saloum region
3. Aida Lo, Project Director

D. Other

1. Dr. Abdourahman Sow, Assistant Director, Infectious Disease Division, University of Dakar Medical School and Survey Co-Director
2. M. Serigie Mbaze Diene, Deputy Director, Applied Nutrition and Food Service (SANDS), Ministry of Public Health
3. Dr. Jean-Michel N'Diaye, Chief, Service des Grandes Endemies, Ministry of Public Health

III. BACKGROUND

The objectives, survey design, sampling procedures, pretest, timetable, and budget of the Sine-Saloum Family Health Survey, which were formulated in April 1982 in collaboration with the Bureau National de Recensement (BNR) during previous travel to Senegal by Friedman and Goldberg, are described in their trip report dated June 21, 1982. Between that time and the TDY assignment described here, the survey questionnaire was put into nearly final form following the pretest through correspondence and telephone consultation between CDC and BNR personnel. At the request of USAID, several questions regarding the knowledge and use of a USAID-sponsored children's feeding program conducted by the Ministry of Health were also added to the questionnaire and pretested. Also, the second stage of the two-stage sampling process was completed at CDC using maps and household lists from the national census of 1976 supplied by the BNR.

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During the same period, BNR personnel developed an interviewer training manual, selected a survey coordinator, four field supervisors and interviewer candidates, and made administrative preparations for the survey. In addition, Friedman and Goldberg received orientation from the CDC Nutrition Division in the use of the instruments to be used to measure the heights, weights, and arm circumferences of all children less than 6 years of age in sample households.

IV. SURVEY ACTIVITIES

The purpose of the present TDY assignment was to provide technical assistance to: (1) Make last minute revisions to the questionnaire; (2) finalize field procedures for the second stage of the sampling process where respondents would be selected at the village level; (3) assist with the training of survey interviewers; (4) help with the final administrative and logistical preparations for the survey; (5) initiate the field work; and (6) discuss the post-field work plans for data processing and analysis of the survey.

Following detailed discussions between the CDC consultants and Fara M'Bodji, the survey questionnaire was finalized during the week of October 25 and sent to the BNR print shop. There are three different survey instruments. The first is a village dossier, printed on pink cardboard, containing information on each sampled village. The second is a form with information on each concession (compound) falling in the sample, printed on blue cardboard. This is in the form of a file-folder which contains all of the third and most important of the survey instruments, the individual questionnaires for that concession, which is administered to all female residents between 15 and 44 years of age.

The writers traveled to five villages in the Sine-Saloum region on October 28-29, along with two experienced BNR field supervisors. The purpose of this trip was to determine field procedures for selecting concessions (compounds) within the census tracts and villages selected in the first two stages of the sample design. The original plan had been to base the random selection of concessions on lists of concessions compiled during the 1976 census for each village that fell in the sample (in some cases detailed census maps were also available).

However, since 6 years have passed since the census, it was anticipated that these lists might need updating. The visits to five villages* that fell in the sample showed that there were some new concessions built since the census, and some concessions no longer existed (up to 10-15 percent of the total number of concessions). There were also some inadequacies in the original lists and other less common problems such as the combining of hamlets.

*Department - Arrondissement - Village

Gossas	- Kahone	- Louke Seyane
Gossas	- Kahone	- Gndlaneme
Nioro	- Paoskoto	- Kabacato
Nioro	- Paoskoto	- Darou-Mougnagene
Fatick	- Niakhar	- Mboulsouka

Perhaps the most important problem was the difficulty of systematically locating the concessions on the census list that followed the random starting point. To resolve this problem, we had the field team supervisor renumber the village concessions, always using the chief's concession as concession number 1, in five test villages. Except in the largest villages this process took less than 30 minutes with the aid of the village chief or other village official, despite our fears that it would be too time-consuming. The concessions chosen for interview will be a cluster of 10 consecutive concessions from the new list, with the starting point corresponding to a preselected random number. In cases where the random number falls within 10 concessions of the last one listed in the village, the team would proceed to the next village listed for that census district and continue with the first concession (the village chief's home) and proceed until ten concessions had been sampled in the district. In this manner, every concession in the census district has an equal probability of selection.

It was estimated, based on the pretest and Census Office information, that each concession would average between two and three possible respondents (ever-married women between 15 and 44 years of age, plus unmarried women who have ever had a live birth). However, one area of Sine-Saloum, inhabited primarily by members of the Serer ethnic group, generally has larger concessions. There the number of women per concession may be somewhat greater. We estimate, all things considered, that the 80 clusters in the sample, each with 10 surveyed concessions, should yield over 2,000 interviews (assuming a completion rate of close to 100 percent). Since these women have likely had an average of about two live births each in the past 6 years, we should obtain information on about 4,000 children.

A 2-week training course for survey interviewers began on November 1. In addition to thoroughly familiarizing interviewers with the questionnaire and with interviewing techniques, the course included training in the proper use of the measuring boards, scales and arm circumference tapes employed in measuring young children. The course also included a lecture given by an infectious disease expert on diseases common among Senegalese children, and a lecture on immunizations given by the chief of the Senegalese Grandes Endemies. The training course was directed by Mr. Matar Gueye who would also function as the coordinator (superviseur) for the survey field work. The last day of training consisted of practice interviews in a village about 1 hour from Dakar.

Fifteen female interviewers were trained, and 12 were selected for work in the field at the end of the training course. Three women were retained as alternates in case any of the interviewers should leave the survey for any reason. The interviewers were divided into four teams of three, with each team supervised by a controlleur (team supervisor). The four controlleurs will, in turn, be supervised by Matar Gueye. All interviewers are bilingual in French, the official language, and Wolof, a language spoken by virtually all inhabitants of Sine-Saloum. While the interviews will be conducted in Wolof, the questionnaire and responses are written in French.

Field work began on November 15. During the first week, the teams worked closely together and were supervised by CDC, USAID, and BNR personnel. During the first week of field work, it was found that team supervisors can obtain

complete lists of even the largest villages (consisting of about 100 concessions) in under 1 hour in the morning, upon arrival in the village. In fact, the listing generally takes only a few minutes because (1) the village has only to be listed as far as the last concession to be surveyed, i.e., nine concessions beyond the random number, and (2) most villages are quite small. This listing does not slow down the survey progress, since very little interviewing can generally be done early in the morning, because during that time of day most women are out helping with the harvest. No major problems had been encountered as of this writing, and field work is scheduled to be completed by December 24, 6 weeks after it began.

V. REVISED TIMETABLE FOR SURVEY COMPLETION

The coding of the questionnaire will take place at the BNR in Dakar after the completion of field work. It is anticipated that the best interviewers will be retained as coders, since they will already be totally familiar with the survey questionnaire. A draft codebook has been prepared at CDC and will be reviewed and completed at the BNR, with consultation from CDC. Key punching will be performed in Dakar with the information punched directly onto tape. After key punching, the unedited tape and the questionnaires are to be sent to CDC.

Editing of the survey will be performed in Atlanta rather than in Dakar, since the BNR has limited access to computer facilities, making any timely data processing there quite problematic. Data analysis will likewise take place at CDC. It is anticipated that Fara M'bodji, the survey director, will come to Atlanta in March/April for two weeks to assist in the analysis after an edited tape is ready. He will also consult with us on the plans for the final survey report. A revised timetable for the survey is as follows:

- 10/25-31/82: Finalize questionnaire field procedures and logistics, sampling, budgetary considerations, and other aspects of the survey.
- 11/1-14/82: Training and selection of interviewers.
- 11/15-12/24: Field work.
- January 1983: Coding (BNR)
- February 1983: Key punching (BNR)
- Mar./Apr. 1983: Editing of data (CDC)
- April/May 1983: Primary data analysis (CDC with participation by BNR personnel).
- June 1983: Writing of survey report (BNR and CDC).


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