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Evaluation of DUALabs Project
African Data for Decision Making
March 17-29, 1975
Contract No. AID/CM/Pha-C-73-18

Covering Statement

The evaluation report has been prepared in separate parts for the Cameroon and Kenya activities. The evaluators are well satisfied with the performance of the project personnel. In both countries it is clearly evident that the project should be extended through June 1976 with the additional necessary funding to accomplish the objectives of the program completely and ensure that local counterparts are sufficiently trained and experienced to carry on the program when DUALabs personnel have departed.

It should be emphasized that both projects have been seriously delayed for differing and unanticipated reasons. In Kenya progress of the work has been hindered principally by the extent of computer conversion undertaken in the Central Bureau of Statistics. In fact, it will not be until sometime in November 1975 that the new computer will be available for normal operations. In Cameroon the delay is attributable principally to time consumed in clearances at various levels and the Cameroon project agreement was not signed until February 5, 1975. When viewed from this perspective, the amount of work accomplished by the Cameroon project manager is all the more remarkable.

It is the unanimous opinion of the evaluators based on extensive discussions with local officials that the project will prove to be extremely helpful to the governmental structure in both countries, in the use of data for decision making concerning population and other socio-economic policies. It is recommended that the necessary additional time through June 30, 1976 be granted and that sufficient funds be provided through the period to permit the satisfactory completion of the objectives specified in the respective project agreements.

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Evaluation of DUALabs Project; African Data for Decision Making

U.S. Agency for International Development

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4 appendices

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Evaluation reports for the Cameroon and Kenya activities were prepared in separate parts. The evaluators were well satisfied with the performance of the project personnel. Both projects have been seriously delayed for differing and unanticipated reasons. In Kenya the work has been hindered principally be the extent of computer conversion undertaken in the Central Bureau of Statistics. In Cameroon the delay was attributed principally to time consumed in clearances at various levels and the fact that the Cameroon project agreement was not signed until February, 1975. It was the unanimous opinion of the evaluators that the project will prove to be extremely helpful to both countries in the use of data for decision making concerning population and other socio-economic policies. It is recommended that the necessary additional time through June 30, 1976, be granted and that sufficient funds be provided through the period to permit the satisfactory completion of the objectives specified and to ensure that local counterparts are sufficiently trained and experienced to carry on the program. The evaluators made 24 specific recommendations.

Evaluation of DUALabs Project
African Data for Decision Making
Contract No. AID/CM/Pha-C-73-18 - Cameroon

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Introduction

General Introduction:

An independent evaluation team was established by DUALabs with the approval of AID early in 1975 to review prior, current, and future potential accomplishments of the DUALabs project "African Data for Decision Making." Since the project is actually in operation in two separate African spheres of influence - Cameroon in the francophone sphere and Kenya in the anglophone sphere, within two different time frames, the evaluators have decided to prepare their evaluation in two parts to address each of these two circumstances separately.

The team consisted of the following professionals who initiated the evaluation in Yaounde, Cameroon on March 24, 1975:

Mr. Robert B. Voight - Retired Statistician, former Chief of the Data User Services Division, U.S. Bureau of Census

Mr. Philippe Dumas - Professor of Management Science University of Toulon, France

Mr. Philippe Billot - Workshop for Urban Studies, Municipality of Paris, France

The team had the able services of Dr. ALVIN ONAKA of the Office of Population - AID, Washington Headquarters as a resource person, and received excellent cooperation from the on-site DUALabs Project Directors, AID personnel in both countries, and from the local officials and government employees interviewed during the evaluation process.

The team has tried to be as explicit as possible in their report and for this reason has prepared working drafts of the evaluation, both at the completion of their activites in Cameroon on March 22, 1975 and in Kenya on March 29, 1975. In Cameroon a draft summary report of the evaluation in French was provided to the Director and the Deputy Director of the Bureau of Statistics for their review and comment before the evaluation process was completed in Cameroon.

2. <u>Political and organisational Background in Cameroon Impacting of the Project</u>

a. One of the purposes initially assigned to the project "African Data for Decision Makers" was

to demonstrate in African developing countries the uses of demographic and other data for decision making and and for formulation of rational population policies.

Such a project, that to date can hardly be completed in Western developed countries, necessitates in any country, and specifically in a developing country, a careful analysis of

(1) The socio-political conditions in which decision-making takes place and

(2) The structure of the information network, and particularly of the data processing organization and relationships with users. These two aspects will be reviewed in turn with respect to Cameroon.

For the purpose of such review, it has been found useful to know that decisions in general are based on a mixture of, say, "objective" and "subjective" inputs. Objective, or rational, inputs are provided by quantified data in the framework of rational economic or social analysis. Subjective, or intuitive inputs are provided by political and cultural frames of reference.

b. A Socio-political and cultural overview:

After several decades of political and economic Cameroonian policy-makers have, since independence, administration by others, been confronted with the classical problems of underdevelopment, and with problems of creating a nation, "building the unity", they say. Under such conditions, and whatever help from developed countries and international institutions was provided in the form of expert advice and factors data, a large part of the decisions were made on the basis of a fine balance including political and intuitive rather than, for example, on the basis of economic efficiency, per se.

One of the main political concerns was the balance between various ethnic groups in the country and subsequently a coherent geographic development. It can be inferred from the foregoing that, to date, the "subjective" has overwhelmed the "objective" inputs in the mixture of decision-making. Arriving at reversing the blending, as the project "African data" does, necessarily implies

a. new expertise in handling decisions,

b. new power relationship between decision makers,

c. new cultural frames of reference and a new language of communication.

The project can thus be viewed as a type of "cultural revolution."

So, to evaluate significantly the progress of the project, a whole series of difficulties have to be anticipated. These are, among others:

a. A resistance to change on the part of those who feel, overtly or not, that new decisions and techniques are threatening their position or power situation and

b. the demand from project supporters to make it less ambitious and less threatening by limitating its field of application.

Difficulties can be only overcome when the project development is viewed as a slow and pragmatic learning process. If the real objective of such a project is to strengthen the decision making process, and not just to provide computer packages, the administrative and teaching procedures of the developed country - i.e. the U.S. - the project has to be adapted to the realities of the developing country.

The proceding consideration is true in the case of Cameroon, as in most countries, since Cameroonians:

1. Want to control their own development;

2. want to fully understand the why's and the implications of their acts (e.g. see comments by Mouyebe and N'Gaye about the funding procedure and schedule of the project.)

3. They wish the project to be a cooperative undertaking and not "aid" in the classical sense.

These socio-political and cultural observations are based on both a limited number of interviews performed by the evaluation team (This limitation is clearly due to the short duration of the evaluation period and not to any reluctance from anybody in being interviewed. The cooperative attitude of all our interviewees is acknowledged here.) but also on some general discussions with French and American representatives that are knowledgeable of Cameroon. The logical outcome of such a situation is sure to result in a pragmatic approach or, in some people's minds, one supposes, "administrative slowness".

As a consequence, this "administrative slowness" has to be considered as a factor to be taken into account. It has to be dealt with as such. Putting too much pressure on situations that are seemingly stalled would create definite blocks. On the other hand, gentle action and persuasion can be expected.

To be quite fruitful in the present atmosphere it can be expected that if change takes place in the decision-making mixture, it will be for good and, in Cameroon, long lasting.

c. Organizational Considerations

Part of the power structure that deserves special consideration in the frame of the project "African Data for Decision Making" is the organizational relationship of the data-processing activities in Cameroon.

In fact Cameroon is a unique case with regard to data processing organization. All of the data processing activities for government and governmental agencies are centralized in a department called "Service Central Informatique" (S.C.I.) reporting directly to the Secretariat general of the "Presidence de la République." The analogy with what occurs in some corporations can be helpful in understanding the present situation in Cameroon:

History of data processing in Cameroon.

Until 1966, the punched card equipment was located in the Statistical Office, the latter reporting to the Ministry of Plan. It mainly processed statistics for governmental information. With the availability in Africa of new electronic computers in the mid-sixties, and the need for processing administrative data (e.g. finance, tax collection, customs declarations, etc.) the question was raised as to whether the electronic data processing service should stay with the Statistical Office or be transferred to the Ministry of Finance.

a. In order to maintain balance between both Ministries; and

b. because of his specific interest in computer applications, the President of the Republic decided to directly control the newly created S.C.I., and to assign it to neither of the Ministries.

Since then, S.C.I. has undertaken various applications with the help of French management consultants, at the beginning. S.C.I. has progressively taken over all the facets of computer service i.e. from the very project definition through the programming, running and maintenance of programs. SCI generally does not use computer software packages. There is a constant managerial desire to closely control all the centre activities. SCI is also in charge of counseling the President of any activities involving the use of the computer. SCI is by far the major computer user in Cameroon. It is the only available service for all governmental departments and agencies.

It is in the position of a monopoly. SCI presently runs an IBM 370/155 and an IBM 360-45 with teleprocessing and direct access capabilities.

The effectiveness of SCI is impressive. For instance, it is the only service in the world, with the exception of the Airport of London (SOFIA project) to run a completely automated customs clearance procedure in the Port of Douala. The savings generated by State budget control application alone are considered to be paying off three times the complete cost of the SCI operation.

Interestingly enough, the technicians in SCI are naturally naturally cooperative and interested in knowing technical niceties of CENT-AID. In a sense they were disappointed by CENTS-AID simplicity, a trait that proves the gap between technique-oriented computer scientists and user-oriented DUALabs.

Department of Statistics is anxious to have CENTS-AID disseminated to decision-makers in other ministries i.e. Health, Education, etc. once they themselves have completely mastered it, and have proven its usefullness.

It is our hypothesis that exerting premature pressure to disseminate the system CENTS-AID to outside statisticians might well be the best way to proceed. In consequence this twofold recommendation of:

1. leaving the project in the hands of the Bureau of Statistics as long as necessary and

2. supporting the creation of a consulting and training group inside the statistics office which would be in charge of controlling dissemination of expertise in CENTS-AID outside that office.

Time will surely be an effective ally to make people feel more secure about using data for decision-making, and considering public data as a public resource.

Several people in statistics have indicated that a terminal could even save them from physically stepping into SCI. It is significant that actually no terminal is foreseen in the Office of Statistics, while several are planned by SCI in other government agencies and universities in Yaoundé.

In the same vein, moderation is our advice with respect to the editing of

the census files. Although some experts in the U.N. are putting pressure on the DUALabs project manager to carry out the technical job of preparing an edit program adapted to the Cameroonian census, such a move from DUALabs would be premature at the present time. Remembering that Cameroonians are eager to keep control of their own affairs, any help or proposal from DUALabs would be a tactical error unless that help has been requested by Cameroonian officials in charge of editing the files.

In summary, organizational conditions of data use in Cameroon are congenial with the socio-political conditions in the country. But they are also the local solidification of a universal trend of information systems development that generates crises of its own. The high calibre of people met in Cameroon does not impede the emergence of crises. It just makes DUALabs' project the more interesting. This review gives a more accurate feeling of the difficulties of the DUALabs situation. They justify our recommendations for a careful and progressive approach. Conversely, it is the deep feeling of the team that when the first obstacles and resistances are overcome, the future will be the more promising. The Cameroonian people have been the more painful to get convinced of the value of the project. No risk of versatileness is the positive counterpart of initial drawbacks, and slowness. Moreover an unexpected outcome of DUALabs' project might be a sounder cooperation between SCI and Statistics that will be beneficial for everyone.

3. History of the Project in Cameroon

Negotiations began with the Cameroon government for participation in the project in May 1973. A formal proposal was submitted to Cameroon on June 29, 1974. An agreement in principle to start a joint venture in the Bureau of Statistics was the subject of a letter dated August 29, 1974 sent to DUALabs from the Minister of Plan.

In October 1974, the DUALabs project director, then on temporary assignment in Kenya, was transferred to Yaounde. An outline of a Project agreement was negotiated with Cameroon government authorities over the next several months and an official project agreement between AID and the Cameroon government was signed on February 5, 1975.

Between February 10 and February 21, the CENTS-AID system was installed on the IBM 370/155 computer in the Central Information Service of the Presidency and 15 computer programmers have been trained in its use. Three Cameroon data files have been documented and are ready for processing.

4. Current Project Objectives in Cameroon

Compared to the general objectives which are expressed in the AID - DUalabs contract (to provide the decision-makers with a tool allowing them to elaborate rational population policies by the use of demographic data) the specific objectives of the Cameroonian project seem to be much more realistic since they are limited to:

1) Provide general software (CENTS-AID and MINI-START) allowing an easy and quick processing of files (and especially those derived from the pilot census currently underway (March 15 - April 15) and the forthcoming complete national census scheduled for March 1976).

2) Organise training sessions for the use of these softwares.

3) Study the needs for computerized edit programs.

This last objective seems to be a posteriori statement, which has been added after the experience of the census done on Dafia by the students of IFORD (Institute for Demographic Training and Research). The data of this census proved to be somewhat defective with respect to the collection and coding of the data. This is a problem which is always met in attempting to tabulate large masses of data. They must be "clean" to be readily manipulated.

The second objective (concerning the organization of training sessions) is different from the initial purpose according to the types of people who should attend the sessions. Now the persons supposed to be trained are not so much the "decision-makers" as the technicians in computer science, the statisticians and more generally people working in the planning fields as research follows. This change, which is linked to the first one, corresponds certainly also to a more realistic view.

A top decision maker seldom had the interest and desire to devote a part of his time to purely technical questions.

If we had to sum up in one sentence the specific objectives of the Cameroonian project we should say that it si to install a generalised software permitting the production of tabulations in an easy and reliable way, which could be used by non-programmers and to have this software effectively used.

The way the results provided by the computer are then used remains the domain of the decision makers for whom the important thing is to get quickly the information that they need.

5. PURPOSE OF THE EVALUATION

The evaluation which was conducted during the week of March 17 - 23, 1975 in Cameroon was made at the request of the sponsor to provide specific findings on what had been accomplished to date in meeting the goals and objectives of the project with full recognition of the impact of conditions and problems encountered by the contractor in his efforts to achieve those goals. In addition, the evaluation process provides a set of recommendations for future courses of action in the project from among several alternatives. From the findings and recommendations of this evaluation the sponsor and contractor should be able to assess the degree to which the project objectives have been achieved and an insight as to the long range value of the program if the necessary funds, local institutional support, and time are available to fully exploit the data systems that become established.

SUMMARY OF FINDINGS - CAMEROON

1. Specific Assessments

a The interval time between the submission of the formal proposal for the project to the Cameroon government on June 29, 1974 and the signing fo a detailed project agreement on February 5, 1975, amounting to more than seven months and more than eighteen months from the first negotiations in May, 1973 is a major factor which has been taken into account in the evaluation since this period of inaction has seriously disrupted the anticipated completion dates and costs of the various program objectives in Cameroon.

b) Status of program objectives at point of evaluation:

1) CENTS-AID is installed and available for use by government units and academic organizations interested in demographic research i.e. The Institute of Statistical Training and the "Institute for Demographic Training and Research". Interviews by the evaluation team with key officials in the government agencies and the Directors of the two institutes have indicated a high degree of interest and expectation in the use of CENTS-AID.

2) The evaluation has verified the fact that three Data Base dictionaries were operational at the time of the visit and that three additional dictionaries could be operational in the very near future.

3) The evaluationhad confirmed that the results of the Town of Bafia Census have been used by the trainees in the training seminar conducted in February to produce tabulations of demographic data as practical exercises in the use of CENTS-AID.

4) From the discussions it was determined that the data collected in the Cameroon Pilot Census conducted in March 1975 would be available as an additional source of "live data" to be used in conducting training sessions beginning in July or August. Basic data files developed from the pilot Census should be very pertinent for training material to a significant number of decision makers and their assistants in the Cameroon government agencies.

5) At the point of evaluation there is no certainty that significant numbers of Cameroonian decision makers in the government will have received training in CENTS-AID and START & their usage. It is apparent, however, that several key officials will participate in upcoming seminars. Equally significant as a measure of project effectiveness is the interest displayed by those key officials interviewed by the evaluators in having their assistants and technical staff members receive the training.

6) Availability of computerized basic data editing system - the edit system developed by the American University of Cairo - was received by the DUALabs Project Director in Cameroon on February 16, 1975 and it is planned to test its effectiveness in the processing of the Cameroon pilot census. Mr. Hie, Chief Systems Analyst of the Bureau of Statistics is interested in applying the edit in the trial census to assure the feasibility of employing it in the processing of the Cameroon Census to be conducted in 1976.

7) At the point of evaluation 65 tabulations have been produced in the course of training Cameroon government technicians based upon two data files that were produced in Cameroon - The Town of Bafia Census population data file and the Cameroon national motor vehicle registration file.

8) Subject to technical modifications required for operation on the configuration of the computer available in the Cameroon Computer Center the START system will be installed in Cameroon in time to employ it in the development of summary data files based on the Cameroon pilot census. As far as can be determined there are no summary data files on tape currently available which would permit the testing of the START system and its feasibility of application. The Cameroon pilot census will be the first file available probably in August or September 1975.

9) Six basic data files have been identified to date in Cameroon and Data Base Dictionaries have been established for them. These are:

i) Bafia town census household population file
ii) Bafia town census deaths file
iii) Bafia town census births file
iv) Bafia town census fertility data file
v) Labor Survey file
vi) Motor Vehicle Registration file

Using the data base dictionaries and the CENTS-AID program the following tabulations have been produced:

i) Age by sex distributions - Bafia town census
ii) Ethnic groups by age categories - Bafia town census
iii) Profession Category by sex - Bafia town census
iv) Profession Category by Marital Status - Bafia town census
v) Types of Motor Vehicles by Geographic Area - Motor Vehicle Registration file (specifically requested by the Department of Statistics)
vi) Frequency Distribution of Motor Vehicles by Make of Vehicle
vii) Frequency distribution of Motor Vehicles by Country of Origin of Manufacture.

10) Fifty-six tabulations have been produced from the above specified files in the training seminars conducted in February as practical training exercises in the use of the Data Base Dictionaries and the CENTS-AID tabulation program.

11) A valuable contribution to the long range effectiveness of the project will be contributed by the Cameroon co-director who is a systems analyst for the Bureau of Statistics and the Cameroon Census, and will be applying the techniques of CENTS-AID and MINI-START in these areas when advantageous and appropriate to do so. Of equal importance is the fact the he will also be giving training seminars in CENTS-AID to students in the "Institut de Formation et de Recherche Demographiques" (UN demographic training) as a standard part of the curriculum. This training will reach technicians and demographers in 22 francophone African countries over time. IFORD was established in 1972. Currently there are 20 first year students, 6 second year and 5 third year students in the school. Plans for a new building to be build for the school in the near future includes computer terminal facilities which should greatly enhance the use of CENTS-AID in classroom exercises.

12) The Director of "Institut de Formation de la Statistique" (IFS), in an evaluation interview, indicated a strong interest in including CENTS-AID training in the curriculum of IFS. This school prepares statistical technicians in a two year course. It also provides a one year training for "adjunct" technicians (young people 15 to 16 years old). Established in 1961 there are currently 15 statistical technicians and 36 adjuncts enrolled from several francophone African Countries. The co-director of the DUALabs project provides 20 hours of instruction on computer use to the higher level students. The Director of IFS expressed an interest in adding 10 hours of instruction in the use of the CENTS-AID package to the schools' curriculum.

13) A policy and planning statement of the Cameroon Census has been requested from the Ministry of Planning by the DUALabs project Officer. To date no suggestions concerning the use of the census demographic data files have been prepared or discussed with appropriate decision makers.

14) To data fourteen technicians and assistants to decision makers have received training in the CENTS-AID program. Eleven of these people were programmers from the central computer center of the Presidency and three statisticians from the Department of Statistics. There is a definite commitment for CENTS-AID training in the curriculum of the "Institut de Formation Demographique" which will provide this knowledge to demographers and statisticians from a number of African francophone countries. It is the view of the evaluators that this possibility represents one of the greatest potentially valuable results of the project.

a) Although top decision makers have not as yet received the CENTS-AID training in Cameroon, the deputy Director of the Bureau of Statistics in an interview with the team indicated that he wished to attend a CENTS-AID training seminar and that he planned to have key staff members of the Bureau take the training also.

b) Another interesting development is the decision made by the director of IFORD to include CENTS-AID training in the curriculum of IFORD starting in the spring term. This also has the potential of reaching African demographers from most of the francophone countries represented in the student body of the Institute.

2. Overall Assessment of the Project

The evaluation has indicated that the structure of the CENTS-AID training seminar is generally satisfactory to the recipients. However there is a high level of interest in providing more time to review examples of applications of the system to various types of data. For those with no knowledge of computer processing, trainees recommended further elaboration of the basic fundamentals of computers, programming, and the essential elements necessary for computer processing. We have been informed that these modifications in the training will be provided.

a) When necessary it was agreed that individual training would be offered to the very top level officials at times most convenient to them if they preferred such an arrangement.

b) It is the consensus of the evaluators that, based on discussion with all of the principal officials who were available during the evaluation period, there is a strong interest in the Camerobn government in the project objectives. They expressed their hopes that the project be carried to a point of fruition where government staff would be able to fully exploit the products, programs, training procedures and practical operating experience to be gained from additional time for the project. The Deputy Director of the Bureau of Statistics emphasized the desire of the government that the program activity be continued for another year beyond the current planned expiration date to achieve these goals.

c) It is the consensus of the evaluators that the training seminars in the CENTS-AID program have received a very favorable reaction from the Cameroon participants, that additional sessions are necessary with some modifications as outlined in the previous section.

d) It is clear that the DUALabs program can make a very important contribution to the pilot census of Cameroon over the next several months and that further benefits from this experience will accrue in

processing the complete national census to be undertaken in the spring of 1976. Conversely, the pilot census provides an excellent data base to demonstrate the potential effectiveness of the overall DUALabs project objectives.

e) The evaluators have been favorably impressed with the amount of work accomplished on the project from the point of official agreement on February 5, 1975 despite many logistic and administrative delays and difficulties and the overall problem of working within another culture. The present favorable outlook for accomplishing the project objectives is due in great measure to the skill, tact and unceasing efforts of the DUALabs project director in Yaounde. He has an excellent grasp of the overall social and political environment which we believe absolutely essential to the successful operation of the project.

f) The potential to achieve the long range goals of exposing the CENTS AID and START programs to decision makers in other francophone African countries from what can be accomplished in the curricula of IFS and IFORD operating Yaounde is perhaps one of the most exciting benefits which can be achieved with sufficient time and finding devoted to such efforts. On a cost benefit basis to the sponsor we strongly recommend that this be fully supported.

g) It is the consensus of the evaluators that it is both appropriate and of potential greater value than can be currently assessed to continue the DUALabs project in Cameroon to an effective completion by the end of FY 1976.

RECOMMENDATIONS

From the specific objectives of the Cameroon-DUALabs project which are expressed in the "Project Agreement" of February 5, we may say that they correspond to the motivation of providing Cameroon with a standardized tool allowing the users to produce statistical tables without needing a special programming, which could only be done by a computer scientist. It is, by the way, a general observation that every situation in which the help of the programmer is required to use the computer considerably slows or even blocks the jobs. In such a situation the user depends entirely on the time the programmer is willing to spend on his problem, according to his own tasks and priorities. Furthermore, special programming often takes much time and it is quite preferable (even for a computer specialist) to have access to a generalized software system which enables him to get answers quickly to most of his questions. Systems like those which are proposed by DUALabs are therefore of a great interest both to the research people as well as the programmers themselves.

Nevertheless a certain number of points should be noted:

a. It could be dangerous to let people think that with such a system they won't need any help from computer scientists. In fact those skills are still necessary to maintain the adequacy of the DUALabs programs within the operating system of the computer.

b. Even such an easy-to-handle software as CENTS-AID, needs, to be of the best profit, to be used quite regularly. The programmers are in the best position for that, and if the other users have not an easy access to the computer, it may happen that the monopoly of using the new programs remains in the computer service, and consequently, that the myth of the computer remains strong.

   So in order to have the project fully reaching its objectives, it seems necessary that the users have a physical contact with the computer either by a direct access or through a terminal.

   In the particular case of Cameroon, our recommendation is to develop as fully as possible the capabilities and possibilities of the CBS people to use the DUALabs programs before training other government units in their use.

c. In the same vein, the creation of a consultant bureau inside the CBS should be encouraged, and also the creation of a users group who could meet from time to time to compare and share their own experiences with the systems.

d. The training sessions are a very important matter, so it is recommended that additional training seminars be conducted for groups of not more than 15 persons. It is recommended also that the groups be as homogeneous as possible with respect to fields of interests, background in the knowledge of computer operations and technical competence. So the training sessions

should be differentiated (in content and time) according to the types of persons attending:

- programmers
- statisticians
- non-technical research people
- decision makers

e. The data used in seminars should be of relevant interest to persons attending. The pilot census is a good opportunity to get that appropriate material.

f. To come back to the preoccupations of the first two points, it is surely necessary to proceed quite smoothly and to prepare very carefully some non-programmer people to use the systems, so that they could be given as an example to their people rather than to pretend to reach too high objectives.

g. According to the presentation, and as it has been pointed out by an anglophone specialist, it would be good, to facilitate as much as possible the use of the systems, to have the keywords and the printouts totally written in French.

h. The first and unavoidable condition for the processing programs to be of some interest is to be applied to clean data. It is therefore crucial to install or develop an edit program.

i. In view of the potential benefits achievable in this project it is urged that the Project manager in Cameroon receive full and constant support from DUALabs Washington headquarters in both the logistics of technical needs and the modifications and improvements of the CENTS-AID and MINI-START programs, computer match-merge system and computer editing technique best suited for francophone Africa throughout the duration of the project.

j. It is recommended that DUALabs Headquarters keep the project manager more completely and promptly informed of the status of those elements of the project for which headquarters has assumed responsibility, in order to permit more effective direction of the activities undertaken in Cameroon by the Cameroon project manager.

k. The sponsor should fully recognize the fact that the project has been in effective operation for a very short period of time when evaluated. This necessarily makes for a more difficult assessment of the project when measuring its overall value. However it is our considered opinion that it is possible to make this a very effective contribution to the use of data in decision making in Africa if it is carried through the completion at the end of Fiscal Year 1976.

l. In view of the fact that the project co-manager was not in Yaounde during

the week the evaluation was conducted, it is recommended that he be asked to supply an independent response to a series of evaluation questions at a later date.

Evaluation of the Poplab Project

in Kenya - April 1975

(USAID Program Agreement [illegible]-A-505)

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B. Documents reviewed in evaluation.

C. Demographic Studies in the Central Bureau of Statistics - Reported from the Kenya Statistical Digest, March 1973, Vol. XI - No. 1.

D. Poplab Project: Status of Project at the End of three years - March 1975.

E. Demographic Surveys Feasibility Meeting Papers - November 25-27, 1974, Central Bureau of Statistics.

F. The Poplab and Kenya's National Demographic Data System - unused paper.

G. Up-dated Poplab Project cost estimate.

H. Demographic Baseline Survey Report - 1973.

I. Introduction

A. General Background

As called for in the Poplab Project Agreement, an evaluation of the objectives achieved during the first three years of the program was conducted during the week of April 7, 1975 by a neutral evaluator, Mr. Robert B. Voight, former Chief of the Data User Services Division of the United States Bureau of Census. Mr. Voight was designated by USAID/Washington on the basis of his long experience in statistical survey operations and supervision of demographic analysis and report preparation.

The evaluation process included a thorough review of the project objectives, documentation of work accomplished, future work plans, manpower requirements, the statistical context of the project within the administrative structure of the Government of Kenya, review of some of the analytical reports produced, and assessment interviews with key personnel in the project and other officials in the Central Bureau of Statistics, USAID/Kenya, and other Kenyan government officials.

It should be noted that all officials questioned by the evaluator were completely cooperative and anxious to provide the information requested.

B. The Kenyan Cultural and Statistical Conditions Impacting on the Project

From the interviews made during the evaluation of the Poplab project there is a strong indication that the Kenyans want to do things for themselves to the maximum extent possible. This cultural characteristic holds even to the point of emphasizing the process of control and execution of statistical operations over the questions of analysis and issuing reports within CBS.

In the government there appears to be some reluctance on the part of some organizational units to take advantage of new statistics resources. A good example of this problem is the office handling the birth and death registrations which is now some three years behind in processing the forms to permit analysis. Repeated diplomatic efforts on the part of CBS to assist in overcoming this lag have met with no success. There are other instances in some of the other university ministries where there appears to be as yet little comprehension or knowledge of the value of statistical data for planning.

Despite this lack of [illegible] of current demograp[illegible] [illegible] the value of [illegible] [illegible] objectives, there appears to be a growing realization that more information is required for many planning programs. As a consequence the next several years will no doubt bring an increasing number of inquiries to the Central Bureau of Statistics for information bearing on these programs.

The success of the national demographic data collection, in the long run will depend on the degree to which it can provide data both promptly and accurately in response to such inquiries. It will call for a strong promotional effort on the part of the Director of Central Bureau of Statistics.

C. Purpose of the Evaluation

The purpose of this evaluation was to assess after the first three years of operation, whether the project should be continued for the full five years stipulated in the original contract. The evaluation would be made on the basis of the quality of performance, achievement, and adherence to project goals and objectives during the first three years and an assessment of the prospects for meeting fully the end-of-project goals at the end of two additional years of operation.

Based on the findings, the evaluation will also include recommendations for improving the operation of the program in order that the full potential of the investment may be realized.

II. Findings

A. Specific Assessments:

1. Project accomplishments compared to goals for each of the first three years of activity have been reviewed both through interviews and collaborative documentation. Considering the normal problems associated with the initiation of a substantial statistical enterprise in the context of the Kenyan government apparatus, the first year's accomplishments are impressive and very nearly met the targeted goals in terms of timing. In fact the establishment of the sample exceeded what the evaluator would have expected. The only shortfall was the failure to develop plans for the analysis of existing data.

2. The degree to which the second year goals were achieved in the survey field operations were quite satisfactory. Training of one Kenyan participant was initiated as called for. A two year summary report was issued in July 1974, just after the completion of the second year's activities. This report presents a very fair and impartial assessment of the instances where project goals were not fully accomplished. Although work on analytical reports of existing data was initiated, no reports were issued.

The evaluator could find no evidence of a formal schedule of reports established during the second year. An undated detailed work program showing proposed start and completion dates for publication appears to have been prepared sometime in 1973 and contains pencil revisions in the dates of as much as 12 months for some items.

3. It should be noted that the evaluation has been done with three months of the third year program remaining. At this juncture (1) analytical studies of vital rates from the Baseline Survey have been completed, (2) development of alternative methods for measuring vital rates has been accomplished, (3) the continuation of analysis of existing data has not been achieved, (4) the matching of the findings from the continuous surveillance and retrospective survey and the analysis of these results is in process for the first six months operations, (5) the initiation and testing of the use of a multi-round survey to make a cost/effective comparison with dual record system is on schedule. The correlative research activities tested as project goal number 6 stand as follows:

   (a) Testing of suitability of existing indices of fertility and mortality has been determined as not applicable. The evaluator concurs.

   (b) Evaluating reliability of demographic data that may be effected by memory lapses - data collected but not yet evaluated, evaluation will begin within the designated year.

   (c) Assessing methods for enumeration of the nomadic population has not been started and will not be accomplished within the designated year.

   (d) Experimenting with sampling schemes for use in general population censuses to obtain greater detail has been done in the course of developing the national multi-purpose sampling plans.

   (e). Testing suitable techniques of map preparation for demographic surveys has been done. The evaluator has been impressed with the status of mapping achieved for the sample operations currently underway in the light of the resources available to the staff. It should be considered as a major innovation and improvement.

7. As specified, a detailed project review to assess the possibilities of permanent GOK support and to make decisions concerning future project funding for underway in the CBS.

8. As specified, two participants for academic training have been selected and are currently in training - one pursuing a masters degree in demography from the University of North Carolina (USAID sponsored), the other engaged in a one year/ demographic training program at the Regional Institute for Population Studies at the University of Ghana (UN sponsored).

9. To provide an adequate institutional base for the Demographic Statistics Unit for the remainder of the Poplabs project and to maintain the unit from 1977 forward on a national sample level a total of six professionals trained in survey sampling are required, (none employed at present) At least one computer system analyst should be on the staff. None are employed at present. It would be desirable to select and train two candidates for this position as soon as possible - allowing for the inevitable attrition in this scarce occupational category. It appears absolutely essential that two professional level candidates be selected and trained in geographic methods and cartography to maintain the mapping activities required for the sample rotation pattern of the national sample. These two people would cover all the professional cartographic requirements in the CBS, including the management of the mapping program for the 1979 Census of Kenya. This appears to be a crucial requirement to the evaluator and the training should be initiated not later than the fall of 1975. Before the DSU activities are based on the national sample survey program in 1976, two additional statistical officers at the sub-professional level should be recruited and given on the job training".

10. Future training requirements may be summed up as follows:

    a. A total of six people are proposed for training during the last two years of the Poplabs project - four in 1975-76 and two in 1976-77. The specific types of training includes two professionals in demographic analysis and survey management; two professionals in survey sampling methods and techniques, and two professionals in computer programming and systems analysis. It is the evaluator's opinion that this represents a modest and minimum training program if the program is to be viable at the conclusion of the Poplabs project.

11. Financial requirements:

An updated estimate of on-site costs for the balance of the project was prepared at the request of the evaluator. The detail is provided in Appendix G. A summary is provided below:

Peplab Project - Cost Estimates - Local Costs & Costs for Training Participants

Summary

Item	FY 1975		FY 1976		FY 1977	
	USAID CONTRIBUTION	GOK CONTRIBUTION	USAID CONTRIBUTION	GOK CONTRIBUTION	USAID CONTRIBUTION	GOK CONTRIBUTION
LOCAL:						
Current Survey Operations	$56,667*	$133,520	$44,789	$150,476	$15,204	$179,15[illegible]
SUPPLEMENT A:						
Cost of Developing a National Sample - DSU shared cost calculated at ⅛ of total development		$ 2,057	4,000	26,390		63,50[illegible]
GRAND TOTAL	$56,667	$135,571	$48,789	$176,866	$15,204	$242,65[illegible]
TOTAL USAID & GOK	$192,238		$225,655		$257,854	
% GOK		71%		78%		95[illegible]%

* Includes $6,007 not yet funded by AID to handle salary increases.

** This will be year of expansion to national sample; s[illegible]e cost will depend on survey method selected, it will not be possible to estimate accurately.

Factors Increasing Costs - national [illegible]ple will be longer than sample currently in use (about 50% longer); areas will be spread out more geographically.

Factor Decreasing Cost - There may be efficiency in field collection if field force is working on other surveys also.

Range of Total Cost Estimates

Minimum = same as FY 1975 DSU cost or about $192,000

Maximum = 50% longer than FY 1975 DSU cost or about $285,000

These estimates appear reasonable and realistic to the evaluator.

12. Additional Assistance Requirements

After the resident advisor leaves in Jan. 1976, there may be need for two or three months of intermittent technical consultation on the sample operation and cartographic work. There should be no need for additional long term assistance beyond one additional year for the demographic intern to be paid by the University of North Carolina.

13. Although there were no firm data as to which data collection method is most cost effective as of the time of the evaluation, the data will be available so that such a decision can be made in March 1976.

14. The data collection method to be adopted will be determined while the national sample is being established - i.e. - method established March 1976 - sample drawn by June 1976. This [illegible] of national sample experience with the selected data collection method by the time the Poplab project terminates.

15. A time schedule for analysis and report preparation was prepared in October 1974. It is shown below. This schedule will require updating as of July 1975 to provide for additional reports and to revise some of the timing. It is the evaluator's conclusion that this schedule reflects some slight improvement in the time lag in report preparation that was reflected in the status of the project at the end of second year of operation. The additional trained manpower which can be allocated to analyses and report generations during 1976 and 1977 should eliminate this time lag. This is the same time lag indicated in the AID Audit Report conducted in September 1974, some eight months prior to the evaluation. At that time the AID audit identified the causes of time slippage as:-

a. An overly optimistic original time schedule set up in 1972
b. Lack of highly qualified personnel to make the analyses and prepare reports.
c. Lack of computer programming assistance in CBS.
d. The schedule as originally established allowed no time for the resident advisor to establish the unit.

While the evaluator does not feel that the last cause identified by the audit is significant since this was not the direct responsibility of the resident advisor, the audit did point to the major problems causing the lag. At the time of evaluation the extent of these problems had been reduced to a considerable degree.

Proposed Studies to be Carried Out

During the Period October 1974-June 1976

Type of Study	Period for Analysis and Report Writing
I. Demographic Analysis	
1. 1973 Baseline Survey	
a.) Fertility Report	Oct.-Dec. 1974
b.) Mortality Report	" "
c.) Differential Fertility Report	" "
2. Current Fertility & Mortality (Dual Systems for four Survey Periods)	
a.) July-Dec. 1973	Jan.-March 1975
b.) Jan-June 1974	April-June 1975
c.) July-Dec. 1974	July-September 1975
d.) Jan.-June 1975	Oct.-December 1975
3. Household Budget Surveys	Jan.-June 1975
Methodological Research	
1. 1973 Baseline - "A" Schedule (pregnancy history approach versus "B" schedule - Brass type question)	Oct.-December 1974
2. Enumerator training methods for Demographic Surveys	Oct.-December 1974
3. Effect of various factors on reporting vital events	
a.) Length of recall (2,6,12 months)	July-Dec. 1975
b.) Use of community contacts	July-Dec. 1975
c.) Effect of rotation of clusters	July-Dec. 1975
4. Development of matching rules in a dual system	Nov. 1974 - Feb. 1975
5. Evaluation of a Dual System Vs a Single System	Jan.-June 1976
6. Design of a National Sample	Jan. - June 1976

16. Some three or four seminars have been held so far to acquaint the DSU staff and other members of the Central Bureau of Statistics with the status of activities in the Poplab project.

17. A very good demographic and statistical library is being established in the DSU which should be of great value in the training of the staff to upgrade their analytical abilities and report writing.

18. The evaluator has determined that several methods of estimation have been tested as called for in the original project agreement as well as application of the "Brass" technique to the data collected in the Baseline Survey.

19. The evaluator has read the first report by the DSU - "The Demographic Baseline Survey Report - 1973" issued in April 1975 and considers it to be a very well prepared document indicating a high level of professionalism in the analytic effort. If this can be taken as an example of subsequent reports to be issued during the balance of the Poplab project; a major goal will have been achieved.

B. Overall Assessment

1. The objective to develop a demographic studies unit in the Central Bureau of Statistics with a competent trained staff is being met satisfactorily. At the end of three years of Poplab project activity it is clearly evident that the DSU has become institutionalized and an integral unit of the CBS.

2. The objective to collect and analize demographic data for Kenyas' planners is being achieved. The collection activities are in very good shape while the analysis is lagging. These are clear indications, however, that this latter problem will be overcome during the remaining life of the project.

3. A national multi-purpose sample will have been designed and established for data collection by the government of Kenya.

4. New methods for measuring births, deaths and imigration by sample survey techniques have been tested and will be available for continued use by the Government of Kenya on a cost effective basis in measuring population change and other demographic data on a national basis.

5. There is a high probability that, at the end of the project, reliable and current information will be available to potential users in the government at reasonable costs.

6. While this demographic information, as published, will be distributed to the various ministries, it will be some time before the long term planning and development strategies of the recipient [illegible] reflect the newly available demographic [illegible]ation due to the compartmentalization of those off[illegible] [illegible]ncu[illegible] real sense of urgency to take advantage o[illegible] potential.

III. Recommendations

A. Recommendations for immediate consideration

1. Complete the training program proposed in March, 1975.

Demographers	- One in 1975-1976 One in 1976-1977
Survey Sampling	- One in 1975-1976 One in 1976-1977
Computer Systems Analysis	- Two in 1975-1976
Geography/Cartography	- one in 1975-1976 and one in 76-77 to cover all CBS requirements in this field

2. Provide for an additional 10 days of consultation time for Hugh Rose in FY 1975 to assist in analysis and report review. Provide for up to 50 days of consultation for Hugh Rose in FY 1976 to provide guidance to the newly trained demographic professionals in analytic methods and the preparation of reports.

3. Arrange for the extension of Anne Cross' service to DSU for an additional year to be funded by the University of North Carolina to assist in the critical review of analytic work completed and first stage drafts of reports to be issued.

4. Prepare a detailed work plan for the remaining elements of the project. Record the extent of completion of each element monthly and circulate the status of the work plan goals and accomplishments to all project principals for awareness of problems. Update this work plan quarterly to reflect any modifications in the individual project elements.

5. Establish better cost records to ensure that the cost effectiveness of alternate methodologies can be clearly demonstrated.

6. Make absolutely sure that the demographic trainees on returning from their respective training programs are immediately assigned to analytic work and report preparation with no collateral responsibilities.

B. Recommendations for future consideration

1. Establish & distribute a monthly newsletter featuring interesting and important achievements in the project to other government units to make them better aware of the DSU.

2. Hold assessment seminars including DSU senior staff members, the Directors and Deputy Director, officials of other government agencies, interested university research personnel and consultants at least every six months.

3. Expand the distribution of DSU reports within the several ministries.

4. Appoint a chief of the DSU who is qualified relieve the CBS Director & Deputy Director of their responsibilities and further demonstrate that the DSU is an established viable organization.

5. Take full advantage of the satellite remote sensing project (ERTS) which is established to operate concurrently with the Poplabs project to promote the cartographic materials required in the national sample design.

6. Make certain all personnel who will engage in analysis and report writing are thoroughly trained in the use of CENTS-AID. This should permit the exploitation of both data collected in the Poplabs project but existing data already are filed in the CBS.

IV. Evaluation Summary

On the basis of the work accomplished to date in the development of survey methodologies, sample survey design and execution, and evidence of analysis and report generation which does require a higher priority in the remaining time available; it is recommended that the Poplabs project be carried through the remaining two years with appropriate funding.

In the judgement of the evaluator the Demographic Studies Unit is a viable organization with promise for a substantial contribution to planning and development in the Government of Kenya through the national demographic data collection and analysis it is establishing through the Poplabs project.

APPENDIX A

Chronology of Evaluation Interviews

April 7-9:30 A.M.

Discussion with Al Lackey (AID), Don Larson (Poplab Resident Advisor) and Tony Mwaniki (Deputy Director, Central Bureau of Statistics) concerning the most effective evaluation protocol, a selection of appropriate background documents for the evaluators review and reference, arrangements for evaluation interviews with relevant officials.

April 8-12
April 8-12 Noon

Luncheon discussion with Dr. J. Tait Davis, Chief of the Program Planning & Evaluation Unit of the Ministry of Finance and Planning; Don Larson - Poplab Resident Advisor; Tony Mwaniki, Deputy Director of CBS, and John Kekelove, Senior Demographer, DSU.

Dr. Davis indicated that the demand for data will be increasing at a rapid rate over the next two to three years, impacting heavily on the resources of the D.S.U. It is clear that the national multi-sample program to be developed over the next year in the Poplabs project must take into account several geographic and administrative area interests in order to satisfy the data needs in several of the ministries.

A general discussion reached the consensus that a formal advisory committee of end-users to the DSU as called for in the project objectives was not realistic and that it would be for the most part ineffective and time consuming. Informal contact with technicians in the other ministries was deemed to be much more valuable and effective.

The discussion made it clear to the evaluator that closer collaboration with planners in the Ministry of Treasury and Planning would improve the programmatic efforts of the DSU.

The general tenor of the discussion indicated a need for the DSU to assist other government units in formulating their needs for demographic data because of a lack of data expertise in these other organizations. This implies an adequately trained staff in DSU and tactful approaches to the other units to achieve maximum usefulness of the national demographic data system being developed in the Poplabs project.

April 8-2:00 P.M.

Meeting with Hugh Rose, former Poplabs Resident Advisor, and currently consultant to the project; Don Larson, current Resident Advisor; Tony Mwaniki, Deputy Director of CBS; Annie Cross, Intern Demographer; and John Kekelove., Senior Demographer - DSU.

APPENDIX A

This session was devoted to a thorough view of the current status of the project, the future objectives to be accomplished, manpower and training requirements, costs, extent of Government of Kenya financial support, and problems in the analysis and report preparation phases of the project. The detailed assessment of this review is contained in the "Findings" section of the evaluation report.

April 8-4:00 P.M.

Meeting with Mr. Permeet Singh, Director of the Central Bureau of Statistics.

It is clear from this discussion that Mr. Singh is completely committed to the institutionalization of the Demographic Statistics Unit as an integral part of the Central Bureau of Statistics. He indicated that a senior staff officer would ultimately be appointed to be in charge of this unit and it would be one of the sections in the Bureau, probably enlarged in scope to cover both demographic and social statistics. He is deeply concerned with the need for training the senior staff of the Unit and hopes to accomplish this with outside financial assistance for at least 5 people over the next two years.

He recognizes the need to strengthen the analytical and report writing capability of the staff and for this purpose would hope that Annie Cross' tour of duty could be extended for an additional year to review the draft reports and counsel the staff members on appropriate methods of analysis and writing. In addition to he would find the consultative services of Hugh Rose up to 50 days very valuable during FY 1976 to instruct returning trainees in the elements of analysis and report generation. He considers the analysis and report preparation aspects of the project as the most crucial elements to be achieved in the final two years.

He feels there are no programmatic constraints in his relationships with his superior, the Minister of Finance and Planning, which would inhibit the continuation of the Demographic Statistics Unit as the agent for maintaining a national demographic data collection system in Kenya at the conclusion of the Poplabs project. He is also confident that the necessary funds to operate this program (at perhaps $200,000 per year) will be available from the Government beginning in FY 1978.

Mr. Singh does not foresee the need a for full-time Resident Advisor on the project after July 1976 providing the national multi-purpose sample has been established and ready for operation by that time. He foresees the possible need for occasional short-term consultative assistance during the final year of the project which should be supplied by the University of North Carolina.

APPENDIX A

April 9 - 2:30 P.M.

Meeting with Charles Nelson, Chief of USAID/Kenya; Dr. Al Lackey, USAID Population Officer; Permeet Singh, Director, Central Bureau of Statistics; Don Lorson, Poplabs Resident Advisor; Lois Richards USAID Program Officer; and William Sigler, Deputy Chief of USAID/Kenya.

A preliminary assessment of the Poplabs project was given orally to the group by the evaluator in which it was indicated that the survey operations, sampling design, and cartographic work were in very satisfactory condition and on time in terms of target dates. It was pointed out that the analysis and report generation activities were still lagging although there was some evidence that the time lag in this aspect had not fallen further behind. With the appropriate concentration of manpower returning from demographic training over the next year on the analysis andreport writing with assistance from the intern demographer and the former resident advisor acting in a consultative capacity it appears that this phase of the project will be accomplished satisfactorily by the termination date in 1977. Not all potential analysis and report writing will have been completed but certainly the major portion of it.

The evaluator indicated that a preliminary draft of the evaluation report would be made available to CBS, USAID/Kenya, and the Poplabs Resident Advisor for their review and comment on April 17, 1975. It was estimated that the final typed version would be available to the interested parties by the end of April from USAID/Washington.

The general tenor of the discussion indicated a very favorable reaction on the part of USAID to the presentation.

APPENDIX B

Documents Reviewed in Evaluation

*1. Demographic Studies in the Central Bureau of Statistics - Reported from the Kenya Statistical Digest - March 1973, Vol. XI- No.1

2. The Concept and the Program of the Laboratories for Population Statistics - Laboratories for Population Statistics - Scientific Series No. 1, March 1971 - The University of North Carolina - International Program of Laboratories for Population Statistics.

3. An Evaluation of the Laboratories for Population Statistics FY 1970 - 1974 by Dr. Alvin T. Onaka, Raymond S. Martin, and John V. Gelb of AID (Specific comments and recommendations on Kenya Poplabs project).

4. Letter from Parmeet Singh - Director of CBS to Dr. A. Lackey - USAID/Kenya Population Officer, dated February 7, 1975 requesting extension of Hugh Rose consultation days allocation (additional 10 days over 50 allocated)

   Reply by Mr. Lackey dated February 24, 1975 indicating 8 days still available and matter should be reviewed with evaluator.

5. Annnual Goals and Accomplishments Outline (undated)

6. Detailed Work (Program of the Demographic Studies Unit - Kenya (undated)

7. Visits of Consultants and U.N.C. staff - January 1973 to February 1, 1975.

8. Status Report on Demographic Studies Unit Project Poplab by Hugh Ross and Al Lackey, dated 2/28/74

9. Proposed Kenya Poplabs Budget by Survey operations and Other Costs - FY 1975, 1976, and 1977 - dated September 1974.

10. Collecting Age Data - Analytical paper by Mr. P. Mwaniki - (undated)

11. A Program of Survey and Census Work for Kenya 1975-1979 (Central Bureau of Statistics) - November 25-26, 1974.

APPENDIX B (Cont.)

12. Report of Audit Findings No. 3 - Population Planning and Health Sector, dated September 12, 1974 to Charles J. Nelson, Director, USAID/Kenya from George G. Geoffroy, Auditor-in-Charge

13. Demographic Studies Unit Survey Documents

    a. Schedules Used in Surveys
    b. Baseline Survey I - Enumerator's Reference Manual
    c. Baseline Survey I - Field Supervisor's Manual
    d. Baseline Survey I - Area Statistical Officer's Manual
    e. Continuous Surveillance Survey Question Sequence
    f. Retrospective Survey II - Enumerator's Reference Manual
    g. Baseline Survey II - Enumerator's Reference Manual
    h. Mapping Manual
    i. Seminar Papers on Mapping
    j. Manual for Training Enumerators-Baseline Survey
    k. Report on Training Evaluation Seminar
    l. Time and Cost Analysis of the Baseline Survey 11/5/73

14. Draft Report on the Results from the first six months of the Dual Record System in the Kenya Poplab - dated March 1975

15. The Kenya Demographic Studies Unit - A History of Evaluation of two years operations of the Poplab Research Project - July 1974, by High Rose.

16. Kenya Trip Report - June 30-July 8, 1974 by Hans E. Kruse, UNC Representative.

17. Trip Report - Kenya - December 7-22, 1974 by H.B. Wells, UNC Representative.

18. Estimated Technical Manpower Requirements and suggested Associated Training for Staff of the Demographic Studies Unit, dated February 27, 1975, by Don Larson Resident Advisor.

*19. Poplab Project: Status of Project at the End of three years - March 1975, by Don Larson, Resident Advisor.

20. Inventory and Brief Description of Computer Files in the Central Bureau of Statistics - Ministry of Finance and Planning, Central Bureau of Statistics, March 1975.

*21. The Poplab and Kenya's National Demographic Data System - undated paper.

*22. Demographic Surveys Feasibility Meeting Papers - November 25-27, 1974, Central Bureau of Statistics.

APPENDIX B (Cont.)

23. Project Agreement - USAID and Ministry of Finance and Planning, GOK on Population Dynamics - Poplab, dated October 24, 1974 to provide funds for local costs for the third year (1974-1975) of a five year project which began in March 1972.

24. Project Implementation Order/Technical Services dated March 29, 1974 to provide for one full-time resident advisor for 24 months and 3.5 man months of various consultants.

25. Project Agreement between USAID and Government of Kenya covering Population Dynamics - Poplab project dated March 28, 1972.

26. None-Capital Project Paper - Population Dynamics (Demographic Study Unit) dated January 7, 1972.

27. Basic Agreement between AID and University of North Carolina Population Center - effective date: May 1, 1972 - Expiration Date: April 30, 1974.

APPENDICES

A. Chronology of Interviews

March 25, 1975

9:30 - 10:00 AM

A general meeting was held in the Conference Room of the Central Bureau of Statistics to inform representatives of the government of Kenya, DUALabs personnel, and USAID/Nairobi of the general objectives, plans and method of the evaluation of the DUALabs project in Kenya. The DUALabs Project Manager for Kenya presented a report on the accomplishments, problems and prospects of the program. Mr. Singh gave a strong endorsement of the DUALabs project on behalf of the Central Bureau of Statistics. A revised plan of the evaluation interviews was discussed in view of the unavoidable delayed arrival of the evaluation team from Cameroon.

The people who attended were:

Harvey Herr	DUALabs Project Manager
David Bluett	DUALabs Technician
Parmeet Singh	Director, Central Bureau of Statistics
Anthony Mwaniki	Central Bureau of Statistics
J. Tait Davis (Kenyan representative on evaluation team)	Minister of Finance & Planning
Alvin S. Lackey	USAID/Nairobi
Alvin T. Onaka	USAID/Washington

March 26, 1975

12:30 PM

Meeting of the evaluation group with David Bluett, Harvey Herr, Alvin Onaka. Briefing on the schedule of interviews, review of project developments in March.

2:30 PM

Meeting with people who have taken the training sessions. Ten persons came:

P. Kallaa	Central Bureau of Statistics (CBS)
L.J. Kiambi	CBS
S.G. Kinyanjui	CBS
S.M. Wachira	Education
Z.N. Murage	CBS
S.O. Akach	CBS
J. Kekovole	CBS
G.H. Olum	CBS
G.T.E. Ongaya	CBS
J.W. Githinji	Educational Statistics

Most government decision makers and assistants in Nairobi are not computer specialists but rather statisticians either in the CBS or in the Ministries of Health or Education. They stress at the outset their lack of exposure to computers and their lack of background regarding the computer.

Consequently one of their main preoccupations is to have DUALabs seminars in the future more geared to an introduction to the computer. They suggest that the group be less numerous and more homogeneous. They would like more examples, more detailed explanations, and more opportunities to write CENTS-AID commands. It seems clear to them that people exposed to the computer have no problems adapting to CENTS-AID. They suggest regrouping students by level of knowledge in data processing. The seminar should last a week. Some recommend it to be stretched over a period of several weeks.

Comments:

We need time to understand.

"A syllabus would be helpful."

"What I expect from DUALabs is that when I want a tabulation, I can get it."

"DUALabs will help us use the information we already have."

"We want everybody to understand software."

"We don't need a technician as a teacher, rather a layman who speaks to laymen."

"We hope that file documentation will help affect the turnover among programmers."

3:30 PM. Meeting with Mr. Parmeet Singh, Director of the CBS:

Mr. Singh explained the general situation with the computer in Kenya. There is a tremendous pressure from users and computer manufacturers to increase the number of computers. It is thus a voluntary policy of the Ministry of Finance to attempt to control that increase. One of the means of achieving that purpose is to centralize all admininstrative computer applications in a single department. This also yields economies of scale in computing and storage costs, and better use of rare professional skills (i.e., systems analysts and programmers). Historically, Data Processing has always been under the authority of the Head of CBS. In that regard CBS considers as one of its tasks to educate people in computer capabilities to make them computer-oriented. Hence the interest in the DUALabs project. To quote Mr. Singh:

> "The DUALabs representative here has made a tremendous impact."
>
> "Publication of dictionaries is one of our objectives. It is a basic step and a prerequisite."
>
> "Confidentiality? Yes, we are very much concerned. But I am not worried about it because the computer is part of the CBS.
>
> "Improvement of computer service is expected from a system of governmental cost accounting. Computer time will be charged to ministries."
>
> "We are interested in a unique identifier for individuals; similarly for firms. 75% of industry is concentrated in 550 firms."
>
> "DUALabs software is also of interest because it will help us avoid a costly trial and error process in programming. We have lost ten years in trying to program!"

"With regard to statistics, our concern will be in the future to develop social statistics and rural statistics. We are trying to build an on-going survey of rural activities based on a sample. This will permit measuring the evolution of social characteristics and the impact of welfare on people."

"We lack geographical references. So I am setting up a geographic and cartographic section."

"East African community is stalled for the moment: No exchange in the field of statistics and computers in the other East African countries."

"There is a shortage of professional skill. There are not enough locals to let me answer the great demand on the computer. I am obliged to hire expatriates. Private industry attracts most of the locals.

"The CBS computer is the best run in the country."

"The relationship between the CBS and the University is very weak."

"We badly need systems analysis."

"The Kenyan government has requested more help from DUALabs in a letter dated November 1, 1974 asking that they extend their stay."

<u>March 27, 1975</u>

8:00 AM

Meeting with Mr. J.T. Davis, Program Planning and Evaluation Unit, Ministry of Finance and Planning.

Mr. Davis gave an overview of Kenyan government organization and of the Planning and Project Evaluation Unit (PPEU). It appears that the Kenyan Government is much concerned with a careful planning and trying to improve its decision-making process. It is important to remember that the British ruler had started building a local administration in Kenya 15 years before independence.

At the present time project evaluation and program reviews are difficult to carry out because of the general unavailability of contextual data on basic parameters. Some of the data is available in CBS but, in its present form, difficult to access. Were such data readily available, a major improvement in project and program evaluation could result. Over the past few years several significant improvements have been achieved within the government, particularly in project and program costing and in the forward programming of public sector expenditures. A more accessible data base is a necessary prerequisite to further improvements in evaluation and to the formulation of planning and forecasting econometric models.

March 28, 1975

8:00 AM. Meeting with Harvey Herr (DUALabs Project Manager in Kenya) and David Bluett (Systems Analyst). The purpose of the meeting is to review the evaluation design.

The conclusions are set up in the findings. Some important points are the following:

1. The attitude adopted for the training has been to have students doing the things on their own, come back to the teacher, check what they have done, etc. This is very important as some of the people were starting from level zero. Also some of them have difficulties visualizing what they want to do (which is a preliminary stage) and don't even know what a tabulation is. They therefore wanted the instructor to do the tabulation for them, which is not the right way of learning.

2. The quality of "decision-makers" is not fully defined. Among the persons aware of the DUALabs project, some of them could be called "middle level" decision-makers:

   - Mr. Parmeet Singh (Head of the CBS)
   - Mr. J.T. Davis (Head of PPEU)
   - Mr. T. Marchant (Rural Survey)
   - Ms. Z. Mahboobi (Ministry of Health)
   - Mr. A. Mwaniki (Director of the Demographic Studies Unit)

3. The Kenyan technical correspondent of the DUALabs project is now working on the conversion from ICL to IBM. Then he won't be available until October 1975. Furthermore, as long as the computer staff remains only 50% manned, it may be that the Kenyan technicians will never be available to train in the take-over of DUALabs computer programs.

4. This brings us back to the main problems encountered here as they are expressed in Harvey Herr's report:

   - Unexpected delays in reliable computer availability
   - Compatibility problems
   - Lack of punched card interpreting facilities
   - Administrative delays.

9:00 AM. Meeting with: Rod Torkington, Co-Project Manager, CBS
Jim Otto, Peace Corps Programmer, CBS

Rod Torkington was hired about a year ago by the Government of Kenya to be the computer manager. He reports to Mr. Parmeet Singh, Head of the CBS. Jim Otto is actually acting as an assistant manager of the computer unit.

The actual organization comprises:

1 Computer Manager
2 Assistant Computer Managers
5 Senior Analyst Programmers
5 Analyst Programmers
12 Programmers

but it is only currently 50% manned. Turn-over is high.

The actual objective is to meet the conversion target to 370-135 in October 1975. The stages of conversion are the following:

ICL --→ IBM 360 --→ IBM 370-135 (192 K)

They are operating under DOS and they will continue to do so, at least at the beginning, with the next 370. This DOS was a source of problems for David Bluett, as the DUALabs software is supposed to run under OS. But now it is possible to use MINI-START or CENTS-AID.

One of the big problems now is to create awareness about using the computer outside CBS, for example in the Ministries of Health and Education. For this purpose CENTS-AID and MINI-START are quite simple and limited, but may be a good start.

Many files are not at all, or badly, documented so it could be a recommendation to build dictionaries for those files. This is another interest of DUALabs' project.

There is much data which could be of interest to researchers for deeper studies.

Since DUALabs programs and SPSS need clean data, there is a problem of editing. Jim Otto is working on a generalized edit program specifically adapted to the situation here.

At the moment there are no locals to go on with the project. So it is impossible to run a schedule because of skill shortage.

Some Research Centers need the capacity of a computer. For example, there was an agreement with the Rockefeller Foundation which bought SPSS and left it at the disposal of the computer center in exchange for access to it.

10:00 - 11:00 AM. Meeting with Mr. D. Larsen, Miss Annie Cross and Mr. Hugh Rose, PopLabs Project.

The PopLa's project, an AID supported project, is intended to develop methods for measuring population change in the inter-census periods.

The DUALabs project is expected to be of great help to PopLabs with respect to two of its files: 1) the Baseline Survey and 2) the Retrospective Survey. Both files have been already documented and compiled in Data Base Dictionaries in CENTS-AID. No use is foreseen for START.

Miss Annie Cross has taken the training seminar, and her comments are:

"Quite interesting and enjoyable. We had fun in manipulating our files. It is really interesting to know what you are doing and to correct errors by yourself. I have appreciated the nice CENTS-AID Handbook."

Eight people in demography are going to be trained.

Mr. Rose: "It is important to develop time and cost evaluation of research. DUALabs' CENTS-AID might be utilized for that purpose."

11:30 - 12:30. Meeting with Mr. E. N'Jeru and Mr. Ndungu, Ministry of Finance and Planning, Rural Development Program.

These gentlemen have not been exposed to computers. They are waiting to be told what to do regarding DUALabs.

Planning in Kenya has been centralized for a while, but now the trend is toward decentralization at two levels: (1) provincial level and (2) technical level. Now they are part of a new section in charge of coordinating the planning activities among decentralized units, in rural areas.

One of the main reasons for decentralizing planning is the poor quality of data in the central offices, e.g., they don't actually know whether a bridge exists to cross a river, since that depends on local conditions.

"Data for decision is not obtained from statistics."

"Data collection is a tricky subject."

"Data is useful for me, if it is valid, reliable."

"I don't know whether DUALabs' project will be useful for me and for the country."

"We are waiting to be told, and see."

"In fact, there is a lot of data stored that is not exploited. There is a need for diffusion and knowledge about data available. There is more data in the CBS than they can cope with."

"You cannot plan without knowing, but you should know correctly."

"The seminar for us should 1) be providing background 2) last for several weeks, with 2 to 3 hours a week.

12:30 PM. Meeting with Mr. B. A. Jenny.

Mr. Jenny is concerned with producing a Monthly Statistical Digest which includes basically all categories of information:

Cost of living

Trade

Finances

Public Building Plans

etc.

Mr. Jenny intends to produce also 3 or 4 pages of comments on these figures for the leaders. His main concern is to get information from different services and to ascertain if these services collect their data in a consistent and regular way. He is himself not directly involved in collecting and processing the data, so although he thinks the DUALabs project very interesting and worthwhile he doesn't feel he has to be directly involved in it.

2:30 - 3:30 PM. Meeting with Miss Mahboobi (Statistician, Family Planning Division) and two persons of her staff.

Their training sessions were welcomed, although they felt that the pace was too fast. They wish that in the future there could be a stretched out kind of seminar lasting several weeks, but taking them away from their offices only a half day a week. They think they have to digest what they learn, and need more practical exercises.

The tabulation operators show interest in becoming professionals in CENTS-AID.

With respect to the present situation in the Family Planning Division, Miss Mahboobi stresses that she wants to keep control of her data processing. She does not feel that the Computer Center is reliable. In case data is integrated, a coordinator is absolutely necessary.

4:00 - 5:00 PM. Meeting with Mr. Charles Nelson, Dr. Alvin S. Lackey, Mr. Richard Sigler and Ms. Lois Richards, USAID.

Report to the AID mission of the preliminary findings and recommendations of the evaluation team.

B. List of People Interviewed

Mr. Parmeet Singh, Director, CBS

Mr. Rod Torkington, Co-Project Manager, CBS

Mr. Don Larsen, PopLab Project Advisor, CBS

Miss Annie Cross, PopLab Project

Mr. Jim Otto, Peace Corps Programmer, CBS

Mr. Charles Nelson, USAID Director

Dr. Alvin Lackey, USAID Population Officer

Ms. Lois Richards, USAID Program Officer

Miss Z. Mahboobi, Statistician, Family Planning Division, Ministry of Health

Dr. J. Tait Davis, Chief of Program Planning and Evaluation Unit, Ministry of Finance and Planning

Mr. Hugh Rose, Consultant to the PopLab Project

Mr. E. N'Jeru, Rural Development, Ministry of Finance and Planning

Mr. Ndungo, Rural Development, Ministry of Finance and Planning

Mr. B. A. Jenny, Ministry of Finance and Planning

P. Kallaa, Central Bureau of Statistics (CBS)

L.J. Kiambi, CBS

S.G. Kinyanjui, CBS

S.M. Wachira, Ministry of Education

Z.N. Murage, CBS

S.O. Akach, CBS

J. Kekovole, CBS

G.H. Olum, CBS

G.T.E. Ongaya, CBS

J.W. Githinji, Education Statistic

APPENDICES

CHRONOLOGY OF TEAM ACTIVITIES

Morning of March 18, 1975

eting with Mr. Gilbert Sherman, DUALabs' Project Manager in Cameroon.

Sherman explained:

The general situation in Cameroon (from the point of view of data processing):

- sensitivity to the problems of data processing and this being related to the next census which has to take place in 1976.
- pilot census in 1975 which is intended to be used as a training material for CENTS-AID.
- role of the SCI (Service Central de L'Informatique-Director: Mr. Nguegang) as the owner of the computer.
- responsibilities of Mr. Mouoyébé as the Director of the Bureau of Statistics and National Accounting (CBS) and the coordinator of the census.
- role of the IFORD (Institute of Formation and Demographic Research) and of the IFS (Institute of Formation in Statistics)
- key persons that should be seen if possible:

Mr. Nguegang	Director, Central Data Processing Service
Mr. Hie	Chief systems Analyst, CBS (Systems Analyst for Census)
Mr. Mouoyébé	Director of the Bureau of Statistics and National Accounting
Mr. Ngogong	Director of the IFS
Mr. Gendreau	Director of the IFORD
Mr. Ndjafa	Systems Programmer, SCI (Attended the seminar
Mr. Nzeale	Programmer, CBS (Attended the seminar)

Mr. Ndjenkam	Programmer, SCI (Attended the seminar)
Mme Njeck	Statistician, CBS (Attended the seminar)
Mr. Gwandua	Statistician, CBS (Attended the seminar)
Mr. N'Gaye	Deputy Director of the CBS

2) The history of the project in Cameroon:

- arrival of the Project Manager in October
- draft of project agreement with Mr. Hie
- signature of this agreement in February by the Cameroonian Government
- identification and documentation of 6 files:

(4 files derived from the Bafia Census made by the students of IFORD in 1972-1973: 22,000 persons):

1. Households
2. Births during the past 12 months
3. Deaths
4. Fertility

(2 other files):

1. Motor vehicles
2. Labor survey - 1971; 20,000 persons

- installation of CENTS-AID in February
- training of 15 people in February

Afternoon (March 18)

3:00 PM. Meeting with Mr. Gendreau, Director of IFORD.

Mr. Gendreau presents IFORD (see leaflet attached):

- created in 1972
- objectives of the school: top decision-making in demography
- UN funded
- number of students (2 in first year; 6 in second year; 5 in third year)
- geographic origin of the students: several countries of Africa

He then explains that he is very interested in using CENTS-AID as a research and teaching tool. There will be a one week seminar of training in CENTS-AID for the students of second and third years. Data used for that training comes from the Bafia Census which has been conducted in 1972-1973. (Every year the new students are in charge of conducting a census.) Mr. Gendreau hopes to have a terminal in the new building when it is completed within 2 years.

4:00 PM. Meeting with Mr. Ngogong, Director of IFS.

Mr. Ngogong presents IFS:

The school prepares middle level technicians in statistics:

- technical assistants (L.L.) 15 Francophone countries
  2 years of studies (with 2 months of practical work)
- technical agents (H.L.) 1 year of studies (with 1 month of practical work)
- the students are supported by UN grants (UN, FAO) and by FED grants (FED - "Fonds Européen de Développement"). The Cameroon government also supports the Institute. France sends two teachers each year. The UN sends experts from time to time for specialty teaching.

- the Institute sometimes organizes specialized seminars (for example on National Accounting)
- IFS was created in 1961.

  Since 1961 they have had:

  438 students in the LL; 337 diplomas

  199 students in the HL; 155 diplomas

  This year 15 students in HL; 36 in LL.
- They give a 20 hour course in computer (Mr. Hie) to high level students. This could be increased 30 hours in order to allow training in CENTS-AID, which could be a good thing to promote CENTS-AID in other countries.

Morning of March 19, 1975

9:30 AM. Interview with Mrs. Njeck; Statistician, CBS.

(Trained in CESD, Paris. Has attended the seminar.)

- Participates in the evaluation of the questionnaire
- Will be in charge of coding the pilot census
  computerization
  data processing
- So she is interested in CENTS-AID as she expects it will provide fast tabulations, especially in the case of new tabulations as far as CENTS-AID could be used for the routine tabulations.
- She would like to increase her knowledge of CENTS-AID and thinks that it would be useful to have other people trained (especially people from SCI).
- She would have liked an introduction or computer background (which had not been done in Yaounde because the majority of the participants already had a background in data processing).

- She would appreciate having a terminal in her office, facilitating access to the DUALabs software installed in the computer center.
- She prefers CENTS-AID as she judges it easier and more flexible to work with.

10:30 AM. Interview with Mr. Gwandua; Statistician, CBS. (Anglophone)

- He has attended the seminar. He thinks that most people who were there were programmers and therefore followed well, but that it was more difficult for people without any knowledge of computers.
- He thinks that CENTS-AID is pretty good and would have used it if he had had it six months sooner instead of writing a cross-tabulation program. CENTS-AID could have produced all the same tables except two of the ones he did. CENTS-AID is limited in amount of cells which can be tabulated in one table output and has no controls in outputs.
- Mr. Gwandua would appreciate having a terminal and wants to minimize the programming part of his job, as he is a statistician. In that sense, he is much in favor of CENTS-AID.

11:00 AM. Meeting with Mr. Koehring, Regional Development Officer, USAID.

Afternoon (March 19)

4:00 PM. Meeting with Mr. N'Gaye, Deputy Director of the CBS.

- Mr. N'Gaye is waiting for concrete outputs and would like to see the project remaining in the CBS for now.

- They have been obliged, in the CBS, to create their own programmers division in order to satisfy their own needs more quickly. (When they ask SCI people for modifications of programs they have had to wait sometimes as long as 2 years because the SCI programmers have no time to do this.)
- He hopes that CENTS-AID will bring an improvement. A test was suggested. Mr. Gwandua will be asked to use the CENTS-AID technique to produce tables asked for by Mr. N'Gaye.
- Mr. N'Gaye was interested in participation in a CENTS-AID seminar to learn more of the capabilities of this software and he thinks all the people in CBS should do the same.
- He thinks that the capabilities of using CENTS-AID should be maintained in the Bureau of Statistics for the moment.
- Mr. N'Gaye asked about the continuation of the project beyond October 1975. As the project was supposed to last 2 years, why should it be stopped after 1 year? The answer was that it is the total DUALab project (including other countries) which lasts two years and that it is a matter of financial procedure.

Morning of March 20, 1975

Working Day. Preliminary draft of the evaluation report prepared and reviewed.

Morning of March 21, 1975

8:00 AM. Report to Mr. Koehring, USAID, of the evaluation group activities.

9:30 AM. Meeting with Mr. Matthews, Deputy UN Resident Representative.

- General background of the Census and administrative projects in Cameroon.
- Existence of the B.T.R. ("Bureau Technique Régional") in Bangui, Central African Republic, which is a central training point for census people. Countries represented in B.T.R. belong to the UDEAC group (Cameroon, Gabon, Congo, Central African Republic, Tchad)
- B.T.R. is partly financed by the UN.

11:00 AM. Meeting with Mr. Tayo, B.C.R. ("Bureau Central de Recensement")

- General organization of the Census in Cameroon.
- The Ministry of Plan, which is in charge of the Census, has delegated this work to the Central Bureau of Statistics.
- Within the CBS a special section has been created with 5 divisions:

  1. Conception and Analysis (questionnaire design, tabulation design, analysis of the results.)
  2. Field operations
  3. Processing
  4. Administration and logistics
  5. Cartography.

  In addition they are trying to create a communication section (in charge of communication through the 5 divisions and of public information).

  In the field:
  - 7000 points of census
  - 1 co-leader for 5 enumerators
  - 1 supervisor for 10 co-leaders
  - Program

- Pilot Census, March 1975: for testing questionnaries, enumeration procedures, answers, etc. There are about 70 dialects in Cameroon but there is no question concerning this point.
- After the pilot census: processing of the data. (They will use CENTS and CENTS-AID, but they also need an edit program.) They hope to have tested the maps for the end of December 1975.
- Problems they expect:

  --Punching personnel

  --Punching machines

  --Storage

  No problem with computer time.

Afternoon (March 21)

4:00 PM. Report of the findings of the group to Mr. Kotock, Deputy Director of the SCI.

The Group gave Mr. Kotock a summary of the draft report (8 typed pages in French).

6:30 PM. Reception given by the Ambassador of the United States of America. For the guest list, see Appendix 6.

Morning of March 22, 1975

9:30 AM. Meeting with Mr. Mouoyébé N'Dedi, Director of the Central Bureau of Statistics and National Accounting.

When he met the group, Mr. Mouoyébe had already received the French draft of the report. So the group talked with Mr. Mouoyébé of the general scope of

the DUALabs project. Mr. Mouoyébé, who was cool about the evaluation before it started, expressed his satisfaction regarding the DUALabs project and what has been done by the evaluation group during the week.

- Mr. Mouoyébé said how much he has appreciated the way Gilbert Sherman has conducted the DUALabs project until now.
- Concerning the use of CENTS-AID, and START when installed, Mr. Mouoyébé insists on the necessity of a Training Center inside the CBS. This Training Center could be in IFS (when the new section of Field Engineers is created). The Training Center could be in charge of the problems of editing the data.
- At the beginning the DUALabs project should be fully developed inside the CBS and after that, according to the level of interest, in other administrations. Each administration should at the right moment set up a team specialized in the use of the programs. The next users could be, in order:

The Ministry of National Education

Ministry of Transportation

Ministry of Finance

2. CONDITIONS ENCOUNTERED IN CAMEROON

a) Hardware problems

Not only is hardware separated from the Bureau of Statistics, but the latter is itself geographically dispersed. Communication problems are thus not facilitated. Besides, it is a constant wasting of time to jump from one office to another.

b) Software problems

SCI is operating an IBM 370 under OS/MFT. This has made some minor problems in installing CENTS-AID (basically adapted to OS/MVY.) Due to an excellent team in SCI those problems were completely solved with DUALabs specialists. The system is presently fully operational.

Several changes are to be anticipated in other packages (e.g. START) when installed.

c) Language

Although Cameroon is officially bi-lingual (English and French), French only is actually used in Yaounde and in the whole administration.

d) Institutional

Administrative slowness and centralization are common characteristics of Cameroon institutions. This has to be taken as a constraint and lived with when dealing with Cameroonians. Besides managers are often "out of town".

e) Communication

In spite of geographical dispersion and slowness, communication is easy. People are friendly. AID representatives are fully cooperative. The UN census advisor is in the office next door to that of the DUALabs project manager.

f) Organizations not yet fully reached

None has been reached outside the Bureau of Statistics, IFORD, and IFS. No move is to be made until cleared with the Head of the Statistics Office.

4. LIST OF PEOPLE INTERVIEWED

Mr. Gendreau, Director of IFORD

Mr. Gwandua, Statistician, Bureau of Statistics and National Planning

Mr. Koehring, Regional Development Officer, USAID

Mr. Kotock, Deputy Director, Central Data Processing Service

Mr. Matthews, Deputy UN Resident Representative

Mr. Mouoyebe N'Dedi, Director, Bureau of Statistics and National Planning

Mr. N'Gaye, Deputy Director, Bureau of Statistics and National Planning

Mr. Ngogong, Director of IFS (Institute of Formation in Statistics)

Mrs. Njeck, Statistician, Bureau of Statistics and National Planning

Mr. Tayo, "Bureau Central de Recensement"

CAMEROON TRIBUNE

WEDNESDAY, MARCH 5, 1975 National Information Weekly No. 36: Price 50 Frs. CFA

NATIONAL CENSUS BEGINS MARCH 15

The date for the commencement of the national census Cameroon has been preparing for has at last been announced. It is March 15, 1975.

The Ministry of Planning and Territorial Development has already sent out census officials to each of the seven provinces to start the mobilization of those who will carry out the census in these provinces.

Cameroon Tribune, on its part, met Dr. D. N. Lantum, member of the International Union for Scientific Study of Population (IUSSP), member of the National Census Committee and professor at the University Centre for Health Sciences (CUSS), for clarification. Read his first serial.

Effective use of preventive medicine encourages population growth.

Believing that the Cameroon people, as realistic as they are, will work better from a position of knowledge and high sense of civic responsibility, we the teachers of the nation must also take the responsibility to supply the basic knowledge needed for this work at this appropriate time.

This is therefore the beginning of a series of articles I hope to present to the public on this all important matter of national census.

MEANING

The word *census* is in common usage in everyday language among Cameroonians. But it never means the same thing to everybody. It is therefore important to standardise the meaning in operative terms in order to ensure appropriate action and cooperation during this historic national operation.

The elements contained in the following definition conform to basic international requirements from which Cameroon cannot afford to take exception or deviate, if it has to speak the same scientific population language with the rest of the world and particularly if it has to enjoy the benefits of comparison with others.

(Continued on page 3)

NATIONAL CENSUS

(Continued from page 1)

We have to try at this point in our national social, cultural and economic development history to certain baseline data to be able to measure our progress in the future..

A national population census excercise must contain the following elements

(a) Everybody must be counted. The census is a population inventory of all citizens including men, women and children of all ages within the national territory of Cameroon and including all Cameroonians in foreign lands. Foreigners in Cameroon shall also be duly counted and recorded as such.

(b) A census shall be done optimally at a given date. All organisations and administration of the census operation shall ensure that all citizens are counted on the same day which shall pass into Cameroon history as the national census day.

In many countries of the world, the census day is usually declared a public holiday in order firstly, to facilitate the counting process by giving all the citizens the opportunity to stay at home while waiting for the enumerators and secondly, to emphasize the importance of the census exercise.

If the national count is done in ten days or six months, the chances of counting some people twice or of missing moving businessmen are very much increased. Such errors must be anticipated and appropriate measures planned against their control.

That is why the census time-limits must be short -- usually a day optimally. Population movements must not be arrested for too long, otherwise the economic activity of the nation will be undesirably paralysed.

A census is not the kind of geographically limited survey with exhaustive questions we are used to. It is a national exercise involving everybody and the questionnaire should be simple and short

(c) The population shall be counted where they are. This means that the enumerators will go out to count the people in their own places of residence. The population will not have to assemble in a market place or in a polling station.

Therefore, operationally, the government shall provide enough well trained enumerators to meet all Cameroonians in their houses within the given date. Boats or canoes shall be used to reach those Cameroonians living in islands. Bicycles or automobiles shall be used as indicated to reach people in isolated settlements.

This is a difficult job but that is the nature of the task the Cameroon government is addressing itself to, thanks to multilateral support and collaboration. The exercise will only succeed through the cooperation of all Cameroonians who must ensure that they are *counted* and counted once only.

(To be continued in our next issue)

IMPORTANCE OF THE NATIONAL CENSUS

Continued from last issue

IMPORTANCE

The census will provide the important basic information needed for the *realistic* planning of all government and private development operations. Let us consider some examples of such operations which need realistic planning. We might pose some questions in order to crystallize the kind of problem now faced by planners in the absence of basic demographic information.

POPULATION STUDY

When the government of Cameroon declared that the budget for the 1974/75 fiscal exercise was 75 billion (milliard) francs CFA, it immediately came to my mind: for whom and on whom will this money be spent? How many people are there in Cameroon (or outside) for whose welfare and development this money will be spent? How many of them are male, female or children?

At this point in time, how many of these children are less than one year old? How many children are less than two years old? How many children are between three and five years old (in the pre-school age)? How many children are of school age (between six and fifteen years)?

How many citizens are less than 25 years of age? How many citizens are above 55 years of age?

DEPENDENCY RATIO

Under normal conditions in our present state of development, citizens less than 12 years or above 55 years are not expected to perform as full-strength workmen. They depend on the able and working sector (13 to 55 years) for their living. They are idle mouths to feed. The ratio of this dependent population to the active working population is called the Dependency Ratio.

Where are these people to be found? Are they in urban areas? in rural areas? In which province are they living? And in which division or district, or in which specific town do you find them?

How many children were born alive to these people during the past 12 months? How many of these died after birth? How many Cameroonians died during the last one year? By how much has the Cameroon population increased during the past 12 months?

How many people have moved away from their place of birth to live somewhere else in Cameroon for any reason, during the last five years?

How many people (men and women) are living in marriage unions in Cameroon? How many adults are single? How many of these are divorcees or widows?

ECONOMIC ACTIVITY

How does the average Cameroonian earn his or her living? In other words, what are the occupations or the professions of Cameroonians? How many people are there in the extractive economy, i.e. working on farms, doing fishing or hunting as a major means of earning a living?

How many Cameroonians are working in the industrial sector, i.e. in organised plantations, cement and rubber factories, shoe factories etc.? How many are there in the service sector, such as office civil servants, teachers, nurses, taxi drivers, pastors, catechists and street sweepers?

Answers to these questions will indicate our economic performance in 1975.

LITERACY

How many Cameroonians can read and write? How many are illiterate? How many have completed the primary school level of education? How many have added on the secondary school or post-primary level of education?

How many have gone beyond the level of General Certificate of Education (A Level) or the *Baccalauréat* and are completing or have completed some university type of education?

These are indicators of the potential manpower situation in Cameroon in 1975.

Dr. D. N. LANTUM, member of the International Union for Scientific Study of Population (IUSSP), member of the National Census Committee and Professor at CUSS.

CULTURE AND LANGUAGE

Since the bewildering complexity of tribes and dialects constitutes a major problem in national development, the Cameroon census exercise must take cognizance of this problem and limit itself to national yard-sticks that can help sub-sectional communication and understanding for achieving national objectives.

Tribal research must be left to subsequent divisional and provincial sample surveys for local administrative consumption. Therefore the national population census excercise of Cameroon must limitedly determine how many people speak French, English or both.

It will be useful to determine how many Cameroonian languages are spoken by the average Cameroonian. This will measure the degree of effort to broaden communication for effective function in a pluricultural society.

A baseline must be set at this time in order to measure progress in our official national bilingual development, which is the unique characteristic of Cameroon among the nations of Africa.

The knowledge of certain Cameroonian languages spoken over vast territories could be useful in planning provincial radio programmes and new papers in the major vernacular languages, to facilitate mass information and education for rapid national development. It is in the philosophies of Africa as expressed through the Cameroonian languages that we build a true African identity in modern times.

STUDY OF HABITAT

The Cameroon population census should also study certain socio-economic indices which reflect development in these spheres.

Enumerators should observe and classify the homes of Cameroonians as follows:

How many people live in the original "poor man" type of house? The style varies in the diverse ecological zones of Cameroon. In the forest zone, such a dwelling would consist of simple sticks with mud or flat split wood for walls, sticks and palm leaves for thatches, and a floor of smooth pounded earth.

In the grassland areas, such a "poor man" type house would consist of bamboo or sticks with mud for walls, bamboo and grass or palm leaves for thatches, and a smooth hardened earth floor. huts whose walls are built in a circular form with sticks and grass and a pointed circular roof of the same material. The floor would be smooth pounded earth. There exist various modifications of these.

The modern houses anywhere would consist of cement blocks or mortar for walls, zinc or tyles for roofs and cemented floors. They may contain closed water system or not. They are usually considered as permanent-planned to last more than twenty years.

The intermediate category of homes will be a mixture of the above types with diverse refinements. These are essentially non-permanent and generally indicate the transition from the primary to the really modern structures.

Grossly the home structural style is a measure of socio-economic development and is the index of the habitat. During the next census which comes in ten years time, we can establish the change in development during the intervening period.

One other measure or parameter for the "habitat" is the availability of water. We can grossly group local water resources as follows: The safest and modern sources include the processed and purified pipe-borne water system, protected springs and closed wells with pumps.

The second level would include unprotected springs with taps or carelessly used open taps for the public. The most basic and consequently less hygienic type would include open wells, rivers, lakes or running streams.

This measure of habitat is also "hygienic index" which tells us how clean or healthy the population of given communities is likely to be. With the heavy investments on water resources in developing collectivities, this index will tell us the extent of progress made in the area of environmental sanitation and personal hygiene at different times.

DENOMINATORS MAINLY

It is possible that our national census exercise can establish data (statistics) for the questions and problems posed above. It is only highly recommended that these basic questions be adopted in the census questionnaire.

The reasons are as follows: These problems possess a national character and can be answered by every family. They are easy to teach and to understand. They are the problems which the various ministries of government are grappling with everyday.

It is important to stress that the function of the census is to establish national or sub-regional denominators only and that the census will not go into details beyond the measurement of national phenomena.

When census has established these denominators, the various ministries of government will now be expected to carry out small surveys or investigations in limited areas or subjects to establish the numerators. When they divide the numerators by the denominators, they will establish fractions which show the importance to given problems to which they could then address themselves to improve as part of their function in the national development strategy.

On a subject which involves all the activities of the nation, it is impossible to mention all the uses of the census exercise in one short article.

One needs to state categorically that the objective of the census exercise is NOT to establish lists of people for the purpose of paying tax. However, the census figures will be very useful also in this important civic responsibility, although there are already established measures for tax collection.

(To be continued)

IMPORTANCE OF THE NATIOAL CENSUS

Cameroon Tribune — Wednesday, March 19, 1975

(Continued from last issue)

CONTENT

From the foregoing questions on population study, dependency ratio, economic activity, literacy, study of habitat and denominators, we can begin to organise our minds to seek the appropriate answers which we will tell the enumerators during the census exercise.

In most countries of the world where the national population census has been organised as a regular affair over hundreds of years, the items of information that constitute the content of the census are fairly standard.

Geographical Items: Location at time of census and/or place of usual residence.

Household or Family Information: Relationship to head of household or family.

Personal Characteristics: Sex, age, marital status, place of birth, citizenship.

Economic Characteristics: Type of activity, occupation, industry, status (as employer, employee, etc.).

Cultural Characteristics: Language, nationality characteristics or ethnic properties.

Educational Characteristics: Literacy, level of education, school attendance.

Fertility Data: Children — total live-born.

Topics derived from the questionnaire: Total population at a given date, population by size of locality, urban-rural classification, household or family composition.

ECOLOGICAL APPROACH

In fact, according to Bogue, the United Nations lists these as the minimum essentials for a census. Most nations desire to go beyond this, however, and collect additional information to satisfy their peculiar national statistical demands. The need for this information may be urged by government, by business, or by private professional organisations.

In this respect it is important to mention that for the first Cameroon national census of March 1975, the government has specially requested that information concerning the environment be also collected.

This has been considered necessary in order to establish essential baselines for the total national social, economic and cultural development. The official title of the census exercise stresses this total ecological approach to national development policy. Hence it is "The National Population Census and Habitat".

For the United States census of 1960, the following items were considered sufficiently important and necessary for their census content: birth place of parents, migration — place of residence five years ago, income (personal and family), family status (relationship to family head), place of work, mode of transportation to work, number of times married, date of marriage, age of marriage.

India and other nations usually included the following: religion, caste, number of living children, age at birth of first child, languages spoken.

DATA COLLECTION

Normally, every nation would like to know everything about itself. To achieve this, the consus questionnaire should be long and exhaustive. Thousands of well-trained enumerators will need to be employed to interview the citizens and collect the information or data. Complicated calculating machines will be needed to process the data collected if reports are to be completed on time for use.

The great limiting factor is clearly one of cost. The ideal and exhaustive census is too expensive to undertake even for the very rich and developed nations such as Sweden and the United States of America.

Even there, the questionnaire is also limited, and more detailed information is completed by continuous registration of vital events, special regional and sub-regional surveys, which deal only with restricted population samples to which statistical and probability theories are applied to arrive at conclusions which reflect the national population.

One aiding factor for developed countries is the high literacy rate which permits the mail system of data collection. That is, questionnaires are mailed in time to heads of households or individuals who complete the forms giving the facts about their families as existing on the census day.

The task of the enumerators is merely to edit these forms, recheck the homes of unacceptable forms and verify the coverage by careful post-enumeration surveys in selected sectors.

LIMITING FACTORS

Normally, Cameroon would not effectively afford a census exercise with a very elaborate questionnaire because of the major limiting factors of low literacy level, lack of experience in the exercise, forbidding cost of operations, the needed stamina to handle and process extensive data and produce exhaustive reports in time for public consumption.

However, it is very encouraging that Cameroon is attempting her first national census when there are international experts to advise, thanks to international multilateral cooperation, and when there is an ultra-modern computer facility already installed in the presidency of the Cameroon republic. But this has to be hired at high rates.

An American expert agency has also recently installed a computer facility called DOUALABS in Yaounde. This can also be useful for census work.

One is to hope that the national information stored in these machines will remain in Cameroon for constant exploitation during the next period of ten years by research workers of the national research institutes covered by ONAREST and the University of Yaounde.

Inspite of these, the Cameroonian questionnaire must be simple, short and easy to complete, if the national census is to be completed optimally within a limited time. Every citizen shall be counted because government wants to be sure of its national population.

Thousands of well-trained enumerators will need to be used and an effective campaign for the education of the masses will have to be mounted to facilitate massive cooperation through understanding and the citizens' desire to proudly participate in the national civic responsibility.

MAJOR STEP

In the past, the national governments of the emerging African states (including Cameroon) have been afraid of the proper national population exercise for several reasons, some of which have already been mentioned.

Instead, exhaustive sample surveys have been conducted and the total national population figures arrived at by mathematical and statistical techniques. This, of course, has not been entirely satisfactory and the need for a proper census where every citizen is counted has become inevitable.

The rapid population change and socio-economic development in Africa in general, and in Cameroon in particular, cannot and have never followed the statistical models and projections by mathematical philosophers sitting on their tables and manipulating socio-economic formulae and demographic models.

The census exercise provides for the direct count of all citizens at a given point in time, so that government will know the basic truths about the population and the national environment, in order to plan realistically for the future. A successful census will constitute one major step forward in the national development effort.

In recent times, the Economic Commission for Africa has studied the problem of conducting censuses in Africa. In their findings, they recommended a standard short questionnaire with a few additional questions to cover demographic parameters particular to individual nations.

In planning the Cameroon exercise, due consideration has also been given to these recommendations. The Cameroonians themselves and experts sitting in international and interdisciplinary technical commissions did evolve and agree on what they considered the core of the population parameters to be measured in the national census.

They also took note of the resources for feasibility such as financial availability, local organisational potential, mass communication establishments, needed training and existing mass consciousness for national development.

How will the Cameroon government achieve a proper census?

(To be continued)

By Dr. Dan. N. Lantum
Professor of Community Health at UCHS (CUSS).
University of Yaounde
Member of I.U.S.S.P.

Your Quota In The General Census

The General Census of Population and Housing whose preliminary counting started last Saturday, March 15, 1975 is the first exhaustive general census since the reunification of Cameroon.

Those of you who have been following Dr. Lantum's serial on the importance of this census must have been already fully informed of why it is necessary for all countries, no matter their level of development, to carry out such a comprehensive census.

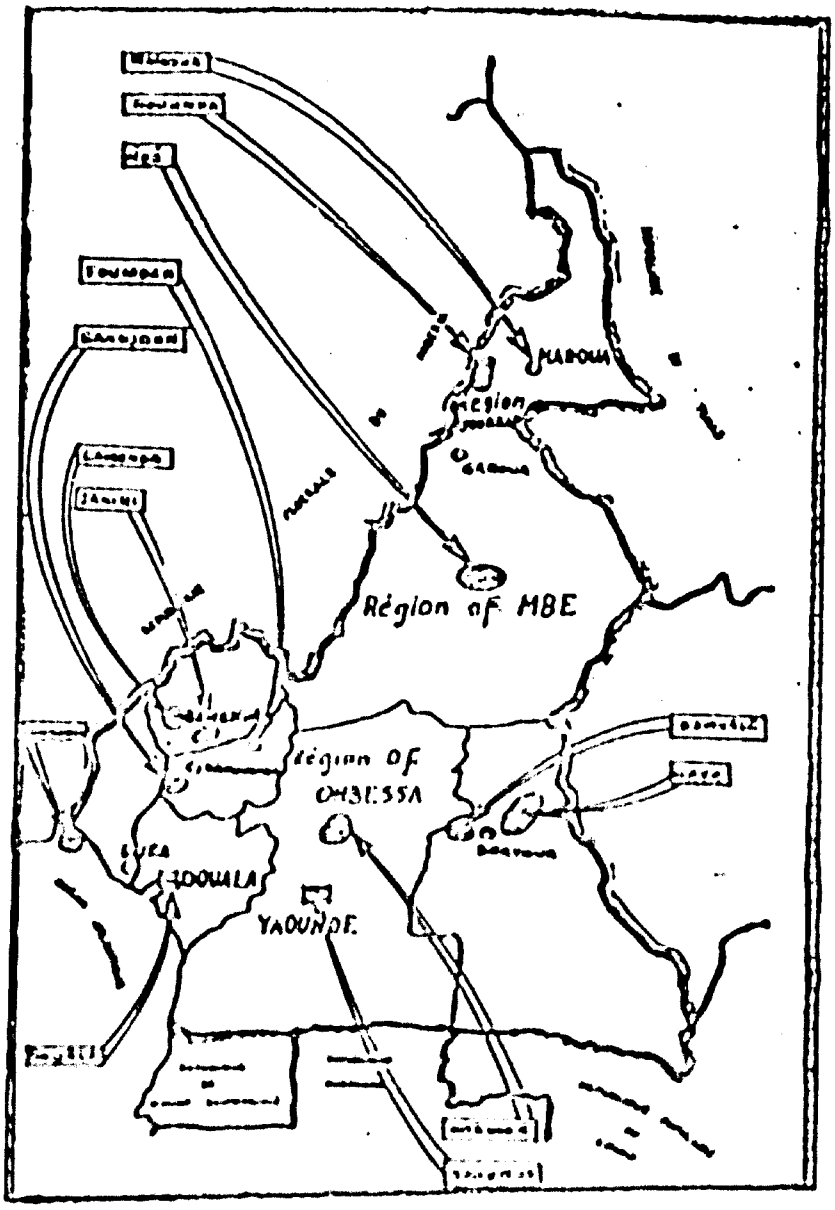
The census will be carried out in two phases. The preliminary counting already going on will give way to the final phase which begins in 1976.

During this phase the enumerators will like to know the head of your household, the names of all members of the family, relatives, friends and even visitors. They will also record statistics concerning the marital status of adults, their level and kind of education and the types of houses in which they live. The enumerators will also like to know their kind of occupation and their employers and if they are business men they would like to know the type of business they are engaged in.

For women above the age of 12, the enumerators will ask them questions which will reveal their life fertility. Thus they will like to know the number of one woman's children living within and outside the household. They will also record how many births and deaths occur in a family within specific periods.

Do not be scared when the enumerators ask you all these questions; be calm and give them the correct facts.

If you are literate, help in educating the illiterate masses on the importance of the census. Let them understand that giving the enumerators the correct facts is doing themselves good and the entire nation valuable service.



Map showing Preliminary counting zones

Every citizen should understand that the success of the census does not only depend on the hard work and the efficiency of the enumerators and the Census Central Bureau, but also on the cooperation and honesty of all Cameroonians.

We do not need to remind ourselves of how much internal trouble faulty census results have brought some African countries due to wrong information given by some citizens.

The watchwords of every Cameroonian during this exhaustive census should therefore be Honesty and Efficiency.

By Peter Mabu

Third World Attacks Population "Myth"

Some countries of the Third World are growing increasingly impatient with what they consider to be an imperialist plot to thrust population controls on them.

The "population bomb", they say, is a Western myth that is badly overdue for debunking.

In growingly sarcastic terms, they are attacking the Western social philosophy that if population growth can be restricted to reasonable limits, the Third World's twin problems—a low and progress falling standard of living and rising unemployment—can be checked.

PRESERVING

This, the third world says is false. A high density of population does not necessarily engender poverty and high unemployment, as such countries as Britain, Belgium, Holland and West Germany show. On the other hand, some of the least densely populated countries in the world, mainly in Africa, have very low living standards and a high proportion of unemployment.

The Western experience will show, however, that a low birth rate follows an improvement in living standards and not the other way round. When people have a way of life worth preserving, they take an active interest in keeping the size of their families small.

In these circumstances, the Third World argues, people do not have to be told to practise birth control. They do it automatically. Thus the entire drive for what is euphemistically called family planning sponsored by UN and other agencies is based on wrong premises and not by accident.

CONCEPTION

Low living standards cannot be eradicated by having fewer empty stomachs to fill, nor can idle labour power be eliminated in the same way. The correct answer to the endemic hunger that is the lot of countless millions in the Third World from birth, indeed from conception, to death is higher production, particularly of food, coupled with higher productivity.

This involves two factors—capital and new adoptive technology. Unless there is a massive transfer of capital from the West on a continuing basis to the underdeveloped countries, these goals cannot be attained, the Third World pundits say.

This capital should not come in the form of loans or gifts made by western governments according to their own charitable predilections, nor as private investment. It should come through a fund or bank administered by representatives of the needy countries, and contributions to it should be compulsory for all the affluent countries as a much larger percentage of gross national product than the meagre 1 percent set for the second development decade of the UN.

MOUTHS

Overpopulation is a purely relative term, the Third World socio-economists say. It relates to the size of the human population of a country or region in direct proportion to the development of natural resources. If such development is carried out through the planned intervention of the state on the basis of social needs and of ensuring a fair distribution of GNP, the problem of too many hungry mouths and too many idle hands will be solved speedily.

Overpopulation is caused basically by a disproportionate distribution of the world's capital assets and wealth so that the share of the underdeveloped countries constantly diminishes.

The affluent nations are against an equitable sharing of these assets. And thus the only answer they can provide to the terrifying spectre they have conjured up of growing hunger and unemployment in the underdeveloped countries is a political one, it is argued. Family planning is that answer. And it is an answer which suits the elites in the underdeveloped countries as it does not trespass on their entrenched interests.

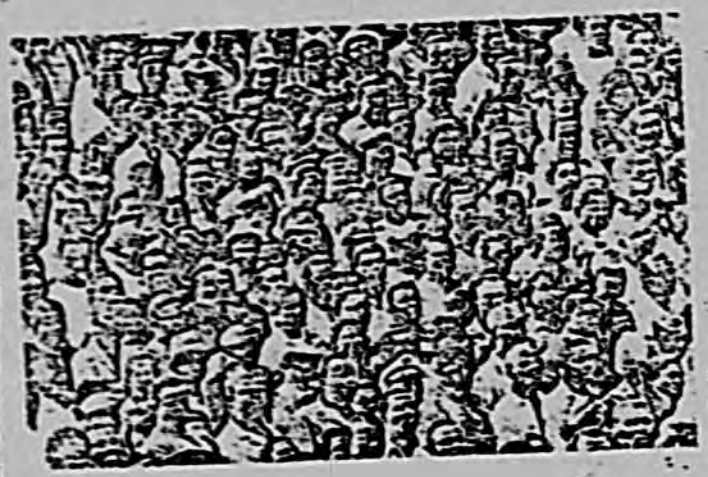
EASIER

For example, a family planning expert from the United States said recently after a period of experiment in a Punjab village: "Given the favourable attitudes found in surveys, family planning may be easier to implement than major advances in education, or the economy, which require large structural and institutional change in the society as a whole".

Joseph J. Spengler, professor of economics at Duke University, USA, also says on this subject: "What I'm afraid of is, if India, for instance, doesn't do something, it will become filled with people with aspirations for a much better life whose expectations won't be met. What will they do? They very likely will turn to the communists or to some group that believes in a highly centralised state, which the communists might take over.

"The immediate danger in India is that private and public enterprise can't improve economic conditions rapidly enough if population continues to grow rapidly. Many people will come to feel frustrated, and this will play into the hands of the communists".

So the strategy of the family planners seems to be to strive to bring down the birth rate in the underdeveloped countries by artificial means, by passing at the same time the basic socio-economic changes which alone can make such a programme viable, in fact unnecessary.



The problem in Cameroon is one of under-population. Picture shows spectators in a football match in Yaounde.

Cameroon Tribune — Wednesday March 26, 1975

Ambassador and Mrs. Moore's Drinks
In honor of DUALabs Delegation
Friday, March 21, 1975
1830 hours

Guests:

Mr. and Mrs. Robert Voight
Chief of delegation, DUALabs

Mr. Philippe Dumas
Data for Development, France, DUALabs

Mr. Philippe Billot
Parisian Workshop for Urbanism, France, DUALabs

Mr. and Mrs. Gilbert Sherman
DUALabs, Yaounde

M. Simon Kotock Ngan
Chef de Service Adjoint
Service Central de l'Informatique
Presidence de la Republique

M. Wesner Joseph
Bureau du Rencensement
Direction de la Statistique
Ministère du Plan

M. Ngae a Moubeke
Directeur Adjoint
Direction de la Statistique
Ministère du Plan

M. Francis Gendreau et Mme
Directeur, Institut de Formation Statistique

Mr. Thomas Schlenker
Commercial Attache

Mr. and Mrs. Steven Liapis
USAID Contoller

Mr. and Mrs. Michael Phelan
USIS Cultural Officer

Mr. and Mrs. James Griffin
Consular Officer

Mrs. Jacqueline Phelps
Visitor

Host and Hostess

QUESTIONS RELATING TO FERTILITY

(Interview of women aged 12 years and over)

Serial number of the woman in the household	Life fertility					
	LIVING CHILDREN			TOTAL NUMBER OF CHILDREN BORN ALIVE		
	Count all living children of the woman i.e. those who live in the household as well as those living elsewhere 21			Count all live-born children of each woman including those who died after birth 22		
	Male	Female	Total	Male	Female	Total

EVENTS OCCURED IN THE HOUSEHOLD DURING THE LAST 12 MONTHS

Period from *to*

BIRTHS 23			DEATHS 24	
Has there been any birth in this household during the period from to ☐ YES ☐ NO (check the appropriate box) If yes, indicate the sex of the child, the serial number and the age of the mother			Has there been any death in the household during the period from to ☐ YES ☐ NO (check the appropriate box) If yes, give details	
Serial number of the mother	Sex of the child	Age of the mother	Sex of the deceased	Age of the deceased

QUESTIONS RELATING TO HOUSING

25 — **Type of structure** : *Circle the number corresponding to the type of structure occupied by the household*

1 — housed house or hut
2 — House with several dwellings
3 — Modern villa
4 — Multi-apartment building
5 — Concession number of houses or huts ☐☐☐
6 — other

Characteristics of the housing unit *(Circle a number in each column ; if a concession, indicate the physical characteristics of the main house or hut)*

What are the building materials used for the walls 26	What are the building materials used for the roof ? 27	What are the characteristics of the floor ? 28	What is the number of rooms in the housing unit ? 29	What is the lighting system used ? 30	What is the type of water supply ? 31	What is the type of toilet facilities used ? 32	What is the type of occupancy ? 33
1 — Straw or stems 2 — Planks 3 — Cardboard 4 — Mud 5 — Plank and mud 6 — Thatch 7 — Other	1 — Cardboard 2 — Sheet metal or tiles 3 — Thatch or grass 4 — Other	1 — Cemented 2 — Plank 3 — earthen 4 — Other	*(Write down the serial number of rooms)* ☐☐☐	1 — Electricity 2 — Kerosene 3 — Oil 4 — Traditional 5 — Other	1 — Running water 2 — Public tap 3 — Wells 4 — Spring 5 — Pond 6 — Other	1 — With flush toilet 2 — Latrine 3 — Other	1 — Rent 2 — ownership 3 — free of charge 4 — housed by the employer

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MINISTRY OF PLANNING AND TERRITORIAL DEVELOPMENT

UNITED REPUBLIC OF CAMEROON
Peace — Work — Fatherland

DEPARTMENT OF STATISTICS AND NATIONAL ACCOUNTS

CENTRAL BUREAU OF CENSUS

GENERAL CENSUS OF POPULATION AND HOUSING

(Decree No. 73/757 of 6 December 1973)

FORM RG 2

"HOUSEHOLD — HOUSING UNIT" SHEET

Locality

Province ..... ☐
Division ..... ☐☐
Sub-Division ..... ☐☐
"Enumeration area" code ☐☐☐
Structure No. ..... ☐☐☐
Household No. ..... ☐☐
Number of family nuclei ..... ☐☐

Preliminary Counting				
SEX	RESIDENTS			VISITORS
	Present	Absent	TOTAL	
Male				
Female				
TOTAL				

Sheet No of

CO TIAL

Data contained in this document are confidential. They may under no circumstances be used for purposes of prosecution, fiscal control economic sanction.
Any failure to answer to the questions asked or any inaccurate reply will be punished in accordance with the provisions of Article 7 of Law No. 63-10 of 19 June 1963 (Order No 28/CAB/PR of 1st February 1974)

Date of interview

Enumerator name :

Crew leader name :

Remarks by the enumerator :

Remarks by the crew leader :

Visa of the assistant supervisor :

	TOTAL POPULATION															POPULATION AGED 6 YEARS AND OVER						
Serial number	NAMES AND SURNAMES	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	DATE OF BIRTH		Age in completed number of years for those whose age is separated in the month of birth column	RESIDENCE STATUS	PLACE OF BIRTH	USUAL RESIDENCE			PLACE OF PREVIOUS RESIDENCE	NATIONALITY	EDUCATIONAL LEVEL		STATUS OF ACTIVITY	OCCUPATION	STATUS IN THE OCCUPATION	TYPE OF BUSINESS	MARITAL STATUS
									PLACE	DURATION										
	Record the members of the household in the following order — Head of household — Spouse of the household head — Unmarried children of the household head with the wife — 2nd wife of household head even itself followed by his unmarried children — Married children of the household head eventually followed by their family — Other relatives — Other persons (friends, workers)	— Head of household — wife — son d'ughter — mother father — other relations — no relations	M Male F Female	Month (in figures)	Year (in figures)		Write "present" for residents present ; "absent" for residents absent and "visitor" for persons visiting	Where were you born ? Record the sub-division of birth for a person born in Cameroon and the country for a person born abroad. On the upper part and the village or locality of birth on the lower part.	Where do you usually live ? Record the sub-division d'in Cameroon ; and the country if abroad	How long have you been living in the sub-division? Record the number of years in 11a ; or the number of months in 11b for persons whose duration of residence is less than one year		Where were you living before settling in this sub-division ? Record the name of the sub-division d'in Cameroon, or the name of the country if abroad	What is your nationality ? Record the nationality stated by the person ; "C" for Cameroonian and the nationality in full for the others	Have you ever attended school ? If answerable "no" end the questions No 15 If yes, approve the type and the level of education. Record the corresponding abbreviation according to the instructions at the bottom of the page.	What is the highest degree you have obtained ? Then record ? Then "Zero" if the person has no degree. Record the degree if the person has one. Use one of the abbreviations at the bottom of the page	What were you doing during the past week ? ——— ——— Write the abbreviation corresponding to the activity in accordance with the instructions at the bottom of the page	What was your occupation during the last reference period ? Record in full the occupation carried out ; for example : nurse - farmer - forest agent, tapper, blacksmith, teacher, etc .	Question only those who work or those who have worked before. Record one of the following categories as the case may be — own account worker — wage earner — Apprentice — Family aid — Other	What is the kind of business of your enterprise ? (or of your employer ?) Record in full the field of activity of the employer or the enterprise (for example : shoemaking, retail sale, handicraft extraction etc) and add the name of employer or enterprise if necessary	C M W D
1	2	3	4	5	6	7	8	9	10	11a	11b	12	13	14	15	16	17	18	19	20

ABBREVIATION TO BE USED

COLUMN 14

- NO — did not attend school
- MAT — kindergarten or nursery school
- PR — Primary school
- POST — Post primary
- GEN — General secondary education
- EN — Ecole normale (Teacher training college)
- ESS — Ecole supérieure spécialisée (specialized training college)
- UNIV — University

COLUMN 15

- CEPE — Certificat d'études primaires
- FSLC — first school leaving certificate
- CAM — Certificat d'arts ménagers (domestic science certificate)
- CAP — Certificat d'aptitude professionnelle (vocational proficiency certificate)
- BEPC — Brevet d'études du premier cycle
- BE — Brevet élémentaire
- GCE OL — General certificate of education, ordinary level
- CAFMEG — Certificat d'aptitude aux fonctions de maître d'enseignement général (Teachers grade III certificate)
- CAPE — Certificat d'aptitude pédagogique élémentaire (Teacher grade II certificate)
- PROB — Probatoire (Cambridge or W A school certificate)
- BAC — Baccalauréat
- BTS — Brevet de Technicien supérieur (Higher national certificate)
- BSAEM — Brevet supérieur d'aptitude à l'enseignement ménager (Higher national certificate in domestic science)
- GCE AL — General certificate of education, advanced level
- BSC — Brevet supérieur de capacité (Teachers' grade I certificate)
- MEP — Maître d'enseignement primaire (Prof. of teaching)
- MEPS — Maître d'éducation physique et sportive (phys. ed. sp. teach.)
- LIC — Licence (Licentiate's degree, bachelor's degree)
- DES — Diplôme d'études supérieures (Post graduate diploma, Master)
- CAPCEG — Certificat d'aptitude au professorat de CEG (cert. of proficiency for junior secondary school)
- ING — Engineer
- MED — Medical doctor
- CAPES — Certificat d'aptitude au professorat de l'enseignement secondaire (Teachers proficiency certif. for post second. school)
- CAPET — Certificat d'aptitude au professorat de l'enseignement technique (Certif. of proficiency for the professionals, tech. ed.)
- DOC — Doctorate, Ph. D

COLUMN 16

- WE — Working
- WET — Working temporarily
- UE — Unemployed
- LE — Looking for employment for the 1st time
- HE — House keeping
- RET — Retired old person
- ST — Student
- HAND — Handicapped
- LOIT — Loiterer

COLUMN 20

- C — Single
- M — married monogamy
- M1 — married to 1 spouse
- M2 — married to 2 spouses
- -
- -
- -
- -
- -
- -
- -
- V — Widow
- D — Divorced or separated

QUESTIONS RELATING TO FERTILITY
(Interview of women aged 12 years and over)

Serial number of the woman in the household	Life fertility					
	LIVING CHILDREN			TOTAL NUMBER OF CHILDREN BORN ALIVE		
	Count all living children of the woman i.e. those who live in the household as well as those living elsewhere 21			Count all live-born children of each woman including those who died after birth 22		
	Male	Female	Total	Male	Female	Total

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Period from *to*

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Serial number of the mother	Sex of the child	Age of the mother	Sex of the deceased	Age of the deceased

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1 — Isolated house or hut
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3 — Modern villa
4 — Multi-apartment building
5 — Concession : number of houses or huts ☐☐
6 — other

Characteristics of the housing unit *(Circle a number in each column. If a concession, indicate the physical characteristics of the main house or hut)*

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1 — Bricks or stones 2 — Planks 3 — Cardboard 4 — Mud 5 — Poles and mud 6 — Thatch 7 — Other	1 — Concrete 2 — Sheet-metal or tile 3 — Thatch or grass 4 — Other	1 — Cemented 2 — Plank 3 — earthen 4 — Other	*(Write down the total number of rooms)* ☐☐	1 — Electricity 2 — Kerosene 3 — Oil 4 — Traditional 5 — Other	1 — Running water 2 — Public tap 3 — Wells 4 — Spring 5 — Pond 6 — Other	1 — With flush toilet 2 — Latrine 3 — Other	1 — Rent 2 — owner ship 3 — free of charge 4 — housed by the employer

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Division ☐☐
Sub-Division ☐☐
"Enumeration area" code ☐☐☐
Structure No. ☐☐☐
Household No. ☐☐
Number of family model ☐☐

Preliminary Counting

SEX	RESIDENTS			VISITORS
	Present	Absent	TOTAL	
Male				
Female				
TOTAL				

Sheet No

CONFIDENTIAL

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Date of interview

Remarks by the enumerator : _____

Remarks by the crew leader : _____

		TOTAL POPULATION													POPULATION AGED 6 YEARS AND OVER						
	Serial number	SURNAME AND FORENAMES	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	DATE OF BIRTH		Age in completed number of years — for those whose age is expressed in the months in the previous column	PLACE OF BIRTH		NATIONALITY	USUAL RESIDENCE OR PLACE OF SOJOURN			PLACE OF PREVIOUS RESIDENCE	EDUCATIONAL LEVEL		STATUS OF ACTIVITY	OCCUPATION	STATUS IN THE OCCUPATION	TYPE OF BUSINESS	MARITAL STATUS
											PLACE	DURATION									
				M = Male F = Female	Month	Year (in figures)		Locality	Sub-div. or country			Years	Months								
0	1	2	3	4	5	6	7	8	9	10	11	12a	12b	13	14	15	16	17	18	19	20
LIST A: MEMBERS OF THE HOUSEHOLD PRESENT ON THE NIGHT OF THE CENSUS																					
LIST B: VISITORS PRESENT ON THE NIGHT OF THE CENSUS																					
LIST C: MEMBERS OF THE HOUSEHOLD ABSENT ON THE NIGHT OF THE CENSUS																					

ABBREVIATION TO BE USED

COLUMN 14

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- MAT = Kindergarten or nursery school
- PS = Primary school
- PRIST = Post primary
- CEG = General secondary education
- ES = Basic normal (Teacher training college)
- CSI = Basic main (non-optional vocational training college)
- SUP = University

COLUMN 16

- CEPE = Certificate d'études primaires
- FSLC = Final school leaving certificate
- CEB = Certificate d'aptitude professionelle (domestic science certificate)
- CAP = Certificate d'aptitude professionelle (vocational proficiency certificate)
- BEPC = Brevet d'études du premier cycle
- BE = Brevet d'enseignement
- GCE OL = General certificate of education, ordinary level
- CAP/BEP = Certificate d'aptitude professionelle/brevet d'enseignement général (Teachers' grade III certificate)
- CAPE = Certificate d'aptitude pédagogique d'enseignement (Teachers grade II certificate)
- PRIM = Polytechnic (Cambridge or W.A. school certificate)
- BAC = Baccalauréat
- BTS = Brevet de technicien supérieur (Higher national certificate)
- BSAETD = Brevet supérieur d'aptitude à l'enseignement technique (Higher national certificate in domestic science)
- GCE AL = General certificate of education, advanced level
- BDC = Brevet professionel de technicien (Teachers' grade I certificate)
- BEEP = Diplôme d'enseignement professionel (Prof. cert. teaching)
- DIEPS = Diplôme d'éducation physique et sportive (phys. ed. sp. tr. teach.)
- LIC = Licence (Licentiate's degree, Bachelor's degree)
- DES = Diplôme d'études supérieures (Post graduate diploma, Master)
- CAPCEG = Certificat d'aptitude au professorat de CEG (level of proficiency for the junior secondary school)
- ING = Ingénieur
- MED = Medical doctor
- CAPES = Certificat d'aptitude au professorat de l'enseignement secondaire (Teachers' proficiency cert. for post second. school)
- CAPET = Certificat d'aptitude au professorat de l'enseignement technique (Cert. of proficiency for the professorate, tech. ed.)
- DOC = Doctorate, Ph. D

COLUMN 18

- TRA = Working
- TRAT = Working temporarily
- CHO = Unemployed
- LE = Looking for employment for the 1st time
- MA = Home keeping
- RET = Retired, old person
- ST = Student
- HAND = Handicapped
- LOIT = Loiterer

COLUMN 20

- C = Single
- M = married woman
- M1 = monogamous married woman
- M2 = polygamous married woman
- V = Widow
- D = Divorced or separated