

Non-Capital Project Paper:**DEMOGRAPHIC RESEARCH CENTER (PopLab) CERED****I. Summary Description**

The Government of Morocco through its Division of Statistics (DOS) of the Secretariat for Planning has requested A.I.D. to assist in establishing a Demographic Research Center (Centre de Recherches et d'Etudes Demographiques - CERED). The purpose of CERED will be to develop and validate measures of demographic change and related factors and to collect special types of demographic data considered by the Moroccan Statistical Division as useful for planning purposes.

It is envisioned that CERED will be established for a period of five years. During this period CERED will be financed by Moroccan and A.I.D. funds. It is anticipated, however, that the CERED program will prove of such value that it will become a permanent element of the Moroccan statistical organization. Although CERED is being established with the technical cooperation and the support of A.I.D. through a contract with the University of North Carolina, it will be a Moroccan institution, controlled by and responsible to Moroccan authorities.

II. Setting

The economic and social development of Morocco depends on a number of inter-related factors, major ones of which are the characteristics and rates of growth of the nation's population. No sound plan for economic or social progress can be made effectively in the absence of meaningful data on population growth, since this factor has an important effect on all planning computations relating to labor force, educational plans, urbanization, trade markets, etc. Morocco recognizes that too rapid population growth is also a retarding factor in economic and social progress, and programs to modulate such growth require precise and up-to-date information on population growth rates.

Morocco has found that the rate of population growth is one of the most difficult statistical facts to measure accurately. The conventional decennial population census is too expensive to repeat at more frequent intervals. The traditional civil registration system is too constrained by its legal purposes and, in addition, is often too inaccurate to serve as a method for measuring current population change and related factors. Nevertheless, these rough methods have provided Morocco with some general demographic information; however, to measure short-range changes, to study the success or failure of developmental programs related to population change, and to evaluate the social, economic, and cultural factors that facilitate population change or

create barriers to it, more sophisticated measurement instruments are required. Therefore, one of CERED's purposes will be to devise such sophisticated statistical measurement methods and to validate them as appropriate methods for Moroccan use. For additional information on the setting see Pop/FP DPOP (Project 608-11-580-089) dated December 2, 1968, as revised.

III. Strategy

The major objective of the CERED will be to create an effective organization for testing methods and devising new techniques for measuring demographic change and topics related to such change and for developing appropriate systems for providing the demographic information necessary for planning. The program of CERED will consist of three major activities: (a) the design and testing of improved statistical methods for measuring population change; (b) the collection of special types of substantive data on population as may be appropriately collected by CERED projects; and (c) certain related activities such as the analysis of Moroccan demographic data as may be necessary for the purposes of the DOS and the Secretariat for Planning, the participation in seminars and meetings with staff of UNC and staff from related projects in other countries, etc. The details of the program to carry out these objectives are given below.

CERED will carry out this program by defining one or more geographic test areas (laboratories), developing for these areas detailed maps, house identification systems, periodic population counts, and other resources so that these areas can be used to test and validate statistical techniques.

The CERED will be one of several projects to be established by UNC and AID in various regions of the world as part of the UNC program for Laboratories for Population Studies (PopLabs). It is hoped that the professional staffs of these projects and UNC will form an international cooperating groups so that the methodological studies and technical experience can be interchanged for the benefit of each. Although established with USAID and UNC assistance, the CERED will be completely a Moroccan institution designed to serve the needs and interests of Morocco. The administration and technical direction will be Moroccan. All data collected will be the property of Morocco with DOS having complete control of its publication or disposition. Within this framework it is assumed that the general content of the research program will be discussed in detail with the cooperating institution (UNC) and that a general concurrence will be reached on research projects financed with AID funds.

IV. Planned Targets, Results and Outputs

In what is expected to become a permanent research program, it is not possible or desirable to establish precise targets for the life of the project. The

first activities must be simply those of preparing basic materials about the areas so that they can be used for research. The first step will be to delimitate carefully the areas, prepare detailed street maps of all parts of the territory, fix house numbers to all dwellings, etc. Arrangements will be made to keep these maps and dwelling identifications up-to-date to take account of new construction, etc. The second step will be to take a simple base-line population count so that the population size and distribution within the area is known. When these steps are accomplished, CERED will be ready for the first research project.

As indicated above, CERED's research program will consist of three major lines of activity:

- A. The design and testing of improved statistical methods for measuring population change. Under this activity the first and most important research project will involve a detailed and comparative analysis of birth and death data obtained from two sources:
 1. Recording of Births and Deaths - Recording will be carried out by at least two different methods. One method involves the establishment for each household of a household list and monthly visits to each household by a local person to record changes in household composition (deaths, births, migration). (Method M, used in Malawi and Turkey). The second method is more like that of a "registrar" who records births, and deaths in the villages. This "registration" could be carried out with the help of informants and would not involve regular visits in the household (Method P modification of a method used in Pakistan). It may also be desirable to test other methods of recording births and deaths.
 2. Demographic Survey - The plan is to carry out two surveys every year in the same towns and urban districts where births and deaths are registered (by the methods outlined above). Since there are at least two sub-samples (M and P) in the rural and urban populations, the sub-samples could be surveyed every six months or these surveys could occur less frequently in each sub-sample. The first demographic survey should be carried out six months after the beginning of the period of registration of births and deaths.

For each method of registration of births and deaths (M and P) a case-by-case comparison will be made between the registration and the survey data. A list will be prepared giving all the cases involving a conflict between the two sources of information (births and deaths

that were registered but not reported in the survey or births and deaths reports in the survey and not registered). A special investigator or a team will go into the field to resolve the conflicts occurring between the two sources. The Demin-Chandrasekar method or other methods may be used to obtain estimates of births and deaths on the basis of data obtained from the registration and the survey methods.

B. The collection of special types of substantive data on populations as may be appropriately collected by CERED. These types of data-collection activities will be undertaken at a later date but are outlined below for illustrative purposes.

1. Collection of data on reproductive histories. Comparisons of different methods of obtaining these data (list of pregnancy, list of children ever born supplemented by a list of pregnancy losses, etc.).
2. Methodological analysis of data from demographic surveys on fertility control practices.
3. Tests of the validity and reliability of data on attitudes obtained in K.A.P. surveys (attitudes toward family planning, on the ideal number of children, etc.).
4. Devising and carrying out procedures for measuring the demographic changes that could be attributed to the diffusion of fertility control practices.
5. Application of various demographic models (Coale-Demeny, Brass, Henry, etc...) to estimate demographic rates in the region selected and on the basis of data from the 1960 census and the demographic surveys.
6. Tests of methods for determining errors on age reporting and other variables.

C. Related Activities. The orientation of the CERED program within the overall Moroccan demographic situation implies that there should be a related activity of analysis of existing demographic data from the Moroccan decennial censuses, the civil registration system, and other sources. This analysis would have as its objective the exposition of past population trends, the estimation of future population size, composition, and distribution, and the identification of types of data the collection of which could be tested by CERED. As CERED's research program develops, members of its staff will be invited to

participate in various scientific working seminars and meetings which will be planned by the UNC Pop Lab project for the exchange of research plans and results obtained from the other countries participating in this project.

V. Course of Action

Major elements of the course of action have already been discussed in other sections of this PROP. After the signing of the Project Agreement, the Moroccan Government will officially establish CERED and appoint personnel to the posts of director, deputy director and chief of field operations. Similarly, the University of North Carolina will propose a candidate who will serve as advisor to CERED.

After CERED is organized, all the statistical data (from the censuses of 1952 and 1960, the 1961-63 multi-purpose survey, the K.A.P. surveys etc.), as well as all monographic studies for the region selected, will be gathered in the center. Analyses will be made of demographic changes and changes in socio-economic composition between 1960 and 1970. These analyses will provide a better basis for the selection of the samples and will help in the formulation of methodological problems for research.

The final selection of the sampling region in which all the field studies of the center will be carried out will be made from those regions now under consideration, such as El-Jadid, Kenitra, Meknes, and Settat. The criteria used in the determination will include: size, socio-economic composition (with a balance between urban and rural), the nearness to Rabat. The University of North Carolina will send a two or three-man team to Rabat in December 1970 to provide scientific and technical assistance to GOM officials in making the determination. The U.S. team will consist of a demographer and other experts, who will help develop the scientific basis for the site location, taking into consideration that CERED may wish to expand at a later date into a national representative sample. The team will also participate in development of plans for designing forms, tabulation procedures, field routines, methods for record matching, etc.

As soon as the sampling region is determined, CERED can then proceed to establish the field office, and start the work of mapping, house identification, etc. The UNC will also provide short-term technical assistance in the field of sampling or other special fields as needed and requested.

The detailed operating schedule will be determined by the planning conference.

The advisor assigned to CERED will also assist in organizing in-service training for the senior professional staff as well as for the personnel who

W/C will work on a part-time basis as registrars and enumerators. In addition, two participants will be sent for a year's advance training in Demography at the University of North Carolina.

It is proposed that USAID will provide funds to cover the University of North Carolina Advisor and other short-term consultants, U.S. training, and the cost of selected equipment. USAID will also provide funds for all staff (except the director, deputy director, and field operations chief), for fuel and oil for the vehicles, and for computer rental if the Secretariat has no computer available. The Government of Morocco will pay salaries of the three professional staff and cover other miscellaneous costs. For additional details, see estimated budget Attachment A.

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Annex A

Estimated Budget - Planned Obligations

<u>I. U.S. Contribution</u>	<u>FY70</u>	<u>FY71</u>	<u>FY72</u>	<u>FY73</u>	<u>FY74</u>	<u>FY75</u>
<u>A. CERED (PopLab)</u>	(16 mos.)					(8 mos.)
1. Personnel						
a) Secretaries	\$ 6,000		\$ 4,000	\$ 4,000	\$ 4,000	\$ 2,700
b) Other (Admin. Assist., Clerks, Interviewers)	52,400		40,000	40,000	40,000	27,000
2. Travel (Participation in internat'l PopLab seminars, etc.)	1,500		1,500	1,500	1,500	1,500
3. Equipment	24,500		2,500	1,500	1,500	1,500
4. Miscellaneous (Gas, Oil, etc.)	6,600		5,600	5,600	5,600	3,000
Sub-Total	\$91,000		\$53,600	\$52,600	\$52,600	\$35,700
<u>B. Contract - Univ. of North Carolina</u>						
1. Salaries and Benefits (UNC Advisor, TDY Assistance 25%, Consultants, Admin. Assist 20%, Allowances, Soc. Sec., Retirement)	\$67,100		\$52,620	\$55,360	\$58,090	\$40,040
2. Travel (8 trips plus per diem)	10,200		8,800	8,800	8,800	4,400
3. Other Direct Costs (Communication, equipment, car rental, language training, supplies, technical publications)	10,000		7,000	7,000	7,000	6,000
4. Participants	7,000		7,000			
5. Overhead (est. 34% Sal.)	14,100		11,230	12,010	12,700	8,850
Sub-Total	\$109,000		\$86,650	\$83,170	\$86,590	\$59,290
TOTAL	\$200,000		\$140,250	\$135,770	\$139,190	\$94,990
<u>II. Host Country Contribution Trust Fund</u>	\$ 4,500		\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500
Budget (Director, PopDir. Field Supvr, & Misc. Costs)	23,300		13,500	15,500	15,500	10,700
TOTAL	\$ 27,800		\$20,000	\$20,000	\$20,000	\$15,200

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