

PH 11-2-1982

USA 56513

A DESIGN AND A METHODOLOGY
FOR RECURRENT COST ANALYSIS
OF THE
SINE-SALOUM RURAL HEALTH PROJECT

A Report Prepared By:
CHARLOTTE LEIGHTON

During The Period:
JANUARY 29, 1982 - FEBRUARY 17, 1982

Supported By The:
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
(ADSS) AID/DSPE-C-0053

AUTHORIZATION:
Ltr. AID/DS/HEA: 6-10-82
Assgn. No. 583090

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ABBREVIATIONS

AID	Agency for International Development
AID/K	Agency for International Development/Kaolack
AID/RHO	Agency for International Development, Regional Health Office (Senegal)
AID/W	Agency for International Development, Washington
CFA	Denomination of Senegalese Currency (Francs)
DPRT	Division of Planning, Research, and Training
GOS	Government of Senegal
MOH	Ministry of Health
MSP	<i>Ministère de Santé</i> (Primary Health Care)
PH	<i>Promotion Humaine</i> (Senegalese Government Agency for Community Development Services)
PIO	Project Implementation Order
SSP	<i>Soins de Santé Primaire</i> (Primary Health Care)
TAI	Sanitation Agent
URC	University Research Corporation
USAID	United States Agency for International Development
VHW	Village Health Worker
WHO	World Health Organization

I. INTRODUCTION AND SCOPE OF WORK

Two questions asked by the USAID mission in Senegal guided the design and methodology that are proposed in this report. They are:

1. What recurrent costs has the Sine-Saloum Rural Health Project generated?
2. What are the recurrent costs likely to be in 1982 and in the next several years?

The main purpose of estimating current and future recurrent costs is to assist the Agency for International Development (AID) and the Ministry of Health (MOH) of the Government of Senegal (GOS) in planning for the assumption by the GOS of the project's recurrent costs when AID terminates funding. Ultimately, the data will be used to estimate costs that can be compared with government resources available to pay for them. In making such a comparison, one might ask whether or not any particular activity in the program is necessary for the project to function efficiently and effectively. This is an important question, but the information required to answer it was not requested for this analysis.

Specifically, the first task of the consultant was to identify the recurrent costs of the project, as it was redesigned in 1980. The recurrent costs of the redesigned project were to be estimated and projected for the next several years for the project in a "steady state," that is, with the same service and staffing level and the same structure, *but* excluding medicines and the related supply and delivery system. The mission specifically excluded medicines because separate steps are being taken to resolve problems in this area. In addition, the mission concluded that issues of recurrent costs that are related to medicine supply and distribution warrant separate study.

According to the initial scope of work, the consultant was to help mission staff to develop a methodology for a study of the recurrent costs of the project. After the methodology was designed, personnel from the controller's office at AID and Senegalese representatives from the Ministry of Health were to have conducted the study.

The scope of work was revised soon after work began on the methodology. Because of the Ministry of Health's interest in the study of recurrent costs, several employees of the Ministry were assigned to work with AID staff on the study. As a result, necessary data were computed and the validity and practicality of various procedures were tested while the consultant developed what became the final proposed design and methodology.

II. DEFINITION AND SCOPE OF RECURRENT COSTS

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Basic Definition and Design

The most straightforward definition of recurrent costs is the costs incurred regularly to maintain a functioning and operational program at a given level. Usually, two general kinds of recurrent costs are identified: direct and indirect. Direct recurrent costs generally include the salaries (or other forms of compensation) of staff, related transportation, overhead expenses, and the costs of the supplies and equipment needed to achieve the goals and conduct the activities of the "project" or program.

Similar, but indirect, costs are associated usually with the smooth functioning of any specific program, simply because projects do not exist in isolation from larger (organizational) environments. Indirect costs are incurred most often by other organizational units and programs that most closely relate to and support the same goals, or the physical infrastructure used by "all" (e.g., roads, a running water system, and a communication system). The range of indirect costs that can be included in any given analysis is, thus, quite broad.

Indirect recurrent costs may or may not be given a value in a recurrent cost analysis, depending on the purpose of the inquiry. When estimated, indirect costs usually are prorated shares of already existing known costs and, in more theoretical economic analyses, opportunity costs, shadow prices, etc., can be derived. However, for most practical purposes and for the specific purposes of this study, the more sophisticated estimation and allocation of indirect costs do not seem either necessary or relevant to the immediate program issues related to the recurrent costs of the Sine-Saloum health project. It does seem useful, however, to try to identify the principal indirect recurrent costs most closely related to overall functioning of the project. The rationale for the extent of indirect costs proposed for this analysis is given in the next section.

Exhibit II-1 is an outline of the basic structure of the recurrent costs proposed for this analysis. A primary distinction is made between direct costs and indirect costs. In addition, direct costs are further broken down according to whether they are incurred continually throughout the year (i.e., annually) or less frequently than each year (i.e., periodically).

The design includes several modifications to the more typical classifications to adapt to certain features specific to the Sine-Saloum project and to the purposes of and scope of work for this study. The rationale for the modifications is discussed in the section that follows the outline.

Exhibit II-1

SUMMARY OF RECURRENT COSTS
ATTRIBUTABLE TO THE SIENE-SALOUM RURAL HEALTH PROJECT

Direct Costs

I. Annual Costs

A. Supervisory Support

1. Regional and Departmental Supervisors (MOH, *Promotion Humaine*, and Peace Corps)
 - a. Indemnities
 - b. Gasoline
 - c. Vehicle Maintenance
 - d. Salaries of (3) New and Additional Regional Supervisors
 2. *Chefs de Poste* and TAIs
 - a. Indemnities
- Subtotal, Supervision

B. Administrative Support

1. AID/Kaolack
 - a. Salaries, Professional Staff
 - b. Salaries, Other Staff
 - c. Overhead (Supplies, Documentation, and Miscellaneous)
 - d. Indemnities and Per Diem
 - e. Gasoline
 - f. Vehicle Maintenance
- Subtotal, Administration

II. Periodic Costs

1. Training
 - a. Supplies
 - b. Maintenance and Per Diem Expenses
 - c. Miscellaneous
 2. Equipment and Other Commodities
 - a. Local (Kaolack) Purchase
 - b. Senegal Purchase
 - c. Foreign Purchase
 3. Construction and Renovation
 4. Transportation (Purchase of Means of Transportation)
 - a. Vehicles
 - b. Mobylettes
 - c. Horses, Carts, and Pirogues
 - i. Short-Term Technical Assistance and Evaluation
- Subtotal, Periodic Costs
- TOTAL, Direct Costs

Exhibit II-1, cont.

Indirect Costs (Annual)

- A. Supervisory Support
 - 1. Regional and Departmental Supervisors
 - a. MOH Salaries (prorated for days of *tournees* for project)
 - b. *Promotion Humaine* Salaries (prorated for days of *tournees* for project)

Subtotal, Regional and Departmental Supervision
 - 2. Rural Community
 - a. MOH Salaries, *Chefs de Poste* and TAIs (prorated for days of *tournees*)

Subtotal, Supervision

 - B. Administrative Support, Central Offices, Dakar
 - 1. MOH Salaries (prorated; full-time, if any) and Per Diem
 - 2. *Promotion Humaine* Salaries (prorated; full-time, if any) and Per Diem
 - 3. AID Salaries (prorated; full-time, if any) and Per Diem

Subtotal, Central Administration
- TOTAL, MOH Salaries from above
TOTAL, PH Salaries from above
TOTAL, Indirect Costs
TOTAL, DIRECT AND INDIRECT COSTS

Rationale

To identify the recurrent costs generated by the project's activities, the basic, straightforward classifications can be used as a starting point, but they must be modified to take into account Senegalese government policy and specific features of the project.

A. Autofinancing and Government Costs

The principal government policy that is related to the design of this analysis--the policy of local responsibility for financing and managing (*autofinancement et autogestion*) the health services delivered to villages and rural communities--limits the scope of the recurrent costs considered and identified in this study. This limitation affects primarily the recurrent costs of medicines and costs at the village level.

For example, under the policy of *autofinancement*, communities are to provide the compensation for village health workers (VHWs) and pay fees or charges sufficient to cover the cost of medicines. Thus, although the salaries of the nurses and sanitation agents at the health posts and of the departmental and regional-level supervisors are funded by the Ministry of Health, the costs of the village-level workers are not.

Because the focus of this study is those recurrent costs that would, in principle, be funded by the GOS once AID funding ends, the recurrent costs identified here include only those now funded by the AID and the GOS. These costs do not represent all the recurrent costs of the project.

B. Project Structure and Activities

The specific identification of the recurrent costs generated by the Sine-Saloum project within the broad categories of direct costs (annual and periodic) and indirect costs follows from the activities and structure of the joint efforts of the AID and the MOH.

The purpose of the project is to strengthen the delivery system to provide basic health services to the rural population of Sine-Saloum. To accomplish this goal, the AID has supported construction, the purchase of equipment and supplies, long- and short-term technical assistance, evaluation, and training. In addition, in the redesigned project, particular emphasis has been placed on strengthening supervisory support for the posts and huts and retraining village health workers and health post nurses. Fifteen new health post chiefs (*chefs de poste*) in Fatick Department and 20 sanitation workers (TAIs) have been added (an additional 20

will be added in 1982), and almost 400 village health workers have been newly trained or retrained.

The specifications are designed to reflect the different payment structure for indemnities and salaries, by type of health personnel (e.g., departmental supervisor versus *chef de poste*); the multiple sources of funding and organizational participation in the project (e.g., AID, MOH, *Promotion Humaine*, and the Peace Corps); the levels of the health system infrastructure and staffing at the regional, departmental, and rural community levels; and the financing decisions that are most often discussed (excluding medicines) (e.g., payment of indemnities, transportation costs, and the participation of rural communities and villages in financing).

C. The Distinction Between Direct Costs and Indirect Costs

The specific set of project factors that modifies the more conventional allocation of recurrent costs among direct costs and indirect costs derives from the fact that the project is providing a supplementary source of funding for a pre-existing base of primary health care services.

Thus, a system of health service delivery existed at the health post and health center levels before the project was initiated, and MOH salaried positions were already funded at the post (rural community), center (departmental), and regional levels. Strictly speaking, one can argue that the salaries of MOH employees at the post, department, and regional levels who have responsibilities that go beyond the duties connected to the project should not be included among the recurrent costs generated by the project. To attribute to the project all salaries related to the provision and administration of primary care services (*soins de santé primaire*, or SSP) in the four departments would clearly overstate the recurrent costs generated specifically and directly by the project.

In general, the question of salary attribution is most often raised in discussions of personnel who work only part-time on direct project activities. Thus, estimating the time of central-office employees (staff in the MOH or the AID) is a common problem. When attributed to a discrete project effort, the recurrent costs of the salaries of such staff generally are considered to be indirect (or marginal) and are prorated according to estimates of time spent on project activities. However, in general, such prorating is only necessary for budgetary purposes, as distinct from economic analysis more broadly, when a salary is funded by different program accounts and appropriations (i.e., only when there is a legal requirement of the appropriation process). Otherwise, such indirect salary costs need not be included in the cost estimates and budgeted amounts for the discrete program.

The reason for omitting indirect (or marginal) salary costs in most budget analyses is that it seems reasonable to assume that those salaries and related expenses (e.g., costs for central MOH staff whose responsibilities include various tasks that support the operation of the Sine-Saloum project and whose decisions and actions are necessary to keep the project running) would recur whether or not the project existed. Similarly, justification for continued funding of those salaries, overhead, and related expenses would be primarily based on the larger set of responsibilities of the staff and the combination of functions, and not just on the staff's responsibilities for the specific project.

Similarly, although the days which health personnel for the project spend on supervisory trips (*soûmées*) represent an opportunity cost in the economic sense, from a budgetary perspective, it is unlikely that these persons' salaries and the overhead their jobs generate would not be paid for the days spent traveling if the project did not exist. From this perspective, it would be overstating the recurrent costs of the project to attribute these salaries and expenses to the project itself or to the cost of continuing it (i.e., as an expense that must be included in the MOH's operating budget because of the project).

However, the full salaries of some MOH employees in field positions that existed prior to the project (e.g., 19 health post chiefs and eight departmental supervisors) have consistently been included in funding estimates for project designs and implementation documents. To make initial estimates of the project's recurrent costs and to secure approval of the project, it was important to identify already-budgeted resources, as well as new budget requirements, and to include among already-budgeted resources those items which represented certain aspects of the broader rural health system into which the project activities were to be placed.

For the purposes of this recurrent cost study, a compromise is proposed. To be consistent with earlier approaches to estimating project costs, the salaries of MOH field staff that were funded before and during the project are included as recurrent costs. However, they are listed with the salaries of central-office staff as indirect costs. In addition, it is proposed that only a prorated share of the salaries of the field staff be included (prorated for days spent on supervisory visits, because the trips are an integral part of the project).¹

¹ The salaries of the 15 new health post chiefs assigned to Fatick Department are excluded altogether, because Fatick is not one of the four departments in which the project, as redesigned in 1980, is active. The overhead of central offices also is excluded, because it is viewed as an unnecessary part of estimation, for the reasons cited above. Per diems for central-office staff for administrative visits to Sine-Saloum Region are included, however, because of their direct relation to project goals and to issues of current importance.

Technically, identifying the salaries of field staff as indirect costs would be unconventional, and prorating those salaries would represent a change from earlier methodologies to estimate recurrent costs of the project. However, the approach proposed for this study seems to be in keeping both with the project's goal of ensuring the viability of the existing and expanded system of SSP and with the task of identifying recurrent costs that are directly attributable to the project.¹ In addition, the classification proposed here provides grounds for a somewhat more precise identification of possible future recurrent costs that would not exist had the project not been implemented.

Thus, in this design, the payment of indemnities and, where applicable, gasoline and vehicle maintenance represent the basic, additional recurrent costs of health staff in the field which are directly attributable to the project. Moreover, by including and classifying the salaries of field staff in this way, the salaries remain visible, become part of a historical record, and can be added, or subtracted, depending on the decisionmakers' intended use of the estimates at the present time or in the future.

The salaries of full-time project staff assigned to the AID office in Kaolack, headquarters of the Sine-Saloum Region, are not so problematical, because they are clearly attributable to the project. The payment of indemnities, gasoline, and maintenance of vehicles also are recurrent costs directly attributable to the project, which was designed specifically to strengthen supervisory support. The supervisory support costs of departmental and regional staff, as opposed to rural community-level staff (*chefs de poste* and TAIs) are, however, identified separately because, as a result of the project design, the supervisory visits have a different cost structure.

D. The Distinction Between Annual Costs and Periodic Costs

A third factor that requires modification of the standard categories also derives from the nature of the project in Sine-Saloum. This factor, related to the different kinds and levels of recurrent costs at different stages of the project, leads to a distinction within the category of direct costs

¹ It should be noted that the project costs are a smaller set of costs than those incurred to operate and maintain the pre-existing and now expanded system of basic health services in the four departments in Sine-Saloum. Indeed, if one wanted to estimate the recurrent costs of SSP as a whole in the four departments of Sine-Saloum, other "existing" salaries and associated recurrent costs would probably have to be added to the costs in the estimates to implement the project. It is in this sense that salaries for field staff are considered to be only indirectly related to the project.

between costs that are annual (i.e., that occur throughout the year) and costs that are periodic (i.e., that occur less frequently than annual costs).¹

In a project such as the Sine-Saloum effort, certain costs that will recur throughout the life of the project will also continue to be a necessary part of a budget, either annually or periodically, after donor funding ends (if the project is to continue without major changes). Included in this category of recurrent costs are, for instance, costs for salaries and overhead for administrative support, equipment, supplies, and transportation. However, some project activities that incur short-term recurrent costs during the life of the project are one-time, start-up costs, and, for the purposes of identifying future recurrent costs, they need not be included. Because AID funding to train TAIs at the Khombole School clearly falls in this category, it has not been included in this analysis of recurrent costs.

Other recurrent costs associated with start-up efforts can fall along the borderline between investment costs and recurrent costs. Also, if such costs continue after the end of the special project effort, it is likely that they will differ in comparison to the original start-up costs and, perhaps, have to be funded less frequently. Thus, although the salaries and overhead expenses of staff at AID/Kaolack are clearly direct and continual operating costs of the project, from a certain perspective, they represent also a mix of investment and recurrent costs. The intensive administrative support which the AID/Kaolack staff provide, and which is necessary to develop and strengthen the project and to maintain contact with the AID and the MOH in Dakar, may be (but is not necessarily) indicative of recurrent administrative support costs that inhere to the kind of program established in Sine-Saloum. The kind and scope of administrative support can, in any case, be expected to change once the project reaches maturity.

Similarly, the training costs of the project can be regarded as one-time investment costs, or as costs likely to recur, once a special effort has been completed, to cover turnover and attrition and to keep the program functioning at the same level. However, the intensive and widespread training effort that is part of the Sine-Saloum project should not have to constitute a recurrent cost after the project ends. Furthermore, the cost of maintenance-level training does not necessarily have to be a recurrent cost to the program; replacement may or may not have to be financed by specially-funded training under the auspices of the project.

¹ The distinction proposed here is somewhat similar to that drawn for fixed costs and variable costs, but it is also related to the basic problem of distinguishing between investment costs and recurrent costs. In the interest of simplicity, these relationships are not discussed in detail and two less technical terms, "annual" and "periodic," are proposed.

As in the case of training and certain administrative functions, the short-term technical assistance provided under the project is predominantly related to start-up activities, and there is no reason to expect that the cost of that assistance will recur. The costs of other kinds of short-term technical assistance may, however, become legitimate recurrent costs.

Certain kinds of equipment (e.g., equipment for sanitation, equipment for *machines*, vehicles, and mopylettes) and construction and renovation activities also generate different levels and frequencies of recurrent costs during the life of the project and after termination of the project. For example, the purchase of certain commodities and services is clearly associated with start-up and initial investment costs. However, all the equipment will have to be replaced, and the costs incurred again at some time in the future, to maintain the level at which the program is currently functioning. The frequency of replacement of different items and the costs associated with maintenance during the life of the equipment or the buildings are variables that can be expected to create recurrent cost levels in the first years after the project terminates that will differ from those cost levels incurred during the life of the project.

These broad items of expenditure--training, construction, renovation, equipment, transportation, and technical assistance--raise questions about the scope of recurrent costs appropriate to, attributable to, and generated by the project and the methodology used to handle those costs in as practical and relevant a way as possible. It is proposed here to include the costs in these broad categories as "periodic costs" in the estimates for 1981 and subsequent years, because they represent a large portion of the project's operating expenses and because expenditure in these categories will be necessary, despite changes in type and level, to maintain at the least the status quo. However, it should be emphasized that the costs for these activities in 1980 and 1981 do not necessarily represent, nor are they indicative of, the level of cost that can be anticipated in the two to five years following the termination of the project. Thus, estimates of future recurrent costs for these activities must be based on assumptions about future program level, and not on direct, "straight-line" projections of past costs.

Equipment, transportation, and construction costs are amortized usually and added to annual recurrent costs. A different treatment is proposed in this design primarily to make costs as relevant as possible to the budgeting process under which these items may be funded after donor funding is withdrawn.

Annual appropriations of amortization funds for these items are not common in public health programs supported by national, government budgets. Most often, appropriations for capital expenditures are made for the year in which the expense will be incurred and the outlay made. To include an amortized amount in each of several years would, in such cases, distort the actual annual recurrent cost level. Moreover, the approach would be incompatible

with the realities of cash flow. Furthermore, many of these items can be classified as capital expenditures; thus, approval to fund them may involve a decision-making process (e.g., funding in relation to the "development" budget and determinations of eligibility for donor funding) that differs from that used to approve the basic annual operating costs that must be paid each year and which continue throughout the year.¹

For these reasons, amortization costs, per se, are not included in the annual recurrent cost category proposed for this study. However, the full replacement costs of equipment, etc., are included in the category of periodic costs to keep these costs visible. Different totals and subtotals of annual and periodic recurrent costs can, thus, be calculated easily, depending on the purpose and needs of the decisionmakers.

¹ Preliminary information on the Senegalese budgeting process suggests that most of the items would, in fact, be classified as "development" or capital expenditures. They are included, if at all, only in limited funding amounts in the MOH's general operating budget. Furthermore, all the equipment, transportation purchase, and construction associated with the project are eligible for donor funding and are currently being paid for by the AID. This feature is true for all the items included in the category of periodic costs. Thus, in general, one of the practical implications of periodic costs, as defined here, is that, as a group, they have different possibilities for funding methods and sources than do annual recurrent costs.

III. METHODOLOGY FOR ESTIMATING RECURRENT COSTS OF THE PROJECT

Overall Methodology

The methodological design calls for estimates of the project's recurrent costs for 1981, including direct and indirect costs; selected average unit costs, and selected comparisons (percentages); and comparable estimates for 1982 and thereafter, with modifications to 1981 base estimates, as necessary.

Samples of tabular formats for recording data are provided in Appendix A. These formats can be used by the AID and MOH staff who are responsible for carrying out the study. The sample tables provide a basic methodological guide for identifying and estimating the recurrent costs of the project. The data entered in the tables can be used for the final analysis and conclusions.

Major methodological problems or issues that can be anticipated to arise during each stage are identified below. Specific comments on each table are provided when necessary to highlight major problems or recommended methods of estimation. In general, the simplest method for calculating costs, including inflation and exchange rates (e.g., basic additions, percentages, averages, and prorating), is suggested. Alternative methods that might produce more accurate figures are suggested for selected major variables.

Data Base

An attempt was made to design a specification for recurrent costs so that the figures will correspond to available and readily accessible accounting and budget data for the period following the redesign of the project. In most cases, the specific costs proposed for identification exist under an identical name (*rubrique*) in the documents prepared and used routinely by AID staff in Dakar and Kaolack. In other cases, the proposed specification will require some regrouping and separate identification, using available data.

Data in MOH documents are readily available and can be used for the specifications proposed for estimating the 1981 costs funded by the GOS. However, the data are not so detailed as might be desired to make certain comparisons and, perhaps, to estimate costs for future years, in the event the GOS assumes the costs currently funded by the AID. A more serious problem for this study is the difficulty that should be anticipated in

finding actual cost data, as distinct from planned expenditures included in the budget. Recommendations for using the data available from the MOH are provided in Chapter V.

Detailed sources of data for the analysis that correspond to the proposed entries in the sample tables are identified in Table 1 in Appendix A. Included in this table are brief comments on the basic estimating procedure for selected items in the sample tables themselves. In addition, there are notes on major follow-ups or verifications that must be done before the data can be computed and entered in the sample tables.

Estimates of 1981 Recurrent Costs

A. Direct and Indirect Total and Average Unit Costs

The methodology proposed for the recurrent cost analysis involves, first, estimating the basic direct costs (annual and periodic) and indirect costs identified in the structure described above. These aggregate cost estimates are to be derived from AID data on actual expenses for the period September 1980 - December 1981 (i.e., the period since the project was redesigned). Those calculations for which MOH data will be required will be derived primarily from amounts included in the MOH budget in relevant categories and, if possible, from actual expenses.

The design proposed for this study also requires the identification of several standard measures of program level (volume) costs and related average unit costs for the direct recurrent costs of the project in 1981 (e.g., the cost to the project of a supervisory trip; the cost of each kind of health worker; the cost of a health post and hut; and the cost for maintenance on each vehicle). The primary rationale for identifying unit costs of this kind is to facilitate the estimation of costs in the future, when the volume of activity they represent may either increase or decrease. In addition, the estimation of some program-level and unit costs to be derived separately for each of the four departments in which the project is active is proposed to facilitate planning and the establishment of policies for the different organizational units that may assume the costs in the future.

Several of the unit costs that are proposed (e.g., costs for a health hut, visits to a health hut, and villages served by a hut; and costs per capita in the villages served) are standard; however, within the scope of this study, they also are somewhat artificial, because they do not represent all the costs for these units.

It should be remembered that some of the estimates of unit costs will, at best, be only partial, because medicines are excluded from the calculations. They will also be incomplete, because of the financial

contributions of communities and beneficiaries, particularly at the level of the village health hut. As was mentioned in Chapter II, the estimated unit costs will represent only the recurrent costs to the AID and the GOS; nonetheless, they will be a basis for estimating continuation costs to either the Agency or to the MOH. In addition, these estimates will represent the approximate additional amount that will have to be financed by any other organizational unit (e.g., the MOH, the departments, or a community) that assumes them in the future. Data on the program-level and unit costs for visits, villages, and population will be useful in relating the recurrent costs financed by the AID and the GOS to the number of people benefiting from health services.

Tables 2-5 in Appendix A provide specific guidance for estimating total and unit costs.

B. Comparisons

The design proposed for this study requires several general kinds of comparisons. One is a comparison of the specific recurrent costs of the project with the MOH budget for the project and for the nation. In another instance, similar comparisons are drawn with the MOH budget for each of the departments of Sine-Saloum in which the project is active. The purpose of these comparisons is to provide a perspective on the relative share of various GOS health expenditures at the national and departmental levels that are represented by the recurrent costs of the project. Such a perspective is needed to answer the question, "Compared to what?" and it may facilitate planning related to the additional cost burden that might be incurred by the GOS, if AID funding for the project is terminated. A comparison of the relative shares represented by each of the organizations currently funding the project is also proposed for this purpose.

The specific comparisons proposed are outlined in sample Tables 6-8 in Appendix A.

Estimates for 1982 Recurrent Costs

The principal methodological issues with respect to estimates of recurrent costs for 1982 derive from changes in the operational level of the project since 1981. Thus, 1982 estimates cannot be predicted directly from 1981 data; various assumptions will have to be made. A general discussion of the major areas where assumptions will have to be made follows.

Mobylettes, for example, are used by the health post chiefs and TAIs to make supervisory visits to the health huts. These vehicles were not available until the end of November 1981. Theoretically, one could expect

the number of supervisory visits to increase as more reliable and easier transportation becomes available; in turn, the cost of indemnities in 1982 will increase. In addition, indemnities and salaries will increase, with more TAIs expected to be in place in 1982. Similarly, some increase in the costs of administrative support at AID/Kaolack can be expected because of the presence of additional staff and a project coordinator, recruited at various points in 1981 to work throughout 1982.

The factors that can be expected to lead to a decrease in 1982 costs can be identified principally for activities that occurred in 1981 but which were substantially completed by the end of the year. Such decreases are evident particularly in training activities and construction and renovation costs.

Other changes are especially difficult to predict. The most significant is the cost of vehicle maintenance and the relation of the age and condition of vehicles to the number of supervisory visits and the volume of gasoline that can be expected to be used. The 1981 costs for maintenance reflect the high costs of repairs for vehicles that were, on average, three years old by the end of 1981. The cost of maintaining these vehicles in 1982 will, undoubtedly, increase. To the extent that new vehicles are purchased--at least three are planned--purchase costs may increase over 1981, when no vehicles were bought (78 mobyettes were purchased, however), but maintenance costs should decline.

More detail on suggestions for assumptions about increases or decreases in recurrent costs for each of the principal activities is provided in Table 11 in Appendix A. Factors that are especially uncertain at this early stage of data-gathering are specifically noted in the table for verification. All the suggested assumptions should be verified with project staff.

Table 9 in Appendix A provides a framework for making the program-level (average unit volume) and total cost estimates for 1982. Table 10 provides a basis for calculating alternative unit costs for variables that would significantly affect 1982 estimates. Alternative assumptions for these variables can be used to identify a range of costs (i.e., a high estimate and a low estimate). Furthermore, it is proposed that different time periods be used to derive base estimates for the selected variables used to project 1982 costs. This approach should make it possible to determine the difference in costs attributable to different stages in the project and to choose the most appropriate and representative base for prediction, corresponding to expected levels of project operations in 1982 and thereafter.

Estimates for Recurrent Costs After 1982

The main methodological issues about estimates of recurrent costs after 1982 derive not only from the progressive and inherent changes in

program variables that will occur between 1981 and the end of 1982, but also from the anticipated termination of AID funding sometime after 1982.

Specific suggestions for assumptions about likely changes in recurrent costs for the years following 1982 are provided in Table 11. In general, the suggested assumptions are based on likely changes inherent in basic program variables (i.e., the "natural" increase or decrease in project activities; for example, number of supervisory trips or age of vehicles), with no consideration of policy decisions that may affect the level of program activity and, hence, costs. However, it is assumed that at some time after 1982, AID funding for the project will end and the GOS will consider assuming the recurrent costs. At that time, certain policy decisions will become especially relevant. It will be possible to anticipate changes in costs resulting specifically from policy decisions already under consideration (e.g., decisions related to payment of indemnities), or from factors specifically related to the government's assumption of costs once AID funding ends (e.g., MOH procedures for transfer payments to *Promotion Humaine* or tax exonerations for gasoline). These policy variables are noted separately, where they are applicable, and to the extent that they are identifiable.

In general, recurrent costs to continue project activities after 1982 should be significantly less than 1982 costs. Thus, to the extent that various project activities are completed and goals either are met by the end of 1982 or by the end of AID funding, recurrent costs for the activities can be expected to decline either to zero or to a maintenance level only. Such decreases will be evident primarily in what are classified in this design as periodic, direct recurrent costs, especially training, construction, renovation, certain equipment, and short-term technical assistance.

As with 1982 estimates, vehicles--their purchase and maintenance costs--present a significant and separate estimating problem. In addition, the implications of changes in these costs will be different for the GOS after 1982, if AID funding is discontinued and the government assumes responsibility for the recurrent costs. To maintain the program at the same level of operation, the GOS will have to assume the costs of vehicle maintenance (costs which the GOS is not paying at this time). However, the increased cost of purchasing vehicles will not necessarily represent an increased recurrent cost to the GOS, as it would to the AID, to continue project activities. The purchase costs will most likely represent either investment costs in the GOS budget or costs for which donor funding may be possible.

The major item that is likely to increase in cost once AID terminates funding of recurrent costs is salaries--to the extent that the GOS decides either to replace the full-time positions now maintained in AID/Kaolack or to increase central-office staff support by creating new positions in the MOH.

IV. WORK COMPLETED TO DATE

IV. WORK COMPLETED TO DATE

Data Gathered and Tables Completed

All the relevant AID data have been identified and collected in readily accessible locations in Dakar and Kaolack. The MOH and AID staff have compiled data from AID sources in tables that provide the basis for estimating:

- annual and periodic direct recurrent costs for the specific project activities identified in this design;
- some unit costs accrued to the project as a whole; and
- some average unit costs for each of the four departments in which the project is active.

Five tables completed in whole or in part are included in Appendix B. The completion of this task by the end of the first stage of the study constituted a major part of the initial effort to compile and regroup data--two steps that had to be taken before totals could be calculated. In addition, the kinds and classifications of relevant data at the MOH have been identified and work to compile those data has begun.

Feasibility of Proposed Design and Methodology

The work accomplished at the beginning of the recurrent cost study indicates that the proposed methodology can be readily applied by the AID and MOH staff assigned to the task. Where certain procedures or data collection efforts were discovered to be impractical or too time-consuming, the initial methodology was changed. The adjustments were incorporated into the tables proposed in this report. Recommendations are made in Chapter V in cases where more time than may be available to the AID and MOH staff may be needed to make certain estimates.

V. RECOMMENDATIONS

V. RECOMMENDATIONS

Resources Needed to Complete Study

An outline of the major tasks that remain to be done to estimate the recurrent costs generated by the project and the estimated time it will take is provided in Exhibit V-1. The tasks are listed in roughly the chronological order in which they should be carried out for greatest efficiency and accuracy. It is assumed that three people, two members of the MOH staff and one person from AID/RHO, will be working full-time. Thus, most days reflect the work of all three people, unless otherwise noted. In addition, some part-time assistance from the controller's office, AID, will be required to identify certain specific costs. The time estimates also assume that the personnel involved will be those who are already familiar with the proposed design, methodology, and data sources; that is, they will be the same three people who participated in the first stage.

It should be clear that the tasks identified below represent the calculations and summaries of cost estimates that would constitute the basic recurrent cost study, and they could be used to draw conclusions about the recurrent costs of the project. They do not include estimates of the resources required for the analytic and policy papers that may be necessary or desirable.

Priorities

The tables constructed as part of the proposed design are intended to provide information to answer most of the usual questions about recurrent costs so that general budgetary decisions can be made. However, not all the proposed estimates will be needed immediately or for the first stage of the recurrent cost analysis. Some of the proposed estimates will be useful for in-depth analysis or suggest areas which would be worthwhile to analyze in depth.

Exhibit V-2 represents an attempt to identify the areas that are most important to the first stage of the process of estimating recurrent costs. Other areas, identified as second priorities, are listed that can be examined later in conjunction with more analytic follow-up work.

All the first-priority tasks can be completed easily by the three assigned staff within three weeks (in as many as 15 working days). To carry out the first-priority tasks for 1981, it will be necessary to complete approximately one-half of Tables 2 and 3, drop Tables 4, 5, and

Exhibit V-1

TASKS AND TIMEPHASING

<u>Tasks</u>	<u>Estimated Time</u>
1. Complete 1980 estimates (see Tables 2-5).	
a. Annual and Periodic Costs Funded by AID	2 days*
b. Average Unit Costs	2 days
c. Departmental Costs	2 days
d. Costs Incurred by MOH	1 Person, 2 Days
e. Review for Accuracy	2 People, 1 Day
f. Currency Conversion (CFA into dollars and vice versa)	2 People, 1 Day
Subtotal	3 People, 8 Days
2. Make comparisons (see Tables 6-8).	
a. Collection of MOH National Budget Data	1 Person, 1 Day
b. Collection of MOH Departmental Budget Data	1 Person, 2 Days
c. Collection of Data from <i>Promotion Humaine</i> and Peace Corps	2 People, 1 Day
d. Calculations	2 Days
e. Review for Accuracy	2 People, 1 Day
f. Currency Conversion	2 People, 1 Day
Subtotal	3 People, 5 Days
3. Make estimates for 1982 and after (see Tables 9-10).	
a. Verification of Assumptions with Project Staff in Dakar and Kaolack	1 Person, 1 Day
b. Calculation of Alternative Assumptions for Selected Variables	2 People, 1 Day
c. Calculation of Direct Costs	2 Days
d. Calculation of Indirect Costs	1 Day
e. Review for Accuracy	1 Day
f. Currency Conversion	1 Day
Subtotal	3 People, 6 Days
TOTAL	3 People, 19 Days

* Plus 1 Person, Controller's Office, AID, 1 Day.

Exhibit V-2
OUTLINE OF PRIORITY TASKS

A. 1981 Estimates

1. First Priority

- a. Calculate estimates for each of the categories of direct cost, January-December 1981.
- b. Calculate unit costs only for supervision (*toamées*).
- c. Estimate the numbers of units representing program level for staff, training, supervision, and health facilities.
- d. Compare MOH budget data only, without attempting either to identify categories of costs that are not easily accessible, or to calculate actual expenditures, and excluding separate estimates for each of the departments.

2. Second Priority

- a. Calculate estimates for the categories of indirect cost.
- b. Estimate unit costs for health facilities and population and beneficiaries.
- c. Determine program level in relation to beneficiaries (e.g., villages, visits, and population).
- d. Calculate total and unit costs, program level, and comparisons identified separately for each department.

B. Estimates for 1982 and After

1. First Priority

- a. Calculate estimates for each of the categories of direct costs.
- b. Estimate numbers of units representing program level related to staff, training, supervision, and health facilities.

2. Second Priority

- a. Make estimates for the categories of indirect costs.
- b. Specify alternative assumptions for estimating a range of costs for selected activities.

7, and curtail the collection of data for Table 6 (see Appendix A). Table 8 would have to be completed, and Table 9 dropped, to carry out the first-priority tasks for 1982 and after.

APPENDICES

Appendix A
STATISTICAL DOCUMENTATION FOR
METHODOLOGICAL GUIDANCE
(Tables 1-11)

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Table 1

DATA SOURCES AND COMMENTS FOR 1981 ESTIMATES OF
RECURRENT COSTS OF THE SIEM-SALOMI RURAL HEALTH PROJECT

	Data Sources*				Comments
	Demandes de Reboursesments	AID Controller's Accounts	MOH Budget ¹	Other	
<u>Direct Costs</u>					
1. <u>Annual Costs</u>					
A. Supervision Support (Departmental and Regional Supervisors, <i>chefs de</i> <i>zones</i> , TAs, Chauffeurs)					
1. Indemnities	x				
2. Gasoline		x		Project staff receipt of monthly gas <i>bons</i> .	For actual annual gas expenses. Identify separately, in PID/commodities, AID control- ler's accounts; allocate according to project staff estimate of monthly volume (200 litres each month, each vehicle) for those personnel, excluding, if possible, gas used for training and pharmacy.
3. Vehicle Maintenance	x				Verify total number of operating vehicles versus vehicles out of commission more than one month. Identify vehicle maintenance for these cars separately for actual expense, or use annual average per operating vehicle in the project (annual total for vehicle main- tenance divided by total number of operating vehicles times number of vehicles for personnel).
4. Salaries		x		Prorated; <i>Bonuses</i> and Peace Corps budgets.	Prorated or full-time. See text. ¹ Note: Verify source of payment of salary for training director. Consider including under "Training."
* The specific source of data for each of the line items of cost is indicated by an "x" in the columns under "Data Sources."					

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Table 1, cont.

	Data Sources				Comments
	Demandes de Remboursements	AID Controller's Accounts	MOH Budget ¹	Other	
B. Administrative Support, AID/Kaolack					
1. Salaries					
a. Professional Staff		x			Identify separately in PIO/technical assistance.
b. Other Staff	x				
2. Overhead, Supplies, and Miscellaneous					
	x	x			Identify relevant expenses in direct reimbursement and PIO/commodities, AID controller's accounts, and add to <i>Indemnités et honoraires</i> .
3. Indemnities and Per Diems					
	x	x			Per diems for professional staff. Identify separately, in PIO/technical assistance, AID controller's account. Add these to entries in <i>Indemnités et honoraires</i> ; exclude indemnities for pharmacist. Consider excluding indemnities for training director.
4. Gasoline					
		x		Project staff receipt of monthly gas <i>bons</i> .	Same as A.2 above, but use average 300 litres each month, each vehicle, and exclude gas used for pharmacy vehicle.
5. Vehicle Maintenance					
	x				Same as A.3 above. Also, exclude vehicle used for pharmacy.
TOTAL, Annual Direct Costs					
					Compare total in Governor of Sine-Saloum, AID Controller's Accounts, with grand totals in <i>Comptes de remboursement</i> , as check for accuracy for not omitting a cost, and for avoiding double counting.

A-1b

Table 1, cont.

Demandes de Remboursements	Data Sources		Mill Budget ¹	Other
	AID Controller's Accounts			

Comments

II. Periodic Costs

A. Training (Supplies, Per Diems, and Miscellaneous)

1. Supervisors, *Chiefs de Poste*, TAIs (excluding Khombole School), and *Chiefs de Poste*

x

Note: Only some of the expenses for training director for indemnities, gas, and vehicle maintenance are included under training categories in *Comptes de Travaux*. Consider identifying these expenses in the other relevant categories and adding to training, rather than keeping them in AID/Faolack costs. Consider including salary of training director here, rather than as regional supervisor in 1981, or AID/faolack, December 1981 and 1982. Verify source of payment for per diem of trainees during training sessions; not included in *Demandes de Remboursements*, but are included as AID cost in project redesign estimates.

2. Project Managers and Supervisors, Senegal and Foreign Seminars and Courses

x

Identify separately in P10/participant and direct reimbursement accounts.

B. Equipment and Other Commodities

1. Local Faolack Purchase

x

Exclude horses, carts, and pirogues. See below.

2. Senegal purchase

x

Identify Senegal and foreign purchase separately in P10/commodities and direct reimbursement accounts. Exclude medicines and other pharmacy equipment. Include only equipment and commodities that are relatively durable (i.e., purchased less than annually). Note: Gasoline is included above and transportation below.

3. Foreign Purchase

x

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Table 1, cont.

	Data Sources			Comments
	Demandes de Remboursements	AID Controller's Accounts	MOH Budget ¹ Other	
C. Construction and Renovation	x			
D. Transportation, Purchase				
1. Vehicles and Mobylettes		x		Note: Only mobylettes purchased in 1981; but identify cost of vehicle operating costs for 1982 and after.
2. Horses, Carts, and Pirogues	x			
E. Short-term Technical Assistance and Evaluation		x		Identify expenditures in both P10/technical assistance and direct reimbursement accounts.
<u>Indirect Costs</u>				
A. Supervision, Regional, Departmental and Administrative Staff				
1. MOH Salaries: Supervisors, Districts, etc., TAIs			x	Prorated or full-time. See text.
2. Promotion Incentive Salaries: Supervisors				Promotion Incentive budget. Prorated or full-time. See text.
B. Administration, Central Offices, Dakar				
1. MOH Salaries and Per Diems			x	Prorate salaries for time spent on project.
2. Promotion Incentive Salaries and Per Diems				Promotion Incentive budget. Prorate as in A.1.a., above.
3. AID Salaries				AID/Dakar general operating budget. Prorate as in A.1.a., above.

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Table 1, cont.

	Data Sources				Comments
	Demandes de Remboursements	AID Controller's Accounts	NOH Budget ¹	Other	
<u>Average Unit Costs</u> (Project elements related to unit costs not identified above)					
A. Number of Supervisory Visits	x				Divide total paid for indemnities by 1,000 CFA. Use cost of indemnities for project as a whole, or for each department, as applicable.
B. Number of Regional and Departmental Supervisors, <i>Chefs de Poste</i> , and IAIs, New for Project and Pre-Existing			x	AID project reports and staff verification.	
C. Number of AID/Esolack Staff					
1. Professional		x			Clarify status of training director, 1981 and 1982.
2. Other	x				
D. Number of Supervisors, <i>Chefs de Poste</i> , IAIs, and <i>Centres de Santé</i> Trained, by Department				AID project reports and staff verification.	
E. Number and Location, by Department, of Posts and Huts Constructed, Renovated, Receiving Local Purchase Equipment, Furniture, as Applicable	x			AID project reports and staff verification.	Identify separately in data sources for actual unit costs, or prorate total in each category by relative size of department.
F. Number of Posts, Huts, Villages Served, by Department				List provided by project coordinator prepared in 1977.	To identify number of actual functioning huts, verify with project staff or estimate from monthly management information system reports, using number of huts reporting, or some minimum number of visits, as a standard. Consider comparison of average costs of the 60 sample health huts (see table 1.1.1), with average for all huts, for purposes of choosing relevant unit costs for period after 1982 or a range for those estimates.

Table 1, cont.

	<u>Data Sources</u>				<u>Comments</u>
	<u>Demandes de Remboursements</u>	<u>AID Controller's Accounts</u>	<u>MOH Budget¹</u>	<u>Other</u>	
G. Visits to Huts, Children Under 5, Women 15-45, and Total				Monthly reports from management information system.	
H. Population in Villages Served				List provided by project coordi- nator prepared in 1977; 1978 GOS Census.	

¹ The MOH budget is identified as a data source in this table only for categories of costs currently funded by the MOH as part of the project. See separate table for proposed comparisons of MOH budgeted amounts in categories comparable to the project's.

Table 2

SUMMARY OF ANNUAL AND AVERAGE UNIT DIRECT COSTS OF THE SINE-SALOUM
RURAL HEALTH PROJECT, SEPTEMBER 1980 - DECEMBER 1981

Direct Costs	Total Costs		Average Unit Costs for January - December 1981							Per Capita Population Aux Villages Polarisés	
	Sept. 80- Sept. 81	Jan. 81- Dec. 81	Pers.	Tournée	Poste	Case A/T*	Villages Polarisés	infants	visites Femmes		Total
I. Annual Costs											
A. Supervisory Support											
1. Departmental and Regional Support (MOH, Pharmacies, Health, Peace Corps)											
a. Indemnities	x	x									
b. Vehicle Maintenance	x	x									
c. Gasoline	x	x									
Subtotal, Departmental and Regional	x	x	x	x	x						
2. Health Huts and TAIs											
a. Indemnities	x	x									
Subtotal, Supervisors	x	x	x	x							
B. Administrative Support (AID/Kaolack)											
1. Salaries	x	x									
2. Overhead	x	x									
3. Per Diem	x	x									

* Health huts are divided into the categories of "Active" (A) and "Total Number" (T). See Note 4.

Table 2, cont.

	Total Costs		Average Unit Costs for January - December 1981								Per Capita Population Aux Villages Polarisés	
	Sept. 80- Sept. 81	Jan. 81- Dec. 81	Pers.	Tournée	Poste	Case A/I	villages Polarisés	Visites Enfants	Visites Femmes	Total		
4. Gasoline	x	x										
5. Vehicle Maintenance	x	x										
Subtotal, Administration	x	x										
TOTAL, Annual Costs	x	x	x	x	x	x x	x	x	x	x	x	x
II. Periodic Costs												
A. Training	x	x	x		x	x						
B. Equipment and Other Commodities												
1. Local Purchase	x	x			x	x						
2. Foreign Purchase	x	x			x	x						
C. Construction and Renovation	x	x			x	x						
D. Transportation, Purchase												
1. Vehicles	x	x										
2. Mobylettes	x	x										
3. Horses, Carts, and Pirogues	x	x										
E. Short-Term Technical Assistance	x	x										
TOTAL, Periodic Costs	x	x										

Table 2, cont.

	Total Costs		Average Unit Costs for January - December 1981							Per Capita Population Aux Villages Polarisés
	Sep ^r 80- Sept. 81	Jan. 81- Dec. 81	Pers.	Tournée	Poste	Case A/I	Villages Polarisés	Infants	Visites Leaves	
Indirect Costs										
A. Supervisory Support										
1. Regional and Departmental										
a. MOH Salaries, Supervisors	x	x	x		x					
b. <i>Formation</i> Salaries, Supervisors	x	x	x		x					
Subtotal, Regional and Departmental	x	x	x		x					
2. Rural Community										
a. MOH Salaries										
<i>Formation</i> Salaries and TAIs	x	x	x				x x			
	x	x	x				x x			
Subtotal, Rural Community	x	x	x		x		x x			x
3. Administrative Support, Central Offices, Dakar										
a. MOH: Salaries	x	x	x							
Per Diem	x	x								
b. <i>Formation</i> Salaries	x	x	x							
Per Diem	x	x								
Subtotal, Central Administration	x	x	x							
TOTAL, Indirect	x	x	x							
TOTAL, MOH Indirect	x	x	x							
TOTAL, <i>Formation</i> Indirect	x	x	x							

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Table 3

PROGRAM LEVEL FUNDED UNDER SINE-SALOUH RURAL HEALTH PROJECT, 1981

Personnel ou Equipe ou Comité	Formation (Gens Formés)	Journées Faites	Véhicules	Total Number During Year					Population Aux Villages Polarisés		
				Mobylettes	Postes	Cases A/I	Villages Polarisés	Visites			
								Infants	Femmes	Total	
1. Superviseurs Régionaux											
a. MOH	x	x	x	x							
b. Promotion Humaine	x	x	x	x							
c. Chauffeurs	x		x								
2. Superviseurs Départementaux											
a. MOH	x	x	x	x							
b. Promotion Humaine	x	x	x	x							
c. Peace Corps	x	x	x	x							
d. Chauffeurs	x										
3. Chefs de Poste	x	x	x		x	x					
4. TAIs	x	x	x		x	x					
5. Equipes de Santé Villageoises											
a. Secouristes	x	x					x	x			
b. Matrones	x	x					x	x			
							x	x			
6. Comités de Santé	x	x									
7. Bureau AID/Kaolack											
a. Directeurs	x		x	x							
b. Chauffeurs	x										
c. Autres	x										

Table 3, cont.

Personnel ou Equipe ou Comité	Formation (Gens Formés)	Tournées Faites	Total Number During Year							Population Aux Villages Polarisés		
			Véhicules	Mobylettes	Postes	Cases A/T	Villages Polarisés	Visites			Total	
								Infants	Tommes			
8. Unités Sanitaires					x	x	x					
a. Construction					x	x	x					
b. Rénovation					x	x	x					
9. Population/Bénéficiaires								x	x	x	x	x
10. Bureaux à Dakar												
a. MOH	x		x									
b. Promotion Humaine	x		x									
c. AFD	x		x									

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Notes on Table 3

1. Spaces where numbers are to be entered are marked by an "x."
2. These numbers represent the quantity or volume related to the cost estimates. Thus, they indicate what the project is buying and how the unit cost estimates in Table 2 are derived. In addition, they serve as the base for estimating costs for 1982 and after. As such, they should be compared with the program level, or volume and quantity of activity, projected for future years for the first indication of which costs are likely to increase or decrease.
3. The calculation of most quantities represented in this table is simply a matter of compiling the numbers from available data sources, as outlined in Table 1. For the number of supervisory visits (*tournées*) made, however, it is recommended that instead of trying to perform a separate counting, the 1981 total costs of indemnities for each of the kinds of personnel be divided by 1,000 CFA (the payment made for each *tournée* made).

Table 4

ANNUAL AND AVERAGE UNIT DIRECT COSTS, 1981,
BY DEPARTMENT*

Department:	Total Cost January - December 1981	Average Unit Costs							Personnel	Per Capita Population Aux Villages Polarisés
		Tournée	Poste	Case	Villages Polarisés	Visites		Total		
						Enfants	Femmes			
<u>Direct Costs</u>										
A. Supervisory Support										
1. MOH Departmental Supervisors										
a. Indemnities	x									
b. Chauffeur Indemnities	x									
c. Gasoline	x									
d. Vehicle Maintenance	x									
Subtotal	x	x	x							
e. Chefs de Poste Indemnities	x			x						x
f. TAIs Indemnities	x			x						x
Subtotal, MOH	x	x	x	x	x	x	x	x	x	x
2. Promotion Humaine Departmental Supervisors										
a. Indemnities	x									
b. Chauffeur Indemnities	x									x
c. Gasoline	x									
d. Vehicle Maintenance	x									
Subtotal, Promotion Humaine	x	x	x	x						

Table 4, cont.

	Total Cost January - December 1981	Average Unit Costs							Personnel	Per Capita Population Aux Villages Polarisés
		Tournée	Poste	Case	Villages		Visites			
					Polarisés	Enfants	Femmes	Total		
<u>Direct Costs (cont.)</u>										
3. Peace Corps, Departmental Supervisors	x								x	
a. Gasoline	x									
b. Vehicle Maintenance	x									
Subtotal, Peace Corps	x	x	x							
Subtotal, Supervisory	x	x	x	x	x	x	x	x	x	x
<u>B. Training for:</u>										
1. Trainers	x		x						x	
2. Village Health Teams	x			x					x	
3. Health Committees	x			x					x	
Subtotal, Training	x		x	x					x	
<u>C. Equipment, Construction, and Renovation</u>										
1. Postes	x		x							
2. Cases	x			x						
Subtotal, Equipment	x		x	x						
TOTAL	x	x	x	x	x	x	x	x	x	x

* There is one table for each department.

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Notes on Table 4

1. Spaces where costs should be entered are marked with an "x." As for Table 2, costs are the estimated cost for the line item, whether an annual cost when entered under the total cost columns or an average unit cost when entered under the unit cost columns.
2. The average unit costs are calculated by dividing total cost of the line item by the number and quantity of each "unit," which can be found in Table 5.
3. Because this table corresponds to Table 2, the total costs of all the departments, as entered here, should equal the total costs for the respective direct cost categories in Table 2. However, average unit costs for each department will be specific to that department and will be different from the average costs for the project as a whole, as entered in Table 2.

Table 5

PROGRAM LEVEL FUNDED UNDER SIRE-SALOUM RURAL HEALTH PROJECT, 1981,
BY DEPARTMENT*

Department:	Personnel ou Equipé ou Comité	Formation (Personnel formés)	Total Number During Year							Population Aux Villages Polarisés	
			Tournees	Véhicules	Mobyettes	Postes	Cases	Villages Polarisés	Visites Enfants Femmes Total		
1. Superviseurs Départementaux											
a. MOH	x	x	x	x							
b. Promotion Humaine	x	x	x	x							
c. Peace Corps	x	x	x	x							
d. Chauffeurs	x		x								
2. Chefs de Poste	x	x	x		x	x					
3. TAIs	x	x	x		x	x					
4. Equipés de Santé Villageois	x	x						x			
a. Secouristes	x	x						x			
b. Matrones	x	x						x			
5. Unités Sunitaires						x	x				
a. Construction						x	x				
b. Renovation						x	x				
6. Population et Bénéficiaires								x	x	x	x
7. Comités de Santé	x							x			

* There is one table for each of the four departments.

Notes on Table 5

1. Spaces where numbers are to be entered are marked by an "x."
2. As in the case of Table 3, these numbers represent the quantity or volume related to the cost estimates (e.g., number of *tournées* made, vehicles or mopylettes allocated, *postes* and *cases* to which assigned, or villages served by each of the respective personnel).
3. Because this table corresponds to Table 3, the totals of all four departments, as entered here, should equal the totals for the respective categories as calculated for the project as a whole in Table 3.

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Table 6

COMPARISON OF RECURRENT COSTS OF SINE-SALOUM RURAL HEALTH PROJECT WITH MOH BUDGET, 1981

	Total Project Recurrent Cost for Category	AID Funding for this Project	MOH Funding for this Project	MOH National Funding for this Category	% AID Project Funding of MOH Project Funding for this Category	% MOH of total Project Recurrent Funding for this Category	MOH Project Funding in this category of MOH National Funding for SSP	% MOH Project Funding of MOH National Funding for Health
Direct Costs								
I. Annual								
A. Supervisory Support								
1. <i>Institution/Primes</i>								
a. Regional Supervisors								
b. Departmental Supervisors								
c. <i>Centres/Primes</i>								
d. TAIs								
Subtotal								
2. Gasoline								
3. Vehicle Maintenance								
Subtotal, Supervisory								
B. Administrative Support, Kaolack								
1. Salaries								
2. Overhead								
3. <i>Institution/Primes</i>								

11/1

Table 6, cont.

	Total Project Recurrent Cost for Category	AID Funding for this Category in the Project	MOH Funding for this Category in the Project	MOH National Funding for this Category	% AID Project Funding of MOH Project Funding for this Category	% MOH Funding of Total Project Recurrent Funding for this Category	% MOH Project Funding in this Category of MOH National Funding for Health	% MOH Project Funding for Health
4. Gasoline								
5. Vehicle Maintenance								
Subtotal, Administration								
II. Periodic								
A. Training for:								
1. Trainers								
2. Village Health Teams								
3. Health Promoters								
4. Managers								
Subtotal, Training								
B. Equipment and Other Commodities								
1. Local (Fadack and Senegal) Purchase								
2. Foreign Purchase								
Subtotal, Equipment								
C. Transportation, Purchase								
1. Vehicles								
2. Molyettes								
3. Horses, Carts, and Pirogues								
Subtotal, Transportation								

Table 6, cont.

	Total Project Recurrent Cost for <u>Category</u>	AID Funding for this Category in the <u>Project</u>	MOH Funding for this Category in the <u>Project</u>	MOH National Funding for this <u>Category</u>	% AID Project Funding of MOH Project Funding for this <u>Category</u>	% MOH Funding of Total Project Recurrent Funding for this <u>Category</u>	% MOH Project Funding in this Category of MOH National Funding for SSP <u>Health</u>	% MOH Project Funding of MOH National Funding for <u>Health</u>
D. Construction								
E. Renovation								
F. Short-Term Technical Assistance and Evaluation								
Subtotal, Periodic								
TOTAL, Direct Costs								
<u>Indirect Costs</u>								
A. Supervisory Support								
1. Salaries, Departmental Supervisors								
2. Salaries, Pre-Existing <i>Chefs de Poste</i> , TAIs								
B. Administrative Support								
1. Salaries, Central Offices, Dakar								
2. Per diem for Visits to Sine Saloum								
3. Gasoline for Visits to Sine Saloum								

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Table 7
COMPARISON OF PROJECT RECURRENT COSTS AND DEPARTMENTAL BUDGET LEVELS,
BY DEPARTMENT*

	Total Project Recurrent Cost for Category	Project Recurrent Cost in this Department	MOH/Departmental Budget Level for that Category	% Project Recurrent Cost of Department Budget in that Category	% Project Recurrent Cost of Total Department Budget for SSP Recurrent Costs	% Project Recurrent Cost of Total Department Budget for Health
--	--	---	---	--	---	--

Department: _____

Direct Costs

I. Annual

A. Supervisory Support

1. *Salaries/Primes*

- a. Departmental Supervisors
- b. *Off-Post/Lease*
- c. TAs

Subtotal

2. Gasoline

3. Vehicle Maintenance

Subtotal, Supervision

TOTAL, Annual Direct Costs

4/1

Table 7, cont.

	Total Project Recurrent Cost for Category	Project Recurrent Cost in this Department	MOH/Departmental Budget level for that Category	% Project Recurrent Cost of Department Budget in that Category	% Project Recurrent Cost of Total Department Budget for SSP Recurrent Costs	% Project Recurrent Cost of Total Department Budget for Health
<u>II. Periodic</u>						
A. Training for:						
a. Trainers						
b. Village Health Teams						
c. Health Committees						
Subtotal						
B. Equipment and Other Commodities						
<u>Direct Costs</u>						
C. Transportation, Purchase						
1. Vehicles						
2. Mobylettes						
3. Horses, Carts, and Pirogues						
Subtotal						
D. Construction						
E. Renovation						
F. Short-Term Technical Assistance						
TOTAL, Periodic Costs						

Table 7, cont.

	Total Project Recurrent Cost for Category	Project Recurrent Cost in this Department	MOH/Departmental Budget Level for that Category	% Project Recurrent Cost of Department Budget in that Category	% Project Recurrent Total Department Budget for SSP Recurrent Costs	% Project Recurrent Cost of Total Department Budget for Health
<u>Indirect Costs</u>						
A. Supervisory Support						
1. Salaries, Departmental and Regional Supervisors						
2. Salaries, <i>Chefs de Poste</i> and TAIs						
TOTAL, Indirect Costs						
* There is one table for each of the four departments.						

Table 8
COMPARISON OF SOURCES OF FUNDING FOR SINE-SALOUH RURAL HEALTH PROJECT,
1981 AND THEREAFTER

	Annual Cost January 1981 - December 1981	% of Total Recurrent Cost of Project	To Be Continued After December 1982		Likely Funding Source After December 1982
			Yes	No	
I. AID					
A. Direct Costs					
<u>Annual</u>					
1. Supervisory Support					
a. Indemnities to MOH and <i>Practitioners</i> <i>Humaine</i> Departmental and Regional Supervisors, CHOs, and TAIs					
b. Gasoline					
c. Vehicle Maintenance					
Subtotal, Supervisory Support					
2. Administrative Support, AID/Koalack					
a. Salaries					
b. Overhead					
c. <i>Indemnities</i> <i>Practitioners</i>					
d. Gasoline					
e. Vehicle Maintenance					
Subtotal, Administrative Support					

Table 8, cont.

	Annual Cost January 1981 - December 1981	% of Total Recurrent Cost of Project	To Be Continued After December 1982		Likely Funding Source After December 1982
			Yes	No	
<u>Periodic</u>					
3. Training					
4. Equipment and Other Commodities					
a. Local (Kaolack, Senegal) Purchase					
b. Foreign Purchase					
Subtotal, Equipment					
5. Transportation, Purchase					
a. Vehicles					
b. Mobylettes					
c. Horses, Carts, and Pirogues					
Subtotal, Transportation					
6. Construction and Renovation					
7. Short-Term Technical Assistance and Evaluation					
Subtotal, AID Direct					
 B. Indirect Costs					
1. Administrative Support, Central Offices, Dakar					
a. Salaries (Prorated)					
b. Per Diem (Visits to Sine-Saloum)					
c. Gasoline (Visits to Sine-Saloum)					
Subtotal, AID Indirect					
TOTAL AID					

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Table B, cont.

	<u>Annual Cost January 1981 - December 1981</u>	<u>% of Total Recurrent Cost of Project</u>	<u>To Be Continued After December 1982</u>		<u>Likely Funding Source After December 1982</u>
			<u>yes</u>	<u>no</u>	
II. MOH					
A. Direct Costs					
1. Supervisory Support					
	Salaries, New Regional Supervisors (3)				
	Salaries, New <i>Chefs de Poste</i> (15)				
	Salaries, TAIs (20, 1981; 40, 1982)				
	Subtotal, MOH Direct Costs				
B. Indirect Costs					
1. Supervisory Support					
	Salaries, Departmental Supervisors				
	Salaries, Pre-Existing <i>Chefs de Poste</i> (19)				
	Subtotal, Supervisory Support				
2. Administrative Support, Central Offices, Dakar					
	Salaries (Prorated)				
	Expenses (Visits to Sine-Saloum)				
	Gasoline				
	Subtotal, Administrative Support				
	Subtotal, MOH Indirect				
	TOTAL, MOH				

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Table 8, cont.

	<u>Annual Cost</u> <u>January, 1981 -</u> <u>December 1981</u>	<u>% of</u> <u>Total Recurrent</u> <u>Cost of Project</u>	<u>To Be Continued</u> <u>After December 1982</u>		<u>Likely Funding Source</u> <u>After December 1982</u>
			<u>Yes</u>	<u>No</u>	
III. <i>Promotion Humaine</i>					
A. Indirect Costs					
1. Supervisory Support					
Salary, Regional Supervisor (1)					
Salaries, Departmental Supervisors (4)					
Subtotal					
2. Administrative Support, Central Offices, Dakar					
Salaries (Prorated)					
Expenses (Visits to Sine-Saloum)					
Gasoline (Visits to Sine-Saloum)					
Subtotal					
TOTAL, <i>Promotion Humaine</i>					
IV. Peace Corps					
A. Direct Costs					
1. Supervisory Support					
a. Maintenance Allowances/Salaries (2 PCVs)					
TOTAL, Peace Corps					
TOTAL, AID, MOH, <i>Promotion</i> <i>Humaine</i> , and Peace Corps					

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Table 9

ESTIMATION DES FRAIS DE FONCTIONNEMENT ET DE NIVEAU DE FONCTIONNEMENT
PREVUS POUR 1982 ET APRÈS: PROJET DE SANTE RURALE A SINE-SALOUM

	Tournées		Personnel		Véhicules		Mobyettes		Postes		Cases		Formation	
	1982 Cost	Après N°												
I. Frais Directs														
<u>Frais Annuels</u>														
A. Supervision/Animation														
1. Superviseurs Départementaux et Régionaux							x	x						
a. Indemnités, Essence, Entretien des Véhicules	x	x	x	x	x	x								
2. Chefs de Poste														
a. Indemnités	x	x	x	x	x	x		x	x	x	x	x	x	x
3. TAIs														
a. Indemnités	x	x	x	x	x	x		x	x	x	x	x	x	x
Soustotal, Supervision	x	x	x	x	x	x	x	x	x	x	x	x	x	x
B. Administration, Bureau de Kaolack							x	x						
1. Indemnités, Essence, Entretien des Véhicules	x	x	x	x										
2. Salaires					x	x	x	x						
3. Frais Communes, Fournitures, etc.	x		x											
Soustotal, Administration	x		x		x	x	x	x						
TOTAL, Frais Annuels	x		x		x	x	x	x	x	x	x	x	x	x

Table 9, cont.

	Tournées		Personnel				Véhicules		Mobylettes		Postes		Cases		Formation	
	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après
	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o
3. Administration																
1. Niveau Central																
a. MSP: Salaires																
Primes			x	x	x	x										
Essence	x		x		x		x		x		x		x		x	
b. Promotion Humaine:																
Salaires			x	x	x	x										
Primes	x		x		x		x		x		x		x		x	
Essence			x		x		x		x		x		x		x	
c. AID: Salaires			x	x	x	x										
Primes	x		x		x		x		x		x		x		x	
Essence			x		x		x		x		x		x		x	
TOTAL, Frais Indirects	x		x		x		x		x		x		x		x	

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Table 9, cont.

	Tournées		Personnel		Véhicules		Mobyettes		Postes		Cases		Formation	
	1982 Cost N°	Après Cost N°												
Frais Périodiques														
C. Formation														
1. Frais de Soutien														
a. Superviseurs, Formateurs														
b. Travailleurs de Santé Villageoise														
c. Comités de Santé														
d. Directeurs														
2. Manuels, Fournitures, Divers														
Soustotal, Formation														
D. Equipement														
(dont: Achats Etrangers)														
E. Construction et Renovation														
F. Achats pour Transport														
1. Véhicules														
2. Mobyettes														
3. Chevaux, Abris, etc.														
4. Pirogues														
Soustotal, Transport														
(dont: Achats Etrangers)														
TOTAL, Frais Périodiques														

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Table 9, cont.

	Tournées		Personnel				Véhicules		Mobylettes		Postes		Cases		Formation	
	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après	1982	Après
	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o	Cost	N ^o
II. Frais Indirects																
A. Supervision																
1. Niveau Regional																
a. MSP Salaires			x	x		x										
b. Promotion Humaine Salaires			x	x		x										
Soustotal			x	x		x										
2. Niveau Départemental																
a. MSP Salaires			x	x	x	x										
b. Promotion Humaine Salaires			x	x	x	x										
Soustotal			x	x	x	x										
3. Niveau de Communauté Rurale																
a. MSP Salaires:																
Chefs de Poste			x	x	x	x										
TAIs			x	x	x	x										
Soustotal, Supervision			x	x	x	x										
(dont: MSP			x	x	x	x										
Promotion Humaine)			x	x	x	x										

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Notes on Table 9

1. Spaces where costs are to be entered are marked by an "x." Costs are the estimated costs for the line item.
2. Under the symbol "N⁰" enter the number of units represented by the cost (e.g., number of visits made by *chefs de poste*, TAIs, etc.). Columns where numbers should be entered are marked by an "x." Numbers for *véhicules* and *mobylettes* indicate how many have been assigned to the relevant personnel. Numbers for *postes* and *cases* indicate how many are served by the relevant personnel. Numbers for *formation* indicate how many of the relevant personnel receive training.
3. An inflation factor can be applied easily and separately to major subtotals and totals. An average exchange rate for 1981 can be used for purposes of expressing the estimates in CFA or dollars. For 1982 and after, the amounts can be expressed in constant 1981 dollars. This method facilitates identifying changes in costs because of policy and program changes, without the complications of variable and unpredictable currency values. Alternatively, an estimated percentage change in the value of CFA relative to the dollar can be added to the totals for future years.
4. When estimating the cost of vehicle maintenance, special attention should be paid to the number of old and new vehicles and the respective differences in average maintenance costs.

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Table 10

ALTERNATIVE TIME PERIODS FOR ESTIMATING A RANGE OF UNIT COSTS OF KEY VARIABLES FOR 1982 AND AFTER

	Costs and Quantities											
	September 1980 - September 1981				January 1981 - December 1981				December 1981		April - December 1981	
	Total		Monthly		Total		Monthly		Monthly		9 Month	
	Cost	H ⁰	Cost	H ⁰	Cost	H ⁰	Cost	H ⁰	Cost	H ⁰	Cost	H ⁰
A. Supervisory Visits												
1. Supervisors												
a. Indemnities	x		x		x		x					
b. Gasoline (Litres)	x	x	x	x	x	x	x	x				
c. Vehicle Maintenance (Number of Operating Vehicles)	x		x		x		x					
		x		x		x		x				
Subtotal, Supervisory Visits	x	x	x		x	x	x	x				
2. Chief Inspectors and TAIs												
a. Indemnities (Number of Hobyettes)	x		x		x		x		x		x	
		x				x			x	x		x
TOTAL, Supervisory Visits	x	x	x	x	x	x	x	x	x	x	x	x
B. Administrative Support												
1. Salaries and Overhead												
2. Indemnities	x		x		x		x				x	
3. Gasoline	x	x	x	x	x	x	x	x			x	x
4. Vehicle Maintenance (Number of Vehicles for AID/Pack and Number of Operating Vehicles)	x		x		x		x		x	x	x	x
		x				x					x	
		x				x					x	
TOTAL, Administrative Support	x		x		x		x		x		x	

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Notes on Table 10

1. Spaces where costs, or quantities and numbers, are to be entered are marked by an "x."
2. The different time periods identified correspond to different levels of program activity (see text); thus:
 - a. September 1980 - September 1981 represents the first 12 months after the redesign of the project in August 1980.
 - b. January 1981 - December 1981 represents the first full calendar year after the redesign and corresponds to calendar year 1982.
 - c. December 1981 is the first full month after the delivery of the mbylettes for *chefs de poste* and TAIs to use for supervisory visits. No more recent data were available at the time this design was developed, but it may be possible to use a three-month average for visits by those staff (December 1981 - February 1982) by the time the actual study is conducted. It is highly recommended that this be done, if at all possible, because there is generally a lag in payments as reported in the source document for data on this table (*demandes de remboursements*). In other words, payments of indemnities in December are likely to be predominantly for earlier months, before the delivery of the mbylettes.
 - d. April 1981 - December 1981 represents the term of the new project coordinator.
3. Estimates for these different periods provide a basis for choosing the most appropriate program level and unit cost assumptions for 1982 and after for those activities most likely to affect significantly costs in future years. This table also is a backup to Table 9 and should be completed first.

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Table 11
 LIKELY CHANGES, DUE TO POLICY AND PROGRAM VARIABLES,
 IN RECURRENT COSTS (TO AID OR GOS) OF THE
 SINE-SALOUH RURAL HEALTH PROJECT,
 1982 AND AFTER*

	Likely Changes in Recurrent Costs	
	In 1982, Compared with 1981	After 1982, Compared with 1982
<u>Direct Costs</u>		
I. Annual Costs		
A. Supervisory Support		
1. MOH		
a. Regional and Departmental Supervisors		
(1) Indemnities	Decrease in number of visits, hence cost of indemnities, if no new vehicles, because of increasingly poor condition of existing three-year-old cars.	Decrease to zero; likely not to be paid, per AID or MOH policy decision.
(2) Gasoline	Depends on number of visits; see indemnities above.	Increase, if GOS assumes costs and if price per gallon goes up, if MOH does not usually receive tax exemptions, as does AID; volume depends on number of vehicles and possibly on payment of indemnities.
(3) Vehicle Maintenance	Increase in average cost of new vehicles, decrease for any new vehicles.	Depends on age of vehicles, as in 1982.
b. <i>Chefs de Poste</i>		
(1) Indemnities	Increase if number of visits to increase because of presence of molyettes for 12 months of 1982, compared with only 1 month in 1981.	Decrease to zero; likely not to be paid, per AID or MOH policy decision.

* Excluding consideration of inflation.

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Table 11, cont.

	Likely Changes in Recurrent Costs	
	In 1982, Compared with 1981	After 1982, Compared with 1982
c. TAIs		
(1) Indemnities	Increase, if number of visits likely to increase because of presence of molyettes, as for <i>Anglo de parte</i> , above, plus approximately 20 additional TAIs, compared with 1981.	Decrease to zero; likely not to be paid, per AID or MOH policy decision.
Subtotal, MOH	Net change depends on magnitude of likely increase in vehicle maintenance and visits made by <i>Anglo de parte</i> and TAIs, compared with any change in number of visits made by supervisors, affecting volume of gasoline and indemnities.	Likely substantial decrease due to non-payment of indemnities; any increase in gasoline price would be more than offset by decrease in vehicle maintenance, because either there will be new vehicles or old vehicles will be unusable or irreparable.
2. <i>Promotion Mexicana</i> , Regional and Departmental Supervisors		
a. Indemnities	Same as for MOH supervisors, above.	Decrease, depending on indemnity policy, as for MOH, above. If indemnities are to be paid and MOH is responsible for cost, increase or decrease depends on whether or not MOH can transfer payments to <i>Provincia Mexicana</i> for that purpose or on <i>Promotion Mexicana's</i> own indemnity policy.
b. Gasoline and Vehicle Maintenance	Same as for MOH supervisors, above.	Cost depends on number of visits and age of vehicles, as for MOH, above. If MOH is responsible for cost, depends on transfer payment policy.
Subtotal, <i>Promotion Mexicana</i>	Net increase, if no new vehicles; constant or decrease, if new vehicles.	Increase to <i>Promotion Mexicana</i> , if GOS responsible for costs, unless MOH can transfer payments.
3. Peace Corps		
a. Indemnities	Depends on number of visits, because of age of vehicle, as for MOH supervisors, above.	Depends on decision to continue (or not) PCV services, if project ended, or if function is assumed by GOS personnel.

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Table 11, cont.

	<u>Likely Changes in Recurrent Costs</u>	
	<u>In 1982, Compared with 1981</u>	<u>After 1982, Compared with 1982</u>
b. Gasoline and Vehicle Maintenance	Depends on age of vehicle, as above.	
Subtotal, Peace Corps	Net increase, if no new vehicles; constant or decrease, if new vehicles.	Decrease, if Peace Corps' services not continued and not replaced by additional GOS personnel.
B. Administrative Support, AID/Kaolack		
1. Salaries	Increase because full year for full-time administrative assistant and regional training director, formerly employed by MOH.	Decrease, depending on policy decision on degree of intensive administrative support necessary. If GOS assumes costs, increased cost to GOS only if new positions added to replace AID/Kaolack personnel (i.e., rather than detailing existing staff).
2. Overhead	No change.	Decrease, same as AID/K salaries, above.
3. Indemnities and Per Diem	No change.	Decrease, same as AID/K salaries, above.
4. Gasoline and Vehicle Maintenance	Increase, if no new vehicles; decrease, if new vehicles.	Decrease, same as AID/K salaries, above.
Subtotal, AID/Kaolack	Increase.	Decrease.

Table 11, cont.

	<u>Likely Changes in Recurrent Costs</u>	
	<u>In 1982, Compared with 1981</u>	<u>After 1982, Compared with 1982</u>
II. Periodic Costs		
A. Training		
1. Supervisors, <i>Chefs de Poste</i> , TAIs (excluding Khombole) and <i>Comités de Poste</i>		
a. Supplies and Miscellaneous	Decrease, assuming most supplies, manuals, etc., purchased by end of 1981.	Substantial decrease, if training goals of project accomplished by end of 1982. Assume less intensive, less frequent training, and fewer trainees (i.e., only to cover attrition).
b. Per Diem	Decrease, because of completion of 1981 training plans.	
2. Project Managers and Supervisors, Senegal and Foreign Seminars and Courses	No change or decrease.	Decrease, assuming training goals met by end of 1982.
B. Equipment and Other Commodities		
1. Local Kaolack and Senegal Purchase	No change or decrease.	Decrease for several years, assuming most such equipment and commodities have been purchased by end of 1982 and are relatively durable.
2. Foreign Purchase	Decrease (verify nature of purchases in AID commodities, AID controller's account).	Decrease, as for local purchase, above.
C. Construction and Renovation		
1. <i>Postes</i>	Decrease to zero, assuming completion by end of 1981.	Decrease.
2. <i>Cases</i>	Decrease to zero, assuming completion by 1981.	Decrease.

Table 11, cont.

	<u>Likely Changes in Recurrent Costs</u>	
	<u>In 1982, Compared with 1981</u>	<u>After 1982, Compared with 1982</u>
D. Transportation Purchase		
1. Vehicles	Increase for planned purchase of three vehicles, compared to none purchased in 1981.	Increase, if old vehicles not replaced by end of 1982. No increase as a recurrent and operating cost to GOS, if included in investment budget or if provided by donors.
2. Mobylettes	Decrease; all planned mobylettes purchased by end of 1981.	No increase until 1985 or 1986, when mobylettes are three years old or more. Not a recurrent cost increase to GOS, as for vehicle purchase above.
3. Horses, Carts, and Pirogues	Decrease to zero.	No increase until pirogues need to be replaced; assume horses not to be replaced.
E. Short-Term Technical Assistance and Evaluation		
Subtotal, Periodic Costs	No change.	Decrease.
	Net substantial decrease, offset by some increase, depending on number of vehicles purchased.	Net substantial decrease, until 1985, if new vehicles purchased by end of 1982.
Indirect Costs		
A. Supervisory Support, Field Personnel		
1. MOH Salaries, Departmental and Regional Supervisors, <i>Chiefs de Poste</i> , and TAIs	Increase for 20 additional TAIs and standard GOS yearly salary increase, if any.	No change.
2. <i>Paravets</i> , <i>Biologistes</i> Salaries, Departmental and Regional Supervisors	No change, except for standard GOS yearly salary increase, if any.	No change.
3. Peace Corps - Allowance for Volunteers	No change.	Depends on Peace Corps' continuation decision or GOS replacement decision.
Subtotal, Supervisory Support	Increase for new TAI salaries and for standard yearly salary increases, as applicable.	No change, except for standard yearly salary increases, as applicable.

Table 11, cont.

	Likely Changes in Recurrent Costs	
	In 1982, Compared with 1981	After 1982, Compared with 1982
B. Administrative Support, Central Offices, Dakar		
1. MOH, Salaries and <i>Primes</i>	No change.	No change, unless or until AID project funding ends and MOH replaces AID central-office support with addition of full-time (or larger proportion of part-time) staff responsible for USR in Sine-Saloum.
2. <i>Promotion mensuelle</i> , Salaries and <i>Primes</i>	No change.	No change.
3. AID, Salaries and <i>Primes</i>	No change.	No change until project funding ends.
Subtotal, Administrative Support	No change, except for standard yearly salary increases, as applicable.	No change until AID project funding ends, except for standard yearly salary increases, if any. Increase to GOS after end of AID funding, only if additional MOH or <i>Primes</i> or <i>Messin</i> staff time is allocated to replace AID central-office administrative support.

Appendix B

TABLES COMPLETED FOR STUDY OF RECURRENT COSTS
(Tables 12-16)

Table 12

SOMMAIRE DES DEMANDES DE REMBOURSEMENTS A KAOLACK:
 REPARTITION PAR CHAPITRE POUR LE PROJET SOMME TOTAL
 SEPTEMBRE 1980 - JANVIER 1982

	1980		1981						Total	
	<u>19/9-</u> <u>28/11</u>	<u>29/11-</u> <u>31/12</u>	<u>1/1-</u> <u>2/2</u>	<u>1/3-</u> <u>31/3</u>	<u>1/4-</u> <u>31/5</u>	<u>1/6-</u> <u>31/8</u>	<u>1/9-</u> <u>31/10</u>	<u>1/11-</u> <u>31/12</u>	<u>19/9/80-</u> <u>31/8/81</u>	<u>1/1/81</u> <u>31/12/81</u>
I. Formation										
a. Equipement										
b. Frais de Soutien										
c. Frais Divers										
II. Construction										
III. Equipement Locale										
IV. Indemnités										
V. Entretien des Véhicules										
VI. Documentation										
VII. Bureau AID/Kaolack										
VIII. Agios										
IX. Divers										
TOTAL										
Dont: Promotion Humaine										
Indemnités										
Entretien des Véhicules										
Essence										
Scustotal, Promotion Humaine										

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Table 12, cont.

	1980		1981						total	
	19/9- 28/11	29/11- 31/12	1/1- 27/2	1/3- 31/3	1/4- 31/5	1/6- 31/8	1/9- 31/10	1/11- 31/12	19/9/80- 31/8/81	1/1/81- 31/12/81
Dont: Pharmacie										
Indemnités										
Entretien de Véhicules										
Essence										
Equipment Locale										
Soustotal, Pharmacie										
Superviseur de Formation										
Indemnités										
Entretien de Véhicules										
Essence										
Soustotal, Formation										
Corps de la Paix										
Essence										
Entretien de Véhicules										
Soustotal, Corps de la Paix										

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Table 13

REPARTITION DES INDEMNITES, PAR DEPARTEMENT ET REGION
FINANCES AUPRES LE PROJET DE SANTE RURALE A SINE-SALOM

	1980		1981						Total	
	1979- 28/11	29/11- 31/12	1/1- 27/2	1/3- 31/3	1/4- 31/5	1/6- 31/8	1/9- 31/10	1/11- 31/12	1979/80- 31/8/81	1/1/81- 31/12/81
<u>Personnel Régionale</u>										
MSP: Superviseurs Régionaux										
Chauffeurs										
Superviseur Pharmacien										
Soustotal, MSP										
Promotion Humaine:										
Superviseurs Régionaux										
Chauffeurs										
Soustotal, Promotion Humaine										
Bureau AID/Kaolack:										
Superviseurs et Administrateurs										
Chauffeurs										
Soustotal, Bureau AID/Kaolack										
TOTAL, Région										
<u>Personnel Départementale</u>										
1. Kaolack										
MSP: Superviseurs Départementaux										
Chauffeurs										
Chefs de Poste et TAls										
Soustotal, MSP										

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Table 13, cont.

	1980		1981					Total		
	19/9- 28/11	29/11- 31/12	1/1- 27/2	1/3- 31/3	1/4- 31/5	1/6- 31/8	1/9- 31/10	1/11- 31/12	19/9/80- 31/8/81	1/1/81 31/12/81
Promotion Humaine:										
Superviseurs Départementaux										
Chauffeurs										
Soustotal, Promotion Humaine										
TOTAL, Kaolack										
2. Gossas										
MSP: Superviseurs Départementaux										
Chauffeurs										
Chefs de Poste et TAI										
Soustotal, MSP										
Promotion Humaine:										
Superviseurs Départementaux										
Chauffeurs										
Soustotal, Promotion Humaine										
TOTAL, Gossas										
3. Foundiougne										
MSP: Superviseurs Départementaux										
Chauffeurs										
Chefs de Poste et TAI										
Soustotal, MSP										
Promotion Humaine:										
Superviseurs Départementaux										
Chauffeurs										
Soustotal, Promotion Humaine										
TOTAL, Foundiougne										

Table 13, cont.

	1980		1981						total	
	1/9/79- 31/11	29/11- 31/12	1/1- 27/2	1/3- 31/3	1/4- 31/5	1/6- 31/8	1/9- 31/10	1/11- 31/12	19/9/80- 31/8/81	1/1/81- 31/12/81
4. Hioro du Rip										
MSP: Superviseurs Départementaux										
Chauffeurs										
Chefs de Poste et TAls										
Soustotal, MSP										
Promotion Humaine:										
Superviseurs Départementaux										
Chauffeurs										
Soustotal, Promotion Humaine										
TOTAL, Hioro du Rip										

Table 14

REPARTITION D'ENTRETIEN DES VEHICULES ET DE L'ESSENCE PAR L'UNITE
 QUI S'EN SERVE, POUR LE PROJET DE SANTE RURALE A SINE-SALOOM

	1980		1981						Total	
	19/9- 28/11	29/11- 31/12	1/1- 27/2	1/3- 31/3	1/4- 31/5	1/6- 31/8	1/9- 31/10	1/11- 31/12	19/9/80- 31/3/81	1/1/81- 31/12/81
<u>Entretien des Véhicules</u>										
1. Superviseurs Départementaux, MSP										
2. Superviseurs Régionaux, MSP										
3. Administrateurs, Bureau AID/Kaolack										
4. Superviseurs Départementaux, Promotion Humaine										
5. Superviseurs Régionaux, Promotion Humaine										
6. Corps de la Paix										
7. Superviseur Pharmacien										
8. Superviseur de Formation										
<u>Essence</u>										
1. Superviseurs Départementaux, MSP										
2. Superviseurs Régionaux, MSP										
3. Administrateurs, Bureau AID/Kaolack										
4. Superviseurs Départementaux, Promotion Humaine										
5. Superviseurs Régionaux, Promotion Humaine										
6. Corps de la Paix										
7. Superviseur Pharmacien										
8. Superviseur de Formation										

Table 15

RESUME DES RAPPORTS MENSUELS D'ACTIVITES SELECTIONNEES
 DE CASES DE SANTE DEPENDUES SUR LES POSTES A CM FONDIOUGNE/SOKONE
 (Totals par Poste)

	Poste Toubacouta	Poste Passy	Poste Keur Samba	Poste Keur Saloum	Poste Coular	Poste Nioro Alsane	Poste Nissira	Poste Betanti	Poste Djilor	TOTAL
<u>Juin 1981</u>										
Nombre des Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										
<u>Juillet 1981</u>										
Nombre des Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										

Code: # en parenthère = # cases qui ont rapporté les activités si toutes n'ont pas rapporté.

Table 15. cont.

	Poste <u>Toubacouta</u>	Poste <u>Passy</u>	Poste <u>Keur Samba</u>	Poste <u>Keur Saloum</u>	Poste <u>Coular</u>	Poste <u>Nioro Alsane</u>	Poste <u>Rissira</u>	Poste <u>Betanti</u>	Poste <u>Djilor</u>	<u>TOTAL</u>
<u>Août 1981</u>										
Nombre des Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										
<u>Septembre 1981</u>										
Nombre de Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										
<u>Octobre 1981</u>										
Nombre de Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										

Code: # en parenthèse = # cases qui ont rapporté les activités si toutes n'ont pas rapporté.

Table 15, cont.

	Poste <u>Toubacouta</u>	Poste <u>Passy</u>	Poste <u>Feur Samba</u>	Poste <u>Feur Saloum</u>	Poste <u>Coular</u>	Poste <u>Nioro Alsane</u>	Poste <u>Nissira</u>	Poste <u>Betanti</u>	Poste <u>Djilor</u>	<u>TOTAL</u>
<u>Novembre 1981</u>										
Nombre de Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										
<u>Décembre 1981</u>										
Nombre de Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										
<u>Janvier 1982</u>										
Nombre de Cases										
Nombre de Villages Fréquentant les Cases										
Nombre des Malades										
Nombre de Nouveaux Malades										
Nombre d'Enfants de Moins de 5 Ans										
Nombre de Femmes 15-45 Ans										
Somme Perçue CFA										
Somme Dépensée CFA										
Somme en Caisse CFA										

Code: # en parenthère = # cases qui ont rapporté les activités si toutes n'ont pas rapporté.

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Table 16

AID EXPENDITURES UNDER SINE-SALOUM RURAL HEALTH PROJECT GRANT
(S.U.S.)

	<u>Cumulative 30/9/81</u>	<u>Cumulative 30/6/81</u>	<u>Cumulative 31/3/81</u>	<u>cumulative 30/9/80</u>	<u>Cumulative 30/6/80</u>	
PIO/Technical Assistance						
PIO/Commodities						
PIO/Participant						
AID Direct Reimbursement						
Governor of Sine-Saloum						
Khombole School						
	<u>Cumulative 31/12/78</u>	<u>Cumulative 31/3/79</u>	<u>Cumulative 30/6/79</u>	<u>Cumulative 30/9/79</u>	<u>Cumulative 31/12/79</u>	<u>Cumulative 31/3/80</u>
PIO/Technical Assistance						
PIO/Commodities						
PIO/Participant						
AID Direct Reimbursement						
Governor of Sine-Saloum						
Khombole School						

Appendix C
LIST OF CONTACTS

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Appendix C
LIST OF CONTACTS

Senegal

Dr. Doudou Ba, Director, Division of Planning, Research, and Training (DPRT), Ministry of Health (MOH)

Mme. Binta Ba, Staff, DPRT, MOH

M. Luc Dionou, Staff, DPRT, MOH

Mme. Animata Mara, Staff, DPRT, MOH

M.B. See, Director, Division of Evaluation, Ministry of Planning

M. Andre Thiakane, Staff, DPRT, MOH

Mme. Aida Lo, Project Coordinator, AID/Kaolack

M. Camara, Pharmacy Director, Kaolack

Mr. Peter Halpert, Deputy Project Coordinator, AID/Kaolack

Dr. Kane, Regional Medical Director, Sine-Saloum Region

M. Ndoye, Project Accountant, AID/Kaolack

Mr. Wayne Butler, Regional Controller, AID/Senegal

Ms. Pat Daly, Staff, AID/Senegal RHO

Ms. Mary Diop, Staff, AID/Senegal RHO

Ms. Carolyn Horn, AID/Senegal RHO

Dr. Michael White, Regional Health Officer, AID/Senegal

Dr. Henri Paret, Consultant, World Health Organization (WHO)

Washington

Dr. Donald Ferguson, Agency for International Development,
Washington (AID/W)

Dr. Clive Gray, Harvard Institute for International Development

Ms. Serita Henry, AID/W

Ms. Maureen Lewis, AID/W

Ms. Terry Lukas, AID/W

Mme. Afsaneh Mashayekhi, World Bank

Mr. Jacob Meerman, World Bank

Dr. James Shepperd, AID/W

Dr. Stanley Scheyer, Center for Human Services, University
Research Corporation (URC)

Dr. Joseph Stockard, AID/W

Ms. Ann Tinker, AID/W