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USAID/OCEAC REGIONAL HEALTH EDUCATION PROJECT

INTRODUCTION

A three member team was dispatched to Cameroon and the Central African Republic in order to carry out an Ex-post Evaluation of a regional USAID/OCEAC Health Education Project. This evaluation was part of a larger project being organized by PPC which will eventually compare health programs in at least six countries. The information derived from these studies will be used to define promising strategies for improving the AID health programming process.

The Ex-post Evaluation was carried out in conjunction with an EOP Evaluation. Portions of the report produced by the EOP team will be appended to this overview rather than repeating the detailed history and characteristics of the project. The focus of this report will be on specific themes which were identified as being either very germane to the functioning of the project or relevant to future health programming. Each of these themes will be discussed in turn, with country specific evidence in support of major points.

The USAID/OCEAC project was originally designed in the late 1960's and initiated under a University of Pittsburgh contract in 1969. The project was broadly conceived to include the spread of preventive health practices, especially environmental sanitation, through the training of health educators and the development of a basic health delivery system.

The field operations began in late 1971 in the Central African Republic and Chad and in 1972 in Cameroon. In all three cases the projects were tied to an already existing health sector pilot zone. In late 1973, a mid-term evaluation team recommended that the goals of the program be more narrowly defined to focus on the development of health education methodology and the training of health educators. Both the mid-term and end-of-project teams concluded that the basic project purpose--increasing public health knowledge and thus improving public health status--had not been satisfactorily achieved, an assessment with which this report will concur.

PART I - IMPLEMENTATION ISSUES

1. Nature of the U.S. Commitment

Examining the experience with the OCEAC Project has led to a number of questions as to the nature of the U.S. Commitment. These questions concern both the reasons behind the U.S. participation in the project and the way in which it was carried out. In terms of the understanding with the cooperating governments, the U.S. purposes seem never to have been clearly understood.

There are several indications of confusion regarding the purposes of the project. The differences among the several program documents have been cited in the 1973 evaluation report, and the experience subsequent to that suggests that no concerted attempt was made to clarify the situation. It appears that only a minimum effort was made to draw the cooperative governments into the process of planning the continuation of the project and of agreeing on its content at the time of revision. In fact, as of the 1974 project revision, the U.S. purpose seems to have been to fulfill our (reduced) commitment and terminate the project on schedule without further reflection. It appears that there was not even a nominal effort at employing the "collaborative style" prescribed for A.I.D. activities.

This limited objective presumably is one which none of the OCEAC countries could have been privy to. Nor would they have shared it unless they considered the U.S. contribution to their respective health programs to be counter to their interests. It is doubtful that any activity could be effectively implemented if it were known that the date for terminating critical inputs is fixed in advance without regard to achievement or lack of it.

Another doubtful aspect of U.S. purpose in undertaking the OCEAC project is the relationship to OCEAC itself. Apparently at the time of inception, OCEAC was considered important in terms of U.S. policy to strengthen cooperation among French-speaking West African countries. Whether this policy aim was abandoned unilaterally by the U.S. or in response to a decline in interest on the part of member countries is not so important as the fact that the project continued to be administered as a regional one. Operating through OCEAC made it harder to effect any real change in the three countries, especially as the organization's power significantly waned over the project period.

The attempt to assist rural health development, or rural health education services, through the OCEAC mechanism provided only one source of misunderstanding by the host governments of the U.S. purpose and commitment. Delays in recruitment under the University of Pittsburgh contract, and the limited effectiveness of some advisors provided under the contract were additional negative factors. The entire project experience must have raised doubts as to the seriousness of the U.S. intent and/or the U.S. ability to implement its plan.

As observed in retrospect, the operations under the project seem also to have lacked adequate A.I.D. management both in Washington and in the field. The advisors' reports appear to cite the same difficulties for each period (lack of local counterpart, lack of transport) and to cover the same broad range of activities, each in some continuing stage of partial implementation. There seems to have been no attention paid to the rate of progress toward accomplishment of specific goals, to the possibility of accelerating progress through project adjustment and/or reduction of the number of tasks to be performed, or to the foreseeable impact if the tasks were completed. Rather than the "efficiency" which appears to have been an underlying rationale for combining efforts in three countries under one project, such a design resulted in a lack of supervision in at least two of the three participating countries (Chad and C.A.R.).

Coordination of the project activities with the health sectors of participant states was precluded by failure to collaborate directly with host governments. Neither at its inception, nor, most importantly, as the project neared its announced termination date, was there an attempt to enter discussions with the governments to ascertain the extent to which the local authorities would have the qualifications or resources necessary to enable them to carry on the work which had been begun by or with the help of the A.I.D. funded advisor. Had effective measures been taken to ensure that the advisors phased their activities over to their counterparts, it would have been a definite indication of U.S. intent to terminate the project. As it is, the termination of the project seems to have been interpreted by these governments as an arbitrary measure and may thus have deprived the project of the positive impact which it could have had, in spite of the implementation problems. Rather than the planned evaluation and phase-over during the last six months of project life, in effect, the project was terminated, and subsequently evaluated without cooperating government participation.

The decision to terminate was clearly taken without any evaluation as to whether the project had been a success or merited continuation. If it had been labeled a success, A.I.D. should have been able to identify the host country institutions and individuals qualified and empowered to continue the work. If a failure, A.I.D. should have been able to identify the reasons for failure and communicate them to the cooperating governments as reasons for the termination of the activity. This could have provided a forum for A.I.D.-host government dialogue and increased the potential for avoiding a repetition of the mistakes of this project.

As it was, the project was terminated ostensibly because the original term of the project was five years, and the time had been completed (in fact, the term actually realized was four months short of five years). This modification in project duration was not based on any accelerated progress, nor was it the result of a documented determination that the project was a failure and thus phase-out was justified. Nevertheless, the period June 30 to September 30, 1976 was utilized for final evaluation of the project rather than operations. The EOPS report was not undertaken to provide a basis for the decision to terminate, nor was it completed as a basis for programming of further rural health activities in the region. In fact, additional rural health projects had already been developed in Cameroon and C.A.R. and were already in an advanced stage of approval even before the OCEAC evaluation began.

The host countries had little reason to expect absolute termination of the project. Despite the fact that the inadequacy of the project for achieving the stated purposes must have been evident at a very early stage to those closely involved in it, no status reports were provided to the government. Assuming that the purpose of the project was credible the cooperating governments may well have expected that the U.S. activity would continue over a long duration. It is clear that with such modest resource inputs, goals could not have been reached under the original project period. In fact even had the resources provided been increased many-fold, a longer time period might still have been required. Another reason for expecting extension was the obvious difficulty the U.S. had in finding advisors with suitable expertise for implementing the project. Since the project was inadequately staffed, it was reasonable to anticipate that the governments would not be penalized for AID's mistake and that other advisors who were better qualified would be recruited under a new proposal.

In view of the mutually acknowledged poor health conditions in the three countries, and despite -- or perhaps because of -- the activities of international and private agencies working on health problems, it is questionable whether ending the project was justifiable on the grounds of either A.I.D. or host country government poor or non-performance. A more credible reason for ending the project might be shortage of A.I.D. funds, or a shifting of priorities away from the support of OCEAC. If the motivation for the project was political, five years is a long time for such motivation to have remained valid. Unfortunately, the kinds of problem which the project was supposedly addressing cannot be solved in five years.

With near-perfect hindsight, it seems unreasonable to have expected to deal with problems of an inherently long-term nature, such as effecting behavioral change in such a short period of time and with very limited resources. For these reasons, the African officials and employees most involved must have had reason to expect some further U.S. effort in this area.

2. Administration of OCEAC Project

In addition to the substantive problems involved in the OCEAC project there were several questions of administrative method which do not seem to have been tackled directly. Presumably, these were regarded as being of second order. It may have been hard to justify expending major effort on project administration, but it now seems that the way the project was set up and implemented would have crippled even a well-designed and conceived project.

Foremost among the difficulties was the role of OCEAC itself, and the way it affected the relationship between AID and the beneficiary countries. It is difficult to tell whether the project was intended to strengthen OCEAC or whether it was expected that operating through OCEAC would render the project more effective or, alternatively, economize on administrative costs. In any event, OCEAC seems to have played a weak liaison role between AID and the cooperating countries. Apparently, the signing of an agreement with them directly rather than with the individual governments resulted in substantial administrative demands being placed on AID itself. Whether OCEAC actually benefited from this joint collaboration is unclear, but from the perspective of a member country (Cameroon), the choice of OCEAC was a poor one since this organization supports a policy at odds with that of the national government. Dr. Simon Atangana, Director of Public Health, characterized the OCEAC policy as one of seeking to establish rural health services without regard for parallel development efforts in the same rural areas, while WHO seeks to contribute to an integrated rural effort. It should also be kept in mind that OCEAC was a somewhat reluctant participant in the project from the beginning, a factor which must have negatively affected their level of commitment.

A further problem was the philosophical conflict and the lack of cooperation among the major donor agencies in Central Africa. While there was apparently continuous awareness of one another's activities, in none of the countries visited was there any mechanism for coordination either on the part of the host country or any of the donors. Since resources were generally acknowledged to be inadequate to deal with the vast health problems, it might have been expected that some division of labor among donors would have been carefully arranged, or at least attempted.

The actual work plans submitted for the last two years of the project were unrealistic in their scope and misleading in their achievement objectives given the capabilities of the assigned staff. Also, these work plans were not prepared in conjunction with the cooperating governments.

It is tardy to suggest that the work plans should have been reviewed in advance by supposedly participating governments. It should be pointed out however that the 1973 team had suggested that a full-time project director be assigned by AID, either as a direct-hire or contract employee; this employee could have undertaken this crucial collaborative role. That resource limitations prevented such a step is further evidence of inadequacy of inputs relative to anticipated outputs.

These administrative shortcomings raise a question as to the implicit project purpose. While explicitly conceived as a means to reduce excessive morbidity and mortality in Central Africa and thus improve health status (as the project documentation states), the project actually may have been intended to strengthen forces toward regionalization, or to demonstrate a degree of U.S. interest in the health aspect of development in the three countries. Perhaps, as the University of Pittsburgh suggested, one of the real underlying purposes was to develop knowledge and awareness of African health problems in a large American University.

It seems safe to say that whatever the true project rationale, none of these objectives was realized to any extent, including that of maintaining a U.S. presence or indication of U.S. interest in the region or its health problems. The lack of supervision by the Agency, whether in the field or in AID/W, was a critical factor which limited achievement.

3. Data availability, data gathering: research methodology

Attempts to measure achievement and impact under the OCEAC project fell far short of expectation and of supposed Agency practice. Very little or nothing was done which could have been used to measure the impact which the project might have had on rural population in the three cooperating countries.

Despite the facts of the situation, the project documentation indicates that the project designers and the University of Pittsburgh, the original implementing agent, initially shared a complete awareness of the importance of and need for measurement of conditions at the outset and completion of the project. Several efforts by various members of the University staff were reported; in one case, collected data were shipped to Pittsburgh and never heard from again. One lengthy report (Ludwig and Porsching) reportedly is anecdotal and impressionistic and, thus, does not present any basis for measuring change. The four-village study undertaken in 1975 in the Bimbo pilot zone, C. A. R., was methodologically deficient, based on an unrepresentative sample, and was performed at the end of the project term rather than at the beginning. It, therefore, does not allow for the measurement of change realized during the project period. The Director of Basic Health Sources of the Ministry of Public Health, who was directly in charge of the Bimbo project, was particularly bitter in his remarks as to what use a one-time four-village survey might be put.

In summary, the attempts at measurements were all concerned with small, unrepresentative samples, were not repeated so as to provide some semblance of a time series, and were designed in such a way that the information gathered was incomplete or misleading.

These shortcomings seem to reflect the overall difficulty with designing and implementing the project. Perhaps the nature of the project itself and the setting in which it was undertaken, precluded effective measurement. The difficulties seem to fall into two categories: those relating to poverty (the situation) and those related to education (the nature of the project).

In view of the cost in terms of time and manpower of gathering ample and manageable data, and in view of the evident size of the health problems to be dealt with in the poor rural areas of the three countries, it is not surprising that no major effort was made by any party to the project along these lines. The cooperating governments were already operating with limited financial resources, as was continually reported, and the AID money was already spread over so many and varied activities that it would have been more startling had data gathering been accorded any higher priority.

The project was designed within a limited time frame and with limited funding: in the period envisioned, not many changes could have been anticipated. When change is slight, it requires more skill to determine it.

The suitability of data gathering for this project was challenged by the University of Pittsburgh in its March, 1974, response to the 1973 Evaluation. Passages from this response are worth quoting, not only because they are well-expressed, but because they appear to have been the basis for subsequent thinking as to the importance (or lack of it) of data gathering activity. (This attitude, if it existed, was never made explicit).

> It should be evident to all members of the Site Visit Team, as it is to individuals within the University, that the application of a research methodology to this project is completely inappropriate within the limited resources of the project. For example, in order to implement an appropriate methodology for purposes of evaluation of the impact of the various activities, the following would have to be done:
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> a. A social experiment would have to be designed that would permit sampling stratification methods to be employed in a number of villages and the project would have to have the authority to control the activities of the other health organizations and health-related activities within all villages. Other international agencies that are attempting to improve health conditions within these countries would have to be coordinated in order to be able to factor out the effects of their activities from those of this project
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> . . . . . .

c. Large scale resources would have to be made available in order to effectively conduct and evaluate a social experiment as implied by the Site Visit report. A minimal five-year followup study would have to be concluded. [Page 4.]

The application of evaluation Procedures to the OCEAC activities

The concept of program accountability has received increased attention during the last ten years in the United States. This attention has resulted in widespread evaluation activities to determine whether or not a given program has been able to achieve its stated goals and objectives. This is appropriate considering the highly integrated technological, social, and political base of this country. The generalization of these evaluation procedures to developing countries, however, can be debated. The Site Visit Team continually refers to the fact that no baseline data exists as to the present health status either at a local or national level within these countries.

On the assumption that such baseline data could exist and that resources were available to gather such information, it is extremely problematic for a three or four year project to have any statistically significant impact on this baseline. Long-term follow-up studies would have to be initiated in order to establish trend data. If one is not willing to go to this extent, there is the question as to whether or not the initial baseline data should even be collected. It must also be remembered that if the project were to attribute selected changes in baseline health data to their project, they would have to be able to control all health activities within the given sample or population under consideration. Presently the project does not have that ability. Furthermore, the Site Visit Team report comments on the extremely low level of health status that currently exists in the three countries. On the assumption that this is true, it does not seem reasonable that expensive and sophisticated evaluation techniques have to be utilized to ascertain whether or not the project's activities have had an effect. The documentation in terms of accountability should be most appropriately expressed in terms of a case study approach that primarily contains descriptive information as to the

processes employed and their related impact as perceived by the project staff and persons within countries where the activities are being conducted. [Pages 5-6]

The evaluation plan devised in the field is operationally sound in an environment with resources that are not conductive to sophisticated, scientific research. The University concurs with the Draft PROP accepted by Pitt, AID, and OCEAC in which is stated, "Without a sophisticated research design and closely monitored control situations, it will be impossible to demonstrate direct relationships between project inputs, and the final evaluation will attempt to assess the relative importance of non-project interventions." [Page 12]

The Pittsburgh response contains elements of justification and rebuttal, and might have been more convincing had the survey work done under the contract reflected a higher standard. It should be added that there is no evidence that the indicators referred to were identified or used, and in view of the absence of any information as to the change in health status in the zones where the activity took place, the problem of attributing such change to AID program inputs did not arise.

The most glaring deficiency of the evaluation process was the lack of clear-cut behavioral goals to allow for the assessment of success or lack of success. Once objectives had been established, it would have been possible to identify measures of program impact. These might have included the following:

a) Clearly someone working in the program should have been able to see increased preventive health activity over 5 years. One could examine the number of health education classes given per week, the number of persons who have been reached by these activities; and/or ascertain the level of activity among the distinct communities in sanitation, nutrition, etc. as contrasted to villages which did not have the benefit of such education.

b) It should have been possible to assess the organization of the village health committees in terms of the numbers of such committees which have been formed and the quantity and quality of their activities.

c) The evaluation of the quality of work being conducted by health personnel after receipt of health education would have been useful. The project director could have observed and measured the performance of individual workers so as to assess the strengths and weaknesses of the health education curriculum. Such an evaluation of staff performance would be the basis of revising courses to address key problem areas.

None of these measures is totally satisfactory and they do not provide a direct measurement of change in health status. The data gathering could have been carried out at a modest cost, however, and the indicators could have been incorporated in the project operation. Ultimately, of course, the impact of the educational process could only be assessed by examining well established behavioral changes in the target communities, several years after the implementation of the project.

PART II - HEALTH EDUCATION

4. Host Government Commitment to Health Education

The original project agreement was signed between OCEAC and AID which had contracted actual project implementation to the University of Pittsburgh. It was assumed that OCEAC, as an existing regional organization, represented the governments of the countries which were to participate in the project. No agreement was ever signed directly with the member governments, however, nor were these governments provided orientation by AID on the total project scope.

In effect, the nomination of candidates for overseas training by the Ministries of Health of OCEAC countries can be considered at least an implicit approval of the training component of the project. But, importantly, the project did not secure an explicit agreement from each government on the precise nature and extent of financial, physical and human resources which they were willing to commit during or after the period of AID-funding. Over the ensuing five years of the project implementation, this failure to obtain firm and specific agreement with the governments on their resource contribution resulted in an inadequate level of complementary inputs, particularly in the form of logistical support, to permit the project to function satisfactorily. Ultimately it led to a serious undermining of the majority of health benefits which might have otherwise accrued from this project.

At the same time, OCEAC's ability to either commit resources to the project during its duration or importantly take over responsibility once AID funding had terminated was precluded by its already precarious economic position. Although the team was unable to review the OCEAC budget, reportedly OCEAC activities have been seriously circumscribed by persistent shortages of funds; Such shortages which have led to difficulties in the payment of staff payrolls and other major financial commitments can be attributed to two key factors: first, the irregular payments to the organization by member countries which is a major source of revenue; and second, and importantly, apparently declining financial assistance to OCEAC by the French government.

In such a setting, the failure to secure explicit commitment of resources to health education by the participating governments was a serious omission of programming, and precluded accomplishment of project goals.

a) Central African Republic

The 1976 budget released by the GOCAR, as in all previous years, outlines only forecast appropriations by Ministry and by responsibility centers within each ministry for the current and previous year. There are no data available either officially or unofficially on actual budgetary allocations or expenditures. Within the development community, however, it is generally felt that actual expenditures vary significantly from those reported. Given the limitations of the budgetary data, the 1976 budget breakdown of the Ministry of Health does provide some indication of the priorities assigned to the various discrete activities within the health sector as well as a key to any major shift in priorities over the previous year. (note budgetary data from pre-1975 were not available.)

According to the 1976 national budget, of total national expenditures of CFA 20.9 billion, the Ministry of Health appropriation amounted to CFA 1.4 billion or 6.7%. This figure is a significantly higher appropriation level for health than many developing countries. This appropriation was divided into:

Operating budget (salaries) CFA 771 million - 53.7%
Current expenses and misc. CFA 665 million - 46.3%

The 1976 budget for the Ministry of Health indicates a shift in priorities from urban to rural health activities as indicated in Table 1. At the same time, the National Service of Health and Health Education appropriation which has increased in absolute amount is misleading. In actuality the 1976 forecasted allocation represents just 2.7% of the Ministry's operating budget or a decrease in its proportional share from the 1975 budget.

Within the recurrent costs and miscellaneous appropriations whereas almost half was for the purchase of medicaments (CFA 300 million), only 55.4 million or 8.3% was allocated for the purchase of fuels, etc. It therefore appears that the lack of adequate supplies of fuel to provide the essential transportational support for health personnel to extend health activities, including health education, to the rural populace, will continue to hamper the effective operation of the sector.

b) Chad

Of the $3.2 million appropriated for health in the Chad 1974 budget, almost two-thirds was disbursed for personnel. Further, in real terms, the actual health budget has declined by an estimated 27% over the preceding 10 year period. And in 1975 it is reported that the Ministry of Health actually was allocated just 38% of the total monies appropriated from the national treasury for its operating budget. With resource inputs rapidly waning for the health sector as a whole, public health education activities were given a low rank among health priorities: subsequently resource contribution to preventive health has been minimal.

c) Cameroon

Although budgetary data were not readily available to the team, it was reported that the primary focus of Government activities in the health sector continue to focus on urban, largely curative-oriented services. The Ministry of Health has initiated some activities in the rural sector over the past few years which should have a positive impact on health status. Overall, however, with the decline of services carried out by the Grandes Endemies, the French endemic disease control organization which made massive resource inputs over the colonial period, preventive health programs have waned, and especially immunization surveillance has deteriorated significantly. Ongoing activities in preventive health, focused primarily in the area of environmental sanitation, are largely self-help, community-organized projects such as those of Mfou Department discussed Yaounde in this paper.

5. Training of Health Educators

Overseas training of OCEAC member country personnel to serve as health educators and/or counter parts in those countries in which pilot programs were operative.

Selection of Participants

The nomination of candidates for overseas training was, under the original project design, to be conducted by notification to OCEAC by the Ministries of Health of member countries. Under this component, seven persons have received such training as follows:

2 Central African Republic
2 Tchad
3 Cameroon
1 Gabon

The selection process did not require any clearly defined criteria for participant selection other than nomination. Although in theory all participants were to have worked at least one year in health education, there were no grounds of commonality among candidates with regard to the nature of their previous academic or professional experience or to their specific experience in health education and/or related activities or their expression of interest in health education.

a) Central African Republic

Of the two Central Africans trained abroad under the project one received training prior to any actual work in the health education project. The second worked at Bimbo's pilot health zone for approximately one year prior to going abroad for formal health education training.

b) Cameroon

The first Cameroonian counterpart trained abroad was selected from staff members already working the Mfou demonstration zone. The second candidate was a senior health official and professor of science prior to nomination. He had not participated in any health education activities prior to receiving training.

6. Lack of Training Contracts

The appropriate utilization of personnel trained under the overseas education component of the project was effectively precluded by the failure of the project to require the signing of training contracts as a prerequisite to the overseas training of foreign nationals which clearly stipulated, with the signed agreement of both the subject governments and the participants themselves, both the precise participant obligations upon termination of the overseas training period and a clear commitment from the government as to the nature of their work upon return to their countries; that is, how their training would be utilized within the health sector.

a) Cameroon

Upon completion of one potential counterpart's training in Antwerp in July 1975, he was assigned to the Ministry of Health. The second has just recently returned from two years abroad (2nd year of training at his own expense) and has not yet been assigned. The team was told that the government was no identifying a 'good job' for him.

b) Central African Republic

Two counterparts were actually trained; a third was selected but never received training. Of the two trained abroad, one was assigned to administrative

duties within the Ministry of Health and then transferred to the Ministry of Planning. The second, the health educator at the Bimbo pilot health zone, is not working full time on health education activities. During the team visit to the country, he was encountered on three consecutive days at the Ministry of Health office in Bangui. Further, even when he is working at the pilot zone, his actual activities are unclear. One source, the WHO country director, indicated that while the health educator's formal job description officially is quite adequately focused, in actuality, his activities include considerable curative treatment. While the actual proportion of his time devoted to curative versus preventive health activities is impossible to verify without conducting a detailed time/motion study, it is apparent that health education is merely one activity within his area of responsibility. A key question is whether this diversion of his role was under this personal control/choice or whether it was in fact due to the large demand for curative health care among the Bimbo-served populace.

c) Chad

Of the two counterparts trained, one has been assigned to an administrative position as director of clinical services at Farcha. The work of the second, which is focused in health education, has been instrumental in introducing the concept of community organization to villages within the Farcha pilot zone. He has also made a significant inroad to the initiation of village sanitation activities. His overall health education success has been constrained, however, by excessive demand on the health system for curative services and a concomitant lack of resources for preventive health activities. As a result, support for health education among Farcha health personnel has not been forthcoming. The problem has been compounded by the recent assignment of a new medical director for Farcha who is clearly oriented toward curative-focused medicine. Consequently, promotion of health education has been hampered.

7. Content of third-country training

Failure of the contractor, the University of Pittsburgh, to undertake a preliminary study to determine the precise health needs of the project countries prior to commencement of long-term training of health education counterparts, hampered selection of an appropriate training site.

Furthermore, the AID-funded project directors in each country should have assessed the quality of work performed by their counterparts upon return from overseas training. Since no post-training evaluation of host country personnel was undertaken, a serious void was created in AID knowledge of the appropriateness of training these health educators in a third country.

a) Central African Republic

An interview with the health educator at Bimbo pilot zone revealed that he personally felt his training at Antwerp had been "too theoretical" and had inadequately prepared him for the precise tasks for which he was responsible as health educator at Bimbo. For example, he had not received training in actual development of visual aids to be used either in training other health personnel at one level or the target population on the other. In fact, the team's examination of the health materials at Bimbo support their inadequacy within the given setting.

b) Chad and Cameroon

Counterparts trained from Chad and Cameroon had more positive reactions to the training received in Antwerp. Meetings with the two Chad men who had received overseas training under the contract revealed that they personally found their education in Belgium useful, despite the fact that the team later found out that one man was not engaged in health education. (See section on nature of training).

The initial counterpart from the Cameroon revealed that the program at Antwerp had been significantly changed prior to his attendance. He indicated that there had been much negative reaction to the program by participants in the year prior to his enrollment (the year in which the discontented CAR counterpart had been trained) and that this had precipitated a major redirection of the curriculum with increased attention to practical training in preparation of teaching materials and actual teaching.

8. <u>Training of students, of existing health personnel refresher course (recyclage)</u>

The practical training of students from the participating countries health manpower training institutions in the pilot zone was envisioned as an integral part of the health education project. Such training actually was undertaken in two countries -- Central African Republic and Cameroon

and both the total coverage and content of the field experience in health education has been extremely limited.

The Institute National d'Education Medico-Sanitaire (INEMS) in Bangui is presently training approximately 15 para-professionals (non-physicians) per trimester or a total of 45 health workers per academic year including 15 personnel to serve in the medical arm of the national military force. During each three-month semester, students are required to spend two days per week in one of the four field annexes to obtain practical experience. Bimbo has been the training ground for about twelve students annually. While there is a defined program for the theoretical orientation of students in health education at the Bimbo health center, the practical experience is questionable. The only visible sign of the students participation was a series of hand-drawn pictures depicting typical village scenes such as gathering water or human waste disposal which impacted on health. Although a course evaluation form was developed as part of the evaluation and management component of the OCEAC project, its focus was merely on student's opinion of the value of the course and a test of the basic knowledge which they had acquired. No evaluation of job performance subsequent to training was undertaken. Further there was no documentation of the names of the students who had received training at Bimbo, nor follow-up by INEMS of their activities upon graduation as a test of the relevance or utility of the curriculum.

Refresher training has been undertaken in the Central African Republic and Chad but the exact content of the training could not be determined. There were no course outlines or description of methodology available for team review. (It is doubtful that such course planning was actually done). As is the case with student field work, no documentation exists on the number or names of participants in this 'recyclage,' so that the team was unable to identify individuals to question on the refresher component of the project activities.

Refresher training has been only intermittent in Chad since project initiation. The withdrawal of AID financed technicians at Farcha in 1974 brought an abrupt end to the zone's recyclage activities which had only been operational since 1971. After a complete void in refresher training through the balance of 1974 and a 11 of 1975, it has been reactivated in 1976 due to the personal initiative of Farcha's health educator who obviously was able to secure the financial backing from the Ministry of Health.

There has been no refresher training of existing national health personnel at Mfou, the demonstration zone for the OCEAC project in the Cameroon. Rather, all such courses are held under the auspices of OCEAC itself and participation is limited solely to nurses. There has been reportedly use of Mfou's health education activities for environmental sanitation field training of University Center for Health Services (CUSS) students. Staff motivation to engage in public health measures has been

extremely weak. Salaries in the health sector are very low and reports of delays in payment of personnel for periods of up to six months are not uncommon. In the absence of financial remuneration for increased job responsibilities such as health education, commitment to the concept of preventive health remains cursory at best.

The fact that such refresher training was an intermittent and not linked to follow-up activities also hampered its effectiveness. At both Bimbo and OCEAC headquarters, some health education materials had been gathered together to form a library. Use of such materials at Bimbo was limited, however, to those actually at the center. Students who received the refresher training and returned to service in widely dispersed health units had no access to health materials either to review public health areas they had already studied or to familiarize themselves with new approaches in the current state-of-the-art. The OCEAC library was to serve as the formal health information dissemination center for the five member countries. In fact, distribution of materials appeared at the time of the team visit to be seriously hindered by the lack of a formal distribution system, poor cataloguing of materials and irregular hours of service.

Overall, it can be said that the most serious problem affecting refresher training is the health and resource situation in each of the three countries. Shortages of personnel are chronic with substantial turnover necessitating constant training and re-orientation of personnel at the centers. Human and financial resource inputs have not been able to catch up, much less continue the pace of constantly growing demand for health care (both as population coverage increases relatively and as rapid population growth continues throughout the foreseeable future.) Until resources more closely match need, curative care will remain the top priority for health personnel's time in these zones and it will remain difficult to release already seriously limited manpower from their duties to undertake such training. In such a curative focused public setting, health education has been forced into a low priority.

9. Health Education Materials and Suitability of Teaching Methods

At all levels of project activity, the inadequate attention paid both at the design and implementation stages to the selection and utilization of materials adversely impacted upon the public health education process. At both Bimbo and Farcha, training materials did not reflect any awareness of the socio-cultural and environmental setting of the distinct countries.

a) Central African Republic

Bimbo pilot health zone's principal means of health education were a group of eight flip charts furnished by OCEC which had been developed by the Nutrition Institute of Zaire. The charts were displayed on a large artist-type easel bordered by a wide wooden frame. In addition, students from INEMS who had participated in field training at Bimbo had developed a series of hand-painted pictures with plastic covers for teaching. In view of the fact that health workers must travel by mobilettes (motorbikes) to

carry out health outreach activities, such materials were non-portable and thus were virtually non-usable. Thus, many of the charts were sitting in the training room at Bimbo.

Under the contract, Bimbo was also provided with battery operated portable slide projects for use in the education program. At the time of the team visit, at least four such sets were visible, reportedly inoperative due to lack of batteries. (Each such set requires 12 large batteries.) Further, village health workers have stated that the use of slide projectors as an educational tool is not feasible in the typical village setting. First, there is no suitable place to project slides (e.g., no clear white walls) and further the transport of screens is extremely difficult on bicycles.

The other major source of educational materials was a 3M Photocopier for developing supplies under the OCEAC project. The duplication of any training materials developed by the health educator however has been impossible for at least the last six months due to the lack of photocopying paper.

The team was unable to view a health education class in process. The flip chart sitting outside the adult women outpatient clinic, however, had phrases completely written in French, despite the fact that none of the several women awaiting attention who were questioned was able to speak French. One poster was visible in Sango, the local dialect.

b) Chad

As in Bimbo, health education was an integral part of outpatient consultations. Those awaiting medical attention were given lectures complemented by use of flip charts on various health themes by Farcha health staff. All such lectures, however, were conducted in French despite the fact that the local dialect is prevalent among the target population. Further, all materials were developed solely for use at Farcha. Outreach health workers had no visual aids and had to rely on memorization to fully cover the major health themes during lectures to villagers.

Other than the posters, slides and flip charts there were, as far as the team could carefully ascertain, no other health education materials which had been prepared for the use of health personnel in the villages nor was there any material developed to serve as a basic guide for health education for the newly formed village health committees. Thus, personnel from the center engaged in their outreach work, as well as village leaders participating in the Committees, had to rely on notes and/or memory from lessons at the main health centers at Farcha and Bimbo.

c) Cameroon

In contrast to Bimbo and Farcha, the primary focus of the Mfou demonstration zone has been the organization of Village Health Committees. There is no ongoing or envisioned health education of the general population in the demonstration zone except that which would occur within the committee structure itself (see part III).

10. Appropriateness of subject matter of health Education Materials

The environment in which a population lives, encompassing the spectrum of geographic and climatic condit ions, housing and general societal patterns and lifestyles and health practices, has a profound impact upon health status. Unfortunately, as was discussed earlier, The University of Pittsburgh gave inadequate attention to data collection on socio-cultural patterns and health practices from which health education programs should have been built. Several graduate students had been sent to the field in the early stages of project implementation to conduct an "anthropological study." While the report was not available to the team at the time of our visit, several persons who had reviewed it previously stated that it had serious methodological problems and lacked professionally acceptable social analysis: reportedly, the study was largely a collection of impressions of rural life. With such a poor perspective of the population group on which health education was to be focused, it is not surprising that some of the teaching material developed largely in Pittsburgh and used in the field was inappropriate for the given countries' setting.

The evaluation and management manual developed for the OCEAC project highlighted much careful planning of the health education curriculum and themes for village outreach activities. The detailed lesson plans, however, exibited a serious lack of understanding of the typical village setting. For instance, one lesson focused on the need for pregnant women to bathe at least twice per day. In actuality women must often walk long distances several times a day to the principal water source to obtain even sufficient quanitities of water to meet their families daily water requirements including water for food preparation.* It appears highly inappropriate to expect that pregnant women could take additional time from their already demanding daily schedules, including major agricultural responsibilities, to obtain the additional water necessary to follow this health practice. The question is clearly not whether the lesson was sound from a health standpoint but rather, in the given socio-cultural setting was there any real possibility of its being implemented.

* In Chad, the team was told that in one village women had to walk 10 miles round trip twice per day to obtain necessary water for their families.

Again, throughout the health education program, the actual content of the teaching has not focused on practices which have a reasonable chance of adoption at the given point in time and stage of development of the village in which the target population lives. These lessons should have been reviewed by a country national familiar with local conditions given the lack of basic KAP data.

The professional expertise of health educators clearly lies in the general areas of public health, statistics and epidemiology and in the group dynamics and actual lesson planning necessary to transfer this knowledge to others. They are not, importantly, expert in the numerous specific areas of public health such as nutrition, family planning, and endemic disease control. Importantly, therefore, they depend on technical backup from other health professionals. Such support had been planned under the original project agreement with the contractor; in actuality it was not provided. Rather health educators were forced to glean what technical information they could from existing staff. In each pilot health zone, educators, worked most closely with sanitation agents. In such a setting, it was inevitable that health education materials would focus almost entirely on the area of environmental sanitation to the relative exclusion of other critical health issues.

A review of the flip charts in use at the Bimbo health zone (CAR) indicated a heavy concentration on malaria and environmental sanitation, particularly human waste disposal and provision and maintenance of a clean water source for the village families. The nutrition component of the health education curriculum was limited largely to information on the value of breast feeding and appropriate weaning practices. In addition, the health educator stated that food preparation demonstrations were given periodically in the villages. Important areas of nutrition such as food selection and nutrient requirements were, however, neglected nor was there any mention of the synergism of nutrition and general health status. Little attention was given to the teaching of basic personal sanitary habits, the change of which was an essential complement to such direct sanitation efforts as well digging or latrine building.

11. Selection of target population

Given the limited resources available to implement the program, the concentration of health education activities among distinct population groups should have been more carefully planned. Under the actual project design, activities were widely dispersed among numerous types of groups: existing health staff, patients receiving ambulatory care at the demonstration zones, village health committee leaders, villagers, etc. Decisions should then have been made on which focus would have the best multiplier effect. To the extent that in actuality resources were thinly spread over all these groups, much potential benefit was dissipated. For instance, much effort was placed on giving public health lectures to persons awaiting medical attention at the health centers. Aside from the point that the effectiveness of this approach is questionable, as discussed earlier, much of the population at highest risk of morbidity and mortality

and thus in greatest need of education on preventive health measures did not regularly, if at all, attend clinic sessions. The "rural poor majority" on which the program was intended to focus remained largely outside the delivery system and the health education project. At the same time, the effectiveness of outreach activities, discussed later, precluded the reorientation of prevalent personnal hygiene and sanitation practices at the village level which were essential complements to any curative care undertaken.

12. Health Education Conference

A principal result of the project was to have been that health education conferences, two of which were held over the project period, would become a regularly programmed activity by OCEAC for member countries. In actuality, such a goal was unrealistic given several key constraints to the continuation of such meetings. First, the limited financial resource base of member countries coupled with the relatively low priority afforded health in general and preventive health in particular, within the development plans of the member nations, precluded the adequate funding of such an activity. OCEAC is largely viewed as a 'dying organization.' Although the French still staff five of the six key positions, its financial resources are extremely limited and it is generally agreed that OCEAC will probably be phased-out over the decade.

The cost of conducting such a health conference is prohibitive for most Central African countries. Expenses incurred for travel of national delegations, actual meeting expenses, and duplication and dissemination of material developed at the conference amounted to $13,000 just for the second conference held in 1976. Furthermore, it is questionable whether such conferences are worth this much investment, since much of the information exchanged is not appropriate for the local situations with which the participants will have to deal. Perhaps such conferences could be held at less frequent intervals (every five years, for example), and in the interim relevant material in printed form could be circulated to interested parties.

PART III - HEALTH DELIVERY SYSTEMS

13. The relationship of health education and health delivery

In the original project design, the strategy for incorporating health education concepts and techniques into actual health services was never clearly delineated. The initial agreement included "assisting in the development of pilot zone health services" but as in other parts of the document, neither a precise goal or a method of achieving such a goal was ever spelled out.

When the terms of the agreement were modified as a result of the 1973 evaluation, the focus of the project was restricted to those health education components discussed earlier, but peripherally included as a

measurement of goal achievement was the "perceptible and more appropriate use of public health services (including sanitation and hygiene), especially by the rural population," and the improvement of health conditions by finding practical means of increasing popular awareness of, and control over, the environmental factors which underlie many of the common health problems of the region." Additionally, there is reference to the importance of developing structures within the village that will allow health education to be introduced and to the need for using health education to change levels of information, and health attitudes, practices and status.

A review of the project documents indicates that even after the 1974 modifications, the underlying goal of the project was still to bring preventive health awareness to the communities. Nevertheless, the commitment of resources was inadequate to effect the transfer of health information and inputs from project trained public health functionaries to the target population. In retrospect, it was inappropriate to design a project that would provide for the training of health educators and other health personnel, or for the development of health education materials, without a definite plan for how these investments could reach and eventually impact upon the scattered rural population.

The health delivery problem was further compounded by the competition between the demand for curative services and the AID/OCEAC project emphasis on preventative activities. The limited resources available in the pilot zones for health outreach were often directed into treating ailments rather than lowering future disease levels in the population. Furthermore, the health education project was directed at improved environmental sanitation, the results of which require a long time to materialize, and are thus of much less obvious visibility than treating a malady. The project should undoubtedly have included the transfer of information on nutrition and other aspects of preventive medicine in addition to its focus on environmental protection as a means of avoiding the contamination of food and water sources.

14. <u>The selection of paraprofessionals</u>

In all three pilot zones, the responsibility for the outreach aspect of health education was vested in a group of paraprofessionals known as itinerants. Most of these individuals had been recruited from the region within which the zone was located and had received either refresher courses or initial training as part of the health education project. In the training program, stress was placed on the limited resources of village communities, so that local materials would have to be used in carrying out improved sanitation programs (as in the case of building latrines out of bamboo). It was hoped that such training would make the itinerants more sensitive to the social and economic conditions of pilot zone villages and also less likely to seek jobs in other parts of their respective countries. In this regard they were fairly successful; only one report suggests that the training program be modified to incorporate living in the villages as a special assignment.

In spite of the apparent rationality of this approach, the recruitment and subsequent allocation of low level health personnel requires careful evaluation. There is evidence that the itinerants did not always function adequately, a situation which seems to have derived from insufficient supervision, a lack of the physical inputs needed for the job, and poor motivation. The latter phenomenon was usually the result of either low levels of acceptance of these health workers within the assigned villages or salaries that were perceived as inadequate and which often were not distributed on schedule. Both poor job performance and a higher than expected rate of turnover (although no specific statistics are available) were obvious symptoms of dissatisfaction.

15. <u>The logistics of itinerant services</u>

With the exception of the individuals who reached the dispensaries, usually for curative purposes, the vast majority of the target population had to be reached with preventive health information and related activities by the itinerants. This task was formidable for several reasons. As already mentioned, the paraprofessionals were poorly paid and often not well supervised since the limited staff stationed at the health centers was under consistent pressure to meet daily patient visit requirements. Furthermore, nurses and health educators did not always understand the skills required for preventive health outreach and were often poorly trained in organiz communities, an essential ingredient in obtaining a local commitment to improve d health conditions.

The work schedules of the itinerants were also unrealistic, considering their limited means of transportation. Complaints were often voiced as to the long distances the workers were expected to cover and work days of thirteen hours were recorded. These difficulties stem from two mistakes in the design of the delivery system. First of all, in only one of the health zones (Mfou) was a realistic plan devised that linked a designated area of coverage with the number of itinerants available and the distance they could reasonably be expected to traverse on a bicycle (and even in this situation problems occurred as will be discussed subsequently). The second and related error, was an excessive dependence on motorized vehicles in a situation of resource scarcity. In the C.A.R., for example, only 55.4 million francs or 8.3% of the recurrent cost and miscellaneous appropriations of the budget were allocated for the purchase of fuels, making it likely that supplies of fuel would be inadequate to transport health personnel to the villages.

Some stationary health education delivery has also been attempted in the pilot zones. In Bimbo and Farcha, out patients using the health centers have become a target population. Flip charts with pictorial messages complemented by short talks by staff members on diverse health themes were used for teaching those awaiting medical care. While it is agreed that this approach has been used in several other developing countries, the question remains whether addressing sick people on health and disease themes, usually unrelated to the illness for which they are seeking medical care, is an appropriate vehicle for health education itself. Does a sick patient who has travelle a long distance to the center have enough interest in learning to retain new information? This question is especially relevant given the lack of materials available for the patients to take home with them as well as the cursory, at best, follow-up of health education in the village by the mobile health staff's outreach program.

a) Chad

The Chad component of the regional health project stressed the development of effective methods of health information dissemination for the purpose of improving sanitary conditions in the villages and, secondarily, improving nutrition and infant care. A very conscientious health educator injected some dynamism into the program, but it remained totally inadequate from a health delivery perspective. The pilot zone was focused on Farcha town, located just outside of Njamena, and thus not a very typical rural community. As it turned out, the Farcha dispensary was the only one in the zone that was regularly operative; the other health centers had no permanent staff and only occasionally held clinics.

The itinerants who were trained to carry health education to the villages were immobilized by transportation problems. The villages to be covered were spread over to a distance of thirty-five kilometers with many located along tracks that became impassable in wet weather. The vehicles that had been provided by the program were either inoperative or out of gasoline most of the time. During one visit it was noted that both of the project vehicles were broken down, one of these for at least six months prior to the visit.

Since both clinics and itinerants were unreliable in terms of maintaining regular contact, the villages became dependent on local health workers. These functionaries were usually members of the communities in which they served, a situation which should have had positive results as implied in the conclusion. Unfortunately, this system, as it developed in Chad, was hampered by several factors. According to the project evaluation team, the health workers were poorly trained and equipped (as verified by the mobile vaccination teams), barely literate, and not always well thought of in their villages Certainly, these workers were not integrated with the rest of the health structure that included the central dispensary staff, nurses, and itinerants, and they were alleged to provide only the most rudimentary and not necessarily effective treatment. This situation may provide an example of a suitable strategy: locally selected health workers, but an insuficient commitment to their training or to their incorporation into the health system.

b) Central African Republic

The Bimbo Pilot Zone covered an area of 3500 square miles occupied by 20,000 people distributed in approximately 119 villages (an average density of about four persons to the square mile). The pilot project began in 1969 with two dispensaries, Bimbo and Begua, and dependent health posts: Bobandio and KM22 (linked to Begua) and Sakpa and Yatimbo (linked to Bimbo). Thus, from the beginning of the project, dispensaries were associated with health posts which were responsible for health aid in a hierarchical system that allowed for the flow of information and health services.

In spite of this attempt to provide a coherent structure for the Bimbo zone health system, outreach remained a problem. A mobile team with one mobilette was organized to circulate among six villages in a two week cycle. A boat circuit was also organized on the river bank and along with the mobilette provided reasonable service, but only in the vicinity of the Bimbo dispensary. Thus, the villages within three kilometers of Bimbo center received considerable attention, not just from the team of itinerants but also from the INEMS students who were assigned to the villages to do their practical training in applied health education. But, while the inner tier of villages was saturated, most of the zone (many villages were twenty to thirty kilometers distant) did not receive enough assistance to make for any sustained change in their sanitation systems.) It was estimated by the Ministry of Health that less then 40% of the population of Bimbo zone had begun to be affected by the health education approach through the outreach delivery network.*

The delivery of preventive health services was complicated by a situation that is continously referred to in all progress reports: the tendency for vehicles to break down, and for replacement parts and gasoline funds to run out. Since the itinerants were initially dependent on motorized vehicles it proved difficult for them to switch to other modes of transport. Complaints abounded on the problems of reaching villages on bicycle or on foot, especially during the rainy season. The boat circuit also ran into difficulties due to malfunctioning equipment.

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*Even in that part of the Bimbo zone located closest to the control dispensary, the impact of the health education program had not been quantitatively assessed.

c) Cameroon

The purposes of the health education project in Cameroon were similar to those outlined for the other programs, the major difference being that the coordination of the pilot zone activities was the responsibility of OCEAC rather than WHO and that emphasis was placed on Village Committees. Since the zone, Mfou, was a large one, systematic attempts to reach the villages were limited to those located closest to the city of Yaounde. After an acceptable level of changed attitudes and behavior was achieved in these villages, the program would be gradually extended to more remote areas. This approach represents an improvement over the Bimbo zone since funds were not wasted on ineffective attempts to reach remote villages during the early stage of itinerant activity. However, it has proved to be impossible to accurately measure achievement since data collection, originally planned as a function of the itinerants, was not carried out with any regularity. As in the other zones, the only change which could be documented was the numbers of committees formed, and the gross figures on new latrines, garbage pits and protected springs.

During the life of the project twenty-two itinerants were trained, most of them being subsequently assigned to Mfou. Once certified, the health workers were assigned to a dispensary located in the center of a service area with a radius of approximately twenty kilometers. There are now twenty-nine such dispensaries in Mfou and of these eight have one to three itinerants each. These itinerants are primarily responsible for improving the sanitary conditions in each village although they are also supposed to improve general health knowledge, nutritional levels, and child care. They accomplish these goals through the vehicle of the village committee, and each itinerant has been responsible for forming and maintaining contact with about five to six committees.

The logistics of this situation are straight forward: the health worker has to cover a number of villages scattered over an area which should be no larger than four hundred square kilometers, or a distance of twenty kilometers from source dispensary to furthest village. To cover this territory, the workers were originally provided with bicycles, but many individuals complained that this mode of transport

was inadequate (citing hills, muddy tracks and other obstacles) and were given permission to purchase motorbikes from the government on an deferred payment plan. This option did not prove totally satisfactory either; the workers complained of the high costs of the vehicles, which, in turn, they were often unable to use due to breakdowns, scarcities of spare parts and the ubiquitous shortage of gasoline.

15. The Organization of Village Committees

The village committees, representative groups selected by village members following a period of contact and discussion with an assigned itinerant, were designed to encourage communities to play an active role in their own health betterment. According to the final report of a meeting of village committees held at Mfou, this structure provided a vehicle for the discussion of health problems and the design of special programs to deal with these problems.

Although most reports of the projects convey enthusiasm toward the committees,* there is conflicting evidence as to their effectiveness. The final Sanwogou report discusses three villages with impressive deparisitation programs, only one of which was organized by an active committee. The health functionary at Mkono (Mfou) remarked further that in his area there was practically no difference in numbers of sanitation projects between the villages with and without committees.

Some of the problems inherent in the committee approach are well documented. Once having been formed, the committees require commodity support and stimulation which has not always been forthcoming. Several village leaders reported waiting months for materials and equipment that had been promised to them as part of the latrine building program. Others contended that their authority had not been clearly defined; while the committee might claim that offenders who ignored new sanitation policy would be punished, the law enforcement officers refused to follow through with arrests.

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*Even the 1973 evaluation expresses confidence in the committee approach, stressing the need for traditional community leaders to influence health beliefs and practices.

a) Chad

One implication of the lack of successful itinerant outreach in this country has been the poor showing of village committees. Although twelve such committees had been formed as of late 1974, most of these were not regularly supervised and had become inactive. The numbers of functioning committees has fluctuated during the last year but remains minimal. In the concluding remarks of the end of 1974 report it was recommended that no new committees be initiated until those already established had developed some continuity and some ability to sustain themselves. The point was made that committee members who do not have dependable and long term contact with an itinerant would become frustrated and lose interest in the program, undermining any future effort to establish a preventive health system in the community.

b) Central African Republic

The irregular contact between itinerant teams and villages in this country resulted in the rather slow emergence of village committees. Only five had been formed by September, 1973 and it was not until July, 1975 that thirteen committees were reported. The most recent figures indicate that twenty-four committees were finally organized but that of these only six were actively involved in preventive health activities at the time of the team visit. We were told that even in some of the villages where latrines, animal enclosures and other sanitary facilities had been built, a decline in contact with the itinerant had resulted in the reappearance of old habits of garbage and waste disposal.

The early project plans at Bimbo called for the establishment of a coordinating committee which would bring the leadership of all the village committees together and provide a forum for airing common problems. It was anticipated that such a committee would assist in sustaining the commitment of the participants to improved sanitary conditions long after the first burst of interest. In spite of this official plan no coordinating committee had been formed at Bimbo as of August, 1976. The official explanation was that the appropriate time had not yet arrived and that village leaders might feel that their independence was being undermined

if they were scrutinized by neighboring counterparts. A more likely explanation is that the resources, administrative and otherwise, needed to establish such an organization were not available. The only comparable activity that has emerged in connection with Bimbo is a special seminar which was held in Bangui, attended by representatives from thirteen villages, health experts and even the Minister of Health. The response of the committee members was positive; they claim to have returned to their villages with new ideas on how to implement preventive health care. The Minister of Health recommended that the seminar be repeated but the termination of the AID grant puts the continuation of this activity in doubt, since the C.A.R. has not provided budgetary resources for this purpose.

c) Cameroon

As of late 1975 the itinerants had managed to organize forty-three village committees of which thirty-six were functioning at the time of the team visit. Only in the four best organized villages, however, have committee leaders registered considerable success in spreading the building and use of latrines, putting animals in pens and protecting water sources. Almost all committee leaders complain about the problem of obtaining village funds for cement and transportation and the lack of follow-up activities needed to encourage the continued use of the latrines and other inputs. Many leaders have also been forced to bear most of the responsibility for carrying out sanitary projects, a burden that they claim should be more equitably spread among the village residents.

I. The Central African countries of Cameroon, Central African Republic and Chad rank among the lowest in the world in such health factors as life expectancy and the prevalence of intestinal diseases--although much of the current information represents crude estimates.* Under these extreme circumstances, more consideration should have been given to the most appropriate form and quantity of AID intervention.

There were numerous inadequacies in this project which have now been documented in detail. The Program was weak administratively from the point of view of coordination with host governments, with other donor agencies and in terms of internal management. Nor was a realistic strategy provided as to what could/should be accomplished in the AID time fram given the resources available.

The absence of clearcut goals for the project was compounded by some serious misconceptions. Although the project design was supposed to allow it to be replicated elsewhere, both AID's health education component and the other activities that were part of the multi-donor "pilot zone" program, were too resource intensive to allow for widespread implementation. Furthermore, all the target areas were located in the suburbs of the capital cities, in what was labeled a rural health project.

Certainly, the administrative problems were exacerbated by two key issues: (1) poorly defined lines of responsibility among AID, OCEAC, and contract personnel, and (2) the lack of a suitable data base, either prior to or during the initiation of the project. It proved to be very difficult to evaluate changes brought about by the project without some assessment of the initial health conditions that prevailed in these areas.

It should also be emphasized that the project management lacked the adaptability that might have allowed for greater levels of accomplishment. For example, it became clear at an early stage that although the project was conceptualized on a regional basis in reality it dealt with countries with different sets of problems and little proclivity to work together. Yet, the regional focus remained unill the termination date of the program.

II. The problem of implementing the health education program, the most crucial component of the project, reflected the inadequacies of administration

* The Assault on World Poverty, the World Bank, 1975, pp. 350-51.

and data collection mentioned earlier. Coordination and decision-making plagued various phases of the program. In the selection of candidates for advanced training in health education, little effort was expended in determining who would be the most appropriate candidates, what type of training would meet the needs of the respective countries, where this training could best be obtained or whether, in retrospect, the educational experience had been effective. Another important element of the program, retraining of health education personnel, was carried out only intermittantly with no follow-up to determine the relationship of training to job performance. Nor, were materials developed that the health educators could take from the training site to their field assignments.

The issue of training materials deserves further discussion. Some materials were poorly designed for local conditions; this reflected the lack of knowledge about regional cultures and health practices previously discussed. Other documents were kept in inaccessible libraries and thus were not available to health workers. Some of the items developed for instruction were rendered useless because they were too heavy to carry on bicycles, they required sophisticated equipment or they were only available in French. There was certainly a dearth of simple, portable materials, in the local language, that would have facilitated communication about preventive health.

There were three impressive published items that did emerge from the program, however: Education pour la Sante, Appliquée aux Communautes Rurales, Les Coutumes de nos Ancetres Face a la Vie, and Cours d'Hygine et de Nutrition (on rural health education, traditional local health practices, and nutrition.) Unfortunately these materials seem to have been prepared without a clear idea as to how they would later be utilized nor for what potential audience they were appropriate. The publications were written in French and in a style that made them unsuitable for local health workers, a contingent that could certainly have used the information in carrying out village health activities. In spite of these limitations, all three items are worth circulating more widely among health officials since they represent an extensive research effort. Current plans calls for keeping them within the local AID network in Central Africa, but it would be more appropriate to make them widely available in the OCEAC countries and in other Francophonic African countries as well.

One more point needs to be made with reference to the health education approach. The tendency for government operatives to fail to carry out programmed health education activities reflects a larger incapacity to deal effectively with preventive health in the wake of an enormous unfulfilled demand for curative services. This is an issue that surfaces continuously and cannot be blamed on the AID/OCEAC project. One aspect of the project that could have been corrected by AID intervention, however, was the stress on environmental sanitation to the neglect

of other critical areas of preventive health such as nutrition.

III. In the realm of health delivery, a serious gap developed between the training of health educators and the transfer of their information to the rural population. This problem was reflected in the original AID/OCEAC project design and resource allocation which neglected the delivery component. Three of the more critical areas of health delivery, the selection of itinerants (paraprofessionals), the design of health delivery logistics, and the organization of health committees, will be discussed in turn.

1. In the three pilot zones paraprofessionals were recruited, tested, trained within a civil service system and assigned to villages. As indicated in the previous discussion, many of these aides were frustrated by transport problems and salaries that were perceived as inadequate, yet resources have not been available to change these conditions.

One alternative approach to coping with this situation is now gaining wider acceptance in Central Africa, especially by WHO. It calls for the selection of candidates for paraprofessional training from within the ranks of a specific village with the understanding they will return to their own communities. Whenever possible such a program would begin with volunteers. They would start to earn a small salary when local productivity could generate a tax base. Also implicit in this system is the renewed attention being paid to various types of traditional health functionaries (nurses, midwives) whose already proven acceptance within the village can make for effective dissemination of new health information and practices. Such traditional healers can either become paraprofessionals in their own right or can benefit from more extensive contact with trained health educators.

2. There are severe problems in the delivery of health services to a rural population that is predominately disperse , in some cases at very low density levels. There are several programs in the region which are attempting to resettle scattered families in agricultural villages, but the process will probably be very gradual. For the foreseeable future fixed health facilities will be totally inadequate to reach the rural populace; instead some combination of fixed and mobile services will be required.

Each of the pilot zones in this project has had a program which attempted to integrate fixed location health centers to mobile units but with limited success. To be effective such a system would have to be based on the number of motorized vehicles which would conform to expected supplies of gasoline and replacement parts, and it would make extensive use of bicycles. Furthermore, the different elements of the mobile system would be coordinated which, in Central Africa, would mean combining the home and village visits by the sanitary itinerants with the activities of the maternal and child health nurses and those of the teams of vaccinators. In a situation of scarce resources health outreach programs would have to be carefully integrated and realistically planned. The alternatives

are obvious in the pilot zones: frustrated villagers who have received some initial attention but little follow-up, and the saturation of a few communities close to the central dispensary with health education efforts and training while the more remote villages in the zones received no input at all.

3. The village committee structure remains a promising mode of stimulating community preventive health activities although research is needed to determine which factors are most related to committee success. With a research grant to National University of Cameroon, data could be collected and analyzed on the village health committee program (focusing on Cameroon but possibly including the C.A.R. and Chad as well). To date only a small percentage of committees formed have been able to sustain interest for more than a few months, a problem that in part reflects infrequent contact with itinerants. The following tentative suggestions are offered as an approach to upgrading the level of activities among committees:

1. The committees should be representative of their communities. When traditional leaders are an important element in the village they should be included or they will sabotage health efforts (a problem at several Mfou villages).

2. The committees should have a realistic concept of their role so that they will not be frustrated by an exaggerated idea of their own prerogatives.

3. The interest of the committee members must be sustained. If they are promised inputs these should be delivered and if they depend on contacts with paramedical personnel these should be forthcoming. As in the case of other elements in the rural health program, the level of commitment should reflect the resources available. To encourage a committee to initiate health related activities and then not to provide promised materials and services (pipes, latrine covers, digging equipment) to make these efforts complete, may ultimately be more detrimental to the health program than doing nothing at all.

4. There must be some mechanism for rewarding committee members and other villages for displaying high level of commitment. The OCEAC project does not refer to this incentive requirement directly, but to some degree it has been built into the program. For example, meetings of committee leaders have been held annually for two years at Mfou, and these sessions have provided a forum for individuals to convey their insights and discuss their problems. At these meetings prizes have been given to the communities with the best record in improved sanitation. The team visited one of the high achieving villages and it was obvious that the committee members' pride in their accomplishments and enthusiasm for future ventures had been sustained. In spite of these limitations, the committee approach as developed in Central Africa remains the most promising aspect of the preventive health delivery system.

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The team visited the Central African Republic between August 9th and August 13th, 1976. Interviews were held with the following individuals:

1. Ambassador Quainton, United States Ambassador to C.A.R.
2. Dr. Thimossat, Director General of Public Health
3. Dr. Kpossa, Director of Urban Health
4. Dr. Beouan, National Director of Basic Health Services
5. Ms. Jocelline Bagite Ailey, UNDP Technician
6. Mr. Hurani Aqel, UNICEF Technician
7. Dr. Agabton, WHO Technician
8. Mr. Christian Panneel, UNDP Technician
9. Mr. Michael Kossi, host country homologue to project technician
10. Mr. Andre Bitta, Paramedical Specialist - Bimbo
11. Mr. Georges Piya, Sanitation Assistant - Bimbo
12. Mr. Wayowa, Service de la Lutte contre les Grandes Endemies
13. Dr. St. Iles, INEMS
14. Dr. Djazzar, WHO

The team visited Cameroon between August 13th and August 20th, 1976. Interviews were held with the following individuals:

1. Mr. William Mithoefer, Deputy Chief of Mission, American Embassy
2. Mr. John W. Koering, Regional Development Officer, A.I.D.
3. Mr. Felix N. Awantang, Assistant Health Advisor, A.I.D.
4. Dr. Bernard Guyer, CDC Epidemiologist at OCEAC
5. Mr. Simon Atangana, Director of Public Health & Preventive Medicine
6. Mr. Etoundi Antoine, host country homologue
7. Mr. Mbarga Sylvestre, Project Chauffeur
8. Village Health Committee Members
9. Dr. Gladys Martin, CUSS Public Health Unit
10. Mr. Felix Awantang, USAID Health Office

Appendix

TABLE 1

Proposed Operating Budget of Ministry of Health 1976
(in millions of CFAs)

	1976 Amount	1976 %	1975 Amount	1975 %	1975-76 %
MOPH Budget					
Section I - Permanent Personnel					
Division	4.7	(0.6)	4.7	(0.7)	0
Ministre	6.6	(0.9)	6.1	(1.0)	8.2
Cabinet	24.0	(3.1)	21.2	(3.3)	13.2
Dg de SP	36.0	(4.7)	39.2	(6.1)	- 8.2
Dir./de Sante Urbaine & des Hospitaux	165.0	(21.4)	145.0	(22.5)	13.8
Centre N. Hospitalier Bangui	8.3	(1.1)	8.3	(1.3)	0
Hospital de Bouar	367.0	(47.6)	277.0	(42.9)	32.5
Dir. Sante Rural	4.0	(0.5)	4.0	(0.6)	0
Source National de Sante de Base	96.0	(12.4)	88.0	(13.6)	9.1
Lutte contre les Grandes End.	21.0	(2.7)	18.5	(2.9)	13.5
Serv. Nat'l d'Hug et Educ. Santaire	4.8	(0.6)	4.8	(0.7)	0
Dir. de pharmaceutiques	30.0	(3.9)	24.0	(3.7)	25.0
Institut Ntl. d'Enseign. Medico-Social et Ecole Annexes (INEMS)	3.6	(0.5)	4.3	(0.7)	-16.3
Garages UNICEF					
Sub Total	771.0		645.1		19.5
→ Depenses courantes et diverses (of which many categories	664.6*		601.7		
includes:					
Purchase of medicines	(300.0)	(45.1)			
Bangui hospital	(100.0)	(15.0)			
GRAND TOTAL	1,435.6		1,246.8		

*Note: Gasoline appropriation just 55.4 or 8.3%.