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Assessment
of the
USAID Child Survival Strategy
in Zaire

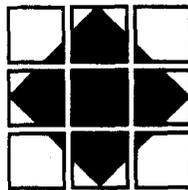
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July, 1990

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ACRONYMS

A.I.D.	Agency for International Development
AIDS	Acquired Immuno-Deficiency Syndrome (French - SIDA)
AS	Aire de Sante (Health Area, sub-unit below health zone)
ASCI	Africa Child Survival Initiative
AZBEF	Association Zairoise de Bien Etre Familiale
CCCD	Combatting Communicable Childhood Diseases
CDC	Centers for Disease Control
CENACOF	National Center for Coordination and Development
CEPLANUT	National Nutritional Planning Center
CMR	Childhood Mortality Rate (0-4 year olds)
CPN	Prenatal Clinic
CPS	Preschool Clinic ("well-baby" clinic)
CS	Child Survival
EPI	Expanded Program on Immunization (French - PEV)
FONAMES	National Health Foundation
FTE	Full-Time Equivalent (personnel position)
GOZ	Government of Zaire
HGR	General Reference Hospital
HIS	Health Information System
HPN	Health, Population, Nutrition
IEC	Information, Education and Communication

IMR	Infant Mortality Rate
ISROS	Shaba Health Infrastructure
KAP	Knowledge, Attitude and Practices Study
MCH	Maternal and Child Health
MCZ	Medical Chief of Zone (Medecin Chef du Zone)
MIS	Management Information System
MOH	Ministry of Health
MUHS	Morbidity and Use of Health Services
NGO	Nongovernmental Organization
NNT	Neonatal Tetanus
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PSND	Projet de Services des Naissances Desirables
SANRU	Basic Rural Health Project (Sante Rurale)
SIDA	French - Acquired Immuno-deficiency Syndrome (AIDS)
SSS	Sugar Salt Solution
TIPPS	Technical Information on Population for the Private Sector
TT	Tetanus Toxoid (French - VAT)
USAID	United States Agency for International Development
WASH	Water and Sanitation for Health Project

EXECUTIVE SUMMARY

I. Purpose of the Evaluation and Methodology Used

This evaluation responds to a request for an assessment of the appropriateness, efficiency and effectiveness of the USAID/Zaire Child Survival (CS) Strategy and how it functions in relation to the national primary health care strategy of the Government of Zaire (GOZ) and to the A.I.D. Africa Bureau's CS strategy. Restraints to success are to be identified and recommendations presented for addressing these constraints.

The evaluation was accomplished through:

- Review of USAID project documents, related GOZ documents and relevant studies and reports of international organizations and private consultancies.
- Meetings and interviews with staff members of USAID, GOZ and nongovernment organizations (NGOs) associated with strategy projects.
- Contacts with other donors supporting related activities.
- Field visits to three regions, 14 health zones and 17 health centers.

II. Purpose of the Activity Evaluated

The USAID/Zaire Child Survival Strategy emphasizes prevention and concentrates on the most serious health problems impacting on mothers and children. Immunization programs, oral rehydration therapy, malaria treatment and environmental sanitation are aimed at decreasing child mortality and morbidity. Eliminating acute malnutrition and reducing chronic malnutrition in children under five is the aim of nutrition activities. Family planning assistance is expected to protect the health of mother and child. A major aim of the strategy is to build the infrastructure and institutionalize the delivery of the services.

III. Findings and Conclusions

The USAID/Zaire CS strategy closely parallels that of the Africa Bureau and is consistent with the GOZ primary health care strategy. USAID has used a network of many projects over the past few years to address CS in Zaire. Some projects have been more successful than others, but the ensemble has worked. We find the multiple project strategy appropriate, though not without its problems.

Although we can point to no health intervention that would have had a major impact on CS that has been overlooked, there are areas that will require more effort. Two examples are financial management and supervision. USAID's assistance in these two areas has been well conceived and successful insofar as the programs have progressed to some degree. But both still have far to go and are so important to the success of the CS program that we cite them for continued emphasis.

The multiple project approach also ties up the small USAID/HPN staff in day-to-day project management. There is little time left for field observation trips or for long-term planning, sector analysis, etc. The creation of an umbrella project under the management of a single institution to cover the numerous and diverse projects could ease the USAID staff management problem. In sum, there are *many* pros and cons to the multiple project approach, but the team leans toward retaining the successful status quo, even if it were to require reducing the number of projects to fit the management capacity of available staff.

An analysis of the impact of the USAID CS activities was requested in the Scope of Work. An attempt was made to respond to this request on a project-by-project basis in order to make recommendations relative to the importance of each in the overall strategy. We found that the time allotted for this evaluation did not permit the gathering and subsequent analysis of the necessary data. The team epidemiologist estimates that at least three months of exhaustive effort would be required to gather data and then analyze it for valid interpretations and conclusions. We stress the preliminary nature of conclusions we have reached and regret instances where factors influencing certain findings may have been overlooked. We did agree on the necessity of continued assistance to four activities:

- *The SANRU Project (Basic Rural Health Project--Sante Rural):* It is the key element in the USAID CS strategy. It is a successful project and is *perceived* as successful--important to continued success.
- *Africa Child Survival Initiative (ASCI/CCCD) activities:* A major favorable impact on Child Survival would be lost without the immunization and diarrhea control activities.
- *The School of Public Health:* Long-term, upper-level management needs will be efficiently met through continuation of this successful project.
- *Family Planning:* Spacing of children is vital to mother and child. Unchecked population growth will eventually stifle the progress assistance may have produced in the social program arena.

We are not in sufficient accord to insist either on the continuation or termination of the other projects as currently conceived. However, HIV/AIDS is such a threat to CS that we are confident USAID will assist the GOZ to address it. Condom distribution

and HIV/AIDS testing are already elements of the SANRU and family planning efforts cited above. Perhaps the AIDS information, education and communication (IEC) Project (AIDSCOM) should be there. Other donors are taking an interest. USAID must be in a position to fill the gaps but will not necessarily have to take the lead. We were divided on separate water and sanitation projects versus continued efforts through SANRU and Village Development Committees.

There has been some question concerning the continuation of the USAID/CCCD connection. The benefits of the assistance of the Centers for Disease Control (CDC) with its ready cadre of technical expertise and rapid sharing of information from other countries are big advantages for the ASCI/CCCD Project. A shift to some other source of technical assistance, with termination of the PASA agreement with CDC, risks loss of such benefits as the "full-time equivalents" now available as consultants.

The difficulties the evaluation team had in assessing the impact of CS interventions could have been lessened were there an adequate national health information system (HIS). This is a glaring need and, although the African Development Bank and the World Bank are collaborating in an attempt to develop and test an HIS, USAID should be alert to any further requirement for assistance that might be needed.

The latter half of the body of the report consists of a discussion of the detailed questions from the Scope of Work relative to immunization, oral rehydration therapy, malaria, nutrition, family planning, and AIDS prevention activities.

IV. Recommendations

1. Consider carefully any decision to have an umbrella project managed by one institution, covering a large number of the Health, Population and Nutrition portfolio of projects. The team has serious concerns (cited in the body of the report), but hesitates to state a firm recommendation.
2. Maintain the CCCD link as a source of technical assistance for activities of the Expanded Program on Immunization (EPI).
3. Give assistance priority to the following four activities:
 - SANRU III or its equivalent.
 - The ASCI/CCCD Project or its follow-on.
 - Family planning, with continued emphasis on the contraceptive supply line and on training and supervision.
 - The Zaire School of Public Health.

4. With reference to HIV/AIDS, continue to expand provision of HIV-Quick Test capacity to general reference hospitals through SANRU and the distribution of condoms, with appropriate IEC, through family planning activities. Avoid pre-empting the still-crystalizing major program assistance expected from other donors while remaining ready to complement it.
5. Make a further effort to gain acceptance for family planning among upper level GOZ officials. Whatever pressure is feasible should be applied to gain final government approval of the population policy statement.
6. Continue placing a priority emphasis on improving the management systems required for the delivery of health services with a focus on developing the skills of the Zone Central Bureau staff, including the Medical Chief of Zone (MCZ), the administrative officer and the nursing supervisor. Supervisory training programs at all levels should continue to be stressed.
7. Cooperate with the African Development Bank and the World Bank, as needed, in their efforts to develop a national standardized health information system.
8. Sponsor national seminars comprised of key national and regional nursing school officials to establish a standardized primary health care curriculum for each level of nurses' training. Support efforts to enforce licensing and inspection of schools for nursing.
9. Use the Agency's influence in support of legal status for health zones where zonal administrators currently where cannot open bank accounts and where there is conflict concerning authority.
10. Monitor research on resistant strains of malaria. Increase the emphasis on malaria treatment and control in the ASCI/CCCD and SANRU Projects.
11. Consolidate past and ongoing child survival-related studies, routine reporting documents and sentinel site surveys; analyze data and update it annually.
12. Emphasize good dietary practices to help address the problem of chronic malnutrition, a major contributor to child mortality. IEC activities relative to good weaning practices are called for. Growth monitoring programs must be improved by better counseling for mothers whose children are not gaining weight properly.
13. Evaluate field use of solar energy in Zaire for refrigeration. In many countries this energy source has not proven to be cost-effective but the enormous distances in Zaire may change the equation.

ASSESSMENT OF THE USAID CHILD SURVIVAL STRATEGY IN ZAIRE

I. Purpose of the Evaluation

This review responds to a request from the United States Agency for International Development (USAID) Mission in Zaire for an assessment of the appropriateness, efficiency and effectiveness of the USAID/Zaire Child Survival strategy and how it functions in relation to the national health care strategy of the Government of Zaire. Restraints to success are to be identified and recommendations presented for addressing these constraints.

II. Socioeconomic Background

Since socioeconomic background material on Zaire is presented in so many documents already available, we will cite only a few historical developments that have led to major constraints to the current provision of health care in Zaire.

Five years of political instability following independence in 1960 led to a deterioration of the pre-independence infrastructure from which the country still has not recovered. There were, nevertheless, some ten years of economic growth between 1965 and 1975, in large measure due to high world copper prices. During this period, economic growth fairly well kept up with population growth, but the relative good times ended with plunging copper prices in the seventies.

Perhaps triggered by the growth period, the GOZ tried various schemes in the 1970s that contributed to the current economic woes. An experiment in the nationalization of foreign businesses and their transfer to the Zairian private sector was unsuccessful. Heavy industrial investments, such as the Inga dam and power line and a metallurgic plant, resulted in a massive debt but failed to develop a modern industrial sector.

By the late seventies the GOZ realized that these large public investments and the nationalization scheme were not viable. The government tried to return the companies to their owners and operators but many would not accept them. The end result of all the above was a loss of investments and many jobs and an immense foreign debt.

By 1975 economic growth turned negative and has never since improved enough to match the population growth. In order to satisfy foreign lenders, the GOZ has had to implement austerity programs which are, and will continue to be, a major constraint to investments in the public sector, limiting GOZ support of health services.

At the time of the sudden and unexpected advent of independence in 1960 the country's educational system had not yet begun to produce middle- and upper-level graduates in numbers sufficient to meet the nation's administrative needs. There were fewer than 20 college graduates among the indigenous population. Although university-trained personnel increasingly have been entering the government and industry, the educational system still is not fully able to turn out enough capable personnel. The lack of management-trained middle- and upper-level personnel remains a serious problem.

Ethnic rivalries have always existed in this vast multi-cultured country and these were exacerbated by tribal wars and rebellions immediately before and after independence. As a result, there are instances, both in government and in the private sector, where programs suffer from distrust among staff members of differing origins. In some areas of the country delivery of services has been negatively influenced by the differing origins of top program administrators and the recipient groups.

A second aspect of the ethnic question is tribal loyalty. Historically, a moral question was raised for the individual placed in a position of fiscal responsibility where diversion of funds was a possibility. If members of this individual's family were in dire need, his first priority was to the family. Even for personnel in church organizations, this was a problem. However, these diversions have become less and less attributable to family or clan needs, and have become an issue of basic survival in the face of decreasing per capita income.

Historically and culturally Zaire has been pro-natalist, a stance that was reinforced by the Belgian colonial administration and the Catholic Church. Traditionally births were spaced, but large families were and are the norm, and the traditional methods of spacing have been largely cast aside in urban settings. Many, if not most, political leaders still are not concerned by population growth rates and show little concern for spacing of children for health of mother and child. The pro-natalist attitude, particularly among the male population of Zaire, is a constraint to health of mother and child which must be addressed.

III. Health Services Background

The upheavals of the post-independence period saw the near collapse of a fairly well-organized, though mainly curative, health care system. The GOZ attempted to continue and later revive this system through the 1960s and early 1970s, but found itself spending almost the entire health budget for curative care in urban centers.

Efforts began in 1975 to reorganize the health services to reorient both the public and private sectors toward primary health care (PHC) and to standardize the administration of health services throughout the country. From 1975-1980 a number of pilot programs began decentralizing curative care from hospitals to satellite health centers and organizing preventive and promotive PHC services at the community level. In 1981, Zaire offi-

cially adopted the Alma Ata objective of "Health For All by the Year 2000" through promotion of decentralized PHC. The pilot programs of the late 1970s served as models for the development of the Ministry of Health's first five-year National Health Plan (1982-86).

The five-year plan mandated the decentralization of the health care system by the creation of approximately 300 health zones. The health zone concept was developed to coordinate and standardize the administrative and technical supervision of all health services within a specified geographic area, and to ensure coverage of the entire population with preventive, promotive and basic curative services. Prior to the introduction of the health zone system, government, Catholic, Protestant and private health facilities coexisted, each with independent administration, overlapping coverage, and few, if any, preventive or promotive activities. In the ensuing years, this health zone concept has proven sound, and the second five-year National Health Plan continues the development of these zones. The plan calls for almost all of them to be functional by 1991.

IV. Team Composition and Study Methods

The review was carried out over a period of six weeks from late January to early March, 1990, by a Pragma Corporation team composed of a development generalist as team leader, a medical epidemiologist, a health economist and an anthropologist. USAID/Zaire added four Zairians to the team: Cit. Nahimana Giteba from the National Center for Nutrition Planning (CEPLANUT), Dr. Mutombo Nsenda from the National Health Foundation (FONAMES), Prof. Bula Bula Lie Lie from the National Center for Coordination and Training for Development (CENACOF), and a representative from the Ministry of Planning. The team was supported by and responsible to the USAID Office of Program, Evaluation and Planning and also worked very closely with the Office of Health, Population and Nutrition.

The work was accomplished by a review of documents, interviews of staff at all levels of the health system, both public and private, meetings with other donors, visits to project sites in Kinshasa, field visits, and observation of selected operational tasks.

The team divided into two groups of four each for an eight-day field trip, one group going to the Bandundu Region and the other to the Shaba Region. Three team members later made a three-day trip to sites in the Bas-Zaire Region.

The sites were selected to include a range of variables: Catholic, Protestant and state-supported; urban and rural facilities; successful and unsuccessful health zones and centers; SANRU-assisted and non-SANRU-assisted zones; and villages where Development Committees are active and others where they hardly function. The team had a particular interest in seeing USAID-supported project activities in the field such as the ACSI/CCCD, Family Planning, Area Nutrition Improvement (CEPLANUT), Shaba

Health Infrastructure (ISROS), Communications for Child Survival, and, of course, SANRU II activities, including the water and refugee health components.

At the different sites we had discussions with at least one incumbent of the various levels of the regional health hierarchy: Medecin Inspecteur Regional and sous-Regional, Medecin Inspecteur Urbain, Medecin Coordinateur PEV (EPI), and representative health medical and administrative personnel at each health zone and health center.

At the health zone and health center levels, individual team members interviewed the health staff according to their specialties. We also had the opportunity at some locations to meet with Village Development (and Health) Committee members, to talk with villagers and to check local pharmacies. Some travel was by road (two days in Bandundu and three in Bas-Zaïre), permitting site visits away from centers served by air strips and allowing views of conditions and contacts with people between towns and villages. We talked with Protestant and Catholic expatriates working in health activities, with Belgian Cooperants, personnel from Medecins Sans Frontieres, USAID project personnel (both health and agriculture) and a number of Peace Corps volunteers.

The following health zones and health centers were visited:

1. In the Bandundu Region

Health Zones

Bandundu
Vanga
Djuma
Sala
Idiofa
Kikwit Nord
Kikwit Sud

Health Centers

--
Kimanu
Kimbata (and a Kimbanguist dispensary)
Pukulu (and a Kimbanguist dispensary)
Kizito and Manding
Lukolela
Inga I (also in Kikwit, CEPLANUT, EPI Antenne and the Mama Mobutu Maternity)

2. In the Shaba Region

Kasaji
Sandoa
Kabongo
Kalemie
Ruashi in Lubumbashi

Health Center
(water project)
Kina (and water project)
-- (EPI Antenne)
(also the UNICEF Regional Office in Lubumbashi)

3. In the Bas-Zaire Region

Nselo	Yuba, Kibambi-Ufuma, Kinzao, Kimbata-Nfinda and Mfuma
Kisantu	Ngeba, Kipasa and a Health Post, Nkandu

In summary, team members visited 14 health zones and 17 health centers or posts in three regions.

The Zairian team members were a tremendous help. Having the local viewpoint of qualified professionals always available in judging problem areas and arriving at possible solutions helped in coming to more reasoned decisions. In some instances, team members changed positions on recommendations as a result of their counsel. Also, they were able to provide easy access to various Ministry and parastatal offices, both for contacts and for data, saving considerable time for those of us who didn't know just where or when to go. In the field their presence made our relationships instantly informal and at ease in the private Zairian homes where we were lodged and made our presence as questioners much more acceptable with zonal health personnel.

However, we found it difficult to efficiently coordinate an eight-member team with limited transportation. In group meetings introductions were time consuming, there were duplications in questioning and, in some instances, there were language problems. The Scope of Work called for two Zairian members rather than four. Having the two extra members slowed activities. For a long-term study, however, where administrative time is not a factor, a team would be well served to have all four of these exceptionally well-qualified professionals as members.

The team's first two weeks were devoted to introductory meetings with the numerous USAID, GOZ and private individuals and organization staffs concerned in one way or another with A.I.D. health-related projects. Planning and scheduling for these meetings, some of which had to be rescheduled due to late arrivals of team members, could not have been more competently handled. We were very impressed with USAID's preparations for our visit.

Two days were used in the preparation of questionnaires for field trip use. Field testing would have shown these to be too detailed, but the one-day trip to a site south of Kinshasa planned for this purpose was canceled and the questionnaires were not revised. They did prove unwieldy and went largely unused with the exception of parts of the medical form. We recommend that any evaluation tools of this nature be field tested prior to duplication and field use.

Four weeks were gone by the end of our eight-day field trips and the medical team members still required another three days in the field. It had become obvious that there was not enough time to complete all the requirements of the Scope of Work in the time allotted. The USAID/HPN office had stated from the beginning that the HPN staff

would normally be updating the Child Survival strategy paper in the form of a health background paper for the "Action Plan" (an appendix requirement in our Scope of Work) and that our assistance had been requested largely because we were to be present and working on this very subject at the time this document had to be prepared. In a meeting with the HPN officer, it was agreed that the update would be a cooperative effort. The team anthropologist would write the first two chapters dealing with the health sector description and the constraints analysis, and that the HPN staff would develop the balance. To assist in the latter, each of our team members was consulted orally for recommendations based on our observations thus far.

With only one week left after the final medical team field trip, it was evident that the data in hand, particularly the medical impact data, could not be analyzed and available for synthesis into a final report in the time still available in Kinshasa. Extensions in Kinshasa not being feasible, it was decided that the final draft would be prepared in Washington. Unfortunately this final report would thus be drafted without the participation of the Zairian team members. Their views are reflected in the body of the report, but they had no opportunities for comment on the final draft.

V. Findings and Conclusions

Child Survival Strategy

The USAID/Zaire CS strategy closely parallels USAID's Africa CS strategy and is consistent with the GOZ PHC strategy. The GOZ does not have a CS strategy per se. The AID/Africa strategy calls for immunizations, control of diarrheal diseases, improved nutritional status, child spacing, malaria treatment, and attention to AIDS. Emphasis on management and training is called for to improve health services delivery, as is the involvement of the private sector. The USAID/Zaire strategy includes all of the above.

The GOZ PHC strategy lists immunizations, pre-natal care, maternity care and family planning, health education, promotion of nutrition and agriculture, control of endemic diseases, clean water and sanitation, and basic curative care. The USAID/Zaire CS strategy includes elements of all the above and conflicts with none. Attention to AIDS is also now a part of the GOZ program.

Impact

The Scope of Work provided to the evaluation team requested an analysis of the impact of USAID assistance in the field of Child Survival. Impact can be defined as measurable reductions in disease burden and increases in access to services, coverages by services and other "process indicators." Measurable reduction in disease burden includes both morbidity and mortality data.

One evaluation team member had had extensive experience with the GOZ and Church of Christ in Zaire in health services in the latter half of the 1970s, including a wide range of site visits in rural areas in five regions. There has been a clearly noticeable improvement in the provision of health services and in child health status in rural areas of Zaire in the intervening years. One has to have seen it then, see it now, and talk with individuals in whom one has confidence who have experienced the change, to appreciate how much better the situation really is today. Apparently the improvements have largely been effected in the last five years.

Decentralization

The major factor behind the change for the better in rural health services has been decentralization, the creation of the health zone concept and the decision of some donors to channel assistance to the zones. The new approach is *rapidly* (in the African health services context) putting basic health services within reach of the rural population. The MOH deserves credit for approving and cooperating with this effort.

USAID and other donor assistance has extended the coverage of already existing church-sponsored services and opened or reopened dormant GOZ facilities on an organized, logical basis in over 200 of the nation's 306 health zones. USAID assistance through SANRU is responsible for 90 of a projected 100 of these. Immunization services are available, to some extent, in 275 zones, although in many only at the zone General Reference Hospitals (HGR). In-service training programs have been instrumental in partially correcting the GOZ colonial heritage of over-emphasis on curative care by the established medical training schools.

The trend, as new projects are developed, should be to minimize vertical program assistance and projects requiring central level management and support--not because such assistance is unneeded but because, given the current central level situation, the resources can be so much more effectively used in assistance to horizontal programs at the zone level. Nor should such assistance be considered as an abandonment of national-level institution building. A large cadre of health personnel, experienced in planning and managing health services, is being developed as the country continues its progress in bringing the 306 health zones into operation.

The USAID Child Survival Portfolio

USAID assistance to the health services went through a period of experimental years with some project successes and a few failures. But during the 1980s USAID settled into a relatively stable program aimed at increasing health service coverage of the rural population with the primary emphasis now on CS.

Current USAID support to CS activities in Zaire is provided through approximately 18 projects (eight bilateral) which vary in types of activities, including construction (rehabilitation of health facilities, installation of potable water sources and aerated

latrines); training of health care providers; provision of supplies and equipment; research and development; and expanding access and coverage by services.

In order to assess adequately the impact of the various interventions, data demonstrating trends in CS indicators were sought by the team members. In some cases, data requested were not accessible during the time available; in other cases, too much data were provided to permit in-depth analyses with subsequent interpretation and conclusions. To provide the in-depth data analyses requested would take a minimum of three months to complete. It is recommended that USAID consider the development of an inventory of the existing data base related to Child Survival activities. In addition, there should be the provision for regular updates as additional data become available. This would provide an easily accessible overview of the status of Child Survival activities and trends to the Mission, project-related staff, and consultants.

In appraising the overall merit of USAID/Zaire's CS strategy, logic demanded that we review the individual A.I.D.-supported health projects, considering each one's impact on Child Survival and cost. We could then also have made recommendations regarding extension of these individual projects. We very soon realized this would not be possible and that, in most instances, conclusions would have to be drawn from the limited data. The team separated to cover more ground, some seeking financial information, some medical data and some looking at management. Later, when together as a team, we found that individual impressions of many of these projects were quite divergent. One team member may have talked with an eloquent implementer while another dealt with a less articulate project officer, or vice versa. For example, the Zairian team members reacted negatively to the Contraceptive Social Marketing effort, whereas other team members thought it innovative and worthwhile. One may have seen the best examples of the project's activities in the field while another was exposed to less solid results in another region. After reviewing such a variety of activities it is difficult to recommend extending or terminating any one in particular. We will, however, cite four that must continue:

1. There must be a SANRU III Project (and it should keep the same name). SANRU not only is successful but, perhaps equally important for continued success, it is *perceived* as successful by the GOZ, the Zairian public and even other donors. We are aware of the territorial conflicts now being noted by some, but believe they are outweighed by advantages and can be overcome. With so many elements included in the services provided by health zones and health centers, it is difficult to measure the impact of this project on CS. But there can be no doubt of the positive nature of SANRU. Health service availability in terms of population coverage would be more rapidly increased if SANRU could take responsibility for a portion of the urban health zones.
2. The ASCI/CCCD Project or its equivalent should continue. Here there *is* measurable positive impact.

3. USAID should support the School of Public Health until endowments currently being sought can complement the support provided by the GOZ and scholarships from other organizations or countries. There are resources that could be tapped in pursuit of financial support. For example, retired missionary physicians with life-long interests in Zaire health services might be enlisted in the search for endowment funding. Impact on CS is not measurable but in our judgment will be "measurably" important over the long term.
4. Assistance is vital to family planning. Support for family planning has been costly with little measureable impact thus far on CS. Nevertheless, the effort has to be continued. Success in this program will bring immediate benefits in the improved health of mothers and children. More importantly, in the long term, without success, population growth will negate the gains of social service assistance programs. Success will come as reason prevails, but it will not occur without continued assistance.

Citing just the above activities does not mean the fight against the growing threat of HIV/AIDS or support for water and sanitation activities should be abandoned. We comment on these later.

Appropriateness of CS Strategy and Activities

The Scope of Work requests the team's assessment of the appropriateness of the method of delivery of USAID's assistance to CS interventions in Zaire. USAID has used a network of many different projects over the past few years, some more successful than others, but the ensemble has worked. All of the health intervention that impact on CS have been developed. Within USAID itself, however, the large number of projects has tied up the HPN staff in routine project management to the detriment of long-range planning, sector analysis, field observation trips, etc. There have also been some problems with lack of coordination between various projects. Some of these are cited in the epidemiologist's report.

The creation of an umbrella project, e.g., consolidating SANRU, EPI, family planning and a number of the current smaller-type projects might simplify management. Technical assistance funding could be channeled through an institutional contractor or consortium of contractors, making it easier to shift funds from one type of intervention to another and possibly solve coordination problems.

However, the team has serious concerns regarding the advisability of creating an umbrella project managed by one institution to cover any large number of the projects related to Child Survival. The concerns relate to the ability of one institution to coalesce the appropriate expertise necessary to cover all of the inputs.

Successful multidisciplinary subcontracting arrangements are rare. In the experience of some team members, unfortunate results having been observed in several countries.

The original multidisciplinary project may become split into separate projects due to the weaknesses observed in one or more of the disciplines covered in the original project design. Another difficulty would be the coordination of the large project with the MOH and NGOs. There may be overriding direct hire staffing shortages that dictate the necessity for such an umbrella arrangement and our team members' experiences may have been uniquely negative. In any case, the Mission should review USAID country experiences with large multidisciplinary projects before undertaking this major management change. If these prove to be largely negative, we would advise cutting the health projects down to a number that *can* be effectively managed by available staff.

Another key issue is what the future of the CCCD Project activities will be at the end of the current project. At present, CCCD activities in-country have benefited from the assistance of the Centers for Disease Control (CDC) with a ready cadre of technical expertise to assist in the development of program activities. In addition, there has been the benefit of rapid sharing of information gained in other CCCD countries. There is also concern that termination of the PASA agreement with CDC for CCCD activities could result in the loss of CDC technical consultant availability, since the personnel slots, or "Full-time Equivalents" (FTEs), will be absorbed by other program activities in CDC and not be readily available for international assistance.

Turning again to results, i.e., the impact of CS strategy interventions, the stated goal of each of the CS interventions is to lead to a reduction in the infant and childhood mortality (IMR and CMR) of the Zairian population. There are many factors contributing to infant and childhood mortality, but a reduction in the incidence of diseases identified as contributing to IMR and CMR can surely be expected to reduce these death rates.

The target diseases selected for interventions include the vaccine-preventable diseases (measles, polio, pertussis, diphtheria, tetanus--especially neonatal tetanus, and tuberculosis), diarrhea and the subsequent dehydration that leads to a high mortality, malaria, nutritional deficiencies and, more recently, HIV infection.

Corresponding incidence data are hard to present and interpret since they are obtained from a variety of sources, many of which are not comparable due to differing methodologies and age groups of the study cohorts. Sources of data are cited in the epidemiologist's report, including a summary of these results.

The results of the CCCD/MUHS surveys from 1985 and 1989 can be compared as the same methodology and same study areas were chosen. These studies demonstrate a decrease in IMR from 130 per 1000 live births in 1985 to 110 per 1000 live births in 1989. This represents a 15.4% reduction in IMR over a four-year period in the study area. The FONAMES/UNICEF surveys conducted in 1987 present lower IMRs for urban areas than shown in the MUHS survey, a not unexpected finding as access to health services is better in urban areas.

We were not able to assess gains in Child Survival as related to the nutritional status of target populations. A review of documents available to the team suggested that there have been studies on the nutritional profile of children in Zaire, but time did not permit an assessment of the quality of the studies or their results and interpretations.

Data that are needed include nationwide statistics on nutritional status of the childhood population, disaggregated by region or zone. The disaggregation will permit an assessment of nutritional status by type of assistance received in each zone. Another means of addressing this question would be to do annual curves following the nutritional status of the population and annual coverages by the key Child Survival interventions. An excellent study would be to plot nutritional status in children 0-5 by family planning acceptance or parity of mothers.

Health Information System and Evaluations

The team's difficulties in assessing the impact of CS interventions would have been lessened were there an adequate national health information system (HIS). The absence of a HIS has led to a situation in which each program and project is dependent upon developing its own information system and supplementing it with special impact studies and operational research studies. Thus, to do a thorough assessment of the impact of the interventions, the information system of each project must be evaluated, interpreted and compared in addition to results of all special studies conducted by each of the projects. The plethora of studies creates a confusing situation, since very few are truly comparable.

Under the CCCD Project assistance, an information system was developed that collects data from each of the functional EPI zones on vaccinations, diarrheal cases treated with ORS, and presumptive cases of malaria treated with chloroquine. In addition, a sentinel reporting system was developed for morbidity and mortality due to the CCCD target diseases. At present, there are 121 reporting units. Data from this system are presented later in this report.

The need for a coordinated HIS cannot be overemphasized as the projects overlap in terms of target populations. In addition, while some project interventions may appear to be vertical, they are actually horizontal at the service delivery level. The same Medical Zone Chief and the same nurses are running pre-natal clinics, pre-school clinics, vaccination sessions, family planning counseling and product distribution, ORS distribution, treating malaria cases, etc. A few standardized forms should be developed for the HIS.

The African Development Bank is currently assisting in developing a HIS and expects to see it tested this spring. Funding for the necessary communications system is to be provided by the World Bank. Once the national system has been implemented, it should provide more comprehensive data on disease and service delivery trends.

Evaluations have been regularly conducted on most of the CS projects.

The water and sanitation interventions to date have been studied in one area only (Kirotshe). Appropriate monitoring measures would be to follow the water borne disease trends such as diarrheal diseases in the less than five-year-old population.

SANRU is using a reporting system prepared in collaboration with EPI, CEPLANUT, PSND, the Belgian Cooperations, etc. This is, in effect, an early HIS, but limited to zone PHC activities. The SANRU Project has also conducted frequent evaluations of the project as well as specific zone evaluations.

The CCCD Project conducts annual internal evaluations of all country projects in addition to the biannual external evaluations. In 1989, the EPI information system was modified to include management-related information, thereby changing it to a Management Information System (MIS). This is a significant accomplishment of the CCCD assistance in Zaire. To improve the monitoring of EPI/CCCD activities, consideration should be given to modifying the present information to add information on the vaccination status of reported measles and polio cases, the vaccination status of mothers of neonatal tetanus (NNT) cases, the number of cases of dehydration and treatment modality, presumptive malaria cases and treatment modality, and the number of cases of chloroquine-resistant malaria treated.

Sustainability

Sustainability is possibly the greatest problem facing the CS strategy. One cannot reasonably believe that the strategy as a whole is sustainable, even though a few individual projects to some extent may be. Those with commercial aspects such as Social Marketing have the greatest sustainability potential. At the other extreme, the EPI component of the ASCI/CCCD project is one of the least sustainable (yet most important) activities in the current Zairian health system. If we address just PHC delivery, projects with high curative elements, such as SANRU, have a much better chance than those that are primarily preventive, since people are more inclined to pay for cures than for prevention.

The government has had difficulty contributing financially to the sustainability of CS activities. Between 1978 and 1989, the health share of government expenditures fell from 5% to about 1%, according to World Bank sources. Real per capita expenditures for health are estimated at \$0.20 per annum. In 1989, with the support of the World Bank, the GOZ starting working on a Social Sector Adjustment Program which may reverse the unfavorable trend in health care expenditures. It is noteworthy that the GOZ increased its contribution to the SANRU Project by 400% between 1988 and 1989 and by 100% for ASCI/CCCD over the same period. USAID, SANRU and REACH staff have collaborated with GOZ officials to improve understanding and increase financial support for CS activities. This is unlikely, however, to have sufficient impact to significantly improve sustainability prospects for the foreseeable future.

Certain elements directed toward eventual sustainability must be incorporated into each project's design, but USAID should not expect sustainability within three to five years for most projects in the design stage today.

A.I.D. must think in terms of long-term commitment, technical assistance and training and in continuing major support for management development.

Immunization Activities

The USAID CS strategy seems heavily oriented to increasing vaccination coverages of pregnant women and of children by their first birthday. The team heard concerns expressed by USAID/HPN personnel that perhaps there was too much emphasis on these groups at the expense of other activities. We do not agree. The level of emphasis is a reflection of the level of development of the program activities and the level of effort necessary to provide vaccinations to the target population.

Most of the Child Survival interventions require training of personnel in the program objectives and recommendations and provision of the necessary supplies. In the case of vaccination activities, there is the additional need to develop the cold chain. Critical to the cold chain is provision and maintenance of refrigeration equipment. There are, thus, extra requirements in the immunization program which should not be confused with over-emphasis.

The national immunization policy is in accordance with international recommendations. Present objectives are to increase coverages to 80% of the target population in the major cities through acceleration of activities.

A recent change in strategy to vaccinate against measles at six months of age in Kinshasa, where a significant number of cases have occurred in the six- to nine-month old age group, will probably be made a nationwide change. Another change that should be effected is to vaccinate all women in the child-bearing age group, thereby requiring only boosters during pregnancy.

As of February, 1990, 206 of the 306 HZs in the country met the criteria as functional EPI zones. This represents an increase from 1988, when 174 were functional. A zone is considered functional when the MCZ has been trained, there is refrigeration equipment available at the central zone office and at least four Aires de Sante (AS) are vaccinating. An additional 69 zones are providing immunizations. Thus, vaccination services are presently available to some extent in almost 90% of the health zones in the country.

According to the 1989 internal CCCD evaluation report, further expansion of zones has been halted until the GOZ increases its contribution to activities.

According to reports, approximately 71% of the population in Zaire had access to vaccination services in 1988 in contrast with an estimated 60% in 1985. According to the

SANRU 1988 report, 72.6% of the population in SANRU-assisted zones had access to vaccination services. It is unclear what the criteria for "access" to services are. The WHO definition of access to services is living within a one-hour walk from the services. The impression is that the definition of access to services applied in Zaire is living in a health area that has vaccination services available, regardless of actual displacement time from a health facility.

A concern is the leveling off of vaccination *coverages* during the period 1985-1988. A contributing factor to this leveling off may be limited access to services due to vaccination sessions being conducted once a month in the majority of the rural health facilities. Another factor may be underreporting of vaccination activities.

Another theory is that while 71% of the target population is estimated to have access to vaccination services as defined by residing in an AS with vaccination services, the actual proportion of the population that live within one hour of vaccination services may be much less, with real coverages of accessible population much higher. A recalculation of vaccination coverages using as the denominator the population presently with access to vaccination services would provide better information on the efficiency of the vaccination activities.

Field visits were conducted in three regions covering a total of 14 health zones, but team members directly observed a limited number of vaccination sessions. The quality of the services observed was quite high from a technical perspective. Attention was paid to cold chain requirements and vaccination techniques. In terms of age at administration of vaccinations, all personnel interviewed during field visits were up to date on national recommendations.

Information on vaccine wastage was not readily available to assess compliance with the recommendation to open a new vial for a single child. Interviews with health facility staff revealed that many would not vaccinate a sick child, preferring to reschedule the child to return at the next session. Studies conducted in many countries have shown that on any given day, between 30%-50% of children are sick. Thus, non-vaccination of sick children probably contributes to the lower vaccination coverages observed.

Available data strongly suggest that vaccination activities have had a significant role in reducing morbidity and mortality of the childhood population in Zaire.

The annual reported incidence of poliomyelitis in Kinshasa during the period 1968-1988, as compared with reported vaccination coverages of third doses, shows marked reductions in morbidity beginning three years after implementation of EPI activities. Visits to rehabilitation centers revealed no new polio-related paralysis in more than four years.

There has been a 54.4% reduction in the number of reported cases of neonatal tetanus (NNT) in urban areas during the period 1982-1988.

Results for the annual reported morbidity and mortality due to measles in Kinshasa during the period 1981-1988 are not as impressive as those for polio and NNT. One possible explanation is that many of the cases in 1986-88 occurred in children less than nine months of age, prior to eligible age for receipt of measles vaccine. The planned change in vaccine to the EZ vaccine for administration at six months of age may significantly reduce the incidence of measles.

The SANRU Project has focused on development of institutional capacity of the immunization program at the zone level. This was assisted by the provision of vehicles and motorcycles to the zone to facilitate supervisory activities. In non-SANRU-assisted zones, this is not the case. The CCCD Project has provided transportation to the antenne/depot level, theoretically to facilitate supervisory activities. The impression of the evaluation team and earlier evaluation teams is that there has been significant success in the development of the capacity of the zone for sustaining immunization service delivery, but that development above the zone level (the antenne/depot and central levels) is weak.

Development of an adequate cold chain seems to be a constraint for the extension of services. Serious difficulties are noted with the use of kerosene refrigerators. Kerosene supply is limited, and wicks are reportedly not available on the local market, limiting routine maintenance.

A recent analysis of EPI data examined the variables of SANRU assistance, rural/urban zones and state (MOH)/NGO assistance. Thirty-one of the 100 health zones that SANRU assists are state-managed health zones with no NGO partnerships; 16 are state hospitals with some NGO participation; and the remaining 53 are NGO (church/private) hospitals. The analysis showed that:

- 1) Coverage levels are higher in urban zones than in rural zones.
- 2) In rural areas, levels of coverage are higher when those areas are SANRU-assisted than when they are not.
- 3) Again in rural areas, levels of coverage are highest in zones assisted by NGOs.
- 4) Even in the SANRU-assisted zones, levels of immunization are higher when SANRU is NGO-assisted.

These findings are preliminary and further analysis of this data is needed, however it appears that NGO participation in the development of the immunization program should be stimulated and expanded.

Given the slow extension of electricity to rural areas, it may very well be cost-effective to continue the expansion of solar energy refrigerators--but the data are not available to justify this as a recommendation as yet.

The recurrent costs associated with the provision of vaccinations include vaccines, needles, syringes, vaccination cards, sterilizers, cold chain equipment, spare parts, kerosene, transportation expenses associated with vaccine distribution and supervision, and training and retraining of personnel. Given the present low level of financial commitment of the GOZ to the health sector, it is unlikely that vaccination activities will be sustained in the absence of external assistance.

Oral Rehydration Therapy (ORT) Activities

The USAID CS strategy includes appropriate management of diarrheal episodes with ORT as a priority intervention under the CCCD Project assistance. Support has been given for the development of training/demonstration units and for local production of ORS packets.

The national policy for ORT has been to recommend the use of sugar-salt solution (SSS) at home. Several studies have shown the correct recipe for SSS was not known by most mothers and many of the health facility personnel. In addition, it was found that sugar is not readily available at the village level in many parts of the country. In view of these findings, the national policy is being officially changed to recommend increasing fluids at home and promoting the ORS packets rather than use SSS. Only one size ORS packet should be available. There are presently three different sizes, leading to some confusion among the users.

The national policy is to decentralize training through the establishment of ORT demonstration units in each of the regional capitals. As of February, 1990, 17 ORT training sessions had been conducted Mama Yemo Hospital in Kinshasa, four at Bukavu and one each at Lubumbashi and Kisangani.

In 1988, 100% of 69 hospitals and 71% (111 of 156) outpatient facilities sampled were using ORS for treatment of diarrheal episodes. This is in contrast to 22 of 47 hospitals (47%) and 12 of 47 outpatient facilities (25.5%) sampled in 1984. Field visits to EPI functional zones supported these findings. All health zones visited had ORS packets available for use. Visits to the pediatric wards of the HGRs visited revealed no children being treated with IV rehydration. Reviews of clinic registries revealed all cases of gastroenteritis were treated with ORS packets.

Information from sentinel reporting units in 1988 revealed that 72% of the 55,400 cases of diarrhea seen were treated with ORS in contrast with an estimated 42% in 1985. Regular trend data on cases of diarrhea appropriately treated at home do not appear to be available. Results of a KAP survey done in Ruashi revealed that mothers have five different classifications of diarrhea, with different treatment-seeking behavior depending on type of diarrhea. This may explain why the available national statistics do not reflect consistent major increases in the proportion of diarrheal episodes appropriately treated at home. Results of this survey showed that 16% of mothers claimed to give SSS

at home for the most recent diarrheal episode, and 7% of mothers were given ORS packets by the health facilities.

In 1982, 14% of admissions to pediatrics in Mama Yemo hospital were for diarrhea, while in 1986, only 3% were for diarrhea. More impressive is that the proportion of hospitalized mortality attributable to diarrhea decreased from 50% to 6%. In addition, on the day of the visit to Mama Yemo Hospital, there were no cases of diarrheal disease being treated in the unit. This, combined with the documented decrease in mortality associated with diarrheal diseases in the hospital, suggests that there is increased appropriate home treatment of diarrheal episodes in the Kinshasa area.

ORS packets are sold by the health facilities and the funds from their sales are to be used for resupply. Initial stocks of ORS packets were capitalized by external assistance with expectation of creating a revolving pharmaceutical fund at each health facility. The 1988 CCCD evaluation (and field visits by this evaluation team) revealed that proceeds from the sales of ORS packets were used to pay personnel salaries and purchase other needed supplies in both 1988 and 1989. Thus, the attempts at autofinancing of ORS production and use were not successful. However, the potential for sustainability is present.

The establishment of decentralized ORT demonstration units for the training of medical and paramedical personnel represents an effort at institutionalizing ORT capacities. Again, due to budgetary constraints, not all of the planned demonstration units have been opened, and those that have become functional have not held the planned number of training sessions. At the time of this evaluation, four ORT demonstration units were funding in the regions.

Malaria Activities

The malaria control program is the youngest of the three components of the CCCD Project, with activities just getting underway in 1985. At present, this is the weakest component of the CCCD Project and the EPI unit. Given the emergence of chloroquine resistance in Zaire and the increasing disease burden due to malaria, this component should receive greater emphasis in future activities.

The national policy for malaria control at present is directed towards the early appropriate management of presumptive malaria cases with chloroquine. In addition, chemoprophylaxis of pregnant women is recommended. The national policy has not been directed at morbidity reduction through the promotion of use of mosquito nets and insect repellents.

Information from the sentinel reporting units in 1988 revealed that of 120,219 cases of malaria seen, 77.5% were treated with chloroquine. Compliance with national recommendations for treatment of presumptive malaria went from 99% in 1985 to 90% in 1988 in outpatient facilities and from 74% to 100% in hospitals during the same period. This

trend for decreasing compliance of outpatient facilities with national recommendations for chloroquine treatment may reflect increases in chloroquine resistance seen by these facilities resulting in increases in quinine administration. Information on the number of cases treated with non-chloroquine antimalarials is not routinely collected.

Data for the period 1983-1988 show a definite increasing trend for home chloroquine management of children's febrile illnesses.

A study on the pregnancy outcomes of women given chloroquine chemoprophylaxis compared with those where febrile episodes were treated with chloroquine revealed no difference in birth weights of the children. Field visits revealed that many of the health facilities were using the latter strategy, even though the national policy still recommends chemoprophylaxis.

Information on the availability of non-chloroquine antimalarials in the health facilities is not available at the central level. Field visits revealed that all health facilities visited had at least one non-chloroquine antimalarial, most commonly quinine in tablet and/or injectable form. Other second line drugs such as fansidar and amodiaquine were irregularly found.

A 1989 MUHS survey revealed that approximately 37% of febrile illnesses were treated at home with chloroquine. There is a definite trend for increasing proportions of febrile episodes that are treated appropriately over the course of the years.

Studies done in 1988/89 showed there was resistance to chloroquine at 10 mg/kg but no resistance to quinine. Information on the sensitivity of *Plasmodium falciparum* to other non-chloroquine antimalarials such as fansidar and amodiaquine was not available. A marked increase in the proportion of pediatric deaths attributable to malaria in 1986 probably represents the introduction of chloroquine resistance into the Kinshasa area. The proportion of pediatric admissions attributable to malaria almost doubled in 1986 compared to 1982, and the proportion of pediatric deaths attributable to malaria has quadrupled.

The absence of routine monitoring of antimalarial drug sensitivities goes against the development of a sustainable national program.

Nutrition Activities

The CS assistance strategy has had an emphasis on nutrition through the development and strengthening of the national nutrition planning unit (CEPLANUT), the inclusion of growth monitoring as part of well baby clinic (CPS) activities and nutritional rehabilitation activities for those children identified as malnourished. Growth monitoring with nutrition counseling is an important part of service delivery activities in the SANRU-assisted zones. Field visits revealed that all CPS activities included the weighing of children.

Activities promoting breastfeeding include an IEC campaign by CEPLANUT against the introduction of substitutes for maternal milk--a problem only in urban areas.

Poor weaning practices are widespread. In rural areas weaning just involves shifting to the family's diet, which is usually not suited to the weaning child's needs. In the cities there is a trend to premature complements to maternal milk. Health facilities, particularly those supported by SANRU, include proper weaning practices in CPS sessions, and many sell weaning food packets of corn or soja flour, fish, etc. CEPLANUT has prepared messages on the subject for both urban and rural programs. There is also now a factory, partly financed by USAID, which is producing a rich weaning food marketable at a low price.

There are not many activities promoting dietary management of diarrhea. The HEALTHCOM Project has begun an effort as cited above. CEPLANUT cooperates with EPI in preparing educational material on the subject. Currently CEPLANUT and EPI are organizing ORT training courses which include dietary management of diarrhea at Mama Yemo Hospital, for use in Lubumbashi.

Growth monitoring activities are fairly widespread. In 1988, 81% of the population in SANRU zones had access to CPS activities (as compared with 54% in 1984), 33% of children 0-4 years old were enrolled and followed in CPS clinics, and 8% of children were registered as below 50th percentile for weight for age.

CEPLANUT together with PRICOR has done research studies to develop more effective CPS presentations for the growth monitoring sessions.

Targeted supplementary feeding programs exist in many hospitals around the country for severely malnourished children. An estimated 25% of children under five are malnourished, and between 5% and 8% are severely malnourished. There are no national norms for the rehabilitation programs and, unfortunately, some of these programs (e.g., PL480 Title II) use imported food grains. A uniform strategy using locally-produced foods is urgently needed.

Child Spacing Activities

PSND, SANRU, AZBEF and predecessors have been very successful in informing the Zairian population concerning modern contraceptive methods and have established family planning outlets throughout the country. Nevertheless, contraceptive usage is still minimal, with CYP protection variously estimated between 45,000 and 200,000. Having a positive impact are community-based distribution programs, the Technical Information on Population for the Private Sector (TIPPS) Program, and the particularly successful Social Marketing Project. Urban areas are partially served through family planning outlets but the major future impact should probably come through the zone health services, both urban and rural.

A comprehensive document setting forth a population policy and strategies for implementing a population program was drafted in late 1986 but has never been officially adopted. The lack of an official population policy and genuine commitment to family planning policies has been a handicap to expansion and development of the family planning effort in Zaire.

Even so, the family planning program has made some progress in areas that have particular impact on CS. Training of health facility personnel in the identification of high risk births is included in the program of SANRU-assisted zones. A standard checklist is part of the prenatal clinic (CPN) records. Health facility personnel have also been trained to counsel women on averting future high-risk pregnancies. While counseling is reported to be occurring, very few of the health facilities have contraceptive supplies to permit extension of services.

Data available at Mama Yemo Hospital show that in January, 1990, the leading cause of death in the hospital was perinatal causes (22% of all deaths). Perinatal deaths are often due to prematurity and low birth weight, both of which are associated with high-risk pregnancies. High-risk pregnancies include those women with five or more pregnancies, teenage pregnancies, and those where the birth interval is less than three years. The criteria recommended for identification of high risk pregnancies are sound but action on their use is deficient. There has been little applicable research in this area.

There is still resistance to family planning activities on the part of the formal health sector, with concerns raised about the limitation of family size. However, during the course of our field visits, many women were interviewed, and almost all expressed a desire to limit their births to either three or four. Many of the women interviewed expressed a desire not to have additional children but added that husband and other family members placed pressure on them to continue child bearing. The demand is there for the services but there are still cultural constraints in the immediate community that need to be addressed.

Family planning information efforts have very successfully been directed at women of child bearing age. Only recently have young men been targeted. The IEC program should also attempt to reach older family members as one step in bringing about a change in national attitudes. The effort to get sex education in the school curriculum should continue.

Water and Sanitation Activities

There can be no doubt that available clean water should have a positive impact on Child Survival. However, the degree to which the various members of a rural community actually derive benefit from a newly-installed water source has not yet been carefully studied. How it is used, how much is used, how much use is still made of other sources and how bad they are, are all questions that need to be answered. Is the additional time

available to mothers because of the proximity of the new source devoted to children's needs?

There is little data available relative to reduction in diarrheal diseases in children in water-assisted zones. A study conducted in Kirotshe compared the incidence of diarrheal diseases in children less than five with distance of household from potable water source and quantity of water per person used by the households. This study revealed a significant reduction in diarrheal incidence among those households using 50 or more liters of water per day and those households living within a five-minute walk from the water source.

The team defers to the imminent WASH review for additional data and a detailed evaluation of the water and sanitation activities. But our present opinion is that help should be downgraded to direct assistance to Village Development Committees for water and/or sanitation activities they have proposed and will support.

AIDS Prevention Activities

Data published from Project SIDA studies suggest that HIV transmission is becoming a major contributor to IMR in Kinshasa. IMR among children born to HIV positive mothers was compared with those born to HIV negative mothers. Two hospital populations were studied, one having clientele from a higher socioeconomic group, the other from a lower socioeconomic group. In the former population there is a 3.3-fold difference in IMR between HIV positive and HIV negative mothers. In the latter population there is a 7.9-fold difference in IMR between HIV positive and HIV negative mothers. Studies have demonstrated that approximately 60% of children born to HIV positive women will seroconvert during the course of the first year. (Statistics from the New England Journal of Medicine, SIDA Report.)

Additional concern is that transfusions are a common treatment modality for anemia among children, especially anemia associated with severe malaria infection. Studies have shown a definite correlation between transfusions and HIV seropositivity in children over one year of age. In addition, studies have shown a history of a high number of injections for curative treatment of children to be associated with HIV seropositivity.

Field visits revealed that criteria for blood transfusions in the treatment of anemia in children were not consistent, with many children receiving transfusions for questionable reasons. This is of concern as HIV testing is presently available in only four non-urban zones in the country. Thus, the possibility for increases in HIV positivity among children exists in rural areas. Possible cases of AIDS in adults were seen by the team physicians during field visits. The impression is that Ministry doctors outside Kinshasa are not yet familiar with the presentation of clinical AIDS. There is an evident need for emphasis on operational issues in the field in order to impact on the transmission of HIV in Zaire.

U.S.-assisted mass media awareness and preventive messages concerning HIV/AIDS have had a wide impact and are probably largely responsible for the impressive increase in condom sales through the Contraceptive Social Marketing Program (from under a million in 1988 to over four million in 1989).

VI. Recommendations

1. The team has serious concerns about the advisability of creating an umbrella project managed by one institution (or a consortium) to cover any large number of the Child Survival projects. However, such an arrangement *would* simplify management, make it easier to shift funds from one activity to another and enhance coordination among activities. Our major concerns relate to the ability of one institution to coalesce the appropriate expertise necessary to cover all the inputs; the difficulties to be expected in coordinating such a project with the MOH and NGOs; and some team members' past personal experiences with umbrella project failures. (We suggest that the Mission review USAID's experiences). Partly, too, we are influenced by the fact that the Mission's current approach is working. Should a winning combination be changed to an unknown? Overlooking other problems, the HPN management overload could be lessened by non-renewal of some of the smaller activities. These often require as much administrative time as the larger projects.
2. Relying largely on the team epidemiologist's analysis, we recommend that USAID continue CCCD technical assistance to the EPI activities. The advantages of the CCCD link are discussed in the main body of this report. There may, however, be overriding considerations, of which we are unaware, favoring a shift to some other technical assistance mode.
3. Assistance priority should be given to the following four activities:
 - *A SANRU III or its equivalent.* This project is the key element in the current success of USAID's CS strategy. It is successful and because it is generally so *perceived*, consideration should be given to retention of the same project title. As is to a certain extent already the case, SANRU's zone-level, horizontal-delivery concept must include more than just the normal health service interventions. Emphasis should be placed on promoting community participation in village road improvement, local consumption of agriculture, animal husbandry and fish culture, etc., in addition to water, sanitation and construction activities, all of which can be shown to impact on CS. The Village Development Committees must be active in the planning to assure locally acceptable activities. Successes will probably be limited to sites with interested, dynamic committee members (or similarly minded health center head nurses), but the effort must be made through all health centers or these individuals will not be triggered. If funding is limited, future assistance for large localized water source improvement and health facility construction

should be reduced and these funds held for whatever aid is considered warranted for activities of the types described above initiated by local committees. Peace Corps technical assistance is advisable if the community wants it. Management of SANRU would be simplified if all zones supported were in two or three regions but overall long-term impact on CS would probably be lessened. There is a word-of-mouth spread effect to neighboring, unsupported zones, particularly of promotional activities, and a potential for in-service exchange training of personnel.

- *The ASCI/CCCD Project or its equivalent.* There can be no doubt of the impact of the immunization program on CS. Cooperation with SANRU must be strengthened for delivery of services, and central-level management requires more technical assistance. Some recommendations specific to the ORT and malaria elements of this project are to be found below.
- *Family planning.* The various family planning projects have not been cost-effective statistically, but the effort must continue. Otherwise, in the long-term, population growth will negate the gains from social services assistance. This calls for continued priority emphasis on the training, supervision and information activities, effective integration of family planning services into the SANRU system, and a further effort in developing a well-coordinated supply line. Lack of an approved population policy is a serious constraint and USAID should continue to use its influence to get the policy approved. Many in top-level positions still say that however large population growth may be, it can easily be absorbed in such a vast and empty country. Some are eloquent in insisting that the low average population density is really an obstacle to development. Those involved are unaware, or haven't yet accepted, other factors. Reasoned arguments for a restrained population growth are rarely heard and these more often from non-Zairian voices. On the other hand, the positive effect of family planning on the health of mothers and children is not generally contested. Even so, there is little interest in supporting the program.

We know RAPIDS and Story Board presentations have been made to selected groups, but a second effort is needed. To be convincing the presenter must be thoroughly familiar with the material, completely fluent in French and have an authoritative but pleasing manner. We have seen many RAPIDS failures. The few real successes were with presenters blessed with all three of the above qualities. A successful example was a presentation to the president of one central African country by Paul Marc Henry, a respected, informed French statesman. He was held for an extra hour with excellent end results. The ideal would be a Zairian or someone from another French speaking African country. Dr. Sabwa Matanda, initiator of the Desired Births Program is a possibility, as is Prof. Mutatch Kayombo of Sendwe Hospital in Lubumbishi. Targets--always in small groups--are Ministers and upper level Ministry personnel, particularly health and education, members of parliament, CEOs from the business community and mass media personalities. These presentations will not directly counteract the basic con-

straint (husbands and clan) that prevents mothers from spacing and finally limiting births, acts already acceptable in principle to them as logical steps for their own and their children's health. However, the attitude at the central level must be changed for there to be real support for all aspects of the family planning program on down the line.

The RAPIDS approach is not required for the nurses in the zones. They just need to be convinced of the importance of family planning for the health of mother and child. Currently, many male nurses don't seem to have accepted this. USAID should continue to stress this training through SANRU and PSND. PSND, SANRU and AZBEF should be encouraged to develop a coordinated contraceptive supply system. Family planning training should be given to all nurses, not just to a selected individual from each health facility.

- *The School of Public Health.* This successful program is too important for the long-term management needs of the health services delivery system to be allowed to founder. Assistance will have to continue until endowments or some other financial support mechanism is in place. The current 25-student level should be increased to 40 in order to fully benefit from the available staff, library and laboratory facilities.
4. With reference to HIV/AIDS, continue to expand provision of HIV-Quick test capacity to General Reference Hospitals through SANRU and the distribution of condoms, with appropriate IEC, through family planning activities. Avoid pre-empting the still-crystalizing major program assistance expected from other donors while remaining ready to complement it.
 5. Building management skills has been a major element in USAID assistance and the positive results were evident in our contacts with MCZs. The effort with administrative officers and nurse-supervisors must continue. Continue to use Peace Corps in financial management training. Manuals not yet available for any of the eight management systems should be prepared and distributed to the responsible staff members. The importance of supervision at the zone and health center levels cannot be overstressed.
 6. Also in the management system area, cooperate in the development of a national health information system (HIS). The need for a standardized HIS was discussed in Section V. The African Development Bank and the World Bank are together addressing this important project.
 7. Sponsor national seminars comprised of key national and regional nursing school officials to establish a standardized PHC curriculum for each level of nurses' training. Support efforts to enforce licensing and inspection of schools for nursing. The proliferation of "diploma mill" nurses' training schools all over Zaire has produced an available pool of incompetent personnel, many of whom have found places in

health zone facilities. Overstaffing with poorly-trained personnel was a more frequently-heard complaint on our field visits than was a lack of personnel.

8. Malaria is the most frustrating to address of the major contributors to child mortality. Increase the emphasis on malaria treatment and control in the ASCI/CCCD Project. Monitor research on resistant strains of malaria.
9. Use the Agency's influence in support of legal status for health zones where zonal administrators currently cannot open bank accounts and where there are conflicts concerning authority.
10. Consolidate past and ongoing Child Survival-related studies; routine reporting documents and sentinel site surveys; analyze data and update it annually. It is estimated that a minimum of three months would be required to prepare this data base, allowing for extensive visits with all USAID-assisted projects, and for multiple field visits to collect information on studies performed.
11. Chronic malnutrition being a major contributor to child mortality, place more emphasis on good dietary practices. Both urban and rural IEC activities relative to good weaning practices and urban IEC discouraging the introduction of substitutes for maternal milk are called for. The growth monitoring programs must be improved by better counseling for mothers whose children are not gaining weight properly.
12. An evaluation of field use of solar energy refrigeration is needed. International data suggests that solar powered refrigeration is not cost-effective, but this may not be the case in Zaire, with its enormous distances from energy sources and where there is local production of the refrigerators. Also there are local technicians at hand and locally available spare parts.
13. Suggest that the MOH broaden availability of health services by training private pharmacy operators as dispensers of advice on birth control, AIDS prevention, proper use of hypodermics and treatment of malaria and diarrhea. This training could be a requirement for the pharmacy license. Note: The Bandundu team counted 50 pharmacies between the airfield and central Kikwit. A random stop found one of these had 30 regular customers for contraceptive pill resupply.

Time did not allow for discussion of *all* the recommendations that individual team members felt warranted. The reader will find these additional recommendations in the team member reports.

ANNEX A

DOCUMENTATION

I. For All USAID Projects

Project Implementation Reports (PIRs) for 3rd and 4th quarters FY 1989

II. Bilateral Projects

A. Basic Rural Health II (SANRU II 660-0107)

Project Paper

Project Grant Agreement

Project Grant Agreement - Water Component (BRH II)

Project Agreement Amendments, #1 - March 1986; #2 - December 1986; #3 - 3/89

Evaluation of BRH II - December 1986 (evaluated jointly with BRH I)

USAID Audit of Rural Health Projects in Zaire

B. Shaba Refugee Health Project (660-0114)

Amendment to Cooperative Agreement, June 1989

C. Shaba Refugee Water Project (660-0116)

Project Paper, February 1985

Accord de Cooperation, March 1985

Cooperative Agreement between USAID and AIDRZ, June 1985

Cooperative Agreement between USAID and AIDRZ, August 1986

Cooperative Agreement Amendment, November 1988

Amendment #1 to Project Implementation Letter (PIL) #4

Project Evaluation - Shaba Refugee Health 660-0114 & Shaba Refugee Roads,
660-0115, September 1986

Cooperative Project Agreement Amendments, August 1986 and November 1988

D. Area Nutrition Improvement Project (660-0079)

Project Grant Agreement, September 1982

Final Evaluation of Area Nutrition Improvement

E. Title II - Maternal Child Health Component (660-0079)

Project Paper Amendment, May 1985
Cooperative Agreement between AID and ORT re: PL 480 Title II Program
PL 480 Title II Annual Progress Report, 1988
Operational Plan FY 1989, April 1988
Presentation of project activities, May 1988
Status report, November 1988
Contract between American ORT Federation and Victoria Assorted Products (VAP)
Revised Project Implementation Report 1988-1990, December 1988
Interim Evaluation of AID-ORT Title II Project, April 1987

F. Family Planning Services Project (FPSP) (660-0094)

Project Paper, September 1982
Project Paper Amendment #1, March 1987
Project Paper Amendment #2, August 1988
Annexe IA Supplement au Document du Projet
Annexe IB Description Amplifiee du Projet Amende
Project Grant Agreement, September 1982
Project Agreement Amendments: #1 12/82, #2 6/84, #3 3/87, #4 8/88, #5 3/89
Mid-term evaluation June 1985
USAID Population Strategy - Zaire 1985-1995 (FY 87 update), May 1987
Politique Nationale de la Population au Zaire, December 1986
Attachment A - Resume de la Conception du Projet Cadre d'Analyse Logique
Continuation and Expansion of Family Planning Operations Research in Zaire,
Tulane University, December 1989
Contraceptive Marketing in Zaire 1988-89, Bertrand, Tulane U., September 1989.

G. Kimbanguist Hospital Assistance (660-0122)

Contrat de cooperation pour un projet de creation d'un centre hospitalier a
Kinshasa, Zaire
Operational Program Grant
Operational Program Grant - Amendments #1 and #2
Report on Operations of the Kimbanguist Hospital of Kimbanseke Zone, 10/88
Progress Report, October 1989.

H. School of Public Health (SPH 660-0101)

Original Project Paper, 1984
Project Agreement Annex A, August 1984
Amendment to Project Paper, July 1987
Project Agreement Amendments: #1 5/85, #2 3/86, #3 8/87, #4 5/89

Mid-term evaluation, July 1987

Rapport d'activites 1987-1988, Dr. Kashala Diong and Dr. W.E. Bertrand, 12/88

III. Regional Projects

A. Africa Child Survival Initiative (ACSI/CCCD) Project (698-0421)

Action Memorandum for the Administrator, 1981

Project Agreement, 1982

Project Agreement Amdts.: #1 5/83, #2 7/85, #3 8/86, #4 8/87, #5 7/88, #6 3/89

Project Paper - Amended version, 1986

Amplified Description of Project, 1986, Annex 2

Annual Report, 1986

Annual Report, 1987

Accomplishments of PEV/CCCD, 1988

ACSI/CCCD Project, Mid-term evaluation, November 1988.

B. Zaire HIV/AIDS Control Project (698-074)

Project Paper, June 1988

Action Memorandum for the Director, 1988

Implementation Plan for the IE&C/Mass Media AIDS Prevention Project
(IE&C:MMAPP), February 1989

Implementation Plan for the IE&C/Mass Media AIDS Prevention Project
(IE&C:MMAPP), December 1989

USAID/Zaire AIDS and AIDS-Related Activities, December 1989

Abstracts submitted by the Project SIDA for VI International Conference, 1990.

IV. Centrally Funded Projects

A. HealthCom (Communication for Child Survival) Project

Memorandum d'Accord, 1987

Fiche du Projet Propose par HealthCom pour le Zaire (Appendix B)

HealthCom Trip Report, November 1988

Evaluation of HealthCom Activities in Lubumbashi Area.

B. PRICOR (Primary Health Care Operations Research)

Rapport Preliminaire PRICOR II

Analyse Systematique sur le *Systeme de Soins de Sante Primaire au Zaire*, Mpese &
Greenberger, September 1987

Sommaire Synthetique des Activites de collaboration SANRU II/PRICOR Iik, 87-88
Situation Actuelle: Projet PRICOR, November 1989
Dissemination Plan PRICOR Zaire, January 1989
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PRICOR Zaire Systems Analysis Preliminary Report, 1987
The Weaning Project/Kinshasa, CEPLANUT & Manoff Int., January 1988.

C. OPTIONS - (Options for Population Policy) Project

Country Report: Zaire, July 1989
Zaire Quarterly Report #1, March 1989
Zaire Quarterly Report #3, November 1989.

D. REACH - (Resources for Child Health) Project

Reports from REACH

Analysis of Preventive Care Data from Zaire, January 1989
Household Health Care Demand Study; Vol. I, Methodology, September 1988;
Vol. II, Utilization Patterns, September 1988
Financial Management Information Systems in Four Zairian Health Zones,
December 1987
Etude sur le Financement des Zones de Sante au Zaire, June-October 1986
A 1986 Update of the Zaire Health Zones Financing System, December 1987
Long Term Health Care Financing Study in Zaire - Trip Report, 4/88
1988 Update of the Zaire Health Zones Financing Study, April 1988.

E. INTRAH (Program for International Training in Health)

Contract (amended) between University of North Carolina and PSND
INTRAH Country report, October 1988 - March 1989
INTRAH Country report, April 1989 - September 1989
INTRAH Trip Report - Impact Studies and Final Reviews of INTRAH/AZBEF and
INTRAH/PSND projects, June 1989.

F. TIPPS (Teaching Information on Population for the Private Sector) Project

Preliminary Proposal/Scope of Work
TIPPS/PLZ Family Planning and Child Survival Study
TIPPS Strategy in Zaire, May 1989
TIPPS Cost Benefit Model.

V. Additional Reports, Papers, and Data Sources

1. Africa Child Survival Initiative, 1988-1989 Annual Bilingual Report
2. World Bank - Health Sector Analysis 1987
3. USAID Child Survival Action Plan 1987
4. USAID Child Survival - A second report to Congress on the AID Program
5. Volet Surveillance et Promotion de la Croissance du Projet Ecole de Sante Publique (660-0101)
6. Impact of CCCD Project in Zaire, March 1988
7. Strategy of Measles Control in Kinshasa
8. Etude sur l'Impact des Services de Sante sur l'Etat de Sante de la Population
9. Rapport de Surveillance de la Poliomyelite dans la Ville de Kinshasa, 6/87
10. Contraceptive Marketing in Zaire, 1988-89, A Sentinel Site Survey, J. Bertrand, Tulane U., September 1989
11. "The Role of the Community Participation in Managing Primary Health Care in Zaire." Franklin C. Baer - Project Management SANRU
12. Report: Surveillance Nutritionnelle dans la Region de Bandundu
13. Causes of Infant Mortality and Sources of Treatment in Karawa Health Zone, Zaire
14. GOZ Primary Health Care Strategy
15. Traditional Methods of Birth Control in Zaire, Waife, Pathpapers, 12/78
16. USAID Zaire Child Survival Action Plan, 1987
17. Health Sector Financial Strategy - USAID/HPN Office, February 1989
18. Table Ronde des Bailleurs de Fond sur les Secteurs Sociaux - Dept. du Plan, Vol. I, Zaire, October 1989
19. Sustainability of US-Supported Health, Population and Nutrition Programs in Zaire: 1972-88; December 1989
20. Analyse de la Situation de l'Enfant au Zaire, UNICEF - Zaire, 11/86
21. Developpement Integre des Soins de Sante Primaires au Zaire, Barry, UNICEF 12/88
22. "Sur la Couverture Vaccinale" - PEV - UNICEF/Zaire, 5/89
23. Child Survival Implementation Report, Bureau for Africa, 9/89
24. Les Structures du Dept. de la Sante Publique
25. An Action Plan for FY89-FY91, The Development Fund for Africa (DFA), 3/89
26. Measuring Use of Oral Rehydration: Conceptual Issues & Evidence from HealthCom Surveys, U. of Pennsylvania, 8/88
27. Programme National de Lutte Contre le SIDA - Dept. de la Sante Publique - lan a Moyen Terme, 1988-92
28. A.I.D. Policy Paper - Health Assistance, 12/86
29. Zaire Social Marketing Project - A Summary, Population Services International
30. Zaire Trip Report - Family Planning Management Project, Huise & Seims, 9/87
31. Analyse de la Situation des Femmes, Meres et Enfants au Zaire, UNICEF
32. Program Review of AZBEF, Evaluation and Audit Dept, IPPF, 10/87

33. Planning Primary Health Care Resources for Zaire, Franklin Baer, 6/85
34. Rapport sur le Secteur de la Sante, Zaire, World Bank, 1988
35. Rapport Annuel, BCZ (Bureau Central de Sante) de Vanga (Bandundu), 1988
36. Rapport Annuel, Conference Episcopale du Zaire, BOM (Bureau des Oeuvres Medicales), 1988
37. Rapports epidemiologiques annuels, Services Statistiques, Mama Yemo: 1985, 1986, 1987, 1988
38. Techniques de collecte et d'analyse de donnees sur la mortalite perinatal a Kinshasa, Zaire - Nkhela, Nzita D., CRDI, Ottawa, 1988
39. Morbidite et mortalite infantiles et juveniles a Kinshasa, Niveaux et determinants - Pitshandenge, Ngondo & Gamboa, U. of Kinshasa, 4/88
40. La Situation des enfants dans le monde, UNICEF, New York, 1989
41. Etude Ethnomedicale: Malades Diartheiques, TRO, et Vaccinations a Lubumashi - Yoder, Stanley P. and Bihini Yanka, HealthCom, USAID.

ANNEX B

INDIVIDUALS & ORGANIZATIONS CONTACTED

1. Nicolas G. Adrien, Technical Advisor, National Rural Water Services, Kinshasa
2. Neen Alrutz, S&T/Health, AID/Washington
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6. William Bertrand, Technical Advisor, School of Public Health, Kinshasa (Tulane University)
7. Bitegetse-Imana, Deputy Director, Central Coordinating Bureau, National AIDS Committee, DSP, Kinshasa
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9. Steven Brewster, Project Administrator, SANRU, Kinshasa
10. Jerome Chevalier, World Bank Representative, Zaire
11. Chirwisa Chiramolekwa, Project Director, PSND, DSP, Kinshasa
12. Joe Deering, Technical Advisor, OPTIONS Project, Kinshasa
13. Dikasa Lusamba, School of Public Health Kinshasa
14. Jay A. Drosin, Project Manager ORT-AID, Food for Peace, Kinshasa
15. Duale Sambei, Project Direction, SANRU, Kinshasa
16. Carlos Ferreros, Director, Social Marketing Project, Kinshasa
17. Lauren Greenberger, Field Director, CHS PRICOR Project, Zaire
18. George Kakera, Pharmacist, Social Marketing Project, Zaire

19. Kashala Diogi, School of Public Health Kinshasa
20. Kasonga Ntambue, Infrastructure Section, SANRU, Kinshasa
21. Kidinda Shandungo, Training and Documentation, SANRO, Kinshasa
22. Liambi Aundu, Medical Director, BCC, National AIDS Committee, DSP, Kinshasa
23. Herve de Lys, Resident Advisor, OPTIONS/PSND, Kinshasa
24. Madziela, Project SIDA, Mama Yemo Hospital, Kinshasa
25. Manungu, Training and Research, PEV, Kinshasa
26. Masumbuko, Rugina, Planning, Evaluation and Formation, National Rural Water Service, Kinshasa
27. Miaka mia Bilenge, Director, PEV, Kinshasa
28. Miatudila Malonga, World Bank, Washington
29. Milenge Kibwa, Studies and Ops Research, SANRU, Kinshasa
30. Mivumbi Nginge, Sales Operations, Social Marketing Project, Kinshasa
31. Beth Morocco, HPN Project Monitor, AID, Kikwit
32. Kevin Murphy, Epidemiologist, Centers for Disease Control, Atlanta, Georgia
33. Mutombo, Coordinator, Maladies Diarrhetiques, PEV, Kinshasa
34. Muwongo Masidi, Medical Director, Kimbanguist Hospital, Kinshasa
35. Diasolua Nguid, Dep. Director, Field Office CEPLANUT, Kikwit
36. Tin Sy Nguyen, Engineer Technical Advisor, ISROS, Shaba
37. Bena N'Silu, Kimbanguist Church Leader
38. Paluku, Malaria Coordinator, PEV, Kinshasa
39. Glen Post, S&T/Health, AID/Washington
40. Gerald Rosenthal, Associate Director for Health Finance, REACH, Washington
41. Robin Ryder, Project Director, SIDA, Kinshasa

42. James Sheppard, S&T/Health, AID/Washington
43. Craig Smith, Agronomist, USAID, Kikwit
44. Snacken, Belgian Cooperant, Medical Technical Advisor, Kikwit
45. Lukono Sowa, Director, National Rural Water Service, Kinshasa
46. Tshioko, Kweteringa, Medecin Coordinateur, PEV, Kasai, Occidental
47. Tswakata Masam, Deputy Director, Sante pour Tous, Kinshasa
48. Karn Wilkins, Technical Advisor, PEV, Kinshasa
49. Yamba, Studies and Operations Research, SANRU, Kinshasa
50. David Zielke, Field Management Officer, USAID, Kikwit

Other Individuals

- Regional and Sous-Regional Medical Directors (3)
- Regional Medical Inspectors (2)
- Urban Medical Inspectors (2)
- PEV Antenne Coordinators (2)
- Zone Health Personnel at all levels
- Catholic and Protestant expatriate physicians and nurses
- Medecins sans Frontieres (1)
- Kimbanguist dispensary personnel (3)
- Peace Corps Volunteers, Agriculture and Fisheries (5)

Organizations

- Association Zairoise de Bien-Etre Familiale (AZBEF)
- Center for Nutrition Planning (CEPLANUT)
- Kimbanguist Hospital
- Mama Yemo Hospital
- National Statistical Institute
- U.S. Peace Corps
- UNDP
- UNFPA
- UNICEF
- UNIKIN
- USAID/Kinshasa (15)
- World Bank
- World Health Organization

ANNEX C

SCOPE OF WORK

ARTICLE III - STATEMENT OF WORK

The evaluation team will research, analyze, report on and provide recommendations on the following items:

A. Overall Strategy

1. Appropriateness, effectiveness, and efficiency of a strategy which delivers CS interventions through a network of many different project; comprehensiveness, manageability and cohesiveness of strategy and structures for implementation; relative emphasis on different activities. Coordination and consistency among projects; potential and possibilities for non-project assistance to CS sector.
2. Relation of USAID/Zaire's CS strategy to the Africa Bureau's CS strategy and the Africa bureau's action plan.

(Continued on Next Page)

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3. Productivity, efficiency, and effectiveness of implementation of CS-activities by the public sector, NGO sector, and for-profit private sector, and appropriate roles for each.
 4. Relationship between USAID/Zaire's CS strategy and: USAID/Zaire's agriculture sector strategy; transportation sector strategy; private sector strategy.
 5. Sensitivity and attention to the role of women in development and gender issues.
 6. Adequacy and effectiveness of Human Resource Development efforts; capacity for institutionalized training and manpower development.
 7. Relation to the GOZ National Primary Health Care strategy, particularly its CS initiatives; policy impediment to increasing the effectiveness of the delivery of CS interventions; appropriateness and achievement of USAID efforts at policy dialogue and reform.
 8. Resources allocation in term of a) Health benefits per dollar of investment by type of intervention b) Relative proportion allocated to public institutions, GOS, and private institutions, c) proportional investment in particular interventions. Suggestions on possible reallocation of existing monies to achieve high CS impact.
 9. Role of income and nutritional constraints on the expected impact of incremental expenditures on CS activities.
- B. Overall results (People-level impact)
1. Evidence of results to date of CS interventions on higher-level indicators including child survival rates.
 2. Relationship between gains in child survival and nutritional status of target populations.
 3. Relationship between the population's ability to pay and access to CS interventions.
 4. Appropriateness and adequacy of impact studies conducted to date.
 5. Appropriateness and adequacy present and planned monitoring activities, and evaluations for overall assessment of results.

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C. Targets

1. Progress made to date in meeting the following CS strategy targets:
 - A. Establishment of a sustainable community-supported primary health care system (to support delivery of child survival interventions).
 - B. Increased capacity of the GOZ to plan, implement, and evaluate programs to combat childhood communicable diseases.
 - C. Increased capacity to train health personnel in-country (School of Public Health Project: 660-0101).
 - D. Improved planning, management, and technical capacity within the National Nutrition Planning Center (CEPLANUT).
 - E. Implementation of a targeted, time-limited maternal child health (Title II ORT) Program for Kinshasa.
 - F. Strengthen and expand family Planning services delivery (Family Planning Services Project.)
 - G. Promote population policy development.
2. Constraints impeding the accomplishment of the above targets and associated benchmarks.
3. Recommendations for future implementation of activities in light of constraints identified.

D. Immunization Activities

1. Focus on immunization activities within CS Strategy.
2. Status of immunization activities and effect on A) The National immunization policy; B) The number/percentage of health zones providing immunization; C) Access of target populations to immunization; D) Immunization coverage of target population; E) Quality of delivery of services (performance of critical tasks); F) Reduction in disease specific morbidity, mortality or disability.
3. Allocation of resources to immunization and indications on cost-effectiveness.
4. Emphasis on institutional capacity development to sustain host country immunization service delivery.

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E. Oral rehydration therapy activities.

1. Focus on ORT activities within the CS strategy.
2. Status of ORT activities and effects on A) the National ORT Policy; B) The number/percentage of health zones providing ORT for diarrhea; C) Percentage of Diarrhea cases of children under five appropriately treated with ORT at health facilities; D) Percentage of diarrhea cases appropriately treated at home; E) Reduction in diarrhea hospital admissions and diarrhea hospital mortality, due to appropriate health facility/home management of diarrhea.
3. Emphasis on dietary management of diarrhea.
4. Use of comprehensive approaches to communication, including mass media, to promote and sustain the correct use of ORT and improved dietary management of diarrhea.
5. Types and magnitude of ORT training provided including physician training.
6. Combination of home-mix and packet-based ORT programs and plans for home treatment of diarrhea.
7. Involvement of the private sector to distribute and promote ORT and to produce ORS packets.
8. Efforts to build a sustained capacity to deliver ORT.

F. Malaria activities.

1. Focus on malaria activities within the CS Strategy.
2. Status of Malaria activities and effects on A) The National Malaria Policy and Adherence to Policy; B) Malaria treatment and chemoprophylaxis practices; C) Availability of first and second line antimalarials, D) Percentage of fevers given presumptive treatment at health facilities; E) Percentage of fevers treated appropriately at home; F) Development and functioning of sentinel drug sensitivity surveillance systems.
3. Efforts to build sustainability of activities/effects.

G. Nutrition Activities.

1. Emphasis on nutrition activities within th CS strategy.

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2. Present status/implementation of A) Activities promoting breast-feeding; B) Activities related to better weaning practices; C) Activities promoting dietary management of diarrhea; D) Growth monitoring activities and research; E) Targeted supplementary feeding activities; F) Plans for integrating nutrition objectives and activities into agriculture projects.
3. Efforts to build sustainability of Activities/effects.

H. Child Spacing Activities

1. Present, status of activities with respect to: a) Policy dialogue; b) Training and supervision of service providers in High-risk births; c) Information and services for clients; d) Operational research on child spacing services; e) Targeting of services specifically to avert high-risk births.
2. Effect of activities on access to voluntary family planning services, specifically, progress made in meeting couple years of protection (CYP) goals; problems encountered and proposed solutions.
3. Efforts to build sustainability of activities/effects.

I. Water and Sanitation Activities

1. Effects of water and sanitation activities on a) percentage of children under five with access to clean drinking water; adequate sanitation; b) reduction in diarrheal diseases in children under five residing in Shaba and BRH-II water project-assisted zones.
2. Efforts to build sustainability of activities/effects

J. AIDS Prevention Activities

1. Effects of a coordinated information, education and communication strategy on HIV/AIDS transmission on child survival, particularly with respect to decreased peri-natal transmission.
2. Present status of institutionalization of IEC activities into the Central Coordinating Bureau of the National Aids Committee.
3. Present status of School of Public Health's capacity to perform quality social and behavioral research with respect to AIDS prevention.

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K. Other

1. Level of host government support for the CS strategy and activities in terms of policy and resource allocation.
2. Capacity of GOZ management and administrative structure to support and finance, without long-term assistance bilateral, regional and centrally-supported CS activities, at present and project levels.
3. Role of central institutions such as Fonames, Sanru, Pev, etc. in the CS strategy and their ability to manage CS programming and activities in Zaire.
4. Level of Donor Coordination and Means for Strengthening
5. Use and Appropriateness of Modern Communication Strategy and Ways to Improve.