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## **HEALTHCOM IN NIGERIA**

### **FINAL CASE STUDY EVALUATION REPORT**

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**ABBREVIATIONS**

AED	Academy for Educational Development
ARHEC	African Regional Health Education Centre
CIHDC	Center for International, Health, and Development Communication
CCCD	Combatting Childhood Communicable Diseases
CDD	Control of Diarrhoeal Disease
CEU	Continuing Education Unit
EPI	Expanded Programme on Immunizations
FRCN	Federal Radio Corporation of Nigeria
HEU	Health Education Unit
HOD	Head of Department
IEC	Information, Education, Communication
LGA	Local Government Area
MOH	Ministry of Health
NGO	Non Government Organization.
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PRITECH	Technologies for Primary Health Care
PSMB	Primary School Management Board
TBA	Traditional Birth Attendant
ZLO	Zonal Liaison Officer

## EXECUTIVE SUMMARY

This evaluation report focuses on three aspects of HEALTHCOM activities with information collected in August 1991. The report discusses evidence of the impact of the project on how health education is conducted in Niger State including the institutionalization of the HEALTHCOM methodology. The report assesses the impact of the project interventions in Rafi and Suleja LGAs with particular attention to treatment of malaria and immunizations. Finally, to some extent, the report describes the impact of the project on health education at the Federal level. Comments are also made about the initial impact of the workshops for the states of Zone C.

### *HEALTHCOM in Niger State*

The initial objectives of the HEALTHCOM project in Niger State were to improve the quality of health education in the state and to assist the Health Education Unit (HEU) in the promotion of immunization and oral rehydration for diarrhea. The project sought to improve the health education performance of health care workers and change the behavior of mothers in bringing young children to health centers for immunizations and in managing cases of diarrhea. About one year into the project, activities focused on health education and immunizations rather than on oral rehydration, partially because of ambiguities in the government policy on ORT promotion.

Since the project was based within the Health Education Unit of the Ministry of Health (MOH) of Niger State, one of the operational objectives was to improve the quality of the health education conducted by the HEU. The evaluation team found that health education was now given a higher priority by the MOH than in 1987. The HEU now has its own budget line in the annual budget and personnel from the HEU work regularly with radio and television producers. The project persuaded the MOH to finance the expansion of the HEU by constructing a graphics unit and a dark room for the HEU and by hiring a graphic artist as a regular staff member.

The impact of HEALTHCOM is less clear with regard to training of personnel within the HEU in the HEALTHCOM methodology of formative research, message development, and the planning of a communication strategy. Judging from discussions with HEU staff, the methodology taught in Niger State consisted of three key elements: the use of focus groups and informal interviews to determine the level of popular knowledge about childhood diseases, the importance of pretesting print and radio messages before diffusion, and the wide use of print materials in face-to-face communication. Personnel from the HEU have recently used aspects of the HEALTHCOM methodology in their involvement with new development projects. The importance of pretesting seems to be the element that has been the most widely assimilated. The development and distribution of flip charts for use in giving health talks to all the health centers in Niger State is the clearest example of the use of print materials in health education. The planning aspects were taught in several workshops but it was not clear to what extent that will be continued.

The project succeeded in establishing a pattern of close collaboration between health educators of the HEU and personnel from the radio and television stations in Minna. The project organized two major workshops in 1988 and 1989 that brought together radio and television producers with health educators who together discussed formative research results and developed messages about immunizations that were pretested and produced. The radio producers learned both a new way of preparing radio broadcasts that used popular knowledge as a base, and they learned to use personnel from the HEU as resource persons

for technical information about health issues. In addition, HEALTHCOM provided the producers with tape recorders and cassettes for use in pretesting messages. In interviews with the radio producers and individuals from the HEU, everyone cited this collaboration as an effect of the HEALTHCOM project. In order for radio producers to follow this model of message development and pretesting in the future, someone from the HEU or the radio must provide encouragement, and funds for transport and the purchase of equipment for pretesting must be made available.

The impact of the project on immunization coverage is difficult to assess with the data available, both because the strategy of the federal government to plan annual special immunization days masked coverage changes due to advertising alone, and because current data are problematic. For each of the special campaigns in 1988, 1989, and 1990, the project played a major role in assisting the HEU with the publicity campaign. That publicity campaign included the preparation of signs advertising the campaign, special radio spots about EPI, and for the 1990 campaign, the construction of about 30 billboards scattered throughout the state. Yet it is not possible to separate the impact of the project itself without survey data from the population. Most probably, the immunization coverage increased from 1988 to 1990 through the strategy of special immunization days, as temporary sites were created and mobile teams traveled to remote areas. HEALTHCOM organized the publicity for those intense efforts.

The assessment of the HEALTHCOM project by personnel from the MOH in Minna was remarkably consistent. While expressing satisfaction that the project had given a new priority to health education per se, and that collaboration between the media and the HEU was a permanent pattern, dissatisfaction about the planning and management style of HEALTHCOM was clearly expressed. These persons found that the project did not involve them sufficiently in the planning of HEALTHCOM activities and did not inform them about the extent of project resources available. They were critical of the way the project was directed from the outside, either Lagos or Washington. If a greater degree of involvement and a feeling of ownership by the HEU staff had been developed, the level of support and enthusiasm for HEALTHCOM would have been increased.

The project was also criticized for not working sufficiently with other development projects in Niger State. In fact, before the LGA intervention, there was not much evidence of collaboration with the CCCD or UNICEF who were both involved in primary health care activities in Niger State. This appeared to be related to the management style of the project which was directed from the outside--Lagos or Washington--and the fact that the Resident Advisor was based in Lagos for the first part of the project.

#### *HEALTHCOM in Rafi and Suleja Local Government Areas*

From September 1989 to September 1990 HEALTHCOM took the lead in a series of interventions in Rafi and Suleja Local Government Areas (LGA). These interventions were conducted jointly with the MOH, UNICEF, health officials from the two LGAs, and the Primary School Management Board. The major objectives included the improvement of the health of school pupils by the provision of potable water and improved personal hygiene, the organization of school health clubs in five schools in each LGA, the improvement of the treatment of fevers (presumed malaria) in five health centers in each LGA, and the increase of immunizations for measles in those health centers. Schools were also to receive plastic drums to provide potable water for pupils. One-week workshops were held for screeners and vaccinators from health facilities, for teachers from the five schools, and for traditional birth attendants and members of some non-government organizations. Baseline surveys about priority health problems and knowledge of EPI were conducted by the African Regional Health Education Centre (ARHEC) in the two LGAs before

the intervention. The workshops were held from March to early May, 1990. A system for monitoring the intervention by an outside person was also established. All the training for the intervention activities was completed by the end of May 1990.

Discussions held with headmasters and teachers from participating schools showed that they had received the materials for potable water and instructional materials to be used in teaching about personal hygiene, prevention of malaria and rapid treatment of fever, and measles immunizations. School health clubs were started in each of the schools. The central idea of the health clubs was to encourage pupils to speak to their parents about malaria and measles immunizations. Personnel from several health centers reported that mothers told them their children had spoken to them about immunization of their siblings.

The impact of the intervention on treatment of malaria was monitored through a reporting form distributed to health center staff. Those forms were filled out by health workers rather sporadically in July and August, and only occasionally after that. A review of those forms showed there was no change in the number of days that parents waited before bringing a child with fever for malaria treatment. No evidence was found that the intervention had any impact on malaria treatment. The health workers interviewed who had used the reporting form did not understand its purpose but they filled out the form for some time anyway.

Evidence of the impact of the intervention on measles immunization was to come from referral forms being returned to health centers after parents had received them from their children. In only one center were any of those forms found, and only five were found dating from July 1990. This system of referral forms was not well understood and failed to show any impact. Records of measles immunizations from the participating health facilities, month by month from 1988 to June 1991 were also examined to check for increases after the intervention. These records failed to show any increase in measles immunizations during the intervention.

The LGA intervention succeeded in establishing a collaboration among a group of organizations with a common goal and in obtaining the full support of LGA officials. School health clubs were also formed in the schools. The outcome indicators related to treatment of fevers and immunization for measles did not show any impact at that level.

Among the reasons that could be cited for this lack of impact are the following: One, the objectives of the intervention, particularly regarding the school health club part, were too broadly defined at the outset. With such a wide range of objectives, training programs become vague and indicators of success too numerous. Two, the training given to personnel was not sufficiently clear and the participants did not fully understand what was expected. This was a question of both time spent and complexity of concepts to be communicated. Three, while pupils may be willing to participate in health clubs if asked by their teachers to participate and if they are given markers such as caps and tee shirts, it may be too much to ask of them to speak to their parents about measles and immunizations and then expect to have a measurable effect. And four, the system of monitoring and supervision was stopped in September when funding was terminated.

These reasons all concern the functioning of the project. Also pertinent is the fact that the USAID mission did not release funds promised for the training phase, and that the time period was extremely short to show an effect on behavior. The funding uncertainties caused delays in implementation and a premature shutdown of project activities.

*HEALTHCOM at the Federal Level*

The primary objective of HEALTHCOM at the federal level was to improve the capacity of the HEU in Lagos to conduct health education. The project involved the HEU staff in training workshops to teach them about developing and pretesting messages and the use of graphics in health promotion. HEALTHCOM hired a graphic artist and a materials development specialist to work full time within the HEU to work with equipment purchased by HEALTHCOM and given to the Federal HEU.

The project succeeded in upgrading the graphics capabilities of the HEU dramatically through this combination of training and purchase of equipment. In addition, several members of the HEU staff participated in training workshops in materials development, pretesting and planning communication strategies. However, since the FMOH counterparts to HEALTHCOM were changed four times, no one was sufficiently trained in the HEALTHCOM methodology to carry on by themselves. A number of individuals profited by participation in workshops and learned aspects of a new way to develop messages, pretest materials in the population, and plan their overall strategy.

At the level of zones (groups of states) HEALTHCOM organized two major interventions. One, the six states of Zone C sent radio producers and health educators to a workshop designed to show how popular knowledge can be used in message development and production, and how to plan and produce radio health programs over time. A three week workshop was held in July 1988 in Minna and Kaduna and a follow up was held in March 1989. During the follow up workshop the groups from each state reported on what they had accomplished the past six months in health education for their state. Two, media representatives and health educators from each Zone B state participated in a workshop in 1989 designed to establish collaboration between health educators and media personnel and to demonstrate how they could conduct brief research projects in their states in order to have a better basis for designing health communication programs.

## INTRODUCTION

### *HEALTHCOM Program Objectives*

The original project documents of the HEALTHCOM project formulated three principal objectives for the project to achieve between May 1987 and September 1990.

1. To develop and demonstrate innovative and effective methods of public health communication.
2. To strengthen national and state health communication capabilities through training of health and communication personnel in the design, execution and evaluation of systematic communication programming.
3. To assist in the design, production and evaluation of educational material in support of the Nigerian child Survival Programme, namely: immunizations, oral rehydration for diarrhea, malaria control, breast feeding, and child spacing.

In operationalizing these objectives early in the project, it was decided that HEALTHCOM would assist the Nigerian government at the Federal and State level in the promotion of the use of ORT for diarrhea and the immunization of children through the training of health care personnel in ORT, EPI, communication planning and management of health education activities, and the development of messages for the public regarding ORT and EPI. At the Federal level the project was attached to the Health Education Unit (HEU) of the Federal Ministry of Health (FMOH), while at the state level the focus state would be Niger State. Therefore, the project worked with the Health Education Unit of the State MOH in Minna, the capital of Niger State. The project focused on the training of health care workers and media representatives through workshops, on the production of print materials for use in health education and for diffusion to the public, and on assisting mass media personnel (radio and television) in the development, production, and diffusion of messages promoting ORT and EPI.

According to this original plan the main populations targeted by project activities were health care workers and mothers of small children in Niger State. Program objectives were expanded somewhat in 1988 at the request of the Nigerian government. The project was asked to assist the six states of Zone C (Abuja, Kaduna, Katsina, Kwara, Niger, and Sokoto) in developing a communication strategy for health education by the mass media, namely, radio and television personnel. Later that year the project initiated assistance similar to that provided to Zone C to the states of Zone B (Bendel, Lagos, Ogun, Ondo, Oyo). At the same time, the focus of project interventions shifted from ORT and EPI together to primarily immunizations. Finally, in August 1989, at the request of the USAID mission in Lagos, the project was asked to shift its focus again, to no longer work at a zonal level but focus exclusively on two Local Government Areas within Niger State, Rafi and Suleja LGAs.

Taking into account these modifications to the original plan, the program ended up working at four administrative levels. At the Federal level, the program sought to increase the capacities of the FMOH to conduct health education by building up the planning expertise and graphics capabilities of the HEU in Lagos. At the state level, the program worked with the HEU in Minna, Niger State, to increase the importance given by the state MOH to health education, to build up the graphics capabilities of the HEU, and to establish close working relationships between media representatives and health educators. The program also sought to improve the performance of health educators in health centers by involving them in training workshops. At the zonal level, the program provided training in planning of health education and development of messages to health educators and media representatives for the states of Zone C. The same effort was begun but not completed in the states of Zone B because of decision by the USAID Mission to focus on only two LGAs. Finally, at the LGA level, the program sought to improve the health of school pupils, improve the treatment of malaria, and increase immunization coverage in certain health centers of Rafi and Suleja LGAs with an intervention that involved working with both health centers and primary schools.

#### *Overall Evaluation Objectives*

The original evaluation plan prepared by the CIHDC called for formative research on the diagnosis and treatment of diarrheal disorders and knowledge of EPI, the evaluation of health care worker performances, and a baseline and follow up survey of the knowledge and use of ORT as well as knowledge of immunizations and immunization coverage in Niger State. Formative research was completed in Niger State in late 1987 and the baseline survey was conducted in March 1988. The survey aspect of the plan focused on outcome variables of the performance of health workers in giving health talks, women's knowledge of mixing the water/sugar/salt solution (SSS), the use of SSS for diarrhea, women's knowledge of immunizations, and immunization coverage, all in Niger State. After the baseline survey and the presentation of results to Niger State officials in July of 1988, it proved impossible for the CIHDC to return and conduct more evaluation research in Nigeria, partially because of limits placed on outside technical assistance by the USAID mission.

This evaluation report does not attempt to assess the impact of all of project activities at different administrative and geographic levels. Rather, the report evaluates three aspects of HEALTHCOM activities based on information collected in August 1991. One, the report discusses evidence of the institutionalization of HEALTHCOM methods for conducting health education by the HEU in Niger State, since this remained a consistent focus of project activities. Two, the report assesses the impact of the project interventions in Rafi and Suleja LGAs with particular attention to treatment of malaria and immunizations. And three, to some extent, the report describes the impact of the project on health education at the Federal level. In addition, a few comments will be made about the initial impact of the workshops for the states of Zone C.

Evidence about institutionalization in Niger State was collected through a review of project and MOH documents about specific activities, and interviews with MOH personnel associated with the HEU to discuss their current and past activities and responsibilities. The impact of the project in Rafi and Suleja was assessed by interviews with LGA officials, school teachers, and health center staff who participated in the intervention, and by the collection of data on immunizations and the treatment of malaria from the participating health facilities. Evidence on the HEALTHCOM impact on how health education is conducted at the FMOH was obtained by reviewing project documents and through interviews with individuals who had been part of the HEU at the FMOH the past few years.

### *2.3 Methods of data collection*

The assessment of the impact of the HEALTHCOM project on health education in Niger State relied primarily on interviews with personnel from the Health Education Unit in Minna or persons from the MOH. Attempts were made to review annual reports of HEU activities from the past few years but only 1989 was available. The central idea behind reading reports and interviewing individuals was to determine how the HEU current activities overall differ from those in 1987, the time when HEALTHCOM began in Niger State. Individuals were also asked about what they knew about the "HEALTHCOM methodology," about what they consider to be achievements of the project in Niger State, and about how the operations of the project could have been improved.

Evaluation of the HEALTHCOM intervention in Rafi and Suleja LGA focused on three aspects: the activities within primary schools, the treatment of malaria, and immunizations performed by participating health centers. Information about school activities was obtained by interviewing teachers about their participation in the HEALTHCOM workshop, their teaching of health subjects and the activities of school clubs. Personnel in health centers were asked about their use of the malaria treatment form and for more copies of the form. The forms were examined for changes in the duration of fevers before treatment and actual treatment. Data on the numbers of immunizations given by health centers for the past four years, month by month, were obtained from the health centers and from the central statistics office of the MOH in Minna. These data were compared and reviewed to determine the extent of the increase after the launching of the intervention. In addition, discussions were held with HEALTHCOM personnel, with MOH and UNICEF staff, and with LGA officials about the planning and launching of the intervention in the LGAs, since all of these groups participated in the planning and support of this intervention.

## **BACKGROUND**

### *The Situation of Nigeria*

With an estimated population of some 110 million people in 1990, the country of Nigeria has by far the largest population in Africa. Within the borders of the country is found enormous diversity in land and language, religion and social organization, history and economic production. The physical environment ranges from dense swamps in the south east to semi desert in the north. Although more than 200 languages are spoken, four languages are commonly used in public communication: Hausa in the north, Yoruba in the south west, Igbo in the south east, and English in all regions. The differences in religious practices remain a source of tension for Islam dominates in the north while Christianity dominates in the south.

The country has been divided into twenty-one states for administrative and political purposes. Each state has its own governor and ministries that mirror those at the Federal level. Thus each state has its own Ministry of Health, Ministry of Education, Ministry of Planning, etc. States are further divided into Local Government Areas (LGA) which are, in turn, divided into districts. In the beginning of 1991 the country had a total of 452 LGAs. For some years now the country has been ruled by a military council headed by President Ibrahim Babangida.

The division of the country into states has served as a template not only for government services per se, but also for education, manpower training, and communications. For instance, in each state are found a School of Health Technology as well as a Federal University of Technology. Each state has its own radio and television station in the capital, usually with booster stations in smaller cities. Development projects financed by donors have been generally granted on a state by state basis. The states have also been informally grouped into four zones (A,B,C,D): zone A is the northeast region, zone B the southwest, zone C the northwest, and zone D the southeast region. Training programs sometimes are planned for personnel from one entire zone at a time.

In 1991 the government decentralized control of Federal funds and of health policies so that the LGAs now receive funds directly from the central government rather than through the state governments as before. Each LGA now makes its own needs assessment in health services and can determine its own priorities for health services and communication. As a result, donor assistance will henceforth be channeled directly to LGAs with less involvement by state governments.

### *Niger State*

The government of Nigeria chose Niger State as the state where HEALTHCOM would focus most of its attention and resources. Located in the central western part of Nigeria between Kwara to the south and Sokoto state to the north, this area has strong ties to the south while still being considered a "northern

state," The population is estimated at about 2.6 million people. Besides English, Hausa is the language most widely understood in Niger state. Most people in the southern part speak Nupe, and in the east the main languages are two types of Gwari. The majority of the population belongs to the Muslim religion.

Niger state has been divided into ten Local Government Areas for administrative purposes. Each LGA is also divided into five to eight districts. Each LGA has an EPI Manager responsible for mobilizing people for special immunization days and for overseeing all aspects of immunization. Each LGA now also has a Primary Health Care (PHC) Coordinator, the person in charge of all PHC activities including EPI and CDD. Minna serves as the capitol city of the state.

In August of 1989 HEALTHCOM was asked to change its focus of attention and conduct an intervention in Rafi and Suleja LGAs in Niger State. Suleja LGA lies to the south and east of Minna and contains the town of Suleja, a rapidly growing urban area near to the new Federal Capitol, Abuja. While the majority of people in Suleja LGA speak Gwari, the inhabitants of Suleja town are more likely to speak Hausa, Yoruba, Nupe or Igbo.

The center of Rafi LGA is found some 100 kilometers west of Minna. The main local languages spoken there are Hausa, Pango and Kamuku. Rafi is almost entirely rural with a population that lives by farming and cattle raising. Rafi was chosen as one of the 52 LGAs to receive assistance from UNICEF in 1986 to develop a coherent PHC program.

### *HEALTHCOM Presence in Nigeria*

The HEALTHCOM project operated in Nigeria from May 1987 to September 1990 as part of the USAID sponsored Nigeria Child Survival Program. This program was largely funded and managed by the USAID CCCD project. The overall goal of the Child Survival Program was to strengthen Nigeria's institutional capacity to decrease morbidity and mortality among children under the age of five. In effect, HEALTHCOM was to become the communication component of the child survival program with particular attention given to immunization, the management of diarrheal disease, malaria control and birth spacing. HEALTHCOM collaborated at the Federal level with other donors such as the WHO and UNICEF who also have been managing projects concerned with child health. The private sector was involved by hiring an advertising firm St. Georges Ltd., to produce the EPI poster, the billboards, and some radio spots.

At the Federal level in the capitol city of Lagos, the program worked most closely with the Health Education Unit of the MOH. HEALTHCOM provided a materials development specialist and a graphic artist to work full time with the staff of the HEU to introduce them to the use of research and pretesting of messages for health promotion as well as to improve their graphics capabilities. Relations were established with the Federal Radio Corporation of Nigeria (FRCN) to begin a process of collaboration

between radio producers and health educators. Representatives from the FRCN as well as health educators attended each of the regional workshops held for the media.

At the level of zones (groups of states) HEALTHCOM organized two major interventions. One, the six states of Zone C sent radio producers and health educators to a workshop designed to show how popular knowledge can be used in message development and production, and how to plan and produce radio health programs over time. A three week workshop was held in July 1988 in Minna and Kaduna and a follow up was held in March 1989. During the follow up workshop the groups from each state reported on what they had accomplished the past six months in health education for their state. The EPI flip charts developed with HEALTHCOM assistance were also distributed to representatives of each of the states. Two, media representatives and health educators from each Zone B state participated in a workshop in 1989 designed to establish collaboration between health educators and media personnel and to demonstrate how they could conduct brief research projects in their states in order to have a better basis for designing health communication programs.

HEALTHCOM activities in Niger State at both the state and LGA level are described in detail elsewhere in the text. Project activities generally focused on organizing and conducting workshops for training about health education, the planning and management of health services, and the use of media in health education, and on the development of better quality print materials for use in health education.

From the beginning the project was scheduled to work to build up the health education capacity of the HEU at the Federal MOH. That level of intervention was accompanied by three other levels of emphasis. Initially that was the focus state approach which asked HEALTHCOM to work primarily in Niger State. Then it was the zonal approach in which the project was to train personnel from each state of the four zones of the country in the use of the media for health education. Finally, during the last 12 months the project focused on two LGAs within Niger State. These changes were made at the request of the Nigerian government or by the USAID mission.

### *Current Situation of HEALTHCOM*

The program ended officially on September 30, 1990 when funding was terminated. The Resident Advisor, Tony Agboola, stayed on for three months working directly for CCCD. The Nigeria Child Survival Program continues as USAID assistance through the CCCD project. It is unclear to what extent HEALTHCOM will be included in further assistance by USAID.

The CCCD contract with USAID in Lagos and the Nigerian government will soon be renewed for 18 months. USAID has been given six states in which it may work, including Niger State. The CCCD will work in two LGAs initially to establish a training program for health workers within the Schools of Health Technology of these states. By creating a Continuing Education Unit within the School of Health Technology in Niger State, the CCCD successfully trained a core group of persons able to continue

training of health care providers. These persons are available to act as facilitators as the project expands to other states as this model will be followed in the states assisted by USAID: Niger, Plateau, Anambra, Sokoto, Lagos, and Oyo.

The personnel of the MOH in Niger State would certainly welcome further assistance provided that the project involve the HEU staff in the planning as well as the implementation of the project so that a feeling of ownership can be developed. However, since both planning and implementation of health services has been decentralized, projects will now work largely through individual LGAs rather than through the state MOH.

## **HEALTH EDUCATION IN NIGER STATE**

### *Capacity for Health Education*

Since at least the early 1980s the MOH in Niger State has had a department called the Health Education Unit staffed by personnel with training largely in nutrition and environmental sanitation. In 1985 the HEU had a director with little training in health education and an assistant director with many years of experience as a nurse and one year of specialized training in health education. The state was divided into four health zones, each with two or three LGAs in them. The persons in charge of health education in each of the zones had not been trained in health education, for the MOH did not have enough trained staff to fill those positions with health educators. Health education was often being done by individuals with little training in health education.

When the HEALTHCOM program began in Niger State in 1987 eight members were working full time in the HEU, which was being led by the assistant director while the director was absent to follow a special two year course in health education. The role of the HEU was to respond to health education needs as they arose, as the MOH mobilized to respond to epidemics in the state or to prepare for special events such as World Health Day. In short, health education was considered as an intermittent activity to be organized when public participation was required. The HEU personnel who implemented these activities had little training in health education per se. It appears as though their primary role was to communicate technical knowledge about disease and illness to the public as the need arose.

In 1983 the HEU initiated a program of special training in personal hygiene and environmental sanitation for food vendors in the city to improve their food preparations. Vendors were given one week of training and were then awarded certificates. In 1985 the HEU began a similar training program for food vendors selling food to school pupils to improve the nutritional value of the foods they sold.

The acceptance of HEALTHCOM signaled that the MOH was willing to make health education a higher priority. Early in the project HEALTHCOM showed that health talks in health centers could be improved and that the use of print materials, appropriately designed and properly pretested, would make health education easier. For instance, health workers welcomed the flip charts designed for use in giving health talks. Several members of the staff participated in a series of workshops on the development of the flip chart, on new methods of teaching GRT and EPI, on working with media persons to develop and pretest messages, and on EPI management and supervision.

The operations of the HEU during 1991 in Minna differ from its operations in 1987 in several ways. One, the MOH has given the HEU its own budget line in the annual budget process so that the staff can better propose and plan its activities. That change was a result of lobbying by the HEALTHCOM project. Two, with the assistance of HEALTHCOM, the HEU staff has several times prepared communication strategies for three or six months in advance, which also represents a new approach to health education.

Three, the HEU has a graphic artist with a graphics lab and a dark room for print productions. The MOH provided the money for the construction of these two facilities and HEALTHCOM trained a graphic artist and a health educator to work in print production. The HEU now has a total of fourteen persons on the staff, including the four who are based in the health zones of the state.

HEALTHCOM has persuaded the MOH to invest funds in improving health education, it provided brief training in health education for HEU and health center personnel, and it showed how graphic materials could be used in health promotion. The project also trained two persons to operate video cameras so the HEU can provide the television station with footage for their programs. As a result, the HEU as a unit is larger, has more autonomy, and has more capability for the production of print materials and message development in 1990 than in 1987. However, for at least some months and perhaps longer, no funds have been made available for purchasing materials for these facilities and the rooms are practically empty.

The MOH has an ongoing shortage of staff trained in health education, for it is thought that health educators should be university graduates rather than lower level technicians. Therefore, many MOH personnel who are called on to do health education are graduates of the School of Health Technology which provides training in environmental sanitation and nutrition with little emphasis on health education of the public. The project was able to provide training in health education in the form of brief workshops to MOH staff and many health workers. It was not possible to assess the effect of this training per se. One can only note that these workshops contributed to giving health education a higher priority in Niger State.

The impact of HEALTHCOM is less clear with regard to training of HEU personnel in the HEALTHCOM methodology of formative research and message development. The methodology taught in Niger State consisted of three key elements: the use of focus groups and informal interviews to determine the level of popular knowledge about childhood diseases, the importance of pretesting print and radio messages before diffusion, and the wide use of print materials in face-to-face communication. The importance of pretesting seems to be the element that has been the most widely assimilated. The development and distribution of flip charts for use in giving health talks to all the health centers in Niger State is the clearest example of the use of print materials in health education.

The effect of the project on the operation of the HEU has been more by impacting several individuals than by shaping the management of the unit as a whole. That is, several persons have learned basic principles of formative research and message pretesting, skills they now apply in their work with other development projects. For a project to have a lasting effect on a department, that will not suffice, since those persons may be transferred or become otherwise engaged. While the development of the management of the HEU may not have been part of the project's objectives, this appears to have been a case of a missed opportunity to shape the work process and establish patterns that promote a certain perspective on health education.

Four reasons may be suggested for why the project did not shape the HEU into a more cohesive unit. One, four of the staff are always out in one of the four health zones. Two, the staff did not truly feel enough a part of the planning of HEALTHCOM to be truly involved in its activities and thus work more intensively together. Three, while HEALTHCOM did hold an initial and follow up workshop in management and supervision, the process of reporting to superiors was not emphasized. The workshops did emphasize the importance of developing communication plans. Four, the possibility of affecting the day-to-day style of management of the HEU in order to build collaboration and accountability may never have been a priority. Most likely, this aspect of program development was never part of planned activities.

One is left with the impression that the HEALTHCOM team did not pay sufficient attention to enlisting the real participation of the HEU in project activities. Again, this is related to the fact that the Resident Advisor was based in Lagos, as the government requested, for a long period of time. The project tried to operate at too many administrative levels at the same time for it to take full advantage of the opportunities to develop the HEU in Niger State.

#### *Health Educators and the Media*

A key element in the HEALTHCOM strategy in Nigeria was the establishment of collaboration between personnel from the media, mainly radio and television, and health educators, in the process of developing and producing messages about health. UNICEF had held regional workshops for television and radio personnel to teach them how to introduce health subjects into their programming in 1985 and 1986. Expanding on this idea, HEALTHCOM brought together representatives from radio and from health education in July 1988 for three weeks to show how health messages could be developed, pretested, and produced in a collaborative fashion. Representatives from the six states of Zone C, including Niger, participated. At that workshop the Niger State HEU staff, along with the radio personnel, developed a plan for radio broadcast of health messages for six months. A follow up workshop eight months later allowed each state to report on progress and problems they had experienced.

This workshop initiated a pattern of close collaboration between radio producers and health educators which still continues in Niger State. At the initial workshop each state pledged to name several staff members to deal with Child Survival issues and called the group a Child Survival Unit. Four radio producers from the Niger State radio in Minna were so identified, one for each language (English, Gwari, Nupe, Hausa). In discussions with these individuals in Minna they spoke with enthusiasm about being able to hold discussions with the public, then develop messages, and finally pretest and revise them before broadcast. They also described a process of consultation with persons in the HEU whenever they needed technical information about health.

Radio Niger prepared four quarterly plans for health broadcasts in 1989 in collaboration with the HEU. Each of the four languages (English, Hausa, Nupe, Gwari) was given fifteen minutes per week with one repeat broadcast, and jingles in each language were heard four times a day. Each week a different subject was chosen but the same subject was treated in all the languages. The radio station provided the time free of charge.

The situation of radio stations has now changed as they have gone commercial and must depend on outside funding for production costs of special programs. Thus UNICEF has signed a contract with Radio Niger to sponsor the weekly health programs and has provided more than 400,000 Naira for that purpose. The Family Health Services project has also provided funds for family planning programs. Radio stations no longer can allocate broadcast time free of charge.

### *Immunization Coverage Rates in Niger State*

HEALTHCOM drew attention to immunizations (EPI) in Niger State by focusing on EPI messages in a number of workshops for health educators and for health educators along with media personnel. The major print project was the development and production of a large flip chart on immunizations and a flyer with an immunization schedule that was distributed to all 68 health facilities in the state for use in health talks. Special radio spots on EPI were produced and broadcast frequently by the state radio in 1988 and 1989.

One should then expect that this promotion of immunizations has led to increased immunization coverage. Although this result is likely, it cannot be demonstrated without having both survey data and a way to isolate project impact from the government intensive special immunization days campaigns.

The evaluation of the project on immunization coverage is difficult to assess with the data available, both because the strategy of the federal government to plan annual special immunization days masked evidence of possible increases due to publicity, and because current data are problematic. For each of the special campaigns in 1988, 1989, and 1990, the project assisted the HEU in the publicity campaign. That publicity campaign included the preparation of EPI posters in four languages advertising the campaign, special radio spots about EPI, and for the 1990 campaign, the construction of about 30 billboards scattered throughout the state. Yet it is not possible to separate the impact of the project itself without survey data of the population.

The official figures for completed immunization coverage for Niger State, as in all twenty-one states of Nigeria, reached 80% in 1990. That represents a major increase from the 37% reported in the 1988 HEALTHCOM survey of Niger State. Those figures are for children 12 to 23 months of age immunized without regard to the time or spacing of the immunizations. The figures should be noted with caution, however, given the pressure to reach 80%. In Niger State EPI managers were told they would be demoted if the figure was not achieved. In addition, the strategy of special immunization days produced

monthly increases of 1000% or more for two months, and then in succeeding months the figures drop below those of the baseline months.

Without good data it is difficult to judge the extent to which immunization coverage increased from 1988 to 1990 through the strategy of special immunization days, as temporary sites were created and mobile teams traveled to remote areas. HEALTHCOM handled all the advertising for the special immunization days, but it is not possible to establish just how much HEALTHCOM contributed to that increase.

## **INTERVENTIONS IN RAFI AND SULEJA LOCAL GOVERNMENT AREAS**

### *Planning the Intervention*

The PHC School Health Pilot Project was the result of close collaboration between a group of agencies who all wanted to use school pupils in health promotion. Individuals from the MOH had long wanted to use pupils in "baby tracking," or identifying children eligible for immunizations. The MOH formed a committee to discuss possible actions. UNICEF, and particularly the RUWATSAN group, had been talking about a program to provide safe drinking water in primary schools in mid 1989. UNICEF wrote a proposal and submitted it to the MOH for consideration. In August of 1989 HEALTHCOM was asked by USAID Lagos to drop all planned activities and work in the LGAs of Rafi and Suleja, demonstrating that the project could improve the health of the population through communication techniques in twelve months. In discussions about the beginning of the intervention held with persons from these agencies, each one claimed their group originated the plan.

Somehow the groups came together and set up a joint committee chaired by the PHC director to organize the intervention. Because UNICEF had planned to work in Magama and Chanchaga, those LGAs were chosen. HEALTHCOM had been assigned to work in Rafi and Suleja, so those areas were also included. The Primary School Management Board was also involved and supported the program. Officials of the four LGAs involved supported the project by participating in the needs assessment and contributing funds.

In August a group of three persons from ARHEC in Ibadan were asked to conduct baseline research in Rafi and Suleja in order to identify health problems that were of the greatest concern in the two LGAs. Team members made one visit to Niger State to discuss the survey with LGA officials and a second visit to assist with pretesting of the questionnaire. After the questionnaire for the survey was sent to Niger State by ARHEC in October, HEALTHCOM personnel conducted most of the training of interviewers for the survey, distributed the questionnaires, supervised the interviewers, paid the interviewers, and sent the questionnaires to Ibadan for analysis. Since the anticipated survey report was not submitted when the information was needed for planning the intervention, HEALTHCOM personnel conducted discussions

with LGA officials in order to develop a list of health problems they considered their priority. For both LGAs the list included malaria, measles, and scabies. This information was used in planning of the intervention.

The overall plan of the intervention was to conduct workshops for selected personnel to improve their knowledge of measles, malaria and personal hygiene in schools. LGA officials in Rafi, Suleja, Magama and Chanchaga identified five schools and five health centers in each LGA to participate in the project. Each school sent a headmaster and a teacher to the workshop, and each health center sent two staff members. The workshops for health center staff were held in March 1990 and focused on interpersonal communication in the treatment of malaria and how to screen and receive individuals bringing their children for immunizations. Workshops were held for teachers in early May of 1990 and focused on the development of school health clubs, the teaching of ORT for diarrhea, the early treatment of fevers (presumed malaria), and the use of the referral forms for malaria and immunizations. In Rafi and Suleja LGA a workshop was also held in April for traditional birth attendants and certain members of non government organizations to enlist their support for early treatment of fevers and for immunization of children as well as provide community outreach for the project.

### *Intervention Objectives*

The original proposal for the intervention identified many objectives at rather different levels: establishing a pilot school health program in five schools in four LGAs; developing a teaching manual and other supporting materials for teaching about health; promoting healthy behaviors among pupils and their parents and siblings related to many diseases; having a supply of potable drinking water in the schools; organizing a school health club in each school; supervising, monitoring and evaluating the PHC school health pilot project. These stated objectives are a combination of activities, means, and outcomes.

In the two LGAs that HEALTHCOM was asked to assist (Rafi and Suleja), the program also sought to improve the treatment of malaria by urging parents to bring their children to health centers without delay whenever they had a fever, and to increase immunization coverage for measles by having school pupils discuss immunizations with their parents and check on the immunization status of their younger siblings. Pupils were given a referral form to be filled out and taken to the health center in case a child had a fever, and another form if a child needed an immunization. Progress in malaria treatment was monitored through the use of a form for recording treatments given by health workers and a school health referral form given to pupils to be used if they or their siblings suffered from a fever. An immunization form was designed and given to members of school health clubs or pupils of the upper grades so they would, in turn, inquire about the immunization status of their siblings

In addition to working through school health clubs, the promotion of better treatment of malaria and measles immunization was also to be promoted by the training of NGO representative, traditional birth attendants, and radio broadcasts from Abuja and Kontagora. Time limitations did not permit any contacts with TBA and NGO personnel trained by the project. the radio broadcasts were not diffused as planned for reasons that are not clear but that include the lack of supporting funds.

These objectives can be summarized by noting that the Primary Health Care School Health Project sought to involve primary school pupils in health promotion through discussions in their homes while improving sanitation at school. At school the program wanted to provide safe drinking water to all pupils and involve older pupils (grades four, five and six) in a school health club that would clean up the physical environment and plant a garden. In at least Rafi and Suleja LGAs, the project also sought to improve the health of young children by having pupils speak to their parents about treatment of malaria and about immunizations, and assist in identifying children in need of immunization.

Therefore, the questions asked in evaluating the impact of the program in the schools and health centers were the following:

- 1) were the school health clubs established?
- 2) were the malaria reporting forms used and did they show an improvement in the timeliness of parents bringing children to health centers?
- 3) were the EPI referral forms used and did the numbers of immunizations given for measles increase?

#### *Findings: School Health Clubs*

Interviews with teachers revealed that in most, if not all schools, a school health club was formed with pupils from the fourth, fifth and sixth grades. Club members met in some schools once a week, in others once a month. In several schools gardens were planted and club members participated in cleaning up the school environment. In at least two schools club members also sometimes engaged in cleanup operations in the nearby town. The number of pupils participating in school health clubs varied from 20 to 85 per school. Pupils who seemed particularly bright, clean and attentive were chosen by teachers to be club members. Club members received caps and tee shirts with the EPI logo on them. The project successfully initiated the establishment of school health clubs.

#### *Findings: Treatment of Malaria*

A school health referral form was developed and passed out to headmasters at the workshop. This form was to be given by the headmaster to pupils suffering from fever and was to be presented to health center staff when they reported for treatment. In addition, a malaria history and treatment form was developed for reporting of treatment by health center staff. This form was used to ask questions of the mother

bringing a child for treatment of a fever. The staff filled in the number of days the child had suffered from a fever, the treatment given at the health center, and the medicine given to be taken at home.

Interviews with health center staff showed that the school health referral forms had not been used as intended. In only one health center out of eight were any such forms found, and in that case there were about 20 forms that had been submitted by pupils. These forms had been used for all sorts of minor illnesses rather than for malaria. Furthermore, in some schools parents thought that if the forms were given to the health center staff, treatment would be free, which was not the case. Thus the system for reporting of fevers by pupils failed to function as planned. It appears as though very few people understood the intended use of these forms.

HEALTHCOM personnel had collected at least four or five of the forms for the history of malaria treatment filled out by health center staff from each health center before the end of September 1990 when the project ended. These forms were examined before the visits to the health centers began. In two of the health centers visited five or six more of these forms were collected at the time of our visit. On each form is space for information about 12 children. The form showed the name of the child, the date, the number of days the child had already had a fever, the treatment given at the health center and the medication given to taken at home, plus several questions about listening to health programs on the radio.

About 80% of the forms collected had been filled out from July to September 1990. An examination of the dates on the forms showed no patterns of when they had been used. Interviews with three persons who had actually used the forms revealed there was no particular system for when the forms had been used and that only questions one to four about radio programs were consistently asked.

These forms were examined to see if the time period of waiting with a fever had decreased in the first few months of the intervention. The length of time the child had a fever before being brought to a health center ranged from one to six days with a mean of 2.1 days. It had been anticipated that if the educational program had an effect on waiting time before a child was brought for treatment, the waiting time would decrease after the first two months. There was no difference found between the forms filled out in July and August and those filled out later. Using these forms as an indicator of impact, no effect of the intervention on malaria treatment was found.

#### *Findings: Measles Referral Forms*

Reporting forms for measles immunizations were also developed and passed out to school headmasters at the workshop in May 1990. The main purpose of using the EPI referral forms was to show how many children had been brought for immunizations because a child had been identified by a pupil from primary school as needing an immunization, and that the pupil would give the referral form to the mother so she could take it to the health center. In only one health center were any of these forms found, and in that case it was two forms. That system did not work at all, for few people seem to have understood what was

being sought. It is possible that the system could have been corrected to some extent if HEALTHCOM had been allowed to continue its monitoring of the intervention by monthly visits by Dr. Oke who visited Minna in August 1990 and made visits to all the health centers in September. A cut off in funds prevented any more visits. However, given the lack of understanding of the forms, it is not sure that even the monitoring could have made the system produce results.

Since the EPI referral forms were not being used, the numbers of immunizations given by each health center in Rafi and Suleja LGA month by month from 1988 to July 1991 were examined. If the number of immunizations increased over three years in the initial months of the campaign, that would suggest the intervention may have had an effect. The month by month figures from the facilities as well as those from the MOH in Minna were examined. No such increase was found in either source of data.

One might argue that even if the referral forms were not properly used, the program might have increased immunization coverage for measles without having an effect on the overall coverage rates. That is possible but not likely. Given the nature of the data available, small changes in measles coverage will not be evident. The effect of the special immunization days made the figures from all of the LGAs look rather strange. For three months of the year in 1988, 1989, and 1990, the number of immunizations given by these facilities increased from five to ten times the normal number per month, which effectively destroyed any possibility of showing a gradual increase. Furthermore, the figures reported by each facility month by month for the four years in question from the facility records were examined as well as the same figures from the same periods from the Statistics Unit of the MOH in Minna. These latter figures were sent to the MOH from each LGA. We found the figures from the LGAs to be much larger in almost every case. That too reduced the chance that any effect could be identified.

The difficulty of finding evidence of the impact of the intervention on measles immunizations by looking at numbers of measles immunization per month can be seen by examining the numbers of measles immunizations given month by month in Rafi and Suleja LGAs for 1989 and 1990 through June 1991. A reading of the columns horizontally provides a picture of the degree of change from one year to the next.

**RAFI LGA**

	1989	1990	1991
January	383	161	234
February	205	693	630
March	300	116	226
April	406	141	481
May	386	1152	621
June	232	566	696
July	293	83	
August	261	272	
September	589	293	
October	581	89	
November	531	1060	
December	187	1215	

**SULEJA LGA**

	1989	1990	1991
January	151	495	322
February	220	1036	138
March	354	383	459
April	206	157	274
May	149	2974	
June	334	2970	329
July	175	255	
August	169	183	
September	759	299	
October	170	231	
November	611	1440	
December	320	819	

The point of these tables is simply to show how the numbers of measles immunizations given fluctuated wildly according to the special immunization days and other factors that cannot be identified. In each special campaign three consecutive days were chosen for special emphasis in three consecutive months.

Temporary immunization sites were established and additional vaccinators were hired and trained. In 1988 the special immunization days were held in March, April and May, in 1989 they were in September, October and November, and in 1990 they were in October, November, and then in January, 1991. Given these fluctuations, the intervention would have needed to have an enormous effect on the number of immunizations before an impact could have been seen at the level of monthly immunizations given.

Overall, the LGA intervention succeeded in establishing a collaboration among a group of organizations with a common goal and in obtaining the full support of LGA officials. School health clubs were also formed in the schools. The outcome indicators related to treatment of fevers and immunization for measles did not show any impact at that level.

Among the reasons that could be cited for this lack of impact are the following: One, the objectives of the intervention were too broadly defined at the outset. With such a wide range of objectives, training programs become vague and indicators of success too numerous. Two, the training given to personnel was not sufficiently clear and the participants did not fully understand what was expected. This was a question of both time spent and complexity of concepts to be communicated. Three, while pupils may be willing to participate in health clubs if asked by their teachers to participate and if they are given markers such as caps and tee shirts, but it may be too much to ask of them to speak to their parents about measles and immunizations and then expect to have a measurable effect. And four, the system of monitoring and supervision was stopped in September when funding was terminated.

These reasons all concern the functioning of the project. Also pertinent is the fact that the USAID mission did not release funds promised for the training phase, and that the time period was extremely short to show an effect on behavior. The funding uncertainties caused delays in implementation and a premature shutdown of project activities.

## **HEALTHCOM AT FEDERAL AND ZONAL LEVELS**

The primary objective of HEALTHCOM at the federal level was to improve the capacity of the HEU in Lagos to plan health education. The project involved the HEU staff in training workshops to teach them about pretesting messages and about the use of graphics in health promotion and hired a graphic artist and a materials development specialist to work full time within the HEU to work with equipment purchased by HEALTHCOM and given to the HEU. With this combination of training and investment in personnel and equipment, the capacity of the HEU to conduct proper pretesting and to produce graphics of high quality increased greatly.

Before the beginning of HEALTHCOM the HEU staff would discuss ideas about what kinds of information to communicate, and they would discuss them with the artist who would draw sketches and then show them to the staff. Once the staff provided feedback the artist would redo the drawings and then send the material out to be printed. Presently, once the artist has sketches and the staff has given feedback, the drawings are pretested once or twice in the target audience, then the artist makes revisions, and finally, the printing is done in the unit itself.

In addition, several members of the HEU staff participated in training workshops in materials development, pretesting and planning communication strategies. However, since the MOH counterparts to HEALTHCOM were changed several times, a number of persons received a little experience in the process of research and message development rather than having one person assimilate it all.

HEALTHCOM performed two activities at the zonal level, one which produced a measurable impact, and one which was aborted when the project ended. In July 1988 the project organized a three week workshop in Minna for health educators and media representatives from six states, the states of Zone C. Most of the first week was spent in considering research results from EPI in Niger State and planning a strategy for six months of health promotion, state by state. Each state had sent at least two health educators and two radio producers. The second and third weeks were spent developing appropriate messages and pretesting them in Kaduna. In the process each state was persuaded to identify persons within their staff who would work on Child Survival issues and who would then make up what was called a "Child Survival Unit" within the radio structure.

This same group met again in March 1989 in Ilorin to discuss what each state had accomplished in the past eight months. Each state had produced and broadcast health programs according to a plan, usually weekly programs in two or more language for fifteen minutes at a time, and all but Kaduna had formed a Child Survival Unit. The quality of the jingles were compared and criticized at the workshop. Each state also presented a summary of the problems they had encountered in creating a health program for their radio station.

Since at least two health educators were part of this process, a collaboration between radio producers and health educators was initiated in these states as well as in Niger State. In addition, the workshops convinced the radio producers of the importance of developing a short radio program to address child survival issues. HEALTHCOM gave the radio stations equipment to upgrade their work and cassettes to use in their own pretesting.

A similar pattern of interaction was initiated in 1989 for the five states of Zone B (Bendel, Lagos, Ogun, Ondo, Oyo). A workshop was held for health educators and media organizations to train them in simple research techniques (interviews and focus groups). The participants of each state then carried out research about health problems in their region for later use in message development. This initiative was stopped when the focus for all interventions was shifted by USAID to the two LGAs in Niger State.

## CONCLUSION AND RECOMMENDATIONS

### *Achievements Linked to Major Emphases: Niger State*

If one asked what HEALTHCOM achieved in Niger State with its numerous activities, one can identify essentially four domains in which the program had an effect. First, the project demonstrated to the MOH that the way health education was being done in health centers and by the media could be improved. Two, the project established a pattern of collaboration between health educators and radio and television producers so that any health program broadcast to the public will be developed with input from both types of specialists. Three, the project showed how that with money and expertise, the capacity of a health education unit to plan and direct health education could be vastly improved in a short amount of time. Four, the radio producers used what they had learned in workshops to produce and broadcast numerous messages for long periods of time about EPI and other child survival issues.

The information collected through a combination of ethnomedical research, focus groups, and observation of health talks at clinics gave the MOH clear evidence of the nature of public knowledge about ORT and EPI. Workshops showed MOH personnel how to use this information as well as print materials to teach more effectively. In these ways the MOH became convinced that health education could be greatly improved.

The collaboration between health educators and radio producers was the result of two extended workshops that brought educators and producers together for the first time. That collaborative pattern will most likely be maintained since both sides find the contact enriches their professional work and because new health projects require the same sort of collaboration. Whether the radio producers are able to develop and pretest messages as they were trained to do depends, it seems, on whether funds will be found to pay for their transport and purchasing of materials needed for pretesting. HEALTHCOM provided those funds for the first round of message production.

The project spent large sums of money to bring technical assistance for needs assessment and practical workshops for improving the operations of the HEU in both Lagos and Minna as well as purchased materials to equip the two laboratories and dark rooms. These additions and the training that went with it, have enabled the HEU in Lagos to continue producing good quality print materials. In Minna, on the other hand, there are no materials left and so the HEU has not been producing new materials.

During the time that HEALTHCOM trained and assisted the radio producers, they were able and willing to produce regular health programs about child survival. The project had provided sophisticated tape recorders and other assistance to facilitate the production of messages. As assistance ceased and radio stations became more commercial, the programming changed. Only sponsored programs will now be broadcast, only programs that are paid for by specific agencies.

The demonstration of new and improved ways of doing health education seems to have had an impact on the thinking and planning of the MOH in Minna. This is a benefit that does not require continual resources. The other two achievements, however, demand a regular source of funds to continue using the skills recently acquired. Part of the measure of the HEALTHCOM impact in the long term will be the willingness of the State MOH to provide funds to maintain a certain level of message production.

One may also ask what might have been achieved, given the objectives and resources available. First, the project did not provide sufficient experience in the use of the principles of health education usually central to HEALTHCOM to assure that the HEU will continue to follow that model. That does not seem to be a realistic goal in all countries, and it did not occur in Niger State. Two or three individuals certainly learned about aspects of the HEALTHCOM methodology by using it, and others participated in several workshops in which it was discussed.

Second, the project did not have a great impact on the functioning of the HEU as an integrated unit in Minna in general. The main impact was felt by two or three individuals only. The opportunity to develop the HEU into a more effective unit was missed. The evidence points to three possible explanations for this failure: a) this was not made an explicit objective in the implementation plan; b) the HEALTHCOM team was unaware that this could be an important outcome. c) HEALTHCOM was managed out of Lagos by a single advisor with many responsibilities. Sufficient attention was not given to the development of the HEU in Minna. The latter explanation is the most plausible one.

The project sought to improve the capacity of the HEU to produce educational materials of high quality. Not enough attention, however, was paid to the side of personnel development, of interpersonal skills, to the creation of a team that shares work responsibilities and goals. All the emphasis was placed on the technical and material side. The project would have had a stronger institutional impact in Niger State if the project directors had paid more attention to this aspect of capacity building.

#### *LGA Intervention: Rafi and Suleja*

With regard to the intervention in Rafi and Suleja, very little evidence was found of impact on behavior. Since the project was directly asked to show an impact in twelve months, it seems important to consider reasons for why so little impact can be shown. Four explanations are suggested here. One, the objectives of the intervention were too broadly defined at the outset. With such a wide range of objectives, training programs become vague and indicators of success too numerous. This may have been a reflective of the diverse interests of the parties involved. One example illustrates this point. LGA officials chose the schools and health clinics for the study. HEALTHCOM wanted all the schools to be located in one district, for that would facilitate logistics and evaluation as well. The LGA officials decided they wanted one school in each of the five districts so that each district would equally benefit. Had all the schools and

clinics been located in one district, the chance of finding an effect through the use of statistics would have been better.

Two, the training given to personnel was not sufficiently clear and the participants simply did not understand what was expected. This was a question of both time spent in training, regular supervision, and complexity of concepts to be communicated. The fact that no referral forms were found for malaria and almost none for EPI clearly shows that the principles for their use were not understood. For the use of the malaria referral form, five groups must understand what to do: the headmaster, the teacher, the pupil, the parents, and the health worker. Perhaps the process was simply too complicated.

Three, while pupils may be willing to participate in health clubs if asked by their teachers to participate and if they are given markers such as caps and tee shirts, but it may be too much to ask of them to speak to their parents about measles and immunizations and then expect to have a measurable effect. For such a system to work, teachers must be trained to talk about these interactions regularly with their pupils and discover just how the process occurs (or does not occur) and why. No evidence was found that teachers interacted with their pupils in this way.

And four, the system of monitoring and supervision was stopped in September when the project ended. HEALTHCOM had no recourse but to cease operations at that point. Some of the problems mentioned could have been corrected with regular visits, but given the confusion about the forms, it does not seem as though monitoring would have been sufficient to make the system function properly.

It should also be noted that the project had little time to demonstrate an impact. Funding uncertainties delayed the start of the workshops as well as hastened the termination of all activities.

The one overall positive achievement of the LGA intervention was the nature of the interaction of HEALTHCOM with other groups. While HEALTHCOM took the lead in organizing the training program (workshops) for all four LGAs involved, this was not only a HEALTHCOM intervention. The project worked closely with UNICEF, the MOH, and LGA officials to plan this intervention, for each group displayed a keen interest in this activity. A substantial amount of time and resources were spent to assess the health priorities of the two LGAs and to devise a response in terms of their needs. Conversations with personnel from the LGAs, UNICEF, and the MOH showed that each group considers this intervention as partially theirs.

The legacy of this interaction is strong support and enthusiasm for the intervention at the LGA level and a desire to find a way to continue the project at UNICEF and the MOH. Both Rafi and Suleja LGA health staff want the program to continue and expand. The persons who participated clearly felt involved and interested in the process of initiating the project.

There is an ironic complementarity in the impact of HEALTHCOM in Niger State versus the two LGAs. In Niger State, with outside resources and clearly directly training programs, the project succeeded in improving the capacity of both the HEU and media personnel to conduct health education. These activities, though successful initially, require additional funds for the benefits to continue. At the same time, many of the persons involved feel as though the program did not involve them sufficiently even though they were trained by it. HEALTHCOM would be welcome to continue but on another basis.

On the other hand, in the two LGAs, the intervention did not succeed in terms of its own selected indicators except for the formation of school clubs. However, given the quality of the interaction in planning and implementing the program, those involved want to continue and expand. Those persons, however, may not be aware of the limited effects of the intervention.

HEALTHCOM seemed most successful in mobilizing skills and resources to focus on a particular problem and get many individuals involved. This was the workshop model, one used successfully to improve graphic and media output through better equipment, additional skills, and proper planning. This succeeded also in getting numerous messages about EPI on the radio for a long period of time. The project was also successful in showing that the results of simple research among the population can be used in message development.

The project seemed least successful when it came to following up on what had been initiated. This involved supervision of performance after training, interpersonal skills to maintain performance, verification of distribution, and calculating the resources needed to maintain production. In several cases, the inability to follow on initiated activities was the result of a shift in emphasis mandated by the USAID mission in Lagos.

### *Recommendations*

The Federal government has redefined the organizational structure of health services to give the Local Government Areas more autonomy and responsibilities in assessing their needs, planning their strategies, and implementing policy. Therefore, technical assistance in health services in Nigeria will be organized more at the LGA level than the state level from now on. This will require building up the LGA capacities to provide technical training in service delivery and to plan and conduct health education.

The USAID will continue assistance on Child Survival issues to the Nigerian government through the CCCD project which will include training of health workers to improve service delivery as the CCCD has done in Niger State with CCCD consultants and Continuing Education Units based in the Schools of Health Technology. Ideally this training would be accompanied with complementary training in health education for health workers at the LGA level as well as the development of communication strategies using mass media in the domains of EPI, ORT and malaria treatment. This will also require research to be conducted on the current state of knowledge among the population in these domains.

The question is, would it be advisable to ask HEALTHCOM to undertake some of these tasks in conjunction with the CCCD? In Nigeria to date HEALTHCOM has demonstrated its ability to perform the following tasks well:

- a) doing simple research to assess public knowledge about health issues;
- b) bringing together health educators and media representatives to develop messages together;
- c) improving the capacity of a health education unit to produce quality materials.
- d) bringing together groups of people in workshops to involve them in a new activity;
- e) assisting an LGA to assess its health priorities and develop an intervention along those priorities.

The project in Nigeria has been less successful in performing the following sorts of tasks:

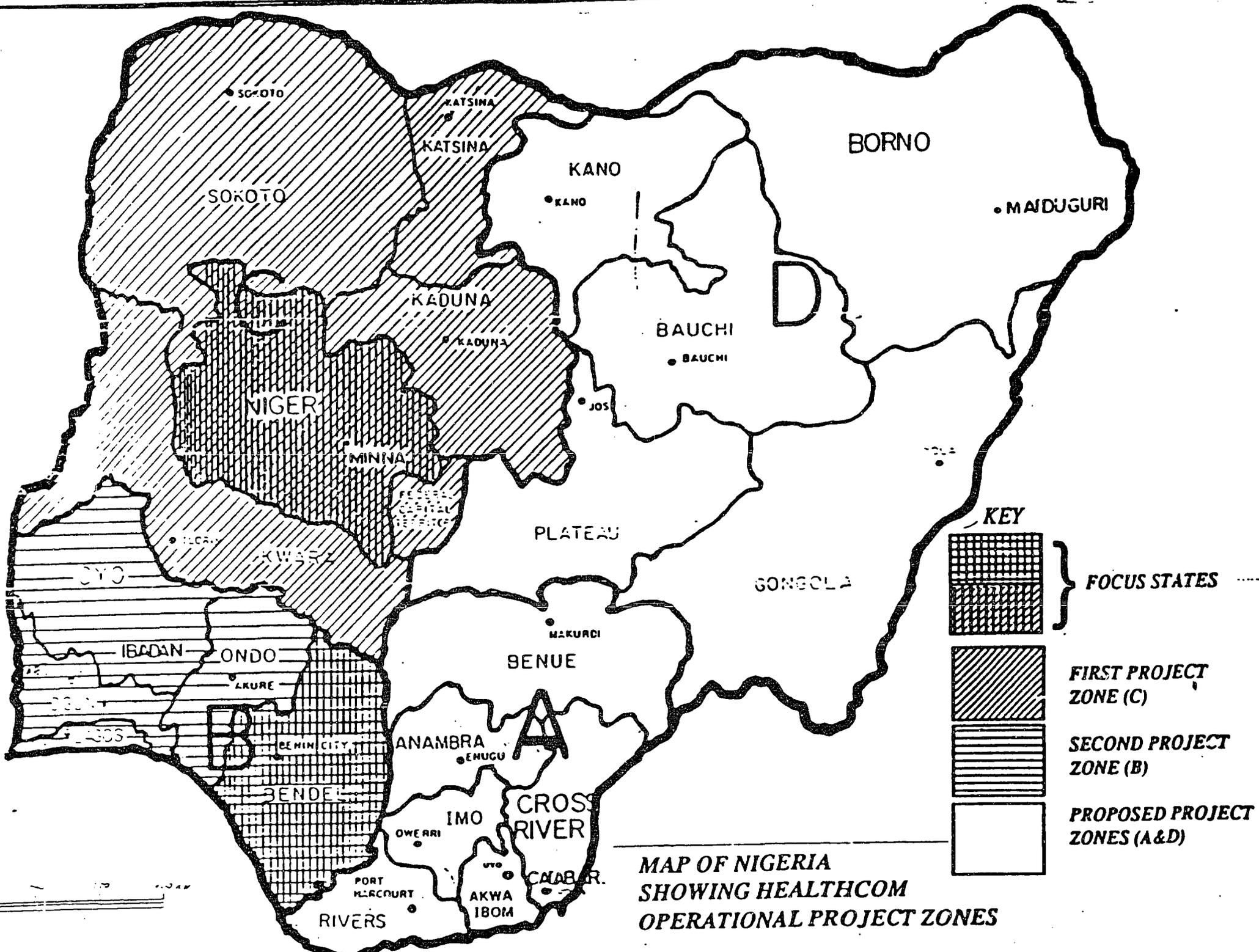
- a) involving the HEU staff in project planning and monitoring activities in a way that each person felt part of the process;
- b) following up on trainees after a training workshop;
- c) working with the CCCD to coordinate training activities in Niger State.

It seems likely that the lack of a feeling of involvement by health workers in the HEALTHCOM project was related to the fact there was no resident advisor in Niger State for long periods and the management style which resulted in decisions about the project being made in Lagos or Washington without consultations with persons in Minna. The lack of follow up to certain workshops, I believe, was related to a conception of training that emphasized short periods of refresher courses. It is unclear why there was not more cooperation between the CCCD and HEALTHCOM in the past.

It seems logical to request that HEALTHCOM continue in Nigeria to work with the CCCD and take charge of the tasks outlined above that have, in the past, been properly accomplished. This would require, however, a different style of management than the one used in the past, namely, one that provides for close consultation with the CCCD to coordinate activities and that provides a way that local personnel have more to say about the shape of the project than in the past.

A work plan for the next 18 months has been drawn up that includes HEALTHCOM, the CCCD, ARHEC and the FMOH. That work plan does not adequately describe the responsibilities and roles of each agency. It would be advisable to hold a series of meetings with the four groups represented to outline a plan of action as soon as possible. The overall plan should outline the relationships between the CCCD training of health workers in technical matters, the HEALTHCOM training of health educators in message development, the preliminary research needed to orient these activities, and the overall role of the FMOH in directing the interventions in the various LGAs. The work plan was particularly vague

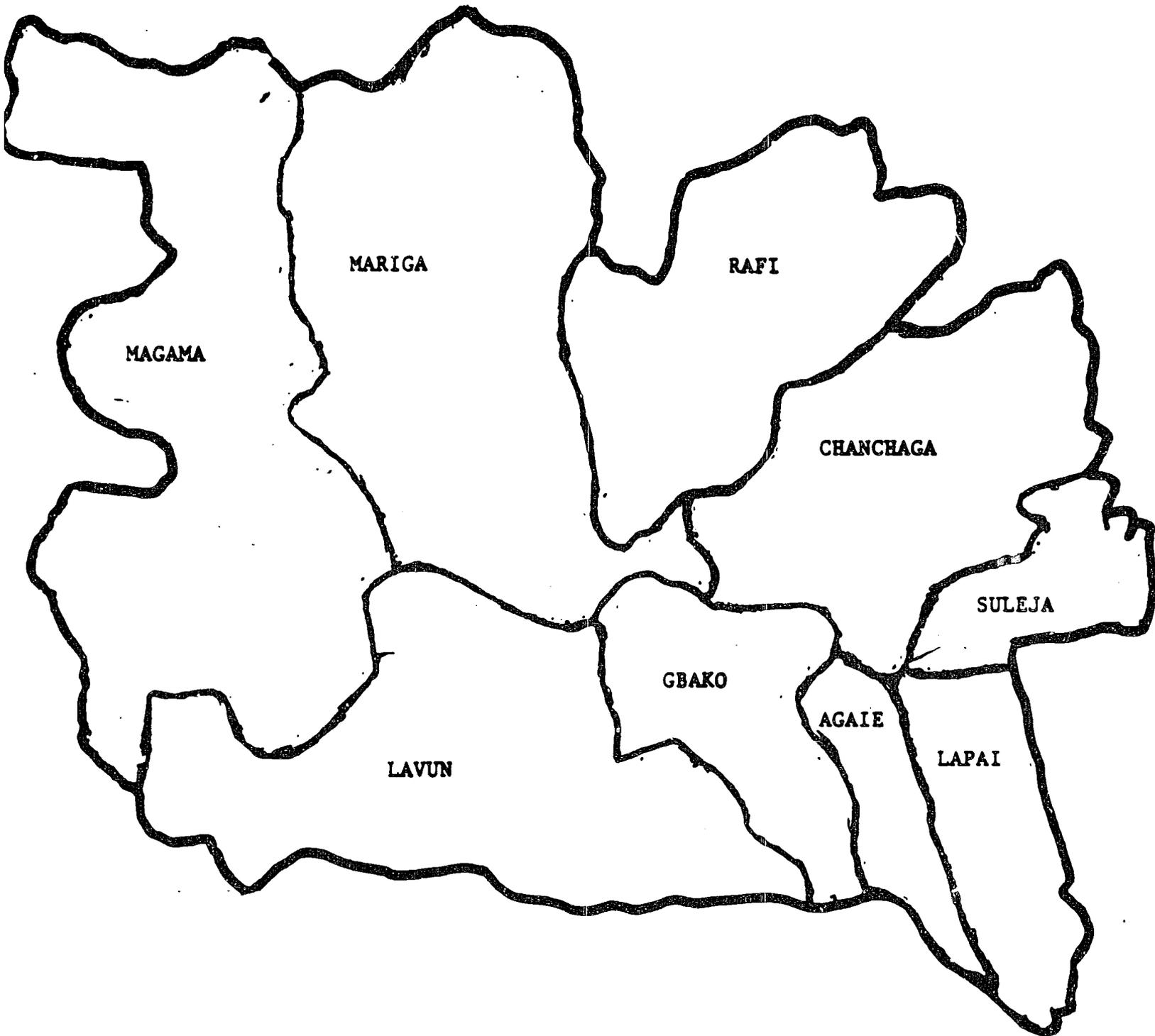
about the role of the FMOH and ARHEC. The HEALTHCOM project hired ARHEC in the past to conduct surveys in Niger State and ARHEC had a difficult time in respecting its work commitments. The more specific the work plan can be about respective responsibilities, the more likely it will be effective.



**MAP OF NIGERIA  
SHOWING HEALTHCOM  
OPERATIONAL PROJECT ZONES**

APPENDIX B

LOCAL GOVERNMENT AREAS: NIGER STATE



## APPENDIX C

### CONTACT LIST

#### Federal Ministry of Health, Lagos

Mr. J.O. Ola	Principal Health Educator, Health Education Unit (HEU)
Mrs. Ruth Obiodun	(former) Senior Health Educator, HEU
Mrs. F. Henshaw	(former) Principal Health Educator
Mr. Desmond Ajoko	Graphic Artist
Mr. Godwin Uzoma	Graphic Artist

#### Federal Radio Corporation of Nigeria (FRCN)

Mrs. Tokumbo Agboola	Health Program Producer
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#### UNICEF Lagos

Mrs. Rosemary Wellington	Assistant Communications Officer
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#### USAID Mission, Lagos

Mr. Gene Chiavaroli	AAO
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Ms Susan Krenn	PCS Country Representative
Mr. Thomas Kola	PCS Evaluation

#### HEALTHCOM

Mr. Tony Agboola	(former) Resident Advisor
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Mr. Idris K. Nagia	(former) Zonal Liaison Officer, Minna

## **Niger State Ministry of Health, Minna**

Dr. Susan Saba	Director General
Dr. Zakari Wambai	PHC Director
Mr. Jack Koce	Chief Health Educator
Mr. M.A. Isah Mokwa	Assistant Chief Health Educator
Mr. Kuso Mohammed	State EPI Manager
Mr. Ibrahim Abubakar	Senior Health Educator
Mr. Saliju Majin	Graphic Artist, HEU
Mr. Garba Sale	Statistician, Health Information System
Mr. Shagaya Madugu	Statistician, EPI Unit

## **Continuing Education Unit, Minna, MOH**

Mr. M. Zakari	Chief Health Officer
Mr. M. Usman	Health Officer

## **Radio Niger, Minna**

Mr. Alhaji Yusuf Tsakpati	Director, Programme Services
Mr. Shaka Adaba	Producer, English, & Head of Child Survival Unit
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Mrs. Amina Saidu	Producer, Hausa
Mr. Hafsatu Abdulladi	Producer, Nupe

## **SULEJA Local Government Area**

Mr. Yuda Nyazento	LGA Vice Chairman
Mr. Jibril Kallamu	Supervisory Counselor for Health
Mr. Alhaji Halilu Mohammed	(former) HOD for Health
Mr. Alhaji Hassan U. Paiko	HOD for Health
Mr. Aminu Alihu (Amos)	LGA Health Educator
Ms Jummai Bello	LGA Senior Health Educator
Mr. Mohammed Gawu	Zonal PHC Coordinator
Mr. Abdullah Ketakwa	Zonal PHC Coordinator for EPI/ORT

### **Suleja General Hospital**

Mrs. Anna Gimba  
Mrs. Kyauta Ishaku

EPI Unit Director  
Senior Nursing Officer

### **Ijah Basic Health Centre**

Mrs. E. Bello  
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Senior Community Health officer  
Community Health Extension Officer

### **New Gawu Community Health Centre**

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Mrs. Augustina Dauda

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Community Health Supervisor

### **Diko Basic Health Centre**

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Community Health Supervisor

### **Teachers**

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Mr. Abdullahi Dahirou

Headmaster, Ijah Primary School  
Headmaster, Angwa Waje Primary School

## **RAFI Local Government Area**

Mr. Alhaji Sani Mohammed	LGA Chairman
Mr. Alhaji A. Ukuso	HOD for Health
Mr. Mohammed Hadi Ibrahim	Supervisory Counselor for Health
Mr. Mohammed Sani	LGA Health Education Officer
Mr. Yusuf D. Haruna	Assistant Information Officer
Mr. Abdullah Mustapha	LGA Monitoring & Evaluation Officer

### **Adamu Turaki Dispensary**

Mrs. Rebecca James	Community Health Supervisor
Mrs. Hawa Yaku	MCH Community Health Supervisor

### **Tegina Dispensary**

Mrs. Hauwa M. Mohammed	Community Health Supervisor
Mr. Salu Daladi	Community Health Worker
Ms A. Kulubako	Public Health Worker

### **Yakila Basic Health Centre**

Mr. Abdullah Isah	Health Superintendent
Mr. Ahmed Alkili	Senior Community Health Supervisor

### **Pandogari Basic Health Centre**

Mr. Usman Mohammed Kakuri	Community Health Officer
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### **Teachers**

Mr. Mohammed Segira	Headmaster, Kagara Central Primary School
Mr. Abiota Adeboale	Health Teacher, Kagara Central Primary School
Mr. Sale Ahmed Gunna	Teacher, Yakila Primary School
Mr. Idris Bala	Teacher, Yakila Primary School
Mrs. Rebecca David	Health Teacher, Tegina Primary School
Mr. Idris Isah	Health Teacher, Tegina Primary School
Mr. Mbala A. Mamman	Headmaster, Pandogari Primary School