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PEACE CORPS

Washington, D. C. 20525

July 24, 1974

Dear Stan:

Inclosed you will find pictures of your visit to Liberia. I would appreciate it if you would make your selection and return a couple of good ones to me. I would like very much to get our Public Affairs office to make use of them either in a release or in our in-house journal called InterAction.

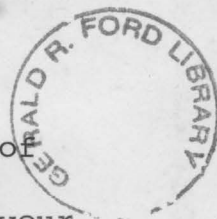
I looks as though you had a thorough and interesting visit.

For your information, I am planning to travel to Botswana, Lesotho, Swaziland, Malawi, Mauritius, Kenya, and Ethiopia this Fall. If you have any interest in travelling to any of these countries with me I would be delighted.

Sincerely,

Andrew J. Bell, III

Andrew J. Bell, III
Regional Director for Africa



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COLLECTION TITLE STANLEY S. SCOTT PAPERS (WH Public
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BOX NUMBER 2

FOLDER TITLE African Drought, 1973-1974 (4)-(6)

ACCESSION NUMBER 1998-NLF-022

MOVEMENT DATE 05/31/2001

TYPE OF MATERIAL Photographs

NEW LOCATION Audiovisual Collection

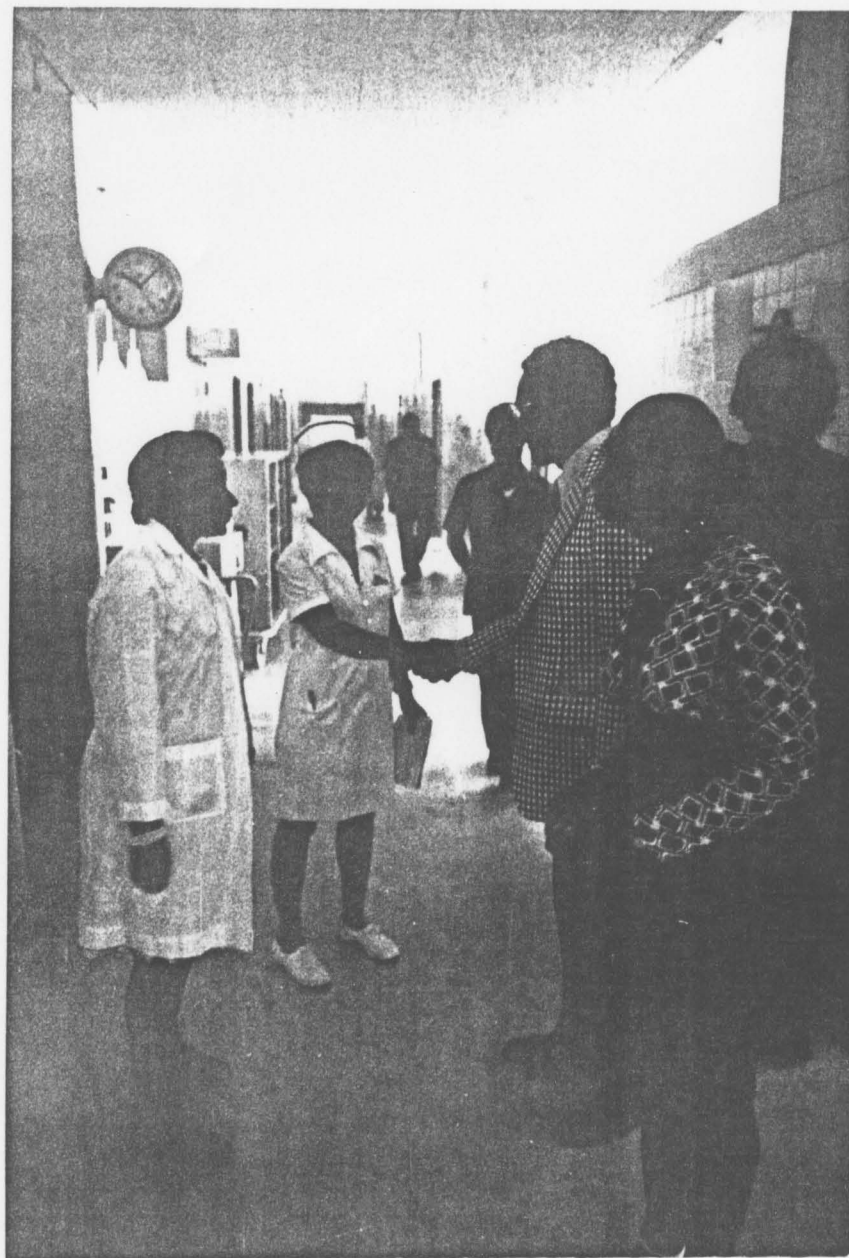
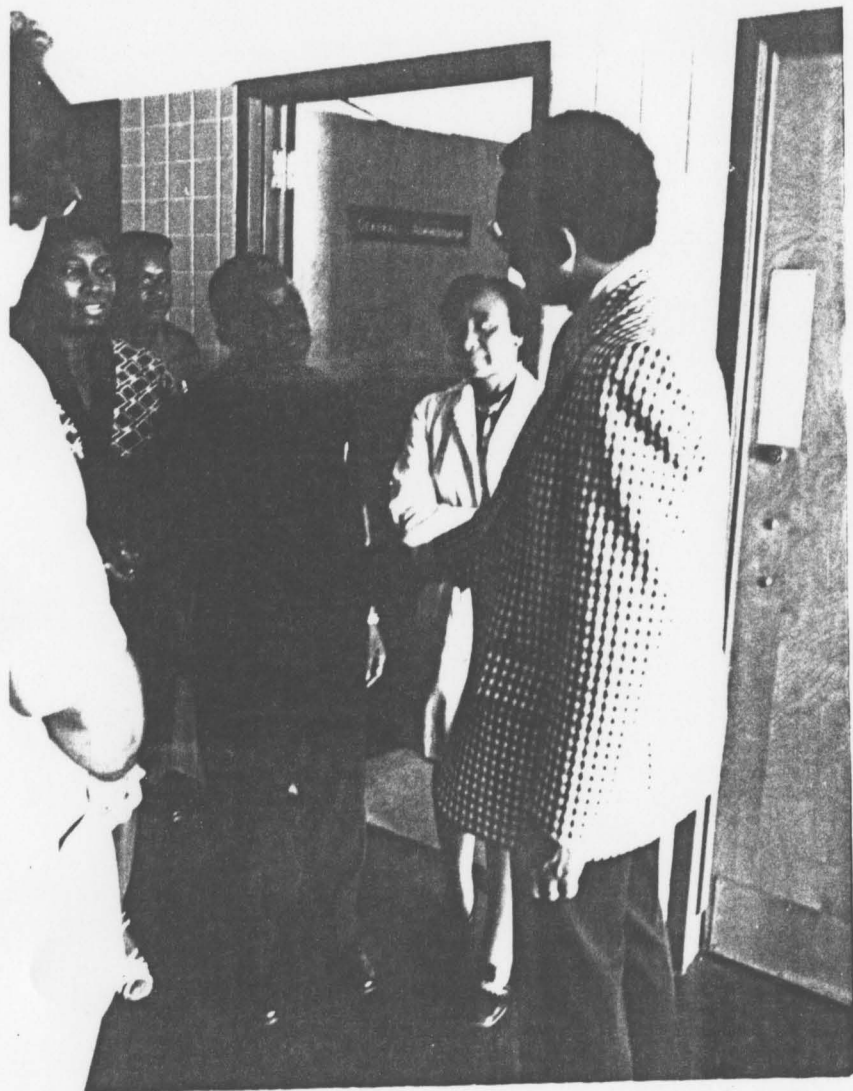
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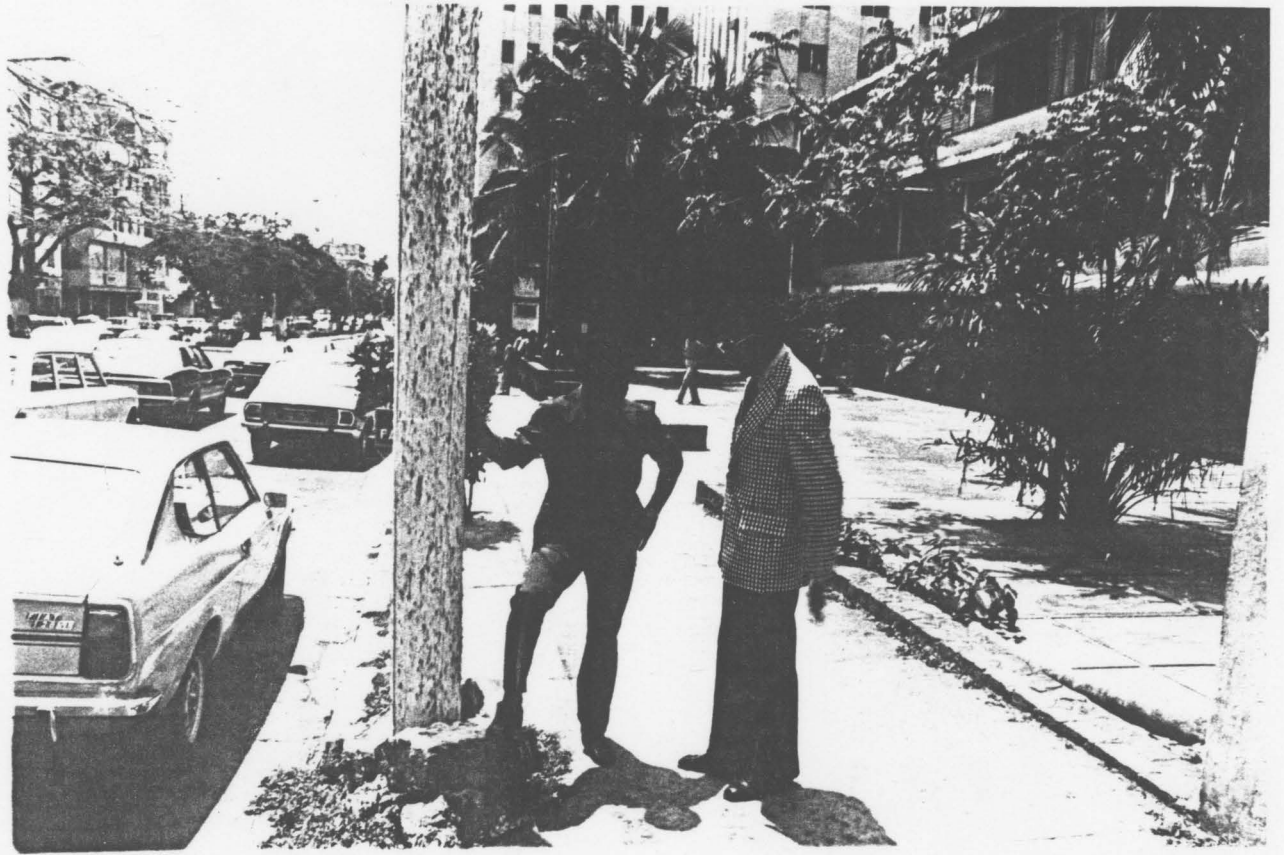


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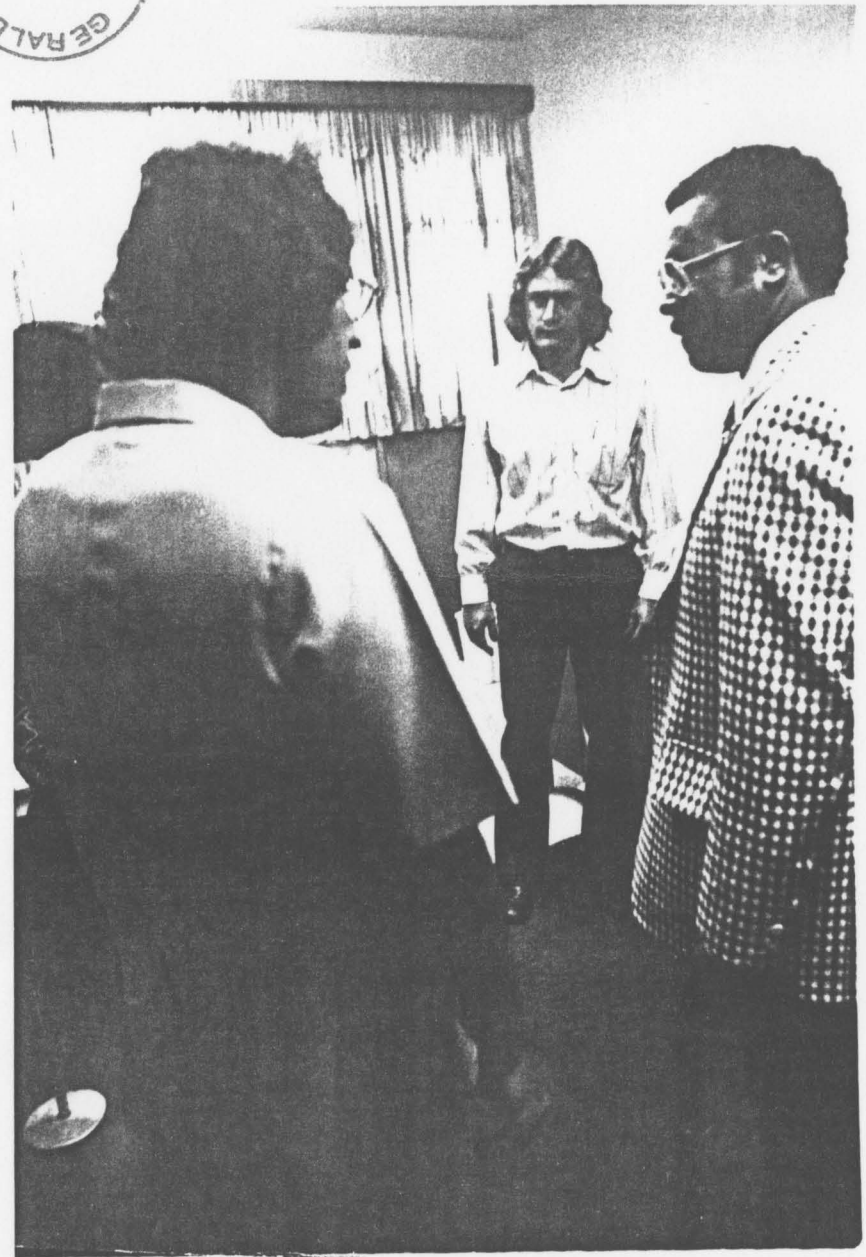
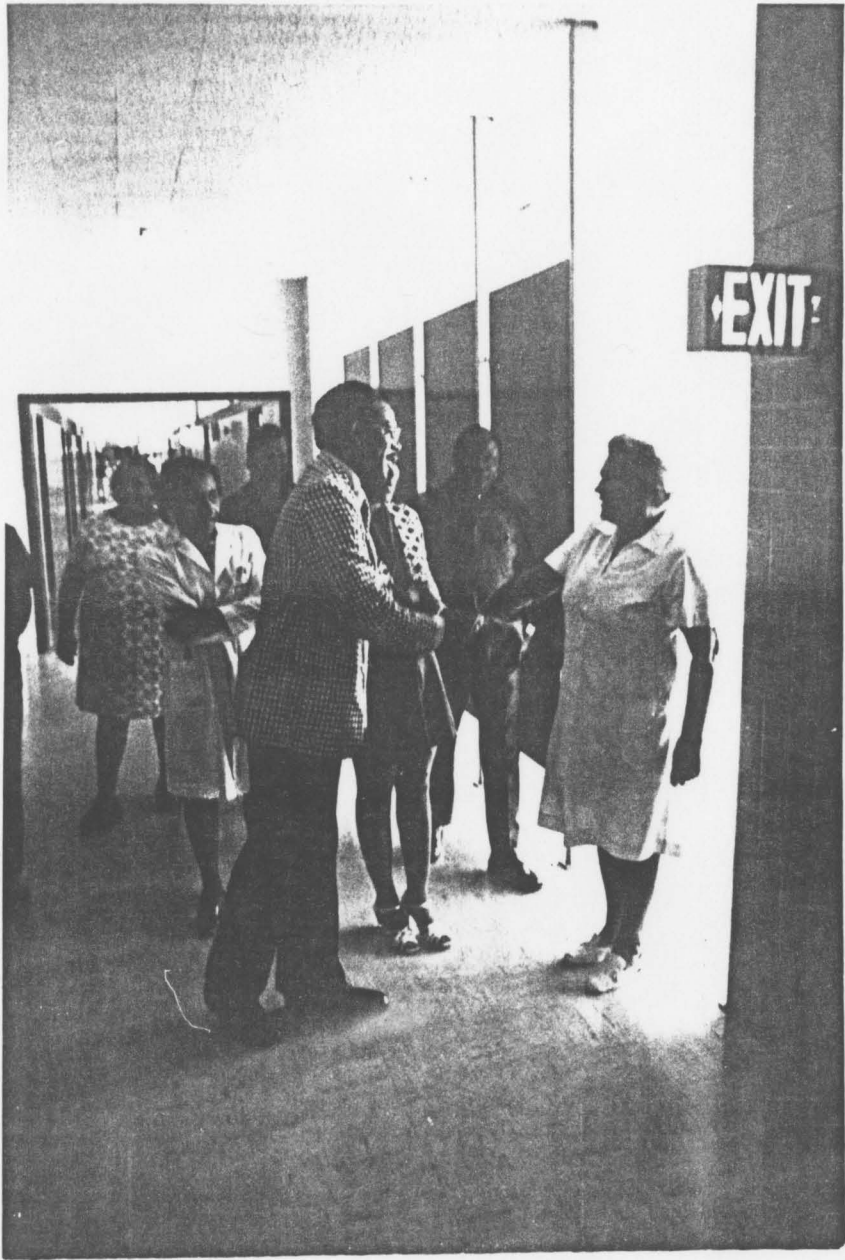




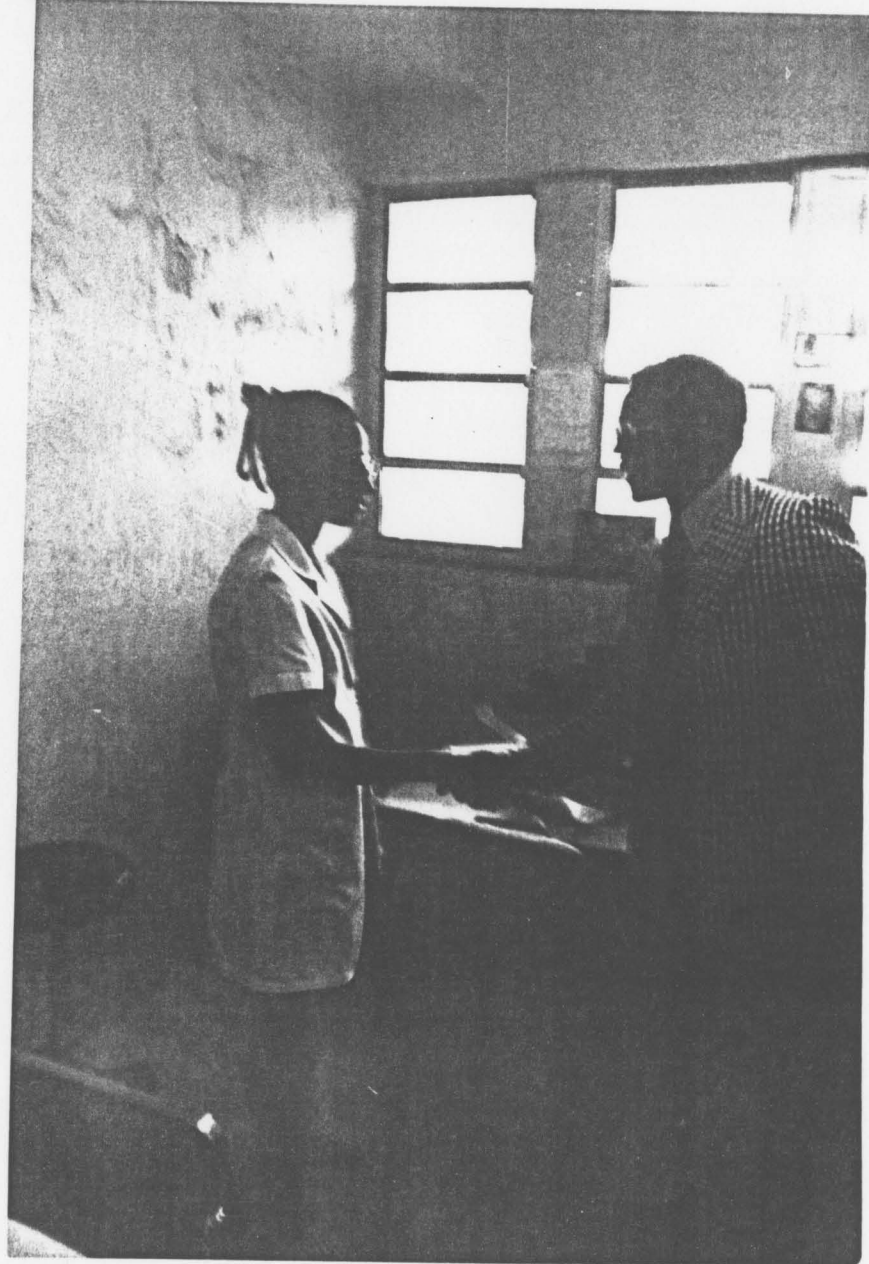
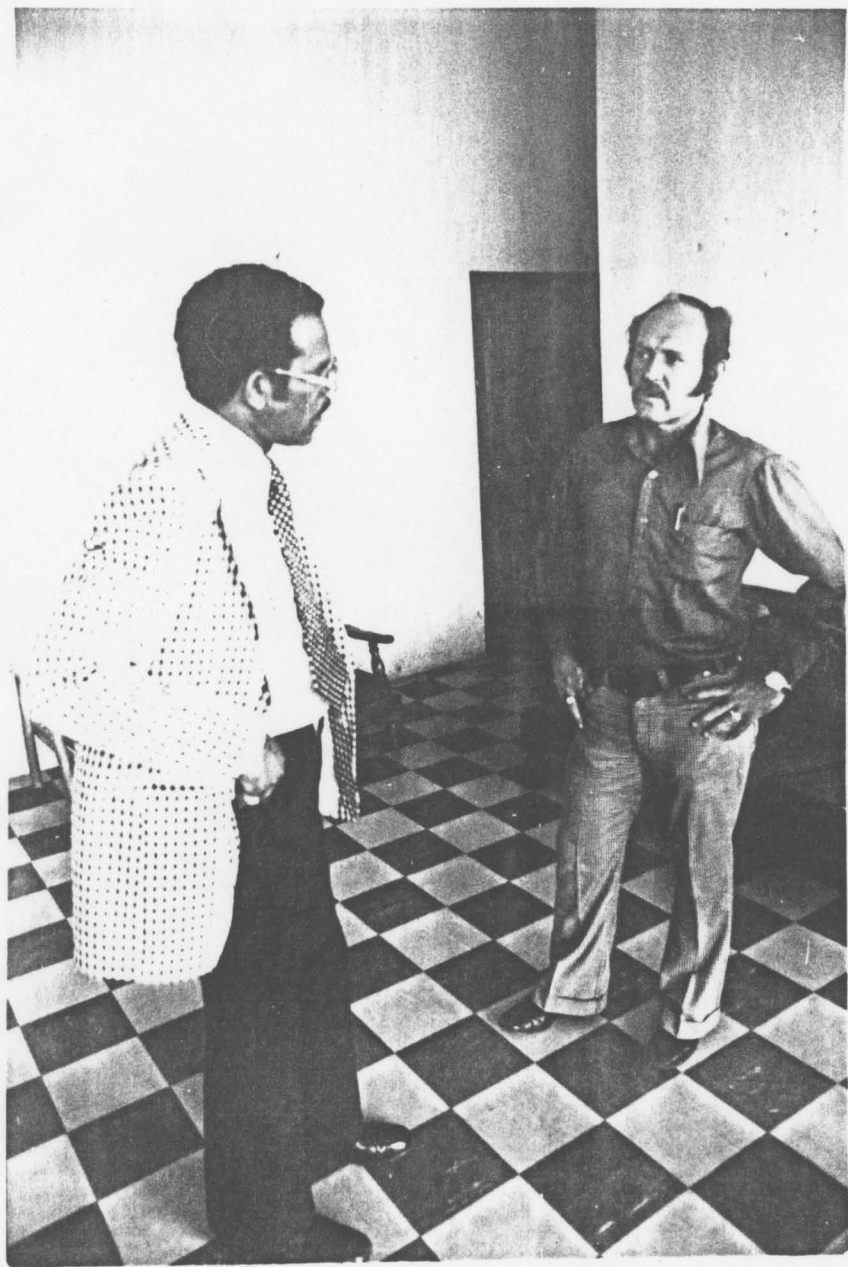
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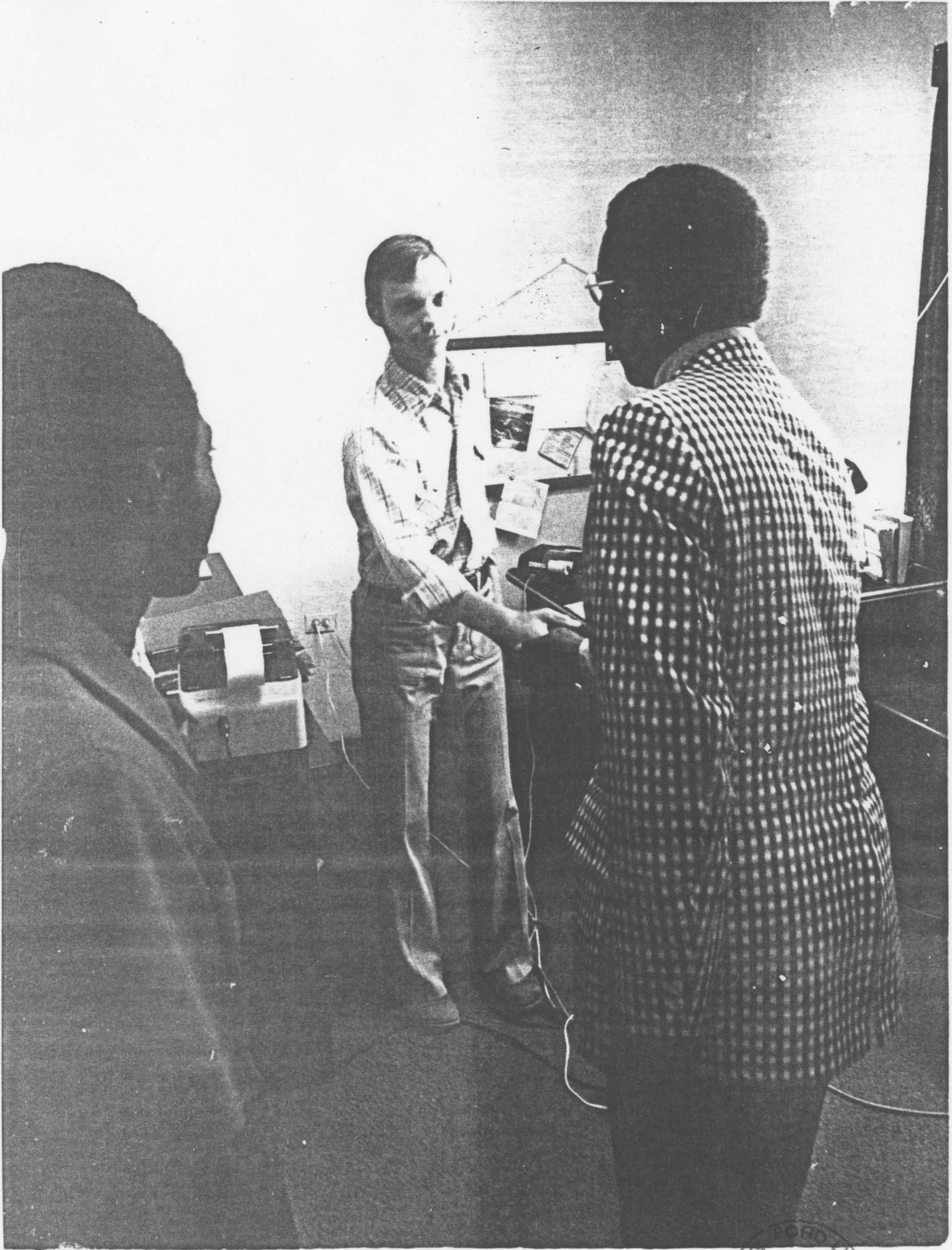


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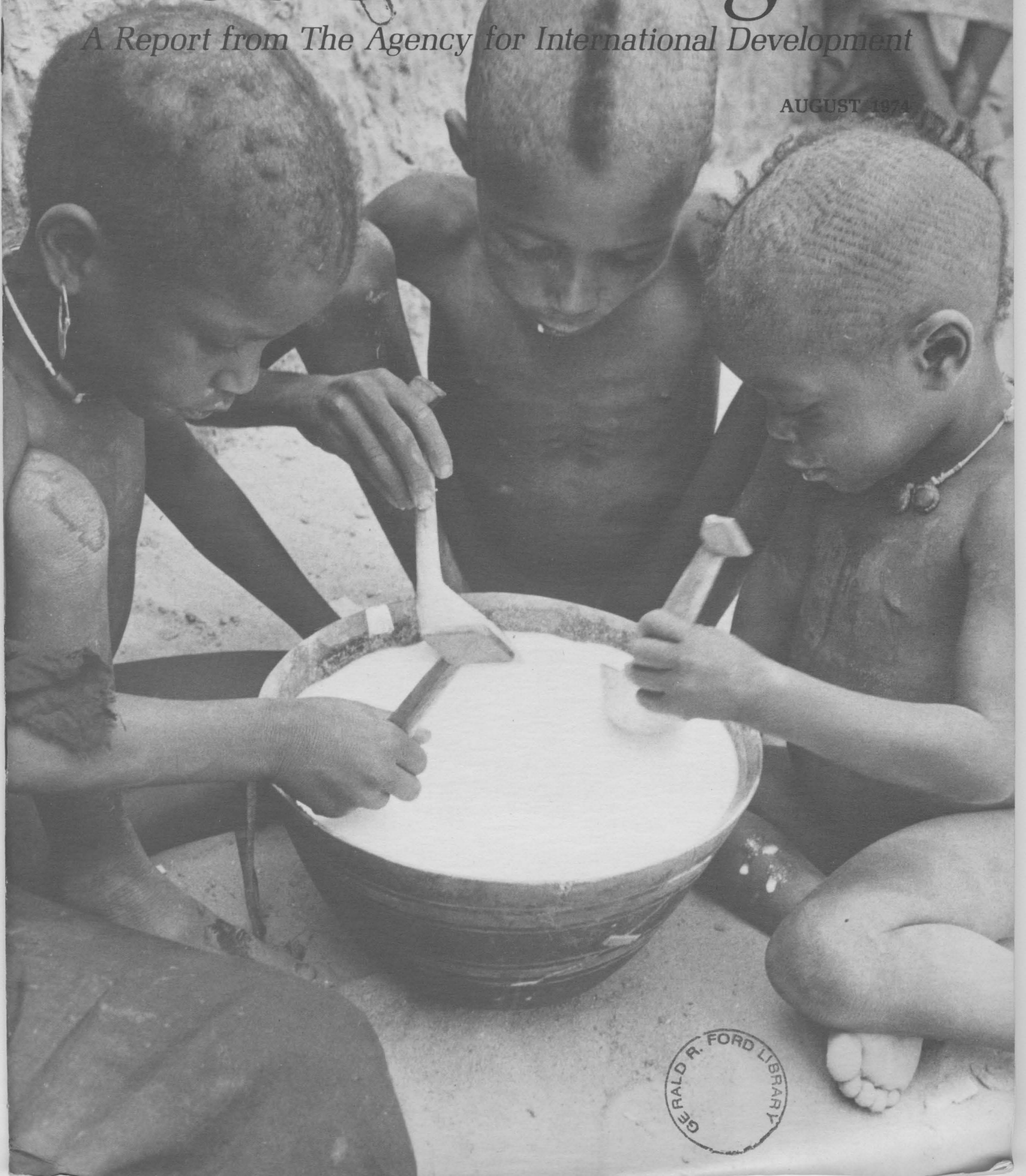


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War on Hunger

A Report from The Agency for International Development

AUGUST 1974



GERALD R. FORD LIBRARY

War on Hunger

A Report from The Agency for International Development

Daniel Parker, AID Administrator
Clinton F. Wheeler, Director, Office of Public Affairs

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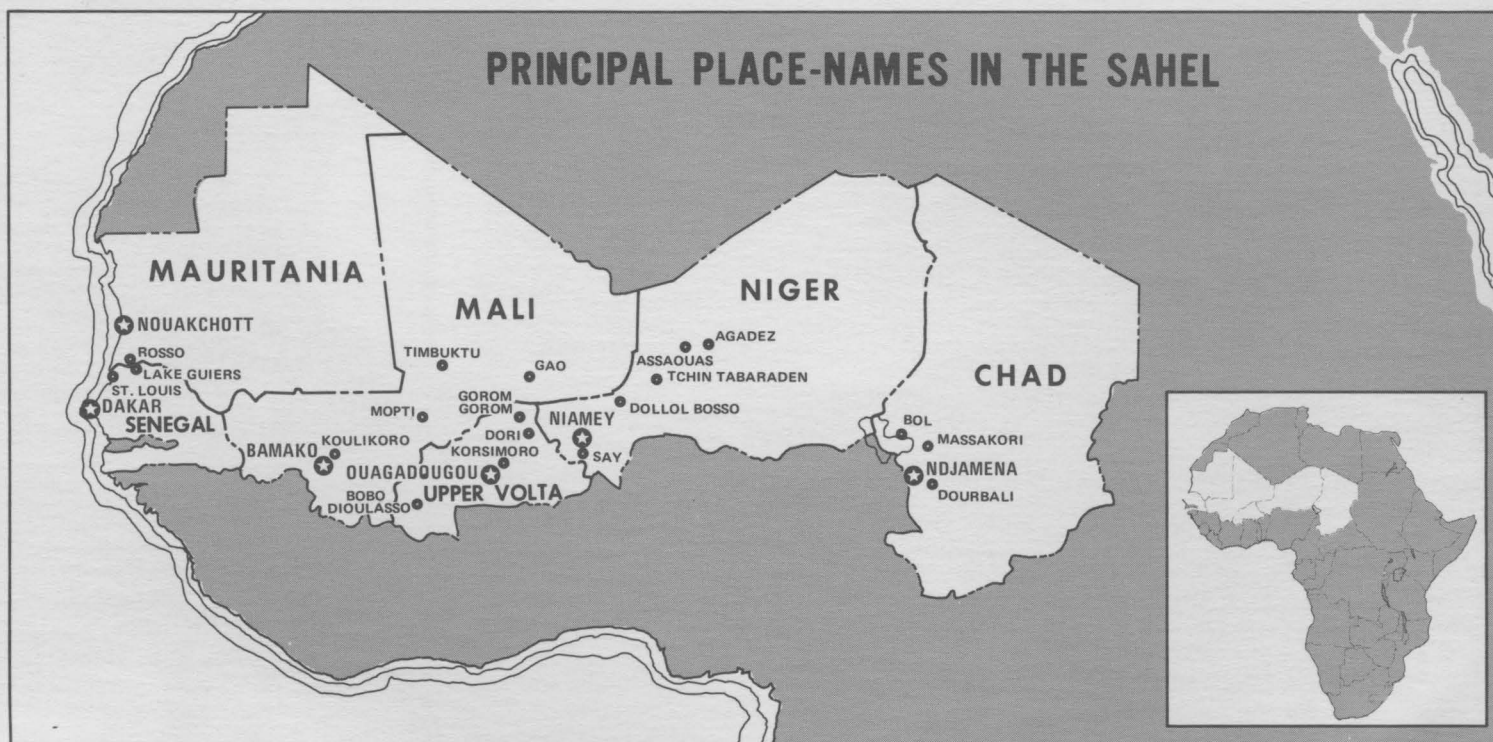
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COVER: Youngsters in the refugee camp at Tchín Tabaraden, Niger, dip into their daily bowl of high-protein porridge. Milk is furnished daily to the children in the refugee camps. (See page 2)

Photo by Carl Purcell

Publications Division
Office of Public Affairs, AID
Room 4953, State Department Building
Washington, D. C. 20523. (202) 632-9141
Jerry E. Rosenthal, Division Chief
David L. Rhoad, Editor
Betty Snead, Assistant Editor

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Survival in the Sahel

By Jerry E. Rosenthal

Photos by Carl Purcell



One year ago this month, *War on Hunger* published the first comprehensive illustrated article on the drought in sub-Saharan Africa. It drew widespread concern and attention. Subsequently, we have published articles concerning the progress of relief efforts, and the views of recognized authorities on the causes and consequences of the drought. A list of these and related articles appears elsewhere in this issue.

This year, Mr. Rosenthal and Mr. Purcell returned to the Sahel to report on the effects of the drought 12 months later, and on the actions taken by the United States, other donor countries, and agencies. The articles in this issue also comprise the first comprehensive illustrated report on these actions.

This entire August issue is devoted to the Sahel. All of the written material, of course, may be freely reprinted or excerpted. Extra copies, prints of the photographs, and other art work may be obtained without charge upon request. Address correspondence to the Publications Division, Office of Public Affairs, Agency for International Development, Washington, D.C. 20523.

One Year Later

The rhythmic beat of the drums throbbed through the little village lying in the heat-baked heart of Africa. Out of the thatched-roof, mud-walled huts came the people of Dourbali—first the men, then the women, and the children. Heeding the summons of the drums, they headed for the village center, their traditional forum for village affairs, social life, and trade.

But the market stalls, normally laden with mangoes, peanuts, millet, utensils, and trinkets, were empty today. Instead, parked where all could see, was a truck. On the door was the inscription that identified it as the mobile health unit of the Service for the Control of Endemic Diseases, an agency of the Government of Chad. It also bore the insignia of the U.S. Agency for International Development.

Tables had been set up in the shade of the tall, leafy nime trees. On the tables were file holders, microscopes, centrifuges, and the other instruments and paraphernalia needed for inoculations, vaccinations, blood testing, and physical examination. Most of the packages of medicines and sanitary necessities also bore the clasped hands symbol of AID.

The visit of the mobile health clinic was not the first for the people of Dourbali. But it was exciting

nonetheless. The shining, polished instruments of modern science are a fascination to people who own only a knife or a *daba* (a small hoe).

Village officials and staff members of the health unit directed the congregating villagers to line up—men in one line; women and children in another. Under the supervision of Dr. Bernard Ingelet, they were examined and questioned about their health. Those needing smallpox vaccinations were sent to one table; cholera to another. Those needing tuberculosis, or leprosy examinations to a third. For general examinations they went to still another table.

Parte, a small, handsome young mother, held her four-year-old son by one hand and carried her infant daughter in her other arm. She was in the longest, busiest, and noisiest line—the one in which the children were given their shots, examined for malnutrition, measles, polio, and other ailments, and where mothers were given vitamins and instructions on caring for their children.

Parte's children, like most of the others, cried lustily when given their shots but quickly quieted down as they became interested in all the goings-on around them. Those children who appeared undernourished were mainly those who had arrived in the village only recently with their nomad parents.



A festive day in the village of Dourbali in Chad. Rain had fallen the night before, the mobile health team paid a visit, and a

wedding procession climaxed the occasion. The bed was gaily decorated. Gifts were carried by family and friends.

It was a noisy, chattering, good-natured and orderly event. Rain had fallen the day before—not much, but enough to keep alive a spark of hope that perhaps more would be coming. And some had fallen a few days earlier. The rains would have been enough to raise spirits; the visit of the medical team made the day an occasion.

“I am happy,” Parte said through an interpreter as she clutched her children and a packet of vitamins, “if my children can live, and be strong—and the rains come.” She proudly displayed her own vaccination scar.

Moussa Hassan, an 18-year-old student who is learning to be a tailor, stood in the line for the table called “the fair.” It was given the label because it dispenses a variety of medicines and pills.

Moussa had expressed his disappointment that the attendant in the smallpox line did not give him a shot.

“He told me I didn’t need another one—I had one.”

As the men joked and talked of the weather, as the children played and women gossiped, more than 2,000 went through the lines. Some were told they must come back to Djerakoula Banyo’s office—he is the chief of the dispensary located near the village. They or their children would need more medicine and possible periodic care.

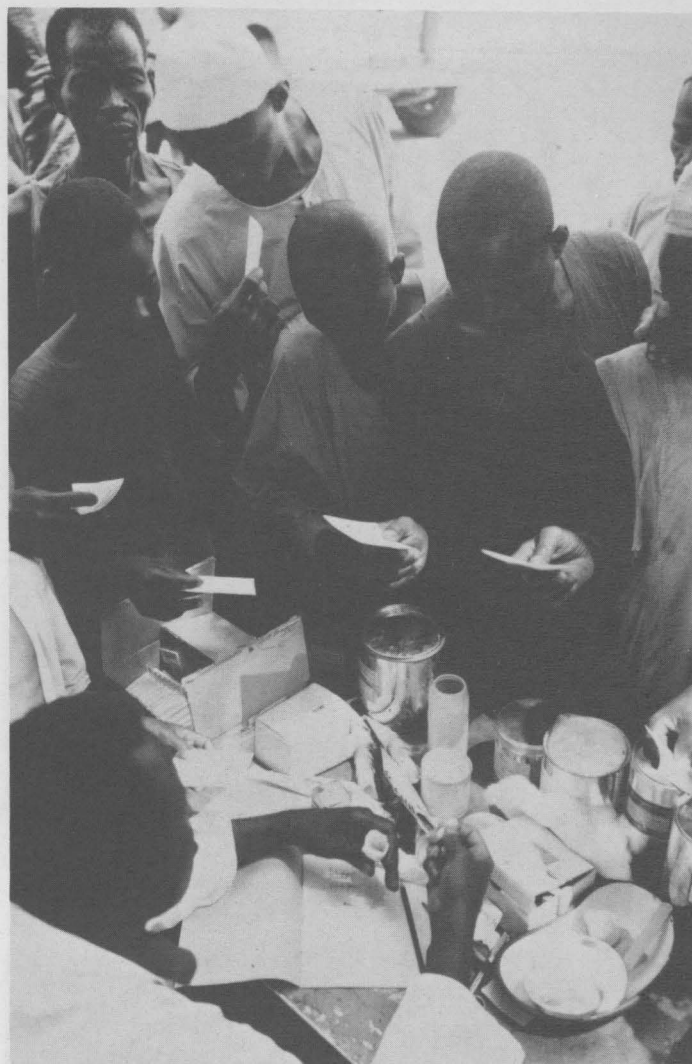
Just as the last of the villagers were being examined, the drums started beating again. Shouts and laughter were heard. Children ran off to see what was going on. As if the day had not been exciting enough, a procession approached the village center where the medical team had set up shop.

Behind the drummers and gourd shakers, a gaily-dressed group of men and women wheeled a bed decorated with a bright-colored spread and pillows. Others in the procession carried household utensils. Two men balanced a chifforobe on their heads. It was a wedding procession, a fittingly gay climax to a festive day.

Despite Drought, Hope

The incident, along with the visit of the medical team, served to illustrate a spirit of hope that has not yet been extinguished by the drought that has afflicted the people of Dourbali for the past five years. In this time they have suffered losses of livestock and crops, but they don’t consider themselves badly off.

Houna Tchaundi, the village chief, said the people have been able to live off the millet and vegetables they raised last fall, plus some food trucked in from Ndjamena, donated by the United States and other countries. But the day the medical team visited the village in May there was little food left over. The people of Dourbali were eating wild berries, nuts, and a little donated millet that had been stored. They were expecting a shipment of relief food.



Some of the villagers in Dourbali line up at the “fair” table, where mobile health team aides dispense medicines.

“There has not been enough food, and certainly not enough good quality food,” Mr. Tchaundi said. “But we have survived. We are not a critical area. No one has died of starvation. Really, our greatest need is for clean water. We need wells.”

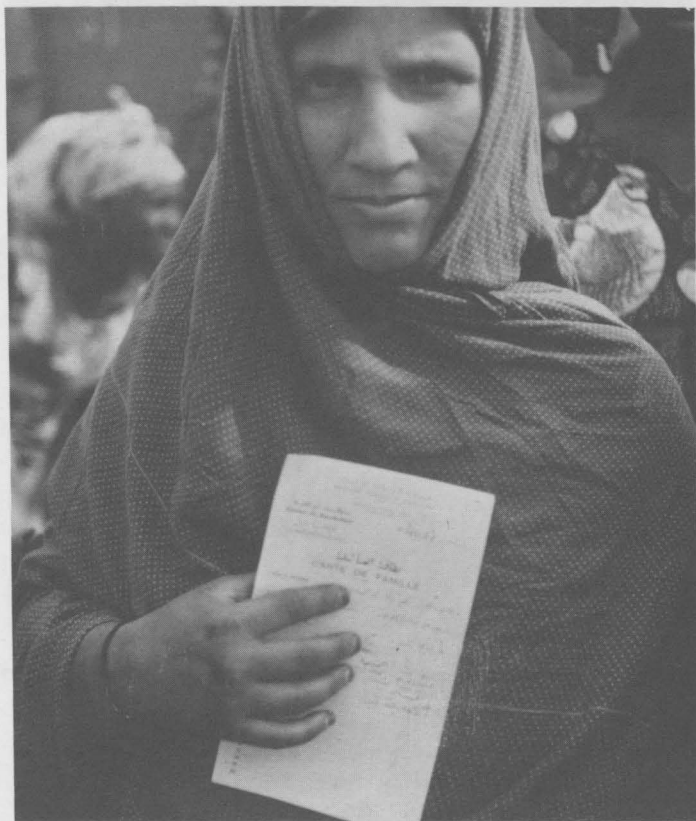
He added, hopefully, “the rains so far look like we may have good crops of millet, peanuts, and *gombo* (a vegetable) this year. We lost a lot of cattle last year and the year before, but those that have survived are doing all right.”

Assistance activities such as the health program in Chad are being undertaken throughout the entire Sahel—the vast region of Central and Western Africa that has been gripped by searing drought for the past four to six years. All across the stricken areas of Chad, Niger, Mali, Upper Volta, Mauritania, and Senegal, actions in the field of health, transportation, grain storage, food production, and reforestation aim to lay the foundations on which 25 million people might build better lives.

It was a year ago that the drought in the Sahel—the area immediately south of the Sahara desert—



Men and women wait in segregated lines for the food distribution center to open in a Nouakchott arrondissement.



A Mauritanian woman holds her ration card. Each arrondissement in Nouakchott has its own distribution center.



Food shipped in to Mauritania from Germany is stacked on the Nouakchott wharf. Trucks will haul the grain to distribution points.

came to world attention. The drought had been going on for several years and, in fact, U.S. Government officials had warned of impending disaster in 1972. AID, which had provided about \$30 million in assistance since the mid-1960s, stepped up food shipments in November 1972. But it wasn't until 1973 that the gruesome stories and photographs began to appear: roadsides and fields littered with the carcasses of starved cattle; listless children with skeleton faces, pipestem limbs and distended stomachs; abandoned villages; desperate nomads, their livestock dead, forced to live in degrading refugee camps; trickling rivers; empty lake beds; dry wells.

Since that time a massive relief effort has been mounted. The United States and other donors have contributed more than \$360 million in food and other types of aid. Of this, the United States share has been approximately \$129 million. More than 1.1 million tons of food have been shipped, of which the U.S. contribution has been 506,000 tons. Included are more than 5,000 tons of so-called protective foods—instant corn-soya-milk and soy-fortified grits. While the bulk of U.S. grain shipped to the Sahel has been sorghum, other donors have also shipped additional grain, powdered milk, and "protective" foods.

Airlift Resumed

The rains of 1973 were disappointing, intensifying the need for emergency relief shipments. As the 1974 rainy season approached in May, extraordinary efforts were being made to assure that the 650,000 tons of food grains estimated to be required from donor countries in the Sahel this year would be distributed in time to avert hardship. AID, for example, resumed an airlift in Mali in June to make sure the food reached the distribution points.

But the drought—unquestionably one of the major disasters of our time—is not the only concern in the Sahel. As catastrophic as it is, the drought has done more than threaten famine. It has laid bare the poverty and lack of development of a large number of people and a vast portion of a continent. (See Table on page 36.) It has dramatized what may be a worldwide climatic shift. It has made apparent that a way of life for several million people is permanently changed. It has created an urgent need for more effective international cooperation in emergency endeavors. It has challenged the imagination and initiative of scientists and technologists in the field of environment. It has shaken the economic, social, and political structures of the countries in the area.

Maurice J. Williams, former Deputy Administrator of AID who held the post of Special Coordinator for Emergency Relief to Sub-Sahara Africa, told the U.S. Congress recently:

"The disastrous drought situation in the Sahel presents a more difficult and complex problem than do disasters such as floods and earthquakes . . . the drought-afflicted countries are among the poorest in

the world. Merely to recover where they were before this drought would still leave a large majority of the people malnourished, without adequate medical attention, and with few educational or employment opportunities."

Kissima Doukara, Mali's Minister of Defense and Internal Security, who is in charge of his country's massive relief effort, also sees the problem as one requiring more than emergency efforts.

"The biggest problem," he said recently in an interview, "is development. For example, here in Mali we know we have only so many rivers. They are not developed, so we must rely on the rainy season. And we know what that means. There is, therefore, no stability. We must have irrigation and other forms of development."

Milwaukeean Malcolm McConnell, 35-year-old director of the Peace Corps in Mauritania responsible for assisting AID in agricultural development projects in the near-desert country, sees the drought in the Sahel as one of a series of great crises the world faces in the next 25 years.

Author of a successful novel and a former Foreign Service Officer in several African countries, Mr. McConnell says, "The Sahel is almost a testing ground of what is going to happen in other parts of the world.

"It is not just the drought, or a lack of food, as serious as these are, but the poverty and under-development. This is the real problem that faces the Sahel and the world and it is going to be interesting to see how the world responds. I want to be a part of this."

AID 'R and R' Program

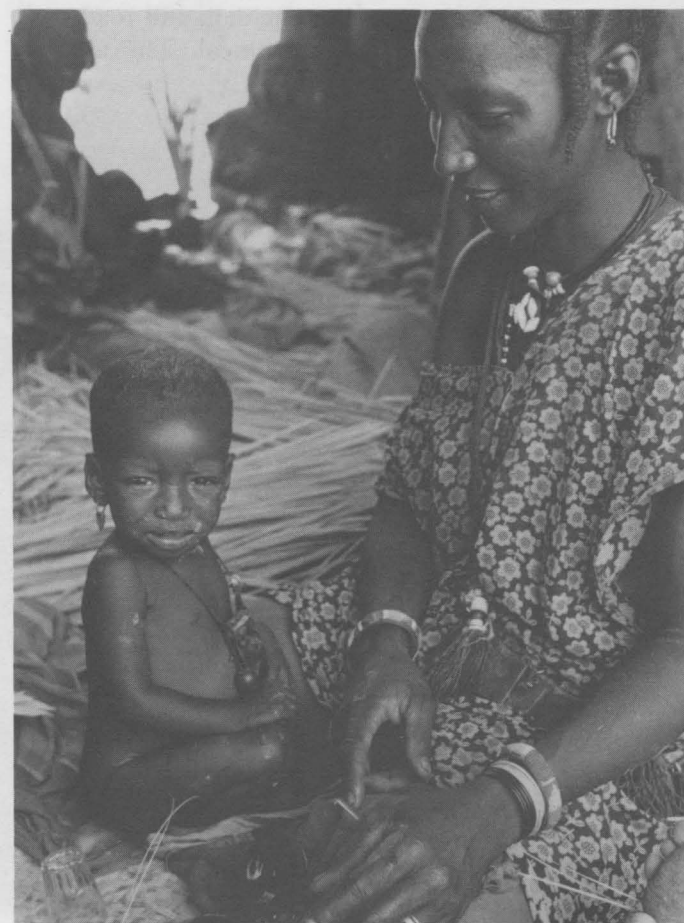
The need for development has been recognized among the donor countries and agencies involved in the Sahel. On the part of the United States, AID has activated a Recovery and Rehabilitation program—"R and R" for short. Following an intensive study by a team of AID technical advisors and experts led by Dr. Edward Fei, a variety of critical short-range actions are being undertaken. Much of the material in this report, such as the visit of the health unit in Dourbali, is devoted to these activities and some of the imaginative individuals carrying them out.

A good "R and R" example is a water storage project being undertaken in the Korsimoro subdivision of Upper Volta. Here, under the initiative of Ouedraogo Mamadou, the 34-year-old administrative chief of the subdivision, the farmers and herdsmen of the area are building an earth and rock dam that has already started backing up a small stream to form a reservoir that will supply water to the area the year around.

Mr. Mamadou, who studied economics at Columbia University a decade ago under the AID participant training program, started the project a year ago.



At the refugee camp in Tchén Tabaraden in Niger, wheat flour is doled out to families. U.S. Civil Defense biscuits are popular.



A child in the refugee camp at Timbuktu, with her mother, is recovering from an infection. Malnutrition here declined sharply.

"I try to show the people they must do this for themselves," he said. "I remember what your President Kennedy said, 'Don't ask what your country can do for you, ask what you can do for your country.'"

"I show to the people they have no money; they have water only in the rainy season; they must depend on themselves if they wish to change this."

The subdivision has a population of about 15,000 with 2,500 living in the village of Korsimoro. Upper Volta's landscape is studded with outcroppings of laterite rock. One of these is about two miles away from the reservoir site. Mr. Mamadou saw that the material was available to solve a serious situation. Not only did the stream dry up to a trickle in the dry season, but, during the rainy months it washed out the only road leading to the highway, isolating the village. The road runs through a swamp. In addition, there was no supply of potable water.

"We had no money or help when we started," Mr. Mamadou said. "I planned the dam to create the *barrage* and discussed with the people how to improve the road.

"They were happy to work, but without some sort of compensation it was sometimes difficult to get all the labor we needed." Mr. Mamadou talked to the nearest Catholic Relief Services representative and he was able to get a supply of 200 sacks of U.S. Food for Peace cornmeal every month. Now, 100 persons who work two weeks a month on the dam and road each receive one 100-pound sack of cornmeal. The work is

spread around among the people, so all can share in the labor and the food.

In addition to the food furnished to CRS, AID, through the U.S. ambassador's self-help fund, has provided other materials. Also, a French agency has furnished tools.

"After we got started," Mr. Mamadou said, "people from our area who had left to work in the Ivory Coast heard about the dam and sent us cement. They said, 'we can't send money, only cement, we wish you to build the dam.'"

Dam Will Bring Progress

Mr. Mamadou, his eyes shining with enthusiasm as he shows a visitor the work accomplished so far, says:

"The water will be available for humans, too. Otherwise, the people have to go 15 kilometers (about 10 miles) to get clean water in the dry season. Also, cattle can be watered now in the dry season, and the *barrage* will furnish water for irrigation. We can now grow potatoes, tomatoes, and other vegetables for cash crops which we could never do before."

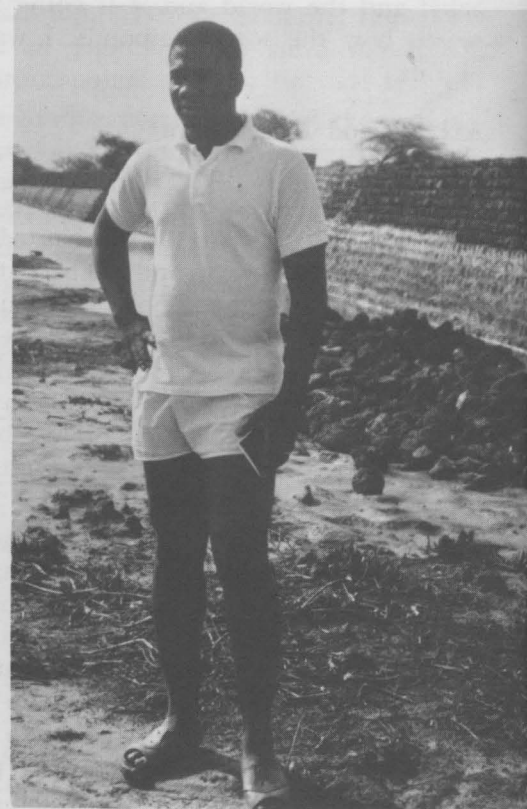
Mr. Mamadou gazed at the dammed-up water sparkling in the sun and said, proudly:

"Last year there was nothing here. Now, look. I feel I am doing something for Upper Volta—for my people."

The project in Korsimoro is an example of an overall activity being supported by AID in Upper Volta. AID is providing \$340,000 to assist in the conservation



Villagers walk across the dam near Korsimoro, Upper Volta. The self-help project is being assisted by AID and other agencies. Workers receive part payment in food.



Ouedraogo Mamadou, a former AID participant, and the dam he conceived.

of water resources and their use in agriculture. Under the supervision of the Voltan Government's Service de l'Hydraulique, participants in the operation are the Peace Corps, the Catholic Relief Services and World Food Program. AID's contribution will provide equipment, materials, and help pay operating costs. CRS is also receiving support from the Rockefeller Brothers Fund and Oxfam.

While actively supporting "R and R" activities as represented by the health service in Chad and the self-help reservoir in Upper Volta, AID also is involved in planning for the medium and long-range development of the Sahel. The African governments themselves, at a meeting of their heads of state in Ouagadougou in September 1973, established the basic elements for a long-range development program estimated to cost \$800 million. AID is working with the National Aeronautics and Space Administration on the use of satellite technology for agricultural planning. The National Academy of Sciences has been asked to assist in seeking out new approaches to solving development problems. AID is discussing with the African-American Scholars Council how research might play an effective role. A major contract has been signed with the Massachusetts Institute of Technology to assess development alternatives available to the Sahel governments. The U.S. Center for Disease Control in Atlanta has been asked by AID to assess middle and long-range health and nutrition needs.

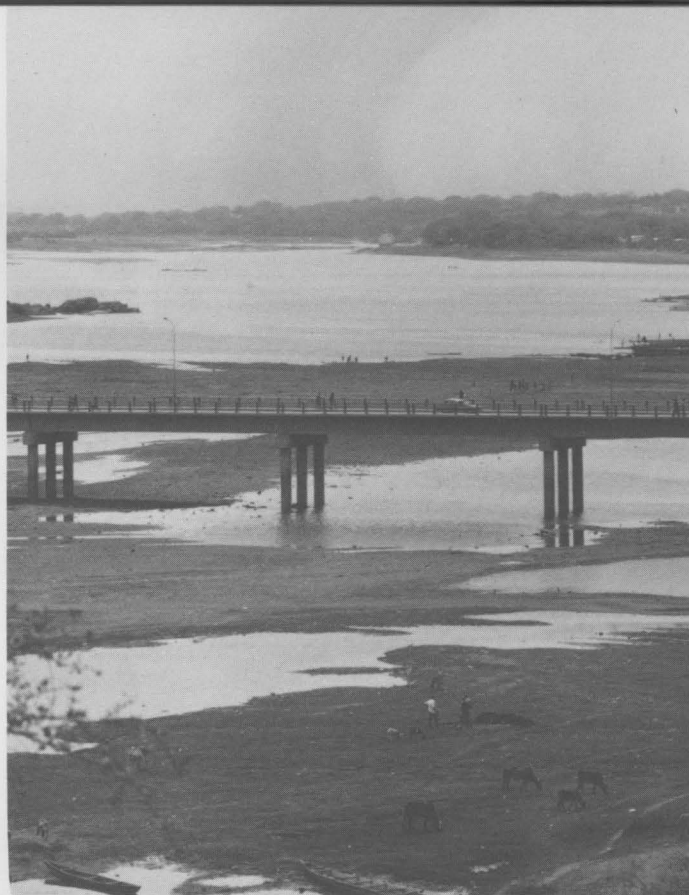
Significant Differences After a Year

In the meantime, however, the immediate problem of emergency relief continues. Visitors to the Sahel this May who had toured the drought countries a year ago and last fall see some significant differences.

Last year, evidence of the drought was visible everywhere. The dead animals made a strong impact. The despairing nomads — especially the children — brought the tragedy home in even more human terms. The sight of dried-up rivers and lakes; the dead echo of dry wells; the blowing desert sands; the destroyed trees all plainly depicted the disaster.

This year, it is possible to drive the same roads and see fewer dead animals than on a U.S. highway. The children look and act more like normal boys and girls. The herds of cattle, goats, and sheep that have survived are robust. Few bones are sticking through the hides of cows. This past May some rain had fallen in Chad, Niger, Upper Volta, and Senegal. Farmers could be seen preparing their fields and even planting. The markets in the cities and towns were vibrant and bustling.

But all this, of course, is not because the drought is over or even eased. Feeding and health programs have been organized by the Sahelian governments, the donor nations and agencies. This has resulted in some physical improvement among the people affected. The deaths of large numbers of livestock



The Niger River at Niamey looked like this in May. The bridge, financed by AID in the 1960s, is named for President Kennedy.

have brought the surviving number of animals into better balance with the reduced amount of forage still available. And strong efforts are being made to save surviving livestock with special feeding programs.

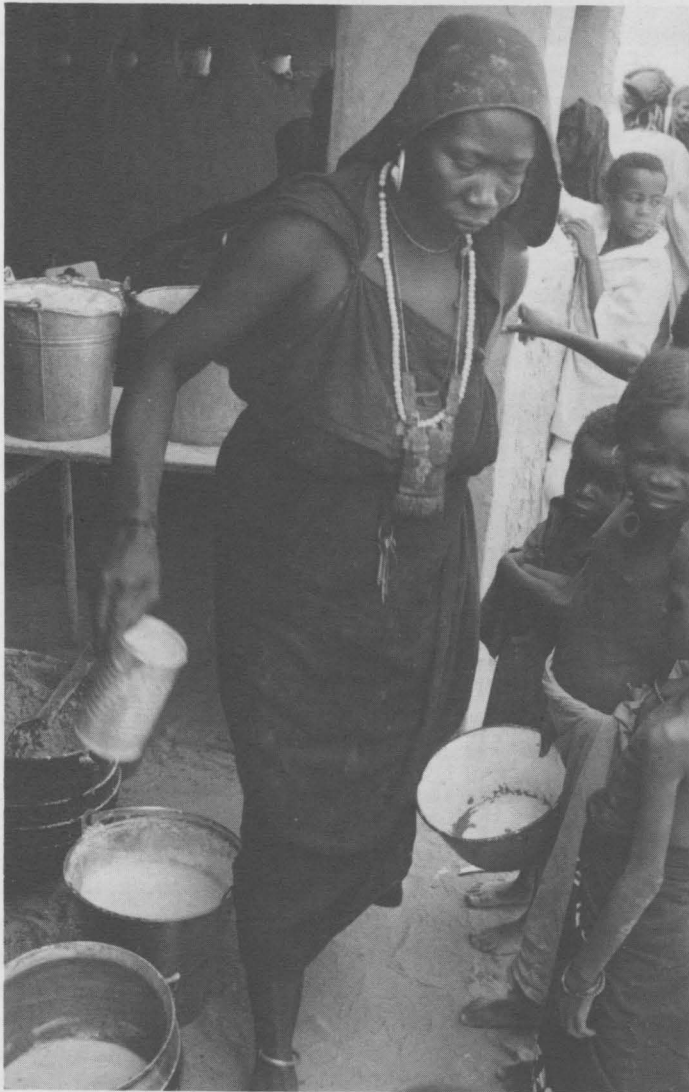
And the desert still encroaches. The rivers are lower than ever—the Niger at Niamey had even less water this May than a year ago when it was possible to wade across. The lakes are drying up still more. The town of Bol, where six years ago a man could fish from the docks, is now 15 miles from the shore of Lake Chad. Lake Guiers in Senegal again is dangerously low. The increasing salinity of the Senegal River endangers the sugar and rice plantations.

The drought, in fact, has spread. In addition to the six countries of the Sahel, the Gambia has been affected and is being included in relief plans. A severe drought has afflicted Ethiopia. Other countries that have been affected in the past year include Botswana, Kenya, Tanzania, Cameroon, Ghana, Nigeria, Guinea. Parts of the Sudan suffer chronically from prolonged dry spells.

In the six Sahelian countries, the shortage of food is estimated by the Food and Agriculture Organization to have risen from 550,000 tons a year ago to 650,000 tons this year.

Father Guy Marlowe, who has headed a Catholic mission at Dori in Upper Volta for many years, fears that the coming year may not be any better.

"We had 16 millimeters of rain on May 13," he said several days after the occurrence. "It was the first rain since last September. Normally, we get three rains in June, five in July, and a great deal in August.



A refugee woman helps in the feeding line at the camp in Tchín Tabaraden, Niger. Youngsters receive milk daily.

It is a sign of a bad year if the rains start before June."

He said that the farmers generally prepare the ground for planting after the first rain, and plant after the second. But if there isn't normal rainfall after that, the seeds die in the ground. That was the situation in many parts of the Sahel last year.

Cholera also had occurred in the Dori area, "because when there isn't enough rain, people will drink from any source." Father Marlowe said the epidemic had ended with a mass vaccination campaign.

So the drought persists.

Yet, overall, there is change from the spirit of desperation of a year ago. The refugee camps have swollen in size, but they are better organized. In the Lazeret camp on the outskirts of Niamey, there is a tent about 20 feet by 15 feet where youngsters of the camp receive and drink their daily allotment of milk (about 1½ pints).

The camp and the feeding operation are run by the International Red Cross, with the Nigerienne Red

Cross. Twelve nurses have been assigned to the camp. On one recent day, the two on duty in the milk tent were Mrs. Michele Perron and Mrs. Jeanne Michaud of Canada.

"We feed about 800 children a day," Mrs. Perron said, as she closely watched the young boys who were helping to mix the milk powder with water from the water tap. "And we make them drink the milk right here."

The reason, she said, is that some of the children would fill their bowls, or cans, or pots, or whatever they brought, then go out and give the milk to their parents.

"The milk is meant for the children," Mrs. Perron said, "and we want to be sure they drink it."

She laughed as she saw one child, about three years old, struggle up from the squatting position in which she had been drinking from a bowl. Her older sister helped her up.

"Look at her little stomach. It's really filled. We know that if they have to drink all their milk here they will have enough and won't come back."

A walk through the camp reveals an apparent effort by most of the nomads to adjust to an existence that threatens to become more permanent than they first realized. Some of the more enterprising refugees have set up stands to manufacture and sell small utensils and crafts to visitors and those of their neighbors who might have earned a few francs. One man had acquired a sewing machine, and in the shade of a makeshift stall, was busy plying his tailor's trade. A well was being deepened in another location. Many refugees also lined the road with their belongings, hoping for rides to other locations, and, possibly, jobs.

The Lazeret refugees also have ventured into self-government and have elected chiefs. One is Ago Ab-

(Continued on p. 35)

Other recent War on Hunger articles relating to the Sahel

"The Edge of Catastrophe", Jerry E. Rosenthal, August 1973.

"Dry Lands", Gilbert G. Stamm, October 1973.

"Mass Famine Averted" (Report to the President by Maurice J. Williams, Special Coordinator for Emergency Relief to Sub-Saharan Africa), October 1973.

"The Sahel: Relief Assistance Continues", December 1973.

"Food, Man and Weather", John E. Ross and Reid A. Bryson, February 1974.

"Can the Sahel Be Saved?", N. H. MacLeod, June 1974.

SURVIVAL IN THE SAHEL

Land, Livestock and Lady Bugs



A lady bug feasts on white scale which has infected these palm leaves. The use of the insects has helped save the trees.

Not far from Agadez, the Sahelian nomads' historic trading and cultural center in Niger, a lady bug is comfortably seated on a palm leaf contentedly dining on a special delicacy.

The lady bug's a la carte entree is *cochinelle blanc*, a food that should never appear on a human menu. It has, however, played a very significant role in the diets and lives of the people of the Sahel.

Cochinelle blanc, or white scale, has blighted the date palms of the oases that border the southern edge of the Sahara desert. It has killed thousands of the valuable trees during the severe years of long drought—at a time when food and all the other products of the date palm are needed more than ever.

The date palm is literally a tree of life for the nomads and oasis dwellers of the Sahel. Next to grass, the palm is probably the most important form of plant life in Sub-Sahara Africa. From it the people of the Sahel and other tropical and sub-tropical lands obtain food, building materials (both timber and thatch), fuel, fiber, mats, hats, baskets and other utensils. Oil is extracted, used for cooking and to light lamps. The seeds make buttons and carvings. And the palm, of course, provides shade in an area where the heat from the sun raises temperatures to 110 and 120 degrees. The tree is necessary to hold the soil to resist the encroachment of the desert. It stimulates the existence of wild life.

The white scale produces a toxic substance that in turn draws the life-giving sap from the tree. Thus, it qualifies as an enemy of man. It is one of the many problems of the Sahel that the drought has brought to light.

The Nigerienne Ministry of Development and Cooperation sought help to save the date palms and, in conjunction with the French Agency for Aid Cooperation and Church World Service, a plan was devised last spring. Lady bugs were brought in (from Iran via Mauritania) where they had been found to dote on white scale as a food. The little insects would be placed on the leaves of the surviving palms in a pilot oasis and trust that the white scale of Niger was as edible as that in Iran and Mauritania.

Sidney K. Bliss Jr., the 29-year old representative of CWS supervising the project, enthuses over the success of the project so far, and its implications for the people of the Sahel.

"It is a model for ecological control," he says. "When the oasis dies, there is a great ecological imbalance. Saving the oasis means saving the environment. And the use of lady bugs means that we use no chemicals that could cause pollution or other problems. The biological control hurts no one—except the scale. By restoring the date palm, we are restoring the economic and ecological balance."

AID Assist for Project

The Agency for International Development is assisting in the project as part of its Recovery and Rehabilitation program for the Sahel. AID is furnishing \$125,000 for vehicles, materials and operating costs for a two-year period to augment the \$30,000 previously committed by CWS and an additional \$150,000 provided by the voluntary agency.

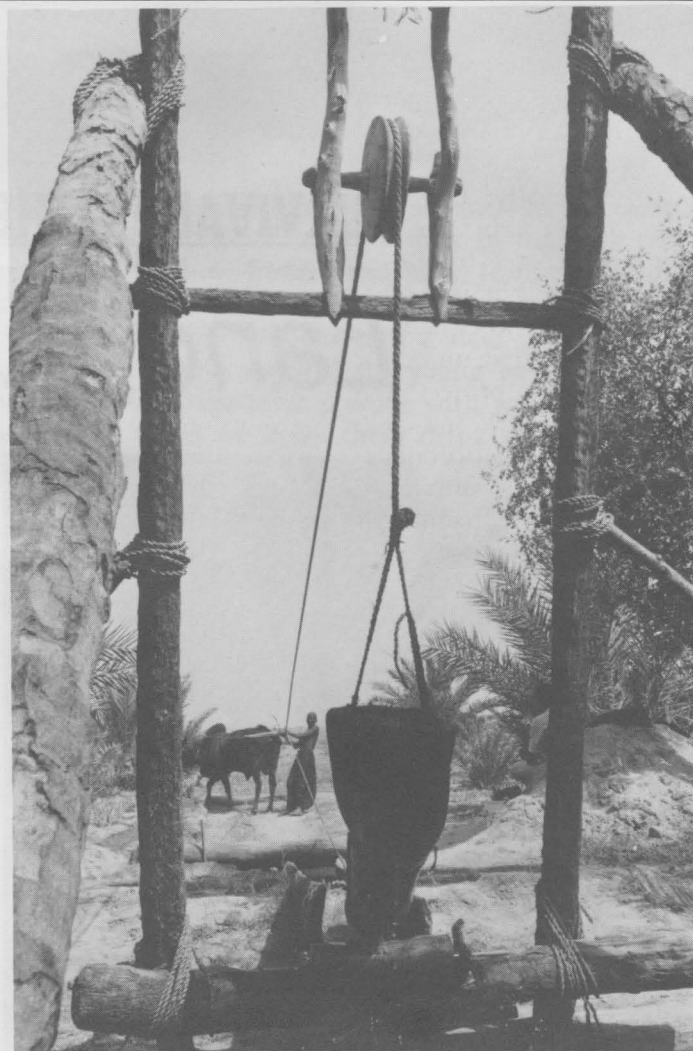
But the pilot project at the oasis near Agadez is more than a host of hungry lady bugs making their homes on palm leaves. The project includes an irrigation scheme from the oasis well that is stimulating the growth of beans, alfalfa, melons, tomatoes, carrots, onions, squashes, and other vegetables.

"We have something growing at all times," the dynamic Mr. Bliss says. "The project not only gives work to the nomads who have lost their livestock, but provides a variety of crops over most of the year and a supply of vegetables for the Agadez market."

Mr. Bliss, the son of a Boston minister and heir to the tradition of a missionary family, is a former Peace Corps Volunteer and 1966 graduate of the University of Michigan. "That's where John F. Kennedy first announced the proposal for the Peace Corps, you know," Mr. Bliss says. "That had a lot to do with shaping my life."

He sees the date palm and agricultural project also as an experiment in establishing a "microclimate." The date palm, he says, "is the root of economic life for these people. The dates, of course, are food, and Tuaregs can live on eight dates a day. The products of the tree can purchase millet and sorghum and other necessities."

At the time of a visit by an AID team to the oasis this May, young palm trees that had been scale-



An ancient but ingenious device for raising water from a well is used in a Sahelian oasis to irrigate palms and vegetables.



infested were already showing signs of producing dates as a result of the lady bugs. A worker was using an ox to draw water from a 50-foot well through an ingenious process that Mr. Bliss said is descended from Roman times. It works this way: The ropes extending from the ox are attached to both open ends of an animal skin water bag. After the skin fills with water in the well, it is hauled up by the ox. As the ox trods a well-worn path, one of the ropes is pulling

the skin vertically; the other is holding the narrow portion of the skin horizontally to prevent spillage. As the skin comes to the top, the rope holding the bottom of the skin horizontally is slackened and the water spills out down a sluice. The water then flows into a series of irrigation ditches.

The date palm project is one of numerous activities supported by AID and other agencies to stimulate recovery and rehabilitation of agriculture in the drought-stricken countries of Niger, Chad, Mali, Upper Volta, Senegal, and Mauritania.

The need, of course, is obvious. In Chad, for example, 50 percent of the cattle have been lost, according to Youssouf Baba Bitangue, Director of the Interior and President of the Chadian Red Cross. And, he said, there were some millet-growing regions of the country that either had no rain last year, or not enough to bring in a crop.

"Two to three years of good rains are needed," he said.

Ali Saibou, newly-appointed director of the drought relief and development effort in Niger, also pointed out that his country had a deficit of 225,000 tons of grain, and that this year it would receive about 185,000 tons from the United States and other donors toward that deficit.

"It is a critical situation," he said.

The situation is much the same throughout all the Sahelian countries. Until crops can be harvested, food must be brought in from the United States and other countries. Although projects such as date palm rehabilitation must be undertaken to meet immediate problems, they also are necessary to lay the foundations for future and more permanent agricultural development. Some require essential changes in the lives of farmers, as evidenced by a project in the St. Louis Region of Senegal.

Here, under the supervision of a group of enthusiastic Peace Corps Volunteers, farmers who had traditionally grown millet and peanuts are now turning to truck farming. The basis of their new life is the digging of new wells. AID furnishes self-help funds to buy cement and equipment.

"When you grow millet and peanuts," Bob McGurn, a 22-year old native of Boston, says, "you need rain. When you grow vegetables, and there is a good well, you don't need rain. It's as simple as that."

The young Peace Corps Volunteer has become closely associated with a 75-year old Senegalese mason named Maasa Diop whose energy belies an age that is nearly twice the life expectancy in the Sahel.

"Maasa knows every inch of this area," Bob says. "He knows the water table better than any scientific survey, and when he says to dig at a certain place and the water table will be five meters down, you dig, and the water is right where he says."

Bob, who speaks the native dialect—walla—has been adopted by a family in one of the villages he serves. He led a visitor recently to one of his "success" projects in Dibimatil. It was a farm that once grew millet and peanuts exclusively, cultivated by a member of the Peuhl people, El Hadji Sow. The Peuhls are mostly nomadic. Here, however, they have begun sedentary farming.

Persistence Pays Off

"Sow had been after me, asking if I could get him a well so he could have a garden," Bob relates. "I came and when I saw the effort he was putting in to try and grow vegetables, I decided to help. I had been feeling depressed that day, and this uplifted me. I got hold of the well digger and the cement, and now you see this."

"This," the visitor could see, was a lush acre of vegetables—tomatoes, carrots, beans, onions, eggplant, peppers, cabbage, lettuce, beets, as well as some millet and peanuts that could be watered from the well.

Mr. Sow's family helps cultivate the mini-truck farm. Living in the mud and thatch huts are his three wives, 13 children, his mother and younger brother, and the brother's wife and four children—24 people in all.

Another factor, besides the unreliability of rain, enters into the change of the farmers from cultivating only millet and peanuts to vegetables. According to Okinawa-born Frank Casey, 22, and Sid Roseberry, 23, of Paris, Kentucky, Peace Corps Volunteers also engaged in the well-digging-vegetable activity, marketing is a factor as well.

"If they are able to grow some millet and peanuts," Frank says as he shows the gardens being cultivated near the sand dunes of the Senegal River delta, "the people bring their crops to the collecting points but they may not get paid by the official agencies for a long time. When they grow vegetables, they can bring



Date palms in the oases of the Sahel are threatened by white scale. The death of these trees would be an added calamity.

them directly to the market, sell them immediately and be paid cash on the spot."

There is a problem, however. As with agricultural development projects everywhere, so-called "second-generation" factors enter into the picture. Lack of good transportation and marketing information have worked against the vegetable farmers. In May, for example, there was a glut in the onion market. Sacks of onions grown by the farmers lay unsold on the roadsides and in villages, mostly because there was no way they could get them to Dakar, where a decent price might be paid. In St. Louis, the nearest city, the demand for onions was saturated.

Also, not all of the garden projects are great successes. Bob showed his visitor one farm where the well was not maintained and was not being used productively. The villagers operating the garden project had not irrigated regularly and many of the vegetable plants were withered.

"So much depends on the people themselves," Bob said. "If they're not really motivated, or if they don't have a good leader, the project can fail despite anything we can do."

But throughout the Fleuve region, where Bob, Frank, and Sid operate, the enthusiasm for their work and the help they are receiving is noticeable. The three refer to the members of their "families" in the villages as "brother" and "father", "sister" and "mother."

"I took a five-day horseback trip through my villages," Sid noted. "I never had to buy a meal or find a place to sleep. I could make my home anywhere."

As the volunteers make their rounds, the villagers show their friendship by presenting them with fresh eggs and chickens. Of course, they are also given vegetables that they helped grow. The volunteers also are called upon by the villagers for other help. Bob is assisting one Peuhl village to organize a school.

A New Spelling

The new wells themselves become community gathering places and are looked upon by the villagers as a special treasure. Often the workers on the wells will inscribe mottoes or messages in the cement casements before they dry. In one lonely village, where a well had recently been built, Mr. Diop, the septuagenarian mason, had etched into the cement the letters "MURIK".

"What does it mean?" a visitor asked. Mr. Diop turned to Bob, who had translated the question into walla. Bob replied, as Mr. Diop beamed,

"It is his spelling of 'America'."

In Mauritania, a similar objective is sought in a project undertaken by the Peace Corps with AID financing. Irrigation pumps are being placed in the palm grove region of Atar to help increase vegetable production.

A project in Chad has the same objective. AID is providing up to \$30,000 in the Lake Chad area for small-scale irrigation equipment, such as portable

pumps, tubing and other equipment to boost agricultural production. This equipment will be used in polders—areas which formerly were swampy inlets of Lake Chad. They have been diked off and drained similarly to those in Holland's Zuider Zee—where crops can then be grown. Ten polders will be equipped with pumps furnished by AID. A Peace Corps Volunteer services them. The activity is being carried out by SODELAC, the Society for the Development of Lake Chad, under the direction of Jean-Claude Menager, a French irrigation specialist.

On a recent trip to the Lake Chad area with Mr. Menager, an AID writer-photographer team viewed the polder project, as well as other Lake Chad development activities.

Corn Fields on Lake Bottom

From a point in Bol, the town that normally sits on the shore of the lake but is now 15 miles distant because of the effect of evaporation on the lake, Mr. Menager pointed to lush fields of corn growing on former lake bottom.

"The soil is so fertile," he said, "they can get three crops of corn in a single year."

The French Agency for Aid Cooperation has carried out the research for the polder projects. Technicians have found that the Dambata and Penjamo varieties of wheat developed by International Maize and Wheat Improvement Center (CIMMYT) in Mexico do well in the soil and climate of the region.

One of the polders near the village of Broumtchiloum, 17 miles from Bol, is planted in tomatoes, peppers and other vegetables. On the day of the team's visit, it was being irrigated by two men, one of whom worked the well using an ancient lever and counterweight device. A wicker basket to hold the water is attached by a rope to the unweighted end of a long timber centered on a cross bar. The man pulls this end down, permitting the basket to drop into the well. When it is filled, he releases his grip and the weight at the other end of the pole drops, raising the basket of water. The water is spilled into a sluice. Another man dams the sluice at intervals to divert the water into ditches along the rows of plants. The AID pumps will enable the men to irrigate considerably larger plots faster and more effectively.

Oumar Boukar, a farmer in the village, said that despite the drought, he had been able to raise enough food to feed his family during the past year.

"But," he said, "I once was able to raise enough to sell some food. Last year I could not do this."

In the village of Broumtchiloum, the recent harvest of wheat, a community enterprise, had been threshed, and the women were chopping the stalks to be used for mats and thatch.

Moussa Agrey, the local supervisor, and Mahamat Boukar, sector chief, explained that the wheat crop this year was "not too good because of the lack of



Youngsters on a farm in the Matourkou rural development project in Upper Volta plow a field in preparation for planting. Peuhl

herdsmen are to be given the opportunity to participate in the project, operated by a U.N. agency and financed by AID.

water. But we were able to sell enough to pay our taxes."

SODELAC buys the wheat that the village does not keep and sells it to flour mills.

In the Lake Chad region, SODELAC also is carrying on a research project with the *kouri* breed of livestock. These cattle, which grow large bulbous horns (said to make it easier for them to float across the lake), are unique in the Sahel and breeding experiments are being carried on with *zebu* and other types of cattle. AID is involved in this experiment and with the growing of a thick, tall high-yielding forage grass, known as *penicetum*, that stems from the sugar cane family. The grass, which will yield as high as 200 tons an acre, requires large quantities of water, however. But if water is available, the high yield can support a controlled herd of cattle far better than large expanses of dry grasses, which are subject to the vagaries of rainfall.

Such vagaries are the concern of the Tintebisgine project being carried on in a rocky moonscape northeast of Agadez. Here, young volunteer members of the International Christian Organization for Peace, associated with Church World Service, are building three-foot high stone barriers on the slopes of the undulating semi-desert.

Dallas Myers, 25, of New Paris, Indiana, says the purpose is to seek to prevent the waste of water that cascades down the slopes during the rainy season.

"The rains, when they come, come in torrents, and the runoff is so fast the soil here has no chance to absorb the water. These barriers, constructed of

the rocks we find right here on the ground should help to slow the flow of water and permit it to soak into the ground. If this will happen, grass and trees will grow and this land—now a waste—can become forage country for livestock."

The project, which is being financed by European voluntary agencies, had 23 barriers completed in May, with two more nearing completion, after having been started in March. The 60 workers, who are herdsmen normally, receive pay both in cash and food.

Kuna, a young Tuareg working in the project, said he once owned 20 camels.

"They all died in the drought. Now I have 15 goats, but last year I lost 40. I'm working on this dam and hope I will be able to start another herd with the money I earn and on the land that we are trying to save."

Another young Tuareg from the Air Mountains, north of Agadez, said he hoped, too, to rebuild his herd, but he would not like to settle down in one place.

"Perhaps, if I see that it would work out, I might do it, if I can still keep my cattle."

Dallas said that the project is scheduled for three years in all, and they would continue to construct the barriers right into the rainy season.

"If the barriers can just hold the water four or five days," he said, "there has got to be germination. That's all we're hoping for."

A controlled type of grass-growing project, supported by AID, is under way at Tchin Tabaraden in Niger. Here, a combination grass and reforestation activity

is being operated by Peace Corps Volunteers. Different types of grasses are being grown in a nursery and will be transplanted during the rainy season to fenced-off areas about 3 miles long and two-thirds of a mile wide. The ultimate purpose is to control the grazing of the cattle in order that there will be grass available throughout the year.

The concern over feeding of livestock throughout the year is expressed in another AID-sponsored activity in Mali. Here, a group of seven Peace Corps volunteers led by Leslie Temanson, 25, of Borup, Minnesota, are launching a pilot project to have farmers dig pit silos. The pit silo, consisting of a circular hole dug in the earth, 9 feet in diameter and 8 feet deep, would be used to store grass and millet stalks when they are harvested and cut after the rainy season.

The silage would provide food for the livestock over the dry season.

"The idea originated with a Peace Corps Volunteer in Chad, Jim Diamond," Les said during a recent interview. "He couldn't figure out why the farmers weren't using the dry grass after it was harvested. Instead, they were burning it. He tried the pit silo idea and it worked."

The word got back to Washington and then was forwarded to Jack Burch, the Director of the Peace Corps in Mali. Les Temanson was asked to take on a demonstration project for the Malians. Les went to several milk distribution points and persuaded the farmers there to try the pit silo idea.

"The Malians had never siloed anything before," Les said. "The concept was entirely new. I talked to local officials and I found enthusiasm for the idea nearly everywhere. After all, these people had lost cattle in the drought and they were open to any idea that might save them."

"Traditionally, the sedentary farmers' work animals practically starve over the dry season. They have no strength, when the rainy season starts, to do the work of plowing and other chores. It takes valuable time for them to build up their strength. An ox could do only about two hours work a day and when you consider that there are about 250,000 oxen in Mali, this is not very productive for the country. It makes the planting season long and drawn out."

Demonstration Pits Show Utility

Les was able to dig nine pits for his demonstrations. They were filled last September and the silage was consumed this past spring.

"The response has been tremendous," Les said. "A milk plant now has demands for pit silos from 20 other villages and 87 farmers."

The seven Peace Corps Volunteers being trained are Jim Lajoie, 28, of Arvin, California; Jeff Dick, 23, of Springfield, Vermont; Bob Hennessy, 23, Syracuse, New York; Carter Oakes, 22, Morristown, Tennessee; John Mellow, 24, East Sandwich, Massachusetts; Marty Loftus, 23, St. Charles, Illinois; and David Crandall,

23, Roselle, Illinois. Also with the group are two wives, Antoinette Lajoie, 25, and Kathy Hennessy, 22, who will be Peace Corps teachers.

Doubts have been expressed about the value of the project, because the sugar content of grass might not be sufficient to create good silage, but Les Temanson says that there is nothing to lose and everything to gain.

"The beauty of it is that no expensive equipment or special technology is needed for the farmers," he says. "They have all the tools they need in their sickle and *daba* (a short-handled tool that can be used as an axe, a hoe or a shovel).

"Besides," says Jack Burch, the Peace Corps Director, "nearly every program introduced into Mali has been directed at the nomad. This one establishes a direct program with the sedentary farmer."

"After all," he added, "we've all been flying by the seat of our pants in the Sahel. We're all learning what will work and what won't. This is part of the business."

The Peace Corps Volunteers training for the project have no illusions, but have great confidence. They have set a goal of 20 pit silos apiece by the middle of September.



Malian farmers are being urged to try pit silos as a means to provide food for their working animals in the dry season.



Giant oyster shells are collected from the Chari River at Ndjamena, Chad, to be mixed into a high-protein feed for cattle.

"All of us have had experience getting our hands dirty," Jim Lajoie said. "We know that most of the job is public relations—getting the confidence of the people. We also know that the program can fall on its face, but if it does it won't be because we didn't try."

One program of livestock feeding that raises few doubts is a feed manufacturing and distribution activity in Chad. Night and day, for five months of the year in the dry season in the capital city of Ndjamena, Jean Vandebussche runs his American-manufactured grinder and mixer furnished by AID two years ago. Into the machines he pours cottonseed meal, sorghum, bones from a nearby abattoir, chopped fish from the Chari River, and oyster shells, some of the largest in the world, also from the Chari River. (The oysters themselves are inedible.)

Out of this comes a mixture that when fed to calves, makes up for the milk they probably are not getting from their drought-weakened mothers. Into each sack Mr. Vandebussche places an empty beer can. The can contains instructions to the farmer that one can of the high-protein feed is equivalent to three pints of milk. The beer cans and oyster shells are collected by local children who are paid in food or cash.

Mr. Vandebussche lives 100 yards from the mill, which is owned by the Chadian Government's Center for Modernization of Animal Production. It produces about 200 tons of feed per month. Nearly all of it is shipped to the northern provinces where it is distributed free by the Government. The costs are financed by the FED, the aid agency of the European Economic Community.

A supplementary feed program also is planned in

Upper Volta and Niger, and AID is contemplating reinstatement of a feed mill in Rosso, Mauritania.

A unique activity that seeks solutions to several of the basic agricultural and livestock problems in the Sahel is under way in Upper Volta. In the Matourkou Valley near the city of Bobo-Dioulasso, nomads of the Peuhl tribe who have lost their cattle are being given the opportunity to join sedentary herdsman and farmers.

The project, which has been in operation five years, is under the direction of the Upper Voltan Government and the United Nations Development Program and Food and Agriculture Organization. AID is making available up to \$350,000 for a period of two years—1974-76; the UNDP/FAO is providing \$1,425,000, and the Voltan Government the equivalent of \$1.6 million over a four-year period to expand the activities involved in the project.

In addition to a school for training agricultural specialists and extension workers, the expanded project contemplates a pilot development effort to introduce animal traction to family farms cultivating fixed parcels of land.

AID's funds will assist in providing a revolving fund for credit which will permit the further development of 200 sedentary farms in two or three villages.

The funds will also help finance a program for cattle feeding and milk cow husbandry on farms which have already had three years of development under the Matourkou project.

In addition, AID will support development of a system to improve livestock and crop production among the sedentarized Peuhl people, living in association with the villages participating in the Matourkou program.

According to Willy Peeters of the UNDP, the system is a form of community development, with village councils making the decisions.

The farmer agrees to clear 1½ to 2 hectares (about 3 to 4½ acres) the first year before he receives credit to purchase oxen and animal traction equipment. He is expected to clear at least an equal amount each year until he has cleared a total of eight hectares (about 20 acres). Two forms of credit are proposed: long term—two years of grace and five years to pay, for equipment and animals; and short term, one growing season to pay for cropping inputs, such as seed, fertilizer, insecticides, and spare parts.

Donald Atwell, AID Drought Program Representative in Upper Volta, says the program of cattle feeding and milk cow husbandry is designed to integrate agricultural and livestock production into the Matourkou village farm system. The production of manure, introduction of forage in crop rotation, conversion of forage into meat, use of labor during the dry season, as well as increasing farm income through the sale of livestock products are reasons for adding a livestock element to farms which have already benefited from the Matourkou program.

(Continued on p. 31)

SURVIVAL IN THE SAHEL

Aiding the Struggle

Simeon Bande is a born leader. At 24, he is an agricultural agent in the Matourkou Valley near Bobo-Dioulasso in Upper Volta. He joins with the farmers and herdsmen of the area in their prayers for rain. Then, he seats them in a circle around him and points out to them how they can grow better crops and preserve their cattle.

Simeon knows well the problems of the region. Much of the good land has been damaged by the destruction of trees. Herdsmen from the north, seeking to escape the drought that has gripped the Sahel, encroach on the farmers' land. Not only has there been insufficient rain over the past four years, but in May it appeared the rains would be late this year. The level of the water in the wells is dangerously low, and, if the wells are to be deepened, it means blasting through a rock table—expensive and risky.

But Simeon also knows that one of the worst problems of the area cannot be blamed on the drought to the north, or wells, or trees. It is river blindness—onchocerciasis—which is endemic in the area.

Simeon knows the disease well. He is one of its victims.

The young, dynamic agriculturist is not blind. He wears heavy, shaded glasses in the sun to protect his eyesight. And he takes pills twice a week which he hopes will arrest the disease. He does not expect a cure.

The handicap has not curtailed Simeon's energetic activities, but he knows the debilitating effect it can have on the farmers. That is why, as part of an AID-assisted integrated livestock and agricultural development project aimed at settling drought-struck herdsmen, he regards it as essential that an effort be made to control the disease.

River blindness is caused by the repeated bites of a small blackfly whose larvae breed in streams and rivers.

With Willy Peeters of the United Nations Development Program who is supervising the agricultural project, Simeon has devised a simple way of killing the blackfly larvae in the Black Volta River, one of the streams that eventually join others to form the Volta River.

A five-gallon can in which a hole is pierced in the bottom is placed on a makeshift raft consisting of an inner tube and wood crosspiece. The hole is plugged with a long stick of wood and the can is filled with a mixture of an insecticide and water. The insecticide



Simeon Bande (right), and Willy Peeters inspect larvae of the black fly which breed in an Upper Volta stream.

is a specific that will kill the blackfly larvae but will not affect fish or other life in the river.

A string is attached to the raft and one of Simeon's assistants wades across a narrow part of the river holding the string. Another string on the opposite side of the raft is held on the shore.

The piece of wood plugging the hole in the bottom of the can is pulled, and, as the little raft with its cargo is pulled across the stream by the assistant on the opposite bank, the larvae-killing chemical flows out of the hole into the water. The raft is pulled back and forth across the stream, eight times, until all of the mixture has flowed out. This is done every Monday, and, although there are no statistics yet, Simeon and Willy believe the number of blackflies in the area has been drastically reduced.

River blindness has been a concern of many years for AID and other agencies involved in development and health programs. More than one million persons in Central and West Africa are estimated to be affected. Of these, 70,000 are totally blind.

Against Disease



A youngster in Chad receives protection against measles. AID is supporting mobile health units in reaching remote areas.

In addition to the humanitarian aspects, river blindness is considered a major obstacle to economic development. Food production is reduced; the annual loss in the African countries is said to be \$30 million annually. Fertile valleys where river blindness is endemic have been abandoned. The people living in them migrate to upland agricultural areas, causing these areas to become overcrowded and overcropped.

International efforts to seek a solution first started in 1953 under the auspices of the World Health Organization. A world conference in 1965 helped ad-



Children in a refugee camp in Timbuktu like to show their vaccination scars. Camp health conditions are vastly improved.

vance the groundwork for research and study of control methods. In 1968, AID participated in sponsoring a technical conference in Tunis. The conference concluded that priority should be given to a large-scale control program centered on the headwaters of the Volta River and basin areas.

In the ensuing years, AID assisted WHO in its studies and research for the program, culminating in a recent multi-donor agreement to launch a 20-year program for the Volta River Basin. Affected countries participating in the program are Dahomey, Ghana, Ivory Coast, Togo, Mali, Niger and Upper Volta.

Cooperating in providing the funds and necessary scientific, technical and material assistance are the United States, Canada, France, United Kingdom, World Bank, International Development Association, United Nations Development Program, World Health Organization, the Netherlands and West Germany. For calendar year 1974, AID is committing \$2 million; France, \$1 million; United Kingdom, \$1 million; UNDP, \$250,000; the Netherlands, \$1 million; Canada, \$500,000, and the World Bank-IDA, \$750,000.

The long-range objective is to eliminate the disease as an obstacle to economic development.

River blindness is not considered a disease of the Sahel. But, like Simeon Bande, many inhabitants of

three of the participating countries severely affected by the drought—Mali, Niger and Upper Volta—also suffer from the disease. It is one of several health problems in Central and West Africa dramatized by the drought.

One of the most common of these problems, accentuated by the drought, is malnutrition. It has made children especially vulnerable to such diseases as dysentery, meningitis, bronchitis, tuberculosis and measles. Last year, AID financed a survey by the Center for Disease Control to determine nutrition requirements. Representatives of CDC were in four of the six countries this past spring to assemble more data.

AID also has furnished high-protein food blends and additives for child feeding programs.

In May, at the invitation of AID, Dr. Pascal J. Imperato, Deputy Commissioner of Health for New York City and an authority on the Sahel, worked with Malian officials to identify health problems. He visited several refugee camps, reporting that the health of the refugees, especially the children, was generally very good.

"The present situation," he said, "is vastly different from what it was six months ago."

Dr. Imperato also remarked on the excellent organization and attempts to improve the health environment by the Malian authorities.

Adults Susceptible to Measles

Although the welfare of children has been the principal health concern in the drought relief effort, adults, too, face several dangers, aggravated by the drought. Many are susceptible to measles. Captain Paul Gris, Technical Advisor of the Services des Grandes Endemics in Chad, adds that for adults there are other threats, such as venereal diseases, malaria, leprosy, and cholera.

AID is assisting the Service with a \$50,000 grant to finance two mobile health units and medicines. Captain Gris points out that some of the outlying areas of Chad, where the drought has been particularly severe, have had no medical services at all. The mobile units will make such service available. Captain Gris stressed especially the threat of measles.

"There has been much of this," he said, "But the AID vaccines over the past five years have been responsible for saving 22,000 to 25,000 lives a year. We have been fortunate in this respect. No one has died of measles in Chad, but the situation could become critical."

One of the problems faced by Chad and other countries in the Sahel is keeping vaccines refrigerated. He said the mobile health units come equipped with refrigerators.

Chad has been carrying on mass immunization programs in conjunction with the WHO and UNICEF. There have been no smallpox cases since 1967, Cap-

tain Gris said. Tuberculosis vaccinations also have been given on a mass basis for the past 10 years.

"Meningitis, however," he said, "has killed 2,000 to 5,000 persons per year."

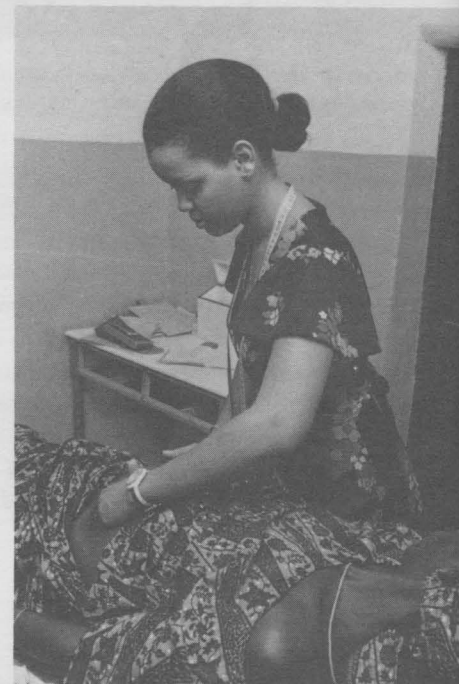
The growth of the refugee camps has increased the dangers of epidemics. Although greatly improved over a year ago in most cases, sanitation in some camps is minimal and the general conditions pose a constant threat of epidemics. In nearly every camp visited by an AID writer-photographer team in May, measles had been a problem, although the threat of an epidemic had subsided. Some children, although otherwise healthy, had conjunctivitis.

The basic problem, however, is the same as that in most developing countries—whether or not afflicted by a drought—a lack of modern health facilities, ignorance of basic hygienic practices (in Sierra Leone, for example, a country not affected by the drought, the rural infant mortality rate is estimated by doctors



A mobile health unit supplied by AID is the center of attention at Dourbali, in Chad. The whole village turned out for the visit.

Marianne Halima, an assistant at the ORT-sponsored clinic in Niger, examines an expectant mother. AID provides funds.



and nurses working in the countryside as 50 to 60 percent); a lack of nutritious food; polluted water; and a shortage of doctors and nurses.

AID and other donors are seeking to help the Sahel, and rural areas of other countries in easing the problems. AID, for example, is committing \$3 million to expand and improve the delivery of health services; reorient and train personnel; improve and modernize planning and management of health programs, among other activities. AID is continuing the furnishing of measles vaccines and other equipment, a program dating back to the 1960s. A recent action provided \$455,000 for 1,325,000 doses of vaccine and spare parts for Ped-o-jet injection machines. Also, AID is providing \$113,000 for the development of a thermo-resistant measles vaccine, to lessen the dependence on refrigeration. Another \$435,000 has been allocated for the same purposes in non-Sahelian countries.

AID is assisting drought-related health programs with grants totaling \$900,000. It is providing \$1 million to FAO's Office of Sahelian Relief Operations for UNICEF and WHO health programs in the Sahel. AID also is financing five portable hospital units—two for Niger, and one each for Mauritania, Upper Volta and Mali.

This past spring, in addition to the study by Dr. Imperato, AID financed a team of health experts from Yale University who ascertained health problems and possible solutions in Niger, Upper Volta and

Mauritania. The American Health Association cooperated in both Dr. Imperato's and the Yale team missions.

Part of AID's health program will help the Mali Government send mobile teams in canoes and boats up the Niger River when the roads are closed by rain.

In Senegal, AID is helping the government establish a bureau to coordinate the health assistance activities of the various donors. As in the other countries, AID funds are being provided for medicines, vaccines and for the support of rural health centers.

Through ORT, a voluntary agency, AID is assisting a maternity and child health extension project in Niger. A pilot project has been set up in Say, a community about 30 miles south of Niamey, the capital city. AID has authorized a total of \$1,162,000 for ORT's activities.

The people of Say contributed the labor and some materials to renovate a building, which now serves as a clinic.

The project, ORT's first venture into health activities, is the result of efforts by Dr. Susi Kessler, ORT's medical director in Geneva. The clinic is under the direction of Idrissa Djermakoye, chief medical officer of the Say sub-prefecture. Working with him is Jacqueline Schweingruber, a registered nurse and specialist in tropical medicine. Ms. Schweingruber, an attractive Swiss, has served in Nigeria, Jordan, and Laos with the Swiss Red Cross.

(Continued on p. 22)



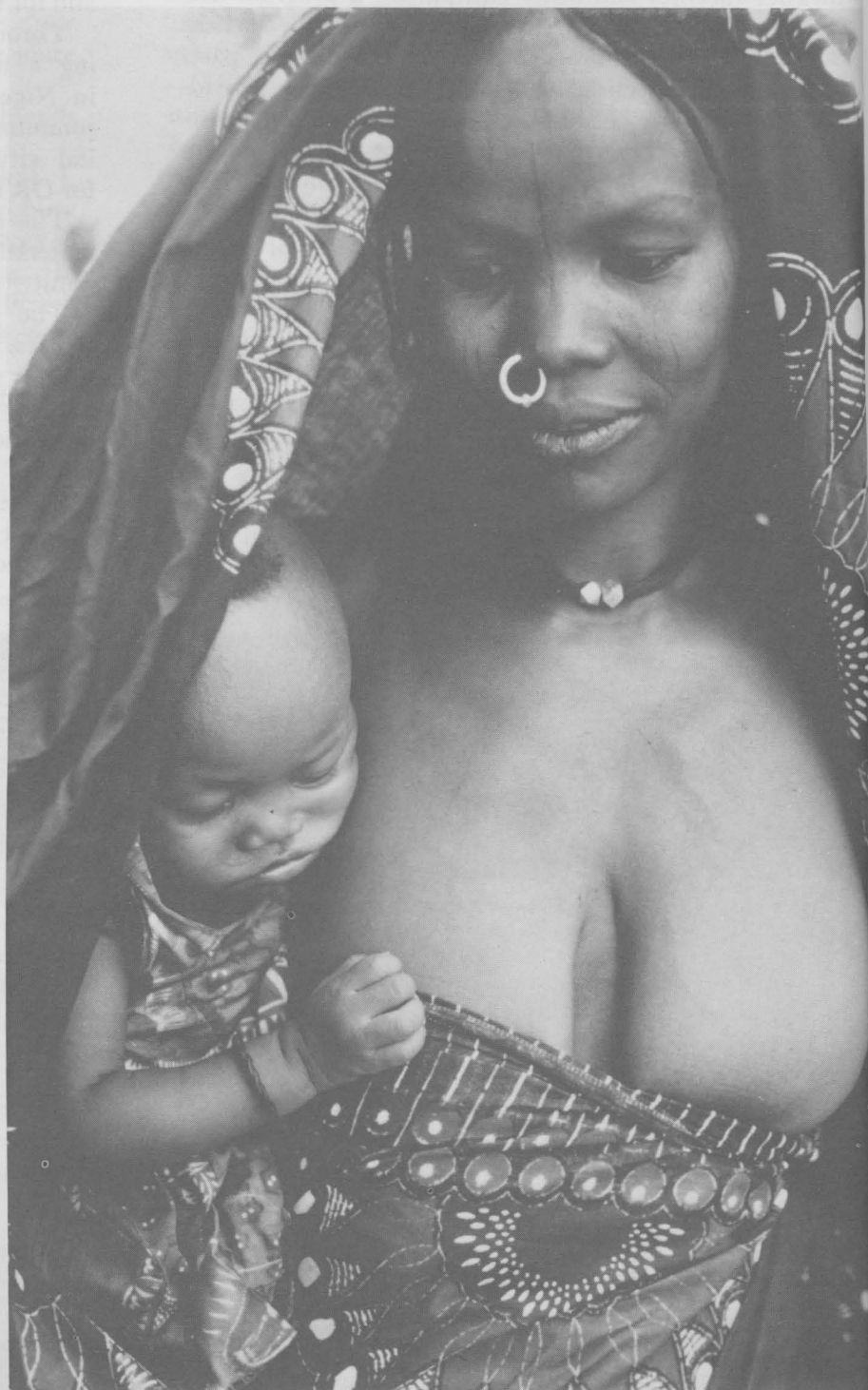
This makeshift raft is floated in an Upper Volta stream once a week in a local program aimed at controlling river blindness. The can on the raft contains a specific insecticide that kills the larvae of the blackfly. The fly's bites cause the disease.



An ancient, laborious method of drawing water makes irrigation slow and inefficient.

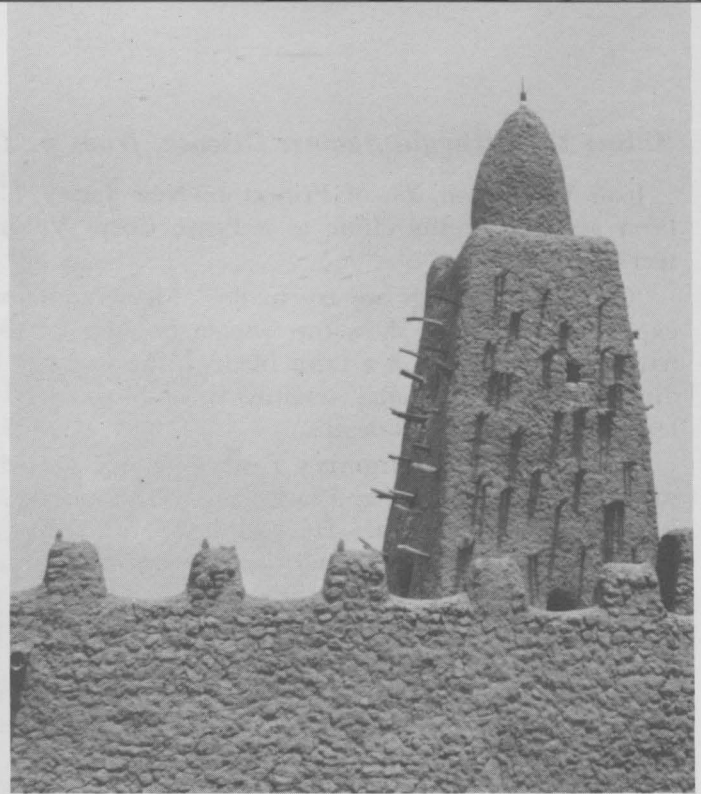


“It is not just
but the poverty and un
the real problem that



A Chadian mother and child show the results of nutritious foods that have been introduced into the Sahel programs to improve maternal and child health.

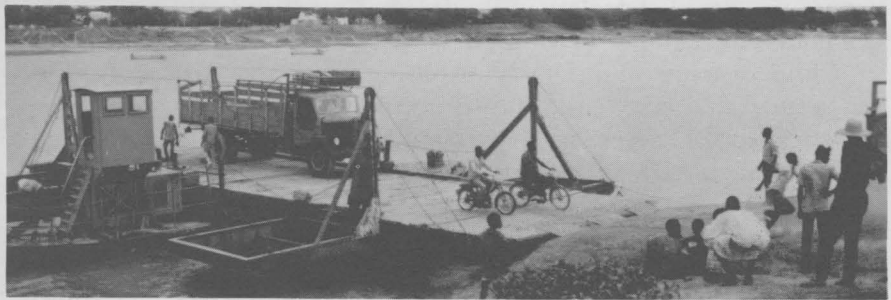
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The towers of Agadez (left) and Timbuktu symbolize the romantic past, bleak present and uncertain future of the Sahel.



El Hadji Sow, Senegal farmer, displays crop made possible with well provided by Peace Corps Volunteer Bob McGurn.



The ferry on the Chari River in Chad represents one of the transportation bottlenecks that trouble Sahel development.

Below: The desert continues to encroach in the Sahel. These trees in Mauritania are being engulfed by the shifting sands.



Aiding the Struggle Against Disease, from p. 19

Joan Waddleton, 23, of Princeton, New Jersey, has been assisting at the clinic as a Peace Corps Volunteer.

"One of the things we try to do," Ms. Waddleton explained, "is try to show the women how to cut the navel cord cleanly with a razor blade, instead of a dull dirty knife." (Post-natal tetanus is one of Africa's leading causes of infant deaths.)

George Little of Virginia's Eastern Shore, a medical technician and former Peace Corps Volunteer, also is assisting at the clinic. He had served as Director of Health Planning in American Samoa and in the southwestern area of Virginia.

Idrissa, as director of the Nigerienne dispensary, says all health problems enter into the service rendered.

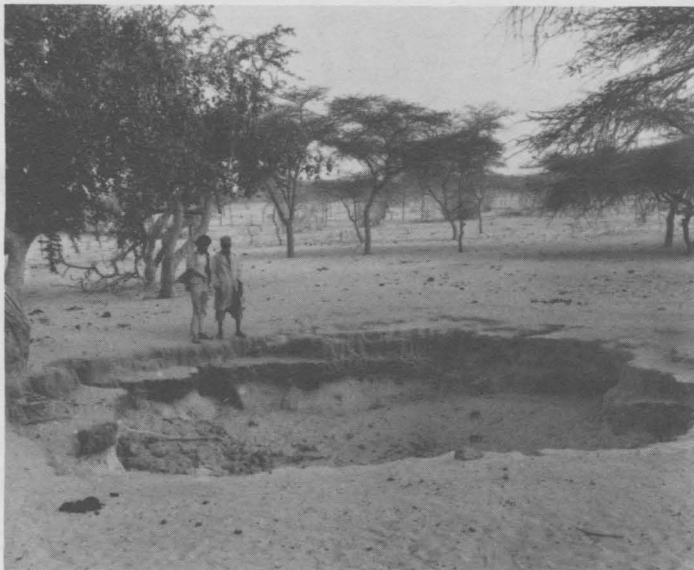
An assistant, 22-year old Marianne Halima, is following up on 200 new mothers in the area. She goes to the huts of the villagers and gives the women lessons in hygiene and nutrition. She is able to dispense powdered chocolate milk, dextrose pills, and other materials donated by Church World Service.

Child spacing and family planning also are part of a maternal and child health care project in the Chad Basin of Niger, sponsored by Africare, a voluntary agency. AID is helping to finance the project with a \$116,000 grant.

Many of the health problems in the drought area stem from the lack of potable water. Wells dug in the traditional way become easily polluted and after a few years will collapse altogether. The life of the traditionally-built well in Senegal, for example, is about three years.

AID is providing \$200,000 in Chad to finance the digging of 180 wells that will assure potable water for 55,000 people.

Joseph Mitchell, 27-year-old Peace Corps Volunteer from Groton, Massachusetts, is in charge of the well-drilling teams, consisting of six Volunteers and Chad



Wells dug in traditional ways may be subject to cave-ins after a few years, endangering lives and the water supply.

counterparts. He describes his work as part technical know-how and part public relations.

"I will go to a town and talk to the chief," he explains. "Naturally, he will want the well, but also, naturally, he'll want it close to his compound or hut. I usually convince him that a central location is better and we jointly select a place where most of the people will be able to use it conveniently."

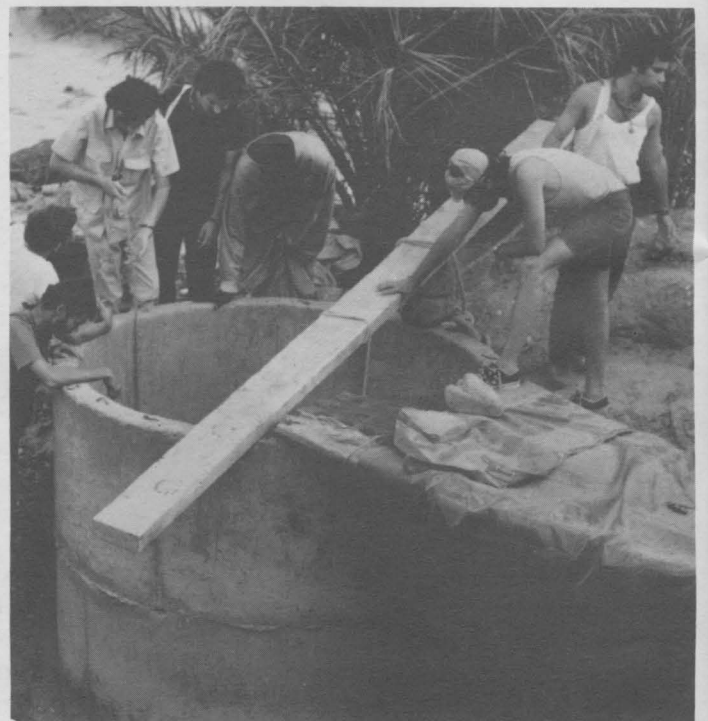
Digging a well in sand takes a great deal of care and proper use of equipment, Joe explained, but usually it can be completed in two or three days.

"But sometimes you don't hit clean water," he said. "One time in Doro we dug close to Lake Chad about 400 yards from the town. We hit water colored a deep green. Then we moved 100 yards away and dug again. This time we hit the 'Coca Cola' stuff. That's really dark brown. Then we moved again—about 175 yards back. This time it was clean and clear."

Joe, a former farm worker, Navy veteran, and Boston College graduate, said the pumps on the wells get such hard use the parts wear out. "We have to figure on repairs about every six months," he said. One of the aspects of the AID project is a repair team. Some of the equipment AID is furnishing includes two Land Rovers, drilling rig and truck, pipe and miscellaneous gear.

"You know, people will walk miles here for bad water," he said. "In addition, their strength has gone down because of the drought. They never were well off, but this drought has made things even worse. The bad water has spread cholera and other diseases.

"At least, what we are doing, by digging wells, is giving them a chance."



Peace Corps Volunteers are helping to build wells under AID auspices in the Sahel. The project is in Mauritania.

SURVIVAL IN THE SAHEL



Among the transportation problems of the Sahel are limited port facilities. At Nouakchott, Mauritania, stevedores are transported

front-wharf to barge and back again by loading nets. Ships anchored in the unprotected waters are in the background.

Transportation—Bottleneck

The resumption of a U.S. Air Force airlift in Mali this past June pointed up one of the great problems of the Sahel—the lack of transportation. The absence of good roads and modern means of moving goods efficiently not only has made the emergency relief effort complicated and expensive, but places a severe restraint on the economic development of the area.

Last year, when the ravages of the drought became known to the world, and emergency food and supplies were rushed to Senegal, Mauritania, Upper Volta, Mali, Niger, and Chad, airlifts were imperative to thwart starvation. Food brought to the ports of Dakar, Abidjan, Lagos, and other seacoast cities were transported inland by rail and by truck. When the food reached the terminals of the railroad lines or the ends of passable roads, the only way some refugees could receive food in time to prevent starvation was by air. The Agency for International Development provided more than \$2.6 million in 1973 to compensate the

of Development

Air Force for airlifting food to outlying distribution points in Mali, Chad, and Mauritania. Large sums of money were expended also for airlifts by Belgium, Canada, France, West Germany, Libya, Spain, Great Britain, and the Soviet Union.

Strenuous efforts were made by AID and the other donors over the past year to avoid as much as possible the resumption of airlifts because of the tremendous expense—about \$400-\$500 per ton. Grain from the United States was rushed early to Africa to enable the over-taxed surface transportation system to spread the burden.

Bottlenecks Cause Back Up

Problems arose, however. The unprecedented flow of food and goods would have taxed the ports' capacities at any time. Late deliveries of food from other donors, plus the limited capacities of the railroads, labor difficulties, and an already strained trucking capability resulted in more than 70,000 tons of food backed up at the ports at the end of May. AID sent management and transportation experts to the Sahel to iron out the problems. The logjam eventually was eased considerably, but the airlift was resumed to insure that enough food—up to 5,000 tons—would be available during the rainy season in outlying areas of Mali which otherwise would be cut off from assistance. AID is providing up to \$1.8 million for the airlift.

Ali Saibou, Niger's chief of drought relief and development, pointed out to an American interviewer in May the problem of furnishing food to Agadez, the outpost town in the drought-stricken area of the country where thousands of impoverished nomads have congregated in refugee camps.

"Stocks are low in Agadez now," he said, "and the rains, if they come, will be soon. This means that the road from Niamey will become unusable.



One barge was being made ready for Niger River traffic at Koulikoro, Mali. AID is helping to improve marine service.

"We are looking into the possibility of bringing the food down by truck from Algeria across the desert. This would cost \$200 a ton, cheaper than air."

The feasibility of truck convoys crossing 1,000 miles of some of the world's most forbidding terrain to Niger and Mali has been proven. AID announced in June that it would finance convoys from Oran, Algeria, to Gao and Tessalit in Mali. The trucks are being driven by desert-hardened Algerian drivers.

Travel time may take up to three weeks, with the driving usually done from 4 p.m. through the night to escape the intense daytime heat. Most drivers of long-haul trucks in the Sahel carry mats for bedding and sleep in the shade of their vehicles during the day.

Crossed Desert in May

Algerian drivers of a truck convoy crossed the desert to Agadez in May. The town that for centuries has been a market place and trading center for camel caravans gave the intrepid drivers a royal welcome. Nigerienne and Algerian flags decorated the road that runs through the town. A banquet feting the drivers was held at the one hotel capable of feeding more than a dozen guests.

Only three of the drought-stricken countries have access to rail transportation. A rail line runs from Dakar in Senegal to Bamako, capital of Mali. Another, called the Abidjan-Niger Railroad, doesn't go to Niger at all, but does provide transportation as far as Ouagadougou, the capital of Upper Volta. The two rail-

Vehicles of ancient vintage still carry food and goods for drought relief. This truck keeps going despite its decrepit condition.



roads together, however, can transport only a part of what is needed. The rest must be hauled by truck or barge, or by air. Chad receives its relief food from Cameroon and Nigerian seaports, thence by rail and truck.

In Mauritania, the death of camels has made it necessary to rely on trucks or air drops to isolated settlements.

A trip almost anywhere in the Sahel illustrates the problem. Recently, two representatives of AID drove from Ndjamena, capital of Chad, to the market town of Massakori, about 100 miles to the northeast. The road, like most leading from the capital cities, at first was paved. Then, it became a graded dirt road then ungraded, and finally, for about half the distance, nothing more than a track across fine sand. The vehicle in which they were riding was a two-wheel drive passenger car. It became mired in the sand three times and suffered a clogged fuel line once. A sandstorm that obliterated the tracks in the sand illustrated another hazard faced by truckers.

Several days later, an AID team drove about an equal distance southeast to the village of Dourbali. Rain had fallen and much of the road was flooded. On this occasion the team traveled in a four-wheel drive truck that was able to push through the mud. But other trucks were not so fortunate. Several became stuck.

Good maintenance is essential. Sand and dust choke fuel lines, infiltrate carburetors, and clog air filters. Tires and radiators overheat. Well-equipped vehicles carry a complete set of tools, extra fan belts, spark plugs, and essential spare parts. Sections of metal track which can be spread to bridge deep sand and mud are hung along the truck bodies. Shovels are standard

accessories. Extra tanks of gasoline and cans of water are imperative.

The breakdown of a vehicle in some areas could spell disaster. Recently, on a visit to a reforestation project in the Senegal River delta area, AID and Peace Corps representatives were forced to walk five miles to the nearest village to obtain transportation when their vehicle developed mechanical problems. Fortunately, the breakdown occurred near the ocean and the temperature was moderate. Had such a mishap occurred in an interior desert area the mishap might have been a more serious problem. A few days later on one trip, a truck was observed stalled on the side of the road. Three days later, it was still there, its driver and assistant patiently awaiting help. Auto repair shops and mechanics are few and far between in the developing countries.

Compounding the vehicle problem is the cost of fuel. Gasoline in the Sahel in May had soared to \$1.20 per gallon or more and was not always available. As in the United States, the presence of a service station in a town (most of the pumps are hand operated) does not always mean that it has gas.

The lack of bridges to cross rivers also slows transportation. Ferries are inadequate and overworked. At Rosso, Mauritania, where the single road connecting Senegal and Mauritania is interrupted by the Senegal River, only one ferry was operating in May. A second one had broken down. At Ndjamena in Chad, a single ferry was operating across the Chari River. The West German Government had flown in a knocked-down craft powered by outboard motors. It had been assembled and was being tested in May.

Soaring Costs Compound Difficulties

The transportation problem affects the economies and development of all the countries. Firms in Niger, for example, in normal times before the costs of fuel skyrocketed and the importation of emergency food became an urgent necessity, paid an estimated \$100 a ton to bring goods from coastal ports to the landlocked country. The cost now is estimated at twice that.

The transportation problem frustrates development of resources. Mali is known to have sizable deposits of bauxite, iron ore, uranium, copper, manganese, and phosphates. But they have not been developed, mainly because of the lack of transportation.

A high-grade deposit of manganese has been discovered near Tambao in the northeast section of Upper Volta, but there is no extension of the railroad which would be needed to make extraction feasible. Mauritania also has iron ore and copper, but exploitation is hampered by poor transportation facilities. Senegal, which boasts about 1,500 miles of paved roads, is deficient nevertheless in farm-to-market roads.

AID has recognized transportation as one of the key problems of the Sahel—both in providing emergency relief and for middle- and long-range develop-



Timbuktu's harbor, vital in the Niger River barge system, was completely dry in May. Rains hopefully will fill it this fall.

ment. In Senegal, AID is furnishing 60 vehicles to permit expansion of a rural development program. AID provided three tank trucks, each of 7,500-gallon capacity, to the Malian Government for use in bringing fuel to distant distribution points.

El Hadji Vera Ousmane Diallo, Director of the Office Produits Agricole Mali (OPAM), the Malian grain agency, pointed out in May that the transport situation in the country had improved over last year. He noted that AID has provided 36 trucks for transporting food which made available 95 trucks in all in the country to be used in food delivery and distribution. He took the occasion to express his appreciation of U.S. assistance.

"Because of what the United States has done," he said, "many families have survived who would otherwise have perished. For someone who is hungry, the appearance of the food truck is a great joy."

AID is assisting a road building and maintenance project in Mali that would include repair of a bridge at Koutiala and provide for the maintenance of the vital Mopti-Gao road throughout the year.

But the major transport activity assisted by AID in Mali earmarks \$500,000 to help the Malian Government's marine agency increase and improve the transportation of food by barge on the Niger River.

The Niger is navigable during the rainy season from mid-August to mid-January and offers a cheap, feasible means of moving food and goods from Koulikoro to Mopti, Timbuktu, and Gao, the principal outlying distribution centers. Roads to these towns are generally impassable during the rainy season.

The barge system, however, has been plagued with slow turnaround time, excessive time needed for repairs and maintenance, and low-powered tugs. The AID assistance is aimed at speeding up the turnaround time by providing new weighing scales at the ports and new mobile cranes at Timbuktu and Gao. It will help re-equip the repair headquarters at Koulikoro, the rail terminal outside Bamako, and establish a maintenance facility at Mopti. Four new diesel engines have arrived from the United States. Some of the equipment is expected to be U.S. excess property made available by AID.

Maintenance and Repair Factor

A problem that the activity hopes to correct is a vexatious loss of time during the navigation season due to maintenance and repairs. The Mali agency operates 13 tugs and 52 barges. When the river drops in late winter or early spring, the tugs and barges are scattered up and down the river where maintenance and repairs cannot be performed. As a result, when the river becomes navigable, they must return to Koulikoro for the work, losing valuable time that should be devoted to transporting food and goods.

A recent study by Frank Moore and Jesse Snyder of AID shows that a round trip of a barge from Mopti to Gao takes 20 to 26 days. The time is broken

down as follows: loading, five to seven days; travel down-river, five to seven days; unloading, three to four days; and the return trip up-river seven to eight days. One barge can move only 600 tons per month. The new weighing equipment and cranes, they said in their study, would slice the round trip time by at least two to three days, while 350 h.p. engines—presently 250 h.p.—would cut another three to seven days. The result would be an increase in tonnage to 700 to 2,000 tons per month.

Wait on the River

A recent visit by an AID team to the main repair and maintenance facility at Koulikoro provided graphic evidence of the problem. Here, with the rainy season approaching and the Niger River beginning to inch up from its 27-inch depth—lowest level in history—the yard should have been filled with barges and tugs being readied by the 150 employes for service. Instead, there was one barge in the yard and two excursion boats aground 30 feet below the dock level. Most of the fleet, Salif Konake, Director of the Mali agency, said, is stranded at Mopti and repair and maintenance won't be extensively carried out until the river is deep enough—at least 3½ feet—to float them.

The single barge being repaired at the Koulikoro yard, was typical, Mr. Konake said. A 60-ton craft, it looked rusted and dented. When a visitor remarked about its condition, Mr. Konake replied, with a smile:

"We consider this one almost new."

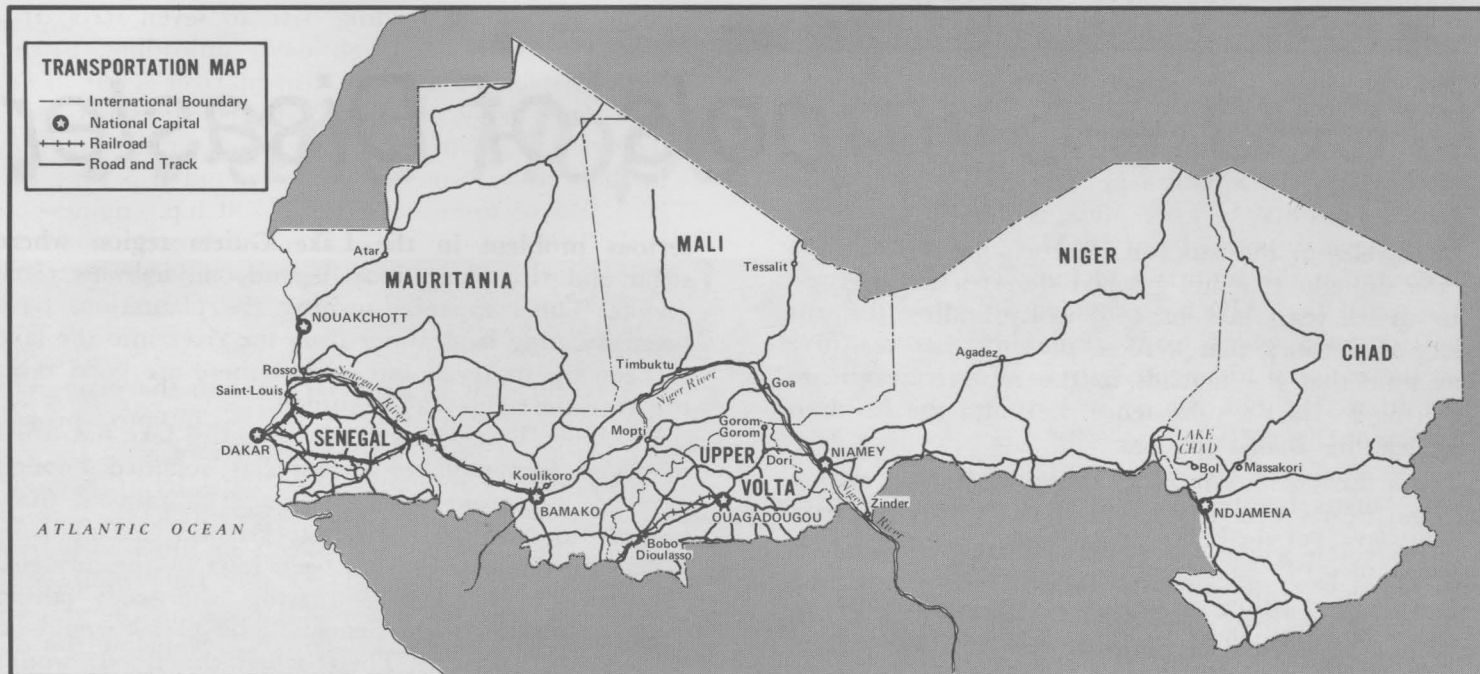
While awaiting work on the barges and tugs, the Koulikoro yard was manufacturing water tanks which would be placed on trailer truck bodies to be used to transport water to villages where wells had run dry.

Mr. Konake, who received his technical education and training in France and Germany, has been in charge of the marine facility for the past eight years.

Closely allied to the transportation bottleneck is the storage problem. In Mali, for example, AID is planning to assist in constructing the necessary storage facilities associated with the marine transport activity. Better warehousing will help expedite the movement of grain on the river.

As in Mali, AID is assisting a road repair and maintenance project in Chad, providing \$328,000 to purchase spare parts for idled road-maintenance equipment; several new vehicles; and a technical advisor. Also, in Chad, the Fonds de Developpement et d'Action Rural (FDAR) has undertaken a storehouse construction program, for which AID is furnishing \$454,300. The objective is to increase the grain storage capacity in Ndjamena to 10,000 tons, and eventually 45,000 tons for the whole country.

Mahomat N'Guekitebaye, Director of the FDAR, pointed out that storage was essential to the grain stabilization program in Chad. The FDAR buys up rice, sorghum, and millet and, if storage facilities are available, the supplies and prices can be kept stable.



The Office des Produits Vivriers du Niger (OPVN) is a similar government agency in Niger. It is planning warehousing facilities in Agadez, Tanout, and Tanhoua, which, with road improvements, would help insure adequate food supplies for the nomadic population. AID funds would help finance costs both for the warehouses and road repair and maintenance.

An AID Food for Peace administrative advisor from Tunis, Tahar Ben Salem, made a survey of Niger's storage facilities in May. He reported that, from a storage capacity of 5,500 tons in the country in 1972, there would be available this year a capacity of 34,500 tons. One of the new warehouses is being constructed at Tchén Tabaraden, a settlement where several thousand nomads have congregated. It has a 500-ton capacity.

AID is assisting in the construction of four warehouses in Mauritania. Three of the structures will have a capacity of 2,000 tons each; the fourth 1,000 tons. The buildings are being constructed with reinforced concrete block walls and metal roofing.

In addition to expanding storage capacity, AID is providing up to \$300,000 to assist the Ministry of Public Works in Upper Volta in a major road repair project. The objective is to assure food supplies throughout the year to the nomads and farmers hit by the drought in the northern part of the country.

During much of the three-month rainy season, nearly one million persons in this area are cut off from the rest of the country because of floods and washouts. This has made it impossible to deliver food to the principal refugee center of Gorom-Gorom during the rainy season. Last year, an airlift was necessary to prevent starvation.

The work is being done on the road leading from Dori to Gorom-Gorom. Here, with the help of the Association Freres des Hommes, an international non-

governmental agency, concrete culverts and river fords are being constructed to support trucks. Drainage ditches are being dug.

At the time of a visit in May, the six-member team of Freres des Hommes were making their headquarters in an oasis several miles north of Dori. It is a delightful spot, known as Dionga, and looks as an oasis should look—with tall palms and cottonwoods mingling with acacia and nime trees. Pure water comes from five deep wells.

But the oasis is far from being just an exotic spa. Under the trees are sections of cement culverts waiting to be trucked to ravines and ditches. Also under the trees are stacks of reinforcing steel, piles of gravel and laterite rock, bags of cement, and maintenance vehicles. Huge grading and earth-moving machines move back and forth along the road in and out of the oasis.

Working on the road are 250 to 300 men from the nearby villages. They are paid 100 francs per day—roughly 40 cents—along with a ration of eight pounds of high protein food.

The Freres des Hommes team, consisting of Philippe Cornichon, Yves Potin, Georges Guiavarch, Jacques Petitjean, Bernard Eichwald, and Georges Tilkin, all from France, were hopeful they could have the road in shape by the time of the rainy season starting in late June so that an airlift would not be necessary.

They had finished two of the three major culvert and ford sections in May. They expected to have the third finished by the time the rains came.

"The year before last, no vehicle could make the trip from Dori to Gorom-Gorom during the rains," Mr. Cornichon said. "Last year, a few high-bodied trucks might have made it. When we're finished, any vehicle will be able to make the trip in all kinds of weather."

SURVIVAL IN THE SAHEL

Trees—Symbols of Disaster

A traveler in the Sahel in 1974 seeking visible signs of the drought that has gripped the area for the past four to six years may have difficulty finding the carcasses of livestock that were so plentiful last year. He may note that the nomads in the refugee camps are receiving at least a subsistence diet, and the children look healthier than a year ago.

But a third grim symbol of the catastrophe is starkly at hand nearly everywhere—the dead and dying trees.

In a region where the growth of any vegetation is difficult at best and a near-miracle in many areas, the leafless acacias being swallowed by sand dunes is evidence of an ecological disaster. And the surrealistic panorama of once-living trees chopped in two by desperate herders seeking forage for their hungry goats and cattle seems a grotesque tragedy.

"The situation is even worse this year than last," says Bassirou Diedhiou, Chief Inspector of Rivers and Forests in the Fleuve region of Senegal. "The herders are cutting more trees.

"And the drought itself has killed more of the species that produces gum arabic. We have had an enormous loss in revenue from gum arabic."

Gum arabic, used in pharmaceuticals, has been a source of revenue for Senegal and several other Sahelian countries. Mr. Diedhiou cited these statistics: In 1971, Senegal exported 6,436 tons of gum arabic. The amount dropped in 1972 to 1,525 tons, and last year to a mere 144 tons. It may be even less this year.

Canada is assisting in a research effort to stimulate the growing of gum arabic trees in the vicinity of deep bore wells. AID also is supporting the tree-planting activity at bore wells.

Ironically, Mr. Diedhiou says the number of wild animals in the Senegal River region seems to have increased. One possible reason, he said, is the creation of a preserve where the cutting of trees and the killing of animals is prohibited. In any case, he says, it appears as if there has been an increase in the number of wild boar, jackal, hare, deer, duck and partridge. Other technical experts point out that such an increase results naturally from the controlled grazing of livestock, which is designed specifically to limit the number of forage animals to the range's carrying capacity.

Fishing, however, has been severely crippled. Freshwater fish have been affected by the salting-up of the Senegal River. The U.N. Food and Agriculture Organization is studying the problem. The low flow has permitted the ocean to back up through the river channel as far as 60 miles. This has also caused a

serious problem in the Lake Guiers region where sugar and rice plantations depend on freshwater irrigation. The companies owning the plantations have been pumping fresh water from the river into the lake to keep up its level, but, unless there are good rains this year, the fields may be ruined.

In Upper Volta, near Dori, an entire lake has dried up. The former lake bottom has retained enough moisture to sprout grass, and, after a rain in May, several thousand head of livestock could feed upon it.

Natural reforestation has been hurt by the drought. "Normally," Mr. Diedhiou said, "the seeds falling from the acacias in the Senegal flood plains would be carried by the river. Then, when the floods would recede the seeds would be deposited on fertile soil and take hold. The low water and absence of flooding—and, of course, the death of so many trees—is hurting this natural process."

Senegal, however, is acting to halt the denuding of the land. With AID assistance, a reforestation project has been started at Tatki. Here, a nursery has been established to grow a variety of species. AID also is supporting a reforestation activity at Ross-Bethio where eucalyptus and other tree seedlings are being nurtured for replanting in key areas.

Holding Back the Dunes

Mr. Diedhiou's department also has planted thousands of Australian whispering pines in the Senegal River delta area. Here, among the dunes where the river meets the sea, long rows of young trees—one to two feet high—struggle valiantly against the sand to take hold. If successful, they will help hold the dunes from encroaching on the fertile Gandiole area lying inland where villagers, under a well-digging program, are growing vegetables.

Twenty workers from the nearby villages are employed on the project, planting and watering the trees and keeping the fences, constructed of limbs of trees, in repair to shut out the goats which would devour the sprouts. The trees are watered every two days during the dry months. Wells have been dug in the area to provide access to fresh water.

In May, 8,000 trees had been planted over 15 acres. The basic plan is to plant the pines along a 200-mile stretch of the coastal area.

AID also is assisting the Government of Niger in the planting of gao trees on 2,400 acres in the Maradi area and to assist in reforestation activities in the Dosso area. AID will finance the purchase of fencing material and vehicles and other ingredients. Peace Corps Volunteers will assist in the project.

... and Hope



At Tchén Tabaraden in Niger, a reforestation activity is being carried on in conjunction with a controlled forage project. Here on the top of a hill, thousands of tiny acacia and nime trees are growing in plastic containers. When they have reached the proper height—about a foot—they will be planted in fenced fields. They also are given to farmers who replant them on their land.

AID is providing up to \$150,000 for the fencing material, consisting of steel posts and barbed wire. The purpose of the fencing is to prevent livestock from eating the newly planted grasses and trees. Pat McDuffie, a 24-year-old forester from Yelm, Washington, is one of the Peace Corps Volunteers working on the project.

"These people want trees," Pat says. "And when we give them to a farmer we also give him instructions on how to take care of them. We also follow up."

The controlled range management and reforestation activity is the result of the initiative of Andre Marty, who works for Animation, a voluntary agency cooperating with the Nigerienne Government's Ministry of Human Promotion, and the Agricultural, Livestock and Extension Services.

In Upper Volta, the drought has pushed many herders and farmers from the sparsely-forested north to the more heavily-vegetated area near Bobo-Dioulasso. Here, according to Willy Peeters of the United Na-

Trees chopped in two in order to supply livestock with leaves are a common sight in the Sahel. Recovery may take many years.

tions Development Program, they are burning and chopping down trees, not for forage, but to clear land for farming.

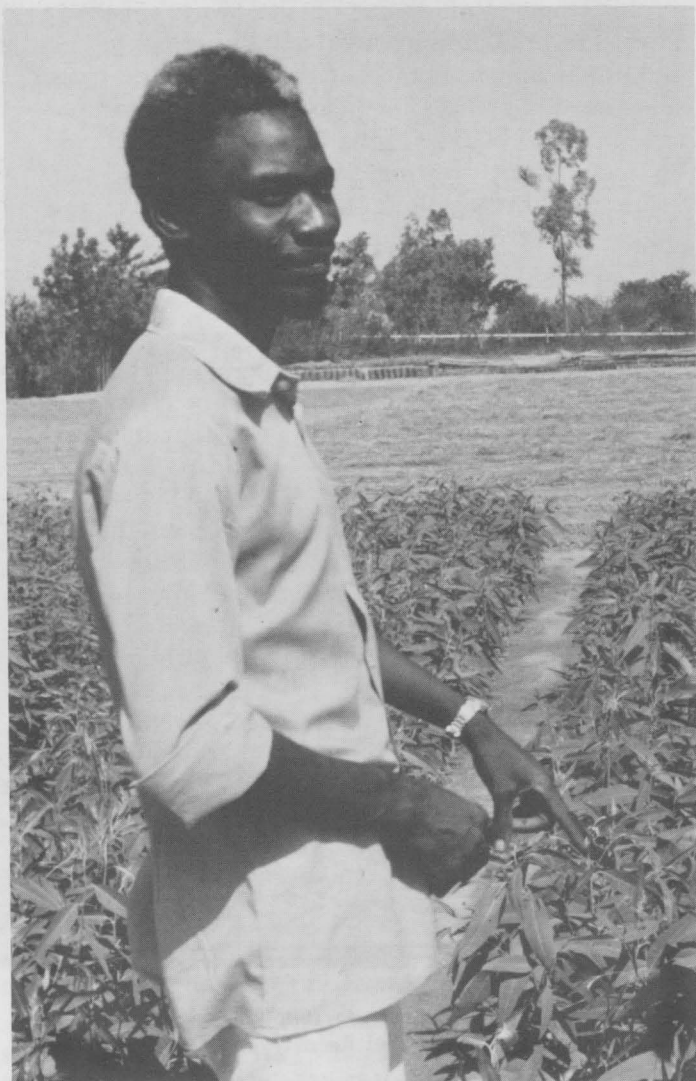
"These people, used to a more barren terrain, don't realize the importance of the trees," Mr. Peeters says. "They don't realize that it is the trees that hold the soil that makes the farming possible."

Wooded Areas Destroyed for Firewood

Also, extensive wooded areas in Upper Volta have been destroyed to meet the demand for firewood. Wood sellers of Ouagadougou will travel as far as 60 miles in their donkey carts to chop and gather firewood.

To help the Upper Voltan Government in its reforestation program, AID is providing \$100,000 to expand and enlarge a nursery near Kombissiri, about 30 miles south of Ouagadougou, and to establish and maintain a tree nursery in the same area. The projects originally had been started under an Israeli technical assistance program in Upper Volta.

At the Nagbange nursery at Kombissiri, this past May, more than 330,000 widely diversified seedlings were in various stages of growth. The AID assistance is planned to permit the nursery to expand the num-



Maxim Ouoba, a technical engineer for the Upper Volta Forest Service, oversees a nursery in a reforestation project.

ber to a yearly production of two million plants. Specific improvements to be assisted by AID at the nursery include an irrigation system, a larger water tower, a pumping system, and the financing of seed, fertilizer, insecticides, and plastic bags.

At the 240-acre tree plantation at Zamse, 80 percent of the trees will be eucalyptus, which grows well in the area. The wood from the eucalyptus and other species will be grown specifically to meet firewood needs. The plans call for harvesting at three-year intervals. Because proper harvesting does not kill the trees, they can be reharvested in another three years. Replanting is required only after four harvests.

Maxim Ouoba, technical engineer for the Voltan Government's Forest Service who studied his specialty in France, points out that the area around Ouagadougou supports many species of trees.

"The kahay tree, for example, has a bark that can be boiled and the juice used to remedy stomach disorders," he said. "The nut of the carita tree can be ground up to make a 'shea-butter' which is an important source of oil in preparing food.

"And ground-up baobab leaves provide a flour that can be made into a sauce; the baobab fruit has a lemon taste, and it, too, can be made into a powder."

Mr. Ouoba, who regards the thousands of seedlings in the nursery with much the same affection as many of his countrymen regard their livestock, has special respect for the nime tree, a species that has grown well in Africa although it came originally from India.

"It can be used for so many purposes," he said. "It provides shade and is an excellent windbreak. It makes good firewood and is more resistant to termites than eucalyptus. It is also a good wood for construction. And when you cut the tree, it will sprout new branches."

Although most of the trees in the nursery are eucalyptus, some of the varieties brought to Upper Volta from Israel, Mr. Ouoba reports there is controversy over their use.

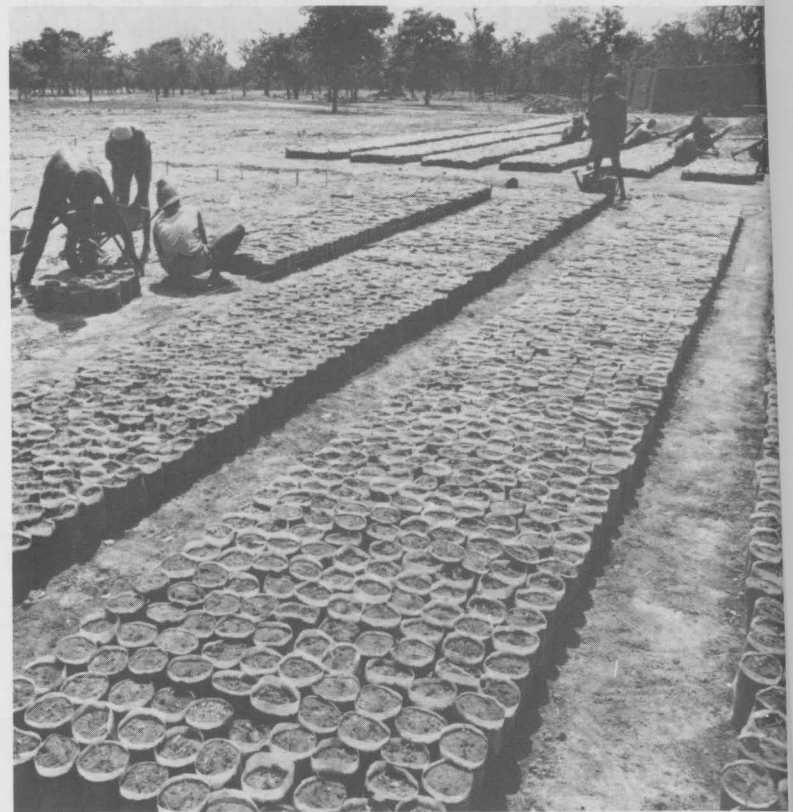
"There are some who say the eucalyptus is the salvation of the dry lands. There are many varieties and they grow very fast and big. But they are also susceptible to diseases."

Also among the many types of trees being grown are cashew and kapok, which can provide sources of export revenue.

Mr. Ouoba pointed out that the main problem is goats and cattle eating the leaves and branches of trees and bushes.

"It might help if the goat herds could be controlled," he said. "The uncontrolled herds cause

Seedlings by the thousands are being grown in the Kombissiri nursery in Upper Volta. One aim is to supply firewood.





Ousseyhou Dieng, an engineer in Senegal's Water and Forest Services, inspects a young tree at a reforestation project.

enormous destruction. And the goat herders themselves will climb the trees and cut the tenderest shoots. These are the ones that should be left to grow."

The need to grow trees for firewood has been emphasized by the fuel crisis. Not only are gasoline, kerosene, fuel gases, and other petroleum products scarce, but the prices have skyrocketed, as they have every-

where. In Upper Volta, one of the world's poorest countries, the crunch is particularly severe.

The farmers and herdsmen of the Sahel value trees, but not always for the same reasons that agricultural advisors recognize. Mr. Ouoba explains, "When you talk to them about growing trees to protect the soil, it is very difficult for them to understand that you don't grow the tree to be cut down. And some would much rather grow a mango tree, for example. They believe they can at least get something from the tree that they can see and eat."

The need for reforestation, although apparent in the Sahel, sometimes is given less than priority consideration. Mr. Diedhiou in Senegal says that many of the reforestation projects have had to be reduced because of the lack of funds.

Mr. Ouoba in Upper Volta says that even though the Voltan Government is encouraging reforestation, not all government officials understand the importance of conservation.

And, in Chad, a Peace Corps forester, Robert Lawrence de Lopez Martinez, said in May that a reforestation project in the Lake Chad area, several years old, is in danger of dying unless fertilizers, pesticides, and such equipment as a sprayer are supplied.

"It would be an added disaster," he said, "if thousands of trees growing in an area that needs them should die because of a lack of needed material. I'm hoping this won't happen."



Land, Livestock and Lady Bugs, from p. 15

Further, according to Mr. Atwell, the livestock operation provides credit to farmers for purchasing cattle; the farmers who are eligible for credit have a sufficient supply of roughage (rice, straw, peanut vines, and hay) and who can buy supplementary industry byproducts (cotton seed, peanut cake, rice bran, mash from beer production). In the case of feeder cattle, the farmer uses credit to buy local animals during November-December. He feeds them until June-July when the slaughter house price for cattle is high. Upon the sale of the cattle, the farmer pays back what he has borrowed. The milk cow program provides farmers with credit to purchase selected cows and bulls. Repayment of credit will be either in cash or kind (probably calves). The program will be tied to the cross breeding activity in progress at the Matourkou center.

A third component of the livestock operation involves providing credit to Peuhls for the purchase of selected bulls to improve the herds in the area. Repayment will be in the form of cash or kind (an exchange of bulls). In addition, the program provides a revolving fund for calf feed supplement.

Other aspects of the Matourkou project financed by AID:

- Wells will be dug, corrals constructed, parks set up for vaccinations.

- Selected grass seed will be used for range improvement.

- A consultation fund to give the Matourkou participants an opportunity to benefit from the experience of other projects in Upper Volta, Mali, Ivory Coast, and Senegal.

A demonstration herd is also included to show farmers and Peuhl herdsmen what animals are available and to provide a pool of insurance animals.

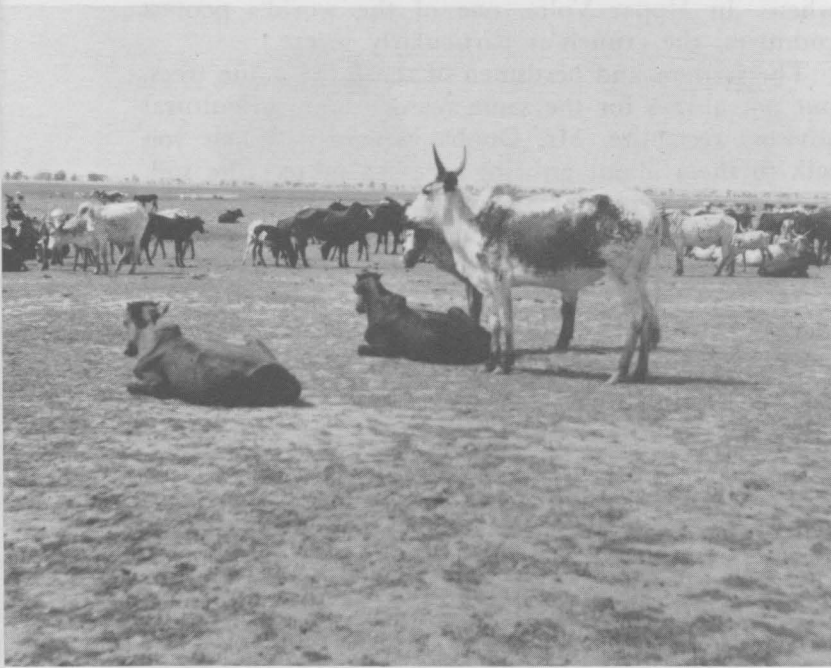
"The chances of success are good," Mr. Peeters, the UNDP representative who is advising on the project says. This is echoed by Joel Simon, a farmer who has been participating in the existing project. He came to the Matourkou project three years ago.

"I am now farming six hectares," he said. "I have added two each year and will have two more next year.

"Before, I worked only with a *daba* on land with other people. I had no land of my own. Now I am much better off. I can feed my family and also receive cash for what I sell."

He says he is able to meet the payments on the money he borrowed for fertilizers and other equipment.

"Also, my children can go to school. That is something I couldn't do."



The drought dried up a lake in Upper Volta, but it provided good pasture for cattle after several rains sprouted grass.

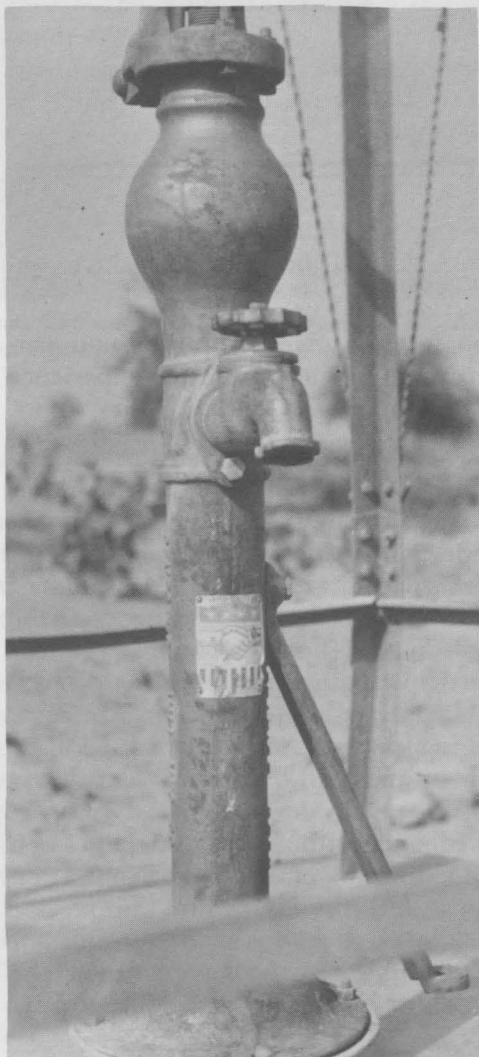
Mr. Peeters says the program anticipates bringing in Azawak bulls from Niger to be used by the Peuhl herds.

"We now have 240 head of cattle in the nine participating villages, serving about 3,000 people altogether."

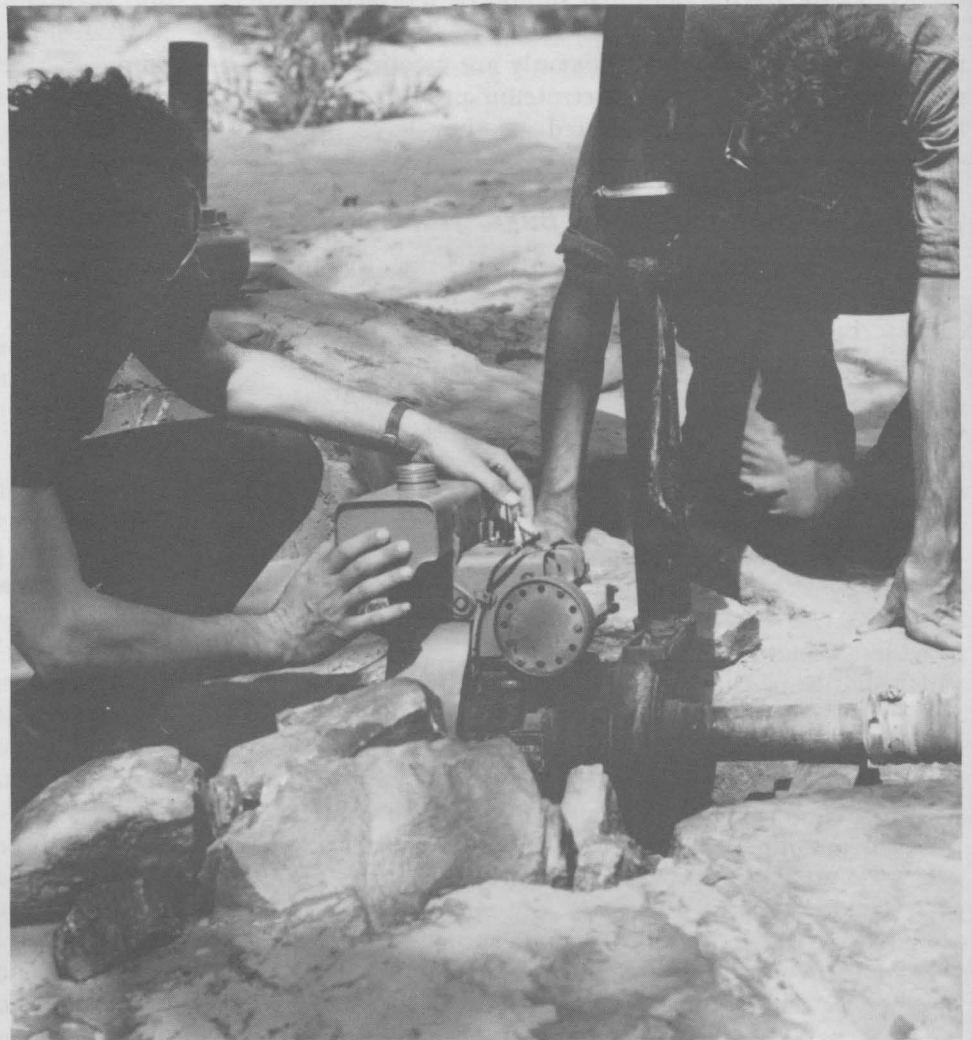
Improving the quality of livestock through modern veterinary practices also is a concern in the R and R program. At a veterinary laboratory in Bamako which AID financed, plans are going ahead for an expansion of activities. AID is providing \$200,000 for additional equipment—most of the laboratory and other equipment already bears such familiar names as Corning, Amsco, Repp, Westinghouse, American Sterilizer, General Electric, Texaco and other American products.

According to the plans, the Malian Central Veterinary Laboratory will more than triple its production of vaccine—from three million doses in 1973 to 11 or 12 million doses by next year.

In Chad, AID is planning to assist the government to establish a "cordon sanitaire" for about 1.3 million head of cattle. AID funds would purchase and equip mobile vaccination equipment and teams.



The clasped hands symbol of AID appears on a windmill-powered pump at Lake Chad.



An AID project is financing irrigation pumps for vegetable farming in the palm groves of Atar, Mauritania. Peace Corps Volunteers supervise the operation.

In Senegal, AID is providing \$800,000 to replace 57 of 80 bore-hole pumps, and rehabilitate those replaced. The pumps, some of which have been operating 30 years, are American made and the same type has been requested by the Senegalese Government.

Training for Agricultural Extension Workers

The need for training of agricultural technicians and extension workers is being met in several instances. In Niger, AID is assisting the Union Nigerienne de Credit et de Cooperation, an autonomous organization under the Ministry of Rural Development, to train village level extension workers and farmers to demonstrate and introduce vegetable farming and market gardening in the Agadez area. This also includes the extension of irrigated rice cultivation along the Niger River.

In Mali, one of the training programs has been undertaken by a French voluntary agency, Volunteers of Progress. At a station about 20 miles from Bamako, 20 young Malians—sons of farmers living within a radius of 30 miles of the station—are being trained in practical farming. The trainees stay at the center two years and their schooling substitutes for military service. Although those that complete the course do not receive a diploma, they are given tools to use in their extension work and on their farms. The training center, incidentally, was the site of a pit silo demonstration this past year.

The importance of training is recognized throughout the Sahel. In Mauritania it is part of a priority program to save livestock.

Abdallahi Soueid Ahmed, Director of Animal Hus-

bandry in Mauritania, notes that the country lost 40 to 50 percent of its cattle since the beginning of the drought, with the Sixth Region—the most hard hit—losing 90 percent. Mauritania began a survival program a year ago. How was it doing this May, 12 months later?

“The situation is relatively better,” Dr. Soueid said. “Because there are less animals, those that have survived have been able to eat more in the grasslands.

“Our plan of survival is working. We have 3,500 to 4,000 head of cattle at our feeding centers, with special supplements given to the females to assure that they will produce healthy calves.

“Our first objective is to save the cows,” Dr. Soueid said, “and second to redevelop the herds.”

The Mauritanian program is being assisted by the FED, West Germany, and AID, which is providing \$200,000. A long-term project is contemplated by the World Bank and AID.

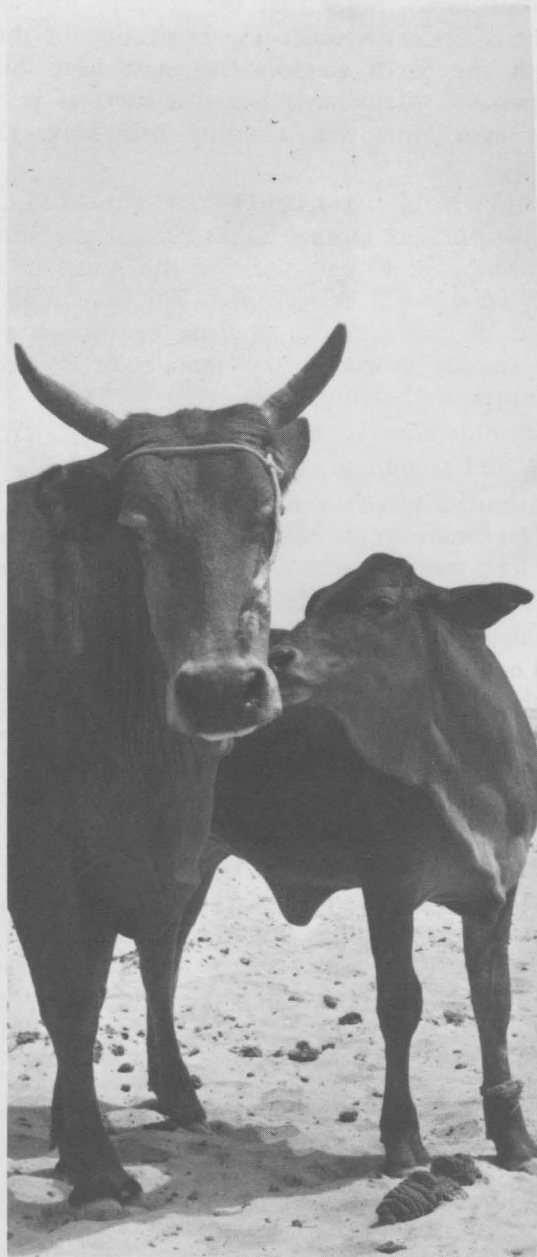
“Our problem, of course, affects the lives of the herdsmen. They must learn to become more sedentary. Also, they must learn to find ways of feeding livestock without depending entirely on rainfall. We are attempting to create production units of herders around deep bore wells, but these cannot be large herds or they will eat all the grass.

“We are seeking smaller herds but better quality, and this is the message we are trying to give our people. The change will come, but it will come slowly. Nomads traditionally have measured success and prestige on the number of livestock, whether or not the animals produce milk or meat.

Farmers in Chad begin planting millet. The procedure is simple: dig a shallow hole, drop seeds, cover—and hope for rain.

The amount of rain falling in summer and early fall will determine whether there will be a harvest.



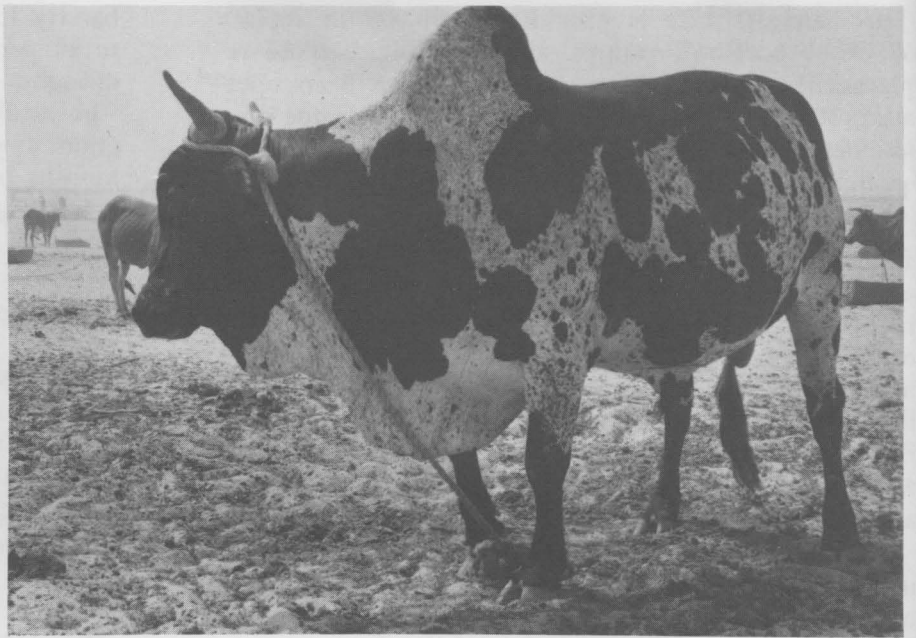


At a feeding station in Mauritania, healthy calves are being raised on special feed to provide breeding stock for future

Dr. Soueid smiled when he was asked if he thought he needed more aid.

"We are happy with the help we have received so far and appreciate the fact that it came at our most difficult time. The problem is not more aid, but training and infrastructure and education to a new way of doing things."

About 25 miles from Mauritania's capital, Nouakchott, in an area one would never think anything useful could grow or live, there is a livestock feeding center tucked between the dunes. In addition to a watering trough, supplied by a pipe that runs back to a nearby deep well, metal troughs have been lined up and at each is tethered a cow. All of the cattle look to be in excellent condition.



herds. The powerful-looking zebu (top) is one of two bulls that have fathered 107 calves at the livestock feeding station.

"How many bulls are there?" we asked.

"Two," was the answer.

"And how many cows?"

"107."

"I see no calves, where are they?"

The herdsman pointed to a cloud of dust and sand behind a dune. The cloud drew nearer to the encampment. One could hear the shouts and see the heads of the herdsmen as they drove the flock to the watering trough. Then the young cattle clumped into view and bunched around the trough.

"How many are there?" we asked.

He pointed to the cows, stolidly lying down in the heat, or waiting patiently at their tethers.

"107, the same as the cows?"

"107," he replied.



One Year Later, from p. 8

demou, a Tuareg from Mali who came to the camp last October after losing all his livestock—100 goats, 200 sheep, 30 camels, 20 cattle, and 8 donkeys.

"They all died in a year and a half," he said.

Mr. Abdemou says that the people come to him "because I know the words", although he neither reads nor writes. They ask him to decide disputes and to represent them with the authorities.

Mr. Abdemou still observes the ritual and customs of Tuareg hospitality. In his tent made of wood frames, goatskins, straw matting, cloth scraps, and canvas remnants, with a worn carpet spread over the dust, he serves tea boiled on a charcoal brazier. He pours with a flourish of the pot held high over the cup. Three servings. He doesn't spill a drop.

Camp For Women and Children Only

The life of refugees is not much different in the other camps throughout the Sahel, although the proportion of men in the Lazeret camp seems to be somewhat higher. In a small camp at Massakori in Chad, the refugees are all women and children. Zara Mandu, the mother of four, is typical. Her husband abandoned her last February, when the last of their livestock died. She and the children walked 80 miles to the camp. Here she lives in one of 20 nylon tents provided and operated by the International Red Cross. A hospital is nearby, supervised by a paramedic, Ibrahim Gay, who says the 57 children in the camp are generally in satisfactory condition. Diarrhea and bronchitis are the most common ailments.

In Timbuktu, Mali, the refugee camp is composed mostly of Tuareg and Arab nomads. Dr. Sory Ibrahim Kaba, the 37-year-old physician who supervises the health facilities at the Timbuktu camp, says conditions are "a lot better" than last summer and fall.

Of the 6,200 people in the camp, 4,000 are children.

"About one in 10 now suffers from malnutrition," Dr. Kaba says. "The proportion was far higher last year."

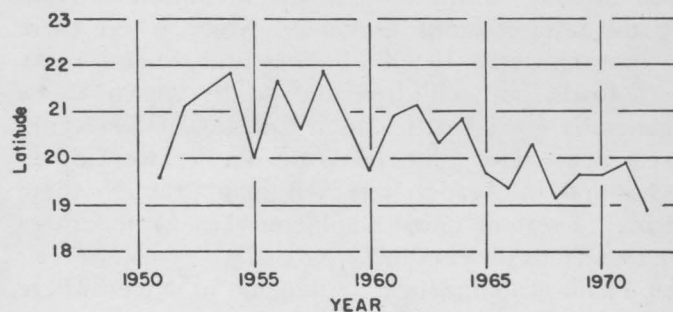
The youngsters are fed milk, powdered eggs, and occasionally receive some meat or fish. A high protein fish powder is supplied by a Swedish agency. AID furnishes CSM. Most of the sorghum and corn that form the basic diet come from the United States.

Dr. Kaba said that measles had broken out last winter, but there were few cases this spring. He pointed out that the low number of men in the camp provided an involuntary form of birth control.

"Seventy percent of the total population are women and girls," he said. "We have perhaps two or three births per month. Deaths have fallen to about one a month."

One of the increasingly vexing problems in the refugee camps is finding useful activities, especially for the children. Zarah, a Tuareg woman, has been in the camp a year. Her husband, a herdsman, died during the drought, and she was left with six children.

NORTHWARD PENETRATION OF MONSOON RAINS IN THE SAHEL



The chart line offers evidence of the climatic conditions which have led to drought in the Sahel. The higher the latitude to which the rains penetrate, the greater the seasonal rainfall.

"Three of the children go to the school that was started, but there aren't enough teachers for the others," she said. "There is nothing for the others."

As in Lazeret, small crafts are being taught, and the women gather together to weave mats to sell in the Timbuktu market, but Lt. Koreissy Tall, the commandant of Timbuktu, says there is not enough of a market there for them to make a living.

Overall, however, in the opinion of Dr. Pascal Imperato, Deputy Commissioner of the New York City Health Department and an authority on the Sahel, the



All of the refugees in a camp in Chad are women and children. Zara Mandu's husband has left her and four children.

Timbuktu camp "probably represents the best place where the refugees have ever lived." He visited Mali camps in May of this year, at the invitation of AID.

In the refugee camp at Agadez, Niger, where there are approximately 10,000 Tuareg and Fulani destitute nomads, both children and adults appear to be in generally good health. Susan Colgate, of New York City, a nurse with Church World Service working in the hospital in Agadez, reported that although there had been a serious measles epidemic last winter, there were no serious illnesses in May.

At Tchín Tabaraden, a settlement in Niger where the pilot of a plane must circle several times to dis-

tinguish the runway from the rest of the brown dust, some 16,000 refugees are receiving food. The location of the several camps makes it necessary to distribute food daily to those closest to the village, but up to intervals of 10 days for those whose tents are pitched farther out.

Much of the food is being delivered by truck from Niamey. Along with grain, it consists of wheat flour, sugar, vegetable shortening, and biscuits originally packaged for U.S. Civil Defense purposes.

"The people like the biscuits," the prefect Koussa Bagna says. He likes to inform visitors, too, that the town's name—Tchín Tabaraden—can be translated as

THE SAHEL: Some Statistical Comparisons of Development

	U.S.	Developing Africa (Including Sahel)	Sahel	Chad	Mali	Mauri- tania	Niger	Senegal	Upper Volta
Area (thousand square miles)	3,615	10,842	2,044	496	479	398	489	76	106
% of Africa total	---	100	19	5	4	4	4	1	1
Population (millions)	209	318.1	24.66	3.98	5.47	1.25	4.21	4.03	5.72
% of Africa total	---	100	7.8	1.3	1.7	0.4	1.3	1.3	1.8
Population growth rate (%)	0.9	2.7	2.4	2.4	2.4	2.3	3.0	2.4	2.0
Urbanization (%)	74	18	11	7	13	8	3	29	4
GNP (1972, millions of dollars)	1,155,200	62,921	2,921	330	375	214	490	1,120	392
% of Africa total	---	100	4.6	0.5	0.6	0.3	0.8	1.8	0.6
GNP per capita (1972, dollars)	5,532	203	118	85	70	175	120	285	70
Electricity production (KWH per capita per year)	8,300	116	26	13	9	65	12	89	6
Infant mortality (Deaths per thousand live births)	19	160	180	175	188	169	162	159	204
People per doctor	660	15,900	53,000	63,900	37,100	25,900	54,100	14,500	92,800
Life expectancy (years)	71	44	40	40	38	42	43	44	35
Primary school enrollment as % of 5-14 age group	84	33	14	18	15	12	8	26	7
Secondary school enrollment as % 15-19 age group	75	11	5	3	2	4	1	17	2
Literacy (%)	98	17	5	5-10	5	1-5	5	5-10	6
Miles improved roads per thousand square miles area	920	40	7	1	10	2	5	37	26

Source: Statistics and Reports Division, AID.



The Lazeret refugee camp has become well organized since it came into being a year ago. The Red Cross is in charge of the

feeding and health operations. The camps throughout the Sahel are better organized than a year ago, although larger.

follows: "Tchin"—"salt" and "Tabaraden"—"lots of pretty girls".

One pretty girl there, however, is not a native. Marys Marty, from Nancy, France, is a nurse who has served in Niger for eight years. Under Bachard Kassoum, the director, she works in the medical dispensary. Here, too, she reported, there had been a measles outbreak in the winter and early spring but now, in May, conditions were much better.

"The trouble was," she said, "that some mothers did not bring their children to the dispensary. Those who were treated were saved. Some mothers seem to be ashamed to bring a sick child to the dispensary. We have launched a special campaign to educate and inform them that this is necessary. We also are trying to educate them to nutrition. Since February this has had great results. There has been an incredible difference in the weights of the children."

The camp is using local products as much as possible in feeding. Some millet and meat has been available to augment the foods being shipped in. Each mother is given a milk card which is marked for each day she receives milk.

Mrs. Marty—her husband is an agricultural advisor working in Tchin Tabaraden—checks each card as the mother presents it. The child's weight is recorded periodically to determine if it is gaining.

The nutritional program, she says, now covers 300 to 400 children per day. Each child receives one-half liter (about a pint) of milk a day, and some meat three times a week. They also are given two pieces of sugar. Mrs. Marty has trained four women to help her.

"The children and the mothers must eat the millet and meat, and drink the milk here," Mrs. Marty said. At the time she was describing the procedure to a visitor,

U.S. Aid to the Sahel

(as of June 30, 1974)

FOOD

506,000 metric tons of grain
(including ocean freight costs)

\$99,221,000

NON-FOOD ASSISTANCE

Emergency projects, technical assistance,
Recovery and Rehabilitation programs

\$29,660,000

TOTAL

\$128,881,000

Representative Emergency Projects Funded by AID

CHAD

U.S. Air Force Airlift	\$170,000
Airdrop Equipment	2,200
Animal Feed Mill Equipment	10,000
Sacks for Animal Feed	13,100
Measles Vaccine	49,000
Ocean Freight for Voluntary Agency Supplies	250,000
Tarpaulins	50,000

MALI

Vitamins	\$12,821
Bandages	2,200
Temporary Storage, Abidjan	10,000
Airlifts	5,059,000
Blankets	88,000
Tarpaulins	42,000
Trucks and spare parts	500,000
POL assistance	75,000
Measles Vaccine	96,000
Ocean Freight for Voluntary Agency Supplies	4,000

MAURITANIA

Domestic Grain Transport	\$275,000
Medical Equipment	3,100
Medicines	57,000
Water Trucks (2)	50,000
Vitamins	72,125
Potato Seeds and Transport	15,000
Measles Vaccine	38,000
Emergency Hospital	5,000
Rebagging Supplies	50,000
Storage and Transport	150,000

SENEGAL

Animal Feed	\$219,491
Measles Vaccine	81,000
Ocean Freight for Voluntary Agency Supplies	50,000

NIGER

Animal Feed	\$430,000
Animal Medicines	75,000
Airdrop Supplies	15,000
Hand Tools	20,000
Medical Supplies	23,500
CSM Transportation	4,500
Crop Reporting	3,000
Measles Vaccine	81,000
Hospital Equipment	12,000
Ocean Freight for Voluntary Agency Supplies	225,000

UPPER VOLTA

Animal Feed	\$156,000
Animal Medicines and Saltlicks	125,000
Emergency Hospital	7,000
Anti-Biotics and Vitamins	10,685
Ground Water Survey	4,000
Measles Vaccine	110,000
Hospital Equipment	5,000
Ocean Freight for Voluntary Agency Supplies	54,000

REGIONAL ASSISTANCE

Measles Vaccine Research	\$112,000
Locust Control	95,000
Grants to Voluntary Agencies	250,000
CDC Nutrition Team	150,000
Maintain Cotonou-Gao Road	100,000
Crop Surveys (Niger and Upper Volta)	20,000

ASSISTANCE TO UN AGENCIES

FAO (For UNICEF and WHO)	\$1,000,000
Assignment of Logstician to FAO	54,000
UN Special Sahelian Office	100,000

a mother came through the line without her child and wanted the food and milk. "No," Mrs. Marty told her firmly, "you must come back with your child."

The entrance to the center purposely has been constructed to form a sort of maze. This, she said, provides for an orderly line, and prevents crowding.

The center is operated by the Nigerienne Government with help from several voluntary agencies, including Oxfam, a British organization.

"But we need money to buy medicines and equipment," she said. "We need more people. Just recently a Belgian doctor was driving through with a convoy and stopped to have one of his drivers receive medical attention. The doctor stayed a couple of days to help us treat the children. But we would like more trained people who can stay."

In the camps there is a division between the Tuaregs and Fulanis. The Tuareg tents are higher, made

of skins and cloth. The Fulanis' shelters are constructed of tree branches and are lower and rounded.

There is, in most of the refugee camps, the feeling that the camps may be around for a long time, even if the rains are good this year. The refugees, for the most part, must look forward to continuing their existence as refugees. In some camps, when the rains turn the dry dust to mud, this can be miserable. But, as Chief Abdemou said in the Lazeret camp, "What is there to do? The people have to stay here or starve."

This attitude seems to be most tangible in the encampments in Nouakchott, the capital of Mauritania. Here, where the desert truly seems to have taken over, many refugees have built more permanent lodgings. Shacks of wood, metal scraps, roofing materials and clay brick have risen among the tents. Fences have been constructed.



U.S. sorghum travels long distances and in strange ways. This bag was delivered to a destitute nomad family by camel.

Although few nomads can read or write they are aware of the origin of the food and recognize the AID symbol.

Each family is given a card with a number. The cards are colored according to the *arrondissement*. Each family receives its allotment of food once a month at the rate of 22 pounds per person. The food from the United States is trucked up from Dakar, but some of the other donors ship their food through the port of Nouakchott. This port consist of a long unprotected wharf extending from the beach into the ocean. The food must be lightered from the ships and in the rough seas this can be a time-consuming, inefficient process. Turnaround time for ships calling at Nouakchott can be a week or more.

Future of Refugees Unclear

The problem of the future of the refugees, particularly the future of the nomads, is a matter of considerable concern. Minister Doukara in Mali sees no immediate solution in his country.

"We can't make any permanent plans yet," he says. "If we are to attempt to restore cattle herds, that will take four or five years. We are now living just day by day.

"The people in the camps know only livestock. We cannot give them other work. They have no skills

yet, but they will have to adapt to a new way of life. No one can give an easy answer."

Efforts are underway, however, to find an answer. In Upper Volta, AID is helping to finance an activity aimed at the ultimate development of 200 sedentary farms on which former nomadic Peuhl herdsmen can settle. The support would expand a program that has been successfully carried on for several years by the Voltan Government and the United Nations Development Program and U.N. Food and Agriculture Organization. (See page 15.)

The Mauritanian Government, aware of the huge problem of encampments, has planned a "greenbelt" program to surround sandswept Nouakchott. This would not only provide a barrier to the creeping desert, but would resettle 100 families a year. The cost is estimated at \$225,000 a year, of which AID would provide 10 percent. Ultimately there would be 1,100 small parcels of land which would be cultivated in vegetables, providing an addition to the standard diet of cereals and occasional meat.

In the Dollol Bosso Valley of Niger, an agricultural and community development project is being carried on by the Government of Niger through CARE, and



Mohammad Danda, former herdsman, shows off the vegetables he has grown in his new role as farmer at Assaouas, in Niger.

Mr. Danda is one of an increasing number of herdsmen who are turning to farming and controlled grazing for livestock.

assisted by AID. The object is to provide new wells in 10 villages. This would provide water to stimulate vegetable production, lessening the dependence on rain for the inhabitants of the area.

Projects such as these dot the Sahelian countries and could stimulate a further trend toward a more stabilized agriculture.

One Sahelian nomad whose life has changed to that of a farmer is Mohammad Danda. A former herdsman, he lives in Assaouas, a small settlement in Niger 45 miles west of Agadez. Mohammad once herded camels, sheep, goats, and donkeys. He lost them all in the drought—the last ones perishing a year ago.

There are nine people in Mohammad's family, his wife, three boys and five daughters. Because many other herdsmen gathered at Assaouas, the Nigerienne Government set up a food distribution center, using U.S. grain from AID. But Assaouas became more than a refugee camp at a fork in the road. The soil is fertile. Wells were dug and pumps were provided by the Libyan Government. The herdsmen, who no longer had herds, were given the opportunity to culti-

vate the land—one-half hectare (a little more than an acre) to each family. In addition, the plan would be to grow grass under controlled conditions. The herdsmen-turned-farmers would work both the controlled fields and their acre of vegetables. They would receive food until the crops were in.

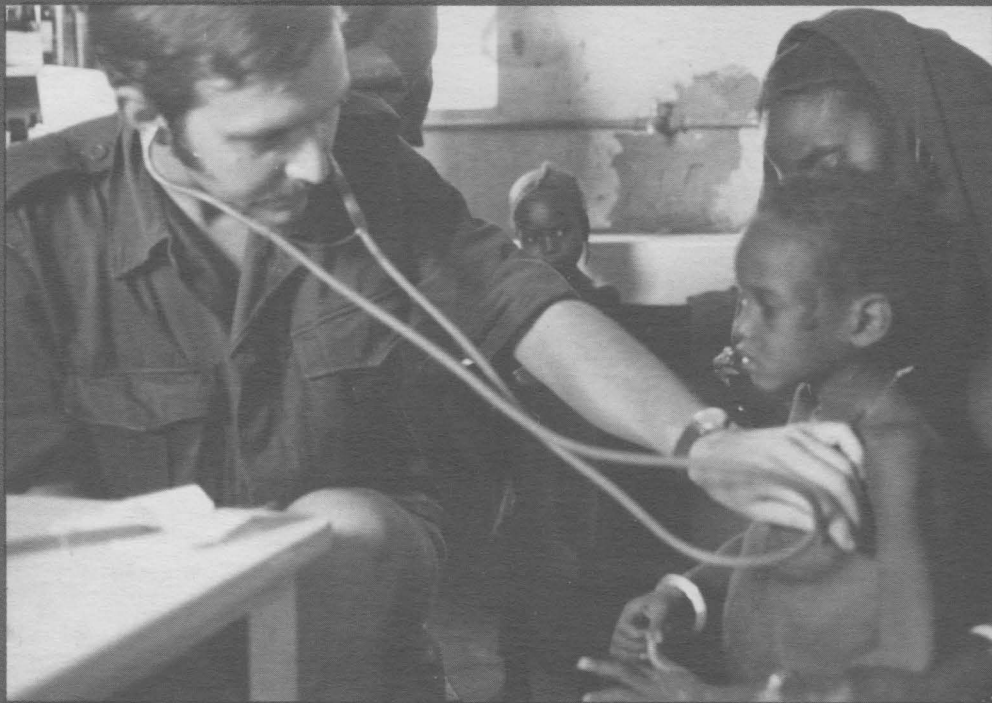
Mohammad became one of the 42 who joined the sedentary project. In May, after a year of his new career, he proudly showed a visitor his plot of ground. Growing there were tomatoes, potatoes, carrots, beans, corn, melons, squashes, among other vegetables. He smiled with satisfaction as the visitor admired the size of the melons and gourds.

"Do you want to go back to being a nomad?" he was asked.

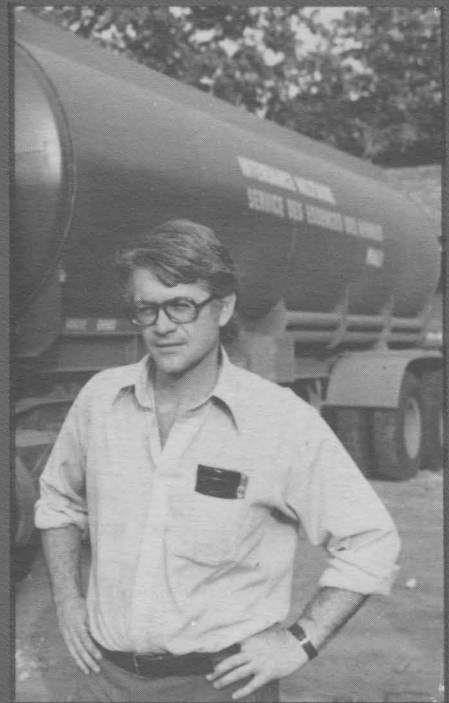
When Mohammad heard the translated question, he looked around at the produce he was growing, and at the members of his family who were shyly emerging from their hut.

He thought a moment, smiled, then laughed. But his face was wistful as he slowly shook his head from side to side.





A French doctor examines a child for marasmus at the refugee camp in Tchin Tabaraden, a town in drought-stricken Niger.



James Kelly, "R and R" representative, with fuel truck AID presented to Mali.



Vehicle maintenance is a key problem in the Sahel. Trucks often travel in pairs to assure safety when one breaks down.

"...we've all been flying by the seat of our pants in the Sahel. We're all learning what will work and what won't. That is part of the business."



Staff members of the maternal and child health clinic operated by ORT and financed by AID in the town of Say, Niger.

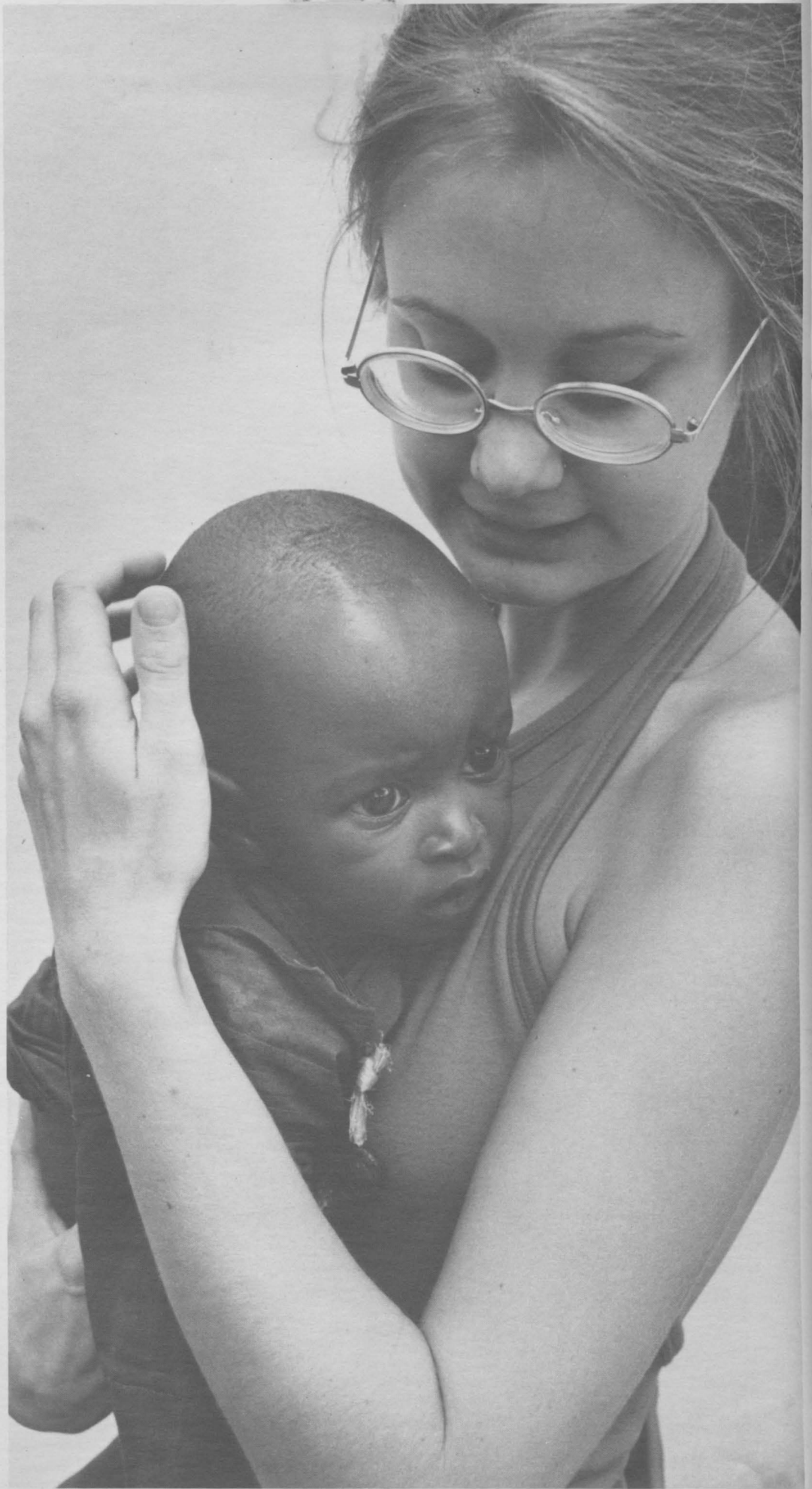


Refugees in the Nouakchott, Mauritania, camps receive food regularly, but life is dull for these nomad women.

DEPARTMENT OF STATE
Agency for International Development
Office of Public Affairs
Washington, D. C. 20523

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AGENCY FOR
INTERNATIONAL DEVELOPMENT



Joan Waddleton, a Peace Corps Volunteer from Princeton, New Jersey, with one of the children she helps at a maternal and child health center in Niger. The center, operated by ORT, a voluntary agency, and the Nigerienne Ministry of Health, is financed by AID. (See page 16)

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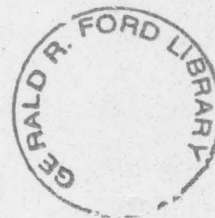
STANLEY SCOTT, SPECIAL ASSISTANT TO THE PRESIDENT
CARE WHITE HOUSE
WASHINGTON DC 20500

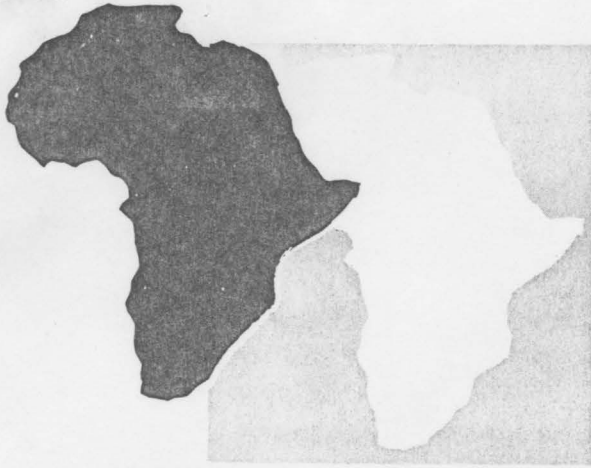
PER OUR CONVERSATION TODAY ON THE AFRICAN DROUGHT PROGRAM AND THE BOXING SHOW IN SALT LAKE CITY UTAH ON SEPTEMBER THREE YOU'RE ASSISTANCE IS REQUESTED DICK SADLER MANAGER OF HEAVY WEIGHT CHAMPION GEORGE FOREMAN DON KING PROMOTER OF THE FIGHT IN ZAIRE AND HERBERT MUHAMMAD MANAGER OF MUHAMMAD ALI ARE NOW TRI-CHAIRMAN OF THIS PROGRAM GOVERNOR CALVIN RAMPTON OF UTAH HAS DECLARED PROJECT SURVIVAL DAY IN THE STATE THE MORMON CHURCH WHICH IS VERY INFLUENTIAL IN UTAH IS LENDING ITS SUPPORT TO THE VENTURE THIS SHOW FEATURES THREE WORLD CHAMPIONS IN ADDITION JOE LOUIS AND SUGAN RAY ROBINSON WILL REFEREE THE EXHIBITION S BOB HOPE WILL SERVE AS MASTER OF CEREMONIES AND GENERAL PERSONALITY FOR THE DAY AN ARRAY OF OUTSTANDING BLACK STARS WILL JOIN THE FIGHTERS IN UTAH AS YOU CAN DETERMINE THIS IS TO BENEFIT THE DROUGHT VICTIMS OF THE ZAHEL REGION OF AFRICA THIS IS A WORTHY EVENT THAT WARRANTS THE SUPPORT OF THE PRESIDENT OF THE UNITED STATES IT IS ALL ABOUT SELF HELP AND HELPING PEOPLE PLEASE TALK TO THE PRESIDENTS STAFF AND SEE IF THE PRESIDENT OR SOME OFFICIAL REPRESENTATIVE OF HIS OFFICE COULD BE PRESENT IN SALT LAKE CITY ON SEPTEMBER THREE SHOULD THIS BE IMPOSSIBLE I WOULD APPRECIATE A LETTER FROM THE PRESIDENT EXTENDING HIS INTEREST AND SUPPORT ADDITIONAL MATERIALS ARE BEING SENT TO YOU I TRUST THAT YOU WILL EXPEDITE THIS IN THE SAME FINE MANNER THAT YOU ALWAYS DO BUSINESS THANK YOU SINCERELY

TED SHORT PRESIDENT CUNNINGHAM SHORT BERRYMAN AND ASSOCIATES
INC 2120 WEST 8 ST SUITE 300 LOS ANGELES CA 90057

15:28 EDT

MGMWSHT HSB





PAN AFRICAN ASSOCIATES

PUBLICITY • PUBLIC RELATIONS • PROMOTIONS
2120 WEST EIGHTH STREET, NO. 305
LOS ANGELES, CALIFORNIA 90057
PHONE (213) 381-1184

August 20, 1974

BOOKER GRIFFIN
PRESIDENT
EXCLUSIVE REPRESENTATIVES OF
DON KING ENTERPRISES

Ted Short, President
Cunningham, Short, Berryman & Associates, Inc.
2120 West Eight Street
Los Angeles, California 90057

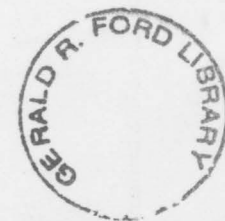
Dear Ted,

I am enclosing per our conversation material on the African drought program and the boxing show in Salt Lake City, Utah on September 3rd.

Dick Sadler, manager of Heavyweight Champion George Foreman, Don King, promoter of the fight in Zaire, and Herbert Muhammad, manager of Muhammad Ali, are now tri-chairman of this program.

Governor Calvin Rampton of Utah has declared Project Survival Day in the state. The Mormon Church, which is very influential in Utah, is lending it's support to the venture.

This show features three world champions. In addition, Joe Louis and Sugar Ray Robinson will referee the exhibitions. Bob Hope will serve as master of ceremonies and general personality for the day. An array of outstanding black stars will join the fighters in Utah.



Ted Short, President

August 20, 1974

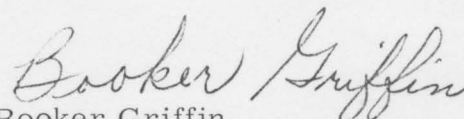
Page 2

As you see this is to benefit the drought victims of the Sahel region of Africa. This is a worthy event that warrants the support of the President of the United States. It is all about self help and helping people.

Please talk to the President's staff and see if the President or some official representative of his office could be present in Salt Lake City on September 3rd. Should this be impossible we would appreciate a letter from the President addressed to our three chairman extending his interest and support.

I trust that you will expedite this in the same fine manner that you always do business. Thank you.

Sincerely,

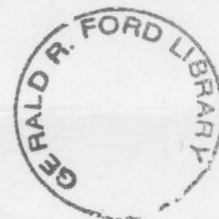


Booker Griffin
Pan African Associates

BG:db

cc: Don King, Dick Sadler, Eyart B. Abner

Enclosures



AFRICAN CHAMBER OF COMMERCE

Wells Fargo Building, Suite ¹³⁶⁶~~1050~~ ■ 44 Montgomery St., San Francisco, CA 94104 ■ (415) 981-0296

Glendale Federal Building, Suite 301 ■ 9454 Wilshire Boulevard, Beverly Hills, CA 90212

August 17, 1974



FAMINE STALKS AFRICA

Last year experts predicted six million deaths in the nations of the African Sahel. The Sahel forms a belt along the southern edge of the Sahara, a belt that is growing narrower as the desert advances at a rate of about 3,000 feet, and in some places as much as 30 miles a year. Overgrazing in areas where water was available, resulted in destruction of plant life. This, in turn, prevented the condensation of water necessary to produce rain.

The emergency food and medical relief rushed to the area by governments and voluntary agencies answered the immediate need--- and though deaths may run into the hundreds of thousands, most of the hungry are still managing to survive. But the international food aid rushed to the Sahel affords only a temporary stopgap.

Moving south in search of pasture, herdsmen have sometimes overrun already lean fields and destroyed crops. Destitute herdsmen and farmers have created serious urban problems in cities barely able to provide sustenance for their populations. Lacking anything else, people have eaten seeds saved for planting. Both crop failure and the depletion of livestock have created large-scale malnutrition, which in turn has made them susceptible to disease and has led to cholera and measles epidemics.

The poor governments of the Sahelian nations, largely dependent on taxes on livestock and farm produce, have lost desperately needed revenues and at the same time have had to redirect monies from development projects to feeding programs. Consequently it is almost impossible for them to do anything for the future of their nations without help from outside.

When the above conditions were brought to the attention of Dick Sadler, he approached the promoters of the Champoinship fight with the idea of donating one dollar for every ticket sold. (See enclosed San Francisco Examiner, Aug. 8, 1974) As of this writing, no commitment has been received from the fight promoters.

However, in pursuit of his dedication to aid the Sahel, Sadler has undertaken the task of coordinating special fund-raising events. The first of which, PARADE OF STARS FOR PROJECT SURVIVAL, is to be held in Salt Lake City, Utah September 3, 1974. (See San Francisco Chronicle, Aug. 16, 1974) In addition to the named participants, famed comedien Bob Hope has graciously agreed to participate on the program.

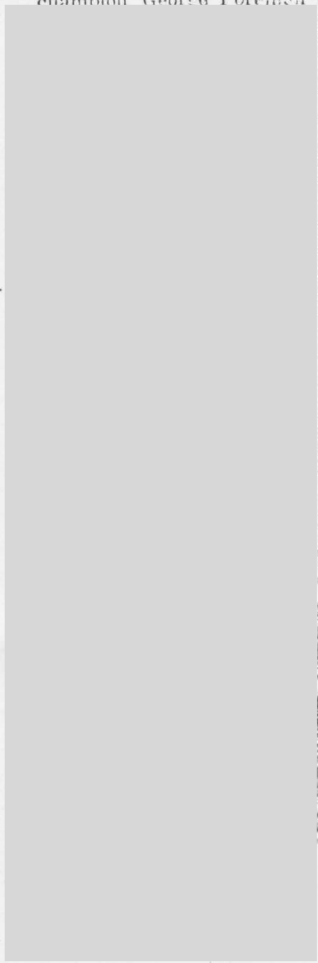
The amounts thus raised will be announced to the world from the ring of the Championship fight in Zaire. Donations are tax deductible; exempt number: 23-7253578 All funds will be administered jointly with the Organization of African Unity.

San Francisco Chronicle
** Fri., Aug. 16, 1974

Foreman, Ali, Frazier in Exhibition

Salt Lake City

Dick Sadler, the man who guided Olympic boxing champion George Foreman



SAN FRANCISCO EXAMINER
Thurs., Aug. 8, 1974 Page 43

SPORTS and Business

Title fight TV may finance drought aid

By Lance Gilmer

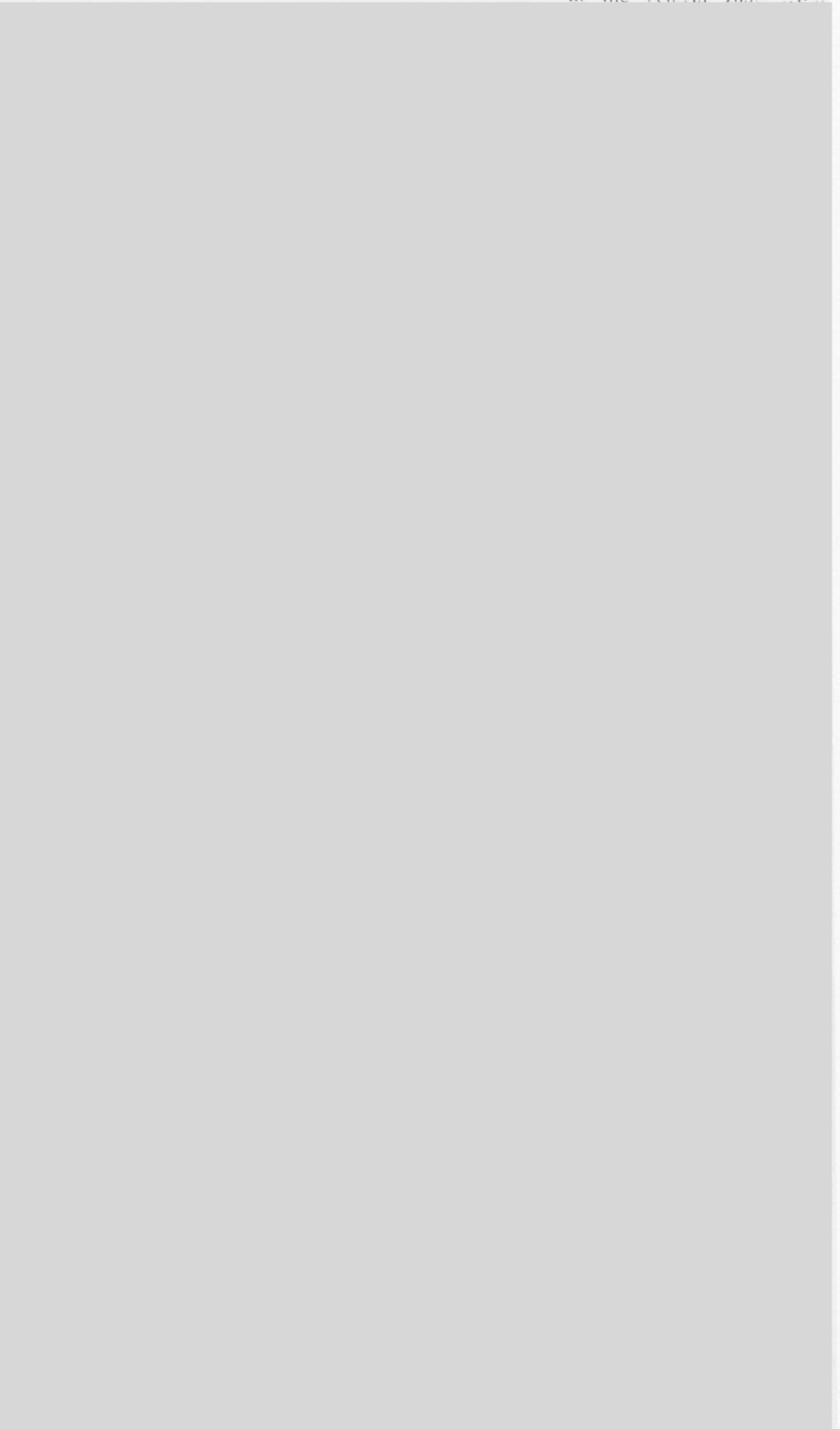
Forget the stereotype image Hollywood and novelists have created of the money-grabbing, insensitive manager and his big, dumb

promoters, television, fight co-ordinators and fans — to participate by doing something for the needy.

"So I went to the promoters, guys like Barry Bern-

blacks, which can be looked on in 50 years from now as a contribution from us to them."

Sadler wanted a dam built in the central zone from



Bay Area Drought Aid

Getting Help to Africa

By Larry Liebert

A Bay Area organization attempting to aid

introduce his new, fast-growing hybrid to the African nations.

State Department funds to move a power plant that is up for sale from Idaho to Mauritania.

San Francisco Chronicle

**

Fri., Sept. 7, 1973

AFRICAN CHAMBER OF COMMERCE

Wells Fargo Building, Suite 1650 ■ 44 Montgomery St., San Francisco, CA 94104 ■ (415) 981-0296

Glendale Federal Building, Suite 301 ■ 9454 Wilshire Boulevard, Beverly Hills, CA 90212

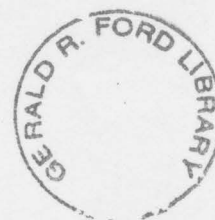
BACKGROUND

The African Chamber of Commerce was incorporated as a non profit organization in December, 1972.

The principal purpose of the Chamber is to collect and distribute accurate and reliable information concerning trade, investment, commerce, industry, finance and agriculture as they relate to the United States and Africa, and in that connection to serve as a clearing house for individuals and firms in both places who seek to explore matters of mutual interest.

During the last six months we have hosted and entertained more than thirty five foreign visitors from Africa. Many of our visitors were sent to us for specific purposes by the Organization of African Unity, the largest organization of African nations in the world. Last month we were visited by the Central Bank Ministers of six different African countries. The discussions explored ways that reciprocal trade could hasten the economic and social development of Africa. Excerpts from those discussions will soon appear in our news letter.

The African Chamber of Commerce has been endorsed by more than thirty African nations.



AFRICAN CHAMBER OF COMMERCE

Wells Fargo Building, Suite 1650 ■ 44 Montgomery St., San Francisco, CA 94104 ■ (415) 981-0296

Glendale Federal Building, Suite 301 ■ 9454 Wilshire Boulevard, Beverly Hills, CA 90212

FACT SHEET PREPARED BY
THE AFRICAN STUDENT ASSOCIATION, BERKELEY, CALIFORNIA FOR:

PROJECT SURVIVAL
(West African Famine Relief Fund)
Post Office Box 389
San Francisco, California 94101

DROUGHT AND FAMINE IN AFRICA

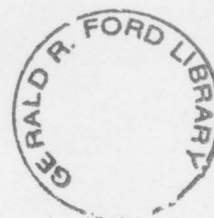
For the past seven years West, Central and some parts of East Africa have undergone one of the severest droughts the world has ever seen. Highly effected countries are:

MAURITANIA MALI NIGER CHAD SENEGAL UPPER VOLTA

As the enclosed map shows, other African countries are also hit by the severe drought:

DAHOMY NIGERIA CENTRAL AFRICAN REPUBLIC CAMEROON ETHIOPIA
GAMBIA GUINEA SIERRA LEONE IVORY COAST GHANA TOGO

Overall, close to 3 million square miles are now under severe drought. The lack of rain has brought devastation and famine to 25-30 million people. The United Nations and the Organization of African Unity estimate that 6-10 million people may die by October as a result of the drought and famine. Already, 1½ million people are dead; millions of cattle and other livestock are dead; and other means of survival, e.g., crops are destroyed.



DATA ON SEVERELY HIT COUNTRIES

Mauritania

Area: 397,850 square miles
(approximately 2½ times the area of California)
Population: 2 million
Extent of disaster: 80% effected
Economy: Based on mining, animal husbandry and agricultural products
Aid to date: 1,800 tons of grain at low cost
Source: European Economic Community

Mali

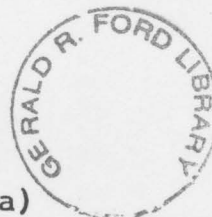
Area: 463,950 square miles
(approximately 3 times the area of California)
Population: 5 million
Extent of disaster: 75% effected
Economy: Based on animal husbandry and agricultural products, (peanuts, cotton)
Aid to date: 8,000 tons of grain at low cost
Source: European Economic Community

Niger

Area: 489,190 square miles
(approximately 3 times the area of California)
Population: 4 million
Extent of disaster: 80% effected
Economy: Based on animal husbandry and agricultural products, (hides, cattle, cotton)
Aid to date: 12,000 tons of cereal at low cost
Source: European Economic Community

Chad

Area: 495,800 square miles
(approximately 3 times the area of California)
Population: 3.5 million
Extent of disaster: 60% effected
Economy: Based on animal husbandry and agricultural products, (cotton, cattle)
Aid to date: Unspecified



Senegal

Area: 76,124 square miles
(approximately $\frac{1}{2}$ the area of California)
Population: 3.8 million
Extent of disaster: 50% effected
Economy: Based on mining, animal husbandry and agricultural products, (phosphate, peanuts, cattle)
Aid to date: Unspecified

Upper Volta

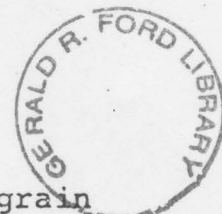
Area: 105,869 square miles
(approximately 0.7 the area of California)
Population: 5.5 million
Extent of disaster: 95% effected
(People are reported raiding ant hills)
(to snatch away grains stored by the ants.)
Economy: Based on animal husbandry and agricultural products
Aid to date: 15,000 tons of cereal
Source: European Economic Community

Other Sources of Aid

United States of America	\$2 million 156,000 tons of grain
Swedish Red Cross	\$18 million to Ethiopia
USSR	10,000 tons of grain, transported by air to the effected areas
Saudi Arabia	\$1 million to Niger
United Nations World Food Program	\$10,284,000 in cereals, sorghum grains and deep drilling for water
World Council of Churches	Unspecified amount
Algeria	10,000 tons of grain

African countries have been helping the effected area for the past 7 years. Even now, African countries are supplying 60%, at no cost, of all aid to the famine stricken countries.

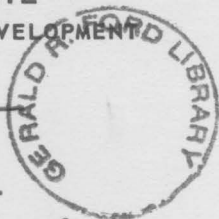
DONATIONS ARE TAX DEDUCTIBLE; SEND TO:
PROJECT SURVIVAL, Post Office Box 389, San Francisco, Ca. 94101





DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT

Mr. Stanley Scott



Here are a few
copies of the release
on the AID grant to
AFRICARE. Please
note release time - not
before Monday noon -
11/7 Val Montanari

For the

PRESS

Agency for International Development
OFFICE OF PUBLIC AFFAIRS

FOR RELEASE AT 12 NOON
MONDAY, NOVEMBER 11, 1974



AID-74-78
Contact: Montanari
(202) 632-8332

**\$500,000 AID GRANT TO AFRICARE
TO HELP START RURAL DEVELOPMENT**

A \$500,000 grant has been made by the Agency for International Development to AFRICARE to help start development projects in drought-stricken Central and West Africa, AID Administrator Daniel Parker announced today. C. Payne Lucas, President of AFRICARE, joined Mr. Parker in signing the new grant agreement at AID headquarters in the Department of State.

AFRICARE is a non-profit national organization supported by private donations and devoted to rural health and development in Africa, with emphasis on the six countries making up the Sahel region.

The money, to be supplemented by AFRICARE'S own funds, will finance the training of officials of African governments and of selected U.S. private organizations in planning and management of rural development projects. The ultimate goal is the improvement of the income, health, education and quality of life of lowest-income people in the Sahel region.

As a result of a continual drought in the region, entire populations have been uprooted and the economies of countries, already among the world's poorest, have been burdened far beyond their capacity even to avert starvation.

Development assistance, as opposed to short-term relief and reconstruction efforts, is needed to restore agricultural productivity upon which the survival and well-being of a vast majority of people in the Sahel must depend.

Enlargement of AFRICARE'S professional staff, the establishment of a Resources Information Center, and the inauguration of training programs and workshops will be made possible by the grant, according to Parker.

(more)

Department of State Washington, D.C. 20523

Since its formation in June of 1972, AFRICARE has established an impressive record of performance in Sahelian West Africa, including an important role in direct drought relief, a program of maternal and child care, water resource development and well construction, and in the training of nurses and paramedical personnel.

AFRICARE President Lucas said the grant will give the AFRICARE program a powerful new boost in pursuit of its continuing quest for a better life for all Africans.

The AID grant is one of the first to be made under a mandate from the Congress to involve more private organizations and institutions in the effort to help poor nations make social and economic progress.

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(more)

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION
Presidential Libraries Transfer/Disposal Sheet

ITEM ID 00625

DESCRIPTION OF ITEM MOVED . . Two black and white photographs of the
signing ceremony for a \$500,000 grant
from A.I.D. for development programs
in the African Sahel (captions on
back).

COLLECTION/SERIES/FOLDER ID . 031500017

COLLECTION TITLE STANLEY S. SCOTT PAPERS (WH Public
Liaison Office - Minority Affairs)

BOX NUMBER 2

FOLDER TITLE African Drought, 1973-1974 (4)-(6)

ACCESSION NUMBER 1998-NLF-022

MOVEMENT DATE 05/31/2001

TYPE OF MATERIAL Photographs

NEW LOCATION Audiovisual Collection

ARCHIVIST William H. McNitt



FORD LIBRARY
GERALD R.

Signing a \$500,000 grant from the Agency for International Development are left, C. Payne Lucas, President of AFRICARE, and Daniel Parker, Administrator of AID. The grant will further AFRICARE's development program in the drought-stricken African Sahel. Behind them are l. to r., Margaret Hickey, Chairman of the Advisory Committee on Voluntary Foreign Aid, Walter Fauntroy, D. C. Delegate to the Congress; Jarold A. Kieffer, an Assistant Administrator of AID and Dr. Samuel Adams, Assistant Administrator for AID's Africa Bureau.





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Signing a \$500,000 grant from the Agency for International Development are left, C. Payne Lucas, President of AFRICARE, and Daniel Parker, Administrator of AID. The grant will further AFRICARE's development program in the drought-stricken African Sahel. Behind them are l. to r., Margaret Hickey, Chairman of the Advisory Committee on Voluntary Foreign Aid, Walter Fauntroy, D. C. Delegate to the Congress; Jarold A. Kieffer, an Assistant Administrator of AID and Dr. Samuel Adams, Assistant Administrator for AID's Africa Bureau.