WORLD HUNGER, HEALTH, AND REFUGEE PROBLEMS

Part V: Human Disasters in Cyprus, Bangladesh, Africa

HEARING

BEFORE THE

SUBCOMMITTEE TO INVESTIGATE PROBLEMS CONNECTED WITH REFUGEES AND ESCAPEES

OF THE

COMMITTEE ON THE JUDICIARY

AND THE

SUBCOMMITTEE ON HEALTH

OF THE

COMMITTEE ON
LABOR AND PUBLIC WELFARE

UNITED STATES SENATE

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WORLD HUNGER, HEALTH, AND REFUGEE PROBLEMS

Part V: Human Disasters in Cyprus, Bangladesh, and Africa

TUESDAY, AUGUST 20, 1974

U.S. SENATE,
JOINT SUBCOMMITTEE ON REFUGEES AND ESCAPEES,
COMMITTEE ON THE JUDICIARY,
SUBCOMMITTEE ON HEALTH,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C.

The subcommittees met, pursuant to notice, at 9:50 a.m., in room 2228, Dirksen Senate Office Building, Hon. Edward M. Kennedy (chairman) presiding.

Present: Senators Kennedy (presiding) and Fong.

Also present: Dale deHaan, staff director, Subcommittee on Refugees, Jerry Tinker, staff consultant; Dr. Philip Caper, professional staff member, Subcommittee on Health; and Mrs. Dorothy Parker, assistant to Senator Fong.

Senator KENNEDY. The committee will come to order.

Today's hearing—the fifth in a series begun last year—resumes the joint inquiry of the Subcommittee on Refugees and the Subcommittee on Health into "World Hunger, Health, and Refugee Problems."

OPENING STATEMENT

One of our concerns today is the continuing drought and famine in the Sahel and other parts of Africa. But, as so often happens in the past, we are also meeting at a time of new human tragedy. In Bangladesh, where heavy floods have swept over two-thirds of the country—literally millions of men, women, and children are in urgent need of emergency relief and rehabilitation support. And in Cyprus we find the latest link in the chain of ravaged populations, which has circled the globe in recent years.

CYPRUS

For the people of Cyprus this is a perilous time, as it is for the renewal of democracy and freedom in Greece, and the future of NATO in southern Europe. Regrettably, the plight of Cypriot civilians has taken second place to the military and political issues at stake, and to the special interests of those who have much to lose or to gain by the outcome of the conflict. But the civilians of Cyprus, both Greeks and Turks, also have interests. And for many thousands, apparently, recent weeks have been a nightmare of death and horror and grief.

Latest official reports from the island describe chaos among the people, and devastation to the land. Estimates on the number of refu-

gees run as high as 300,000, or nearly one-half of the population. Civilian casualties, including deaths, may number at least 20,000.

I think that is a fairly conservative figure. If you figure that 20,000 to 25,000 is 4 percent of the population, it would be the equivalent of 6½ million Americans in a country of this size, which gives you some sense of the number of people that have been killed during the period of this tragedy.

Food and water is scarce or unavailable in many areas. Livestock is dying. The economy has been shattered. And, given the continuing offensive by Turkish forces, there is no end in sight to the human and political tragedy of the Cypriot people.

A great deal has been said over America's role in the crisis, and over the seeming complicity of our Government in the present partition of the island and its people. But the early silence and later vacillation of our policy toward the political and military issues must not now characterize our attitude or response to the escalating human crisis that has gripped all of Cyprus.

Last Friday I made a personal appeal to the United Nations High Commissioner for Refugees (UNHCR) for his "favorable consideration of good offices" in providing for the care and protection of refugees and others in distress. I can report this morning that the High Commissioner, in consultation with U.N. Secretary General Kurt Waldheim and all parties concerned, is ready to move, and is now determining ways in which his office can play a useful role in relieving human suffering on Cyprus.

I urge our Government to actively encourage and generously support the High Commissioner's efforts, and his free access to all parts of the island. His efforts, and those of the International Committee of the Red Cross (ICRC), are vitally needed to help bring peace and relief to the Cypriot people.

And on the diplomatic front our objectives should be clear: An end to the violence, and an early resumption of negotiations to restore the territorial integrity of Cyprus and the right of the Cypriot people, working together, to determine their own destiny. And we must do all in our power, including the allocation of foreign military and economic assistance, to accomplish this end. Important first steps must include a meaningful separation of forces and the strengthened presence of the United Nations.

BANGLADESH

In Bangladesh, there can be no doubt that great tragedy has once again hit the Bengali people. Flood refugees number in the millions. Crops have been destroyed. Food reserves have been lost. Housing, schools, health clinics, and other facilities have been swept away. And all observers agree that this latest disaster is seriously compounding existing economic and social problems, which were brought about by the dislocations of the 1971 war for independence, the energy crisis, and related developments.

In purely human terms, there is great suffering today in Bangladesh. A recent Department of State memorandum states that: "The present situation indicates some serious malnutrition and high morbidity rates." And recent travelers to the area report that there is more human suffering than ever before, that the nation as a whole stands on

the brink of starvation, and that epidemic and disease threaten the well-being and lives of millions.

I share the distress of many Americans over our Government's lethargy in recognizing the latest tragedy in Bangladesh, and over the belated and token response we have given, thus far, to Dacca's urgent appeals for help. And so I urge again today an abrupt change in the attitudes of our Government. Hopefully, we will generously and speedily respond to the specific requests of the Bengali Government for emergency relief, and for needed food and rehabilitation assistance in the weeks and months ahead. In this connection, I am preparing legislation to support this effort.

The United States cannot assume the full responsibility for meeting the massive human needs in Bangladesh. The United Nations and other governments must help. But we must do what we can with what we have.

AFRICA

Finally, in the Sahel and other parts of Africa, the food situation continues to deteriorate. Contrary to the administration's general optimism before this subcommittee last spring, a recent internal report of our Government suggests that "catastrophic consequences" continue from the Sahelian drought, and that the situation of the people is precarious in some areas.

The number of famine refugees is growing. Many relief camps are overburdened. Last year's logistical bottlenecks and administrative delays in the movement of food and medicine continue. Malnutrition and disease still threaten many thousands, and the death rate continues to climb.

In the days and weeks ahead, this subcommittee will continue its efforts in behalf of a more viable international relief and rehabilitation program for the drought-affected area of Africa. This should include some greater leadership by our own Government, and a more speedy allocation of the more than $85 million Congress has appropriated for disaster relief in Africa. Hopefully, the Administration will use these funds and save lives and rehabilitate people, with the same ingenuity and sense of urgency it spends our money in Indochina, or for military aid around the globe.

Our humanitarian concerns today in Cyprus, Bangladesh, and Africa illustrate once again those important foreign policy variables involving people, which diplomats and generals may try to but cannot really ignore. Little will be achieved in building a structure of peace unless governments place a higher priority on the welfare and problems of people, whose neglect fosters instability and spawns conflict around the globe. Political wisdom and simple humanity demands of our country that we do more to help the critical humanitarian needs today of the people in Cyprus, Bangladesh and Africa.

We will recess briefly, to hear President Ford's announcement on his Vice Presidential nomination.

[Recess.]

Senator KENNEDY. We will come to order and congratulate the President on a very fine choice, which is Vice President-designate Nelson Rockefeller.

Senator Fong, do you have an opening statement?

STATEMENT OF SENATOR FONG

Senator FONG. I will say I did not have as difficult a choice as the President had, Mr. Chairman. I wish Vice President Rockefeller lots and lots of luck.

Mr. Chairman, I join you in your concern for the people of the world threatened with destruction by the forces of nature and of man.

Almost unrelieved drought has made a veritable desert of the Sahel. On the other hand, floods have not only inundated nearly half of Bangladesh, but caused further deterioration of the serious economic conditions prevailing in that country.

And if nature is not a sufficient destroyer of life, man's inhumanity to man in its latest manifestation culminated in the slaying yesterday of our Ambassador to Cyprus, the Honorable Roger P. Davies, in the course of the conflict now raging between the Greek Cypriots and the Turks.

SAHEL

Last October and then about 5 months ago, this subcommittee held hearings on the situation in the Sahel. The six countries involved—Senegal, Mali, Mauritania, Niger, Chad, and Upper Volta—have a total population of 22 million people, of whom 6 million have been directly or indirectly affected by the drought.

Recently the Inspector General of Foreign Assistance of the Department of State briefed Mrs. Parker, the minority counsel of the subcommittee, on the Department's activities in this area. The situation in Senegal, Mauritania, Mali, Niger, and Upper Volta seems to be under control. In fact, much progress has been made.

Few, if any, in the Sahel will die of starvation. One death is too many, but the situation seems in hand in these countries.

Interestingly, I have seen a report prepared after a visit to Chad, Cameroon, Nigeria, and Ghana, by members of the congressional staffs of Senators Humphrey and McGee which bear out the Inspector General's report of the effectiveness of our efforts in the Sahel.

At page 34 of the 46-page staff report, they state:

> The Agency for International Development has come under intense criticism within and without the Congress for their handling of the Sahelian drought. Set in its proper perspective, we believe much of this criticism is somewhat unjustified.

Let us here review what the United States has done to alleviate suffering in the Sahel.

The United States has already committed $121 million in food aid and $30 million in nonfood aid to alleviate the suffering of these people. That is 45 percent of the total food aid.

In June 1974, Congress appropriated an additional $85 million for relief in the Sahel. I look forward to learning how that money is being programed and what are the prospects, in the long run as well as in the short run, for preventing a recurrence of the dire situation which has affected this area.

BANGLADESH

In Bangladesh, it is my understanding that the flood situation has somewhat abated.

As I pointed out in my statement of August 13 on the floor of the Senate, while floods in this area of the world are not uncommon, this is not a mere flood, it is of disaster proportion.

An August 15 press release by the Embassy of the People's Republic of Bangladesh shows the toll of human life to be 1,245 dead; epidemic diseases have broken out in almost all of the flood-affected areas in 18 out of 19 districts.

The New York Times of August 18, 1974, in an article by Kasturi Rangan entitled "Subsiding Floods Leave Dacca Desperate for Aid" with a Dacca August 14 dateline, pointed out that two-thirds of the country is flooded.

The Washington Post of August 19, 1974, in a front page article from Dacca entitled "Floods Bring Despair to Bangladesh" by Walter Schwarz of the Manchester Guardian, puts the flooded area at 20,000 square miles, or nearly one-half of Bangladesh; the situation is desperate.

The loss of crop is undisputed. The estimate is that between 1 million tons of standing rice crop and seedlings have been lost. Not only was 80 percent of the summer crop destroyed, but the seedlings for the main winter crop have been washed away.

Without the floods, the food gap this year was estimated at over 2 million tons; with the floods, the situation is perilous.

The housing situation is bad; many hundreds of thousands of houses have been destroyed or damaged.

Livestock loss is estimated at over 20,000 heads.

The education system is disrupted; over 1,000 educational institutions have been damaged.

Roads and rail beds are under water.

Disease of epidemic proportion is threatened.

Bangladesh has asked for 500,000 tons of food grains, 20,000 tons of edible oil, medicines, corrugated iron sheeting for house construction, funds to support rehabilitation.

Bangladesh was declared a disaster area by our Ambassador, the Honorable Davis Boster, on August 2. Since then, the United States, through Ambassador Boster, has given $25,000 to the Bangladesh Prime Minister's Disaster Relief Fund; we airlifted approximately 600 family size tents, 15,000 blankets, and vegetable seeds from Guam.

In addition, we authorized the use of $4 million to be used for building construction. This $4 million is to come out of the $35 million remaining from an existing rehabilitation grant of $203 million, which has an expiration date of June 1975.

The international community has been appealed to by the People's Republic of Bangladesh. I am anxious to hear what our plans are to help these people and what relation our help has to that of the other nations of the world.

CYPRUS

In Cyprus, rather than nature, man made disaster has stricken that country, and our country.

Ambassador Roger P. Davies, a career diplomat, who joined the Foreign Service in 1946 and replaced Ambassador Robert J. McCloskey as Ambassador to Cyprus less than 2 months ago, was killed yesterday when Greek Cypriots stormed the American Embassy in Nicosia. This is a national loss. My heartfelt condolences go to his daughter and son.

Ambassador Davies, on July 28, 2 weeks after the fighting on Cyprus commenced on July 14, declared that disaster conditions existed in Cyprus. This triggered an almost immediate response.

By August 8, emergency aid for Cyprus valued at $877,000 had been given this war-stricken country.

In addition to a $225,000 cash grant to the American National Red Cross to be conveyed to the International Committee of the Red Cross, supplies of blankets, water containers, cots, family-size tents, body bags, and other equipment were airlifted from the disaster stockpile in Leghorn, Italy.

The casualty lists, from what I read, are mounting daily.

The other countries and peoples of the world have been responding to the needs of the foreign nationals trapped in Cyprus, to the needs of the children being orphaned daily and to the needs of the Turkish and Greek Cypriot refugees. We, too, must do our share to alleviate man's inhumanity to man.

I am most anxious to learn what has been going on in these parts of the world, and what you, as the people charged with alleviating their suffering, feel is needed to help you carry out the mandate Congress has given you.

While we cannot assume the burdens of the world, we are faced with disasters in Africa, in Bangladesh, in Cyprus, and now the Luzon area in the Philippines is flooded, a typhoon has hit Burma.

The needs of these people must be considered to the maximum extent possible consistent with our obligations to the people of these United States.

Thank you, Mr. Chairman.

Senator KENNEDY. Thank you very much, Senator Fong, for an excellent statement.

We are delighted to have Mr. Arthur Hartman, who is Assistant Secretary of State for European Affairs, and Chairman of the Department of State's Cyprus Task Force.

We understand and recognize the very extensive pressures that you are under, Mr. Hartman. We know that the death of Ambassador Davies weighs heavily on you and the other members of the Cyprus Task Force and the constantly evolving situation there demands your time.

We know you are anxious to get back. And we understand the time pressures you are under. I want you to know we very much appreciate your presence here before this committee.

Mr. Kieffer, Assistant Administrator of the Agency for International Development for Population and Humanitarian Assistance, we are glad to welcome you and hope you will be able to stay with us longer after Mr. Hartman leaves.

STATEMENT OF ARTHUR A. HARTMAN, ASSISTANT SECRETARY OF STATE FOR EUROPEAN AFFAIRS AND CHAIRMAN OF THE DEPARTMENT'S CYPRUS TASK FORCE, ACCOMPANIED BY JAROLD A. KIEFFER, ASSISTANT ADMINISTRATOR FOR POPULATION AND HUMANITARIAN ASSISTANCE, A.I.D.

Mr. HARTMAN. Thank you, Mr. Chairman.

I do not have a prepared statement, but I thought it could be useful to the committee if I could summarize where we stand in terms of the political situation in getting negotiations started, and also some recent steps we have taken to put a greater concentration on the humanitarian side of the problem.

The tragedy of yesterday—the murder of Ambassador Davies—is only one of a long series that have taken place in Cyprus.

I was in Cyprus 2 weeks ago on a trip that the Secretary asked me to take to see what the situation was in Turkey, Greece, and Cyprus. I met with Ambassador Davies. With regards to the concerns of this committee, I can tell you that these were almost uppermost in the Ambassador's mind. He was clearly conscious of the fact that the people who suffered most from the war in Cyprus were the people of Cyprus, that there were deep roots to this crisis that had been ignored by the rest of the world for some time, and that the suffering of those people ought to be uppermost in all of our minds.

One of his last cables dealt with the situation on the island and the humanitarian needs that the ICRC was already identifying. He made several recommendations to us for next steps.

But I think that this focus on the humanitarian side of the problem of the people of the country itself is one that is easy to be lost, as people talk about the politics and the historic origins of these quarrels.

EFFORTS TO KEEP THE CEASE-FIRE

Our efforts now are to get and keep a cease-fire. We are in constant contact with the leadership of the Turkish Government and the Greek Government, and also particularly with the British Government, because these three powers, acting as guarantor powers, are the ones who tried to get together in Geneva a week ago to get this problem back to the negotiating table. They failed. We have not given up hope that they can get back to the negotiating table. We see some signs it will be possible to launch a proposal which will get them talking again.

We know that this is going to take compromise and flexibility on all sides. Our efforts at the moment are to try to encourage that kind of flexibility from all parties, particularly as the British come forward with what we hope will be at least the beginnings of a proposal that can be discussed.

In the end, the people of Cyprus themselves ought to be the ones who determine their own future. This is certainly our policy and we believe it is the policy of the other governments involved, although there is a long historical background to this problem which shows that the interference of others on the outside has prevented the people of Cyprus from determining their own future. But our efforts are going to be directed to trying to get a negotiation going in which the

two communities on Cyprus talk to each other and work out a future that is going to be just and peaceful.

DIALOGUE NEEDED BETWEEN CYPRIOT COMMUNITIES

One of the most telling moments at the last Geneva conference was the fact that on only two occasions during those 6 or 7 days of talks did the two representatives of the communties on Cyprus get a chance to talk to each other and exchange views. When they did, although I was not in the meeting and had reports only from people who were actually in the sessions, I felt that progress was made. I felt that they were beginning to understand and try to do something about the problem that has existed on the island for some time.

So we hope to encourage that kind of dialogue. We believe that one way of getting at that problem and encouraging them to talk is to begin to get them to deal with the problem of the dislocation of populations, of refugees, of the problems created by the war situation on the island.

Mr. Denktash, the leader of the Turkish community, has recently returned to the island, and it is our hope that he will soon have inter-communal discussions with Mr. Clerides that will focus on some of these humanitarian concerns.

Yesterday the Secretary sent our Under Secretary for Management, Dean Brown to the area. He will be the Secretary's personal representative to stay on the island until such time as a new ambassador is appointed. He has with him a disaster relief expert from AID who will talk with the U.N. authorities on the island and who will also talk to the ICRC and survey directly there the current needs as he is able to determine them.

We know that there are going to be tremendous new needs as a result of the latest fighting.

FUNDS FOR RELIEF ASSISTANCE

The Secretary also authorized us yesterday to make an additional grant of a half a million dollars to the ICRC. We had not had a specific request as yet, but there were already reports beginning to come in from the ICRC of additional needs.

So, pending our report, we thought it only prudent this additional funding be made available.

We are also examining where additional shelter items can be found, because, as I understand it, we have all but run through the stocks that were available in Leghorn, Italy. They are now examining whether there are additional stocks or whether perhaps the cash grant to ICRC to purchase these stocks would be the best method to get additional shelter to the area.

I also spoke to the Charge d'Affaires of the French Embassy yesterday, since the French were in the chair for the European Economic Community Council during this period, to see whether or not the Common Market countries themselves could not make a bigger contribution. I also wanted him to know of our latest steps. They have already made contributions, but it is quite clear that the needs are going to be greater than the resources that have already been made available through international organizations.

So with that opening statement, sir, I would be happy to take questions.

ROLE OF UNHCR

Senator KENNEDY. Is it your information now that the U.N. High Commissioner for Refugees is on the island, or has representatives on the island?

Mr. HARTMAN. There are experts with the U.N. on the island. I had not yet heard that he has arrived. We did hear yesterday that Dr. Waldheim had asked him to take over the coordinating responsibility for the U.N., but I will check when I go back to see whether or not he is actually on the island.

Senator KENNEDY. I am hopeful he is, as you are—and, as I understand it, you are prepared to support those requests that he makes in terms of identifying humanitarian needs.

Mr. HARTMAN. Very definitely.

Senator KENNEDY. As well as the ICRC request?

CYPRUS TASK FORCE

Can you tell us a little bit about the Cyprus Task Force, where the humanitarian issues have been placed in terms of the priority of our own Government?

We have a Cyprus Task Force and perhaps you could tell us a little bit about it.

Mr. HARTMAN. Yes, I am the Chairman of the Cyprus Task Force. We are all physically located in the operations center at the State Department. We have AID representatives on the task force who work back through Mr. Kieffer's office. As we get information from either the ICRC in Geneva or directly from the American Red Cross, I think that has been the channel for dealing with the ICRC, or now from the U.N. High Commissioner, that information will come in to us at the task force and we will pass it on to AID. Of course we will be getting a report now from our AID representative who is with Ambassador Brown on Cyprus.

CURRENT HUMANITARIAN ASSISTANCE ACTIVITIES

Senator KENNEDY. The AID representative on Cyprus now is the person who is going to control, at least he will be responsible, for the humanitarian problem?

Mr. HARTMAN. He is going to survey the situation as it stands today. We have had previous reports from the Embassy indicating what the situation was before the latest fighting. They have had great difficulty in getting around the countryside, as has the U.N., to determine the exact needs today. But in the earlier days, as Mr. Kieffer will report in his statement, we have made available, in addition to the cash grant to the ICRC of $225,000, additional amounts in kind, mainly of shelter items and of water containers, because this was one of the greatest needs, particularly in the southern part of the island around these Turkish communities that were isolated.

Both the ICRC and the U.N. have helped transport the material we flew to the British Sovereign Base Area out to the areas that were in need. When I was on the island, I talked to the U.N. representative

there, and he felt that there was very good cooperation among the agencies involved and that the British authorities in the sovereign base areas had been very effective in receiving the goods that were being flown in, not only from our stocks, but from European stocks as well, and of seeing that the transportation was carried out.

During the time when fighting existed on the island, it was very difficult to get to some of these places. So I am sure there are areas on the island that have not had their needs met.

RELIEF NEEDS

Senator KENNEDY. What assistance has been given by your people to the humanitarian relief needs on the island, prior to the dispatching of this fellow—who is he with, AID?

Mr. KIEFFER. A man by the name of Beauchamp.

Senator KENNEDY. Mr. Beauchamp? Alright, then; what was your cable traffic in terms of the humanitarian needs?

Mr. HARTMAN. Well, the latest message that we have received indicates that in addition to the shelter items, particularly if the numbers of refugees that are currently being reported is accurate, there will also be food distribution and actual food needs.

I understand we have a ship that is on its way which was previously scheduled with a shipment of corn that is due to arrive very shortly in Limassol, which is in the southern part of the island. But the main needs at the moment seem to be these shelter items, perhaps additional food items.

NUMBER OF REFUGEES

Senator KENNEDY. Did they give you any idea as to the numbers of refugees themselves?

Mr. KIEFFER. We had one estimate of 150,000 Greek Cypriot refugees located in two places. Some of these will sort themselves out, but we figure 100,000 are going to be without shelter in 30 days. That is the target we have to try to do something about.

Senator KENNEDY. How are they going to be without it in 30 days?

Mr. KIEFFER. Some of them sort themselves out and go in with relatives and so on, but we estimate that about 100,000 will not have that option.

Senator KENNEDY. What about the Turkish Cypriot refugees?

Mr. KIEFFER. I do not have a good figure on the Turkish side.

CURRENT SITUATION

Mr. HARTMAN. There are two problems.

First of all, you have the Greek Cypriots who are in the Turkish-controlled areas, who, if they feel secure enough, will stay in their homes. If they do not, there may be some large-scale movements out of the whole Turkish-controlled area, and we do not know yet whether these have taken place.

There may also be people whose homes have been destroyed who will move into the cities. That has already happened around Nicosia and in larger towns on the southern coast, Larnaca and Limassol.

In the southern part of the island many of the Turkish communities have been isolated, surrounded by Greek National Guard units. It

is uncertain in some of those areas just exactly what the present situation is.

While I was on the island, the U.N. representatives were trying to organize teams to go out to those areas, particularly the isolated villages, to determine exactly what the current situation is.

So I think it will take us a few more days before we are really sure exactly how many people have been dispossessed and, indeed, whether or not people might not start flowing back to the areas they came from. Hopefully, the fighting will have stopped so these determinations ran be made and people can begin to move around the country.

NUMBER OF U.S. RELIEF PERSONNEL

Senator KENNEDY. How many people are you going to have over there that will be working with Mr. Beauchamp in that area?

Mr. HARTMAN. Well, one of the things we will decide when we have his initial report is exactly what kinds of people would be needed there, what we could do to help the ICRC and the U.N. agencies to better assess the needs. We are not all that sure that their own assessment is the best one they can have at the moment. But I think we will wait for his report before determining whether or not we need additional people there.

FORCED MOVEMENT OF PEOPLE?

Senator KENNEDY. Could you tell us a little bit about the forced movement of people, on both sides, Turks expelling Greek Cypriots and the Greeks forcing the Turkish Cypriots out?

Mr. HARTMAN. It is very hard to tell. When I was in Nicosia, I was told the Greeks were forced out. I was there before the recent action but even while the Turkish Armed Forces were just in Kyrenia I spoke to President Clerides and he said there was evidence that pressures had been applied, that some of the Greek Cypriots in their villages had been encouraged to leave.

On the other hand, I spoke to Greek Cypriots who said they did not think a large movement had taken place. They pointed to the fact that the line was rather porous and it would have been possible to see a tremendous influx of refugees in the Nicosia area. After all, it is only 10 or 15 miles across that Kyrenian plain. So that I would say we really do not have an accurate picture.

The Turkish communities in the south had not moved out. In fact, most of them were prevented from moving anywhere. One of the points of contention in Geneva was that part of the Geneva Declaration that dealt with the freeing of the Turkish enclaves in the south which had not been carried out. That was one of the reasons why these negotiations did not get down to the political problems and constitutional problems, because both sides were claiming that the other side had not carried out the initial agreement to have a cease-fire and also to free these enclaves in the south.

We hope very much that the firing has stopped now. If that is the case, then it ought to be possible to get around the country and begin to get reports of what the exact situation is.

My impression is that there were many exaggerated reports on both sides of atrocities, of large movements of population. That does not mean to say that some of these things have not happened.

For example, when I met with the Turkish Cypriot authorities, they were claiming great atrocities in the towns of the south. I then went back to the U.N. representative and in one case at least he reported that one of the U.N. contingents had just been to that city and that no such atrocity had taken place. So I think we are faced now with many reports which we certainly hope are exaggerated, and it is going to take a few days of cease-fire before we can get an accurate picture.

GREEK CIVILIANS DEPORTED TO TURKEY?

Senator KENNEDY. Do you have any information on whether there has been deportation of Greek Cypriot civilians to Turkey?

Mr. HARTMAN. There were undoubtedly some people moved out of the Kyrenian area after the first phase. In Geneva they reached agreements to return both prisoners and others. Now, there was some claim that some of the people who had moved to Turkey were in fact paramilitary forces. The fact is, on that island everyone is armed now. Not all of them under the control of either Turkish or Greek officers.

I am quite certain that the attackers of the Embassy yesterday were part of an irregular group, not part of the Greek Cypriot National Guard.

It is very difficult to tell, when you say men were moved off, whether indeed they were part of regular forces or not. But they seemed to me to be on the point of saying they would exchange all prisoners.

RED CROSS VISITS TO PRISON CAMPS

Senator KENNEDY. Have you made any requests of the governments, Turkish and Greek Governments, to permit the Red Cross to visit prison camps?

Mr. HARTMAN. Well, the Geneva declaration provided, for example, in the south for the complete freeing of the Turkish enclaves and of all the men who were held prisoner.

For example, around Limassol there were a great many men of the Turkish community, first held in the stadium, then held in a school. Under the Geneva agreement, they were all to be freed as part of the first stage agreement. When the fighting broke out again, my understanding is that was not carried out, so they are probably still in some kind of detention.

The Red Cross had visited that area, and had brought food supplies to that area. I think there are probably many other places, also in the north where the Turkish Army is in control, where the situation is not known at this time, and where, if the fighting stops for a few days, I am sure both the U.N. and the Red Cross will try to get in and examine the situation and see what the needs are.

Senator KENNEDY. Well, just to carry this on, are we going to, or have we been planning to make that an item in requesting these governments, both the Turks and the Greeks, to permit Red Cross presence and inspection of detention centers or prison camps?

Mr. HARTMAN. We will certainly support that. That was one of the prime things that the British Government was trying to get both of its fellow guarantor powers to agree to.

Senator KENNEDY. But you do not have any assurances yet?

Mr. HARTMAN. We do not have any assurances, although at Geneva, as I say, there was agreement at that stage this would happen, but that was before the latest fighting and so that process has to start all over again.

Mr. Callaghan has made an approach to the parties to get this agreement carried out and we will support him in that and we will be working not only with the Turkish Government and the Greek Government, but also with the two communities on Cyprus. It really is quite a divided country now. There is no single administration and there has not been one for some time.

Mr. Clerides heads up the Greek Cypriot administration and Mr. Denktash heads up the Turkish administration.

RED CROSS ACCESS TO ALL AREAS?

Senator KENNEDY. Is it your understanding that the Red Cross will be able to have access to the two different sections of the island?

Mr. HARTMAN. They certainly should have. I am sure they do not at the moment.

Senator KENNEDY. Where do they have, in the southern part?

Mr. HARTMAN. Up to now, yes, better access in the south, although even there they have been prevented by the Greek National Guard, which is more or less the official constabulary, but by irregular units as well, from going to other parts of the country.

I was told by the Greek Foreign Minister that one of the reasons they did not wish to order these Turkish enclaves free was that they were not confident that the new general sent by the Greek Government had full control of the forces there and they were very much afraid if they ordered the Greek National Guard away from those towns, irregular and extremist forces might come in and take over. I think that was the genuine concern they had.

Senator KENNEDY. I was thinking beyond the enclaves, to the prisons and areas of detention, rather than just the enclaves themselves, both of the access of the United Nations and Red Cross officials, who would be working on humanitarian problems. At least at this stage we do not have any assurances beyond those agreements that were made in Geneva that there will be access to these areas.

Mr. HARTMAN. That is correct. They did exchange lists at Geneva, the prisoners held on both sides.

Senator KENNEDY. This must obviously be something that you are working on?

Mr. HARTMAN. Yes.

Senator KENNEDY. Would you keep us informed?

Mr. HARTMAN. I certainly will.

Senator KENNEDY. As to when they do have access.

Also, could you keep us informed as to what requests are made by the ICRC as well as the U.N. High Commissioner for Refugees, what these requests are, and what your reaction is to them, and let us know what you intend to do about them?

I will yield to Senator Fong and come back.

Mr. HARTMAN. Fine.

CONTRIBUTORS TO CYPRUS RELIEF

Senator FONG. Which government has taken the lead in assessing the humanitarian needs of the people of Cyprus?

Mr. HARTMAN. Well, I think at the moment that is mainly in the hands of the U.N. authorities and the ICRC. They are working very closely together. There is no one agency, as I understand it, that is able to do all this at the moment. The U.N., as it carries out its role, which is first to get a separation of the forces, which is impossible with the recent fighting, did continue trying to protect those areas, particularly in the south, of Turkish Cypriot communities. They have had less ability to operate in the northern area controlled by the Turkish forces. But I am sure now that the cease-fire is reestablished, the U.N. Representative Weckman will get into that area and assess what has happened in the Greek Cypriot community in the northern part of the island. Perhaps he will do this with Red Cross representatives—very often they have gone around together.

As far as transportation is concerned, this is one of the most difficult areas—how you get the material out from the base areas where it is located to where it is needed.

The two communities, that is the Turkish Cypriot community and the Greek Cypriot community, have been supplying much of the transportation to get the material out. It has been very difficult to get a Turkish Cypriot truck driven by a Turkish Cypriot out into some of these isolated villages in the south.

The U.N. lent their vehicles when they could and when they felt it was safe enough to go into the areas. But I think transportation, too, is going to be a problem in getting to some of the outlying areas.

Senator FONG. After an assessment has been made as to their needs, will this be related to the U.S. Government?

Mr. HARTMAN. Yes, we are in close contact with ICRC as well as the U.N. representatives.

U.S. ROLE IN RELIEF EFFORT

Senator FONG. What part of their need do we expect to fulfill? What are other governments doing in this area? Do we expect to carry a great amount of the load? What is the situation?

Mr. HARTMAN. We are going to try and do all that we can. We are, as I say, encouraging the European countries to do more. I think up to now we have made the greatest contribution.

THE UNITED STATES CONTRIBUTIONS TO THE CYPRUS RELIEF EFFORT AS OF AUGUST 29, 1974

I. *U.S. Relief Goods Delivered*

10,000 Cotton Blankets
10,000 Plastic Water jugs, 5 gallon
10,000 Cots
4 Water trailers (400 gallon)
3,600 Family tents
100 GP large tents
79 Red Cross Panels
18,753 Wool blankets
2 Tent Repair Kits

II. *U.S. Relief Procured Enroute*

24,282 Wool blankets (This will bring total wool blankets to 43,035)
Approximate value of goods received or enroute: $3 million

III. *Outstanding Embassy Requests* (Requests made 8/28)

2,000 U.S. Family tents (Total 5,600)
16,965 Wool blankets (Total 60,000)

In addition, USAID has made a $725,000 cash grant to the ICRC for Cyprus. Church World Service and Catholic Relief have sent an additional 3,000 wool blankets.

Senator FONG. I see where other countries contributed around $68,000 in cash.

Mr. HARTMAN. In cash, but in kind they have also made contributions. I will be trying over the next few days to get greater contributions from European countries. This is already recognized as a great responsibility. Cyprus was associated with the Common Market; the British Government, German Government and French Government feel very strongly that they have a responsibility; and I am sure they will be doing all that they can.

Senator FONG. Do you feel the needs will be met?

Mr. HARTMAN. I think the needs are going to be much greater and now I think the effort must be to get greater contributions on all sides.

LACK OF INFORMATION ON HUMANITARIAN NEEDS

Senator KENNEDY. Just before leaving, it appears that there is an enormous information gap on the number of refugees you initially mentioned. Of course, the 100,000 figure is very significant. But there have been a number of estimates that exceed that in a rather dramatic way. The number of people that have been killed is also extremely significant. The whole area of need is something which I am very hopeful we can develop information on at the earliest possible time.

It always seems, Mr. Secretary, that we are always able to tell where the military forces are moving and the number of bombs that have been dropped, and this is always calculated with some degree of accuracy. But we never seem to get that same degree of accuracy on the humanitarian problems, and we recognize that these are dangerous areas.

There has been conflict and war on that island, but it does seem to me that when we view the situation we ought to have some sense of urgency about the human dimension. All of us are concerned about the military aspects—but that should not mean we worry first about that, and then after all that ends we can start worrying about the human aspects. I think they are completely interrelated and present more difficulty and more problems, especially for those involved in relief operations. I think we have a very important responsibility to try to help and assist those groups and organizations that are attempting to provide relief.

As you might remember, this subcommittee has been advocating the creation of a special force within the United Nations of highly trained individuals who have a high degree of competency in relief operations, to respond to such human disasters as Cyprus. Whether you are talking

about how you will get the food in Bangladesh up country or whether it's the Sahel, or Biafra, from the docks up country, whatever it is, it is a hairy kind of problem, and there are individuals who are good at transportation and other relief operations.

NEED FOR U.N. EMERGENCY RELIEF SERVICE

This is a uniform problem we are facing wherever we have refugees. And it seems to me that the Cyprus situation again underscores what I am hopeful, and I know there are other people in the administration who will support it, the need for a U.N. emergency relief service. But I want you to understand again how strong at least I feel about it—the need for developing within the United Nations something that will be strictly concerned about humanitarian needs, whether they are Turkish children made homeless in the north or Cypriot children or whatever they are or wherever they are.

I think there is an important role for the United States to play in this. I know there are questions by some as to how much we ought to contribute. For myself, I think this is the place where the United States ought to be leading the way. And I think as much as I regard the work of the United Nations High Commissioner—and I greatly admire the work he has done—but he has a limited jurisdiction, even though he has been willing to extend that in responding to humanitarian problems, and when called upon and he has done an absolutely magnificent job; but it seems to me that developing a special emergency service within the U.N. would be extremely important.

USE OF U.S. MILITARY AID

Could you tell me just before leaving, has American military material been used by the Turkish forces, material provided to Turkey for use by NATO?

Mr. HARTMAN. Yes, I am sure it has been.

Senator KENNEDY. And is that hardware American applied hardware?

Mr. HARTMAN. Some is American-supplied, and granted by or purchased from the United States; not all, but I am sure a good bit has been.

DAMAGE CAUSED BY TURKISH INVASION

Senator KENNEDY. Have you any estimates just as to the physical damage that has taken place in the north?

Mr. HARTMAN. I do not think we have accurate damage estimates. I arrived there after the coup that overthrew Archbishop Makarios and, after the first fighting was ended with the Turkish invasion. I was struck by the fact that there was very little damage in the area around Nicosia. The airport buildings seemed to be intact, although in the main building glass was blown out. There were bomb craters on the airfield.

I think one of the initial things that ought to be done is to get that airfield opened up under some kind of U.N. auspices so it can be used to bring in material. At the moment most of the assistance comes in at the British Sovereign Base in the south and has to be trucked

up to the center of the country. I think it might also help to restore some elements of normality if that airport can be opened up again. But I am sure that greater damage has been done, particularly in the areas where the initial landings took place.

We do not yet have reports on what damage was caused by the fighting that took place last week.

In the south there was some bombing along the coast, particularly Famagusta. I saw one U.N. report that said that the damage was not as great as initially feared, but I am sure there has been damage there.

In some of the outlying villages there were reports, for example, that when U.N. forces arrived at certain Turkish villages, they just found them leveled and the population not there.

So I think as the fighting stops and the U.N. forces particularly are able to get around the island and investigate, we will be able to give you a more accurate appraisal of exactly what has happened.

MILITARY AID TO TURKEY

Senator KENNEDY. Are we considering cutting off military aid to Turkey?

Mr. HARTMAN. We have considered it, but we have rejected it for the moment because our feeling is, to get these parties back to the negotiating table, we have to be able to have the greatest influence on all the parties concerned.

Our feeling is that we are just about to make some progress. The British are putting forward a proposal, and for us to take that step now, which is really the ultimate step we can take and which we feel in a sense then puts us in the position of assuming responsibility for the whole problem, would be the wrong action at this time.

We were very concerned at one point that war might actually break out between Greece and Turkey.

We think that that has been avoided. It is our opinion that we ought to put our full emphasis now on getting those parties together and to get both of them in a mood to be flexible enough to make the kind of compromises that I think both sides are going to have to make to achieve a permanent solution.

The 1960 agreements just did not work, and that was one of the conclusions that was reached at Geneva. Before the Geneva meeting, I think that on the Greek Cypriot side, and perhaps on the Greek Government side, there had been the feeling that all that had to happen was for people to return to the 1960 constitution. I sensed from my talks with the people in Geneva that they realized what many people on the island realized before then, that a simple return to the 1960 constitution is not going to be good enough.

As we said in our statements earlier last week, there must be some provision for greater autonomy for the Turkish community. That was one of the bones of contention all during the Sixties. The Turkish community felt that the guarantees built into the 1960 agreement just did not protect their population.

I think that the Greek Cypriot authorities now recognize that that was the case and therefore further changes must be made.

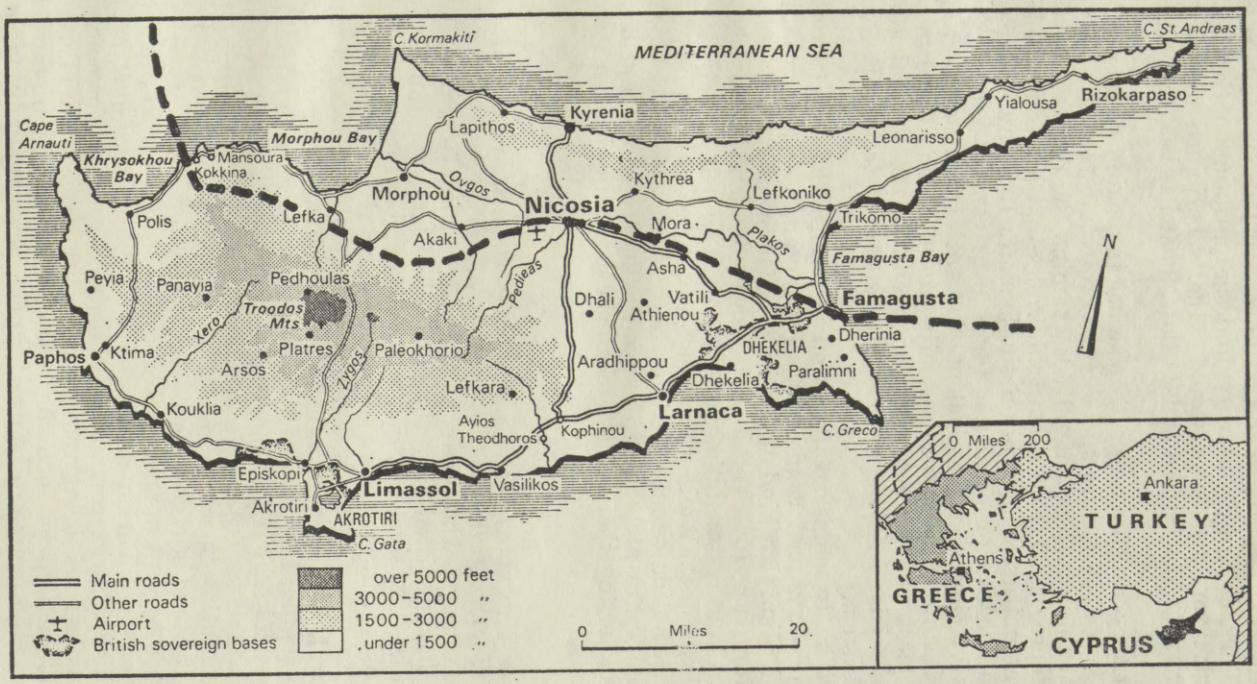
PARTITION OF CYPRUS?

Senator KENNEDY. Does that include partition?

When you recognize what happened in the past as being inadequate, and now the Turks have brought it about by military means, are you willing to accept it, along the so-called "Attila line"?

[See following map.]

THE ATTILA LINE PROPOSED BY TURKEY



Mr. HARTMAN. When people speak of partition, there are two kinds of partition. My feeling is that all parties reject a partition which would mean that parts of the island under Turkish Cypriot authority or Turkish Army authority, and the parts under Greek Cypriot or Greek Army authority, would actually be joined to two guarantor powers, that is Greece and Turkey. That has been rejected by all parties.

What they are speaking of is whether in seeking greater autonomy for the two communities and greater protection for the rights of the two communities, they should not examine the question of whether or not there ought to be geographic zones that are controlled by the two communities, but within a single state. It is my understanding that the Turkish proposal put forward at Geneva was for a single state—sovereign, and independent—but with two or more—they even spoke of cantonal areas in the south—zones under their own authority for most aspects, but not foreign affairs, not general affairs of the whole island. They were talking more in terms of a kind of federal system.

Now that, to me, is not partition in a sense that the two parts of the island—one part would go to Turkey and one part would go to Greece. I think that kind of partition has been rejected.

Senator KENNEDY. The kind that you describe here is something that is at least reasonably acceptable to the United States?

Mr. HARTMAN. Well, we are not taking a position on what the eventual solution should be. We think that is up to the people of Cyprus. We are prepared to use our influence to try and bring the parties closer together—to use whatever mediating influence we have.

WITHDRAWAL OF TURKISH TROOPS

Senator KENNEDY. Does that include the withdrawal of Turkish troops from the north?

Mr. HARTMAN. Absolutely. That is part of the Geneva declaration and we have insisted that the Geneva declaration, along with the parties who have signed it, that that be carried out in its fullest terms. That is one of the provisions—the withdrawal of forces.

Now, my own feeling is that it is wrong to talk about a complete withdrawal, because if you examine the situation on the island, it seems to me that there are so many irregular forces almost completely out of control that if you speak of a complete withdrawal, at least if you think in those terms—of an early complete withdrawal—you could leave a situation in which you would almost have anarchy. I do not think that would be a good idea.

The 1960 agreements provided for certain forces to be present from both Greece and Turkey as the cadre of the national guards of both the Turkish Cypriot community and the Greek Cypriot community.

Another part of the agreement was never carried out. There was to be a common Cypriot force, but one of the tragedies of this 14-year period was the feeling of being a Cypriot never really came through. The parties separated *de facto* and were never able to reach agreement that brought them together as a Cypriot nation.

JUSTIFICATION FOR THE INVASION

Senator KENNEDY. Does that justify military invasion by Turkey?

Mr. HARTMAN. I would not want to say what it justifies. I can tell you what the Turkish authorities said to us. That was that under the Treaty of Guarantee which was part of the 1960 agreement, if they felt that the balance was upset, a very delicate balance in 1960, that they had the right of intervention. They felt the stupidity of these colonels in Greece who overthrew Makarios, particularly this man Sampson, was a direct threat to the Turkish Cypriot community.

The Turks first went to London at the invitation of Foreign Secretary Callaghan and when they felt they were not getting satisfaction about the protection of the Turkish community, they had only one alternative and that was to act.

Senator KENNEDY. Do you know whether they made similar representation to the United States?

Mr. HARTMAN. They certainly did. We sent Under Secretary Sisco to London to participate in those talks, and he immediately, after going to London, went to Athens to give them our view that there was going to be Turkish intervention unless they reversed this course, unless constitutional rule was restored in Cyprus. We said that there would be a Turkish intervention and he tried in his movements between Ankara and Athens to see whether some solution could be reached, but he was unsuccessful.

U.S. ATTITUDE TOWARD TURKISH INVASION

Senator KENNEDY. Is this what Secretary Schlesinger was talking about on the CBS program when he said he felt that Turkey had gone beyond what any of her friends or sympathizers were prepared to accept, in military advances on Cyprus?

Does this suggest we were prepared to see some intervention or some military aggression, as long as it did not go too far?

Mr. HARTMAN. I do not think that is a fair reading. We heard what the Turks said, particularly after the initial coup in Cyprus. We did not say that we favored their intervention.

Senator KENNEDY. Did you oppose it?

Mr. HARTMAN. We said we opposed it.

Senator KENNEDY. But not too hard?

Mr. HARTMAN. We also understood there was a situation on the island that we were not in control of. We joined with the British in trying to persuade the Turks from taking that action because we felt that all other avenues were not exhausted. But by the time our intervention with the two governments—well, by the time Mr. Sisco was in the area, it was quite clear that the Turkish authorities had made up their mind that they had to intervene under the guarantee agreement.

I think what Secretary Schlesinger was referring to was the further military action which we have deplored, and which we tried to stop. We voted for U.N. resolutions to tell them that they should not do this, that this is a violation of both the U.N. resolutions and the agreement reached in Geneva by the three parties.

Our total effort had been designed to try and get these people to a negotiating table. This thing cannot be solved by military means. There can be no solution on that island by military means. I made this clear to the Turkish authorities and emphasized to them that there also cannot be a permanent solution in the absence of better relations between Greece and Turkey and that the Turkish Government should not wish to humiliate this present Greek Government which does not have responsibility for the past Greek Government, although Mr. Karamanlis, I think, has taken very brave and courageous action in saying it was a Greek Government that caused this situation and therefore they have to take some responsibility for it. But he has appealed for negotiation as the solution and we are supporting him in that.

FUTURE ACTION

Senator KENNEDY. Just finally, what are we prepared to do—or are we prepared to do anything—to halt further military action by the Turks if these future negotiations break down?

Mr. HARTMAN. We have been in direct contact with the Turkish Prime Minister, the Secretary has talked to him many times on the phone. We think we have assurances now that this military action will stop and that they will return to the negotiating table. We are giving our full support now to British efforts to get some specific proposals in motion so that the parties can begin to discuss something that is concrete that will begin to deal with the situation.

Senator KENNEDY. Well, we are hopeful, I guess.

Mr. HARTMAN. We are hopeful, and we have had 2 days, now, of cease-fire, and we are going to do all we can to keep that cease-fire in place.

UNITED STATES CITIZENS ON CYPRUS

Senator KENNEDY. What are we doing about American relatives in Cyprus? Do you have a special group in the Department?

Mr. HARTMAN. We have a special part of the task force that deals with, first of all, passing messages back and forth. Many Americans were evacuated in the first evacuation when the hostilities began. There are 300 Cypriot Americans still on the island and our Embassy has been keeping in touch with them under rather perilous circumstances, I must say.

The men in the Embassy went out in cars to check them in their houses, in fact, to check all the foreign groups that we knew about that might be in danger. They went through the Turkish lines and up into Kyrenia where there are many people living along the ridge facing the sea on the other side who refused to be evacuated in the first evacuation, and they have also been checking that around the island. But we are keeping in touch with all those that we have a responsibility for. The British have been very helpful to us as well as the U.N. forces in trying to do that.

UNITED STATES PROPERTY ON CYPRUS

Senator KENNEDY. What about the property that has been taken, American property, taken by the Turks?

Mr. HARTMAN. We just do not know until we get back into the area. So far, the private property that was owned in the northern part

of the island seems to be unmolested unless it was in direct line of attack.

Our consular officer did go up there——

Senator KENNEDY. But nothing has been confiscated?

Mr. HARTMAN. There has been a certain amount of looting on both sides.

Senator KENNEDY. Thank you very much.

DOUBLE ENOSIS?

Senator FONG. I have one question.

In talking with the Turkish officials, did you get the impression that they want double enosis?

Mr. HARTMAN. No, that was not my impression.

I felt in my talks with the Turkish Prime Minister and Turkish Foreign Minister that just for security reasons they did not want to have part of the island in Greek hands.

Senator FONG. Did you get the impression they wanted an independent Cyprus?

Mr. HARTMAN. That is what they said, an independent sovereign state of Cyprus, but with zonal separation.

Senator FONG. Thank you.

Senator KENNEDY. Thank you very much, Mr. Secretary.

Our next witness is Dr. Nevin Scrimshaw, head of the Department of Nutrition and Food Sciences at MIT, and Dr. Robert Stone, Director of the National Institutes of Health. Both of these men are old friends of this subcommittee.

I had the good fortune of traveling with Dr. Scrimshaw to India. Dr. Stone is appearing in a private capacity, and we appreciate his appearance.

Dr. Scrimshaw, do you want to start?

STATEMENT OF DR. NEVIN SCRIMSHAW, HEAD, DEPARTMENT OF NUTRITION AND FOOD SCIENCES, M.I.T., ACCOMPANIED BY: DR. ROBERT STONE, DIRECTOR, NATIONAL INSTITUTES OF HEALTH

Dr. SCRIMSHAW. Thank you, Mr. Chairman.

During the period August 10 to 13, just 1 week ago, I had the opportunity with Dr. Stone, Dr. Howard Miners, and Dr. Earl Beck of the National Institutes of Health, of visiting the flood areas in Bangladesh and talking with a wide variety of people representing many different organizations in an attempt to find out the situation there.

As background, I would like to quote briefly from an editorial report in the September issue of the Atlantic Monthly, which indicates that:

> In 1971, after nine months of terror and three weeks of war, the Pakistan Army left Bangladesh in shambles. More than ten million refugees had fled to neighboring India during those nine months of wholesale killing, burning, looting and rape and returned to find what little they owned in ruins. Six million homes were destroyed and nearly one and a half million farming families lost their livestock and tools, three-quarters of all of the country's vehicles were damaged, railroads were paralyzed and 300 bridges were down. Unplanted fields and severe drought had, between them, caused a food shortage of at least two and a half million tons, and such industry as the country could boast, mainly, the 400 jute mills, had ground to a halt.

Two-thirds of Bangladesh's first five-year plan was supposed to have been funded by foreign aid, including $700 million in this year. But it will be lucky to get half that much. By the time the plan was published, foreign aid sources were already drying up fast, largely because of the worldwide energy crisis. By now this same crisis has backed this luckless nation into the same corner so that the whole plan has gone out the window. Bangladesh will have to pay $125 million in 1974 for oil supplies that cost $25 million in 1973, while another $250 million, at rock bottom reckoning, will have to go for imported food grains. These two items alone will exhaust its export earnings. Not a penny will be left over for imported fertilizer, not to speak of spare parts, irrigation pumps, and other indispensable machinery and cotton cloth.

Mr. Chairman, the gross national product of Bangladesh has dropped to a fifth of what it was a few years ago, with a per capita income in 1972 of $50 to $70. Clearly it was already one of the poorest of the poor countries. To add to these almost insuperable burdens, the rains this year came early, and more heavily than usual. The fact that they came early meant that they backed up against the melting snows of the Himalayas. The volume of water was such that the dams upstream did not hold and the result has been the worst flooding in 20 years. These circumstances have coincided with a full moon and high tides, which slowed the runoff of water to the Bay of Bengal in the south. Both the volume of water and the timing has disrupted the agricultural cycle because the floods came before the spring, or *Aus*, rice harvest was complete and its longer duration is going to make it difficult to get the main summer, or *Aman*, rice harvest planted in time.

ABNORMAL FLOODING

Each year the rains come to Bangladesh, and they flood a large proportion of the country. But, because the population is increasing, more and more people are being forced to live in areas which are devastated by the annual floods. Thus, even the normal flooding each year is causing increased human suffering, and the abnormal flooding this year has caused even more.

Before the floods came, the ration system was giving food to 20 million people, which is nearly one-fourth of the population, and the government required 150,000 tons of grain per month, or a total of 1.8 million tons per year, for this purpose. Now, large numbers of additional people are cut off from their livelihood at a time when grain prices have increased enormously.

The result is a great deal of increased hunger and suffering and a need for the government to provide still more food. There are sufficient food stocks in Bangladesh at the present time, but they need to be extended over the period until the next rice harvest, unless there is promise of additional stocks in the meantime.

What the government needs to do, and would like to do, is increase this contribution from 150,000 tons per month to at least 175,000 tons per month, but this will leave the country without adequate food rations for the month of October.

DEATHS CAUSED BY THE FLOODS

There have been some extra deaths due to snakebite as snakes and people are forced into constricted areas. There has also been an increase in diahrreal and respiratory disease, and a few drownings by

young children, but the deaths have been relatively small compared to the problem of human suffering.

The official estimate of deaths on August 6th was 740, with 430,000 houses destroyed, 868,000 houses damaged, over 18,000 institutional buildings damaged, 28,000 miles of railroad embankment damaged, and over 32,000 head of cattle lost. Because the floods continued to increase after this August 6th date until about August 11 or 12 in the northern part of the country, and August 14 in Dacca and to the south, the final official figures will be presumably higher. In fact, the New York Times yesterday gave an official death total of 1,400.

In the weeks ahead, however, there will be many more destined to die of hunger, dysentery, and this will, as usual in such situations, especially affect the young children.

CROP LOSSES

The crop losses have probably been exaggerated in the press reports. Part of the spring harvest had already been collected before the floods came, and some more of it can be collected as the floods subside, because much of this is the floating rice variety, whose stems lengthen as the water rises. The estimates are that they will be able to harvest at least 85 percent, and perhaps 90 percent, of the spring crop.

But this is the smaller crop and the important thing is to get the main crop of the year, the *Aman* crop, planted, and this will depend on the availability of seed once the waters subside, and on a place to plant the seed beds. The farmers have up to September 15 at the latest to get that crop planted. If the seeds have not been too water damaged or eaten by hungry people, or if fresh seeds can be distributed, then that crop should be a good one because silting will add to the fertility.

IMMEDIATE RELIEF NEEDS

The most immediate need of Bangladesh in this situation is a pledge of grain to enable the government to use its present stocks for additional relief purposes. The grain does not need to be delivered now, but it does have to be delivered early in October. Because reserves and credit are exhausted, this would have to be a gift, and the minimum amount required for this purpose is estimated to be 100,000 tons. This can be in the form of wheat.

The needs for medicine are largely being covered by the emergency shipments that are being sent in from the various European countries and Japan.

It is probably too late for tents to be useful, but building materials, corrugated iron sheets and roofing may be useful.

It may also be too late for additional transport to help much except for the use of helicopters.

Immediate funds for reconstruction are also needed.

LONG-RANGE NEEDS

The greater problem is the long-range one. We simply cannot let a country of nearly 80 million people perish, and the need to help Bangladesh get out of its currently depressing, vicious cycle of poverty are many. They include:

(1) Avoidance of the frequent power failures, due to inadequate replacement parts and poor maintenance which prevent the factories from operating at anything like their capacity.

(2) Increased use of one resource, which they do have, natural gas, for the production of fertilizer and selected petrochemicals; Bangladesh could not only be self-sufficient in fertilizer, but could export it to India and Southeast Asia.

(3) There is a desperate need for assistance in improving their transport system. One of the reasons for the lack of factory output is that products cannot be distributed for lack of railroad cars, trucks, and boats.

(4) We also heard from many sectors of the need for the donor agencies, international and bilateral, to develop a common policy, and exert leadership in urging, upon the Government of Bangladesh, certain reforms in management, policy and economic measures which will be necessary if Bangladesh is to break out of their present situation.

(5) Finally, the rate of population increase is probably the highest in the world. There are 2 million more mouths to feed each year, and the country is doomed unless it can come to grips and find a solution to this problem.

Thank you, Mr. Chairman.

Senator KENNEDY. When did you get back from Bangladesh?

Dr. SCRIMSHAW. Last week, August 14.

Senator KENNEDY. So you probably have the latest information.

AMOUNT OF FOOD NEEDED NOW

Let me ask you this: In terms of the amounts of food that you think would be necessary, I think you mentioned this during the course of your testimony; could we just get that again?

Dr. SCRIMSHAW. We were told that if 100,000 tons of grain could be pledged now, this week, it would enable the government to use its stocks at a faster rate and still be assured of enough for the normal ration for the 20 million persons who are dependent on the government in the month of October, and hopefully until the next harvest is available.

Senator KENNEDY. That is 100,000 a month for how long?

Dr. SCRIMSHAW. No, it is one pledge, a minimum of 100,000 tons of wheat.

Since leaving, we have seen estimates in the newspaper of 150,000, but the best information that we could obtain during our period in Dacca was that the quantity of 100,000 tons of grain pledged now would make a great deal of difference in the current situation even if that grain could not be delivered until early October.

Now, the long-range needs will depend on how successful the country is in getting this next harvest planted, and there is reason to be moderately hopeful here.

FLOODING SUBSIDED?

Senator FONG. Have the floods subsided?

Dr. SCRIMSHAW. The floods in the north began to subside 1 week ago Sunday, August 11, and in Dacca apparently the crest was

reached last Tuesday, August 13, and they are now subsiding fairly rapidly. More rains could, of course, bring new flooding.

Senator KENNEDY. As I understand, they are short of food by 2 million tons a year, in any event, are they not, approximately?

Dr. SCRIMSHAW. The government is distributing to the people as a ration approximately 2 million tons a year, which they must acquire, some of it internally but much of it externally.

U.S. CONTRIBUTION OF FOOD

Senator KENNEDY. Let me ask Mr. Kieffer, what are we providing now? What do you plan to do for October?

You heard Dr. Scrimshaw make these observations.

Mr. KIEFFER. Are you talking about the food?

Senator KENNEDY. Yes.

Mr. KIEFFER. Let me ask Mr. Rees.

Mr. REES. We have no immediate authorization for food in addition to that which is now enroute, and a proposed allocation for the first quarter of this year. There is 73,000 tons enroute from last year's allocation, and 100,000 tons on which we hope to be able to conclude an agreement within the week with Bangladesh, and that would be able to arrive there by October.

I believe our calculation, in view of the flooding, is that Bangladesh will need a good deal more than Dr. Scrimshaw has indicated, and we are putting that matter up for consideration within the government.

Senator KENNEDY. This other agreement, on the 100,000 tons, you expect to be concluded when?

Mr. REES. Within the week, sir.

Senator KENNEDY. How long has the request been outstanding?

Mr. REES. It is part of the first quarter allocation Bangladesh is receiving if this 100,000 goes through, the largest single allocation to any country in the world. We do have food problems ourselves and there has been a tough priority sorting-out job to get this allocation through.

PLANNING FOR U.S. SHIPMENT OF FOOD

Senator KENNEDY. What is your estimate now? What has the United States, over a period of the next 6 or 7 months, been planning to do? We will have the arrival of the grain committed for last year and then this 100,000 tons?

Mr. REES. We have no precise further program. The balance of this fiscal year for Public Law 480 is quite clouded by the crop report of last week, which indicated particularly on the corn side but also for wheat, a downturn from earlier expectations. So we do not have a specific figure in mind. But looking at it from the requirement point of view, we do see a need for additional allocations for Bangladesh.

Senator KENNEDY. But you are not prepared to indicate at this time how much that should be?

Mr. REES. No, we are not able to, sir.

Senator KENNEDY. Have you made any estimates of that, Dr. Scrimshaw?

Dr. SCRIMSHAW. It is apparently very difficult to do so, Mr. Chairman, because it depends on two factors. Firstly, on how much of the

spring harvest is really obtained, in fact, whether 90 percent is ultimately saved.

Second, it depends on how much of the summer crop can actually be planted. If a substantial portion of it can be planted, given the beneficial effect of the silting, then the future need will be somewhat less.

On the otherhand, if the seeds have been destroyed by the water, if many have been eaten, and if the distribution of the seeds to the farmers is grossly inadequate, then that harvest may be markedly less and the future food needs correspondingly increased.

PUBLIC LAW 480 FOOD PRIORITY: BANGLADESH VS. SOUTH VIETNAM

Senator KENNEDY. If we were to contrast the amount of food that we are providing, say, Bangladesh versus South Vietnam under the 1975 allocations, do you have these charts? Do you have this chart? I think it is put out by AID.

Mr. REES. No, I do not, sir.

Senator KENNEDY. Let me just give you some figures to see if they are figures of your understanding.

We are planning to provide approximately $160 million in total food to Vietnam under Public Law 480. Is that your understanding, $160.6 million?

Mr. REES. I am not familiar with that figure.

Senator KENNEDY. Do you have——

Mr. REES. We would have to get that for the record.

My jurisdiction is only South Asia and does not extend to Vietnam.

Senator KENNEDY. Well, for Bangladesh the figure is only $39.4. Are you familiar with that figure?

Mr. REES. Yes, I am. Those are monetary figures that in a real sense have relatively little current meaning. They have been influenced by two very significant factors since they were prepared early this year. One is a change in the availability of food supplies in the United States; and secondly, the change of prices in the United States.

So we do not take the $39 million as a figure we have to reach for Bangladesh or necessarily as a ceiling for what can be provided for Bangladesh.

Senator KENNEDY. What does it mean, then? You mean whatever we authorize in Congress is just a nice round figure that does not have any meaning?

Mr. REES. I understand, Mr. Chairman, you are referring to Public Law 480 figures.

Senator KENNEDY. Fine.

Mr. REES. These are covered by a general multiyear authorization.

Senator KENNEDY. Is not the total authorized?

Mr. REES. The total authorized by Congress is in the billions of dollars and has not in any year ever been reached.

Senator KENNEDY. Well, it is my understanding that $435 million is planned for Public Law 480, title I?

Mr. REES. That, I understand, is the replinishment to the CCC account, but that does not represent the total of the Public Law 480 program possible for this year.

Senator KENNEDY. Out of that figure is the allocation for both Bangladesh and for Vietnam; am I not correct?

Mr. REES. Yes, sir.

Senator KENNEDY. And the figures that I am giving you here, are planning figures, can Mr. Kieffer substantiate them?

Let's just take them as fact—they are AID figures. They are plans for allocations of $160.6 million in Public Law 480 for South Vietnam and $39.4 for Bangladesh. We have close to 80 million people in Bangladesh and I suppose there are some 19 million people in South Vietnam.

Can you give us some idea of why we, given the kind of problems that Dr. Scrimshaw talks about and reports on the flooding, why we have four times as much American food going towards Vietnam than to Bangladesh?

FOOD FOR SECURITY VERSUS HUMANITARIAN NEEDS

Mr. KIEFFER. Senator, I do not think this can be argued out on any kind of equity ground. To one country we had a high priority security commitment; to the other we did not.

When you move to consider it on a humanitarian basis, obviously the ground rules would have to shift.

Senator KENNEDY. That, I think, is exactly the problem and, to be very frank about it, that is why you are losing a good deal of support up here.

I think many of us have supported the food program because we thought it was going to the areas of most critical need, whether a child needed it in Bangladesh or South Vietnam or the Sahel, or whether he is black or yellow. But, quite clearly, the allocation figures would indicate it is going for other reasons—that is, as you pointed out, for security reasons or for political reasons, not based upon what I feel is the underlying support in the Congress for humanitarian reasons.

Maybe I am misreading it, but I would think that that is what the figures reflect.

I know you have to go Dr. Scrimshaw. We want to thank you very much. I know you made a special trip to come here this morning.

Dr. SCRIMSHAW. Thank you very much, Mr. Chairman.

CHOLERA RESEARCH LABORATORY

Senator KENNEDY. Dr. Stone, we are glad to have you here. I had an opportunity to visit the cholera center in Dacca, and was enormously impressed. I feel that this facility is really one of the great humanitarian contributions the United States is making, and I am sure you were aware of the threat of terminating some of the funding for that program a few years back. Having seen it and talked to the officials there, I believe that it is something that the United States can be extraordinarily proud of—working on a disease which has blighted the face of man for such a long time.

I am just interested in what observations you have made about this laboratory and generally about the problems of nutrition.

I want to welcome you here.

Dr. STONE. Thank you, sir. This was my first trip and I want to be very careful about global impressions on the basis of a very limited experience.

I was there to visit the Johns Hopkins Center, funded under an NIH grant, as well as the cholera research laboratory. Presently under way is the trial of a newly developed vaccine, some 92,000 people have been inoculated. This new vaccine was previously tested for safety on American volunteers and then subsequently tested in Bangladesh.

The control population is receiving tetanus and diphtheria inoculations, so they are not without some sort of help.

The problems of doing research in that sort of situation and helping them are enormous, but there is a good deal of enthusiasm. And I came away with a good deal of enthusiasm.

PROGRESS AGAINST CHOLERA

Senator KENNEDY. What sort of progress are they making on cholera?

Dr. STONE. I think very substantial progress in the treatment. We were told that virtually no one dies of cholera now, that is, under circumstances where they can obtain treatment. As you recall, they have motorboats stationed around that entire area, the Matlab laboratory hospital, that bring villagers into the hospital and if they get into the hospital they are treated and they survive.

The principal problem will be a matter of prevention, and of maintaining nutritional status. Malnutrition further weakens people when they are faced with severe dysentery.

It was interesting to me how much dysentery there is that is not cholera. Some of this is shigellosis and we will be heading toward ways of dealing with that problem.

Senator KENNEDY. The kind of support for this laboratory, though, you expect will continue now?

Dr. STONE. Yes, sir, that is my expectation. I think that it will continue.

You do recognize, I believe, that the cholera research laboratory itself is funded by AID. NIH only manages it. The Johns Hopkins International Center is funded by the National Institute of Allergy and Infectious Diseases at this time.

MALNUTRITION

Senator KENNEDY. Did you, while you were over there, form any impressions, just generally, about the problems of undernourishment or malnutrition?

Dr. STONE. Yes.

People are very, very slim and also very muscular, as you recall, and it is hard to distinguish that sort of level of physical fitness from real undernutrition. We did see some children in the hospital who clearly were suffering from severe malnutrition, but no very large numbers of such children, and they apparently represented isolated instances.

Senator KENNEDY. Well, we want to thank you for appearing here. I think that what has been done over a period of time at that laboratory has just made an extraordinary contribution in relieving suffering of people in that part of the world and many other parts of the world, and I think that has been a great credit to this country and to AID for their continued support.

AID CONTINGENCY FUND

Could we get back, Mr. Kieffer, to questions about the contingency fund, the use of AID's contingency fund? Can you tell us a little about the policies of that program?

Mr. KIEFFER. The contingency fund provides a reserve within the AID appropriations for disaster purposes and other unforeseen events that occur from time to time for which we have to use funds, and for which no budgetary provision has been made. By and large, of late, with the United States more actively involved in disaster relief, I would say more and more of the fund is used for disaster purposes.

Senator KENNEDY. What was it used for last year, the amount of money?

Mr. KIEFFER. The actual amount?

Senator KENNEDY. Yes.

Mr. KIEFFER. I have it here.

Senator KENNEDY. As I understand it, it was $15 million appropriated in 1974, $25 million in 1973; does that sound about right?

Mr. KIEFFER. That is correct.

Senator KENNEDY. And the authorization level is $30 million; does that sound correct?

Mr. KIEFFER. Yes.

USE OF CONTINGENCY FUND

Senator KENNEDY. The statutory language says that it will be "primarily" for disaster relief, and yet I understand that, based upon the projects that have been funded in 1973 and 1974, that less than half of the money was actually used for disaster.

So could you tell me whether my impression is wrong, or give what information you want on the allocation? As I understand, just to continue to try and make a point, in 1973, of the $26 million, $14 million went for disaster, $12 million for nondisaster purposes, including a livestock research project in the Bahamas. In 1974, of the $15 million available for contingencies, $7.1 million was nondisaster, which would include the U.S. contribution to the ICCS in Vietnam; only $5.5 million went for disaster relief.

Mr. KIEFFER. Those are my figures, too.

Senator KENNEDY. Could you tell us whether these figures are roughly the figures that you understand them to be?

Mr. KIEFFER. You have it correct, sir.

Senator KENNEDY. Well, could you tell us, then—if we put in the legislation that it should be used "primarily for disaster relief," and then less than half is actually used for disaster relief, what can we do about it? Can you help develop some language for us to make sure it is all used for the kind of humanitarian needs that we in Congress believe it is being used for?

I would think if you ask most Members of Congress how that is being used, this is what they believe it is used for—except the Appropriations Committee. That is why they cut you back, because they felt it was not being used for the kind of purposes that it should be used for.

Mr. KIEFFER. The word "primarily" was added to the fiscal year 1974 legislation. Before that it did not appear. As you suggest, it was

added in an attempt by Congress to gain primacy in the use of those funds for disaster purposes, and that is exactly what we propose to do. In the past there were no such guidelines.

GUIDELINES ON CONTINGENCY FUND'S USE

Senator KENNEDY. What do you think "primarily" means? I know it is always difficult to try and put a percentage on it, although I think you can do that on most things. What do you think primarily would mean, then, in terms of percentages; what would be a good ball park figure?

Mr. KIEFFER. I would say primarily means three-quarters or thereabouts.

Senator KENNEDY. Does it not mean below that?

Mr. KIEFFER. No.

Senator KENNEDY. What would be the meaning to the administration if it were changed to say exclusively?

Mr. KIEFFER. Well, the very thing you cut out is how to handle the unforeseen; that is why the word "contingency" is there.

Senator KENNEDY. What would be the unforeseen type things that you would have felt would be so important to have to be funded, say over the last couple of years?

Mr. KIEFFER. To be very frank, I would not have funded the livestock project. On the other hand, the ICCS had to be funded somehow.

Senator KENNEDY. I might miss the importance and the significance of the livestock project, but it does not hit me quickly as to how important a contingency need it was.

Mr. KIEFFER. Well, if we had suddenly to make special contributions to the U.N. force for Cyprus, it would be unforeseen, and is a logical contingency item in terms of the definition of that word. There must be a fund from which that kind of activity might be funded.

Senator KENNEDY. You mean funding what in Cyprus—American forces as part of the U.N. unit or something like that; you do not take that out of this, do you?

Mr. KIEFFER. If we got into peacekeeping or some other kind of role there.

OTHER CONTINGENCY FUNDS

Senator KENNEDY. You have other contingency funds for that, do you not? We have the Department of Defense.

Where was the money coming from for the U.N. participation that was for the Middle East, for example? That was not going to come out of here, was it?

Mr. KIEFFER. No.

Senator KENNEDY. So there are other sources?

Mr. KIEFFER. There might not be. It depends on whether there is a line somewhere that says you can do it. If not, then it might be considered for contingency funding.

I think it boils down to a budgeting policy relative to the conduct of international affairs and foreign aid. There are from time to time unforeseen events. If you could foresee them, we would have asked for funds and made a provision in the budget. If they are not there, we have to try to provide some funds to help.

Senator KENNEDY. Can you tell me what the livestock program in the Bahamas was?

Mr. KIEFFER. No, I cannot, sir. I very frankly was puzzled when that appeared, and I protested at the time. The administrator made very direct efforts to change the arrangement because he, too, agreed that it should not have been funded in that way.

[Subsequent to the hearing, the following information was provided:]

DEPARTMENT OF STATE,
AGENCY FOR INTERNATIONAL DEVELOPMENT,
Washington, D.C., March 18, 1974.

MEMORANDUM

To: AA/PPC, Mr. Philip Birnbaum.
From: GC, Arthur A. Gardiner, Jr.
Subject: Contingency Fund—What is the Effect of "Primarily for Disaster Relief?"

Section 10 of the new authorizing legislation amended section 451(a) of the FAA of 1961 (the Contingency Fund) by authorizing "for each of the fiscal years 1974 and 1975 not to exceed $30,000,000, to provide assistance authorized by this part primarily for disaster relief purposes, in accordance with the provisions applicable to the furnishing of such assistance."

The phrase "primarily for disaster relief" appears for the first time in the Act. The issue to be decided is the effect of this new provision as a limitation on the use of the Contingency Fund.

In past years, although the Agency has used the Contingency Fund for disaster relief, we have also used it to cover those program costs which were unforeseen at the time of the annual program presentation and which could not practicably be put off until the next appropriation of funds.

The HAC Report on HR 11771 (the appropriating legislation) endorsed this practice.

"The contingency fund is used to meet assistance requirements which are unforeseen or cannot be accurately defined at the time the proposed program is prepared and submitted to Congress. Although it may be used for any economic assistance activities, it is used primarily for two purposes—disaster relief, and situations involving security interests of the United States." (House Report No. 93–694, p. 32.)

The SFRC stated in its report on S–2335 that:

"The Committee notes that $10,000,000 was used from the contingency fund in FY 1973 for a livestock research and development project in the Bahamas. The Committee does not believe that this is a proper use of the contingency fund. It appears that this is a long-range agricultural development project and that funds intended for emergency or disaster use were used to supplement appropriations for the regular development loan or technical assistance programs, programs under which such a project should be funded. The Committee expects that such diversions will not reoccur in the future." (Senate Report No. 93–377, p. 26.)

Thus, the SFRC has clearly disapproved of the use of the Contingency Fund to supplement appropriations for economic assistance activities unforeseen at the time of a Congressional Presentation absent a showing of urgency requiring an immediate obligation of funds.

The SAC, in its report, sets forth three criteria for use of the Contingency Fund, i.e., the project or situation must be "urgent, unforeseen or . . . determined by the President to be important to the national interest." (Senate Report No. 93–620, p. 71.)

The SAC agreed with the HAC that the Contingency Fund is used primarily for two purposes—disaster relief and situa ions involving security interests of the United States. The SAC, however, did not specifically recognize, as did the HAC, that there may be occasions when the Fund could be used for any economic assistance activity. On the Senate floor, Senator Eagleton offered an amendment restricting Contingency Fund use only for disaster relief. However, he modified the amendment before its adoption by the Senate, substituting "primarily" for "only." The following exchange then took place before the vote:

"Mr. EAGLETON. As a part of the legislative history of this amendment, which now reads "primarily" in lieu of "only", can I be assured by the distinguished Senator from Minnesota that next year when this bill is working its way through the legislative process, that with his usual diligent attention the Senator will focus on this fund to make sure the expenditures were primarily for disaster or crisis-related situations? I want to be absolutely sure that this fund is not siphoned off for items that could have been provided for in other portions of the AID bill—that the money will be used for unforeseen catastrophes.

Mr. HUMPHREY. Mr. President, I concur wholeheartedly. I hope the administrator of this program, when he uses any contingency fund assets, will report it immediately to the appropriate committees of Congress so that we have an idea what is going on and so we will know this fund is not used for anything other than emergencies. We have funds for development in several categories in this bill, with funding provided in the contingency fund for the kinds of things that are unpredictable, that come up and have to be handled promptly by the Secretary of State or the AID administrator.

"Mr. EAGLETON. And of a crisis, disaster, or emergency-type situation?

"Mr. HUMPHREY. The Senator is correct." (Congressional Record, Oct. 2, 1973, S. 18376.)

Thus, from the legislative history of the authorization and appropriation legislation, it is clear that Congress intended that disaster relief purposes be emphasized as the major consideration in decisions on the use of the Contingency Fund. However, there is nothing in the legislative history to indicate that it was the intent of Congress to require that a specific proportion or percentage of the Contingency Fund be made available only for disaster relief purposes.

We therefore conclude that the Contingency Fund may properly be used for any A.I.D. purpose, in addition to disaster relief, where the requirement is urgent and unforeseen, including circumstances where the purpose is important to national security. However, in non-disaster situations, the Contingency Fund should be used only in exceptional circumstances where important interests are involved and where other funding sources can be shown to be clearly not available.

FISCAL YEAR 1975 FOREIGN DISASTER RELIEF PAPERS

CONTINGENCY FUND SITUATION

The President's Foreign Assistance Contingency Fund enables the U.S. to respond to unanticipated situations overseas, usually in the form of natural or man-made disasters (floods, earthquakes, civil strife, etc.), but occasionally in the form of developmental or foreign policy contingencies that call for the furnishing of economic assistance. There has recently been some question among Members of Congress as to whether the Contingency Fund should be limited to the former type of situation. While emergency disaster relief is, and will remain, the principal use of the Contingency Fund, its use for other unanticipated situations that are political in nature is an important tool for the President in implementing U.S. foreign policy.

The size of the Contingency Fund has grown smaller over the past decade, particularly in view of rising worldwide costs, so that currently the fund enables only a minimal response to the more serious situations. As a result, the Executive Branch finds it necessary to go through the process of requesting supplemental authorizations and appropriations nearly every year to respond to major disasters (the most recent examples are the Bangladesh crisis in 1972–73 and the disaster supplemental for the Sahel, Nicaragua and Pakistan in 1974.

Managing the Contingency Fund under a continuing resolution poses a special problem. At present we are limited to an annual rate of $17.6 million. We have already committed more than half of the funds available (following full consultation with the Appropriations Committees), and additional uses are foreseeable in the cases of Cyprus and Bangladesh. The U.S. Government's ability to respond to disasters during the second half of this fiscal year will thus be seriously limited if the amounts available remain the same.

Fiscal year 1975 contingency fund review—September 16, 1974

Nondisaster related: Egypt—helicopter presentation	$ 1,800,000
Disaster related (obligated or in process—funds available):	
Chile floods	287,300
Colombia floods	53,000
Brazil floods	25,000
Yemen army worm infestation	25,000
Philippines floods	175,000
Burma floods	338,000
Niger floods	25,000
Trinidad floods	4,790
Mozambique civil strife	25,000
Bangladesh floods	857,955
Cyprus civil strife	4,624,115
Subtotal	6,440,160
Balance in disaster relief account (Sept. 16, 1974)	394,840
Subtotal	6,835,000
Requirements for disaster relief—funds not available:	
Bangladesh floods—transport cost for 5,000 tons of civil defense biscuits (domestic transport to assembly port and sea shipment; a balloon cargo equivalent to approximately 20,000 tons)	2,500,000
Cyprus civil strife—figure above includes $1,000,000 cash grant to U.N. High Commissioner for Refugees (UNHCR) and $400,000 for equipment against a $3,000,000 pledge. Funds are not available for balance of pledge in response to a UNHCR international appeal for $22,000,000	1,600,000
Amount needed to return disaster reserve to $500,000 ($500,000 with no back-up contingency reserve precludes our traditional rapid response to a future major disaster if it is not exhausted sooner by a series of minor events)	105,160
Subtotal	4,205,180
Total obligations and unfunded requirements against the contingency fund	12,840,160

CYPRUS CONFLICT

July 15, 1974: Conflict commenced.

[July 20, 1974: Turkish invasion.]

By July 24, sixteen ICRC delegates in Cyprus with 3.5 tons of medical supplies. (ICRC assumed principal assessment and relief coordination role.)

July 28: Ambassador Rodger Davies exercised his disaster relief authority (declared a disaster existed requiring U.S. assistance). Advised AID Foreign Disaster Relief Coordinator (FDRC).

July 31: AID/FDRC authorized CINCEUR to immediately airlift from AID disaster stockpile in Leghorn, Italy, the following: 10,000 cotton blankets; 4,500 cots; 600 six-man tents; and 2 water trailers (U.S. Army stock).

August 1: U.S. Government (AID) made a grant of $225,000 through the American Red Cross to ICRC to assist in relief effort.

August 7: AID/FDRC authorized USAF transport of following: 100 large tents; 10,000 water cans; 5,498 cots; 200 body bags; 3,000 blankets (2,000 donated by Church World Service and 1,000 donated by Catholic Relief Services); and 79 Red Cross canvas markers.

August 8: All items requested by the American Embassy Nicosia had been delivered consigned to ICRC except radio-equipped ambulances not immediately available in the United States.

August 19: FDRC staff member departed for Cyprus to assist in assessment and relief activities.

August 21: Secretary of State authorized additional $500,000 grant to ICRC for relief program. Department advised European Embassies to encourage European Governments' contributions. UNHCR Prince Saddrudin Aga Khan made assessment tour of Greek and Turkish areas of Cyprus.

August 22: U.N. Secretary General requested UNHCR to assume UN coordination responsibility in Cyprus.

August 23: AID/FDRC authorized military airlift of additional 3,000 tents.

August 25: AID/FDRC authorized military airlift of two additional water trailers from U.S. Army stocks and 1656 wool blankets from AID stockpile in Leghorn, Italy.

August 30: UNHCR issued an international appeal for $9 million to support emergency assistance. UNHCR representative/New York urged U.S. response, expressed hope for U.S. contribution of one-third.

September 2: U.S. Ambassador requested services of AID relief and rehabilitation officer for three to six-month period.

September 3: AID/FDRC airlifted 2,000 additional tents and 52,915 wool blankets. UNHCR announced UNHCR contribution of $600,000 emergency fund.

September 6: Embassy requested 5600 tent flies (a plastic covering for tents to protect from rain and extend tent life).

September 11: UNHCR increased international appeal from $9 million to $22 million for emergency assistance through Calendar Year 1974. AID asked the U.S. Mission in Cyprus for an evaluation. The Deputy UNHCR is to visit Washington September 18 to discuss potential U.S. contribution.

September 13: AID Administrator pledged $3 million to UNHCR in response to $9 million international appeal ($1 million cash grant immediately plus $400,000 for equipment purchased in U.S.; balance due when funds are available).

September 14: AID/FDRC and staff member departed for Cyprus to assist in further assessments ranging to initial rehabilitation needs.

NOTE. The United States is not presently able to make a pledge in response to the revised UNHCR international appeal of $22 million. If the traditional one-third formula is applied, the United States response would be $7.3 million, including the recent pledge of $3 million.

Cyprus conflict summary

Total U.S. assistance to date:	
Ambassador's fund	$25,000
Grant to ICRC	725,000
Grant to UNHCR	[1]1,000,000
Blankets, cotton (10,000)	36,250
Blankets, wool (54,571)	229,564
Tents, family (5,600)	690,890
Tents, large (100)	102,300
Cots (9,998)	101,625
Body bags (200)	4,120
Red Cross markers (79)	4,090
Water cans (10,000)	10,500
Tent repair kits	218
Water trailers (4)	8,000
Estimated shipping (inland)	20,330
Estimated airlift	1,282,043
Tent flies (5,600)	[1]400,000
TDY expertise, FDRC and staff	5,515
Total	4,624,115
Other donor nation assistance	4,925,754
National Red Cross societies donations	109,175
Total all assistance to date	9,659,044

[1] Obligation against $3,000,000 UNHCR pledge.

BANGLADESH FLOODS

July 22: Early monsoon rains reported affecting 11 districts.

July 31: Bangladesh Government (BDG) reports worst flooding since 1954.

August 1: U.N. Disaster Relief Coordinator reports deteriorating situation.

August 2: U.S. Ambassador declares disaster requires U.S. assistance. August 3, Ambassador contributed $25,000 to Prime Minister's Relief Fund.

August 5 to 29: Donor nations and voluntary agencies generally find BDG assessments inadequate or questionable for assistance response purposes.

August 9: U.N. Disaster Relief Coordinator contributes $20,000.

August 10: U.S. Mission indicates requirement will exist for food grains and seeds.

August 12: AID offers services of disaster relief expert to assist in assessment.

August 16: $4 million authorized by AID for purchase of local seed and building materials from previous sub-project grants. U.S. Mission requests airlift of relief supplies from AID disaster stockpile in Guam. AID/FDRC disaster expert departs for Dacca.

August 17: BDG provides assessment of flood damage.

August 19 and 20: AID/FDRC directed deliveries from U.S. or Guam stockpile arrive: 596 blankets; 200 rolls plastic sheeting; 14,946 tents; and 133,180 pounds Civil Defense biscuits (value $93,460).

August 21: U.S. flood analyst arrives Bangladesh.

September 3: Second U.S. flood analyst arrives.

September 8: 10 tons of U.S. vegetable seed airlifted.

September 10: AID logistics officer departs for Dacca.

September 13: Three large tents and 100 cots airlifted for cholera victims.

FOOD

NOTE. 100,000 metric tons of wheat and 50,000 metric tons of rice under PL 480 Title I are currently under negotiation. The foodgrains are valued at approximately $33.5 million not including transportation. It is hoped an announcement will soon be possible (upon signing of the agreement).

Bangladesh floods summary

Total U.S. assistance to date	$4,934,318
Contingency fund:	
Ambassador's fund	25,000
596 tents and 14,946 blankets	186,250
200 rolls plastic sheeting	25,000
Airlift tents, blankets, plastic sheeting	500,000
Airlift Civil Defense biscuits	2,500
10 tons vegetable seeds	41,265
Airlift of seeds	46,743
3 tents, 100 cots and airlift	14,100
Total	840,858
Non-contingency fund assistance:	
$4,000,000 authorized for purchase of seeds and building materials locally from sub-projects grants	4,000,000
Value of Civil Defense biscuits airlifted August 20	93,460
Total	4,093,460
Known Requirements (unfunded) sea transport for 7,400 tons Civil Defense biscuits (CD surplus valued at $13,658,480)	2,500,000

BANGLADESH FLOODS—WEEKLY SUMMARY (SEPT. 9 TO SEPT. 16)

SITUATION

Heavy flooding in Bangladesh which started in July has affected 36 million people, four million acres of crop land, and destroyed stored rice, jute and fertilizer in many areas. The flood waters are reported to have receded in most areas.

We must understand that most of the people affected live next to the rivers and they expect annual flooding. However, Bangladesh already has a serious food shortage problem which has been aggravated by this year's flooding.

The immediate disaster problem is to insure that there will be sufficient food for the normal shortage months of October, November and December. This is the key to the U.S. Government disaster-related assistance.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT (VALUE OF ASSISTANCE: $934,318)

Following the disaster declaration by Ambassador Boster on August 2, and the presentation of $25,000 to the Prime Minister's Relief Fund, a period of uncertainty followed as to the scope of this disaster. On August 16 the FDRC dispatched a disaster expert to assist the U.S. Mission in its assessment of the situation in Bangladesh.

A plan to help feed three million people for one month developed. The donation and shipment of 25,000 tons of Civil Defense biscuits was seen as a possible answer to the feeding problem. An initial load of 133,000 pounds was sent by air on August 20 and 21 (air freight cost $95,960), with the remainder planned for sea transport. However, following a check with the AID/Office of Commodity Management, Transportation Support Division, it was discovered that the shipment of 25,000 tons would take five ships and $10 million. Therefore, the plan was reduced to 7,400 tons on one charter ship and three scheduled freighters. Shipment will be during this month, with arrivals set for October and early November.

To ease the food shortage, AID/W is negotiating to procure 100,000 metric tons of wheat and 50,000 metric tons of rice. These PL–480 Title I foodgrains are valued at approximately $33.5 million excluding transportation costs.

A list of seed requirements was developed by the U.S. Mission in cooperation with the Bangladesh Government. Ten tons of the requested vegetable seeds have been purchased on the West Coast and will arrive in Dacca o/a September 18. The seed and transportation cost is $89,000.

An effort by the Bangladesh Government (BDG) to acquire wheat seed from the Government of Iran was unsuccessful. U.S. Mission in Dacca has been informed that the BDG has belatedly received word through the Ford Foundation in Cairo that Mexican wheat seed from Egypt is available for export. This information has not been confirmed and Mission is dubious seed can be obtained, shipped, and locally distributed before the last planting date of November 25.

During the week of August 19, FDRC also released 600 tents, 15,000 blankets, and 200 rolls of polyethylene covers from its stockpile in Guam and air shipped them to Dacca. Total costs of material and air freight by the U.S. military aircraft was $711,250.

FDRC has also authorized the shipment of 5 million water purification tablets donated by Church World Service (transportation cost to USG $1,100), and medical supplies donated by Catholic Relief Services (transportation cost to USG $3,800).

In addition, the U.S. Mission recommended the release of $4 million for seeds and building materials as to be purchased locally. These funds were available through an existing relief and rehabilitation grant for new sub-projects. AID/W has concurred with this request.

On 13 September the Cholera Research Laboratory (CRL) reported that a heavy outbreak of cholera had been anticipated this year, but the floods have caused an early and unexpected cholera epidemic. CRL facilities are already averaging five admissions per day from the Dacca area. To meet this influx of patients CRL has requested AID to provide three 32-man hospital tents and 200 cots. AID/FDRC has arranged for the air shipment of these items to Dacca.

ASSISTANCE PROVIDED BY OTHER NATIONS, INTERNATIONAL ORGANIZATIONS, AND U.S. VOLUNTARY AGENCIES

Donations from other nations including National Red Cross Societies as reported by the U.S. Mission total $35,751,712.

The United Nations is giving $12,380,000 in assistance through its various organizations.

Voluntary Agencies have spent $50,714 to date, and they expect to be doing a great deal more in Bangladesh.

THE FUTURE

In Bangladesh, where a food shortage was already a substantial problem, the flood has aggravated the situation. While the Bangladesh Government has enough food stored to meet the immediate problem, they will need supplemental supplies during the next two to six months. Without considerable outside assistance, there exists the threat of large-scale hunger and even starvation by the end of 1974.

BURMA FLOODS

Persons affected: 1.4 million.
Acres affected: 700,000.

July 19: U.S. Ambassador declared disaster existed requiring U.S. assistance, committed $25,000 Ambassadorial fund to Government of Burma for local relief actions.

July 23: AID Disaster Relief Coordinator airlifted 3 million doses of penicillin and 500,000 doses of tetracycline, coordinated with UNICEF and the American Red Cross.

Contingency fund obligations

Ambassador's fund, medicine, and airlift	$338,000

PHILIPPINES FLOODS

Casualties: 68 dead; 950,000 affected.
Damage: 100,000 hectares flooded.

August 17: AID Foreign Disaster Relief Coordinator received flood alert.

August 18: U.S. Ambassador declared disaster. $25,000 fund used for baking nutribuns.

August 19: Funds obligated ($125,000 for baking additional nutribuns and helicopter and air support for flood delivery).

August 20: Situation improving.

August 21: A report was received that 1.3 million nutribuns were baked and delivered.

August 26: Responding to Ambassador's request, $25,000 contingency fund obligation was made for local requirements.

SUMMARY

Total contingency fund obligations	$175,000

Other donor contributions have not been significantly reported.

OTHER CONTRIBUTIONS

The state of international disaster information does not yield other donor contributions on a current basis. Such data is usually assembled after the emergency has waned, and it is made a part of AID's Foreign Disaster Relief Coordinator's summary reports.

The ten-year record maintained by AID which is only partially complete insofar as other donors and self-help are concerned shows the following:

	Billions
Total U.S. Government contributions	$1.28
Reported other donor contributions	1.50
Disaster nations self-help (plus)	5.20

Senator KENNEDY. I want to thank you very much for your presentation.

Mr. KIEFFER. Thank you.

Senator KENNEDY. Thank you all very much. We will put your entire statement in the record.

[Prepared statement follows:]

STATEMENT OF HON. JAROLD A. KIEFFER, ASSISTANT ADMINISTRATOR FOR POPULATION AND HUMANITARIAN ASSISTANCE, AGENCY FOR INTERNATIONAL DEVELOPMENT

Mr. Chairman: I appreciate this opportunity to appear before you today to discuss the relief assistance the United States has provided to the countries of Bangladesh and Cyprus. Donald Brown, of AID's Africa Bureau, will speak on the Sahel. We are prepared to provide additional information beyond that contained in my statement should you need it. I shall start first with Bangladesh.

BANGLADESH

Flood situation

An unusually rainy hot season followed by heavy monsoon rains in Eastern Bangladesh and Northeastern India has produced greater than normal flooding in Bangladesh. These floods, which are of the "sheet" as opposed to "flash" type, peaked in the first ten days of August. Although large areas of Bangladesh experience such flooding every year, the floods are worse than usual this year, particularly in the northern and eastern districts. Crops, prices, public health, transportation, housing and livestock have all been seriously affected, but details are still hard to verify.

The Bangladesh Government reports that millions of people were affected at the peak of the flooding, but now the waters appear to be receding. As they recede, increasing numbers of people will return to their villages. This is already beginning to happen. A team of AID staff members spent two days last week examining damage in north-eastern Bangladesh and reported:

The single and most rewarding impression was the obvious resiliency of the Bangalee farmer and his industry and ingenuity in dealing with his own problems, with or without outside help. Sylhet was the first and hardest hit district. Waters have begun to recede now and indigenous recovery operations are in full swing.

In terms of outside help, the priority requirements are: foodgrains, seeds for replanting lost crops, medical supplies, blankets and tents. The problem during the past days has been to develop on the spot reasonable assessments of the amount of these things that can be verified for transmission to the donor community. While some assessment capability was there in Bangladesh, it was decided to call in outside experts who can translate requirements into action terms for decision at the Washington level. A senior disaster expert from AID's Office of the Foreign Disaster Relief Coordinator has arrived in Dacca to assist the U.S. Mission in a further assessment of additional supplies needed over the next few weeks. We also have sent an engineer expert in predicting and assessing floods, since the season for monsoonal floods continues for the weeks ahead.

Foodgrain situation

Even in the best years, Bangladesh must import foodgrain to meet the minimum consumption requirements of its rapidly growing population. The pre-flood needs of food imports in CY 1974 into Bangladesh were less than in recent years because of efforts made to produce more grain and, until recently, favorable weather conditions. Even so, if the flood had not occurred probable foodgrain imports would barely have sufficed by the end of the year to keep government stocks above the minimum level required for smooth operation of the ration system. Now the flooding has caused damage to stored grain, losses to the summer rice harvest which was just finishing, and destruction of rice seedlings for the approaching major rice crop. Government foodgrain stocks in Bangladesh had been built up to meet the annual period of shortages prior to the mapor harvest beginning in November, and these can be used to meet short term requirements. The key question now, however, is to assess what additional foodgrain imports are needed to cover the flood losses and the anticipated September-November pre-harvest shortage.

The Bangladesh Government has requested 500,000 metric tons of wheat and 20,000 metric tons of edible oil under PL 480 Title II. We are assessing this request as well as information on grain losses both from our Embassy in Dacca and the Bangladesh Government. The IBRD has provided an agricultural economist who is helping assess the agricultural damage.

For your information about 59,000 metric tons of U.S. wheat under previous PL 480 Title I sales will arrive in Bangladesh next week. This will augment existing BDG stocks and enable the government to continue meeting emergency needs pending replacement. In addition, we hope to be able to make a announcement soon on our PL 480 Title I long term credit sales. This will be part of our regular assistance to Bangladesh planned before the flooding.

The replacement question is tied up with the much larger question of the U.S. food situation. Supplying additional foodgrain to Bangladesh beyond the level of our regular program requires decisions that bear directly on the problem of determining allocations as between various foreign priorities and between foreign and domestic priorities. Both price and budget questions are also involved. We have brought the matter forward for decision, and we hope to have an answer in the near future.

Medical situation

The major emphasis is on the treatment of diarrheal diseases. Cholera vaccine is produced locally and is not in scarce supply. Immediate medical requirements, sufficient for the next 90 days, have been met primarily by UNICEF, World Health Organization, Australia, Switzerland and the United Kingdom. We have been advised there is no need for the USG to provide additional drugs or medicaments at this time, but some degree of medical assistance may be needed beyond the 90 days. The U.S. Government has offered to provide a medical team from the Center for Disease Control at Atlanta, Georgia, if necessary. Four CDC doctors are currently in the country assigned to the cholera lab and smallpox program, and they are available to continue medical surveillance and provide advice to the U.S. Mission.

SUMMARY OF U.S. GOVERNMENT CONTRIBUTIONS TO DATE

To date the U.S. Government has committed assistance to the value of $607,210 (excluding foodgrains) as follows:

1. The U.S. Ambassador contributed $25,000 under his disaster relief authority to the Prime Minister's Relief Fund.
2. We airlifted 596 tents and 14,946 blankets from the AID regional disaster stockpile at Guam, and airlift for 133,180 pounds of Civil Defense ready-to-eat protein-fortified biscuits from the United States is being arranged. These emergency biscuits are equivalent to one day's ration for 200,000 people.
3. Also, as noted above, a senior AID disaster relief office has been sent to the disaster along with a flood expert from the Corps of Engineers, to assist the Mission in surveying damages, assessing needs and estimating flood conditions.

In addition, we have authorized use of $4 million under an existing AID Relief and Rehabilitation grant for purchase within Bangladesh of building materials to assist in restoration of flood damaged homes, and for purchase of locally-available seeds to permit the farmers to replant their crops as soon as the flood waters recede.

We have also authorized expenditure from the A.I.D. Contingency Fund for the purchase and shipment of seed-wheat and vegetable seeds not available in Bangladesh. The requirements have not yet been quantified. We have asked the U.S. Defense Civil Preparedness Agency to advise us on the availability of several thousand tons of biscuits. If available, some may be sent by air, depending on U.S. Mission recommendations, but most are expected to go by surface.

OTHER DONORS

The Bangladesh Government has made direct appeals to other donor nations such as the United Kingdom, Australia and West Germany. Other appeals to the international donor community have been made by the United Nations and the League of Red Cross Societies. The United Nations through the UN Disaster Relief Coordinator's Office, UNICEF, United Nations Development Program Representative, World Health Organization and World Food Program has been a major contributor in the initial response to the flood disaster in Bangladesh. They have provided medicines, equipment, services and made food commitments which have a total value of approximately $3 million, drawing in part on earlier Bangladesh relief funds to which the U.S. Government was the main contributor. Australia, Canada, India, Italy and the United Kingdom and 14 member societies of the League of Red Cross Societies have donated cash, clothing, cloth, shelter material, tents and food valued at $520,729. Some are continuing to supply emergency supplies for which details are not yet available. The Federal Republic of Germany has already provided a cash donation of approximately $25,000 and has indicated that it is prepared to give more.

CYPRUS

U.S. Assistance

On July 28, responding to the relief requirements engendered by fighting on Cyprus which commenced on July 14, Ambassador Rodger Davies declared disaster conditions existed warranting USG assistance. Subsequently, in responding to specific requirements identified by the Embassy in the first phase of the situation, the following supplies and equipment were supplied from the AID regional disaster stockpile in Leghorn, Italy, and from U.S. sources: 10,000

cotton blankets; 10,000 five-gal. water containers; 10,000 cots; 600 family tents; 200 body bags; 10 large (52'x18') tents 100 Red Cross marker panels and two 400-gal. water trailers. The last air shipment of these supplies was completed on August 8.

U.S. assistance is being coordinated with the United Nations Forces in Cyprus and the International Committee of the Red Cross (ICRC). The above supplies were all consigned to ICRC, Cyprus, for distribution to both Greek and Turkish communities according to ICRC assessments of need.

Following an ICRC general appeal to all its members for funds to finance its relief efforts, the American National Red Cross, on July 29, invited the U.S. Government to contribute to this effort. This proposal was endorsed by the American Ambassador, and on August 5 a cash grant of $225,000 to the American National Red Cross for the ICRC was executed.

The total value of USG assistance to date is $877,000.

Also, Catholic Relief Services donated 3,000 blankets (estimated value $9,000) and Church World Service 2,000 blankets (estimated value $6,000). These blankets were flown in with USG supplies.

The future

With the renewal of hostilities during the past week, relief efforts were virtually brought to a standstill. However, we expect to receive a request for additional assistance from the American Embassy as soon as new requirements can be determined. While new casualty estimates have not yet been received they could be significantly greater than those of a week ago (13,000 to 18,000 victims).

OTHER DONORS

The following information pertains to assistance provided prior to renewal of the fighting. (New information on contributions by other donors is not available.)

ICRC has been flying in medical supplies, blood plasma, blankets, tents, milk-powder and other relief supplies provided by the League of Red Cross Societies and the member societies of the following countries: Australia, Austria, Belgium, Denmark, Finland, France, Federal Republic of Germany, Israel, Lebanon, the Netherlands, Sweden, Yugoslavia and Palestinian Red Crescent. In addition, cash contributions have been received from Canada, France, New Zealand, Netherlands, Rhodesia, and the United Kingdom, totaling $68,590. ICRC has also received support from UNICEF and UNRWA.

The United Kingdom has evacuated several thousand foreigners, provided safe haven to others in the sovereign base areas (SBA), established refugee camps and provided tents and food for some 5,000 Turkish Cypriots on Episkopi SBA. The UK Save the Children Fund is working with refugee children on the SBA.

The Turkish Red Crescent has personnel active with Turkish refugees on Episkopi and has donated two planeloads of medical supplies.

The Cyprus Welfare Department and Turkish Cypriot authorities have been providing food for ICRC convoys. Various Greek Cypriot trade unions and associations have collected relief funds totaling $40,000. The civil servants union has requested members to tithe 10 percent of their salaries (value $5 million) and trade unions have appealed for one day's pay (estimated value $500,000). The Archbishopric of Cyprus has donated $150,000.

PREVIOUS HEARINGS ON AFRICAN DROUGHT

Senator KENNEDY. We will now hear from Mr. Donald Brown on Africa.

We want to welcome you. I believe this is your third time before the subcommittee.

Mr. Shear, glad to have you.

We had a hearing, as you well remember, about Africa and the Sahel, last year. We had a number—we had four or five people who had been working with the voluntary agencies that really came back right off the plane—and I must say that I gathered a rather false

impression about the magnitude of the problem, based upon their observations, and also with regard to the thrust of the Department's testimony.

It seemed then that we were really on top of the situation. We had the maps and they talked about the different areas they traveled and about different refugee camps and how conditions generally were getting better and better. And these were individuals who had been involved in relief work for some period of time. But still the stories continued, in the newspapers and elsewhere, about the continued deterioration of conditions—throughout the summer and fall and through the winter. So I am looking forward to your testimony to find out what the situation is today.

I have been, as I mentioned before, somewhat critical of the Department of State and AID in the fact that for the most part these humanitarian crises come to light as a result of voluntary agency reports, rather than from the Department itself.

This was certainly true about Ethiopia, because of the politics about it. We did not want to antagonize the Emperor, and what have you.

So we are looking forward to your testimony. You have been very helpful to the subcommittee and responsive to questions, both to myself and other members of the subcommittee, and we want to welcome you here and look forward to your testimony.

STATEMENT OF DONALD S. BROWN, DEPUTY ASSISTANT ADMINISTRATOR FOR AFRICA, AID, ACCOMPANIED BY DAVID SHEAR, DIRECTOR, OFFICE OF CENTRAL AND WEST AFRICAN REGIONAL AFFAIRS, AID

Mr. BROWN. Thank you, Mr. Chairman.

I do have David Shear with me today. He has recently come back to Washington from one of our field offices to head our central and west African regional operations, and he is the chief of our programs in the Sahel.

Five months ago I gave you a comprehensive report on our views about the situation in the Sahel and Ethiopia. Since then you have seen an early draft of a portion of a report which we are presently preparing for the Congress that gives country-by-country details on the current situation in the Sahel. That report will be in final form for presentation to the Congress in the next few days.*

Under the circumstances, I would like to provide you with an updating of my March report to you.

CURRENT SITUATION IN THE SAHEL

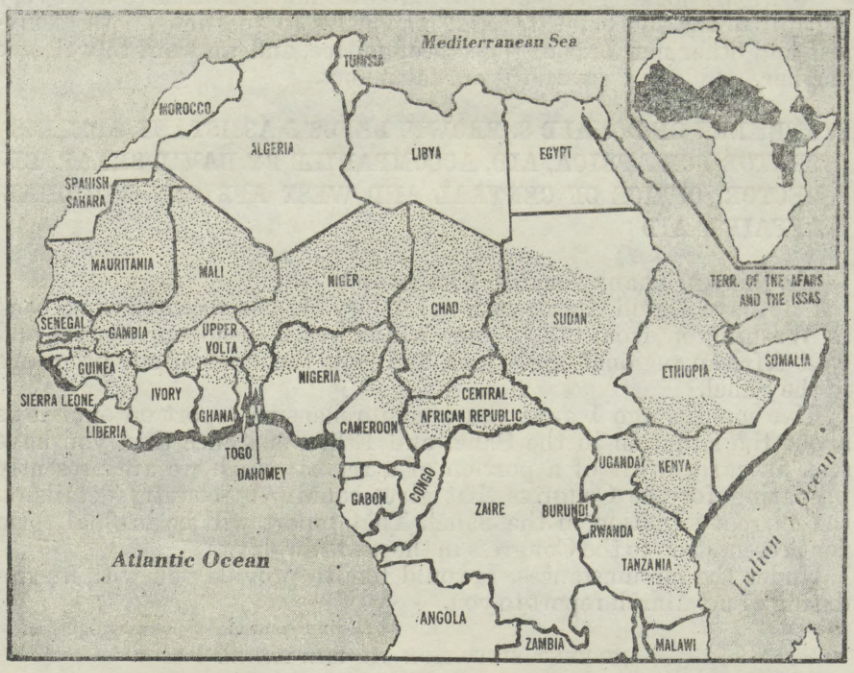
These past 5 months have been very important for the Sahel, since this has been the critical period for assuring that food supplies are in place as the rainy season begins and local transport becomes more difficult. While there have been many problems, there has also been considerable progress. In five of the six Sahel countries, emergency relief programs have averted wide-scale disease and loss of life. The situation in one country, Chad, remains precarious, as I will discuss later.

*See the text in app. II.

We continue to give first priority to assuring that sufficient food supplies are available where they are needed. Since March, more than 561,000 tons of food have moved through west African ports; 207,000 tons have come from the United States.

From the beginning of the crop year last October, nearly 800,000 tons of donated and commercially purchased grains and protective foods have been delivered to the countries of the Sahel. We have recently increased our food aid from fiscal year 1975 availabilities. A new commitment of an additional 100,000 tons has been made and will provide an additional 40,000 tons to meet needs between now and the end of the Sahel harvest in October, with the remaining 60,000 tons serving as an initial commitment against needs in the 1974–75 crop year.

We are urging other donors to make early, interim commitments against next year's needs. We expect that several of them will do so in coming weeks. U.S. food aid since 1972 totals 606,000 tons of grains and protective foods with an approximate value of $121 million.



By Joseph P. Mastrangelo—The Washington Post

Shaded areas show parts of Africa known to be suffering from drought and famine.

HEALTH NEEDS

A second area of major concern is to meet health needs. We have provided $1 million to the Special Sahel Trust Fund administered by FAO to be used for emergency programs carried out by UNICEF and WHO. FAO has also helped the League of Red Cross Societies

organize medical teams in the most critical areas of Niger—and AID is providing $250,000 to backstop this and other Red Cross actions in the Sahel. We are continuing to provide measles vaccines, ped-o-jet vaccination equipment and related materials—we have financed some $497,000 for this program since March, assuring about 1.5 million vaccinations.

In order to develop a more comprehensive approach to medical needs, we have conducted specific medical surveys in Mauritania, Mali, Niger, and Upper Volta. These various actions have contributed to the generally improved situation reflected in preliminary field reports we are just now receiving from the teams sent by the HEW Center for Disease Control to conduct a second series of nutritional surveillance programs.

RECOVERY AND REHABILITATION PROGRAMS

Last time I appeared before you, I described the recovery and rehabilitation, or R. & R., programs we were just then launching. These programs are intimately related to our food aid activities and are aimed at reducing the need for future emergency actions and at ameliorating conditions brought about by the drought. Much has been done through these R. & R. programs over these last 5 months.

Warehouses which did not exist 5 months ago are now available in remote areas; wells which were empty or nonexistent are now functioning and allowing people to return to their villages; food crops are being planted from seed made available under the R. & R. program; livestock feeding programs have kept cattle alive; barges have been equipped with new motors to speed supplies into eastern Mali on the Niger River; fuel trucks have been made available to permit more effective operation of relief truck convoys; trees are being replanted and vegetables are being grown. These actions are valuable in themselves as well as in being the beginning of an effective recovery program framework. They demonstrate how the African nations, ourselves, voluntary agencies, international organizations and other donors can work together to begin righting the problems faced by the people of the Sahel.

LONGER TERM PLANNING

Since March we have gone forward with planning and initial design work for longer-term recovery and development efforts dealing with basic food production and livestock development.

The last time I was here I described the initial planning efforts we had under way to start design of these projects. Now 16 of them are nearing design completion and internal approval. We expect that at least eight of these projects will be under way by the end of the year.

We will be signing an agreement with the Mali Government in the next few days for a $3.4 million livestock project which will launch the first of these medium-term efforts. These projects are being funded from the recent authorization by the Congress of $85 million for drought problems in Africa.

CURRENT RAINFALL

Rainfall seems to be closer to normal throughout the Sahel than was the case in recent years. This may be the beginning of a break in the drought, although continuation of rain in September and October is critical to this year's crop. However, deteriorated land and physical conditions still exist. Even if the drought is broken, continued relief efforts will be required at least over the coming year. Hopefully, however, we can now concentrate more on helping people regain normal livelihoods.

In order to deal with the dual complexity of continued relief efforts and the beginning of a more comprehensive recovery and development program, AID is reinforcing its staff throughout the Sahel. We are placing additional experienced, French-speaking personnel at critical port and country sites to improve monitoring of our emergency programs and to strengthen the planning and management of longer term, more fundamental efforts.

FAO FOCAL POINT

Internationally, the FAO Office of Sahelian Relief Operations (FAO/OSRO) continues to be the principal coordinating organization for short-term relief efforts. We maintain close working relations with OSRO.

This spring, OSRO reinforced its field staff in each port and recipient country and again put a strong field logistical supervisor in the area. OSRO conducted three major meetings of donors in June and July aimed at dealing with immediate logistical bottlenecks as well as longer term logistical planning. OSRO will organize another multi-donor-food assessment team this year to determine Sahelian food import needs in the 1974–75 crop year. We will be meeting with the director of OSRO next week as part of our regular contacts with that organization.

Critical parts of our response to the needs of the Sahel are handled by a wide variety of voluntary and international agencies, as well as by the Peace Corps. These organizations have special abilities to deal with this kind of tragedy which is occurring in the Sahel.

SUPPORT OF VOLUNTARY AND INTERNATIONAL AGENCIES

When I last appeared before you, we had funded, or planned to fund about $2.8 million in support of U.S. voluntary agency and international organization programs in the Sahel. Such support now totals more than $6.8 million. We expect the voluntary agencies to play an increasingly important role not only in relief efforts but even more in those critical programs aimed at helping people re-establish their lives—the kind of things in which the voluntary agencies are so particularly able.

Despite the very considerable international effort that is underway, there are certain remote regions where very special efforts have been needed. Eastern Mali is a case in point. There, with the cooperation of OSRO and the African governments concerned, we have organized special convoys from Algeria and Dahomey to supply the area, and we have also reestablished an airlift to that region. That airlift has

now moved over 4,000 out of a planned 5,000 tons of food from Bamako into eastern Mali.

CONVOY TO NIGER

In Niger we are also organizing a special convoy to carry 1,500 tons of food from Algeria to the Agadez region in the next few days. At the request of the Mauritanian and Chad Governments, we presently have technical teams preparing for airlifts of 3,000 tons and 2,000 tons in these countries. These operations will be under way within the next few weeks. We expect these operations to be under way in the next 2 or 3 weeks.

CRISIS IN CHAD

While the combined efforts of African governments and donors have had a major impact on easing human suffering in five of the Sahel nations, there remain very serious medical and nutritional problems in Chad. To be perfectly frank, the lack of data, weak administrative structures, and extremely rudimentary infrastructure of Chad are such that we have little hard information on the real extent of malnutrition and disease in that country, but we do know the situation remains very serious. The reasons are many. Inadequate information systems, few trained government officials, poor transport and communications, problems of internal security, disagreements on allocation of transport resources; these have all been factors.

We have expressed our deep concern about these problems to the Chad Government. Dr. Adams, chief of the African bureau, met recently with President Tombalbaye to reiterate this concern and to seek greater efforts by the Chad Government itself.

CONTINUING ADMINISTRATIVE PROBLEMS

Senator KENNEDY. Is it not a little late to be finding out about the administrative problems they have in that country?

Mr. BROWN. The administrative problems have been there for an extended period of time, Mr. Chairman. We have been aware of them.

The actual impact of drought in Chad is considerably less than in Niger, Mali, and Mauritania——

Senator KENNEDY. But we are finding out now that there are administrative problems there? You are perfectly frank about the lack of data. But where have we been? This is given against the background of when you appeared in July 1973; looking through your statements about the Sahel, you say:

"Given the efforts of many individuals and many governments [talking about the threat of starvation] I do not think a massive threat exists."

Later on, "We have already said we are prepared to provide more airlift if a real need can be identified."

Later on you talk about "So far the resources available to us from a disaster relief portion of AID have been adequate to meet the immediate relief problem."

That is a year ago. Then in March 1974 you talk about "As a result there has been organized one of the most significant relief efforts of recent years in areas too long neglected. One must seek to be prepared

as possible to deal with the worst of eventualities. I believe there has been enormous goodwill and humanitarianism demonstrated by all those concerned with this problem."

Now we find out today that you have, to be prefectly frank, a lack of data; we have little hard information on the real extent of malnutrition in that country. It is over a year ago that we were trying to find out the extent of it.

Mr. BROWN. A year ago, as I say, the harvest and rainfall situation in Chad was not a serious problem. Rainfall in Chad was much better than in any of the other Sahel countries. This year as well, the rainfall has been, while lower, better than in the other Sahel countries. The situation as a whole in terms of impact of drought has been less critical in Chad. But governmental organization to respond to the existing areas of need has been poor.

It is extremely difficult to get data in any of these countries. We have said that from the beginning, that there has been a lack of clear data.

In Chad this is doubled to the extent that government itself is not making the types of concerted efforts that the other Sahel governments are undertaking. To that extent it becomes extremely difficult for external donors to be able to respond as well as we would like to do, and we are not able at this time to respond with the type of help while the Chad Government is not doing as much as it should be doing.

ROLE OF THE U.N.

Senator KENNEDY. Is the U.N. doing anything there?

Mr. BROWN. All donors are seeking to get the Chad Government to give greater attention to the problems than they have. The U.N. has programs there. They have their technical assistance programs which have been modest, as they have been throughout the Sahel in the past.

The FAO/OSRO has made considerable effort in dealing with the Chad Government on improving their system of relief distribution and administration. We have all, through the intervention we have made, brought about some improvement in that administration, but it still lacks concentrated effort by the leadership of the Chad Government.

AID SURVEYS IN CHAD

Senator KENNEDY. Have any AID surveys on transportation, displaced persons, disease and that sort of thing, been undertaken in Chad?

Mr. BROWN. We have under way a nutritional survey in Chad at the present time. That was not conducted in Chad last year. That is demonstrating what we have over recent months anticipated that it would demonstrate, that is, that levels of malnutrition are higher in Chad than other countries, and it is because of an inadequate distribution system.

HOW MANY STARVED?

Senator KENNEDY. Do you have any idea of how many people starved?

Mr. BROWN. Mr. Chairman, there is no real answer to this question. The only estimate that has ever been made was made last year by

the Center for Disease Control in its nutritional survey. This was a statistical estimate based on a slim, small sample and some fairly sophisticated manipulations of statistics to try and come out with some kind of an estimate. They came out with this estimate we have made available to you on several occasions, that perhaps 100,000 people may have died in the first year of the drought.

Senator KENNEDY. They are doing a similar extrapolation?

Mr. BROWN. They are doing a similar survey and I assume when all the material is available, they will come up with an estimate for this year.

Senator KENNEDY. How much do you think, for your agency; do you think it is about the same as last year?

Mr. BROWN. Our impression is that the feeding programs are working far more effectively this year and that the actual problems of disease, malnutrition, and death, are considerably lower this year.

I can give you no figures to substantiate that. This is simply the impression of all those who observe what is going on, that the death levels are far, far lower.

OBLIGATION OF AID FUNDS

Senator KENNEDY. Of the amount that was actually appropriated last year for the Sahel, how much of that has been expended, and how much of the money that has been obligated has actually reached the Sahel?

Mr. BROWN. As you remember, Congress appropriated funds in two phases in a sense that an appropriation was made, but only a portion of that was authorized early in the fiscal year. The $25 million special Sahel fund was authorized and appropriated in the middle of the fiscal year and an additional $85 million was made available by the congressional authorization only late last June.

Programs are under way for use of the $25 million. I do not have an expenditure figure with me, but many of the actions financed with that $25 million were underway even before our funds were formally put in place, because governments were assured they would have these funds and they started actually on their own, anticipating reimbursement. We may have expended $15 or $18 million of that amount, but I am not sure of the exact amount.

Of the $85 million authorized by Congress, a relatively small proportion has been obligated, primarily for preparations for the Mauritania and Chad airlifts, which will be taking place very soon, set aside for purchase of trucks in Niger, operations carried on by OSRO with a guarantee by us; less than $3 million of obligations.

FUTURE OBLIGATIONS

Senator KENNEDY. How would you expect it would go up say in the next few months?

Mr. BROWN. The $85 million, as you will recall, was in the end authorized for drought-stricken areas of Africa. We are presently programing that on the basis of the use of $65 million for the Sahel, $10 million for Ethiopia, and $10 million for drought problems elsewhere in Africa.

Of the $65 million for the Sahel, $25 million will be used for emergency actions as the requirements for them are determined; $40 million is being programed for medium term development programs aimed at stimulating food production and livestock production.

These are the medium term and longer term programs which I mentioned to you, where planning is going forward at the present time.

We have no hesitation about moving rapidly on obligating the $25 million for emergency actions as individual requirements are determined.

On the $40 million for medium-term programs, we are purposely, since the Congress did give us no-year authorization, we are purposely seeking to assure that the projects we design are good projects. We are not trying to rush into them. We are trying to move this process of design as rapidly as possible, but taking into account the technical problems that have faced development programs in the past, and this does mean a considerable amount of technical, sociological, anthropological review. So that process will take longer.

I indicated about half of those medium term projects we expect to obligate before the end of the calendar year.

TIME INVOLVED IN PROGRAMING

Senator KENNEDY. Well, those considerations, obviously, are very valuable. But I think the question is how long that is going to take. You knew a year ago that you had this problem, and that it was going to take long-term planning and programing, which AID must have been giving some thought to, whether there will be resources for a special kind of relief or over a period of time. I am just wondering how long it will take before these programs and projects are actually funded and started.

I think all of us want to make sure they are valuable in terms of the people, but I am wondering how long you will take?

Mr. BROWN. I anticipate that that full $40 million will be obligated by the end of this fiscal year, by June. About half of it I would expect to obligate by the end of the calendar year.

Senator KENNEDY. That is what, another 10 months?

Mr. BROWN. Yes, sir, and for design of food projects we anticipate, but we hope we can have a real impact on the production of cereals in the area and relieve this region to some degree from importing cereals from the outside world at a time when world stocks are as perilous as they are. To do that does take considerable design, considerable technical effort, and considerable negotiation.

In the area of livestock, the six Sahel states themselves have been spending very great effort over the last year in trying to develop an understanding of a strategy about livestock. The programs we design have to fit in with that concept. It is not easy. There are technical problems.

Senator KENNEDY. I am sure it is not easy. I can remember myself meeting with the ambassadors close to 18 months ago. They were talking about programs similar to what you are. Now you are talking about another 18 months to get them off the ground.

It seems to me, and I do not want to underestimate the facts that you have mentioned, but it does seem to me to take an awful long time to get things going at AID.

Mr. BROWN. I think that is true of any long-term development, medium-term development project. It takes a while, particularly in an area in which the United States has had limited experience and background.

I will say I think we have made very substantial efforts to go beyond normal agency mechanisms to get programs designed and organized. When I was here in March I told you a bit about the effort we were undertaking then to do initial project identification and design work. We had 70 technicians drawn from AID itself, from contractors, from organizations around this country, 70 of them, almost all French speaking—we have drawn virtually every French-speaking agricultural technician in this country in the Sahel— doing design work. We did identify these 16 projects.

Moving from that down to the specifics of how you make a project work still takes some time. But I think we have really taken extensive steps to move this project design faster than is normal for the agency in a program design of this type.

SITUATION IN ETHIOPIA

I would like to turn for a few moments to the situation in Ethiopia.

Recent reports state there have been good rains in the northern areas which have been most heavily hit by drought in recent years. We are hopeful this will lead to a substantially increased harvest. This may be the beginning of the end of the emergency in the north, allowing the Ethiopian Government progressively to turn more attention to recovery and rehabilitation activities. The situation in the south remains less clear.

As I indicated last March, drought struck the south more recently. This is an area of much vaster spaces and scattered population than Wollo and Tigre provinces in the north. Obtaining a meaningful assessment of the impact of the drought, difficult enough in the north, is even harder in the south. Recognizing this, we have provided helicopters to undertake a nutritional survey and drought impact study in the south. Very preliminary reports from this survey suggest that the impact on human life in the south due to this drought may be less severe than some initial reports suggested, although it seems certain that important, but still undefined, efforts will be required in that region.

FOOD REQUIREMENTS

Food requirements for Ethiopia appear to be in reasonably good shape at the present time. 135,000 tons of grains and almost 10,000 tons of protective foods have been committed by the donor community to meet needs through 1974.

The Ethiopian Government itself has provided 14,000 tons of relief grains from domestic resources. However, there will undoubtedly be a need to continue food aid in 1975 and estimates of this need will be made in coming months as the volume of this year's harvest becomes clearer.

We expect to make additional funds available from fiscal 1975 funds when they are necessary.

DISTRIBUTION OF RELIEF

Movement of relief supplies has also improved markedly in recent months. Port congestion occurring a few months ago has been essentially resolved. Trucks have been provided by a range of donors, including the United States, to move these supplies to relief centers. The Ethiopian military has been helpful in this process. However, moving supplies from relief centers into remote farming areas is immensely more difficult, given lack of roads and now the onset of rains.

The Ethiopian Government had hoped to be able to supply people of the region with sufficient food stocks, seed, and oxen to allow them to return from relief distribution centers to their farm lands during the current cropping period. Difficulties in distribution to these outlying areas and shortages of available oxen have limited this movement. This will undoubtedly have some negative impact on actual food production in the region this year.

The continued dependence of populations on governmental relief programs over extended periods can cause major social problems unless future recovery efforts can help resolve these difficulties. The United States has under discussion with the Ethiopian Government a range of R. & R. programs aimed at helping in this process and it is anticipated that a substantial portion of the $10 million provided under the recently enacted Foreign Disaster Assistance Act of 1974 will be devoted to this end.

EFFORTS OF THE ETHIOPIAN GOVERNMENT

The last time we met, we talked a good deal about inadequacies in responsiveness by the Ethiopian Government to the plight of those affected by the drought. There is no question such inadequacies occurred and that has been a major factor in the political changes which took place in recent months.

There is also no question that lately the Ethiopian Government has made a real effort to improve its relief efforts, despite continuing political problems. However, the task facing government remains great. Ethiopian resources, human and material, capable of responding to the task are limited.

There has been good cooperation existing between donors in the earlier period which has now been strengthened by mutual efforts between donors and the Ethiopian Government itself so that the work of all is enhanced. For our part, we have augmented the staff of our AID mission in Ethiopia to reinforce the current positive actions of the Ethiopian Government.

TOTAL DONOR COMMITMENT

We estimate that worldwide donor commitment to meet Ethiopia's emergency needs now total about $65 million. Of this, the United States has so far committed approximately $18 million, largely in food aid. The $10 million provided by the Foreign Disaster Assistance Act of 1974 will be added to that for financing a range of recovery and rehabilitation programs, as well as for continuing emergency relief.

In summary, then, Mr. Chairman, we continue to face extremely serious problems in the Sahel and Ethiopia. There are hopes that cur-

rent rains in both areas may be the beginning of an easing of the situation. But even in the best of circumstances, major concern and continued vigilance are required. However, if the situation is in fact easing, the African governments and the donors can hopefully begin to give greater attention to improving the lot of their people in addition to the basic need for avoiding loss of human life.

I certainly hope for the people of the Sahel and of Ethiopia that this is the case. They have suffered enough. If we can begin to devote some of the vast resources which have moved into the region to more positive programs of human betterment, the people of the Sahel will deserve whatever can be done.

I have with me tables describing various aspects of our programs which update the data I provided you last time I was here that I will be happy to make available to the subcommittee.

Thank you.

U.S. AID TO VOLUNTARY AGENCIES

Senator KENNEDY. You have brought a list of the various projects that have U.S. assistance to voluntary agencies in support of Sahelian programs; are you familiar with this list here?

Mr. BROWN. Yes, I have brought that list.

[See table I.]

TABLE I. *U.S. assistance to voluntary agencies and international organizations in support of Sahelian programs*

[Fiscal year 1973 to date—August 1974]

I. Contingency funds for relief	$93,500
Africare—grant to help launch relief field operations in six countries—$31,500.	
Catholic Relief Services—well-deepening in Senegal from Ambassador's short-term emergency funds (STEP)—$62,000.	
II. Recovery and rehabilitation program funds	871,000
CARE—Dollo Bosso Valley, village development in Niger—$96,000, food-for-work, food distribution program in Chad—$300,000.	
Catholic Relief Services—Earthen dam rebuilding/reconstruction and related agricultural development in Upper Volta—$340,000.	
Church World Service—Agricultural development, date palm (lady bug) restoration in Niger—$125,000.	
Lutheran World Relief—Seed distribution and multiplication—$10,000.	
III. Public Law 480 and Transport/Ocean Freight Reimbursement (July 1973–74)	2,351,356
Regular programs:[1] $1,768,856 Public Law 480 food and transport to Niger, Upper Volta, Mali, Senegal and Chad ($1,439,588.60). Ocean freight reimbursement for privately donated goods valued at $2.2 million ($329,267.46).	
Special Sahelian funds ocean freight reimbursement: $582,500.	
IV. International organizations	3,525,000
UNICEF	1,375,000
Grant via FAO/OSRO Sahelian zone trust fund ($500,000).	
Extension of mobile health systems, support for rehabilitation programs under the R/R program ($875,000).	
WHO: Grant via FAO/OSRO Sahelian zone trust fund	500,000

[1] Incomplete, as all bills for the fourth quarter have not been received.

LICROSS (league of Red Cross societies): To assist relief food distributions for encamped populations	$250,000
SSO (special Sahelian office, U.N.): in support of SSO work with longer-term programing	100,000
FAO/OSRO	1,300,000
$300,000 (1973) for seed distribution.	
$1,000,000 for OSRO logistic/transport support.	
($1,000,000 for UNICEF and WHO.)	
Total	3,525,000
Grand total	6,840,856

TABLE II. *U.S. Private Contributions to Voluntary Agency Activity in the Sahel*

[Estimated and incomplete]

	Subtotals
*AFRICARE	$770,000
For relief (all six countries)—$270,000.	
Water development in Mali, Chad and Niger; ranch crop production in Niger—special contribution from Lily Endowment—$500,000.	
American Freedom From Hunger Foundation: Contributions provided to FAO, CRS, CWS, Africare, CARE	20,815
American Friends Service Committee (AFSC): Medicines for Mali (AFSC currently planning a resettlement program for Mali, estimated $50,000)	5,000
American Red Cross (ARC): Provided to League of Red Cross Societies (LICROSS)	52,000
Baptist World Alliance: Relief to Senegal, Upper Volta, Niger and Chad through other voluntary agencies	34,288
*CARE: Rehabilitation programs in Niger and Chad; relief in both countries	2,615,530
*Catholic Relief Services (CRS): Relief in all countries, special programs in Senegal, Upper Volta. CRS is expanding its programs in full to Mauritania, Niger, Mali and Chad, if possible	1,384,000
*Church World Service (CWS): Medical relief team in Agadez, Niger; date palm disease control and agricultural development near Agadez; incudes relief supplies	1,282,700
Christian Reformed World Relief Committee: Relief support for Sudan Interior Mission programs, Mennonites in Chad and Niger	62,000
*Lutheran World Relief (LWR): Seed distribution and assistance with date palm disease control in Niger	136,000
Medical Assistance Program: Relief medicines for Upper Volta and Mali; food distribution in Niger and Upper Volta	35,650
Mennonite Central Committee: Relief and rehabilitation programs in Chad including agricultural development and food for work programs	527,600
Relief for Africans in Need in the Sahel (RAINS): Contributions to Upper Volta and CILSS	193,000
Seventh Day Adventists World Service (SAWS): Relief, currently surveying all countries for greatly expanded rehabilitation efforts	26,000
Southern Baptist Convention: Relief	60,000
Young Men's Christian Association (YMCA): Commitment only, interest in Mauritania and Senegal	500,000
World Relief Commission: Relief and rehabilitation in Chad, Upper Volta, Niger and Senegal; plans $500,000 investment in program expansion	160,000
World Vision Relief Organization: Relief in Niger and Upper Volta; development rehabilitation: dam-building, education, wells and peanut raising	319,462
Grand total	8,184,045

Senator KENNEDY. Could you tell us, of the ones listed, which have actually not been disbursed in the field?

Mr. BROWN. Not disbursed by the voluntary agency?

Senator KENNEDY. No; by the AID. Or is it your understanding that all of these have been disbursed.

Mr. BROWN. The programs—I am not sure we are working from exactly the same list, because I have a more recent one here which breaks this into types of programs.

Those programs where we have been making grants to voluntary agencies have in effect been disbursed. Those where we have made grants to them for the financing of transport of foods, either foods which we make available or foods which they receive from contributions, have been essentially disbursed.

Those where voluntary agencies are participating with us in the carrying out of R. & R. type programs have been only partially disbursed.

Senator KENNEDY. Well, I understand one of the programs that you have listed here is the Church World Service's agricultural development program for $125,000. Now, I understand that they have yet to see the money.

Mr. BROWN. Well, these are our R. & R. programs and whether they are carried out by voluntary agencies or by any other technical agency, they are organized in a way where the funds move through the local government. We sign an agreement with the local government, in this case Niger, committing these funds. These funds have been committed to the government. We work with the government in Niger and, in this case with Church World Services, to insure that programs are organized and moved forward, but our role is one of essentially funding the agent through the local government. In all of our R. & R. activities the funds become available to the voluntary agency, not by a direct contribution by us but by the local government.

PROBLEMS IN FUNDING VOLUNTARY AGENCY PROJECTS

Senator KENNEDY. How often is that done, these church agencies funding programs?

Mr. BROWN. This is a special type program. The way we have organized them has been undertaken to, at the same time, provide us and the local governments the greatest possible flexibility and ease of funding and to provide reasonable protection of the U.S. taxpayers' dollar in terms of ease of audit and following what is going on.

We do not ordinarily carry on any kind of program with the kinds of mechanisms we have been able to develop for these R. & R. programs. In doing so, we have sought to identify organizations to work with government to make sure actions take place. Some of these are voluntary organizations, some are U.N. agencies, some projects are carried out through French technical assistance programs, some by other agencies, some by the Peace Corps, but the aim is to make the funds available to them through the local government.

Senator KENNEDY. That has been in the pipeline 11 months?

Mr. BROWN. The agreement was signed with the Government of Niger in January or February, the overall agreement, covering all of our R. & R. activities in Niger. The government had to go through

certain processes to put the programs in place. Those did not get completed until March or April. There was some delay because there was a change in government, a coup d'etat.

But I understand that—I am told that the funds are now ready to move from the Development Bank of Niger to CWS.

Senator KENNEDY. When these projects are listed, "U.S. assistance to voluntary agencies," it is somewhat misleading. I would think that most people would feel, looking at this, that they have gotten the money, and not the way you have described it here.

If we have a list, we expect that it represents what is actually in place or being started in those areas, but the lead time is quite excessive.

Could you have someone run through these various programs and give me an up-to-date picture of what is actually being done?

Mr. BROWN. Yes, sir.

RAINMAKING PROJECTS

Senator KENNEDY. Could you tell us, have there been some applications of rainmaking techniques in the Sahel?

Mr. BROWN. Several of the Sahel governments have been interested in weather modification and rainmaking, particularly the Government of Niger.

Senator KENNEDY. When is the rainy season?

Mr. BROWN. From June to October.

Senator KENNEDY. What is your reaction?

Mr. BROWN. Our reaction has been basically unfavorable. The Government of Niger has sought our assistance in identifying firms in the United States which they could contract to undertake cloud seeding. We have done so, and they have made such contracts, but the view of all of the scientists we have dealt with on this is that there is absolutely no assurance that cloud seeding will in fact be a useful process. There are very considerable international concerns in cloud seeding, as we have learned ourselves in some of the complaints of the Canadian Government regarding what we have carried on.

Senator KENNEDY. Did we know when we were in Vietnam seeding clouds that it would rain in Cambodia or Laos?

Mr. BROWN. I cannot speak to that. I can only speak to what the scientific community is telling us, that this is not something we should be pursuing in the Sahel.

Senator KENNEDY. So you do not have a cloud-seeding program?

Mr. BROWN. We do not have a cloud-seeding program; no.

Senator KENNEDY. Who are the scientists?

Mr. BROWN. We have consulted with the National Academy of Science, with NASA—I do not have the names, I can provide them for you—as well as our own Office of Science and Technology in AID and in the Department of State.

Senator KENNEDY. Well, it certainly seems to me, and I am not an expert on that, but I do know from just our own work as the chairman of the National Science Foundation Committee and the Office of Technology Assessment, that a rather strong body of opinion would disagree with that assessment.

It seems to me that a modest program in terms of its implications could be exceedingly important.

NIGER PROJECT IN RAINMAKING

Mr. BROWN. The Niger Government did undertake a modest program last year and evaluations have been made of that and there was no way of knowing whether that rain resulted from cloud seeding or it was going to occur in any event, and the evaluation comes out absolutely neutral about the effect of cloud seeding in that particular case.

I know nothing personally about the technology of cloud seeding and rainmaking.

Senator KENNEDY. That makes about 35 of us in this room.

Mr. BROWN. But we have really consulted quite broadly on this. We are looking at other ways, such as the use of remote sensing equipment to see what one can do better about weather predictions, crop predictions.

I certainly think it is incumbent upon us to broaden our analysis of scientific and technological approaches which we have applied in our own context as to the Sahelian context. We do have efforts underway. I think they need to be strengthened. We have just gotten a report from a very qualified firm which is providing us with a series of suggestions on how one might use remote sensing technology, for example, for a whole range of different things.

This report has just come in to us and I have not analyzed it.

Senator KENNEDY. What is that? What does it do?

Mr. BROWN. It is recommending how one can use, for example, the Earth resources technology satellite or weather satellites, other satellite operations, and the remote sensing that you can get from this for crop prediction, for weather prediction, for mapping, that sort of thing.

Senator KENNEDY. All right. We want to thank you very much.

I have just learned that the Secretary General has named the U.N. High Commissioner for Refugees as the coordinator for humanitarian aid to Cyprus, and that two of his people are there this morning. So we will be looking forward to working with them, and with the Department, in trying to develop the kind of assistance programs to relieve suffering of people who are caught in the crossfire of conflict on Cyprus.

We will stand in recess subject to call of the Chair.

[Whereupon, at 12:40 p.m., the committee recessed, subject to call.]

APPENDIX I

BACKGROUND INFORMATION ON RELIEF AND REHABILITATION PROGRAMS IN THE AFRICAN SAHEL

Information on the Assessment of Sahel Recovery and Rehabilitation Health and Nutrition Proposals in Central and West Africa

AID has provided three health teams to the Sahel—one team to Mali, headed by Dr. Pascal J. Imperato, during the period April 15 through May 6, 1974. Dr. Imperato is presently First Deputy Director of Health for New York City, and was formerly the CDC officer in charge of the smallpox/measles activity for Mali. The second team was from Yale University, and consisted of Dr. Wilbert Downs, Herbert Sacks, and George Silver. The period of their consultancy was May 2 through May 18, and it covered Mauritania, Niger, Upper Volta, and discussions at the UNICEF Regional Office in Abidjan. The teams were provided by the American Public Health Association, Contract AID/csd/2604, Task Orders 11 and 13. The specific guidelines were to provide AID field representatives in Mali, Niger, Upper Volta and Mauritania with back-up expert health assistance to assess identified general health/nutrition program proposals under the Sahel Recovery and Rehabilitation program, and to make specific recommendations in the field and AID/W on activities and measures needed to assure effective delivery of planned health/medical/nutrition services to the "at risk" (target) population during the mid-term Sahel Recovery and Rehabilitation program phase. The CDC nutrition survey ($150,000), as a follow-up on last year's nutrition survey, is in three parts, part one of which has just been completed in Chad, Niger, Upper Volta, Mali and Senegal. The draft report has just been submitted to AID.

RECOMMENDATIONS MADE BY DR. IMPERATO, AND ACTIONS TAKEN BY AID, RE MALI

1. Dr. Imperato checked over the specific recommendations made in the PAADs and worked out in general specific arrangements with AADO, UNICEF and local Government for follow-up actions. Dr. Imperato recommended the following additional actions:

The construction of a pediatric pavilion at the hospital in Gao. AID has authorized $55,000 for carrying out this recommendation.

2. The provision of 2000 heavy duty, weather resistant, rectangular, cloth tarpaulins which can be used as tents when mounted by the Tuareg on frames provided by them. The usual tents found in the U.S. are unsuitable for this purpose.

AID has authorized $42,000 for the tarpaulins and they have been delivered.

3. The provision of potable water supply to the larger camps. On this matter the AADO, the Government of Mali, the Peace Corps and UNICEF have mounted a well digging and improvement program.

For this joint endeavor the U.S. Government authorized $90,000. In addition to the well digging and construction aspects, maintenance crews and training are included (BAMAKO 2584).

4. Refrigeration units, kerosene operated, should be provided to the centers needing them where large camps are located.

UNICEF, New York, contacted by AID/W, and we have been assured that these items are on the regional list to be provided by the UNICEF.

5. The formation of a cadre of camp health educators. The AADO, Mr. Kelly, advises that the Government has actually established a sanitation corps responsible for supervising environmental sanitation in the camp areas, which includes waste deposit, disinfection of the area, routine cleaning of the camp site by the inhabitants; and also the teaching of basic health facts related to hygiene.

Dr. Imperato's report was encouraging in that he saw little clinical malnutrition and rather well organized health services in the camps; it should be pointed out, however, that the West German health team as well as the UNICEF teams have increased and expanded their function within Mali, and AID has authorized 308,000 doses of measles vaccine, which includes 16 Ped-O-Jets for administering the vaccine, and additional spare parts at the cost of $98,000. The amount of vaccine is based on providing the country with a quantity sufficient to cover the age group 6 months to 6 years, with a sufficient amount for adults where outbreaks occur.

RECOMMENDATIONS OF THE YALE TEAM, AND ACTIONS TAKEN BY AID, RE NIGER, MAURITANIA, UPPER VOLTA AND SENEGAL

1. That AID give approval for the purchase of medicines, antibiotics, and measles vaccine, and for provision of package hospitals.

Before the team returnel from Senegal AID received this recommendation by cable and arranged for the purchase of 4 package hospitals to be assigned 2 to Mali, 1 to Upper Volta, and 1 to Mauritania. These units will be used primarily to provide needed hospital equipment to existing hospital units and at camp medical centers. AID has arranged for suitable specialists to assist with the unpacking and assembling of the units when they arrive in the countries. (Expected arrival mid-August.)

2. The Yale team recommended that measles vaccination be given to children 6 months to 6 years of age, and to adults in case of outbreaks. Orders for 90 Ped-O-Jets, spare parts and related items have been placed and these are being delivered to the countries per schedules requested by the recipient Governments. AID has now provided in total since March approximately 1½ million doses which with Ped-O-Jet equipment and spare parts totals some $497 million.

3. The team recommended that AID proceed to authorize research for the development of heat resistant attenuated live measles vaccine. AID has processed PIO/T for this research and has arranged with the Contracts Office to proceed with the selection of a contractor. Funding—$155,000 (FY 75)—is earmarked for this purpose.

An additional $40,000 was approved in the PAAD for R&R for each of the countries—Mali, Mauritania, Niger and Chad—for additional medical supplies based on the need and the effective use being made of such supplies.

As a spin-off to the visit by the Yale team, AID is financing a special training and orientation in the U.S. for a Senegalese physician, where we hope to relate his present problems to the population growth rate and economic development activities of his Government.

CDC NUTRITION SURVEY—1974

This is a second CDC survey of the area covering Mauritania, Mali, Upper Volta, Niger and Chad. The survey will be done in three parts. The first has just been completed and is now being analyzed. The second part is scheduled for the post harvest season, October/November 1974, and the third for Spring of 1975. The cost is $150,000 (PASA).

U.S. GRAIN DONATIONS TO THE SAHEL

	Crop year 1972–73—fiscal year		Crop year 1973–74—fiscal year			Crop year 1974–75—fiscal year	Total
	1973	1974/1	1974/2	1974/3	1975/1	1975/1	
Senegal	30,000	15,250	----------	10,000	----------	5,000	60,250
Mauritania	15,000	18,250	10,000	21,500	10,000	10,000	84,750
Mali	35,000	20,250	45,000	27,500	11,226	8,774	147,750
Niger	46,000	22,250	45,000	40,500	12,432	12,568	178,750
Upper Volta	25,000	16,000	15,000	5,000	1,921	3,079	66,000
Chad	5,000	3,000	20,000	2,500	1,921	3,079	35,500
Gambia	----------	3,000	----------	2,000	2,500	----------	7,500
Guinea	----------	2,000	----------	5,000	----------	8,000	15,000
Cameroon	----------	----------	----------	1,000	----------	----------	1,000
Regional	----------	----------	----------	----------	----------	9,500	9,500
Subtotal	156,000	100,000	----------	250,000	40,000	60,000	----------
Crop year total	256,000			290,000		----------	606,000

NOTES

Contributions by fiscal year: 1973, 156,000; 1974, 350,000; 1975, 100,000 (tranche 1); Total, 606,000.

1. Grain equivilencies are used for protective foods.
2. Donations through UNICEF in fiscal year 1973 and 1974 (9,152MT) not included. In fiscal year 1975, are included (7,300MT in first tranche).

DONOR FOOD AID COMMITMENTS TO THE SAHEL CROP YEAR 1973 (OCTOBER 1972–SEPTEMBER 1973)

[Metric tons]

Donor	Senegal	Mali	Mauritania	Chad	Niger	Upper Volta	Other	Total
United States	45,000	55,250	33,250	8,000	68,250	41,250	[1] 5,000	256,000
EEC	17,000	35,000	5,000	6,000	14,500	15,000	----------	92,500
World food program [2]	----------	----------	----------	----------	----------	----------	6,500	6,500
France	8,000	10,000	8,000	9,000	10,000	9,500	----------	54,500
West Germany	7,000	5,210	9,000	----------	7,420	3,000	----------	31,630
Canada	4,000	5,000	5,000	2,000	5,500	4,500	----------	26,000
U.S.S.R.	2,000	13,000	3,000	2,000	2,500	2,500	----------	25,000
PRC	10,000	10,000	8,000	4,000	10,000	5,000	----------	47,000
Total	93,000	133,460	71,250	31,000	118,170	80,750	11,500	538,630
Other donor [3]	----------	----------	----------	----------	----------	----------	----------	74,370
Grand total	----------	----------	----------	----------	----------	----------	----------	613,500

[1] Gambia, 3,000 metric tons; Guinea, 2,000 metric tons.

[2] The WFP contributed 57,500 to the Sahel in 1973, of which 49,000 was donated by the USG as follows: Senegal, 5,000; Mali, 10,000; Mauritania, 15,000; Chad, 5,000; Niger, 10,000; and Upper Volta, 4,000. The USG 49,000 is incorporated in the U.S. total. The remainer was donated by other countries to Gambia.

[3] Not broken down by recipient country. Major "Other" donors in 1973 were Argentina, 10,000; Sudan, 10,000; Pakistan, 10,000; Italy, 10,000; Nigeria, 6,000

Note: These figures are approximations and commitments only. They include about 100,000 metric tons of concessional imports. Protective foods are not shown. In 1973, the USG donated about 1,000 metric tons through UNICEF, EEC, 14,000; West Germany, 3,250; France 8,000. Smaller amounts from other donors.

FOOD GRAIN AVAILABILITIES—CROP YEAR 1973–74 (NOVEMBER 1973 TO OCTOBER 1974)

	Total	Mauritania	Senegal	Mali	Upper Volta	Niger	Chad	Gambia	Guinea	Cameroon	Not allocated
"Pipeline" [1]	239,382	39,269	52,570	63,524	38,877	27,782	17,360				
United States	239,165	36,234	4,940	68,734	17,525	83,360	20,000	2,372	5,000	1,000	
United States/WFP	32,675		5,060	8,500	2,475	12,140	2,500	2,000			
Total	271,840	36,234	10,000	77,234	20,000	95,500	22,500	4,372	5,000	1,000	
Denmark	15,750	5,000	1,000	3,000	2,000	2,000		[2] 2,750			
France	74,500	10,000	6,000	10,000	9,000	10,000	8,000				21,500
West Germany	35,000	10,000		10,000	3,000	10,000					2,000
EEC	110,000	14,000	15,000	26,000	15,000	30,000	10,000				
Canada	38,191	6,060	2,458	11,917	4,580	8,298	4,878				
Belgium	13,400	1,500	1,900	3,000	2,000	5,000					
United Kingdom	12,000			10,000				2,000			
Hungary	5,000	5,000									
Sweden	3,500					3,500					
PRC	6,000	6,000									
North Korea	8,000			8,000							
U.S.S.R.	10,500			10,000				500			
Licross	484					402	82				
Subtotal	834,547	133,063	88,928	232,675	94,457	192,482	62,820	9,622	5,000	1,000	23,500
Government purchases	240,200	10,000	87,200	87,000	20,000	23,000		13,000	NA	NA	
Total	1,083,747	143,063	176,128	319,675	114,457	215,482	62,820	22,622	5,000	1,000	23,500
Import requirement [3]	1,136,200	200,000	132,200	308,000	128,000	268,000	100,000	NA	NA	NA	
Surplus/Deficit (revised FAO) [4]	−81,075	−56,937	+43,928	+11,675	−13,543	−52,518	−37,180	NA	NA	NA	+23,500

[1] Food from 1972–73 commitment delivered from November 1973.
[2] Through WFP.
[3] Includes "buffer stock" as follows: Mauritania, 50,000; Senegal, 20,000; Mali, 50,000; Niger, 50,000; Upper Volta, 30,000; Chad, 50,000—Does not include Gambia, Guinea, Cameroon, requirement.
[4] Does not include Gambia, Guinea, and Cameroon.

Note: United States donated 40,000 MT as its last contribution fo icalendar year 1973–74. About 25,000 MT is in the form of protective foods (shown on protective foods table).

PROTECTIVE FOODS SHIPPED FROM NOVEMBER 1973

Donor	Mauri-tania	Senegal	Mali	Upper Volta	Niger	Chad	Gambia	Total
United States [1]	9,775	0	4,749	493	2,998	0	0	18,020
SFG	5,144	0	2,749	493	2,998	0	0	11,389
CSB	4,631	0	2,000	0	0	0	0	6,631
UNICEF (United States): ICSM	927	747	3,492	4,596	4,009	2,702	237	16,710
WFP	0	118	300	206	564	125	0	1,313
Oil	0	118	300	124	324	125	0	991
Fish	0	0	0	82	235	0	0	317
Milk	0	0	0	0	5	0	0	5
EEC [2]	3,000	0	2,700	3,338	2,358	300	0	11,696
Milk	2,000	0	2,700	2,478	1,583	300	0	9,061
Oil	1,000	0	0	860	775	0	0	2,635
France: Milk	2,000	500	0	0	510	0	0	3,010
West Germany: Milk	0	0	0	1,300	50	0	0	1,350
Yugoslavia: Milk	11	0	0	0	0	0	0	11
Netherlands	0	0	124	0	55	0	0	179
Milk	0	0	110	0	55	0	0	165
Baby food	0	0	14	0	0	0	0	14
Canada: Milk	0	0	0	340	358	0	0	698
CARITAS: Milk	0	0	0	0	446	0	0	446
Austria: Milk	0	0	0	0	51	0	0	51
LICROSS: Milk	0	0	0	0	486	0	0	486
Sweden: Milk	0	0	0	0	180	0	0	180
Unknown	0	0	0	0	748	0	0	748
Biscuits	0	0	0	0	510	0	0	510
Baby food	0	0	0	0	238	0	0	238
Total	15,713	1,365	11,365	10,278	12,813	3,127	237	54,898
Milk	4,011	500	2,810	4,118	3,724	300	0	15,463
SFG	5,144	0	2,749	498	2,998	0	0	11,389
CSB	4,631	0	2,000	0	0	0	0	6,631
ICSM	927	747	3,492	4,596	4,009	2,702	237	16,710
Oil	1,000	118	300	984	1,099	125	0	3,626
Baby food	0	0	14	0	238	0	0	252
Fish	0	0	0	82	235	0	0	317
Biscuits	0	0	0	0	510	0	0	510
FAO need estimate	10,000	0	22,890	7,000	21,280	3,150	NA	64,320
Amount available	15,713	1,365	11,365	10,278	12,813	3,127	NA	54,661
Surplus/deficit	+5,713	+1,365	−11,525	+3,278	−8,467	−23	NA	−9,659

[1] The United States is planning to contribute an additional 15,867 ICSM through UNICEF in fiscal year 1975 (for 1974–75 crop year).

[2] Some pledged food has not been booked, especially the total 17,815 pledged by EEC.

Source: FAO/OSRO and U.S.G. figures.

SAHEL PORT SITUATION AS OF JULY 27, 1974 (AUG. 3 FOR DAKAR)

[In metric tons]

	Stocks					Reevacuations		
	July 6	July 13	July 20	July 27	Aug. 3	June	July	Average monthly evacuation rate
Senegal: Dakar	16,000	15,727	13,427	29,750	26,500	14,963	19,554	17,000
Mali:								
Dakar	62,097	59,145	55,815	51,911	48,146	17,358	14,628	15,000
United States	5,603	5,188	518	4,533	4,529			
Other donor	26,603	26,938	29,774	24,235	22,166			
Commercial	29,891	27,019	25,523	23,140	21,451			
Abidjan	37,514	NA	32,210	26,200	NA	[2] 6,050	[3] 17,206	15,000
Cotonou	NA	NA	NA	1,321	NA	NA	[1] 679	NA
Mauritania:								
Nouakchott	NA	NA	10,580	10,038	10,500	NA	[1] 522	NA
Dakar	2,498	3,322	3,818	5,867	6,197	6,726	[2] 1,818	5–6,000
Rosso	NA	NA	9,190	3,400	4,184	[2] 407	[1] 5,730	
Niger:								
Apapa	16,349	NA	7,876	8,545	NA	28,092	[3] 18,060	26,000
Cotonou	10,434	7,678	7,849	5,472	5,869	12,832	14,353	13,000
Parakou	NA	317	1,900	1,403	2,000	NA	[2] 7,130	
Upper Volta:								
Abidjan	11,635	10,025	7,099	2,763	NA	[3] 5,018	[3] 9,228	10,000
Tema	2,809	1,490	807	92	NA	2,938	3,468	3,000
Lome	NA	0	2,526	2,184	NA	NA	[2] 816	NA
Chad:								
Apapa	862	4,336	745	1,251	NA	6,782	3,036	5,000
Port Harcourt	9,933	7,997	7,309	6,618	NA	6,013	3,128	4,500
Maiduguri	10,735	10,429	9,457	9,566	NA	NA	[4] 6,445	

[1] Week of July 20.
[2] 2 weeks only.
[3] 3 weeks only.
[4] Estimated.

ARRIVALS IN PORT—ALL FOOD COMMODITIES, FROM NOVEMBER 1973

Country/Port	November	December	January	February	March	April	May	June	July	August [1]	September [1]	October [1]	Total
Senegal	32,584	7,000	34,910	19,400	6,500	5,829	27,408	25,172	31,045	1,000	4,384	----------	195,232
Dakar	32,584	7,000	34,910	19,400	6,500	5,829	27,408	25,172	31,045	1,000	4,384	----------	195,232
United States	13,750	0	0	0	0	4,329	3,887	1,976	0	0	0	----------	23,942
Other donors	3,834	2,000	910	0	2,000	1,500	14,221	4,596	1,045	1,000	4,384	----------	35,492
Commercial	15,000	5,000	34,000	19,400	4,500	0	9,300	18,600	30,000	0	0	----------	135,800
Mali	27,141	3,745	10,231	12,413	24,212	68,335	52,409	27,618	23,287	12,344	7,186	----------	268,921
Dakar	27,141	3,745	5,231	12,413	15,219	49,435	26,530	10,202	5,918	0	907	----------	156,741
United States	15,884	0	231	12,413	0	11,438	1,829	0	0	0	0	----------	41,795
Other donors	6,057	1,145	0	0	4,219	17,417	10,851	7,000	5,918	0	907	----------	53,514
Commercial	5,200	2,600	5,000	0	11,000	20,580	13,850	3,202	0	0	0	----------	61,432
Abidjan	0	0	5,000	0	8,993	18,075	25,879	17,416	13,769	12,344	6,279	----------	107,755
United States	0	0	0	0	0	11,275	5,128	11,239	7,900	2,544	1,604	----------	39,690
Other donors	0	0	5,000	0	8,993	6,800	9,751	177	5,896	9,800	4,675	----------	51,065
Commercial	0	0	0	0	0	0	11,000	6,000	0	0	0	----------	17,000
Oran (United States)	0	0	0	0	0	0	0	0	1,600	0	0	----------	1,600
Cotonou (United States)	0	0	0	0	0	825	0	0	2,000	0	0	----------	2,825
Mauritania	19,760	2,290	8,199	8,954	3,700	4,521	22,921	7,357	5,182	18,721	6,852	----------	108,457
Nouakchott (OD)	11,510	2,000	6,040	1,500	3,700	2,000	7,700	3,108	0	2,000	0	----------	39,558
Nouadhibou (OD)	0	0	0	0	0	0	3,000	0	0	2,000	0	----------	5,000
Dakar	8,250	290	2,159	7,454	0	2,521	12,221	4,249	5,182	14,721	6,852	----------	63,899
United States	8,250	290	2,159	7,454	0	2,500	12,221	3,953	4,358	5,071	453	----------	46,709
Other donors	0	0	0	0	0	21	0	296	824	9,650	6,399	----------	17,190

See footnotes at end of table.

ARRIVALS IN PORT—ALL FOOD COMMODITIES, FROM NOVEMBER 1973—Continued

Country/Port	November	December	January	February	March	April	May	June	July	August [1]	September [1]	October [1]	Total
Niger	8,270	5,513	5,665	8,911	5,874	25,077	32,605	43,741	25,683	9,521	6,598	----------	177,458
Apapa	0	0	0	3,320	2,212	12,204	18,246	26,141	17,288	5,772	5,918	----------	91,101
United States	0	0	0	0	2,000	12,204	10,241	15,916	16,193	4,236	0	----------	60,790
Others (including commercial)	0	0	0	3,320	212	0	8,005	10,225	1,095	1,536	5,918	----------	30,311
Cotonou	8,270	4,513	0	5,591	3,662	9,873	12,459	9,480	8,095	249	680	----------	62,872
United States	4,050	0	0	3,991	0	1,500	3,000	6,249	1,667	249	0	----------	20,706
Others (including commercial)	4,220	4,513	0	1,600	3,662	8,373	9,459	3,231	6,428	0	680	----------	42,165
Port Harcourt	0	1,000	5,665	0	0	3,000	1,900	8,120	300	0	0	----------	19,985
United States	0	0	3,465	0	0	3,000	0	4,820	0	0	0	----------	11,285
Others (including commercial)	0	1,000	2,200	0	0	0	1,900	3,300	300	0	0	----------	8,700
Tema (others)	0	0	0	0	0	0	0	0	0	2,000	0	----------	2,000
Algiers (United States)	0	0	0	0	0	0	0	0	0	1,500	0	----------	1,500
Upper Volta	12,100	1,948	6,249	6,096	3,824	10,957	16,699	12,514	11,504	9,356	5,077	----------	96,324
Abidjan	7,200	1,948	0	0	1,324	7,767	8,250	10,955	7,354	3,849	5,077	----------	53,724
United States (WFP only)	0	0	0	0	0	0	0	0	0	2,475	0	----------	2,475
Others (including commercial)	7,200	1,948	0	0	1,324	7,767	8,250	10,955	7,354	1,374	5,077	----------	51,249
Tema	4,900	0	6,249	6,096	2,500	3,190	5,707	59	0	5,507	0	----------	34,208
United States	0	0	6,249	6,096	2,500	190	5,207	59	0	3,507	0	----------	23,808
Other	4,900	0	0	0	0	3,000	500	0	0	2,000	0	----------	10,400
Lome	0	0	0	0	0	0	2,742	1,500	4,150	0	0	----------	8,392
United States	0	0	0	0	0	0	1,242	1,500	4,150	0	0	----------	6,892
Other	0	0	0	0	0	0	1,500	0	0	0	0	----------	1,500

Chad	2,500	2,100	0	2,000	5,402	7,949	7,070	12,857	1,586	0	9,878	349	51,691
Apapa	2,500	0	0	2,000	2,402	7,949	0	1,884	1,586	0	[2] 5,000	0	23,321
United States	0	0	0	0	0	5,949	0	0	461	0	[2] 5,000	0	11,410
Other (including commercial)	2,500	0	0	2,000	2,402	2,000	0	1,884	1,125	0	0	0	11,911
Port Harcourt	0	2,100	0	0	3,000	0	7,070	10,271	0	0	4,878	0	27,319
United States	0	0	0	0	3,000	0	2,070	5,971	0	0	0	0	11,041
Other (including commercial)	0	2,100	0	0	0	0	5,000	4,300	0	0	4,878	0	16,278
Douala (other)	0	0	0	0	0	0	0	702	0	0	0	349	1,051
Other countries [3]	0	0	0	0	0	[4] 900	[4] 1,191	[4] 13	0	8,695	[4] 100	----------	10,899
United States	0	0	0	0	0	[4] 900	[4] 1,100	0	0	[5] 5,945	0	----------	7,945
Other (as known)	0	0	0	0	0	0	[4] 91	[4] 13	0	[4] 2,750	[4] 100	----------	2,954
Total Sahel	102,355	22,596	65,254	57,774	49,512	123,568	160,303	129,272	98,287	59,637	40,075	349	908,982
United States	41,934	290	12,104	29,954	7,500	54,110	45,925	51,683	38,328	25,527	7,057	0	314,412
Other donor	40,221	14,706	14,150	8,420	26,512	48,878	80,228	49,787	29,958	34,110	33,018	349	380,364
Commercial [6]	20,200	7,600	39,000	19,400	15,500	20,580	34,150	27,802	30,000	0	0	0	214,232

[1] Preliminary figures.
[2] United States is replacement from Niger diversion. Will be repaid September or October.
[3] The Gambia, Guinea, Cameroon.
[4] Gambia.
[5] Guinea—5,000; Cameroon—965.
[6] Mali and Senegal.

Source: PUSG and OSRO figures.

NOTES

(A) United States includes our contribution through WFP but not UNICEF.
(B) Commercial imports usually not known in advance.
(C) There may be some changes due to "borrowing" (i.e. Mali/Maur.; Mali/Niger).
(D) Approximately 835,000 has been delivered.

STATUS OF WEST AFRICA DROUGHT EMERGENCY SHIPMENTS AS OF JUNE 30, 1974 (FISCAL YEAR 1974 ALLOCATIONS) FOR U.S. GOVERNMENT

[In metric tons]

Country	Total	Delivered	En route (booked)			Unbooked
			July delivery	August delivery	Total, July and August	
Niger:						
Emergency	96,054	77,376	15,693	2,985	18,678	0
Sorghum	95,308	76,878	15,693	2,736	18,429	0
SFG	747	498	0	249	249	0
WFP	11,696	6,029	4,167	1,500	5,667	0
Sorghum	11,696	6,029	4,167	1,500	5,667	0
Total	107,750	83,405	19,860	4,485	24,345	0
Upper Volta:						
Emergency	33,525	25,868	4,150	3,507	7,657	0
Sorghum	27,778	20,370	4,150	3,258	7,408	0
Corn	5,000	5,000	0	0	0	0
SFG	747	498	0	249	249	0
WFP	2,475	0	0	2,475	2,475	0
Sorghum	2,475	0	0	2,475	2,475	0
Total	36,000	25,868	4,150	5,982	10,132	0
Mali:						
Emergency	84,475	72,975	11,500	0	11,500	0
Sorghum	78,977	67,477	11,500	0	11,500	0
Corn	5,000	5,000	0	0	0	0
SFG	498	498	0	0	0	0
WFP	8,275	6,275	0	2,000	2,000	0
Sorghum	8,275	6,275	0	2,000	2,000	0
Total	92,750	79,250	11,500	2,000	13,500	0
Senegal:						
Emergency	19,806	19,806	0	0	0	0
Sorghum	14,806	14,806	0	0	0	0
Corn	5,000	5,000	0	0	0	0
WFP	5,194	5,194	0	0	0	0
Sorghum	5,194	5,194	0	0	0	0
Total	25,000	25,000	0	0	0	0
Mauritania:						
Emergency	50,000	42,113	3,451	4,346	7,887	0
Sorghum	37,865	36,615	1,250	0	1,250	0
Corn	5,000	5,000	0	0	0	0
SFG	4,504	498	1,384	2,622	4,006	0
CSB	2,631	0	907	1,724	2,631	0
Total	50,000	42,113	3,541	4,346	7,887	0
Chad:						
Emergency	23,000	19,539	3,461	0	3,461	0
Sorghum	23,000	19,539	3,461	0	3,461	0
WFP	2,500	2,500	0	0	0	0
Sorghum	2,500	2,500	0	0	0	0
Total	25,000	22,039	3,461	0	3,461	0
Gambia:						
Emergency	3,000	3,000	0	0	0	0
Sorghum	3,000	3,000	0	0	0	0
WFP	2,000	2,000	0	0	0	0
Sorghum	2,000	2,000	0	0	0	0
Total	5,000	5,000	0	0	0	0

STATUS OF WEST AFRICA DROUGHT EMERGENCY SHIPMENTS AS OF JUNE 30, 1974 (FISCAL YEAR 1974 ALLOCATIONS) FOR U.S. GOVERNMENT—Continued

[In metric tons]

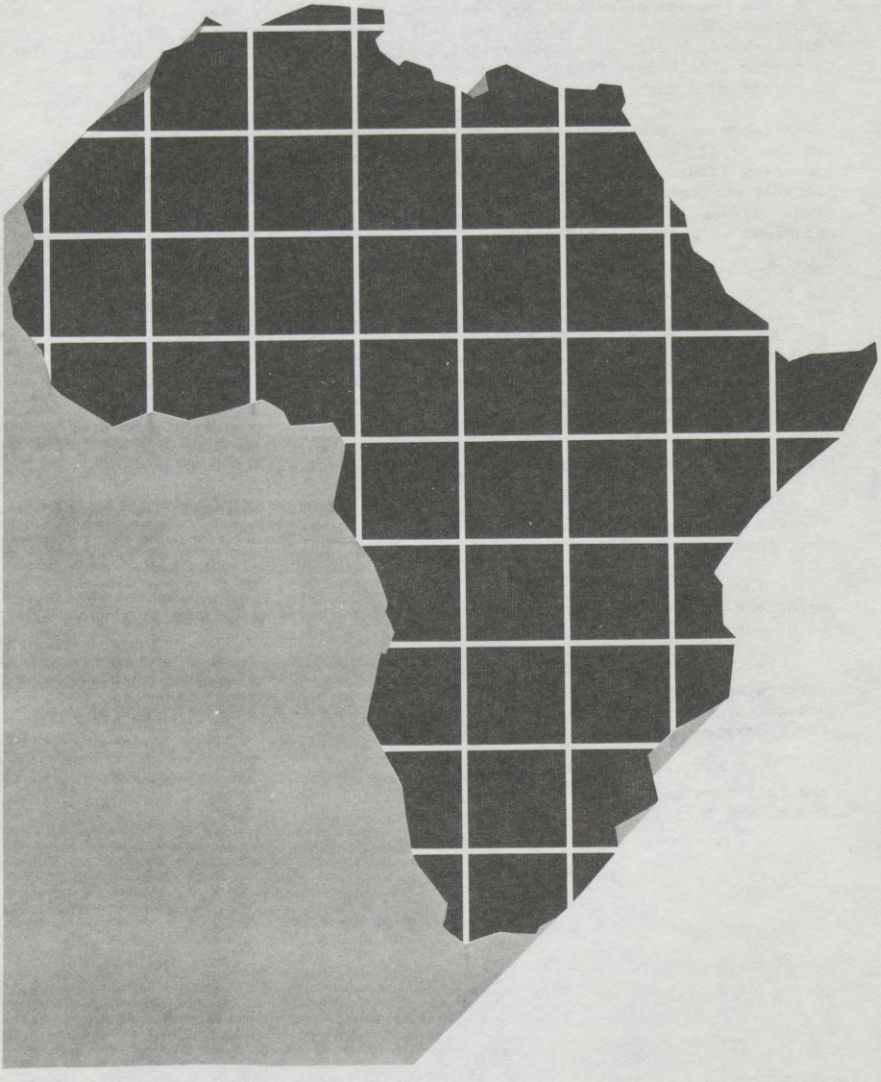
Country	Total	Delivered	En route (booked)			Unbooked
			July delivery	August delivery	Total, July and August	
Guinea:						
Emergency	7,000	2,000	0	5,000	5,000	0
Sorghum	3,000	2,000	0	1,000	1,000	0
Corn	4,000	0	0	4,000	4,000	0
Total	7,000	2,000	0	5,000	5,000	0
Cameroon:						
Emergency	1,000	0	0	1,000	1,000	0
Cornmeal	1,000	0	0	1,000	1,000	0
Total	1,000	0	0	1,000	1,000	0
Emergency	317,860	262,677	38,345	16,837	55,183	0
Sorghum	283,734	240,685	36,054	6,993	43,048	0
Corn	24,000	20,000	0	4,000	4,000	0
Cornmeal	1,000	0	0	1,000	1,000	0
SFG	6,496	1,992	1,384	3,120	4,504	0
CSB	2,631	0	907	1,724	2,631	0
FP	32,140	21,998	4,167	5,975	10,142	0
Sorghum	32,140	21,998	4,167	5,975	10,142	0
Grant total	350,000	284,675	42,514	22,811	65,325	0

Note: These figures do not include U.S. donations of ICSM through UNICEF (9,053 in fiscal year 1974).

APPENDIX II

REPORT TO THE CONGRESS ON FAMINE IN SUB-SAHARA AFRICA

(By the Agency for International Development, September 1974)



Introduction

Drought is becoming the routine in parts of Africa. Since 1968 and especially during the 1970's, the reality of droughts achieved massive proportions, with increasing costs - human and monetary - required to keep the consequences tolerably manageable. The lives of millions have been affected, the economic fabric of national governments has been deeply disturbed, and the future of large regions is now in peril.

The problem of drought has been most spectacularly manifested in the region known as the Sahel, comprising large parts of Mali, Mauritania, Niger, Chad, Upper Volta and Senegal. Separate drought problems have had a severe effect upon Ethiopia. More limited drought conditions have occurred in a number of other countries.

There has been a world-wide outpouring of concern about the drought in the Sahel, and more recently for emerging drought conditions in Ethiopia. The less dramatic drought conditions in other parts of Africa have been largely controlled by local government efforts, but it has become increasingly evident that some of these governments need help in lessening the problems which face their people.

The United States has been a major participant in providing assistance to those affected by drought in Africa. The Congress has played a key role in permitting the effectiveness of this United States effort. It supported the U.S. response to the critical needs in the Sahel through the authorization of $25 million in special funding under Section 639(A) of the Foreign Assistance Act of 1973. As the gravity of drought problems in Africa spread, the Congress acted further through the Foreign Disaster Assistance Act of 1974 which provided an additional $85 million to meet drought needs not only in the Sahel but in other African countries - including a provision that $10 million of this amount would be available for Ethiopia.

In authorizing the original $25 million for Sahel emergency programs, the Congress requested, in Section 639(A) of the 1973 Foreign Assistance Act, that:

"The President shall report to the Congress as soon as possible on solutions to this problem of famine and further propose how any of these solutions may be carried out by multilateral organizations."

In proposing the 1974 Foreign Disaster Assistance Act, the Senate Foreign Relations Committee recognized that the full dimensions of drought problems in Africa were not yet known. In its Report Number 98-835, the Committee stated:

"The Committee notes that the testimony before it demonstrates that the full magnitude of the ongoing and spreading drought is not yet full known, and that it may well exceed the most pessimistic of current

projections. With this in mind, the Committee requests AID to report fully on the extent of the drought damage of each African country which is presently an AID recipient, the estimated amount needed to relieve this damage, and the amount of contributions scheduled to be made by the various local governments, by other donors, and by the United States."

The following report is intended as a first response to these requests.

It must be recognized, however, that the problem of drought continues in many areas in Africa. In particular, the drought in the Sahel has not yet been broken. The repercussion of these events can not, therefore, be fully told. In the Sahel, an immense emergency relief program continues to be needed. In Ethiopia, while drought in the north has eased, drought in the south is spreading. In both the Sahel and Ethiopia, major recovery programs will be required if the people of these regions are to regain hope for the future and achieve conditions where future droughts will have lesser impact.

This report, then, seeks to describe the situation in drought stricken regions of Africa as of June 30, 1974. The immediate drought impact is described, as are relief programs underway. An indication is given of what continued relief programs may be required, although the full dimensions of such need cannot be predicted. The report also suggests some of the longer term needs of the affected countries, as well as steps which are being taken to plan better how these long term needs can be met.

But given the contribution of the problems of drought, this must be looked upon as an interim report. AID will provide additional information to the Congress in the future as the situation develops and requirements are better defined.

Part I - Drought in the Sahel

A. The Situation - Past and Present

Over recent years, the world has become aware of a catastrophic drought in the sub-Sahara part of West Africa known as the Sahel. Following dry years between 1968 and 1971, a sharp decline in rainfall and agricultural production in 1972 and 1973 has left destitute large parts of the population of Senegal, Mauritania, Mali, Upper Volta, Niger and Chad.

The Sahel - an Arabic word meaning "border" and representing the shore of the Sahara Desert - is a two million square mile area of semi-arid lands extending roughly 2600 miles eastward from the Atlantic Ocean and lying between latitudes of 10 and 20 degrees north. An area of fragile ecological balance, inhabited largely by nomadic herdsmen and subsistence farmers, it is one of the least developed regions of the world. Existence of all life is heavily dependent on sparse and variable rainfall. Over a sustained dry spell, such as the present one, the threat of starvation and death becomes a reality.

The Sahel has experienced multi-year droughts before. A severe one occurred 50 years ago, and there have been periodic droughts since. But the present situation, now five or more years old, may well be the worst drought in history. It is certainly a major catastrophe. The Center for Disease Control undertook a nutritional survey in 1973 which estimated that as many as 100,000 may have died. International experts have estimated that perhaps 40% of the goats, sheep, cattle and camels, on which much of the economy and social structure rests, have fallen victims to the drought.

Lack of rain has not been the only factor in today's plight. The population of humans and livestock has grown greatly over recent decades, straining the limited resources of the Sahel. Levels of agricultural productivity have fallen, causing farmers to extend cultivation into more and more marginal lands in order to feed the increasing population. The Sahara has encroached on fertile lands - estimates suggest that 250,000 square miles of arable land have been lost to the desert over the past 50 years. Thus, even before the drought there was deterioration in the land and a weakening of the physical resources upon which the people depended.

With the coming of the drought, particularly with the sharply lower rainfall of 1972 and 1973, the situation abruptly became far more serious. Trees and grasslands were destroyed by overgrazing. Pasturages became barren and eroded. Lakes, rivers and wells shrivelled and dried up. Reserves of grain, including seed stocks, were consumed. Thousands of nomads, their livestock destroyed, congregated in cities or refugee camps - or perished. Farmers, unable to remain on their lands, moved desparately to the cities and feeding centers.

AID had maintained modest technical assistance and food aid programs in the Sahel, with approximately $119.2 million* being provided from FY 1962 through FY 1972. With the failure of the 1972 harvest (the harvest season ends in October or November), it was obvious that major food imports would be required. AID substantially increased its food aid programs. The situation became increasingly desperate and in March, 1973 the six governments jointly declared a regional disaster and called for international assistance. This call for help led to a massive, world-wide response, in which the United States has played a leading role. This response continues to this day.

The first concern of international action has been to save lives. Food, medicine, tents, blankets, medical teams, were shipped quickly, in quantities larger than the region had ever before known. On occasion aid moved faster than systems could be organized to control its flow. In the first year of operations, lack of knowledge and enormous problems of transport and communications meant that aid did not reach all those in need. This year, that aid effort is vastly improved. Donors and African Governments alike are working more efficiently and with greater coordination in their efforts. People are receiving the food and medical attention they need.

While relief efforts are essential, they are not enough if the Sahelian people are to have a decent way of life. The drought is having a profound effect on the region: a fundamental weakening of the ecological base; disruption of social and economic relationships; the changing of basic ways of life.

For this reason, the African governments and the donor community - while seeking to meet the immediate needs of the Sahel's people - have also begun to seek answers to the underlying ecological and economic problems of the region. Only if these answers can be found and investments made to bring basic change to the region, can a repetition of today's disaster be avoided in the future.

AID's approach, in consort with that of the Africans and other donors, has thus been - first, to provide necessary emergency relief; second to undertake activities that can help alleviate immediate shortcomings in agricultural production and infrastructure and lay foundations for future, comprehensive development.

B. Emergency Relief

AID began its emergency relief efforts in November, 1972 when the first allocation of relief grain shipments was made. Large additional food movements followed, as has provision of non-food aid. Through June 30, 1974, U.S. commitments reached a total of approximately $130 million, of which $100 million is in food aid (including costs of ocean

*This figure does not include Africa-wide regional programs or Peace Corps programs.

freight and inland transport). U.S. food shipments of 506,000 metric tons (256,000 tons in 1972 - 1973 and 250,000 tons in 1973 - 1974)* represent about 46% of the world-wide contribution, by tonnage, of food going to the Sahel. Total U.S. assistance of $130 million represents about one-third of the world-wide drought response estimated at $361 million.

There have been many problems in delivering emergency assistance to the Sahel. Most of the U.S. food contribution is sorghum, a grain which has fortunately been in relatively good supply in the United States. But in 1973 there were times when ships were hard to obtain because of massive, world-wide grain movements. Ports in West Africa are poorly equipped to handle these huge shipments and there have been port congestion problems, particularly this year. Railroads were often inadequate to move foods inland on a timely basis. There are few paved roads. Ferries are slow and inefficient. River transport is important but capacity has been inadequate for the amounts involved. Roads leading to many outlying distribution points where nomads congregated are difficult at best, impassable when the rains come. Few trucks, and problems of their maintenance, have often caused difficulties. Airlifts have been needed and provided by several donors - including U.S. Air Force airlifts in Mali, Chad and Mauritania last year and now another airlift underway in Mali. Lack of storage has been a problem. The complexity of managing relief operations of this nature, involving six recipient governments and a number of donors under extremely difficult physical conditions, is without precedent.

Despite these problems, relief operations in the Sahel are functioning far better now than they did a year ago, particularly in providing for the needs of "at-risk" populations. The situation varies, of course, from country to country. The three nations hardest hit by the drought are Mali, Niger and Mauritania. Mali has vastly improved administration of its relief program and has a well functioning system despite the problem of large numbers of nomads who have become refugees and the long distances over which distribution systems must operate. Niger's food needs are the greatest in the region and movement of this vast quantity of goods has caused enormous logistical and administrative problems. Despite earlier weaknesses, Nigerien efficiency in administrating relief efforts has been made better in recent months and the system now seems generally well in hand. Mauritania is faced with major transport problems and weaknesses in government administrative structure. This has caused some distruption in the relief effort, although constant improvements have been made. Of the other Sahel states, Senegal has been least affected by the drought this year and has a well functioning relief program; Upper Volta has also been less touched and seems to have its problems under control. In Chad, the situation is more serious. Governmental weaknesses and attitudes have been such that the food distribution and relief effort are not yet meeting all national needs, especially the problems facing the "at-risk" population.

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*These figures represent shipments per crop year. For fiscal year, shipments total 156,000 million tons for FY 1973; 350,000 million tons for FY 1974.

In general, starvation has been largely avoided this year. Serious epidemics and drought related ailments have been minimized and are less a problem than in 1973. Signs of malnutrition have been greatly reduced. Despite large livestock losses last year, conditions of livestock this year have improved. As a whole, while many problems continue to face African governments and donors alike, the relief effort is reaching those in need on a timely basis.

However, the drought is not yet broken. This year's agricultural season has begun, but rains are again spotty. If the rains fail again this year, vast food imports will continue to be needed. Even if reasonable rainfall occurs, the disruptions that have hit the region mean that important food programs will be needed over the coming year.

Accurate food import requirements can be estimated only towards the end of the Sahel harvest season in October. It has been agreed that FAO will organize a Multi-Donor Food Assessment Study in October of this year - as was done last year - so that an estimate of food import needs can be made that is mutually acceptable to Africans and donors and can serve as a base for next year's donor food commitments. In the meantime, the United States is urging other donors to make new interim commitments to assure a continued flow of food beyond existing commitments which are based only on needs through October, 1974. For its own part, AID plans to announce additional contributions in July, 1974 of 100,000 tons of food - 40,000 tons to apply to the Sahel 1973-1974 crop year, bringing U.S. contributions in that period to a total of 290,000 tons; and 60,000 tons to be applied as a first phase of requirements in the 1974-1975 period.

C. Recovery and Rehabilitation Programs

With the $25 million provided under the special Sahel section of the Foreign Assistance Act of 1973, the United States was able to supplement its food aid and immediate disaster relief response with a broader range of actions to cope with drought problems. AID determined that a set of Recovery and Rehabilitation programs should be initiated with the following key aims:

a. Stimulating short term agricultural production, with emphasis on impact to be achieved in the 1974 and 1975 harvest seasons;

b. Protection of livestock;

c. Improvement of roads, river systems and other transport modes needed to assure delivery of relief supplies to remote areas;

d. Improvement of storage in remote areas;

e. Improvement of medical programs for at-risk populations.

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AID sent specialized teams and task forces to the Sahel in the fall of 1973 to identify specific projects which could meet the criteria indicated above. This led to a series of project recommendations covering approximately $15 million in activities which could be launched right away and have an early impact on easing drought problems. Most of the activities identified can be carried out in collaboration with other donors, the Peace Corps and U.S. voluntary agencies. A simplified programming system was established, specialized personnel were placed in the field to monitor the Recovery and Rehabilitation programs, and agreements were negotiated with the six Sahel governments. These programs are now underway.

In Mali, a major means for getting food into remote areas is use of the Niger River. But inadequate tugs, barges and cargo handling equipment limits the amount of food that can be moved. One of the Mali R&R projects is providing new motors for barges and improved cargo handling equipment - and all this equipment will be in operation by autumn, 1974.

In Mauritania, a potential source for increasing food production is better utilization of river in flood plains, and an R&R project in that country aims at stimulating an early increase in food production in these areas.

Throughout the Sahel, storage facilities in remote areas are limited, and several R&R projects aim at constructing new storage facilities, financing rental of temporary storage, and providing tarpaulins and other coverage for temporary storage in such areas.

In Chad, CARE plays an important role in distributing food and providing medical services to certain distressed areas and an R&R project in that country is supplementing CARE's capacity to carry out this distribution program.

AID currently has under consideration an additional number of R&R projects, potentially costing $10 to $15 million, which will be financed from the recent Foreign Disaster Assistance Act provision of $85 million for drought stricken areas.

D. Planning for the Future

While actively pursuing emergency relief programs and short range Recovery and Rehabilitation projects, AID is also working with Sahel governments and other donors in planning for the medium and long-term development of the Sahel. Only if longer term development activities can be successfully planned and carried out over the coming several years will the conditions which underlay the suffering now occurring because of drought be changed in ways which prevent a re-occurrence of today's disaster.

The African Governments themselves, at a meeting of their heads of State in September, 1973, laid out the general lines for a long-range development plan the cost of which is estimated at $800 million. But Africans and donors alike recognize that converting this general plan into an action program requires further study and the development of investment priorities.

To help in this long-range effort, AID has financed a contract with MIT to assess development alternatives available to Sahel governments. A number of scientific studies are underway to seek means to bring rapid technological change. These include studies on possible application of remote sensing and space technology to resource planning, climatological studies; studies on improved varieties of grain adaptable to the region and the like. Other donors are also undertaking studies of various development approaches. The African Governments, through an Inter-State Committee organized at their heads of State meeting in September, 1973, is seeking to organize and coordinate planning activities underway. It is anticipated that these various efforts will culminate in a series of international conferences in late 1974 to look at planning efforts undertaken to date and to chart how these can be brought together into a more comprehensive effort.

Even while this longer term comprehensive planning is proceeding, other steps are being taken to meet Sahelian development needs.

On the basis of the Foreign Disaster Assistance Act of 1974, AID has proceeded to work out with the Sahel governments a series of national projects aimed specifically at improving agricultural and livestock production. These activities are, in a sense, further extension of agricultural projects undertaken through the R&R program. They are intended to help agriculturalists and livestock herders improve their well-being while more comprehensive, regional development plans are being organized.

Also, a number of longer term regional efforts are being planned which will fit into more comprehensive longer term efforts. Mali, Mauritania and Senegal have joined together to plan major improvement in use of the Senegal River waters and have invited donors to participate in a multi-year river basin development program. The IBRD has organized a multi-country effort to control river blindness in the Volta River basin as a first step in exploiting the water resources of this area and AID is participating in this effort. The Lake Chad Basin Commission has plans for long term development in that region and as part of its medium term effort AID is considering some experimental work in development of low cost irrigation systems in the Chad Basin area.

Africans and donors alike recognize that more planning efforts are needed if the problems of the drought stricken Sahel are to be eased. This planning must take into account the relationships between the arid and semi-arid lands of the Sahel itself and the wetter, generally more productive countries to the South. There is increasing recognition by Africans and donors that only if comprehensive development programs are designed and financing found for them in years to come can one hope to avoid a repetition of the tragedy facing the people of the Sahel in 1974.

Part II - Drought in Ethiopia

Ethiopia, one of the least developed countries in the world, has often suffered adversity. This has become pronounced in recent years as low rainfall has led to drought and famine. Originally confined to the north, drought conditions have recently spread to the south as well. It is estimated that from two to six million people are affected by drought conditions at present.

Weak and sporadic rainfall is not uncommon in parts of Ethiopia. In the two worst hit areas of northern Ethiopia, Wollo and Tigre provinces, poor rains in 1971 were followed by good rains in early 1972 which then turned scant later in the year. The "small rains" of early 1973 were critical for this region - but the small rains failed throughout Ethiopia. At the same time, as in the Sahel, these provinces faced ecological imbalances related to increasing population pressure on steadily weakening physical resources.

In February, 1973, the FAO Early Warning System signalled probable food shortages in these provinces. In April, the Ethiopian government established a drought relief mechanism, banned exports of most domestic cereals and called for international help. AID responded promptly, diverting grain in country from other programs to relief activities. In anticipation of sub-standard 1973 harvests, AID committed 18,000 tons of grain, 10,000 through the World Food Program and 8,000 tons bilaterally. Other donors also responded.

By the end of 1973, it was evident food aid alone was not enough. In December, the U.S. Ambassador declared a disaster situation, permitting utilization of AID Disaster Relief Funds for non-food needs. Levels of U.S. food aid were also increased.

By June 30, 1974, total U.S. assistance to Ethiopia reached a value of just under $18.0 million, $15.6 million for the purchase and transport of 64,418 tons of relief food and the remainder for temporary storage facilities, in-country transport, blankets and tents, medical supplies, use of helicopters and the like.

The Ethiopian government also took further steps. Domestic cereals from surplus areas were provided to the drought region. Relief administration improved. Military trucks were organized to carry relief goods. Efforts were undertaken to clear stock build-ups in the ports, and these efforts were largely successful by June.

Other donor efforts also increased. Food and non-food commitments went up. Donors began consideration of recovery type programs proposed jointly by the Ethiopian government and the United Nations Disaster Relief Office.

At this time, while the situation in the north is still difficult, it appears to be easing. Rains improved this spring. Relief administration is much better. Plans for recovery programs are going ahead with good donor response.

But since early 1974, drought has spread to the south, an area of much larger distances, more scattered populations, with pastoral rather than settled groups. These vast distances and poor communications make it difficult to know the precise dimensions of the problem. For this reason, AID used three helicopters in the summer of 1974 to survey conditions in the south. The report which is being compiled as a result of this activity will give the government and donors a better idea of what needs to be done.

Current estimates for 1974, largely in the north, indicate still another sub-standard harvest. Donors have already committed 132,800 tons and are expected to pledge additional quantities in coming months. The United States is currently considering a new commitment of 20,000 tons. However, as surveys of the south progress, it is expected that estimates of overall national food needs will increase and substantial donor commitments again will be required.

AID has already initiated discussions with the government concerning participation in the medium term recovery program for the north jointly designed by FAO and the government (in which other donors are participating). In addition, it is clear that additional emergency actions and some recovery and rehabilitation activities will be required in the south as greater understanding regarding problems there emerges.

For these combined needs, in addition to food aid already committed and to be provided in FY 1975, AID now has tentatively identified uses of $10 million available under the Foreign Disaster Assistance Act of 1974 for the following purposes:

1. additional short term emergency (non-food) requirements;

2. relief and rehabilitation programs, north and south;

3. medium term rehabilitation, largely in the north.

Part III - Drought Problems Elsewhere in Africa

There are three types of drought-related problems which are occurring in Africa outside the Sahel and Ethiopia.

a. "Spillover" effects of the Sahel drought in adjacent areas, where lower than normal rainfall is occurring in ecological conditions not dissimilar from the Sahel.

b. Other side effects in these countries, such as migratory movements out of the Sahel and extensive pressure on transport systems caused by massive food shipments to the Sahel.

c. Drought conditions in other areas with direct relationship to the Sahel/Ethiopia situation.

In the first category, there appears to be inadequate rainfall in the northern parts of Guinea, Ivory Coast, Ghana, Dahomey, Nigeria, Gambia and the Cameroons. Somewhat similar conditions are occurring in Western Sudan. In these regions there have been increases in human and animal population as has occurred in the Sahel. Low productivity, limited infrastructure and weaker economic/social services exist in these regions than in the more southernly parts of the same countries. Because the afflicted regions are parts of larger economies, the ties to economically stronger regions are greater than for the Sahel and the impact of drought conditions on overall economies is less than for the Sahel countries themselves. For these reasons, these countries have been largely able to meet their needs with their own resources. However, in Guinea, Gambia, the Cameroons and, to a lesser extent, Ghana, food deficits were such that AID has been asked to provide PL 480 assistance. In all these countries, continuing analysis is needed to determine the extent both of immediate drought conditions and of longer term ecological deterioration which may be underway.

Population movement from the Sahel to the coastal states has occurred for many years. Until recently this was largely workers moving from the poorer Sahel to the industries in the south. With the onslaught of the drought, this migration has included nomads seeking better pastures and refugees seeking new food sources. This movement has particularly affected Nigeria, Ivory Coast, Dahomey and, in the other direction, Algeria. Each of these countries is burdened with caring for large numbers of totally dependent persons.

There has also been heavy pressure on transport systems in the coastal countries. Ports and railways have been heavily burdened with food movements. The coastal states have accepted considerable sacrifice

to their own imports and exports to assure movement of this food. Competition for trucking has driven costs up. Roads, rail beds, bridges and ferries have been worn by extensive movement and heavy loads.

Thus, the coastal states, in differing degrees, have been affected in two ways - by some drought conditions in their own northern regions, and by added burdens on their economies caused by the Sahel drought.

For now, the only other area in Africa experiencing drought conditions is East Africa. Here, the effect has been shorter and less severe than in the Sahel and Ethiopia. Tanzania has been most affected. This country - already among the poorest in the world and seriously affected by the energy crisis - has had to import large amounts of food and this has had deep balance of payments and budgetary effects.

Parts of Kenya were also hit by drought in 1973 and 1974, but recent rains, of about 80 per cent normal volume, have relieved the situation in most parts of the country. Kenya managed to meet most of the needs of its distressed people with its own resources. Somalia is always subject to variable rainfall and may be facing drought problems in coming months. Botswana is a drought prone area, although there do not now appear wide spread drought problems.

The only significant requests for AID assistance by countries outside the Sahel and Ethiopia have been for food aid. PL 480 responses have been made in Kenya, Guinea, Gambia, the Cameroons and, on a small scale, in Ghana. A request from Tanzania and another from Kenya is currently under study.

Reviews are currently underway with the countries indicated above to determine whether additional programs beyond food aid are appropriate. This may lead to some programming in these countries although AID's assessment is that highest priority must continue to go to the Sahel and Ethiopia. It is anticipated that the bulk of the $85 million provided under the Foreign Disaster Assistance Act of 1974 will therefore be used in the Sahel and Ethiopia.

ANNEXES

ANNEX I

ASSESSMENT OF SAHEL EMERGENCY, CURRENT SITUATION, AND RELATIONS WITH OTHER DONORS AND AFRICAN REGIONAL ORGANIZATIONS

Part I - Emergency Situation Throughout the Sahel as of June 30, 1974

The Sahelian drought is continuing to have catastrophic consequences. The vast area's fragile eco-system, that was so seriously disrupted by lack of rain in the summer of 1972, was further unbalanced by the inadequate rainfall of 1973 and the continued displacement of people and their dependency upon relief. The most obvious results were that harvests of feed grains in the six countries to meet minimal survival needs were short about 550,000 MTs for crop year 1972-73 and 650,000 MTs for 1973-74. It is not known how many people lost their lives last year as a result of the drought conditions for firm data is almost impossible to obtain. However, based on limited sampling, the HEW Center for Disease Control estimated that as many as 100,000 people may have died. It is obvious that this year the cumulative impact of inadequate or bare subsistence diets will leave many more susceptible to disease. The loss in livestock is incalculable, as is the impact on the many thousands of nomadic families whose way of life depends on cattle, camels, goats, and sheep. Many of these nomad families have again crowded into relief centers in Mali, Mauritania, Niger, and around urban areas throughout the Sahel. It has been estimated that up to 40% of all livestock were lost last year, and it will take years to regenerate national herds. One consequence in Mauritania is that deliveries of grain in some remote areas must be by truck this year and additional distribution centers must be erected because the camels used for transport in prior years are gone. The cumulative impact of the drought can be seen in other ways, as more demands are made on the limited arable land, pasturage, and water sources for the survival of man and beast. For example, in Mauritania's most agriculturally productive region bordering the Senegal River, plantings this spring are 40% of the usual acreage because of sub-normal bottom land flooding. It is too early to tell how extensive this year's rains may be, but, even if they are heavier than normal, the Sahelian tragedy will continue with displaced persons seeking to reestablish their lives, those weakened by malnutrition more susceptible to disease, and grain production levels too low to meet the population needs.

The known amounts of grain allocated so far in 1973-74 by all donors to the Sahel totals over 620,000 tons, or over 90% of the estimated needs prior to the October harvests. The United States is providing 290,000 MTs, or 45% of the total. This total of 290,000 MT includes an additional 40,000 MT provided subsequent to June 30, 1974 from FY 75 availabilities. In addition, deliveries to the ports are earlier than last year, and significant efforts are being made to pre-position grain in areas of greatest needs. However, there are

critical short-term problems because important links in the coastal transshipment system are in jeopardy. Of particular concern is the capacity of the ports of Dakar, Abidjan and Lagos to handle the enormous deliveries of relief supplies from May-July.

The primary port of entry for supplies for Mali, Mauritania, and Senegal is Dakar. This critical link in the distribution chain faces great strain because of limitations on evacuation rates, particularly to Mali. The grain for this landlocked country is transshipped by railroad, which has so far reached maximum monthly shipment rates of 15-20,000 MTs. There is now a backlog of about 50,000 MTs of grain in port, including about 23,140 MTs of grain purchased commercially by the Government of Mali. About 4,500 MTs of this amount is US grain. Steps are underway to seek to raise rail shipment rates, as well as to redirect shipments to other ports, including Abidjan, Cotonou, and Algiers.

The secondary point of entry for Mali is Abidjan, which is now also strained with commercial imports and exports as well as donated grains. Fortunately, closed storage is not a problem at this time and US grain in this port is moving out on a regular basis.

There have been reports of spoilage in this port, but this appears to relate primarily to a commercial purchase by the Government of Mali of 11,000 tons of Pakistan rice which was apparently spoiled before it arrived in port.

The other critical external link is the Port of Lagos, through which a majority of over 250,000 tons of grain pledged by all donors for Niger and Chad is to be delivered. The evacuation rate of the port had been only about 12,000 MTs per month and the port problems have been exacerbated by Nigerian railway breakdowns and strikes by railway and port workers. Steps have been taken recently to augment use of truck transport from this port to Niger and Chad, and about 25,000 MT a month can now be evacuated to Niger and about 12,000 MT per month can be sent to Chad. Actual shipments to Chad have been lower due to bottlenecks at internal points. The U.S. had also contracted in Lagos with a bulk/bagging facility, which has enabled us to greatly accelerate our deliveries for Niger and Chad.

Two intermediate inland points in the transshipment train have also been of considerable concern: Rosso in Mauritania and Maiduguri in Nigeria (for grains going to Chad). US-donated grains for Mauritania are shipped via Dakar (because Nouakchott is already flooded with other donor grain) to Rosso. The river crossing is a problem because of poor ferry service, although early arrival of a British-donated ferry has eased the situation. However, internal distribution throughout Mauritania remains a problem. Maiduguri, which is the staging point for movement into Chad, is plagued by physical problems (rains, rutted roads) and differences on how to use Chadian and

Nigerian commercial trucking to move grains into Chad.

While these and other major problems remain to be dealt with this year, the United States and other donors, and most of the African Governments have learned and applied important lessons gained from last year's experience. For example, determination of grain requirements, donor commitments to meet these requirements, and the actual movement of grains (particularly American grains) has been accomplished far earlier this year than last. In October 1973, an FAO Multidonor Mission encouraged and participated in by the United States, visited the six most affected countries of the Sahel and assessed food requirements for the coming crop year. Donations by the United States and other nations were announced soon thereafter. In fact, commitments for most of the 620,000 tons of grains pledged to date were made by January 1974. The US is considering and additional allocation and delivery in the first quarter of FY 1975 which, with hoped-for further commitments by other donors, would mean that the revised FAO grain need estimate of 650,000 MTs will have been met. In contrast, last year there was only an informally coordinated assessment of need by donor states and the majority of grain commitments were still being sought in the late spring of 1973. The same range of improvement is evident in this year's deliveries. Specifically, only about 75,000 tons, or about one-third of the United States total commitment in the period prior to the 1973 harvest (crop year 1972-73) was actually delivered in Africa by June 30, 1973. This year, 185,000 tons out of our 290,000 ton commitment, or 65% will be delivered by June 30.

An additional 65,000 MT is being delivered in July and August with the remaining 40,000 MT to be delivered this fall. While shipments from other donors have not moved as quickly as those from the United States, there has been some acceleration, due particularly to the coordination efforts provided by the FAO Office of Sahelian Relief Operations in Rome.

Internal measures by the African Governments concerned have also proceeded earlier and more effectively than last year. These measures include better organization of distribution systems; pre-positioning of grains in remote areas that are inaccessible by road in the rainy season; mobilization of military and private truckers for distribution; and improved administration of relief camps. The United States and others have helped in this complex process by financing the enormously increased POL costs, truck purchases and rentals, key road and bridge repairs, deepening and repair of wells, additional storage facilities, vaccines and fortified foods, and management expertise in various sectors of the relief effort to strengthen the capacities of the Governments to deal with their problems.

While food distribution is underway, as are the other emergency actions noted above, the United States and others are seeking to come to grip more comprehensively with the interrelated problems of malnutrition, disease, and care of displaced and dependent families. We and others

have provided vaccines, fortified foods, and support for relief camps. A medical team from Yale has examined medical needs and made recommendations for improved health delivery. The HEW Center for Disease Control has sent medical epidemiologists to the five countries to help establish nutritional surveillance among the most vulnerable of the population. We have also contributed $1 million through the FAO Sahel Trust Fund to support WHO and UNICEF health programs and $100,000 to the League of Red Cross Societies relief camp program. An AID task force has been organized to develop further guidelines and parameters to deal with the displaced persons problem in what will be a most critical aspect of drought recovery measures by all donors in the next two or three years.

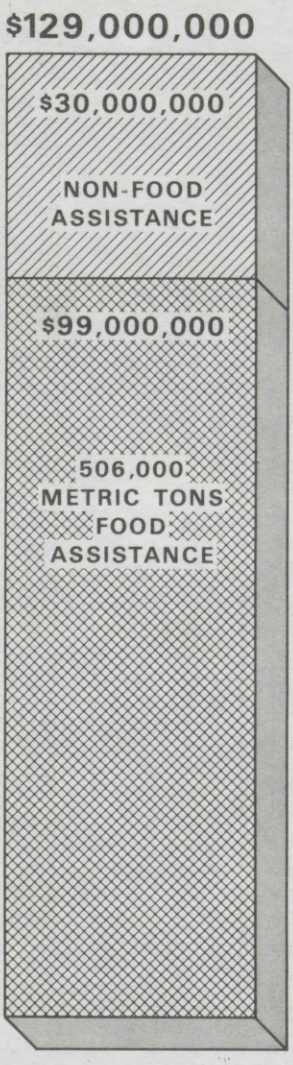
In order to help resolve the critical port congestion problems in Dakar and Lagos, noted above, AID sent a task force to Dakar with a mandate to determine what exceptional measures might be undertaken. For example, we will finance the rental of such additional storage space outside the port proper as may be needed to protect grains from spoilage. The Governments of Mali and Senegal have been addressing the problem of augmenting the carrying capacity of their jointly-owned railroad and a Danish logistics team is helping in this effort. This has resulted in a recent agreement which could eventually lead to a doubling of transport on this rail line from 12-14,000 tons a month to as much as 28,000 tons of grain.

As for the port of Lagos, in early May an AID task force worked with specially-assigned UN logistics experts to negotiate a contract with Nigerian truckers to move all donors' grain to Chad and Niger at the rate of up to 1,000 MTs per week in addition to the 500 MTs per day normally scheduled to move by rail. While there have been problems in reaching the level of evacuation forecast, we are hopeful that these steps will significantly ease port congestion problems and in turn meet the supply needs of Niger and Chad.

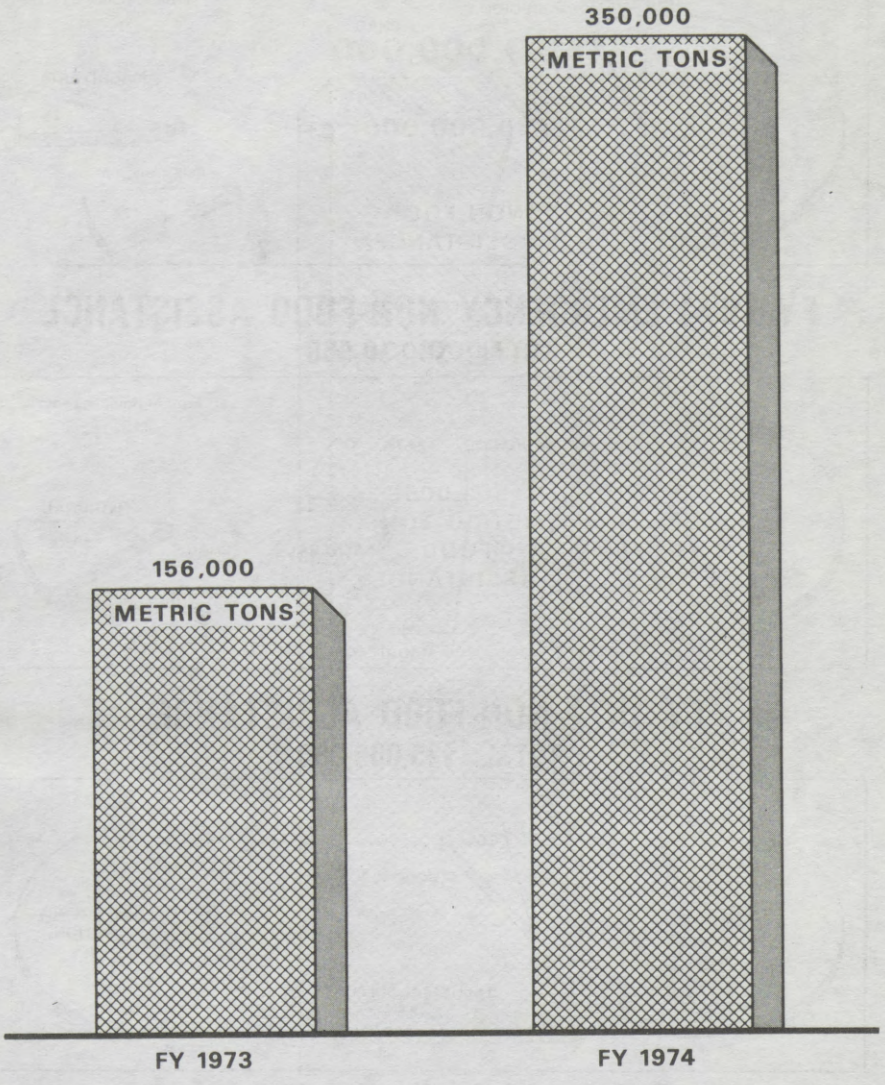
With the availability of the $25 million provided under the special Sahel provision of the Foreign Assistance Act of 1973, the United States has been able to undertake a broader range of actions addressed to easing the problems caused by the drought. In particular, AID has organized a set of Recovery and Rehabilitation programs in each of the six Sahel states. These R and R programs are addressed at meeting critical needs in the immediate future and are designed to assist the people of the Sahel to improve their capacity to deal with the pervasive problems posed by the drought. The R and R programs include actions to improve movement of foods into more remote areas, such as road maintenance, rental of trucks, and the like; improvement of grain storage in remote areas by new construction and rental of special facilities; actions to stimulate agricultural production in the short term, such as provision of seeds and handtools; protection to existing livestock through provision of vaccines and supplemental foods; and assistance in medical programs, particularly in refugee camps and remote areas, through provision of medicines, vaccines, and similar

actions. The R and R program has been designed to have as much impact as possible prior to the harvest period of September-October, 1974, and with full impact within 18-36 months. These programs will be continued and augmented with the additional funds made available on July 8, 1974, by amendment to the special Sahel Act.

TOTAL FY 1973–FY 1974 ASSISTANCE TO SAHELIAN AFRICA

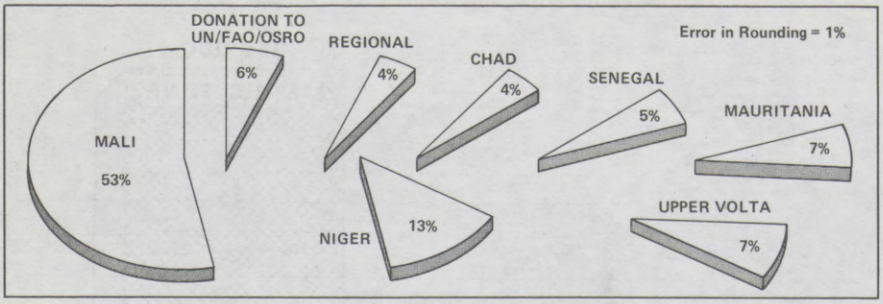


USG PL 480 CONTRIBUTIONS



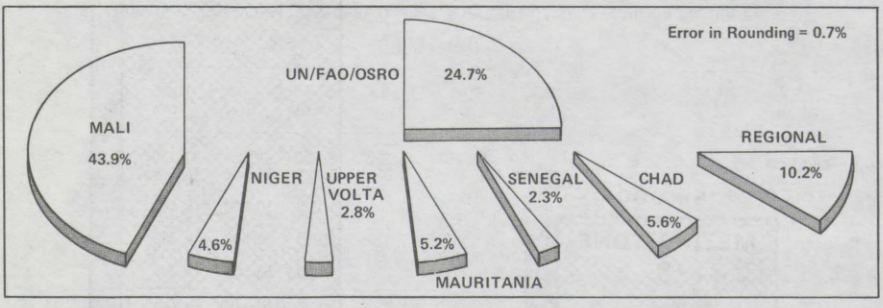
FY 1973 EMERGENCY NON-FOOD ASSISTANCE

TOTAL: $4,696,916



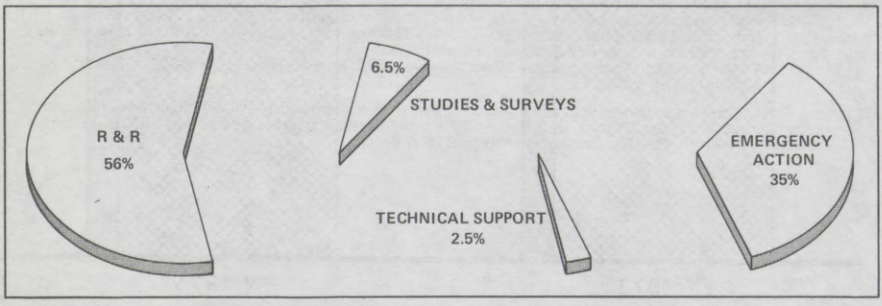
FY 1974 EMERGENCY NON-FOOD ASSISTANCE

TOTAL: $8,686,658



FY 1974 NON-FOOD ASSISTANCE

TOTAL: $25,000,000



Part II - Current Situation in Individual Sahel States

Mali: Mali is among the more seriously affected of the Sahel states: a majority of the country having suffered from prolonged drought. Mali lists close to 1.9 million victims of the drought within its estimated 5.2 million population. Some 40 relief camps have been structured to care for the most severely affected, mostly nomadic families. Mali's grain production, as well as its cotton and peanuts for export, was heavily reduced by the continuing drought, thus intensifying Mali's already serious budgetary and balance of payments problems. The expanse of the country, coupled with the lack of rail and road infrastructure and its landlocked position, makes Mali both difficult to reach and difficult to traverse.

The FAO Multidonor Mission has estimated total crop year 1973/74 requirements at 258,000 metric tons (MT) of grain and 22,890 MT of protective foods. A total of 314,914 MT of grains has been committed (including a pipeline of 46,117 MT and commercial purchases of 77,000 MT). While current year grain requirements will probably be met, there is still need for an additional 50,000 MT buffer stocks. The protective foods situation is far more serious; only 9,867 MT has so far been committed, and requests for special foods such as soy-fortified-grits (SFG) have not been forthcoming. Of the total commitments (donations and purchases) about 236,000 MT had arrived in Africa by late July.

The United States donated 94,000 MT of grain and 8,550 MT of protective foods to Mali during this period. By the end of July, 89,000 MT had been delivered to Africa.

Most grains moving into Mali travel the railway from the port of Dakar to the Mali terminal point at Kayes (or on to the capital at Bamako). Before the drought, no more than 6-7,000 tons of goods per month moved in one direction over that rail link. At present, the railway is averaging the movement of 15,000 tons of grain per month, and in a recent two-week period reached 9,000 tons. Still this has proved insufficient in light of Mali's substantial needs. As a result, grain destined for Mali is tending to accumulate in Dakar faster than the railway can move it. A recent agreement between the Senegalese and Mali Governments aims at eventually raising the evacuation capacity of the rail line to about 28,000 tons a month. If this can be achieved (and it can be done only at substantial expense to Senegal's own traffic diversions from the railway to other more expensive means of transport), Mali's food problems will be substantially eased. In addition to Dakar, substantial food deliveries can be made through Abidjan and donors are increasingly seeking to move food to Mali through this port, although its evacuation rate also has limits.

In general, the internal transport of grain is moving well. However, the Sixth Region (Gao area) is a traditional problem, as supply

movement is normally dependent upon river transport. Thus, unlike the other regions, or countries of the Sahel, Mali's Sixth Region becomes more, rather than less accessible during the rainy season. The drought accentuated the drop in river level and last year, the period for river traffic to the Sixth Region was less than normal. Airlifts to the region became essential; the United States Air Force alone flew 7,122 tons of food to outlying areas from May to October 1973. There continued heavy demands in this region for relief supplies and by spring 1974, it became clear that airlifts would be needed again this year. The U.S. Air Force began operations out of Bamako on May 17 and so far have flown over 3,000 tons to the deficit area.

Special steps have been taken by the Mali Government to increase the flow to the Sixth Region. The United States is presently assisting with experimental deliveries from Cotonou (Dahomey) through Niger to Gao in the Sixth Region and from Abidjan through Niger to Gao. Some 1,600 tons of grain are being shipped via convoy through Algeria. Barge traffic is to be speeded with the use of diesel engines especially designed for truck turn-around at off-loading points.

Outside of transport problems, the internal distribution system is excellently organized. The relief camps in general are reported in much improved condition from this time last year: good management, rotating medical personnel, personal health records, inventories, special child-feeding, and in some a stress on food production, education for the young, and crafts. There were some serious medical problems last year; these appear to be well in hand now. Supplies of medicines and vaccines appear to have substantially reduced disease problems. The U.S. earlier this year rushed measles vaccines to Mali, and has committed additional vaccines to be supplied upon request.

Eventual evolvement from relief to rehabilitation to self-sufficiency for Mali's relief dependents will depend in large part upon rebuilding a compatible environment for peoples who are currently destitute. The European Development Fund, for example, estimates Mali lost close to 40% of its 5.3 million cattle, with losses up to 60% in some areas. The Mali and United States Governments have agreed to approximately $3.1 million in recovery and rehabilitation activities in addition to relief. These activities are moving ahead rapidly. They include development of water resources for villages and rural health programs, and agricultural/livestock needs; improvement of road maintenance on routes to remote distribution points; and improved grain storage facilities. Emphasis has been given to improvements in transportation infrastructure to ensure that conventional systems can meet requirements next year without resort to airlift. An integrated program including supply of vehicles, road repair/construction, road and vehicle maintenance, river barge improvement and augmented storage are some of the investments already made. An effort has been made in all cases to also ensure that transportation investments are coordinated with non-drought related requirements thereby adding even greater

dimension to the returns. Humanitarian concerns including health, nutrition and support to displaced populations will constitute an increasingly important aspect to the program.

Chad: The situation in Chad continues to present serious problems, mostly related to the vastness of the country, its weak administrative structure, political fractionalization, and lack of internal communication. Inadequacy of data and statistics make it difficult to determine with precision the real impact of the drought on all parts of the country.

The FAO Multidonor Mission estimated Chad's grain deficit for crop year 1973/74 at about 100,000 MT. Because of serious logistic problems, they felt that only 50,000 MT could be brought in. They also recommended between 3,150 and 8,350 MT in protective foods be donated. By the end of June, 61,878 MT of grain had been committed, of which 15,600 was pipeline. However, buffer stocks of about 50,000 MT may still be needed. The protective foods situation is less favorable; only 1,833 MT is available. Of the total committed less than 40,000 had arrived by the end of June.

During this period, the US donated 25,500 MT to Chad; all but 2,500 MT has arrived at port. Some of this grain has been diverted to Niger due to Chad's transport problems. It will be replaced from August shipments. The US also donated 702 MT of ICSM (through UNICEF), all of which has arrived.

Chad depends almost entirely on Nigerian ports for grain movements, since large ships cannot enter the alternate gateway at Douala Port, Cameroon. A breakdown in Nigeria railways operations in April/May, plus strikes by railway and port workers, have threatened the movement of grain into Niger and Chad. Through the use of supplemontary trucking, movements of grain to both countries have improved substantially, and it is hoped that this can double or even treble monthly evacuation rates. However, a conflict between Chad and the Nigerian trucking associations regarding movement of grains past the Chad border has been difficult to resolve. The problems included the use of Nigerian trucks in Chad and increasing the trucking capacity to reduce accumulation of foods at the Nigerian border point at Maiduguri. To overcome these problems, the World Food Program provided an officer to special duty in Maiduguri.

Distribution within Chad is hampered by the multiple problems cited above. To this must be added the general security problems in the areas considered the worst affected. At base, however, there is no general plan of relief action. The drought relief coordinator relies upon requests for assistance from prefects and sub-prefects throughout the country. Each request means mobilizing supplies, personnel, transport and fuel. Requests are apparently not forthcoming until the situation has reached crisis proportions - as is the case of Mongo

and encampment areas in the Guera Province to the north. There is currently a major effort underway by the Government and donors to resolve this situation. But there is little known about the possible presence of similar pockers of serious deficiencies elsewhere. The long distances, poor or no roads, limited trucking capacity and lack of relief communication network compound the difficulties of effecting timely requests and response.

Donors have been responding to emergencies on a case-by-case basis as well as by providing direct aid as possible to local groups (voluntary agencies and Red Cross) and/or through UNICEF and WHO. AID and the Government of Chad recently worked out a distribution by truck program involving CARE, which should help the immediate situation in the Guera Province as well as for the longer term. The two volunteers from the League of Red Cross Societies (LICROSS) returned in Geneva in July after being unable to resolve with the GOC the problems related to administration of grain distribution programs. The GOC believed that a separate Red Cross system would not be compatible with the existing distribution channels used by all other donors and volunteer agencies.

Medical services in Chad are fairly limited to urban centers, and the full range of medical and disease problems which face the population are not clear. However, AID has provided additional measles vaccines, the WHO and UNICEF are providing assistance, and Chad has recourse to regional health organizations. The Center for Disease Control conducted a nutritional surveillance survey in 31 villages - 20 in Kanem prefecture and 11 in Lac prefecture. CDC has written a preliminary report and expects to have its final analysis and tabulation report completed by late August. The preliminary report indicates that 22.5 per cent (175 of 779) of children examined were below the acute malnutrition threshold; 14.5 per cent of nomads were below threshold and 24.1 per cent sedentary and semi nomads (people who move around in one area and who usually have small farming areas) were below threshold. Thirty-nine per cent of the villages (12 of 31) reported measles epidemics in the past year, 10 of these in the Kanem area.

AID and the other donors also are considering the strong possibility of another airlift to the outlying areas in Chad. Last year, the U.S. Air Force missions flew 668 tons to the remote areas and back-hauled seeds brought into Chad from Sudan by an FAO-sponsored airlift. The Chad Government has indicated a need for an airlift again this year. However, the conditions of the landing fields are reportedly much deteriorated from last year and such an airlift would require smaller aircraft with lesser carrying capacity. An on-site assessment of facilities is now underway.

However, security is a problem: all official relief ground convoys must be accompanied by military escort. The disaffection and diffusion

of populations in the areas considered most affected by the drought only compound the administrative and logistic problems, as requirements for these regions tend to assume a lesser priority in the eyes of the Government. Our Mission in Chad is continuing to press the Chadian Government, in concert with other donors, to allow planning assistance as well as increased direct support to the relief action. AID's Assistant Administrator for Africa, Dr. Samuel C. Adams, Jr., recently discussed the situation with Chadian President Tombalbaye in an effort to increase government awareness and concern for the relief requirements. The U.S. Mission will pursue this to effect a more adequate relief response.

The human displacement and dependency is closely related to the country's loss of livestock, principally during the past two years. On the basis of limited data, the European Development Fund study indicated that 21-38% of Chad's 4.7 million cattle and unknown percent of its sheep and goats have been lost (with some areas recording up to 90% loss). Women and children seem to comprise the majority in the groups of relief dependent populations in the north; the men believed to have left with the remaining herds for southern pastures, markets and/or work. An undetermined number (estimates range from a few hundred families to several thousand) of displaced peoples have gathered in squatters' camps around the capital of N'djamena, where they appear to be able to find food and work. The families are victims primarily of herd losses. However, reports indicate many of the displaced families have followed their herds to Cameroon, the Central African Republic, Niger and Nigeria.

Chad's livestock industry was very adversely affected by the drought losses. Because of the importance that livestock has played as a foreign currency earner for Chad, these losses in the livestock sector have had a very serious impact on the budgetary and balance of payments situation of the country.

The Recovery and Rehabilitation program in Chad is somewhat more modest than in other Sahel countries, not because of need, but because of limited government capacity rapidly to absorb special aid programs. To date, $1,967,000 of R and R programs have been agreed upon. These include grain storage in deficit areas, establishment of cordon sanitaire (animal health), accelerated grain and vegetable production under irrigated conditions in the Lake Chad area; construction and repair of village wells; and road repair work. We are hopeful that these activities can serve as a demonstration to the Government of the concern of the US Government and may open opportunities for increasing assistance to this very distressed country. A recent addition of a transport project with CARE may be a significant opportunity for improving transportation systems.

Mauritania: The situation in 1974 remains as precarious as last year, despite considerable improvement in relief management and increased capacity to handle emergency relief shipments. The current major

problem is internal distribution.

Mauritania's ability to receive, store and distribute relief foodstuffs has not been keeping up with increased donor flows.

Livestock losses have been substantial and agricultural production seriously reduced. Not only has dry land agriculture been diminished, but there have been substantial reductions in production on river flood plain areas due to lower river levels.

The revised estimate of the Multidonor Mission of crop year 1973/74 requirements is 200,000 MT of grain and 10,000 MT of protective foods. About 143,063 MT of grains (including a 39,300 pipeline) and 8,837 MT of protective foods has been committed. About 83,000 MT has been delivered.

U.S. commitments during this period are 51,000 MT of sorghum and protective foods: 38,103 MT of sorghum; 7,004 MT of soy-fortified grits (SFG); 4,631 MT of corn-soy blend (CSB); 1,262 MT of instant corn-soy-milk (ICSM). The ICSM is provided via UNICEF. Mauritania has taken a special interest in protective foods. All but 1,800 MT has been delivered.

Priorities related to the drought in Mauritania are now geared toward the problem of internal distribution of foods. Arrivals have been timely and regular. But evacuation of stocks from Rosso and Nouakchott to the outlying areas have been seriously hampered by sandstorms, limited transport availabilities (military and commercial), length of travel time to the various regions and lack of administrative capacity in logistic/transport management.

Areas receiving the grains are getting too little for inland pre-positioning prior to the rains. AID recently found bags disintegrating from the direct sun rays and has provided new bags for rebagging. Tarps and polyethylene film have also been provided for stockpile protection, and donors have been advised of the need for similar action regarding Nouakchott stocks.

It should be noted that much of the food shipments (non-US) have been made through the port of Nouakchott, which has limited facilities and is presently strained to capacity. The US and some other donor food shipments are made through Dakar and transported by rail-barge or truck-ferry to Rosso, the major storage point in Mauritania. The ferry system was slow at best; when one of the ferries sank recently, it caused a disruption in the flow of food into the country. The British Government has provided a replacement ferry.

To assist the internal distribution system, donors agreed to provide more than 80 trucks and are, with AID assistance, planning a vehicle maintenance facility. This will bring Mauritania's total truck capacity to 250. Of this total, the 110 government-owned 10-ton trucks

have been assigned to transport grain from Rosso and Nouakchott to the deficit areas of the First, Second and Third Regions. The goal is total evacuation of these ports by the end of July. While the Mauritanian Government achieved this goal, the maximum haulage capacity of trucks in use appears less than needed. Nevertheless, significant evacuation is possible and donors remain willing to provide further assistance in the transport area, including manpower to assist in the management of storage/distribution resources.

Whether an airlift is required may depend on the rate of evacuation coupled with the rainy season and possibility of reports of severe deficit in the outlying areas. While the situation seems generally improved this year and Mauritania is paying careful attention to the human requirements, an airlift to the Eastern Regions has been requested. Mauritania's requirement for an airlift would be at the end of August/beginning September. The US stands ready to provide the assistance as last year, and may call upon the currently operating King Grain Operation in Mali to conduct the airlift in Mauritania. Whether this could be staged from Bamako is presently under study.

While the overall financial situation of Mauritania has been less drastically affected than other Sahel countries because of the importance that mining plays in the economy, the Government still faces important budgetary and balance of payment effects resulting from livestock and crop losses, much higher import needs and the heavy costs of relief and rehabilitation programs. The recent European Development Fund study estimated cattle losses in 1971-74 at up to 90% in some areas; sheep and goat losses at 10-20%.

Approximately $2 million in recovery and rehabilitation projects have been approved for Mauritania this year. Emphasis again is on the strengthening of food distribution systems (transport and storage). Others include short-term programs for increasing vegetable production and increasing cereals production in flood plain areas; construction of grain storage in outlying areas; animal health programs; short-term transportation improvements; and provision of tarpaulins for grain protection while in movement. Given the capacity of the Government and the development base, these R and R activities may constitute the only significant opportunity for US assistance beyond emergency requirements.

Senegal: Senegal's greater diversity of economic activity, its geographic position as a coastal country and its relatively sophisticated infrastructure have contributed to the country's generally better condition than the other Sahelian nations. Only a portion of Senegal lies in the arid areas. Nevertheless, Senegal attracts its share of the nomadic herdsmen, and the areas to the northeast have been severely affected by the drought, although there has not been the development of relief camps as required in other Sahelian countries.

There have been important shortfalls in cereals and peanut production

for export. Livestock, which plays a somewhat less important role in Senegal than in other countries, has also registered a loss. For example, an estimated 20% of the 2.5 million cattle and 10% of the 2.7 million sheep and goats have been lost.

Revised estimates place Senegal's total grain need at 132,000. This has been met by 88,928 MT of donations and 87,200 commercial purchases, enabling Senegal to meet her deficits and build up a better stock. Of this total of 176,128 MT, about 150,000 had been delivered by the end of July. The U.S. shipped 24,248 MT of grain and protective food to Senegal during this period, and all has been delivered.

Senegal has played a crucial role in assisting Mali and Mauritania to meet their cereals import needs by accelerating and expanding the use of Senegal's internal port, storage and transport facilities. Much of the imports for Mali and Mauritania pass through Senegal. The facilities are generally in good condition; rail and road capacities seem able to absorb both the requirement for internal distribution as well as transfers to other countries, as long as port receipts are fairly constant and regularly spaced.

Relief measures in Senegal are therefore well in hand according to the Government and WHO and ORANA (nutritional institute in Dakar); nutritional surveys in the most affected areas tend to confirm a relatively good status of the populations in need. Sufficient additional medicines and vaccines are being provided, including measles vaccines from the United States.

Approximately $1.5 million in recovery and rehabilitation projects have been agreed to between the United States and Senegal. Those have included provision of pumps for wells in agricultural villages, work on range rehabilitation, provision of livestock vaccines, improvement of agricultural production in flood plain areas; and the provision of human medicines and vaccines. Emphasis in Senegal has been on initiating innovative small agricultural production activities. With management of emergency requirements under sound management, the U.S. Government has taken the opportunity to explore small but high impact production projects. These activities may be precursors of more substantial development activities to be designed.

Upper Volta: Only a small part of the country lies in the true Sahelian area. Thus, while the drought has had a severe effect on northern sections, the overall impact on Upper Volta is somewhat less than in other Sahel nations.

The revised crop year 1973-74 food requirements for Upper Volta are 128,000 MT of grains. The estimate includes anticipated shipments to meet reserve requirements. An additional 7,000 MT of protective foods is needed.

Commitments of donations and purchases are 114,000 MT food grains and

7,455 MT of protective foods. About 80,000 MT has arrived in port.

The United States donated 28,500 MT of food grain to Upper Volta plus 4,596 MT of instant corn-soy-milk (ICSM) through UNICEF for this crop year. About 18,000 MT had arrived by the end of July.

The movement of food into Upper Volta is proceeding fairly well. A.I.D. has been using the ports of Lome (Togo) and Tema (Ghana) to service Upper Volta and the evacuation rate from these ports to Upper Volta has been steady. The other donors have been mainly using Abidjan (Ivory Coast) as the port of entry. While evacuation from Abidjan has been slower than from Lome and Tema, enough grain has moved into Upper Volta to allow the GOUV to pre-position food in remote areas before the start of the rainy season.

Internal distribution is being handled in an efficient manner by the Army of Upper Volta. Road and bridge repair programs along the distribution routes has been undertaken with the assistance of A.I.D. and the European Development Fund. Upgrading and repair of important links in the northern regions between Dori and Gorom-Gorom will greatly assist distribution in these most affected areas. Recent heavy rains, however, have temporarily isolated this region and an airlift may be required.

There are relatively few displaced persons in Upper Volta compared to other Sahelian nations. Current estimates number the displaced at 3 to 4,000, all in the northern region and mainly nomadic families. Last year Upper Volta faced disease outbreaks of sizeable proportions; this year the situation is reportedly much improved. An A.I.D.-sponsored nutritional surveillance activity administered by the Center for Disease Control in conjunction with the Government of Upper Volta, is being completed and should provide more detailed information.

The multiple programs of A.I.D. and others has and will continue to assist Upper Voltan efforts to cope with medical and health needs. Large amounts of medical supplies have been provided by donors. UNICEF, the Red Cross and voluntary agencies are providing health/nutrition care to the at-risk populations in the North. WHO and regional health organizations are further resources. A.I.D. has provided additional measles vaccines and supplies as well as prepackaged hospital unit.

As the emergency phase of the drought has come under greater control in Upper Volta, efforts have turned to expanding the capacity of the people to cope with living in a situation which has been made more fragile by the changes in their environmental and social conditions. A recent European Development Fund reported estimates of 16-20% loss of the 2.6 million cattle (although the percentage ranged to 90 in certain areas), and 15% loss of the 4 million sheep and goats. These losses were especially significant to families dependent upon their

herds.

The U.S. recovery and rehabilitation program (R/R) is in anticipation of response to near-future needs. To date $2,762,000 in R/R activities have been agreed between the U.S. and Upper Volta. Activities include digging of 600 wells, earthen dam repair and construction, expansion of animal traction by fabrication of low-cost farm machinery, production of trypano-resistant oxen, supplementary feeding of livestock, herd replacement and improvement, reforestation in Kombissiri, seed multiplication and production, grain storage facilities, repair of key food distribution roads, and rural public health activities. Involved in these endeavors are other donors, international organizations and U.S. voluntary agencies. Here again, control of the emergency situation has enabled the Government to launch a rehabilitation program directed to the re-establishment of populations on farms. These activities will help assure a more significant planting this crop year and will hopefully facilitate greater marketings this fall. Such activities, of course, are the beginning of solutions as against the necessary but only positive significance of most emergency investments.

The Gambia: The situation in The Gambia, which was only partially affected by the drought, has become somewhat more serious this year. Food production has dropped and there have been some livestock losses.

The Government of The Gambia has made a request for external donor help in providing up to 6,000 MTs of grain, although there is some question whether this full amount is needed. Several countries are considering small donations of grain to meet The Gambia's needs. The United States is providing 2,000 MTs of this need through a special contribution to the World Food Program and 2,500 MT directly.

Internal distribution of donated grain is being handled in cooperation with WFP and appears to be well organized. Transport problems in getting food to needy recipients has not so far been an important concern.

Initial contacts have been made with the Government of The Gambia about a range of possible Recovery and Rehabilitation projects. AID has approved food production and related activities valued at $675,000 and implementation will begin in September.

Niger: Niger continues to be in a precarious situation. One of the countries most seriously affected by the drought, Niger's harvests in 1973 were very low. Poor food production led to requirements for substantial food imports. Reduced production of cotton and peanuts for export had a major effect on Niger's budgetary and balance of payments situations. Livestock losses were very heavy, particularly within migrating herds. Increasing numbers of nomads and sedentary farmers became dependent upon Niger for food and relief. The northern part of the country suffered increasingly from the drought.

Niger's problems, from a donor viewpoint, are compounded by the difficulties of shipping grains into the country and by the limited transport and poor routes within Niger for moving needed grains to remote deficit areas. The above factors are neither cause nor effect of the change in government by a military coup in April.

The FAO Multi-donor Mission revised estimates of Niger's grain needs at 268,000 MT, including a 50,000 MT buffer stock for the early past-harvest period. Protective food needs were estimated at 21,280 MT. A total of 205,482 MT have been committed, including a 'pipeline' of 27,782 from earlier commitments and 23,000 MT from commercial purchases. A total of 7,826 MT of protective foods have been committed.

The United States has committed 112,515 in food grain and 6,609 in protective foods: instant corn-soy-milk (ICSM) through UNICEF. Over 90,000 mt had been delivered to port by the end of July. Overall deliveries have been somewhat slower. Of a total of 205,482 MT committed, approximately 160,000 arrived in port by the end of July.

There are several routes used from ports to landlocked Niger. Food flows from Cotonou (Dahomey) into western Niger are moving at a relatively steady pace, and were recently increased as a result of the Niger Minister of Rural Economy, Ali Saibou's trip to Dahomey to arrange additional heavy trucks on the Dahomey-Niger route. However, while U.S.-donated food seems to be moving well and adequate storage facilities have been arranged for its protection, other donor food stocks are neither moving well nor well protected. A food transportation meeting, called by the FAO's Office of Sahelian Relief Operations (OSRO), took place recently in Cotonou to address this problem.

Donors have also increased food shipments through Nigerian ports for transshipment by rail and truck directly into some of the more seriously affected areas of Niger to the east and north. Although breakdowns on the Nigerian railroad and strikes by railway and port workers in late spring significantly hampered the flow, evaluation from Nigerian ports has doubled overall in the past few months and is no longer considered a problem. Extensive use of private trucking firms have helped movements of grain from Nigerian ports to both Niger and Chad. Shipments by truck are expected to increase from an average of 500 tons to an average 1,500 tons per day. If this rate can be achieved and maintained, distribution within Niger will be considerably eased. To increase the capacity of Nigerian ports, A.I.D. contracted the Flour Mills of Nigeria in Lagos to bag bulk grain shipments. Bagging in Lagos facilitates local truck transport, storage and handling, and allows increased bulk shipments. The mills can absorb up to 2,000 MT per day, although start-up current dispatch is running unevenly, from 200 to 800 MT per day. In addition, the United States will begin a trial run of grains by truck through Algeria in mid-July. Mali as well as Niger will benefit from the Trans-Sahara

shipments.

Internal food distribution is steadily improving, although the continued utilization of the foods in the deficit areas have left no opportunity to pre-position stocks or build local reserves prior to the rainy season as planned. Margin for survival in the outlying areas is still considered very thin and any lengthy interruption in the delivery system could result in the need for temporary airlifts to isolated areas.

Present distribution is expected to be greatly strained in the next several months as the rainy season gets underway. Poor or non-existent roads outside main urban areas take a heavy toll on all vehicles, bridges frequently wash out and roads (or tracks) become impassable. Four-wheel drive vehicles are considered the only method to reach many of the remote areas overland during the rainy season. To date the donor community has pledged close to 90 four-wheel drive vehicles of which the majority have been delivered. These, in combination with existing transport however, are insufficient to handle food requirements for remote areas. The anticipated deficit (counting current and projected donor contributions) may be 5,500 MT in grains unable to reach the remote areas. The U.S. has initiated two courses of action: (1) OSRO has been urged to coordinate a multi-donor effort to purchase or lease additional four-wheel drive vehicles, and (2) the Trans-Saharan shipment. OSRO is moving ahead on procurement of 12 trucks in Algeria at a cost of about $600,000, with funds being guaranteed by the U.S. These 15-ton vehicles should add 4,000 MT capacity to the current distribution system. The Trans-Sahara shipment should provide about 1,000 to 1,500 MT to Agadez. Barring breakdowns, it is hoped that the various actions to increase internal transport and delivery capacity will reduce or obviate the need for an airlift.

Niger has approximately 250,000 displaced persons dependent upon relief camps, according to FAO/OSRO. Substantial efforts by the Government of Niger and the donor community are underway to reorganize food and relief distribution as well as to encourage the encamped populations to resume more normal activities. For example, OSRO and the League of Red Cross Societies in conjunction with WHO and UNICEF, are providing personnel trained in relief work and supporting equipment and supplies for up to ten field teams. Coordination in country is being handled jointly by the UN Resident Representative and the Ministry of Health. In addition, WHO and UNICEF are redoubling their efforts to ensure adequate food, preventive health, water and sanitation measures are extended. The U.S. recently provided for additional measles vaccine, $100,000 for medicines and supplies, and $10,000 for two portable hospital units.

Resettlement is one of the Government's major concerns. A "return to the village" campaign is underway, whereby drought-stricken farmers congregating in relief camps and towns are being urged to return to

their land for the planting season. Incentives, such as provision of seeds, hand-tools, and two-months' supply of food per person within a family group are being offered. The Lazaret camp just outside Niamey, for example, has been partially dismantled as people have returned home or are moved to other areas. Reports indicate that adequate food supplies are being distributed in the remaining camps. The destitute nomads, who have no land, herds or other means of self-sustenance will continue to require special attention.

Efforts are already underway to move from relief to rehabilitation; to expand the capacity of Niger residents to cope with the change in their socio-economic condition. The U.S. is assisting in a recovery and rehabilitation (R/R) program to respond to near-future needs. The program emphasizes activities in the fields of agriculture and livestock production, simple infrastructure repair and maintenance, and public health. To date, about $2.6 million in R/R activities have been developed between the Government and A.I.D. Heavy emphasis in Niger has been on pre-positioning of donor grains and augmentation of permanent storage associated both with drought requirements and our earlier grain stabilization program. It is generally believed that limited storage has been the major factor affecting food distribution efforts and that the next season will find sufficient capacity to ensure the orderly marketing of domestic grains and/or distribution of donated foods. Activities also include reforestation of Gao trees in Maradi and Dosso; the acceleration of rice production; pasture reseeding; date palm rehabilitation; agricultural development; animal health; supplementary feed for livestock; repair and maintenance of important food distribution roads; construction of storage facilities in food deficit areas; village development in the Dollo Bosso Valley; and the training of Ministry of Health teams for rural areas. Other donors, UN organizations, U.S. voluntary agencies and the Government of Niger are participating in these activities.

Part III - Relations with Other Donors and African Regional Organizations in the Sahel

A. Emergency Relief

While Africans and donors alike agree that major responsibility for coordination of emergency relief lies with the African governments themselves, many of the logistical problems involved go beyond the capacity of individual governments to resolve.

The UN Secretary General designated FAO to oversee UN relief programs. FAO established the Office of Sahel Relief Operations (OSRO) to do this job and set up a Sahel Trust Fund to receive financial contributions. Despite a shaky initial start, OSRO has increasingly gained the confidence of Africans and the donor community. It plays an increasingly effective coordinating and information exchange role.

Key activities of FAO/OSRO have been:

(a) Establishment last year of a Multi-Donor Food Assessment mission through which Africans and donors alike reached agreement on anticipated import levels. A similar mission is to be undertaken this fall;

(b) Establishment of an information exchange service which has helped guide donors in scheduling food shipments and recognizing potential port and transport difficulties. However, lack of inclusion in reporting systems of Russian, Chinese and Sahel commercial imports has been one cause of today's port congestion problems;

(c) Highlighting specific logistical problems and seeking donor support in resolving them (e.g. arrangements with Nigerian Government to speed up food flows; identifying truck needs and getting donor support in meeting these needs; organizing donor/African committees to deal with port problems).

A.I.D. fully supports OSRO and urges other donors to work with it. A.I.D. plans the following steps to help strengthen OSRO:

(a) Continued provision of staff support;

(b) Continued financing for special operations through the Sahel Trust Fund;

(c) Consideration of ways in which OSRO information system can be improved, including possible computer programming techniques;

(d) Full support to and participation in this year's Multi-Donor Food Assessment Mission.

For direct liaison with other donors on Sahel emergency programs, as well as other concerns regarding the Sahel, A.I.D. and State maintain liaison officers in Paris, Brussels (for the Common Market), Rome (for FAO) and London.

B. Longer Term Development Needs

There is need to improve understanding between donors and Africans on how best to proceed with planning longer-term recovery and development programs. All agree the focus must be on the Africans themselves but more needs to be done to strengthen collaboration between Africans and donors.

The African Governments have established the Interstate Committee of Fight the Drought in the Sahel (CILSS) as a regional coordinating organization. While CILSS still has limited staff resources and needs a clearer mandate from the participating governments, it has played an effective role in drawing donor attention to Sahel development needs. It has also been a focal point for a series of technical meeting and seminars dealing with subjects such as development of regional and national livestock strategies, consideration of ground water development, review of potential use of remote sensing techniques and the like. However, considerably greater effort will be needed if CILSS is effectively to play a role in giving meaning ful shape and priorities to potential development programs for the region.

The UN has establsihed a Special Sahel Office under Deputy Secretary General Brad Morse to orchestrate UN programs for medium and long term development in the Sahel. In addition, the SSO is seeking to help African organizations, especially the CILSS, identify gaps in development planning and helping find means of closing those gaps. In order to achieve this latter end, SSO is moving its headquarters this summer from New York to Ouagadougou, where CILSS headquarters are also located.

While seeking to reach agreement on improved longer term arrangements for development planning, most donors currently work on a bilateral basis with Sahel governments on recovery and medium term development programs. They are also working through established regional organizations such as the Senegal River Development Organization. So far, this has not yet permitted the elaboration of an overall, mutually agreed upon development strategy between Africans and donors.

All agree the present situation is inadequate to deal with longer term needs and that the time is ripe to improve interrelationships. The United States is in regular consultation with African leaders and other donors on how this can be achieved.

ANNEX II

THE DROUGHT IN ETHIOPIA

Ethiopia, the tenth largest country of the African continent with a population numbering approximately 26 million - larger than the combined population of the drought-stricken Sahel countries - is facing the most serious tragedy of its recent history. Although adversity has been a way of life for the Ethiopian people even in normal times, only nominal rainfall, noticed in some areas as early as 1970, has resulted in increasingly severe drought and famine over large areas of the country. Originally confined to the northern provinces, the drought has recently spread to five southern provinces as well, with the number of people affected estimated to number anywhere between two and six million.

The earliest signs of drought became evident in the 1970-71 period when the significance of intermittent rains was noticed. The Imperial Ethiopian Government (IEG) began sending supplemental food grains to sections of five provinces (Gemu Gofa, Wollo, Kaffa, Gojjam and Tigre) from time to time in the years 1970-1972. But this appeared to conform to the usual pattern of intermittent droughts hitting one district this year, another district another year and a third district yet another year. In Wollo Province, for example, probably the worst hit, there was drought in 1971 but the rains in the first part of 1972 were good. Later in 1972 the rains were scant.

In these remote areas where such a pattern is common and where fragmented information is rarely quickly assembled and the communications system is difficult anyway, the potential scale of the problem can escape the attention of even those directly involved in the areas. Further, what was occurring was not simply a failure of rains, but a climatic alteration of major proportions. Throughout Tigre and in many parts of Wollo, as well as elsewhere, the ecological balance has been seriously disturbed.

The provinces most seriously hit by the famine are those with a long history of settled agriculture - unlike those of the lowlands of the northeast where nomadic existence prevails, or those of the south and southwest where tropical and sub-tropical forests exist. Long settlement has meant progressive deforestation and soil erosion. While the capacity of the soil to sustain both humans and livestock has been diminishing, the population has been growing, creating an imbalance which directly augments the effects of the failure of the rains.

As the period of only nominal rainfall lengthened, reports of food shortages became increasingly widespread and serious. By 1973 it

was becoming clear that the "belg" rains (the small rains for short maturing crops planted in February or early March and harvested in May, June or July) would be especially significant in determining the extent of the drought. But the early 1973 belg rains were a failure almost uniformly throughout the country. With a few exceptions in only two provinces, precipitation was at the lowest recorded level in 20 years - and this after a significant and steadily decreasing rainfall pattern over a period of consecutive years. Precipitation measurement throughout most of the country was minimal or non-existent. Throughout the belg season, Tigre and Wollo Provinces, for example, had only four days of rain. For the country as a whole, the IEG reported the magnitude of the loss of the belg crop reached between 75 and 80 percent of the normal harvest.

At the end of February 1973, the FAO's Early Warning Food Shortage Report carried the signal of a possible severe famine. In March the IEG began planning to mobilize domestic resources and such external assistance as could be quickly obtained. In April 1973 the IEG appointed a high-level inter-ministerial National Drought Relief Committee (NRC) headed by the Minister of National Community Development and Social Affairs and comprised of representatives of all involved ministries and national agencies. Similar committees were appointed at the provincial level. On April 13 a ban was imposed on the export of cereal grains, except under license to limited traditional markets, mainly in the adjoining Territory of Afars and Issas which was also experiencing a drought. Also in April, IEG officials began urgent consultations with representatives in Addis Ababa of the UNDP, FAO, WFP, UNICEF and USAID on ways and means or organizing international relief support. In May 1973 the U.S. Government made its first emergency drought relief commitment.

An analysis of in-country Government food stocks in the first part of 1973 revealed that the stocks were down to an insufficient 20,000 tons. Immediately, already-programmed U.S. food stocks in Ethiopia were redirected to emergency purposes. Anticipating a substandard harvest in 1973, the IEG also approached the U.S. Government and the World Food Program (WFP) for additional assistance and in May the U.S. committed an initial 18,000 metric tons of wheat, 8000 of which were pledged on a government-to-government basis and 10,000 of which were pledged by the WFP from a contribution to the Agency for International Development. The AID Mission in Addis Ababa also agreed to release additional wheat which had been destined for ongoing "food for work" projects in Ethiopia. On December 3, 1973 the then U.S. Ambassador, E. Ross Adair, declared that a disaster situation existed warranting U.S. Government assistance. In the period FY 1973/1974, the U.S. Government provided a total of 64,418 metric tons of emergency food grain assistance to Ethiopia at a value of $15,578,150 including ocean freight costs. Over the same period,

the U.S. Government also provided nearly $2.4 million in emergency non-food aid for such items as temporary storage materials, in-country transportation expenses for relief supplies, truck tires and tubes, cotton cloth, blankets, three helicopters for a medical/nutrition survey in the southern areas, medical drugs and supplies, airlift of trucks, technical assistance, and other items. Thus, over the period FY 1973/1974 to date, the U.S. Government has provided nearly $18 million in food and non-food aid.

Ethiopian institutions and private individuals also responded to IEG appeals for donations. Government officials, army, police, university professors and students, private firms, the Ethiopian Orthodox Church and other religious bodies, the Ethiopian Red Cross, and many other groups and individuals were donating cash, food and other assistance. The value of these contributions is estimated at well over $3 million.

In the beginning of 1974, the IEG appointed a Commissioner for Drought Relief and Rehabilitation. Reports and comments from the AID Mission in Addis Ababa and from other international donors indicate that the new Commissioner, Ato Simeles Adugna, is doing a highly effective and dedicated job. Although a fully comprehensive report has not yet been compiled, a preliminary estimate in February 1974 from the Commissioner's office puts the IEG contribution at upwards of $10 million for famine relief.

Numerous international donor organizations and foreign governments have become involved in the Ethiopian relief effort. Overall coordination for these donors is handled by the United Nations Disaster Relief Office in Geneva and in Addis Ababa by the United Nations Development Program Resident Representative. The WFP has provided an officer to assist the Commissioner for Relief and Rehabilitation and the FAO Office of Sahelian Relief Operations (OSRO) provides technical and other assistance. The U.N. Disaster Relief Office (UNDRO) in Geneva estimates that as of March 31, 1974 international donor contributions (including the U.S.) totalled far more than $60 million, with many contributions reported with no dollar value given.

Whereas the Ethiopian and international donor response to the relief effort has been substantial and greatly appreciated by the people and Government of Ethiopia, much remains to be done.

For one thing, drought conditions and continuing substandard rainfall persist in both north and south Ethiopia. Even if rains were good, of course, the years of increasing famine which have already occurred and the climatic/ecological changes which have taken place mean Ethiopia will stand in need of continued outside assistance for

drought relief for some time to come. The UNDRO, in an assessment made as recently as the middle of May, stated "General situation: situation remains critical in nomadic area, with problems compounded by inaccessibility and related logistic difficulties. Authorities consider emergency phase will continue at least until end 1974, with relief emphasis on nomadic areas and increasing attention recovery programs being given other areas".

The United Nations estimates donor commitments for 1974 external food grain requirements at 132,800 tons. It is expected that international donor pledges will be required to meet still another substandard harvest in 1974, and the U.S. Government has programmed already another 20,000 metric-ton contribution in FY 1975 to help in meeting this requirement.

Other needs immediately identified by the UNDRO include high-protein foods, truck and jeep transport, human shelter, blankets and cotton cloth. The U.S. Government has already made substantial contributions in these areas and, as a result of Congressional appraisal of the Foreign Disaster Assistance Act of 1974, which included a $10 million figure for Ethiopia, will continue to do so.

As in the Sahel, drought relief activities in Ethiopia have been viewed as those involving (a) immediate relief, (b) short-term relief and rehabilitation and (c) medium-to-long term rehabilitation. The U.S. Government effort to date has been concentrated in immediate emergency relief efforts such as the food and non-food aid described previously.

In contemplating additional assistance required for the future, AID estimates that in addition to food aid, the U.S. Government should be prepared to anticipate CY 1974 immediate relief requests totaling approximately $2.6 million for such items as transportation costs for in-country food movement, grain storage facilities, seed, medical supplies and follow-up of the medical/nutrition survey undertaken in southern Ethiopia.

In addition to the question of immediate relief operations is that of the need for the recovery and rehabilitation of the drought victims. When the inter-ministerial committee was appointed in November 1973, it requested the FAO to provide a team of specialists to assist in the preparation of a short-term recovery program. The program, consisting of 21 projects requiring a total of $15 million, was produced and circulated through the FAO to prospective donors internationally. Of the $15 million total, approximately $12.5 million was requested from external sources. The program called for the emergency supply of varying quantities of seeds, work oxen and other livestock and tractors, the construction and repair of access roads, the implementation of emergency afforestation and rural water supply programs,

provision of transport facilities, and the provision of technical assistance. Response from the international donor community was encouraging, with most of the proposed projects receiving offers for funding and with the remainder expected to receive funding as well.

The IBRD has completed negotiations with the IEG for a rehabilitation IDA credit of approximately $10 million with the precise projects, dealing with recovery and medium- and long-term rehabilitation, concentrated in the northern provinces of Wollo and Tigre.

In contemplating future U.S. Government assistance in the area of short-term relief and rehabilitation activities, AID is considering (a) supplementing the World Bank effort in the areas of rural penetration roads, rural water development, health and sanitation and reforestation, and (b) assisting UNDRO-identified short-term rehabilitation projects.

In considering possible medium-term rehabilitation assistance activities, AID has engaged in a medical/nutrition survey in the southern provinces and is also financing a feasibility study to identify two areas in the south suitable for resettlement by people from other overcrowded areas of the country. It is anticipated that regular appropriations may be utilized for most of the physical infrastructure in the areas.

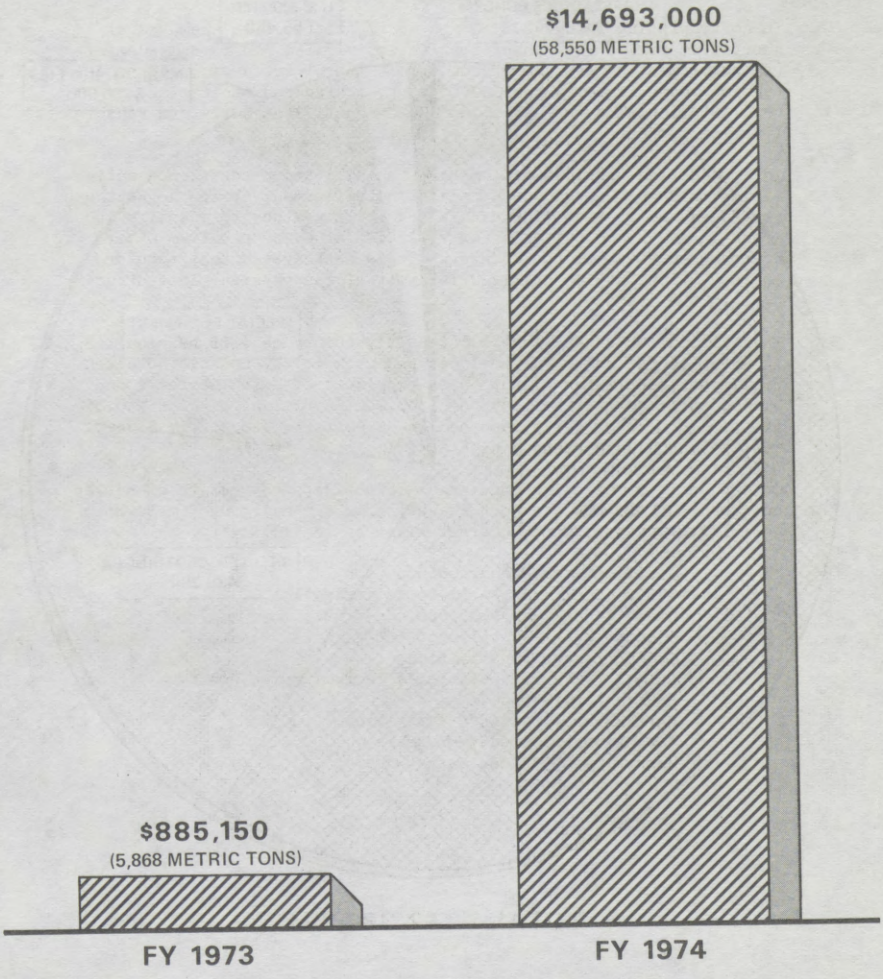
In addition, we expect that substantial assistance will be required in areas in the southern provinces now occupied by nomadic herdsmen. Preliminary estimates of the three provinces of Bole, Harrarge and Sidamo indicate that no less than 500,000 people and perhaps 750,000 are now in need of assistance and in some cases, especially Sidamo, cattle losses have been as high as 50%.

On the basis of existing knowledge and anticipated results of surveys now under way we would expect requests for financing medium-term rehabilitation assistance characterized by the following:

Rural low-cost road construction
Water supply and small-scale irrigation
Range management and pond construction
Drought area resettlement
Grain storage construction
Animal husbandry activities including restocking
Medical assistance
Agricultural research activities
Extension and credit programs
Marketing technical assistance

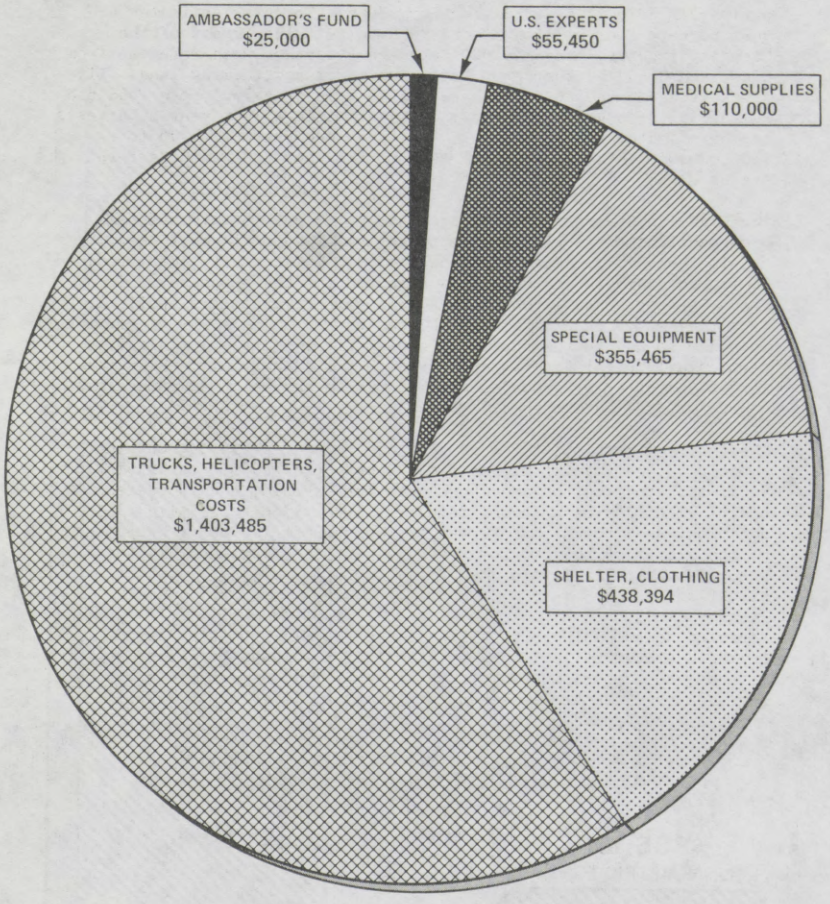
U.S. GOVERNMENT DROUGHT EMERGENCY ASSISTANCE TO ETHIOPIA

PL 480 FOOD AID



U.S. GOVERNMENT DROUGHT EMERGENCY ASSISTANCE TO ETHIOPIA

FY 1974 NON-FOOD AID



TOTAL — $2,387,794

ANNEX III

OTHER AFRICAN COUNTRIES

A. Nigeria

The drought in the Sahel has affected Nigeria from the 12th parallel north (the 12th parallel passes through the city of Kano), with some peripheral effects a little further south. To date, estimates are that perhaps four million Nigerians have felt the impact of the drought directly, many moving southward (together with refugees from Niger and Chad) in search of better pastures and farming land. Livestock losses have run as high as 10% in some areas and both food and commercial crops have suffered. Estimates place last year's harvests in the affected area at 0% to 50% of previous years with up to $100,000,000 in agricultural losses in the Kano and North Eastern states alone.

The Nigerian Government (FMG) has made no appeal to international organizations for assistance, apparently intending to meet the crisis themselves. Funds in excess of $50 million have been provided to the governments of the states affected for the purchase of food for both people and livestock. Additional resources are available from the FMG if required. The FMG has banned all exports of groundnuts in order to add to the supply of foodstuffs available. (This is a particularly significant step because Nigeria is traditionally the largest exporter of groundnuts in the world and this was once a major source of foreign exchange.)

The indirect results of the drought are being felt throughout the economy in the form of higher food prices, reduced raw materials for local industry (cotton and groundnuts for example) and increased unemployment in the affected industries (textiles especially). In addition, the drought has served to reemphasize the heavy dependence of the states on the FMG for financial support, for without federal resources there is little the states could do to ameliorate the situation.

Recent discussions here at AID/W with officials from the four northern states reflected some optimism for this year. According to them, some promising rains have already fallen in three of the four states (much earlier than last year) and they are hopeful the dry cycle has ended.

B. Sudan

The effect of the drought on the Sudan's internal production capacity is becoming a major concern to Sudanese authorities in the Sudan-Chad border area. Normal food and grain supplies are being severely taxed by the continuing influx of refugees from another drought stricken area (Chad). Although these shortages have been largely confined to areas with a small percentage of the country's total population, the Church World Services representative in Sudan now estimates that between 400,000 and 500,000 people are in need of immediate assistance. There are also reports of losses of cattle due to insufficient rainfall and lack of pasturage. Darfur Province in the West and Bahr El Ghazal in the central-southern region have traditionally received scant rainfall to support agricultural development. It is reasonable to assume that the present food shortages are in part due to deficiencies in the transportation and distribution system and the influx of refugees rather than from the absence of favorable weather conditions.

The World Food Program (WFP) sent its Juba representative to the stricken areas in June 1974. The WFP representative concluded that the food situation in Northern Darfur and Northern Kordofan was critical, with severe famine potential. His report recommended airlift of 200 tons of grain to these areas, immediate transport of up to 10,000 tons to Northern Kardofan and a self-help, food for work project in the areas of reforestation, water development, desert control, etc. CWS, in cooperation with Caritas are in the process of developing a program of assistance to needy Sudanese and refugees in the northwest provinces. In May 1973, the Government of Sudan requested and was granted permission to use 56,000 Sudanese counterpart pounds to cover the costs of transporting food commodities from Port Sudan to those stricken areas. The Government of Sudan during 1974 has not requested U.S. assistance to ameliorate the effects of the drought in the northwestern areas. In fact, Volags operating in Sudan, citing food transportation and distribution problems, have requested that the initial call forward for PL 480 Title II commodities be postponed to the second quarter of the current fiscal year.

C. Ghana

Northern Ghana borders on the Sahel area. Neither the Ghana Government nor the U.S. views the situation in Northern Ghana as comparable to that in six Sahel states. As yet there is no definite indication that the Sahel Drought has spread to Ghana although there are pockets where rainfall has been inadequate. Over all, food production in Northern area Ghana is satisfactory. Food supplies are readily available in main markets, although supplies in those villages in Northeast affected by shortage of rainfall are inadequate. There is some economic impact from Sahel situation. Grain is moving illegally over the border into Upper Volta in response to higher prices. This has caused pressure on availabilities and prices in Ghanaian markets. The Ghana Government has moved to ease this problem by establishing controlled government

purchase from others parts of Ghana and transport to Upper Volta. Government has also shipped grain into Upper Region markets. Limited movement south of people and livestock into border areas has been observed.

While the situation in Northern Ghana is not comparable to that in the Sahel, the preliminary report of a consultant financed by A.I.D. at the request of the Government of Ghana, indicates that the process of desertification is indeed occurring in Northern Ghana. This consultant has made a number of recommendations which, if implemented, would assist the Government of Ghana better to understand this problem and take preventive measures. A.I.D. is now working with the Government of Ghana to develop a plan of practical actions to be implemented over the next several years which would protect the ecological balance in the region and arrest the process of desertification.

D. Central African Republic (CAR)

The Central African Republic is a landlocked country of 2.2 million inhabitants more than 300 miles from the sea and located almost at the precise center of the African Continent. While the effects of the drought in CAR have not been as serious as in the Sahelian countries, there have been some deleterious effects. Rainfall during the past four years has been on the average 25% below normal causing river levels to drop. The Oubangi River, CAR's major trade route was so low during 1974 that there were 73 days during which the river was not navigable. In normal years there are usually less than 50 days of non-navigability. The low rainfall has had its repercussion on hydroelectric power supplied to the capital, Bangui, from Boal Falls. Flow over the falls dwindled to the point that ENERCEA, the government-owned power company was obliged to reduce power to its industrial customers by 50%. As a result some companies, including the textile company and the beverage company, have experienced production losses. Production losses and food spoilage experienced by other local concerns have been considerable and ENERCEA's power cutbacks have cost the company $1 million per month since January 1974.

All major agricultural crops have been effected by the drought. The peanut crop, the second most important food crop after manioc, dropped from 75,000 metric tons in 1969-1970 to 40,000 in 1971-1972. Cotton, CAR's major export crop dropped about 15% to 45,000 tons last year. This year's rainfall has been sufficient to permit planting on schedule but the size of the harvest will depend on a continuation of the rain. In any case there will be an overall shortfall in production, and food reserves in the north are on the low side because of prior years' poor harvests.

The general overall effect has been to slow up all sectors of CAR's fragile economy. This includes cutting back the volume of exports and imports which causes a rise in price levels, reducing industrial production and increasing unemployment. The average CAR subsistence farmer, particularly in the northern part of the country, has suffered from the drought. Although there are no reports of outright starvation, people in northern CAR are contracting water born diseases at a high rate because they are dependent on stagnant pools for water. The water table is so low that some people must go to wells at midnight or travel great distances to find water. Some disease has been brought into CAR from the north by drought-affected Chadians in search of better grazing conditions. Aside from this, Chadian southward migration, which apparently is not great, has created no serious resettlement problem in this relatively underpopulated land.

In summary, the direct consequences of reduced rainfall over the past several years are mainly visible in the field of transport and power over the whole country and water supply for people and cattle in the north. In agriculture, the input of the drought, while not gravely serious, has resulted in reduced agricultural production. There are no reported cases of famine or even near famine and no refugee problems in CAR.

E. Cameroon

Until recently, the situation in Cameroon did not appear to be affected significantly by the drought in the Sahel. However, last year's food production in northern areas was somewhat deficient and the Government has begun to analyze requirements for possible food imports. On the basis of preliminary information available to the Cameroon Government and ourselves, an agreement was reached to provide 1,000 tons of Title II foods for the people of the northern areas.

This year's harvest is still difficult to predict. The rains started a month earlier than normal (in April) and continued at a good rate until June. At that point there was a break of 2-3 weeks before the rains started again. In some areas farmers lost their first planting and have had to replant. Predictions being made by the Government of Cameroon are that the harvest will be average, except for the north.

At a major health conference held in Yaounde in July, which included health workers from every part of Cameroon, no outbreaks of disease or serious health problems were brought up. Informal discussions indicated that the general health outlook in the north, although low, was not deteriorating. There are reports that a small group of nomads from Niger have moved into the north but they pose no particular problem at this time.

F. Tanzania

The 1974 drought situation in Tanzania is the result of lower than normal rainfall during the past several years. The areas most affected by the drought are centered in North Masailand and along the Kenya border. Estimates as of late March were that 25,000 cattle had died because of the drought and that some 350,000 more were affected by the lack of adequate range, grass and water. Increased sales as a hedge against starvation helped prevent even greater losses. The initial long rains in 1974 were heavy and benefited livestock production areas. The rangeland then appears to be recovering from the drought. Although it will take some time for cattle populations to recover, prospects appear good.

The situation pertaining to food crops is not as sanguine due to the drying up of early plantings and/or the washing away or failure to germinate of later plantings which coincided with the onset of the long rains. The winter wheat crop in the main growing area east of Arusha, which came to market in March, was estimated at one-third of the normal harvest. The next wheat crop in that area, planted in late March for harvest in August, is estimated to be 50% of normal. The maize crop throughout Tanzania is estimated to be 40-50% of normal. Rice is expected to be about 50% of the normal harvest.

The Government of Tanzania reacted to the drought situation somewhat belatedly, but with vigor, and has initiated major procurement programs with neighboring countries as well as with major exporting nations. As of May 27 funds have been committed for the purchase of 390,500 tons. The National Milling Corporation estimates Tanzania's food requirements for the above commodities at 872,000 tons between March 1974 and September 1975. It is estimated that Tanzania will spend up to $100 million for grain imports during 1974 alone (as compared with less than $2 million spent for the same purpose during 1973), which will constitute a severe drain on Tanzania's foreign exchange reserves. The Government is actively seeking concessional terms for food grain imports and related assistance to augment purchases of food. Discussions with our Embassy in Tanzania are in process.

The U.S. Embassy in Tanzania is of the opinion that the Government of Tanzania will be able to meet its 1974 food needs from local stocks and increased food purchases. The situation for 1975 can be assessed following the harvest later this year. The U.S. Ambassador did declare an emergency in May 1974, and $25,000 in Disaster Relief Funds have been made available for humanitarian requirements. A continuing assessment is in process, and requirements for external assistance will be considered as they are identified.

G. Kenya

Until March 1974, large pastoral areas of Kenya were affected by two years of very light rainfall. In late March of this year the long rains began and are continuing with fairly good volume and distribution throughout the country. The arrival of the rains is expected to assure a reasonably good crop growing season this year.

Kenya's current problem is dealing with the afteraffects of the drought. Large numbers of herdsmen, particularly the Masai, are in need of food assistance. Cattle losses, and therefore the milk upon which pastoralists are greatly dependent, have been sizable in some areas. While it is difficult to determine the extent of the drought, estimates are that perhaps as many as 300,000 persons may be in need.

While Kenya has not yet requested assistance specifically in meeting drought problems, the Government has encouraged charitable organizations to proceed with relief in hard struck areas. A.I.D. has made available to Catholic Relief Services 250 tons of corn-soya blend for distribution in the hardest hit areas of the country. The Catholic Secretariat is paying all inland transport costs, and the Government of Kenya of course is permitting duty free entry of the commodities. If the Government of Kenya's expectation that the current rainy season and in-country food stocks will be adequate to meet drought needs prove to be false, A.I.D. is prepared to consider additional assistance.

For many thousands of Kenyans recent drought conditions certainly have exacerbated their precarious existence. While the situation may improve with the arrival of rainfall, the country continues to suffer the after-effects of two years of drought, and it can be expected to again face problems of rainfall failure. The U.S. is prepared to assist Kenya, and is currently carrying on discussions with the Government and its Disaster Relief Office as well as several concerned international agencies. Assistance activities for the short term could include improvement of drought surveillance and alert capabilities, placement of foodstuffs including storage and transportation, minor road repairs, repair of reservoirs and ground water supplies, and immediate production inputs such as fertilizer and seeds. In turn, this assistance could be followed up with production inputs for livestock and crops, especially relating to water management and land use controls.

APPENDIX III

SELECTED PRESS REPORTS AND ARTICLES ON THE DROUGHT IN AFRICA

[From the New York Times, Sept. 22, 1974]

RAINS BRING RELIEF TO SUB-SAHARAN REGION

NIGER TOWN LOOKING TO IMPROVED CROP AFTER DROUGHT

(By Henry Kamm)

DAKORO, Niger, Sept. 15.—Fields of millet, taller than a man and heavy with ripening grain, surround the large camp of nomad herdsmen and their families who were driven to this southern region of Niger by last year's drought and famine.

Here at last, and along a 500-mile drive eastward from Niamey, the national capital, it looks as though the drought is over. The rains have been plentiful and timely since the beginning of the wet season in late June.

Heavy monsoon clouds still hang over the greening landscape, indicating that more rain may fall before harvesting can begin in earnest later this month. The villagers who live in the south as well as the nomads who fled as the Sahara advanced southward in the drought are cheerful.

But, even with a good harvest, Niger will not be able to feed herself this year. The untold damage of the drought, which began slowly six years ago before becoming a disaster along a broad belt between the desert and the lush tropical coastal lands, will be difficult to repair.

Experts of the many nations and international groups that have contributed to the relief effort know that much work remains to be done and continuing help is needed.

RAINS BRING PROBLEMS

Paradoxically, the rains that are bringing so much hope are also bringing problems. Flooding has washed out roads on which food supplies must be carried.

The countries of The Sahel—the Arabic name meaning "fringe" that describes the sub-Sahara region—are some of the world's poorest. The scarceness of all-weather roads is one of the indices of their poverty.

The 75-mile dirt road leading here from the principal east-west highway—also only partly surfaced—has been able to bear a steady flow of relief food northward to Dakoro. Earlier this year, the road was one of the tragic scenes for many of the moving photographs of starving children and dead cattle.

Two thousand to 3,000 persons remain in the camp at the edge of this way station, which lacks only the Foreign Legion fort to be a perfect setting for a remake of "Beau Geste."

"We need only two more weeks of rain," said Tahirou Moussa, the tall and elderly, robe-clad subprefect, in a conversation in the cool, colonial-style house that belonged to his French predecessor before independence in 1960. "The nomads will leave here then, when the millet is ready."

NOMADS LOST HERDS

Asked how the Tuareg and Fulani tribesmen, traditional cattle, camel and goat herders, would fare on their own after having lost so many animals, Mr. Moussa shrugged and replied in French.

"That will be a little difficult. But what can we do? It happened, and that's that."

The millet fields that surround the camp do not belong to the refugees but to the villagers. The Government's eagerness to see the nomads head northward once more stems in large measure from traditional suspicion between the sedentary and the nomad.

The herdsmen seem as eager to leave as the villagers are to be rid of them. The scarceness of men in the camp is believed to indicate that some have stayed with at least part of their herds and found grazing land across the border in Nigeria and others have more recently gone to join the herders to help them drive the livestock northward.

The town of Maradi, on the main highway, after having been swollen to double its size of 40,000 with nomads, is now almost empty of outsiders. The refugees, mainly Tuaregs, were rounded up and trucked northward last May. Many left the certainty of regular feeding with reluctance.

RESULTS OF FAMINE EVIDENT

Feeding the nomads on their northward trek will remain a relief operation until they can reconstitute viable herds. There remains also the results of the famine on many of those who survived it.

A Fulani woman, walking about with her suckling baby, squeezed her thin breast and shook her head, to indicate she had not enough milk. The baby squalled. No signs of extreme hunger were evident, but many women offered their traditional necklaces, bracelets and earrings for sale to raise money for food.

Tuaregs and Fulanis, people of limited commercial ambitions, put their wealth into herds and into jewelry for their women.

Malnutrition is a serious problem also among the villagers. Although their plight has been less dramatic than that of the herdsmen, because they did not have to trek southward to find relief, they have also been hard hit by the drought and have lived largely on the dole.

"Right now they are picking head by head of millet that is ripe," said Dr. Burt Long, an American who runs the hospital of the Sudan Interior Mission near the village of Galmi.

"And I'm afraid they're picking some before it's ripe."

Dr. Long, who has been at Galmi for 24 years, said the famine had greatly reduced the life expectancy of a people who even in years considered good suffer from malnutrition.

"They have no reserves," Dr. Long said.

"If this year's crop breaks the famine," the doctor continued, "we will see for five years to come a much higher rate of deaths, and then five more years of more deaths than is normal."

[From the New York Times, Oct. 3, 1974]

AFTER THE DROUGHT, A SHAKEN NIGER FACES LONG UPHILL STRUGGLE

(By Henry Kamm)

NIAMEY, NIGER.—An extensive international relief effort has substantially ended the famine in Niger, one of the countries most tragically afflicted by last year's catastrophic drought that spanned the African continent immediately below the Sahara.

This year's rainy season, now drawing to an end, gives hope for a good harvest. But for years to come, even with continuing good harvests, Niger will need help in feeding her population of about 4.2 million and in overcoming the long-term effects of the drought.

Many people are presumed to have died of starvation or of illness fatal only because of the hunger-weakened state of the victims. Mortality was highest among young children, who will also suffer most from the long-term effects of malnutrition. But in a region where even the number of the living is a far-from-precise statistic, it is impossible to know how many died.

Both President Seyni Kountche and the Public Health Minister, Moussa Sala, said in interviews that they could not estimate the number of dead. They said that the international rescue effort averted the worst. Certainly the gloomiest predictions of last year, forecasting mortal danger to millions in the sub-Sahara region, proved excessive.

But even fewer might have died or suffered greviously if relief had arrived faster and more nations had helped.

FOOD BEHIND SCHEDULE

Although a study mission prepared an accurate blueprint of Niger's needs last October, it was March before the flow of food began in earnest.

Taking into account port and road transport facilities an optimum goal of 25,000 tons a month, beginning in January, was set for the arrival of food supplies. But by mid-March, no more than 10,000 tons had reached Niger.

The optimum flow, which would have adequately stocked forward distribution centers before the summer rains made much of the country inaccessible, became instead an unmanageable flood of 50,000 to 60,000 tons a month through Nigerian and Dahomeyan ports in April, May and June.

The United States provided more than half of the nearly 200,000 tons of food, mainly sorghum, that pulled Niger through. The European Economic Community, as well as West Germany, France, Belgium and Canada, and the United Nations World Food Program, were the other major contributors.

Others capable of helping have been more reticent.

The assistance from Arab countries to this Moslem nation was "infinitesimal," President Kountche said.

Kuwait and Algeria each sent about 1,000 tons of wheat and Iraq 850 tons of dates. President Kountche, a devout supporter of Moslem unity, said that since he seized power in a military coup April 15, Libya and Algeria had provided some help.

SAUDI ARABIAN REPORT

In a recent news conference, the head of the Saudi Arabian diplomatic mission here, Hassain al-Rachach, said that his country had contributed about $2-million. But international development experts here put the cost to Niger so far of increased fuel prices close to $9-million, or about one-fifth of the total national budget.

The Soviet Union has donated 2,412 tons of rice and five trucks. China has provided no help, unless 500 tons of rice given in the name of Prince Norodom Sihanuok, nominal head of insurgent forces in Cambodia, was of Chinese origin.

Aid missions here are at a loss to explain the three-month delay in the start of food deliveries. At the United States Embassy and at the European Economic Community and United Nations offices, distraught officials offer to show stacks of telegrams that they dispatched, in the critical months importuning governments and international organizations to act.

"We felt a heavy responsibility," said Alexander H. Rotival, representative of the United Nations development program and a coordinator of the aid effort. "The people had eaten their reserves and were down to their stoic ability to resist death without food."

BUREAUCRACY BLAMED

The slowness of bureaucracy is the reason most often advanced. The United States Ambassador, L. Douglas Heck, said he believed the decision in Washington to make the American efforts as much as possible part of the international program made a slow start inevitable.

Drawing a lesson from this performance, the United States has already set aside 100,000 tons of food grains for the sub-Sahara area for the coming year. A quarter of that is destined for the stockpiles of this country.

The pressures on the White House resulting from the Mideast war and Watergate may have been responsible for the Cost-of-Living Council's one-month delay, from December to January, in approving the 400,000-ton grain program for the drought area.

The results of the delay are still being felt here in the inordinate difficulties of distributing the food to the remote regions of this thinly populated, landlocked country, which is larger than Texas and California combined.

Camel caravans have taken over where even four-wheel-drive vehicles fail. Three convoys of Algerian trucks are crossing the Sahara from Algiers, carrying 1,500 tons of American sorghum to the northern regions of Niger not reachable from the south. The United States and the United Nations Food and Agriculture Organization are sharing the transport costs.

In the most hopeful of estimates, it will take at least three years of continuously good growing seasons for Niger to regain what President Kountche called her "food equilibrium."

In those years, Niger will need donations of grain to replenish the two to three years' reserve that her farmers normally stock for food and seed. That reserve has been wiped out. She will also need grain to feed the nomads until their herds of cattle, camels, sheep and goats—about half of which are thought to have been lost to the drought—have been renewed to a viable minimum.

If the weather and the donor nations remain favorable, there is optimism here that Niger will return to where she was when the weather cycle turned to increasing drought seven years ago. She is a country where in the best of circumstances all but a few people live on the margin of subsistence and look forward to a life span of no more than 40 years.

[From the New York Times magazine, June 9, 1974]

DROUGHT

NATURE AND WELL-MEANING MEN HAVE COMBINED TO PRODUCE A CATASTROPHE IMPERILING MANY MILLIONS

(By Martin Walker)*

BOUTILIMIT, Mauritania. "We are living in a catastrophe," said Dr. Moustapha Siddatt. "Last year, the babies started to die in May when the measles came. This year, they started to die in March, with the flu. We are all that much weaker this year."

Above us on a hill brooded the curiously squat shape of an old French fort. It had once been three stories high, but now the two lower floors were filled with drifting sand. This part of the dry season was always windy, but years of drought had killed off what little vegetation held down the sand. The sandstorms had never been so bad.

Boutilimit—a garbled phrase of the Legionnaires that means "the end of the line"—was home last year to 4,000 people. This year, there are 12,000, and more arrive every day from the desert that has finally proven too much for them. They arrive without their animals. Mauritania had some 11 million head of cattle last year, and a million people. This year, says the Minister of Health, there are perhaps two million cattle left. Even the camels have died. In Boutilimit, they saved five camels to haul up the water from the wells. The water level has fallen so far—it is now more than 200 feet deep—that the men are too weak to haul up the buckets.

It was 140 degrees Fahrenheit in Boutilimit, and it had taken us a day to drive the 160 miles from the Mauritanian capital of Nouakchott in a four-wheel-drive Land-Rover. Much of the time was spent digging the truck free from drifting sand, and it had become horribly clear to us why no food trucks had reached this place since the week before Christmas, why the food ration for the 12,000 people had been cut to less than 200 grams per person per day, why the French doctor who came here went back to the capital and told the Ministry of Health: "There is nothing to be done. These people are lost."

Dr. Siddatt led me through the crowded tents that made up his hospital. One hundred and thirty-four families had trekked in from the desert in the last week. Their tents surrounded the little mud building where the dwindling supplies of drugs were kept, sprawled across what had been the main street, and crept up the hill to the old fort. "Here is where we keep those with TB. There are the typhoid patients. They all have anemia, and soon they will all have jaundice. There is not very much I can do. I write to doctors who were at medical school with me in France, asking for their free samples. But what they really need is protein—meat and milk from the animals that died last year."

The flu came to Boutilimit in March and killed more than 400. Nobody had the time or the strength to keep exact figures. Now chicken pox was racing through the tents. We stopped at one tent, where three children had died recently of chicken pox. The other four children were still sick. Dr. Siddatt thought that two would live.

We walked through the tents, looking at feet that had swollen, like footballs, from protein deficiency, at eyelids chalk-white from anemia, at limbs so like sticks that the knee joints looked gross and deformed. Something seemed to be

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*Martin Walker is a columnist for The Guardian. He recently spent five weeks traveling in the drought-affected areas of Africa.

missing, and it suddenly occurred to me that there were no children following us. In most villages in Africa, a white man strolling around bears a long train of giggling, thumb-sucking children. But here, not one child had the strength to play or to follow or even to wave away the flies that crawled on his sores.

IN AFRICA, THE DROUGHT IS SUCH A VAST CALAMITY THAT OUR STATISTICAL MACHINERY IS UNABLE TO MEASURE IT MEANINGFULLY

The drought that afflicts Boutilimit stretches across the African continent, all the way to Mecca. As well as Mauritania, its dry hand has touched the adjoining countries of Mali, Niger, Chad, the Central African Republic, the Sudan and Ethiopia. It has crept down to Kenya and it has killed the animals in the game park outside Nairobi. It has divided huge Lake Chad into four ponds. (The fishing village of Bol once stood on the lake's shore but now is stranded 18 miles from water.) Right across the waist of Africa, the belt of drought stretches 4,000 miles long and 1,000 miles wide. And beyond the Indian Ocean, in a similar latitude, the drought continues through India's Maharashtra province, into China's Yangtze Valley and right on around the world into Central America.

It is such a vast calamity that our statistical machinery is unable to measure it meaningfully. In the African drought belt, observers think there are about 50 million people, of whom one-third have been severely affected. Bill Price, the British Overseas Development Minister who has just returned from West Africa, reckons that five million now face starvation. Kurt Waldheim, the Secretary General of the United Nations, says that up to 10 million may face starvation across Africa. Nobody really knows for sure.

It is perhaps easier to comprehend in geographic terms: As a result of the ongoing drought, the Sahara Desert has been creeping south, reclaiming huge sections of the marginal land between the desert and the great River Niger, an area known as the Sahel, from the Arabic word meaning shore. The Sahel supports the herds—cattle, camels and the ubiquitous goats—of such desert-dwelling nomads as the Fulani and the Tuareg in the dry season, as well as thousands and thousands of tiny villages and hamlets that exist on subsistence crops of millet and sorghum. Last year, the desert advanced about 60 miles, leaving behind village after village where only sand blows through abandoned huts, where the desert has already covered the stubble of millet.

Thus, in addition to causing widespread physical suffering and death, the drought has incalculable social consequences. The scarcity of food and other resources has aggravated existing tensions in the underdeveloped societies of the Sahel—in recent months, the Governments of Niger and Ethiopia have fallen, and in both countries the drought has contributed to unrest.

The ancient nomadic and peasant cultures of the Sahel were already under considerable pressure as the national boundaries of new African nations cut across their traditional paths of migration and as modern cash economies disrupted their normal way of making a living. The drought has proved a final blow in many places, and some observers of the Sahel have come to believe that the traditional cultures are no longer viable. Meanwhile, Sahel governments must cope with the problem of feeding and caring for settlements of refugees that begin to look more and more permanent.

Rain still falls in the Sahel—enough each summer, in fact, to wash out fragile roads necessary to transport food stores—but in recent years these rains have been sharply diminished. In normal times, 200 millimeters of rain would fall on Boutilimit between July and September, but last year only 41.6 millimeters fell. That was typical—it was a lucky Sahel zone that received even half its normal rainfall last year, and any area that received that much was immediately deluged with refugees. Rosso, on the Senegal River, gets 350 millimeters in a normal year. Last year, 164.5 millimeters fell, and the town exploded from 8,000 to 35,000 people in eight weeks.

It is becoming increasingly clear, furthermore, that this drought is no temporary meteorological aberration, but a basic shift in weather patterns that is causing a progressive reduction in Sahel rainfall. For centuries weather in the Sahel had been governed by the shifting of a body of cold polar air. In spring and early summer, it would begin to recede to the north. As it did so, temperate air masses would follow, and so, in turn, would moist air belts that carry monsoon rains. Then in October, the polar air would begin moving south again, bringing the dry season to the Sahel. Now, however, an increasing number of climatologists believe the polar air mass is not receding so much with summer, and so the temperate air, and the monsoon bearing moist air, cannot move so far north.

No one knows for sure why this has happened, although some scientists believe it has to do with the recently observed fact that the temperature of the earth has dropped gradually over the past few decades. This has resulted in an expansion of polar air masses, in a way that keeps monsoon rains below a line that corresponds closely to areas now experiencing drought.

If the theory of the polar air mass is valid, however, the implications are dire for the Sahel, for there is little man can do to deal with it. Thus, the British meteorologist Derek Winstanley argues that massive reforestation projects in the Sahel will have little effect on the southward march of the Sahara. For the rain will still not fall.

The effects of the drought are compounded by an ironic factor: Well-meaning aid projects over the last decade or so have resulted in an overpopulation of men and livestock that makes the current reduced ability of the land to support them far more disastrous in terms of lives than it might have been before. In the Sahel, the good years began shortly after 1961. There were six years of unusually high rainfall, which improved the thin and scraggly desert pasture. Then came the aid projects—U.S.A.I.D. built more than 1,400 wells where people seemed to need them most, which meant where there were most people and most cattle. In a desert society, which exists in a subtle ecological balance, one of the key restraints upon the size of herds has been the amount of water the tribe can haul up for its cattle by hand. The new power wells were soon surrounded by too many cattle for the available pasture. And with the vaccination programs, fewer cattle died prematurely. The human population explosion, fueled by the beginnings of health care, needed the extra cattle, and the frail ecology of the Sahel began to crumble. Even in 1968, a relatively mild drought led to the desertification of vast areas, as the herdsmen cut down trees so their cattle could eat the foliage, as the hungry and numerous goats ate the very roots in the ground. Nineteen-sixty-nine was an almost normal year for rains, and the crisis was avoided, but the diminished rains of 1970, '71 and '72 condemned the bulk of the Sahel herds to death in 1973, and brought the Sahara into thousands of square miles of hitherto fertile land. The sheer scale of the human population increase terrifies local aid officials. Achim Kratz, the director of the European Development Fund mission in Niger, last year produced an authoritative report that concluded that even with good rains for the next 10 years, the food-population ratio will be worse in 1982 than in disastrous 1973.

FIRST THERE WERE HEALTH AND OTHER AID PROGRAMS; THEN CAME THE DROUGHT; THE COMBINATION HAS DEALT A DEVASTATING BLOW TO THE FRAGILE ECOLOGY OF THE SAHEL

There are a handful of towns scattered through the Sahel, most of them, like Agadez and Timbuktu, centuries old—the only reminder of the great and prosperous civilizations that flourished here six centuries ago when the desert was fertile. When the nomads and the peasants, their traditional way of life shattered by the drought, decide to flee, they move to these towns and to the modern cities on the Niger. There they live in pathetic and disease-riddled shanty-towns. Fewer and fewer people remain on the land to plant next year's harvest, to tend what cattle are left. Food production has thus declined and can be expected to continue at reduced levels, but the uprooted nomads and peasants gathered in the towns must still be fed. And though the crisis that has left them starving is awesome in magnitude, organized attempts to help them have shown an appalling lack of urgency and competence.

The major food donors and local officials have agreed that about seven million people in the Sahel will need emergency food aid this year, and an investigating committee of donors decided after a factfinding tour last September that some 650,000 tons of food would be required. The food itself was not a problem—in fact, almost 600,000 tons were pledged by various donors (in particular, the U.S. and the European Economic Community) by January of this year. But the food is useless unless it can be shipped to northern areas where the hungry people are.

Roads are few in the Sahel. When they exist, they are simple dirt tracks that are covered by drifting sand in the dry season and washed away by the rains. On the average, a Land-Rover can cover 100 miles a day. The normal life of a truck, in these conditions, with few servicing facilities, is about 1,000 hours. There are also four old and frail railroads that go from the ports on the coast up to the southern part of the marginal zone. The capacity of these road and rail

links is about 100,000 tons of food per month, and so if the required 600,000 tons of food is to be moved into place by the time the rains come in July, the shipments should have begun in January.

That should have been possible. Last year, when an emergency program was hastily patched together to deliver 400,000 tons, so little time was left to deliver before the rains came that aircraft were being used from May. But the airlift was so cumbersome and expensive that local aid officials hoped to avoid it this year. They worked out a plan for transporting food by land and forwarded it to Brussels, Rome and Washington last October. That left more than three months for the bureaucratic work and for the shipments to be arranged.

But on Jan. 31, the Food and Agricultural Organization's Sahel Relief Office (OSRO) issued report No. 8. Clause 6 reads: "The timely shipment of donated commodities is of considerable importance. OSRO has prepared tentative shipping schedules for each country by month and by port, taking into account port and internal transport capacities. These schedules will be discussed at a meeting of major donors called by the E.E.C. in Brussels on 12 February 1974."

In other words, by the time that meeting began, six vital weeks of delivery time had been wasted. And it was not until mid-March that the Council of Ministers in Brussels gave the full and final agreement for the deliveries. Only in April did the food begin to arrive in any real quantity. In Niger, for example, a steady supply of 23,000 tons a month was needed. Anything less meant transport capacity wasted. Anything more meant transport capacity swamped and food stockpiled on the wharfs at the mercy of rats and weather. But the monthly arrivals at the ports for Niger look like this:

	Tons
February	10,438
March	7,662
April	49,102
May	20,252
June	11,017

It takes five weeks to get the food from the ports to the distribution points, so anything delivered after June will be blocked by the rains, which close the roads. The transport plan was never put into effect.

So another airlift will have to be undertaken this year, a fact that amounts to an indictment of the international aid community. President Hamani Diori of Niger pointed out to me shortly before he was ousted in a military coup that "the international community spent over $40-million on transporting food to Niger last year. Most of that money went on the airlift. For that kind of money we could have irrigated 11,000 hectares of land near the Niger River, which would have produced 110,000 tons of food. That is not far from our total needs—the economics of airlifts simply does not make sense."

Moreover, aircraft need fuel. The Belgian Air Force Hercules planes were using 19 tons of aviation fuel to deliver one ton of medical supplies to northern Chad last year. The U.S. Air Force used a ton of fuel for every ton of grain it flew from the railhead at Bamako to the refugee camps at Gao. That aviation fuel has to compete with food for limited rail space on the long slog from the ports.

The delay in approving food shipments was not the only administrative mistake. The multidonor mission that visited the Sahel last September to ascertain the total food needs agreed with the Mauritanian Government that Mauritania needed 100,000 tons in 1974, in addition to the 40,000 tons already in the pipeline for the country. Once back in the F.A.O. office in Rome, that 100,000 ton requirement was cut to 60,000 tons, to the horror of the Mauritanians.

To quote from a confidential World Food Program report dated Dec. 8, 1973, the reduced F.A.O. estimates were "based on either a misinterpretation of the recommendation made by the members who visited Mauritania or on a misunderstanding of the situation by the latter. It had been agreed between the mission and the Government that 100,000 tons of cereal would be required in 1974 in addition to the 40,000 tons in the pipeline at the beginning of October 1973."

In other words, somebody had put a minus sign where there should have been a plus sign. The immediate result was that the Mauritanian Government cut the food ration to below 300 grams per head per day—a level of slow starvation.

The confidential report goes on: "In a report of the proceedings of the multidonor mission in Rome it is claimed that the Mauritanian Government indicated that it could only handle the distribution of 58,000 tons of food aid or relief supplies. This is absolutely inaccurate. No such statement was ever made, nor is it contained in any report originating in Mauritania." In fact, the report went

on, Mauritania could distribute about 120,000 tons a year. Although this mistake was uncovered last December, Dr. Abdallahi Ould Bah, the minister in charge of the Mauritanian relief program, told me at the end of March that he had still not been promised the extra 40,000 tons, Belatedly, this food is now on its way.

The organization that should have detected this error was the Sahel nations' own emergency committee, which was established more than a year ago. Based in the Upper Volta capital of Ouagadougou, it was meant to coordinate food deliveries and provide the link between the bulk deliveries of the donor nations and the local transport of the individual nations. In fact, it has done little, largely because the various nations of the Sahel, each jealous of its own authority, have given the committee no real executive authority. Its major action so far has been to undermine its own credibility in Western eyes by presenting last year an unrealistic shipping list of unrelated and ambitious aid projects, with a price tag of $1-billion. According to one American soil expert, the committee's estimate of fertilizer needs would have poisoned every river and every acre of the Sahel for a decade.

We should not forget that the bureaucratic standards of the West are not applicable in the Sahel. These nations are among the poorest in the world. Insofar as the figures mean anything, Upper Volta has an annual G.N.P. per capita of about $60. Niger's is about $80. Independence 14 years ago found these countries with but a tiny band of educated leaders. Niger had but one high school. Education facilities, civil administrations and the accouterments of statehood had to be assembled from scratch. In "normal" years, about 40 per cent of Tuareg children die before the age of 5. The fragile administrative structures of the Sahel nations were barely adequate to cope with the strains of underdevelopment, let alone with a drought that made half the population into refugees.

This fundamental economic and administrative incapacity to handle a crisis of this scale was aggravated by the prickly pride of these newly independent nations. It is never easy for a government to announce to the world that it is incapable of saving its own citizens, and this kind of confession can be politically dangerous in countries where traditional tribal hostilities and jealousies are in an uneasy state of truce. Nowhere was this official reluctance to face up to the problems as marked as in Ethiopia. In November, 1972, its Ministry of Agriculture circulated a confidential report on the failure of the rains and crops, which would necessitate "major food imports" in 1973. The Cabinet chose to suppress and virtually ignore this report. And then in February, 1973 the first batch of starving refugees approached the capital and the tourists of Addis Ababa. They were swiftly turned away by the police and the alarmed Government was soothed by the report of the Governor of Wallo Province that there was "a problem of drought," but all was under control.

THE HERDSMEN AND PEASANTS, GATHERED IN CITIES, DON'T PRODUCE FOOD; THEY MUST STILL BE FED

This official complacency meant that the local U.N. aid agencies, whose charter forbids them to work in anything but close association with the host Government, were not able to mobilize any effective relief. A stormy meeting took place in Addis Ababa on Aug. 14 last year, when an ex-Peace Corps UNICEF official presented a report saying that 60,000 people had already died in Wallo Province and the area was devastated. The Minister of Health suppressed this report, and said that such events could not occur in the great Empire of Ethiopia. But a copy of this report found its way to Britain, and journalists and TV crews went to Ethiopia and reported the crisis to an alarmed world. Then the Government, with incompetence and corruption, began to handle its "problem of drought." Terrified that adverse news would ruin the tourist trade, the Government refused to admit that Wallo Province was raging with cholera. The Government insisted that the ailment be called "gastro-enteritis C." But the Government was only too happy to accept doses of free chlorea vaccine—and then to sell them for the equivalent of two American dollars a shot. The people who had to pay were the desperate, starving, impoverished victims of Wallo.

These were the events that led to the student and military outrage which erupted early this year and led Emperor Haile Selassie to dismiss the Government of Premier Aklilou Wold and install the avowedly reformist regime of Endalkachew Makonnen. That old and discredited Government is gone, but the inflation and the national trauma that drought has brought have injected a basic instability into a system that has preserved Ethiopia in feudal stasis for centuries. For the

drought's effects are all the more vicious in the context of that archaic system. Drought or no drought, the church, owning one-third of all the land, has demanded its rents from the impoverished peasants. And so has the aristocracy. The peasant farmers of Ethiopia have paid about 90 per cent of their crops in rents and taxes. Corrupt officials have abused their power to enrich themselves at the expense of drought victims.

The results have often been violent. In April, I drove deep into southern Ethiopia, towards the Kenyan border, where the drought of last year had left the inhabitants desperate. Encouraged by the political unrest in the capital, peasants who had been docile for generations exploded into a sudden rural revolt. All down the fertile Rift Valley the sky was trailed by the smoke from the burning farms. In the town of Arba Minch, we had barely crossed the only bridge before the local people tried to blow it up. Fifteen people were shot dead in the town that day, three by the nervous police, and the rest by landlords defending their farms against angry mobs of peasants. The provincial Governor had fled back to Addis Ababa, leaving his home in flames behind him. He was no great loss—he had persistently refused to distribute any of the aid food until every last bushel of his own harvest had been sold at three times the normal price. The local priest fled with him. The Governor had been donating $500 a month to the church, and the priest had threatened the townsfolk with mass excommunication if they attacked the Governor. They attacked anyway. The local Mayor was in hiding from a lynch mob.

In Ethiopia, whether the Emperor lives or dies, whether the rains come or not, life will never be the same again. The new Government has already begun to draw up more radical programs of land reform, because its first timid proposals were howled down by an outraged National Assembly. The peasants have shaken off the apathy of centuries. The Emperor has been forced to name an heir. The armed forces have come of political age.

Besides contributing to political unrest, the drought has cut savagely into Government revenues. In Mali, almost 29 per cent of the tax revenues came from poll taxes on cattle. And in Niger, the relatively mild drought of 1968 cost $20-million in lost agricultural production and $14-million in lost livestock—this in a country with a budget of $65-million. The oil crisis served to twist the economic knife inside the wound. The third world as a whole faces an oil bill that is $11-billion higher than last year, and yet total financial aid to the third world is only $8.5-billion. Even in relatively wealthy Senegal, this year's higher oil bill is costing over $70-million, which is slightly more than a quarter of the national budget. And one cannot relieve a famine without gasoline. In Senegal, the Government even has to take water in trucks to the people who live along the shores of the mighty Senegal River, because its flow is now so weak that the water is salt 80 miles from the sea. It has not passed unnoticed in the Sahel Governments that their fellow Moslems control the oil and have some say in the final gasoline prices, but the desperate Sahel governments are still paying the full commercial cost.

The prostration of the Sahel countries by the drought has undermined their economic negotiating position, particularly since the oil price rise has emphasized oil-rich Nigeria's role as Africa's new superstate. Diplomats and aid officials are already suggesting that the Sahel's future lies in much closer economic and political links with the stronger nations that surround them. Traditionally, these nations have been firmly tied to the apron strings of France, the original colonial power. But at the end of March, France agreed to withdraw her last troops from Senegal, and to hand over the key naval base of Dakar. The death of President Pompidou has simply accelerated an established trend of diminishing French influence. The oil-rich neighbors, Libya, Algeria and Nigeria, are increasingly concerned about who governs the nations in their rear. And the trans-Sahara road, from Algeria down through Niger to Nigeria, is arguably the single most strategic road in Africa. Although the social problems and dislocation of the drought were the underlying reasons for the recent coup against Niger's President Diori, its immediate cause was the defense treaty he had just signed with Libya, a move that upset the delicate new balance in the area and alarmed the neighboring Nigerians. Power politics has come to the Sahel, and the impact of the drought has left the Sahel nations with pitifully few cards to play.

If these countries are to stand on their own at all, they will need to solve the basic problems of underdevelopment that the drought has masked. They will need an agricultural revolution, producing cash crops with adequate roads to move the harvest to the markets. And yet, any change in the economic structure of the

Sahel will need the agreement and cooperation of the markets for their cattle and manpower in the south. In addition, the Sahel nations argue that they need guaranteed prices for their primary produce from Europe, which will give their farmers incentives to increase production for export. But after the Arabs' use of the oil weapon and the explosion of commodity prices in general, Europe is wary of guaranteed price structures; the third world countries seem quite capable of getting better prices for themselves.

More profoundly, any attempt to modernize agriculture in these countries will require massive adjustments in attitude on the part of the people. Mauritania, a nation that is perhaps 90 per cent nomad, has already decided that the desert has become too much for the old way of life to continue. The Minister of Health, in charge of drought relief, openly suggests that the future of his country lies in having the vast majority of the population settle down to a static, peasant life in the fertile strips along the coast and along the Senegal. "There will be oases inland, and no doubt many of the older people will return to the desert if they can. But if this drought has given us the opportunity to modernize our society, we must not ignore it," he argues. In Niger, the only country which had a Minister for Nomads (who was himself a Tuareg), the future is seen to lie in irrigated farming along the banks of the Niger, with nonnomadic stock-raising in the marginal zones. Man has endorsed the verdict of nature.

EXPERTS TALK OF 'RE-EDUCATION,' BUT WHEN A PEASANT LOSES FAITH IN HIS LAND, AND WHEN A NOMAD LOSES HIS TRUST IN THE FERTILITY OF THE DESERT, THE EFFECT IS A KIND OF PSYCHOLOGICAL CASTRATION

A massive re-education project will be needed to turn the nomads into settled farmers, and to take the peasant refugees from the shanty-towns and out to new, irrigated areas near the fertile river. In Mauritania, this is beginning to happen; a network of local radio stations to focus on agricultural education is being established. But there is little sign of such prescience elsewhere. This drought, and its social effects, has come as a traumatic psychological shock to the people of the Sahel. When a peasant loses faith in his land, and when a nomad loses his trust in the fertility of the desert, the effect is a kind of psychological castration.

Aid officials, too, are despondent, having seen the drought's brutal negation of a decade of development. In northern Senegal, the rice plantations and sugar-cane groves, all developed in the last 10 years, are dead, poisoned by the salt water that has crept up the river from the sea. In Mauritania, the famous gum trees of Mededra, whose gum arabic was a key source of foreign exchange, are dead. Small market-gardening projects, stock improvement programs—so many are now wasted by drought. The panic of the last two years and the overriding need to keep people alive have left little time for the planning of long-term reconstruction. The World Bank is looking at a $70-million dam project on the Senegal, but there are fears that the reduced water flow may make such a dam superfluous.

Meanwhile, to the frustration of those who hope for rural development, many of the refugees are digging in to become a permanent feature of urban life. In Nouakchott, for example, whose population swelled from 40,000 to 120,000 last year, walls of mud brick are beginning to appear around the tents in the shanty-towns.

Inevitably, the old ways will pass, and the passage may not be very smooth. What few nomads the desert will support will have to give up their goats, the basis of their old way of life, for goats eat the bark from the trees, the roots from the ground and, in terms of erosion, are the advance guard of the Sahara. The Governments of Mauritania, Mali and Niger have already—with reluctance—decided to follow the example of Tunisia and declare war on the goat. The few remaining herdsmen will also have to learn to sell their beloved cattle for slaughter when they are 5 years old, rather than cherish them until they die, for reasons of custom and prestige, as they still do. The herds will be rebuilt, up to a point, but they will never be allowed to overpopulate again. This can and will be attacked as cultural rape, but the Sahel governments have little choice but to try and absorb the nomads into the developing economy.

And so there is a deeper sadness about the drought, beyond the immediate despair and suffering. The archaic feudal system of Ethiopia can pass unmourned perhaps, but the nomad way of life in the Sahara, the style of the Tuareg, has probably contributed something utterly intangible but rather valuable to the

human experience. It was a strikingly effective way of using limited resources to the best effect, and more than that, it generated an ethic of freedom and eternal challenge against the most hostile environment in the world. In that sense, it was always in some indefinable manner inspiring, and in a particular way the human race may never see again.

[From the National Geographic, April 1974]

DROUGHT THREATENS THE TUAREG WORLD

(By Victor Englebert)

A baby is being born in the Sahara night, near a lonly desert well in Niger. The mother has been crying out in pain for hours.

I cannot sleep, and I can see that my companions, like me, have their eyes on the velvet sky. A full moon has just popped above the dark horizon, and it extinguishes the stars like fairy lights at the end of a feast.

Lying near me on the soft sand are my 15-year-old daughter, Barbara, and my 13-year-old son, Eric. A little farther off, our Tuareg guides and interpreters, Mohammed and Hamid, are wide awake. In their three tents fifty paces away, our Tuareg hosts are not sleeping either.

PIETY RESTS LIGHTLY ON TUAREG SHOULDERS

Every few minutes the woman in labor cries mournfully, "*La ilaha illa Allah; wa-Mohammed rasul Allah*—There is no god but God; and Mohammed is His Prophet."

"Hamid," I ask, "is Raisha's time near?"

"Yes, I think so," he answers. "And she may well pray now; she has never done so in all her life."

"Neither have you, I suspect. Since you joined us yesterday, I have not seen you bow once in the direction of Mecca."

Hamid is relaxed about his faith, as are many Tuareg. His people's name, according to one theory, means "the abandoners" (implying they had abandoned religion). It was given to them by Arab invaders of North Africa in the Middle Ages because the Tuareg were pagans. Though long converted to Islam, many still show little religious fervor.

Hamid responds to my accusation with an embarrassed smile. He pulls his blanket over his head, pretending he can sleep in spite of poor Raisha's cries. Our hosts and their children talk softly in the dark. Suddenly I realize that Raisha's cries have ceased.

The people I am visiting this night have been my friends for years. Since I first met the Tuareg in 1957, I have not been able to live happily away from them for long, and have returned many times to share their campfires and their tents, their ceremonial tea, their joy in a successful journey with a salt caravan.*

But on this visit I share their frustration and bewilderment as they confront a foe against which their bravery avails them little, an enemy that could well put an end to their centuries-old way of life. A terrible drought plagues six nations that rim the desert's southern edge: Senegal, Mauritania, Mali, Upper Volta, Niger, and Chad (map, page 547). Some have not seen meaningful rain for seven years. Also stricken are parts of Nigeria, Cameroon, and Sudan. Rainfall has been sparse even in distant Ethiopia and Somalia.

The Sahara has devoured thousands of acres of once-productive farmland. Larders are empty, for even the seed grain has gone to feed hungry families. But a massive international relief effort has brought new seed and grain to avert mass starvation. If Allah wills it, and the rains are good, farmers may begin a slow recovery.

To the nomadic Tuareg, the decimation of the herds that made them mobile has been a crushing blow. Dazed Tuareg men gather in the towns and cities to seeks jobs, and they gaze glumly at a noisy, busting world they would never inhabit willingly. Families huddle in relief camps there, existing on the grain and powdered milk that is airlifted in. Some Tuareg have committed suicide, some have gone mad.

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*"I Joined a Sahara Salt Caravan," by Victor Englebert, appeared in the November 1965 Geographic.

DROUGHT HASTENS INEVITABLE CHANGE

Even before the drought, the winds of change sweeping Africa had eroded some of the old nomad ways. Arab and European fashions had crept into the Tuareg costume, the famed indigo robes of a unique culture. In some places I have seen tents of plastic instead of leather, and water bags fashioned from old inner tubes rather than goatskins.

Such change is the reason my children and I sleep tonight near I-n-Abanrherit Well. I have long cherished a dream for Barbara and Eric: I have wanted them to know, before the old ways have vanished, the beautiful desert people I love so much.

And so I have taken my son and daughter out of their school in New York for a while, and now, with the aid of a Land-Rover shipped from Belgium (we were all born there), we are in the heart of the Sahara, 1,200 miles south of the Mediterranean, and our ears are straining to hear the cries of a new babe pierce the stillness of the desert night.

NOMADS IGNORE NATIONAL BOUNDARIES

A Berberpeople, the Tuareg are predominantly tall and fair skinned, though intermarriage has resulted in darker hues among some groups. The Arab invaders of the 7th and 11th centuries and the Europeans who later ruled most of North Africa feared and respected the Tuareg as fierce warriors; they were never truly conquered, but only subdued by modern weapons.

Today they number about 300,000, organized into several political confederations that have nothing to do with the boundaries of Sahara nations. Our friends of I-n-Abanrherit belong to the confederation of Ahaggar.

Tuareg society, established long ago by force, is feudal in character, with nobles—*imaheren*—the topmost caste, followed by clergy, vassals, artisans, and slaves, who are now merely servants and laborers.

Mohammed and Hamid are not nobles, but of classes a bit below. We found them 140 miles southeast of I-a-Abanherit in Agadez, a market town on the southern edge of the Sahara in Niger. I was looking for the Tuareg companion of my last Saharan journey. Although once I was almost fluent in the Tuareg language, Tamahaq, the years and new tongues I have learned has erased much of it, and I must now have an interpreter.

But my old friend had gone away to work in a uranium mine, I was told, and when Mohammed came to me and asked if he could serve us, I was pleased to engage him. As for Hamid, he tried to sell the children silver jewelry of his own manufacture and wound up by selling himself.

"Please ask him to go with us," they begged. I did, and he accepted.

Merry, marvelous companions, the pair brought joy into our lives from the outset. They showed Barbara how to make a frayedtwig toothbrush that is as good as any commercial one. They taught Eric how to crack a rock-hard sugarloaf with a frail tea glass.

When the children wanted to know the length of Mohammed's turban—his *tagilmust*—he did not hesitate, against normal Tuareg male custom, to bare his face as he unwound the great heargear to its full twenty feet. Delighting in the children's wonderment, the two men put their feet into the cook fire until even soles turned to leather by years of plodding in the sand must have felt pain.

Now, with the consummate ease that also causes the children to marvel, they roll up in their bedding by the fire, they smile, they bid us good-night, and they are instantly asleep.

BARBARA BASKS IN THE GLOW OF GRATITUDE

As the sun is rising, Bukush, husband of Raisha, comes to light our fire and prepare our tea.

"Is the baby born?" asks Barbara.

"Yes," Bukush answers with a smile. "And I think we may call her Barbara. You have brought us luck. Raisha had been suffering for days when you arrived last night; you brought her deliverance."

The beautiful pink baby is lying unwashed on a piece of cloth, already covered with a film of sand, already the prey of flies. If she survives, she will be another tough Tuareg specimen. Two knives are planted in the ground at her head to protect her and her mother against demons.

Demons? There are greater enemies of these people, including, at times, themselves. Visiting the Iullimiden tribe south of the Sahara, I have sorrowed in a sun-seared world's end where no animal life moved, not even a bird. Too much of the brush had been cut for animal forage by desperate herdsmen, allowing the sand to move in and cover the dead roots. Nothing may grow there for years. If the herds are rebuilt, what food can they find, now that the trees are gone?

This is the Sahel. Stretching across West Africa, it is the zone where the savanna and desert struggle for separate existence, and the desert has been winning steadily with the help of the demons—and the nomads.

The morning has gone quickly, passively. The tents are clacking in the wind. Sand blows into our eyes, buries our luggage, and obscures the sky. No life stirs in the camp except the Tuareg children we see playing soundlessly inside the Land-Rover. We are at the end of March, the season of sandstorms.

LAUGHTER CONCEALS GROWING FEAR

A truck loaded with thin sheep, and bulging with tents and collapsible wooden beds, pauses so its passengers can rest.

"Where are you going, and why do you move?" I ask the travelers over sweet tea.

"Because," they say, "our animals are dying of hunger, and we fear to die the same way. We go to Tamanrasset in Algeria, where we will find jobs, *Inshallah*."

They do not complain. It is not proper for a Tuareg to do so. They laugh and tease each other as the Tuareg always do, and they are still smiling as they go on their lonely way.

On this night our hosts are also smiling, although, because the animals are so undernourished, the camp does not have the milk and rancid butter that goes so well with millet porridge. A woman produce a *tendi*, a mortar over which a goatskin has been stretched to form a drum. The women beat the tendi and dance and sing and clap their hands as joyously as if all were well and normal in the Saharan world.

The days pass. When there is no wind to swirl the sand, the sky is blue and mirages define the horizon. Sometimes we feel we are surrounded by water, as on an island. It is very hot. Irrationally, I am tempted to go to the horizon and jump into the water.

Mostly there is wind; sandstorms obliterate the sky. The voice of the wind, the hiss of driving sand, the flapping of tent material oppress me. I imagine the movement of evil spirits. Only the voices of Eric and his Tuareg playmates drive away these ghosts.

With the Land-Rover we make our friends' chores easier. We carry their water from the well and search for firewood. We take them on visits to neighbors.

On one of our wanderings we see a gazelle. With us rides a handsome young man of the Taitoq tribe. His eyes light with craving for meat, which he may not have had in months.

"Oh, catch this animal!" he cries.

TEARS DECIDE OUTCOME OF THE HUNT

I press the accelerator and we roar away in pursuit. Barbara digs her nails into my arm.

"Let her go," she pleads.

"Faster!" begs the Taitoq.

The gazelle tires. We gain.

"Now! Now!" screams the man of the desert. "It is the time to go faster and catch her."

His joy is boundless, but Barbara's face is wet with tears.

I lie as I slow the Land-Rover.

"The sand is stopping me. It is over."

The gazelle staggers away into the desert. The young Tuareg has no word of reproach. Guilt overwhelms me.

"Do you know where I can buy a sheep?" I ask him.

Yes, he knows. From now on I will buy one every three days and share its meat with my Tuareg friends.

In the course of another trip we come upon a woman who imperiously signals us to stop. We stop. She is holding a wooden bowl.

"You must give her water," says Mohammed. "Her husband is a very powerful *marabout*, a great holy man who can make strong *gris-gris* against us if he is slighted.

"Every vehicle that passes and does not stop to give the woman water has an accident. I hope you remember those two wrecked tourist cars we saw."

"The marabout had nothing to do with that," I scoff. "It was merely a matter of two idiot drivers who ran into each other even though they had practically the whole Sahara to themselvs."

The day passses uneventfully. The next morning, as I stir before getting up, I feel a burning sting in my leg. I throw back the blanket and discover a large black scorpion.

I pass a painful day.

"I gave water to the marabout's wife," I complain to Mohammed. "Why, then, did he send the scorpion to sting me?"

"Because you sneered at his power," replies my friend, quite seriously.

Trucks pass every day. Each stops for tea, for their drivers are Tuareg or Arab.

After love, sugary green tea is the sweetest thing in the harsh life of the Tuareg. The nomads drink it ceremoniously, three cups to a ceremony. I think they must be able to smell it brewing from great distances. Almost always in the evenings, when Mohammed is making the beverage by the campfire, visitors materialize from the shadow of night.

"Peace be unto you," they say quietly.

And we wish them the same, and invite them to sit beside us, to savor the tea as I would savor a fine wine.

Young Europeans and Americans in cars of all makes and ages also pass by every day. In a mad rush to get through this awesome desert, they have no time for the Tuareg. Bukush makes me notice that they are always eating as they go.

Evening after evening, the young Tuareg women sing. Their songs praise an ancient war feat, the handsomeness of a boyfriend, or more simply, say, "We have created nice songs," or "We have sewn nice clothes."

Barbara sits fascinated. Eric, however, is preoccupied with his Tuareg clothes, especially the tagilmust. His is only 12 feet long; he would not be wearing even that for another two to four years were he a nomad boy.

But Tuareg men love children, and when they saw how fascinated the boy was with their clothing, they dressed him as one of themselves; they even gave him a sword.

Each man of the desert has a favorite way of winding the tagilmust. Everyone meeting Eric has to undo the boy's headgear and rewind it in his own fashion.

When it is full dark, there are mysterious visitors at the camp, faceless behind their veils and shapeless in their robes. They sit silently beside the girls or lead their camels in graceful ballet around them. After the singing we gather very close to each other on a rug and chat, and I feel that even if the stars and this human warmth were all that one should ever know, life would be worth living a hundred times.

On one clear night when I cannot sleep, I see a man slip out of a tent. Intrigued, I watch his strange behavior. Walking backward, he is erasing his tracks with his robe. He disappears into the night, although not before I have recognized him as the young Taitoq who chased the gazelle with us.

SUITORS RELY ON SILENCE AND GUILE

Next morning when I tell them what I have seen, Hamid and Mohammed laugh heartily. It is obvious to them that I have caught a young man at the end of a romantic date with Raisha's sister. Such a rendezvous always takes place in the girl's tent, next to the sleeping parents, long after the camp has fallen silent, and involves nothing more than sniffs of the noses, petting, and love words.

It is, of course, all a game, but a game played very seriously. I ask Hamid what happens if the lover is detected by the parents.

"Ah," says he, "I can tell you, for I was caught twice in my dating days.

'Once the mother of the girl awoke and, thinking I was a goat, spat upon me. 'Out, evil beast,' she cried.

"I bleated and lay still, but she sensed I had not gone and began beating me with a stick. It hurt, I can tell you, and I could barely contain cries of pain, but I left—fast.

"On the other occasion, I was visiting a girl for the fourth consecutive night. Having slept so little, we were both dead of fatigue and fell asleep.

"When the father pulled me out of the tent by the feet in the morning, I thought I was dreaming, but not anymore when he lashed me with a whip. You should have seen me run away!"

Early in the morning of the seventh day after Raisha's baby is born, the name-giving ceremony begins. The neighbors have been invited, and there is a marabout.

Following Tuareg tradition, Bukush takes the marabout aside and gives him two thorns representing the names that he and Raisha have each chosen for their daughter. The marabout picks one. Bukush tells him the name. The two return to the guests.

A camel is lying shackled on the ground. The marabout slits its throat and announces, "The girl will be named Barbara!" The women answer with three cheerful howls, and Barbara flushes with pride and pleasure.

"What name did the other thorn represent?" she asks.

"It was Barbara also," beams Bukush.

The camel is cut up. The marabout receives a leg. So does the woman who usually braids Raisha's hair and who is now shaving the baby's head. Some six weeks after the birth the tiny pate will be shaved again, and a woman relative of Raisha will formally present the baby to the family.

Little Barbara will then receive presents of jewelry, sheep, and camels—if there are any. Were the child a boy, Bukush's mother would give him a sword.

Three months after the birth, the hairdresser will artistically braid Raishas' hair afresh, and Raisha will give her the clothes she has been wearing, for she will have received new ones from Bukush. Then she will leave her tent and again appear in public.

SAD PARTING PROMISES FRESH ADVENTURES

It is time to go, for we wish to visit other friends in the desert. We start packing. Our friends watch us sadly and silent, incapable of understanding the permanent hurry of Europeans. We distribute our excess clothes and most of the food, sugar, and tea, and we drive away into the desert.

Briefly we visit the noble Kel Fadey Tuareg of the Kel Air confederation. The Kel Fadey are tall, and their lean, chiseled faces reflects a fierce pride in their heritage as warriors and raiders.

"Their arms are thin," I say to Mohammed.

"Because they do not have enough to eat," he replies. "They are nevertheless without fear." I notice he is uncomfortable beneath the hawklike direct gaze of these people of a higher caste.

Perhaps, I later learn, he is nervous also because he and Hamid have injudiciously inquired whether there are any single girls in the camp and have been given to understand that they had best keep to their own tents after dark.

Next we head toward the camp of the noble Iullimiden chief, Mohammed, and that of his Illbakan vassal, Najum, both more than 100 miles southwest of Agadez. We reach Najum's first; his eldest son, Hamiada, greets us with traditional Tuareg courtesy.

"Have you suffered much from the drought?" My question is the routine one.

"I have lost some cows," he replies, "but when I saw the first one die, I sold most of the others and invested the proceeds in rice, millet, sugar, tea, noodles, and such things, and I have resold them at a profit.

"Now I am building a house and will not live anymore in a tent. I hope to buy a Land-Rover for use in my new business enterprise. Will you sell me yours? I will pay in cash."

This from a blue man of the desert!

SCORN FOR SCHOOLING CARRIES A HIGH PRICE

The Illbakan are better equipped than their masters to face the nomads' changing world. In 1946 the French ordered the noble Iullimiden to send a certain number of their children to school. Instead, they scornfully sent the children of their vassals. Now those children are grown, and they are government employees—teachers, clerks, male nurses, and so on—and as independent as their former masters. It is not only drought that is changing the Tuareg way of life.

We drive westward 65 miles and find Mohammed and his people near Edemboutene Well. On the way to the encampment we pass thousands of skinny cows that belong to the chief, but we see no grass anywhere and wonder where the animals find anything at all to eat.

Mohammed is hospitable, but I find conversation a bit strained. He tried to keep it on the subject of my Land-Rover, and I try to avoid this topic. The last time I visited him, he commandeered my Land-Rover and driver and used them every day to go hunting.

He says he would like to buy such a machine not for commerce, like Hamiada, but for further hunting and traipsing about. Commerce would not befit his noble station.

Desperately I try gambits that will get his mind off my vehicle, which I greatly need.

"I have heard you everywhere called the 'Lion of the Tuareg'." I venture, sure that this will please and divert him, but to this bit of flattery he replies with a wan smile.

I remove my sandal, I make a deep bare footprint in the sand.

"See how my toes stick out straight forward," I tease. "The toes of a Tuareg fan out, is it not so, because they pick up objects with their feet, and also they hold the necks of their camels between their first two toes when they ride?"

This time I get a pained look, richly deserved. I decide to try angering him. "Hamiada gave me a message for you," I say. "He said, 'When you see that man Mohammed, you tell him he has a lot of things that do not belong to him.'"

He replies with an unexpected roar of laughter. The intended insult is true: Much of his immense fortune came from ancient pillage. Arant—and profitable—banditry against other tribes was long regarded as acceptable before the French put an end to it.

In the best of humor, the old reprobate returns to the subject of the Land-Rover.

"I want to slaughter a sheep for you and your children," he says. "In fact, I will kill one every day of your stay. But the flocks are far and you will have to drive me there."

And so, in the following days, I drive him to the flocks, and he takes along his gun and makes me detour, and he kills some bustards and gazelles. But I get to know him very well, and I discover with great pleasure that his lion's heart cradles a great humanity, a great tenderness for people.

Mohammed has two sons, 24-year-old Radwane and 20-year-old Hamzetta. When they visit us, they arrive on fine camels. Dismounting, they toss their bridles to a slaveservant—an *akli*—and greet us in French, a language that Radwane speaks as well as he does his native Tamahaq.

No one who ever saw the handsome pair could mistake their noble heritage. Their bearing is regal; they are true desert princes. And they are restless. They have seen some of the fascinating world beyond the Sahara, and they would like to see more.

Radwane's beautiful wife, Raishatu, only 18 and fat as a butterball, is also restless, the young husband confides.

Her young friends are all gone away," he patiently explains. She has no fun now. She has nothing to do but sit all day in her tent, as befits the wife of a noble, and eat too much. We could travel, but my father is very conservative; he says we must all stay here."

Hamzetta, bachelor, falls under the spell of my glowing Barbara. He watches her lift a horse or camel into a gallop and, as she sweeps by in a cloud of dust, hair streaming in the wind of her passing, says admiringly. "Ah, those wonderful European women."

It comes to me with a shock that my little girl, in the eyes of a Tuareg, is of an age for marriage. Perhaps I should keep a whip handy in our tent these starry nights!

When we tell them Hamiada is building a house in town, the brothers are not surprised.

"But we too have houses," they say. "Many houses: in Niamey, in Tahoua, in Tchin Tabaraden. Some of us, like our cousin Rumer, whom you know, use them a lot because they like being in town. We prefer camp life.

"But it is our women, most of all, who stick to our traditions and refuse to leave their tents. One day, probably, we will move to town. Our shepherds alone will remain with the herds, and we will supervise them by Land-Rover."

TUAREG RANK DECIDES WHO DOES WHAT

The leaders of the aristocratic Iullimiden sleep late in the morning and do not even know what time the she-camels are milked. But every day, each poor child who appears before Mohammed's tent is fed, and so are some twenty or thirty adults.

The haughty chief will give a man clothes, or a she-camel to milk for a year. He turns no one away—but when he asks a favor, he expects to receive it without hesitation.

A sad day dawns. Eric is silent. Barbara seeks solitude. She is hiding tears. The young princes bring presents—leather pouches, a fine knife for Eric, silver ornaments for Barbara—and one of these, a thing of exquisite simple taste, she will surely keep forever.

It is the day of parting. We must go. Eric and Barbara will fly back to the States to resume their schooling. I have some things to do in Equatorial Africa.

But I plan to return when the calendar says the rainy season should begin, and I will pray with my nomad friends, to their God and mine, for the end of the drought.

Three months pass. I find Mohammed in Niamey. "The rains have not come," he says simply, "and almost all my cows have died. I have bought a Land-Rover, so I will not need again to trick you out of yours. I hope you will find it in your heart to forgive this deceitful old man."

My Land-Rover rattles east and north across the savanna, past the rotting bodies of cows and camels and donkeys. Vultures fat from their feasting ignore us.

Only the tons of grain and powdered milk arriving from the outside world keep the people alive. Each day cargo planes from the United States, Great Britain, France, Belgium, Canada, West Germany, and other nations supply cities and the nomads who cluster by the thousands at food distribution points in the desert. There is disease, including outbreaks of cholera and measles; they take the old, the feeble, the undernourished children.

In the savanna spotty rains have at least begun to fall. Thirsty fields start turning green, but the unpaved roads become almost impassable, making it more difficult than ever to distribute relief supplies.

I see a beautiful 12-year-old girl with an uncouth European truck driver. The child is his wife; he has paid the traditional bride-price, in this case about 200 U.S. dollars.

To my Western mind, it appears a pure sale, arising from distress, and I want to take the girl back to her family. But my companion, Bukli, young brother of Hamiada, tells me that it would be useless.

"The mother would only send her back to him." he explains sadly. "There is no father anymore. The mother is desperately poor, and refuses to see her daughter die of hunger.

Children stop us, holding up empty bowls. We give them water as long as we have any, then ignore the rest.

A man asks for tobacco. I do not want to unload half the car to find our supply, so I say we do not have any. The man smiles and walks away.

Two days later Bukli says that the man had been walking for days without food, and was still far from the nearest relief center.

I could have helped him, but he was too proud to mention his plight.

There are moments when one could cry.

Now we are in the full desert, and dead camels mark the trail. We pass five in a neat row, like a blasted caravan.

We are looking for Bukush, and find him still camped by I-n-Abanrherit Well. "How are things?" I ask.

"*El kher ghas*—All is satisfactory," he replies. I mention the five dead camels.
"Oh, those," Bukush says. "They were ours."
The children want to know where Barbara and Eric are. I tell them:
"In an airplane, going to America."
The Tuareg children spend the rest of the day watching the sky, hoping to see them. I ask to see Raisha and the baby Barbara.
"They have gone to Tamanrasset," says Bukush. "The rest of us will join them there in a few days."
He breaks into laughter. "I have news about them," he continues. "They are strong and well. They have found houses in which to live. But they put only their belongings in the houses. They sleep in their tents pitched in the courtyards!"

Tonight the moon is full. I must leave early on the morrow. We sit together in the night as we have always done, as always instinctively pressing closer to each other.
"Many of the people in Tamanrasset," says Bukush, "still hope that the rains will come here soon. They plan to buy new herds and once again see baby camels tethered before their mothers.
"But I do not think many will return to the old ways. I do not believe Allah wishes it."
Many officials of the Sahel nations do not wish it either. There is talk of turning these wanderers into more productive citizens—farmers and city workers. But where will the jobs and the new farmland come from?

I stop at Tamanrasset before leaving Africa to say goodbye to Raisha and to my daughter's namesake. Little Barbara is already amazingly strong, a true Tuareg (page 545).
Back in New York I ask United Nations officials about the future of my blue-veiled friends. Neither they, nor spokesmen for the Sahel governments, can give me answers.
Perhaps a noble way of life is ending for the Tuareg. Some, like Hamiada, will adapt. But what of the others? What can they hope for, except long, empty years in relief camps?
The herds may someday be replenished. The desert trees, pulled down for forage and for firewood, may grow anew. And then the men of the desert can roam again.
I pray that those things will indeed occur, for I cannot conceive of a Sahara without the Tuareg. If it is Allah's will the nomads roam no more, I do not think I could return to the empty sands of the Sahara.

[From the Washington Post, Aug. 4, 1974]

A Plan To Make the Sahara Bloom

(By Kevin Lowther and C. Payne Lucas)*

Much of what is the Sahara today was once verdant, productive and populated. There were numerous bodies of water. Rainfall was plentiful. Civilization flourished. Animals grazed in abundance.
It can be so again. The Sahara and its semi-arid periphery may one day again bear fruit and sustain life. It is a possibility ripe for the taking by a world desperately in search of dependable sources of food.
No single generation noticed the Sahara's transformation from bounty to barrenness, but over several thousand years the upper third of Africa was overwhelmed by the "brown revolution." Shifting weather patterns gradually reduced the nourishing rains. And as the soil dried, the cattle and goats of the region's nomads overgrazed and trampled the stubborn grasses which served as a barrier reef to creeping "desertification."
Extended droughts periodically hastened the process. Crops would fail. Herds would be decimated. People would starve and die. But then more or less depend-

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able rains would reappear to rejuvenate the Sahara's southern fringe of grassland—called the Sahel—and the desert would be held at bay.

Then came the much publicized drought, now in its sixth year. It is different from previous droughts, not because it is the worst in living memory, but because it is coincident with a general worldwide scarcity of food. Although the six African nations most affected and Western donors in concert have managed to deliver enough food to avert mass starvation, they have heard their shovels scraping the bottom of the world's collective grain bin.

This sound should be heard as clearly in this country, where we are concerned now only with the price of food, as it is in the Sahel, where people obtain their food from relief centers in metal tins or cupped hands. There are no shopping carts, much less supermarkets, in the Sahel.

But concerned Americans have read all the accounts necessary to grasp the human suffering that lack of rain has meant to several million people in the African interior. The tragedy will be compounded and perpetuated, however, if we merely regard these sorrowful events as just another inevitable natural disaster that must be borne and forgotten.

GETTING THE LEFTOVERS

The Sahara is not a permanent scar on the African landscape. Its expansion is not an irreversible phenomenon. Africans in the Sahel are acutely aware now that they must turn the Sahara back unless they wish to be crowded inexorably toward the forests and sea to the south. And given the right tools, they will do it.

This prospect of halting the Sahara in its tracks and ultimately reclaiming portions of it for grazing and cultivation has serious practical ramifications for us as well.

Six years ago the U.S. government decided to channel most of its foreign aid in Africa to so-called "major emphasis" countries—such as Nigeria and Ethiopia—because they were thought to have the greatest potential for sustained economic development. The smaller and poorer states were not deemed economically "viable" and were either written off the U.S. aid rolls entirely or given the few crumbs that remained after the main feast. These last included the six Sahelian nations—Chad, Niger, Upper Volta, Mali, Mauritania and Senegal—nations that have had to shelve development of their ecconomies while they tried to keep their people alive.

If the drought accomplishes nothing else, it can encourage us to redefine what constitutes a "viable" national economy. Now that the word "surplus"—in a world context—has vanished from the vernacular of agricultural planners, a nation's ability to produce food becomes something more than a footnote to its mineral reserves and industrial potential. In a food-tight world, the capacity to feed one's own people becomes of critical importance as an economic bedrock and as a political stabilizer. To be able to grow more than you need—and thus to feed those who physically cannot meet their own requirements—will mean even greater economic vitality.

Ironically, the drought-wizened nations of the Sahel fit this new definition of economic "viability." They have the capacity not only to feed their relatively small populations but to help feed their more numerous neighbors along the West African coast, as well perhaps as people on other continents.

THE DESERT SEA

Nature may have been unkind when it allowed the Sahara to begin erasing the rich ecosystem which once covered most of Africa's northern bulk. But it left behind the source with which to undo much of the damage—water. A vast "sea" of water—largely remnant from that prehistoric time of plenty—lies beneath much of the Sahara.

This is no revelation. The nomads have always known that water was there in the desert for those willing to dig deep enough. But by and large they relied on the artesian wells that sprung to the surface at widely scattered oases. The sedentary peasant societies also knew the desert was hiding water, but so long as there remained relatively open and fertile land behind them, they accepted Allah's will or animistic fate and gave ground to the oncoming Sahara. They had neither the need nor the technology to tap the subterranean water, irrigate the sand and expand their croplands. Now, however, the means and the need are at hand.

At Kufra, an oasis in southeastern Libya, Occidental Petroleum Co. and the government have converted large acreage of sandy desolation into a lush agricultural region producing three annual harvests. Well pipes that elsewhere in Libya raise oil are now raising water that Occidental experts believe is sufficient under Kufra to irrigate one million acres for eight centuries.

Similar possibilities abound in the Sahara—if a food-conscious world is prepared to fertilize the region with large amounts of capital. How much?

Some measure is available in a study conducted in Niger earlier this year by Texas Tech University and Africare on the feasibility of establishing a large controlled ranching and mixed agricultural project on the southern rim of the Sahara. The aim is to demonstrate that by exploiting underground water, land in danger of becoming, or already claimed by, desert can be restored.

Even in an area of fluctuating but always sparse rainfall, it is surprising how quickly the sturdy range grasses will return on the strength of just a few annual showers. That is, if these grasses—which hold the soil and resist desertification—are allowed periodically to lie ungrazed and untrampled by wandering. oversized herds of cattle, sheep and goats, which have done much to worsen the effects of the present drought.

The Texas Tech-Africare team estimates that slightly more than $12 million in capital investment can convert nearly 700,000 acres of abandoned wasteland into a stable ranch and farming community producing improved strains of beef cattle for export and food far in excess of local needs. The sizes of herds and grazing patterns would be managed to preserve the carrying capacity of the land and therefore arrest expansion of the desert. The food supply would be dependable even in years of drought, assuring the people settled there of a home anchored against the elements.

A TOUGH TEST

To insure a true test in a hard environment, a site has been selected in eastern Niger where soil conditions, annual rainfall and groundwater reserves are somewhat below par for the Sahelian belt.

To balance people and animals against the available land, no more than 500 families would be allowed to participate. About 300 of these would be traditional herdspeople. Each would purchase, on loan against future sales, a small "seed" herd of cattle, sheep and goats, from which they would gradually build larger herds up to the ceiling determined by the grazing capacity and by the demand for beef. A small breeding station would develop improved stock and a resident animal sciences expert would provide professional assistance.

The remaining 200 families, meanwhile, would raise crops such as corn, sorghum, wheat and vegetables—to feed themselves and their cattle herding colleagues, to fatten the animals, and to sell on the open market.

The most important and costly factor is water development. Wells will have to be sunk for each 800 acres of grazing land, as well as for irrigating crops. Where windmills or hand-operated pumps do not suffice, precious gasoline will have to be trucked in more than 1,000 miles from the coast to fuel the watering operation.

The capital cost, though significant, is less imposing when viewed within the broader context of regional development. Much that is learned in this pilot project could modify the cost of applying the concept across many of the continent's dry areas, including such inhospitable regions as the Sudan, northern Kenya, Somalia and parts of Ethiopia.

Present cost estimates are predicated on the worst of circumstances. The return of normal seasonal rainfall, for instance, would greatly reduce the need and expense of pumping water to the surface.

The ranch would not be economically self-sustaining during the initial years. In fact, an annual subsidy of about $2 million would be required during the development period. This could be reduced to less than $800,000 annually within five years, as local professional staff are trained to replace their foreign tutors, and should current oil exploration in the area prove successful. Moreover, the sale of livestock and crops would generate more than $650,000 (again, a conservative estimate) in the first full year of operation. It is expected that the project would operate at a small profit beginning in the sixth year. Finally, within three years after the start of the ranch, the per capita income would be $190, more than twice Niger's 1970 national average of $88.

What does not show in this balance, of course, is the inherent value of the land saved and reclaimed from desert encroachment. And there are compelling, if less tangible, social advantages to weigh.

If reproduced along the entire length of the Sahel—2,000 miles from Senegel to Chad—such projects not only would halt the Sahara's onslaught but would eliminate the need for huge festering refuge camps and restore hope and dignity to people unaccustomed to living on the dole, who have in the past been proudly self-reliant under some of the harshest conditions known to man.

More important, this chain of mixed ranch and farm settlements, eventually embracing millions of acres, would become a major link in a world food system that must be developed and coordinated internationally to assure that all people have enough to eat.

Such a goal may seem attractive only in the abstract to most Americans. Yet in view of inflated food prices, which are tied to general supplies of grain in the world, we ought to realize by now that we have a stake in promoting food production wherever we can, even on the edge of the Sahara and within the desert itself.

We can pretend to be an oasis in a world of want, far beyond the reach of hunger. But as a land of relative plenty, we shall continue to bear the humanitarian burden of helping to feed millions who, through no fault of their own, cannot feed themselves. The more intelligent and, in the long run, the less costly course is to develop the full agricultural capaicty of regions like the Sahel.

As the Israelis, Occidental Petroleum and California growers have demonstrated, there is no trick to making the desert flower. The technology exists. What is required is water and will. We know the water is there beneath the Sahara. But do we and others have the will to do it?

Foreign assistance may pall with many Americans who feel they have done enough for the world. But we have the financial resources to spare for a project of this magnitude. If necessary, we can divert some of the multi-millions we expend on military aid programs to the resurrection of the Sahel and the Sahara.

This should be a cooperative venture, however. The Arab oil interests, for instance, could well afford to invest a small fraction of their revenues in helping their fellow Muslims and their fellow desert dwellers in Africa, especially by offsetting the high cost of oil needed to fuel the water pumps, not to mention the cost of petroleum-based fertilizers.

The West African coastal nations also have a major interest in regenerating the productive vitality of the interior states. Nigeria, Ivory Coast, Ghana, Gabon, Zaire, Liberia and others have already contributed heavily to drought relief among their landlocked neighbors. This generosity is pragmatic as well as humanitarian. The more densely populated nations along the sea are properly concerned that continued expansion of the Sahara will drive millions of Sahelian people southward, over-taxing public srevices, crowding available farm and grazing lands in the more settled regions, perhaps causing violent conflict and increasing the jobless and potentially volatile masses in the towns and cities.

Moreover, the thickly populated coastal nations must consider their own somewhat limited food producing capacity. They can appreciate having to their North a vital bread basket providing an assured supply of grain and meat in exchange for the manufactured products of the developing industrial complex on the coast.

U.S. policy planners cannot ignore the importance of strengthening stability in this section of the world. Africa is rich in mineral resource critical to the world economy. Encouraging political stability by helping to develop the economic foundation throughout West Africa and the Sahel is a course of common sense and common interest.

[From the Christian Science Monitor, Sept. 17, 1974]

Saharan Struggle for Survival

The shifting sands of the drought-ridden sub-Sahara are bringing a tenacious people to the brink of change. Hunger and depleted herds are forcing the Tuaregs of North Africa to abandon their age-old nomadic life. At a camp in Niger, a correspondent talks with Tuareg refugees about their uncertain future.

By Robin Wright

Agadez, Niger.—Exotically wrapped in deep royal robes, Ataka's vibrant figure starkly contrasted the bland tones of Sahara sand surrounding her. The quick animation of her black eyes and olive hands represented something refreshingly alive, something hopeful in the midst of a desert full of hunger and despair.

The young Tuareg woman was well aware of her haunting beauty. But it did not console her.

She sighed.

"Last year it was the animals," she lamented. "We could do nothing as we watched them die, watched them withering away until they would just stop and sit down and wait, with no strength to fight any longer.

"But for some reason there was hope while they lived. We knew that after they were gone we were next.

"Last year it was the animals," Ataka repeated. "This year it is us."

A DEPENDENT TRIBE NOW

Although historically tough and cleverly self-sustaining in their own "nation" within other nations, the Tuareg, the nomadic desert tribe of the southern Sahara, have in the last year become pathetically dependent because of the drought that has cost them innumerable animals and people.

Without animals, which were their jobs, food, transportation, investment, savings account, and status symbols, they have no means of support.

Th only alternative—total dependence on the governments of Mali, Mauritania, Niger, and Upper Volta—is eating away at the one thing they have left—their legendary vibrancy.

"There is nothing to do here but wait . . . and beg. And I would rather die than beg," Ataka said bitterly, sitting outside a crammed Tuareg refugee camp in Niger, one of many flooded with drought victims who have overwhelmed the few cities of the Sahel during the past eight months in search of international food relief.

NO BEGGING FOR FOOD

The strict Tuareg social code has traditionally allowed begging only of tea, sugar, and tobacco—never food. But the final loss last season of an estimated 80 percent of their goats and cattle has forced the majority of the estimated 300,000 nomads to camps, where they beg for all the powdered milk and grain they can get.

Although hardly responsible for the lack of rain, these fiercely proud people remain embarrassed about their situation. The young spokeswoman in a style typifying the freedom and outspoken qualities of Tuareg women, explained for a small group willing to talk with outsiders:

"It is humiliating for us to beg, especially from these people who do not like us or want to help us. My sister, my father, they were lucky; they perished out there. They were never forced into this nothingness."

"This nothingness" specifically is the boredom and feeling of futility that have become the lot of the refugees, replacing the merriment and teasing games that used to be a feature of their lives. There are few roles for them at the camps and even fewer in the cities; so now they just wander, nurse neighbors, peddle their last few possessions, and wait for food.

A 'PRISONER'

"I am a prisoner," Ataka moaned. "Nothing to do . . . no place to go . . We have no will left," she rambled.

What makes it even harder is that she is dependent on a government her people have long spurned and a culture they have neither understood nor approved.

A Caucasian people of Berber origin, the good-natured Tuareg had generally kept to themselves as animal herders moving in small groups through the grazing lands of the Sahel, the Sahara's arid southern strip. Purposely avoiding contact with and allegiance to the independent black governments in whose jurisdiction they lived, the Tuaregs formed loose confederations with their own laws and their own boundaries.

Many of them had even assumed that once the French left in the early 1960's, they would be allowed to form their own states. One band in Mali briefly fought for their claim of autonomy, but lost to the French-armed natonal troops.

Such historical conflicts have led many Tuareg to charge that the Sahel nations are using the drought as an excuse to exterminate the Tuareg in a sort of de facto genocide.

As Ataka answered questions on how the Tuareg are treated by local people and officials, other Tuareg appeared instantaneously from huddled positions in their tents of grain sacks and sticks to shake fists angrily and shout accusations about treatment, revealing one issue that still rallies their fervor.

NOT SO DESTITUTE

But the nomads are somewhat aware that the resentment is two-sided. Due to two Tuareg traditions—raiding other tribes for slaves to support their feudal system, and lording over "their" territory to the point of taxing for passage or use of resources—the black tribes hardly feel loyalty to the nomads. And the Tuareg now fear revenge.

Both United States and United Nations officials deny such a possibility, saying that the tensions have actually forced the governments of Mali, Mauritania, Niger, and Upper Volta to go overboard to prevent this from happening.

Many black residents say the Tuaregs' present position is not so destitute, comparatively anyway. As one Nigerois head of a farming community commented: "They are not so badly off. Just look at us, working hard for what little bits we get. I have little pity for the Tuareg, being fed free while we must work for everything we get."

But whether the Tuareg charges are valid or not, Ataka and her people still sense antagonism. As a result this most recent stage of the drought, the total dependency, has created a feeling of defeat and a general gloominess quite uncommon to their traditional gaiety and stubborn determination.

Although there have been indications since the drought became news that the Tuareg would have to change their life-style and settle down, the way to bring this about has yet to be found.

NEW COURSES

Over the past two years some Tuareg have sought new lives in agriculture, uranium mines, oil fields, and towns. But now there are even fewer employment opportunities, fewer lands to cultivate, and no means to reorient more than 100,000 families. One major UN project in Niger, for example, could accommodate only 300 of the thousand that applied.

With the hiss of driving sand in the background, Ataka made it clear that the remaining members of her family would rather work than rely on others.

"We have no choice. We would work if we could. This is certainly no fun. And we would fight if we could," she added, referring to the warrior-marauder tradition of the Tuareg. "But our swords don't do any good against this enemy."

The abstract nature of the "enemy" makes it all the more frustrating for the nomads to cope with this desert "war." Thousands could not believe drought would continue for so long and waited to go to the camps until it was too late. Children were those most gravely affected by the delay. Many were in too weakened a state to be saved by the nourishment supplied them when they finally reached the camps.

A GENERATION LOST?

The loss of children, the cherished focal point of the Tuareg communities, is another reason for the loss of hope. "We are losing all the young ones," Ataka explained, thinking specifically of her own sister. "One whole generation is being wiped out because they are not strong enough yet to fight."

Without that generation the Tuareg fear they will further diminish in numbers and the confederations will fall apart and force the few left to assimilate into other cultures.

Since relief officials now estimate it will take 20 to 30 years for the Tuareg to get their herds back to productive strength and for the lands to be able to support herds again, the nomads fear there will be no common occupation to hold them together until a replacement generation has matured.

Although rain briefly returned to the region this summer, it is far from adequate. In addition, the Tuareg have lost most of the animals that were their sustenance. And even if there were enough animals, there is none of the vegetation.

The Tuareg life-style is by no means extinct. Nor will it be if Ataka and the other young people carry through their pledge of returning to the tenacious desert. But the centuries-old Tuareg struggle for a separate existence depends right now on a lot more than the vibrancy of its people.

[From the Christian Science Monitor, June 24, 1974]

Stone Dam Helps African Fight Drought

(By Reuter)

Tchirozerine, Niger.—A French priest has brought fresh hope to the villagers of this tiny Tuareg community who have almost been forced to leave their homes because of drought.

The priest, Pere Antoine, has reversed the popular principles of finding new sources of water in drought-hit West Africa.

Instead he has taught the Tuaregs to use the lifeless rocks which surround their community, 25 miles north of Agades, the most northerly town in Niger, to trap the little water which falls and make every drop work for them.

His simple strategy has attracted the attention of both the Niger Government and foreign development workers.

Tchirozerine is next to a river bed, dry for most of the year, except for the very few days when the rains come—and even then the temperatures are so hot and dry it sometimes evaporates before it has a chance to touch the ground.

North of Tchirozerine there is little apart from the uranium-rich Air mountains—except for the greedy, thirsty Sahara—until the Mediterranean coast and fertile northern Algeria 1,000 miles away.

Along its southern edge, the Sahara creeps farther into the savannah each year.

Effort and money is spent on finding new water sources, using irrigation or seeking untapped wells beneath the ground.

But Pere Antoine's plan could be a blueprint for the survival of many thirsty communities. It seeks not to find new supplies, but to make better use of what is available.

The priest has taught the Tuaregs in their harsh surroundings of sand and rock, that they do not need to flee south to the already overcrowded valley of the Niger River to scratch out a living.

Until last year the water table at Tchirozerine had been sinking drastically. Now under the priest's guidance the villagers have built two stone dams, each about eight feet high, across the river bed, with side channels to lead the water out to the areas used for growing vegetables.

One day the river bed began to fill with water from rain which had fallen in the mountains. When it reached the village, instead of flowing past in a few hours, it remained to flood a wide area for three days. Two months later, after the process had been repeated several times, the water level in the wells was almost five feet higher.

In another experiment Pere Antoine concentrated on level stretches between the hills which surround Tchirozerine. A few years ago they provided excellent grazing, but lack of rain and overuse had turned them into dust bowls.

THREE-FOOT WALLS

The priest set the workers to build a series of three-foot-high walls across one plain. These trapped the rainwater so well that by the end of summer the plain was once more covered with a thin layer of grass. Now this year the villagers plan to plant bushes which will help prevent soil erosion by wind and water.

Similar work has been started in the hills, with stone terraces to trap the soil washed down by the rains. Now there is green on the hills, and more important still, soil. In a few years erosion could be only a memory.

All of this has given new life and hope to the people of Tchirozerine. But perhaps the most important thing it has given them, Pere Antoine thinks, is a realization that they can control their destinies in a way they had never dreamed.

"If the people want to stay here and survive," he says, "they must change their thinking drastically. They must realize that if they don't control grazing then their animals will die, that if they do not adapt to the changing situation then life here will not be possible."

The villagers themselves are amazed at the effect their work has had, particularly at the length of time the water has remained. They cannot remember anything like this ever happening before.

This year, with another grant from Oxfam, Pere Antoine and the people of Tchirozerine mean to continue and expand their work. They know now that,

despite a capricious climate and a pitiless terrain, they are not simply pawns in the hands of a blind fate. They can influence their future.

But the drought is leaving very little time for the rest of the Sahel to learn their lesson.

[From the New York Times, Sept. 22, 1974]

SUB-SAHARA AFRICA WAITS FOR HELP

(By George A. Silver)*

NEW HAVEN—Each year the desert creeks farther down into the Sahel. Sahel, Arabic for "border," is the term for the six countries at the edge of the Sahara's southern rim: Chad, Mali, Mauritania, Niger, Senegal and Upper Volta.

There I saw paved roads as red with the red desert dust as the unpaved roads. The baobab was coated red. Red covered the leaves of the mango and the flowers of the oleander. A colleague's white hair was shaded cinnabar after the Land Rover ride to an outpost dispensary.

The spoor of epidemics appears in sub-Sahara Africa.

Some 25 million people struggle to survive, of whom about two million are nomads. Nearly eight million people, displaced by drought and famine, are now de facto refugees within their own lands or in neighboring countries.

It is six years now that the rains have failed to a greater or lesser degree. As the drought intensified and famine spread, epidemic disease, always on the prowl, increased in ferocity. Measles, a killer in undernourished and primitive countries, has grown more lethal.

In Niger, where I found the scarce hospital beds filled with sick children, measles fatality rates have tripled, so that in 1972 more than 2,000 people died of measles in a population of 5.5 million. In the United States it would mean instead of the 90 that died, 80,000 deaths from measles! In the unscreened hospital wards, undernourished mothers rock fly-covered, listless, emaciated infants.

Other dread killers lurk as yet unidentified, waiting for their opportunity. At the Institut Pasteur in Dakar, Senegal, scientists showed me that viruses isolated from mosquitoes two years ago, with no known human disease associated, were recently recovered from epidemics that would otherwise have been classified as "malaria" in the bush. What other epidemics of what virulent disease lie cloaked in "malaria," preparing to invade the crowded camps of nomads and the cities overflowing with undernourished refugees?

Yellow fever sputters around the Sahel. If it should return in full flower, it will be well along its way around the world before the danger signals fly.

Our Government and American foundations have withdrawn from epidemic intelligence and disease control in Africa. Dr. Yves Robin showed us the few million doses of yellow fever vaccine stocked in his freezer in Dakar. But the manufacture has dwindled along with the funds. Hundreds of millions of doses will be needed, which would take years to develop even if technicians were available.

Hunger, malnutrition and disease have been the constant fate of the Sahel peoples for generations. The added weight of the drought-induced famine has been to create larger pools of susceptibles, crowded into camps and cities in closer contact. More are infected, more die. Malaria is omni-present. In the open markets more lepers can be seen than have been found in Europe or North America since the Middle Ages. Tuberculosis and syphilis are widespread.

International agencies and the United States Agency for International Development are accused of foot-dragging. They are bitter over these accusations. The weakness of the means of providing aid in these countries is overwhelming. All-weather roads are few and railroads fewer; rolling stock is negligible; trucks and vehicles are in short supply and in poor repair. There are practically no parts or replacement materials.

Gasoline is $1.50 to $2 a gallon. There are fourteen Nigerian doctors and fifty others under contract for 5.5 million in Niger. The needed food and supplies, delivered to the docks at Dakar and Abidjan, Ivory Coast, can be transported to

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*George A. Silver, M.D., professor of public health at Yale, is author of "Family Medical Care." Last May he and two other physicians were sent to the Sahel by the Agency for International Development to check on the status of medical supplies.

the scattered populations or to the concentration of sick and hungry in the distant cities only with great effort.

The surgeon of a Belgian medical team went home because there were no operating facilities. Children are inoculated with harmless water because a "cold chain" cannot be maintained between freezer, refrigerator, and operator in getting vaccine to the people.

Mobile medical teams, a French contribution, are heroically active but limited to one or two for every million people. Doctors average one for 10,000 people in the bush (compared to one for 650 here). Niger's budget for health services last year came to about 80 cents per person (it was $440 here). Niger has budgeted 15 cents per person for all medications this year.

In a local dispensary, the babies are wretched specimens: Year-old infants look like newborns, cry weakly, barely suckle, and the milk is insufficient.

The need is for food, medicines, doctors, transport—in a word, everything.

Sending our doctors would not help. Health officials there know this. Provision of emergency food and medicines and basic supplies—even tables and chairs are lacking!—is urgent. Sahel government officials want and can use simple drugs, simple equipment.

At the same time, the countries in jeopardy need a powerful transformation at their very foundations to enable them to survive and build in nonemergency times. Addressing this overwhelming need too narrowly is to invite future famines and a long slide into disaster and disease for more people—those as yet untouched.

A.I.D. and international agencies must help in this twin effort. Africa needs immediate and long-term help simultaneously.

It is unlikely that all that needs to be done can be done. We probably do not even know the real dimensions of the need. Perhaps the best we can do is reach a level of inadequacy our consciences will tolerate.

Africa waits.

[From the Christian Science Monitor, June 10, 1974]

MANY CATTLE LOST—AID PROGRAMS NEEDED—RAINS LIFT ETHIOPIAN DROUGHT, BUT FOOD PROBLEMS . . .

(By the Associated Press)

JIJIGA, ETHIOPA—Tractors slog through mud now on the vast plain around Jijiga. Peasants and cattle drink from puddles. Grain shoots and grass spread a thin carpet of green.

Grass, grain, and puddles are strange sights in Jijiga, where until a few weeks ago it hadn't rained noticeably for two years. Now torrents of rain have come to this fly-infested military and farm center 30 miles across a baking semidesert from hostile Somalia.

"Another two weeks with no rain and the temperatures we have here and people would have been dying in big numbers," said Dave Ellaway, a British Red Cross volunteer. Jijiga is about 650 miles north of the Equator.

Still, 75 percent of the cattle in the area have starved, and many more died gorging themselves after the rain. Much more rain is needed over the next few months before the first crops can be harvested in eastern Ethiopia's Harrarge Province.

Inhabitants will depend heavily meanwhile, on food-aid programs hampered by lack of funds, and transport strikes and bureaucracy. Survival is still in the balance for Jijiga, as it is for three million rural Ethiopians in drought-affected regions across the country.

In Addis Ababa, the capital, Western relief administrators say they are winning the battle against hunger. Death rates are reported back to near normal in most areas. Scenes of mass starvation like those of last year, when tens of thousands died, are hard to find.

PROJECTS SCHEDULED

"I am amazed how much better things have gotten over the past two or three months in terms of administraton and nutrition," said John Phillips of the United Nations Development Program.

Ethiopian authorities have scheduled 21 rehabilitation projects—oxen and seed supply, tractor rental, well-digging, tree planting, and road building. Foreign donors are being asked to pay all but $2.5 million of the $15 million cost.

Shimelis Adugna, the Ethiopian drought-relief commissioner, paints a darker picture. He fans out on his desk snapshots of undernourished children and nomads burning heaps of cattle carcasses, taken on a recent flying tour deep in the Ogaden Desert near Somalia.

Despite huge injections of foreign grain, Shimelis does not rule out the possibility that worsening conditions in southeastern Ethiopia will produce disaster on an even greater scale.

RELIEF NEED ASSESSED

Shimelis expects hundreds of thousands of Ethiopians to need food relief for at least the next 12 months. He said in an interview he plans to ask about 40 foreign donors for as much as 250,000 tons of grain in 1975, about 100,000 tons more than the amount pledged this year.

A quarter-million tons of grain, plus sea transport to Ethiopia, would cost about $37.5 million at current prices.

Rain has been falling in Wollo and Tigre, the two northeastern provinces hit hard by drought last year, and in the southwest. Most observers say it is too soon to tell whether the rain will be sufficient. Even if it is, they say, famine-weakened peasants, short of seed grain and oxen to pull plows, are unlikely to produce normal crops.

[From the Boston Globe, Sept. 26, 1974]

TWO CRUCIAL CHOICES IN UPPER VOLTA

FOOD: THE ULTIMATE CRISIS

(By Jack Thomas)

WAYEN, UPPER VOLTA—The mid-day tropical sun burns down with such blinding brilliance that the first time you see Chief Bila Sawadogo, you cannot believe your eyes.

Sawadogo is a frail, feeble, mockery of a human being who has lived his life in the shadow of hunger.

He is a blind, decrepit, fleshless skeleton of a man, more dead than alive, and as you shake his fragile, bony hand, and stare into his blank, bloodshot eyes, you begin to grasp what deprivation and the global food shortage is all about.

Sawadogo and the 40 members of his family are farmers who live in grass homes on the banks of the White Volta River, about 50 miles from the capital city of Ouagadougou in what the United Nations calls an underdeveloped nation.

Nearly half the world's population, about two billion people, live in underdeveloped nations, mostly in Africa, Asia and Latin America.

But the term is a cruel understatement that does not begin to describe the harsh poverty and deprivation, the pervasive hunger and malnutrition, and, sometimes, the helplessness and hopelessness.

In Sawadogo's country, 90 percent of the people are farmers. They do not work a 37½ hour week. In fact, they spend most of their waking hours bent over the fields trying to produce enough grain so they will not be hungry.

In Sawadogo's country, in the past six years, thousands of people have died in the worst African drought in memory, some by starvation, others because their resistance was lowered until they became susceptible to fatal diseases.

In Sawadogo's village, they till the soil with the same simple tools their ancestors used 2000 years ago. There is no shortage of energy because there is no energy. Nor is there television, radio, newspapers, electricity, automobiles, supermarkets, running water, air conditioning or central heating.

Neither Sawadogo nor anyone in his family is aware that there are one billion people in Asia, Africa and South America who are chronically malnourished and nearly always hungry. They know only that the children in their family are always skinny.

They do not know that five hundred million people suffer malnutrition so acute that their physical and mental growth is grossly retarded and they live much of their lives a few days from death. They know only that a lot of the children in their family are often very sick.

They do not know that tens of thousands of people die each year either directly from starvation or indirectly from diseases brought on by malnutrition. They know only that in Upper Volta, if parents want to be sure that three children will survive, they must plan on having six children.

They do not know that Henry Kissinger will address the UN this week on the world problem of food shortages, and they never heard of high quality protein, per capita cereal consumption, the global shortage of food, the Green Revolution or US Senate Resolution 329, relating to an international effort to reduce the risk of famine and lessen human suffering.

They only know that if you get up at dawn, if you go to the field and plant, till and weed all day, and if the rain holds up, you might have enough to eat.

And if you told them that in America, 70 million people were overweight because they ate too much and that they spent $38 million on pills, books, injections, doctors, exercise machines and weight reducing clubs in an effort to take off excess fat, well, they would either laugh at you or conclude that you were crazy.

But nothing tells the story of Sawadogo's family like the dreaded disease, onchocerciasis, or river blindness.

Of the numerous diseases that plague the sub-Sahara people, nothing frightens them more than river blindness. A million Africans are infected with it, 400,000 here in Upper Volta alone. At least 700,000 have been blinded by it and hundreds of thousands more suffer impaired vision and debilitation.

The disease is carried by small black female flies which hatch in warm, fast-flowing river water. Bites from the flies infest the body with thread-like worms which grow to a foot in length. Their larvae circulate through the body and result in itching that has driven men to suicide, wrinkled, parched skin, cloudy vision, debilitation, blindness, and, sometimes, premature death.

African farmers like Sawadogo have known for generations that the closer they live to the river, the more likely they are to suffer river blindness.

For himself and for the 40 people in his family, Sawadogo had two cruel choices:

—They could live near the river where the soil is good and the harvest plentiful, but they would risk suffering river blindness.

—Or they could move away from the river, away from the flies, away from the river blindness to the less fertile sandy regions, but they would risk smaller harvests, sometimes hunger and, in years of drought, starvation.

Sawadogo's family chose to stay here on the river and today, they are paying the price.

Of the 200 villages in Wayen the UN estimates that at least 60 are blind and many others have impaired vision.

A population map of Upper Volta shows the paradox; the soil rich river banks, usually the most attractive places to produce food, are the least inhabited, while the more arid, sandy regions, where it is difficult to produce food, are densely populated.

The US Health Dept. says that as many as 100,000 people may have died in 1973 because of the drought.

If farmers had been willing to inhabit and till the fertile banks of the Niger and the White, Red, and Black Volta Rivers, then, despite the drought, food production would have been higher and the death toll lower.

Sawadogo and his family do not know that in November, the World Bank, the UN, the World Health Organization and a number of developed nations will begin a 20-year, $120 million program to eliminate onchocerciasis. Dr. Rene LeBerre of France, who will direct the project predicts that the river banks will be safe for human beings within 18 months.

In Wayen, a mid-day visitor provided an excuse for Sawadogo and his family to come in from the sun-baked fields and sit in the shadow of their huts to talk.

They smiled happily and each one insisted on shaking hands. For some, it was difficult because they were lepers who had lost their fingers.

They insisted that their guest sit on a small bench while they sat on the ground in a semi-circle.

Sawadogo, guided by a young boy, was dressed in a conical African hat and a reversible, gabardine, English raincoat, unbuttoned, torn, frayed and dirty.

He is five feet six, no more than 110 pounds, and he doesn't know his age. As he sat against the straw hut, he drew his reedy legs to his chest and arranged his raincoat to cover his nakedness.

Through an interpreter, Sawadogo said that the men who were blind had to depend on the children to survive, and that the big worry was whether the children would become blind.

But why had he stayed near the river when he knew about the blindness?

He shrugged. "It is the best place to grow food. And besides, if we left, where would we go?"

He pointed to his lower thigh—bone and skin with an egg-size lump where the parasitic worm lived under his skin.

Another member of the family, Tegende, introduced himself and said he was 45-years-old. He looked 80 because he is blind and suffers from leprosy and malaria.

Shigeye also is blind. He has two wives and five children but his big worry now is how to pay the annual tax of 650 francs ($3) for each member of his family.

Last year, he sold six sheep to raise the money, but this year, he has only a goat and two kids.

Dr. LeBerre's aerial spray program will cover the entire Volta basin, an area about the size of England and France combined.

"We can't control the fly itself," said Dr. LeBerre, "because it migrates 100 miles. So we will kill it at the larvae stage. They hatch in the warm, fast water of the river because they need a lot of oxygen."

Onchocerciasis survives between the 8th and 12th parallels. African slaves brought it to Central and South America, but it is less serious there.

The body can tolerate a slight infection, and the victim may not be aware he carries the disease. LeBerre, in fact, has onchocerciasis. But it is only a severe and prolonged infection which has serious effects.

Although the eye damage cannot be repaired, there is medication to arrest the disease in its early stage. But it must be administred over a long period of time under constant medical supervision. The UN has invested $1.2 million to find a more simple cure.

Why would a country like the United States or Sweden contribute money to fight a disease that does not affect its people?

Hans Johnson, of Norway, a representative of the World Health Organization, thought for a moment:

"It comes down to an international sense of mercy. Why give? Well, a country like mine, Norway, couldn't exist if we were not able to look to other nations for food. We must all live together in this world."

When it was time to leave Wayen, the visitor handed Sawadogo a gift box of cookies and candy, and the chief rose, rearranged his English raincoat again, and nodded his appreciation.

The teenagers took that as a signal that it was okay to frolic with the visitor, smile, pat him on the shoulders, shake hands and, perhaps, exchange a joke with him.

The seemed healthy and full of the promise of youth, until he looked into their eyes and saw the redness which told him they already had river blindness.

[From the Wall Street Journal, May 22, 1974]

Ancient Enemy—Drought, Like the One in Africa, Deeply Scars a Land and Its People

The "greatest catastrophe" in sixth year, fomenting political, social unrest—can the countries survive?

(By Ray Vicker)

Lazaret Camp, Niger—At a well on a sandy, treeless flat here, a half dozen turbaned blacks draw water in goatskin bags tied to the ends of long ropes. A hundred robed men, barefoot women in black and half-naked children eagerly hold out empty, two-gallon kerosene cans for a share of the brackish fluid.

Beyond the well, row after row of palmmat huts of Tuareg and Peul tribesmen squat on the desert, wrapped in the haze of 120-degree heat. Most of the 16,000 inhabitants of this sub-Sahara relief camp lie in the shade of the huts, listlessly waiting for the next distribution of food.

Scenes such as this are commonplace here in the Sahel—the arid land along the southern edge of the Sahara desert—where land and people are suffering from the worst drought in living memory. Many wells have dried up. Pastures are denuded. Farmers watch their unwatered fields blow away. Malnutrition is rampant, and thousands of people have died. Some estimates put the African death toll from drought at more than 100,000, but the truth is there aren't any accurate figures.

This is far more than a local drought. It extends across Africa from the 10th to the 20th parallels of latitude and from the Atlantic to the Indian Ocean—an area of some two million square miles, more than two thirds the area of the Continental U.S. Ethiopia and Niger are hardest hit, but the drought also encompasses Mauritania, Upper Volta, Mali and Chad, as well as parts of Senegal, Kenya, Nigeria, Dahomey and other countries.

DROUGHT'S DEVASTATION

Drought is one of man's most ancient—and as yet unconquerable—enemies. But few droughts in history have had the repercussions of this one, if for no other reason than that populations today are far larger. Perhaps six to eight million Africans are in acute distress, but altogether some 25 million people in the Sahel are affected by the drought in one way or another. They are living in its wake of wrenching social and economic changes, political upheavals, scarred geography, limbs and emotions, and death.

The United Nations' World Food Program terms this the greatest catastrophe the program has ever faced. The world's relief agencies are straining to help, but available food supplies are being stretched to the limit. And there isn't any assurance that this is a cyclical drought rather than a long-term change in basic weather patterns. If it is the latter, the catastrophe may increase progressively to the point that it becomes the greatest disaster of all time.

This drought started in 1968. Each succeeding year has brought less rainfall to most of the affected areas, and the precipitation was distributed unevenly when it did come.

"Each year we could see our pastures growing drier and drier," says Ibrahim Omar, a Tuareg (pronounced twah-reg) who once had 100 cattle, 20 camels and 40 goats. "We had to drive the animals for 20 kilometers from water to find food for them. Then, it was 30 kilometers and then 40, and then all the animals but the camels began to die. The camels? They were sold for almost nothing to traders from Dahomey, for I could see they would not last long, either. Now I have nothing."

AFFECTING LAND AND PEOPLE

His tale is repeated by others of these Berber descendants who have roamed the Sahara and its edges for millennia as fiercely independent, hardy warriors. Their sedentary neighbors to the south tell of crops burning in the ground and of people eating the seeds that might have been used for next year's crops.

Drought changes the appearance of the land it visits. In Africa, where the drought is more intense in the north, semiarid pasture is becoming desert. Water tables are declining, and oases are disappearing. Rivers become trickles and sometimes dry up completely. In Niamney, the capital of Niger, a black man swimming in the Niger River tells a visitor that he can wade across the mud-brown stream although it is chin-deep in places. This is the first time in anybody's memory that the river has been so shallow at this point.

At Lake Chad, the great inland sea in central Africa, the desert meets the water in a reedy swamp that now is far down from the original shoreline. On the north side of the lake the jetty of a fishing village on the old sore thrusts into what is now a sandy field. The lake has receded so far that the water is now 18 miles from the jetty. In wet years, Lake Chad has covered as much as 9,000 square miles. It now covers about a third of that and is actually three small lakes instead of one.

Even more profoundly, drought changes people. It forces them to migrate en masse from their homes and often change their way of life. In Africa, millions of people are on the move, hoping that pastures may be a little greener on the other side of the sand dune.

As the cattle die, and the grass disappears, the rural people migrate to the cities to beg food. Nouakchott, capital of Mauritania, normally has about 40,000 people; today, it has three times as many. Temporary huts stretch far into the desert around the city and robed men swarm the streets waiting for relief food shipments. Mopti, Mali, normally has about 55,000 people. Today it has 125,000.

"Wherever you have towns you have (drought refugee) camps," says Alexander H. Rotival, a New Englander who is the chief UN officer in Niger. Records of the Food and Agriculture Organization in Rome indicate that as of mid-April there were 267,000 people in camps in Niger alone. Mali has about 55,000 in camps. In Ethiopia, each town along the single north-south road through Wollo

province has growing clusters of thatch huts as desperate, dependent suburbs. Food-relief agencies distribute daily rations of about 1.1 pounds of grain per person.

"Those in camps are the lucky ones," asserts a government official in Niamey. "They were able to reach help before being trapped in outlying areas. Many of these latter people are now too weak to move."

But the camps are especially vulnerable to disease. Usually, few people die of starvation in a drought, even one as bad as this. But malnutrition is widespread and invites often fatal disease. Camps have had influenza epidemics, measles outbreaks, numerous cases of meningitis and various other diseases. Now, "we fear a cholera outbreak," says a World Health Organization official in Niamey.

Medical care is scarce to nonexistent. Chad, which has nearly four million people and is one of the countries hardest hit by the drought, has only 44 doctors. The hospital in N'Djamena, the capital, has no oxygen, anesthetics or antibiotics. Near Dessie, Ethiopia, at least a thousand people wait in line before a canvas tent with a wide awning where a lone medical orderly attends them. A bottle of alcohol used sparingly on his hands is his only disinfectant between patients. His supply of drugs is small enough to be carried in a suitcase.

Malnutrition poses a special threat to children. Some medical authorities believe that protein deficiences in a growing child may result in permanent brain damage. If so, hundreds of thousands of African chlidren may be condemned to this life-long fate because of the drought.

Despite the traumas that the drought has caused them, the nomads of the Sahel seem willing to go back to their homelands if somebody would give them a few cattle and camels for a fresh start. "It is our way of life," one Tuareg in Lazaret Camp says simply.

But R. S. Temple, a Colorado native who is the senior livestock policy and planning officer for FAO, says that it might take seven years to rehabilitate Sahel pastures if rainfall returns to pre-1968 levels, and it could take 15 years to restore the land fully. If that's the case, what is to be done with the nomads?

"This is one of Africa's great unsolved problems," a Malian government official in Bamako says. "There isn't enough money available to resettle the nomads, and where would the land come from anyway?"

So, this drought might spawn permanent welfare camps, which could be fertile breeding ground for social discontent. Already, the political effects of drought are evident in near anarchy in Ethiopia, a military coup in Niger that replaced President Haman Diori's regime with a junta, and political unrest in Chad.

"This drought raises questions about the ability of some of these countries even to survive as countries," one UN official says.

Ethiopia had its troubles before, but the drought heightened social and economic stresses in the country, the enmity between the ruling Amhara tribe and the Gallas, and the animosity of the rich landowners and the landless peasants. Aging Emperor Haile Selassie is losing his control over these tugging factions, raising the possibility of a free-for-all for the succession.

The economic problems that led to the revolt in Niger are typical of the drought's devastations. Nearly all of Nigers' 4.3 million people are dependent on agriculture and livestock. In 1971, Niger had 4.1 million cattle; now there are less than two million. Production of shelled peanuts, a key crop, dropped to 20,000 metric tons in February's withered harvest, down from 164,000 metric tons in 1970. Grain production is off by as much as 50% from the predrought output, and fishing is off by 50% at Lake Chad and in the Niger River and its tributaries.

The anticipated national operating budget for this year amounts to $59.4 million. That's up 9% from last year, but $12.5 million will have to be brought in from outside the country if the budget is to be balanced.

That money could come from the Arab oil-producing countries, which are beginning to spread some of their money around among their fellow Moslem nations to the south. When Niger's new military junta had installed itself just recently, its first visitors were a delegation from Libya's Col. Moammar Khadafy, who wanted to know if there was anything he could do to help. Chad is understood to have received at least $9 million in subsidies from Libya and has been promised a $12 million loan by Iraq.

Growing nationalism and closer ties with Arab countries may well be the drought's legacy in international relations. For instance, the Mauritanian government has cut loose from the French franc and created its own currency, the ouguiya. It has solicited help from Saudi Arabia, Kuwait, Algeria and Libya for

support of this currency, and it seems to be forthcoming in the form of money deposits.

The new Niger government is likely to be much more nationalistic regarding the uranium ore that French interests have been mining there. Col. Khadafy's price for subsidizing the Chad government and ceasing to support rebel forces in the country is said to be that Chad loosen some of its close ties to France. (Many of these countries are former French colonies.)

Arab countries have contributed very little to African nations for food relief, apparently preferring to use their money for political deals rather than aid that might be dispensed by international groups. Currently, the U.S. is providing 40% to 50% of the food reaching the drought areas, followed by France, the European Common Market as a body and by European nations individually.

[From the Wall Street Journal, May 24, 1974]

Ancient Enemy—Many People & Cattle Exacerbate the Effects of Drought in Africa

Bad agricultural practices may cause the recovery to be longer, costlier—would planning trees help?

(By Ray Vicker)

Timbuktu, Mali—Two bony cows stand motionless in the glaring sunlight about 40 miles north of here, watching a blue-robed nomad of the Tuareg tribe cut down a lone acacia tree in a barren gully. As the tree crashes to the ground, the cows move slowly toward the leaves. They are starved for food, but too weak to run for it.

"There! You are seeing one of the causes of this drought," shouts a British agricultural expert on an aid mission as he brakes his Land Rover. He points to the fallen, stripped trees that lie along the gully. "The few trees help hold the soil for grass to grow after the rains," he explains. "With the trees gone the soil blows away, and there will be no grass for a long time even if the rains return to normal."

It is a lesson in the fragile ecology of this vast Sahel, the sub-Saharan region that is suffering from the worst drought in living memory. It is a drought that stretches across Africa from the Atlantic to Ethiopia and the Indian Ocean. A shift in weather patterns is the essential cause, of course, but overpopulation and overgrazing and other bad agricultural practices are tightly interwoven in the reasons why this drought is so severe—and why recovery, when and if it comes, will be agonizing and expensive.

The drought is of such staggering proportions that relief and aid agencies thus have focused most of their efforts on trying to feed the hungry; the problems of the drought's longer-term effects largely have been set aside.

Aid isn't a simple matter

There are six million to eight million people in the Sahel who are acutely affected by the dought, plus unknown millions more in Ethiopia, where statistical enumeration is lacking. The volume of food aid for these people is likely to total 600,000 metric tons this year, up from 450,000 tons last year, says Kenneth A. P. Stevenson, the Rome-based director of the Food and Agriculture Organization's Office for the Sahelian Relief Operation.

Aid in this part of the world isn't a simple task. Often, determining where to send the food necessitates surveys, which the dirt-poor countries hit by the drought can't handle themselves. Then, roads, communications and such sometimes must be established in order to get the food to where it is needed. From Ethiopia in the east to Mauritania in the west, United Nations, Red Cross and other aid groups are frantically working long hours to create patchwork distribution facilities.

Near Dessie, Ethiopia, for instance, a British army team hacks feeder roads to remote villages that previously had to rely on mules to bring in supplies. Air transport would seem to be a faster, more efficient way to distribute urgently needed food and medical supplies, but aid officials largely avoid it. Why use precious aid funds on air transport, they ask, when the money might be better used for building roads that may be permanent?

It is a pertinent question, for if meterological pessimists are right, African drought relief could develop into a long-lasting task.

THE HUMAN FACTOR OF DROUGHT

In fertile areas with considerable rainfaill, somewhat less may not matter much. But in marginal lands such as the Sahel even a relatively small decline can be catastrophic. The African drought is not marked by a complete lack of rain; there usually is some during the June–September rainy season. What counts, though, is the volume of rain through the summer and its distribution over the Sahel. Since 1968, the rainfall has been under average and too spotty to sustain the demands that people are placing on the land.

"It won't be until next September that we will know whether or not adequate rainfall this year is breaking the drought." Alexander Rotival, UN aid chief in Mali, says in his Bamako office.

Meanwhile, some think the Sahel has been so devastated by drought that it will take more than a year of rain to end it. One theory is that the Sahara is relentlessly moving south, enveloping pasture and farming land. But others aren't so sure. "If the phenomenon of desertification exists at all, it is due to the human and animal element and not to climactic variations," says Marcel Roche, a Paris scientist with the French Organization for Scientific Research in Overseas Territories.

There certainly is much evidence supporting this contention. Population in the Sahel is increasing at a rate of nearly 3% annually, according to A.I. Grove, an authority on desert countries at the University of Cambridge in England. The Sahel has "one of the highest birth rates in the world," Prof. Grove says.

These growing numbers of Africans value cattle for prestige as well as for wealth. They tend to push the expansion of herds to the limit, with each man's social and economic position determined by the size of his herd. There were an average of 18 million cattle in the Sahel from 1960 to 1965, the FAO estimates. By 1971 there were some 25 million—about equal to the human population. This number has declined since then as more animals died because of drought, but the herds still are too big for the available pastures to sustain safely.

In 1968, before the present drought set in, some areas were being grazed by 6,000 cattle where, the experts said, 600 would have been ideal given the water and the pasture. Now there are more cattle and less water. New wells have been drilled to provide water for the increasing number of animals. which lowers the water table.

"The new wells have allowed seasonal pastures to become all-year pastures," says A. Blair Rains, a British expert on African agriculture. "Now there are far more cattle per area, resulting in serious deterioration of the pasture."

Overgrazing has been so serious that even the roots of grasses have been destroyed. The few remaining trees are being cut down for their leaves to feed animals. Large patches of the Sahel have been stripped so bare that it might take seven to 15 years to rehabilitate them even with good rains, some experts say.

Sedentary farmers on the savannahs of the drought's southern edge also contribute toward diminishing the land's productivity. Most of them raise cattle as well as till the soil, and somethimes they farm land that might better have been left as pasture.

"But what can you do when the pressure of population calls for ever more food?" asks one French advisor to the government of Niger. He shrugs and lifts his hands in a gesture of helplessness.

Some answers may be forthcoming this fall when a U.S.-sponsored study of the region is due to be completed by Massachusetts Institute of Technology. The study, which uses systems-analysis techniques, may become the framework for long-range development in the area.

Meanwhile, some farfetched idea are surfacing in the vacuum of realistic options. One of these schemes, proposed by those who think the drought's devastation might be halted by a torrent of cash, is to plant a green belt of trees across the Sahara. Presumably, this green belt would catch and hold moisture and thus provide pasture for the cattle.

But the only type of tree that grows in the Sahel is the stunted acacia, which has difficulty growing at all in places where a green belt would be most needed. Moreover, young trees are great gulpers of water, so in its first four years the green belt would require all the water of the Sahel; after that the trees might

sink roots deep enough to reach underground water. But how would all the water of the Sahel be moved to the green belt? And how would people survive if all the water went to the trees? And who would pay for all this?

More practical programs call for teaching the people in the Sahel to practice more efficient farming and pasturing techniques, to husband the water they have and to fight erosion. Practical, that is, assuming that the six-year drought will end someday. That it might not is too terrible for people here to contemplate.

"We can't even admit this 'drought' is anything but cyclical, nor can anybody else who is in aid work," says one western diplomat in Niamey, Niger.

"We are participating in short-range aid programs—purchase of seed to replant again this year, for instance—and other such assistance. We would be foolish to recommend such aid if we thought this drought were long-term. We would be throwing money away that might better be used for resettling these people," he explained.

Resettle them where? The question prompts a shrug. Is there a sincere conviction that the drought will end?

"But you don't understand," the diplomat says emotionally. "We can't even think of this being long-term. God! That would be too awful for any of us to face."

[From the Times (London), Sept. 10, 1974]

RESETTLEMENT SEEMS TO BE THE ONLY WAY OF BEATING CONTINUED DROUGHT IN NOMADS' LAND

(By Harrison Church)*

Drought has persisted in the West African Sahel for at least five years and the losses of livestock kept by the pastoral Moors, Fulani and Tuareg have been enormous. The Tuareg, who normally inhabit the inner fastnesses of this frail environment in Mali and Niger, have been so decimated and degraded that the future of their society is in doubt.

The immediate causes are climatic, the downturn of a 20-year or even longer cycle, with the associated lowering levels of rivers, wells and water tables, dessicated vegetation, and stress on man and his vital livestock.

The longer term causes of the present distress of the nomads reach far back. These peoples were at their zenith economically when trans-Saharan trade was at its height. They controlled the routes and wells, exacted tolls, provided the beasts of burden, directed the exploitation and sale of Saharan salt, produced and sold their own fine craft goods in metal and leather, and exchanged goods from Europe, North and West Africa. However, the trans-Saharan conquest of Songhai in 1959 by Morocco, and the progressive substitution of trans-Saharan trade by sea tarffic to and from the Guinea coast, together brought about the collapse of the political and trading power of Saharan peoples, especially the Tuareg, who are farthest from the sea.

Colonial rule came late to these peoples, who generally resisted the French. The Tuareg capital of Agades in Niger, which had earlier been so important in trans-Saharan trade, gave place to a new colonial capital, first at Zinder and later at Niamey. Trade declined in competition with better supplies and superior trade organization in the Sudan. However, Colonial rule induced and encouraged increasing contacts and exchange between the nomads and settled peoples within Africa. Meat was increasingly sought by the latter, particularly by the townsfolk on the coasts, whose standard of living had risen to a much higher level than that of the interior pastoralists.

The nomad economy, subsistent and commercial in the heyday of trans-Saharan trade, then more purely subsistent, has again become increasingly commercial. However, that commerce now consists in selling, when necessary, the very basis of their life—their livestock. In some respects it is like the situation in Germany after the Second World War, when some people had to sell their possessions for food, except that the nomads are selling not only their treasures, but their capital and source of food. So, in severe drought, when the animals are dying, they sell, if they can, their all.

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*Dr. Harrison Church is Professor of Geography at the London School of Economics, and the author of *West Africa* (Longman), now in its seventh edition.

Saharan wells had already decayed with the decline of trans-Saharan trade, and much later with the abolition of slavery which gradually took away the well diggers and tenders. Colonial and independent governments have provided large numbers of deeper and more productive wells but at risk to the reserves of fossil—and so irreplaceable—water. Perhaps more serious is the tendency to provide wells without complementary and comprehensive veterinary policies, the control of water distribution, the rotation of well use or pastoral routes, and areas of improved pasture for resting herds. More wells without these necessary controls have merely increased the numbers of livestock pressing on the precarious pasture, so eroding the soil for miles around each well.

While environmental control is less perfected and certainly less applied than human and veterinary medicine, it is also understandably difficult to persuade largely subsistent nomads to change their methods. These have prevailed for many centuries, but are impossible in a greatly impoverished environment affected by wholly changed economic and political conditions.

Independence has accelerated the nomads' decline. Lines that in colonial days were merely limits of one French colony with others having the same laws are now international boundaries, and Mali, Upper Volta, Niger and Chad are landlocked states in a way they were not under colonial rule. Furthermore, nomads are no longer legally free to move across such boundaries to exchange goods in markets of another country. When starving they have had to cross these boundaries, and there have been cases where officials have refused food to nonnationals or even to nationals who have not paid their cattle taxes because their animals have died.

Southward movement by the nomads brings them into conflict over land and scarce resources with crop growing settled peoples whom the nomads enslaved in pre-colonial days. Memories are long everywhere on such matters, and especially when everyone is short of food. These psychological, social and economic contrasts between West African cowmen and farmers are reflected in the governments and administrations of most Sahel states, which include few pastoralists. Only in Mauritania is the situation different, for its peoples are dominantly nomads.

All the administrations in the area are characterized by their frailty. Except for the Upper Volta, they are responsible for areas that are at least twice the size of France, but with small, poor and scattered populations, and the most modest of infrastructures. Effective control is often minimal, and trained and reliable administrators are rare; fewer still are willing to serve in remote areas. These and other governments have rarely if ever been as successful in agricultural, veterinary, foresty or water development as the former colonial power; given their differences in resources and manpower training it would have been wholly remarkable if they had been. Nevertheless, far more attention will have to be paid to the rural scene here and elsewhere in Africa; Tanzania and the present government of Ghana are encouraging exceptions.

Relief aid has been widely publicized, and has come from United Nations and EEC agencies, from individual governments in and outside Africa, from churches, organizations such as Christian Aid, Oxfam and War on Want and similar organizations elsewhere. The need to use military aircraft has demonstrated the low capacity of rail and road transport in West Africa, both of which must be improved for both short and long-term development.

Resettlement of the nomadic populations in more accessible areas should be undertaken wherever this is possible. Lands in southern Mauritania near the Senegal and its seasonal tributaries, in Mali near the seasonally flooded inland Niger delta, and in south-western Niger appear to be possibilities, but there are ethnic and other problems to overcome. The extension under colonial rule and since of cultivation in these and other more important wetter marginal lands for crops of groundnuts, cotton, rice and other cereals was often at the expense of traditional pasture lands.

This was so in the western part of the inland Niger delta, which is not seasonally flooded, and where the French attempted to emulate the Gezira irrigations of the Sudan. This costly scheme in Mali has not achieved more than a minute part of its aim, and might more sensibly resettle some nomads.

The wide and seasonally flooded river valleys of the Sahel provide precious cultivable strips in otherwise arid areas, especially around the northern bends of the Senegal and Niger rivers. As the annual flood retreats, so crops with the longest growing season such as maize and sorghum are planted first, followed

progressively behind the waters with shorter growing vegetable crops. Yet such areas are equally vital to pastoral nomads, who bring their livestock to graze on the rich grasses which grow rapidly as the water retreats. Again the crop farmers have tended, by their higher birth rate and local residence, to take over seasonally flooded lands formerly used by pastoralists. Simple embankments, weirs and cuts across narrow meanders could provide greater control and more even spread of water, and so more land for pastoralists, and probably for crop farmers as well.

Systematic ranching has been suggested but has proved difficult to establish under less arduous conditions in East Africa. Grasslands and range management are being studied. Numbers of animals must be controlled, and grazing cooperatives need encouragement. There should be selective seeding of grasses and of forage shrubs, rotational razing, and the association of particular pastoralist groups with the use and maintenance of wells.

Any radical change in this extraordinarily difficult and remote environment, with its simple technological and fragile administrative systems, will be long and frustrating. It requires patience, expertise, comprehension and sympathetic handling. Meanwhile, it is good that so many bodies are concerned in Britain, so long as they collaborate. War on Want has established a Sahel Information Group, whilst the International African Institute founded in 1926 to bring about a closer association of scientific knowledge with practical affairs in Africa has established an environmental studies unit. Funded partly by the Leverhulme Trust Fund, the unit will gather documentation on the African environment and publish a quarterly bulletin in English and French.

APPENDIX IV

SELECTED PRESS REPORTS ON THE FLOODS IN BANGLADESH

[From the Washington Post, Aug. 30, 1974]

FLOOD VICTIMS LIVE IN DACCA STATION—"ONLY PLACE LEFT IS STREET"

(By Lewis M. Simons)

DACCA, Aug. 29—Kamalpur Railway Station is jammed with thousands of people going nowhere.

Floods drove them out of their homes—those who had homes to begin with—and they took shelter on the long, open-sided platforms of the station in the Bangladesh capital.

"Now the police are beating us and telling us we must leave the station," said Abu Rullah. "The only place left is the street."

Rullah, his frail wife, Azama, and their three naked sons stood together among a snaking line of about 500 people on Platform No. 2. Some carried bundles of knotted cloth contaning smoke-blackened pots or a few clothes. Others had nothing and clutched rags around themselves to ward off a faintly chill rain whipping onto the platform.

As soon as I began jotting down notes I was surrounded by hundreds of wailing and whimpering people, showing me running sores on the scrawny bodies of their children, the near-nakedness of their wives, empty cooking pots.

"They think you are here to take their names for some sort of relief," said a Bengali journalist who accompanied me.

Rullah, asked why he had not gone to a relief camp, managed a smile and, pulling at his thin beard, told his story:

He and his family had been living in a village near Fulchari Ghat about a hundred miles northwest of Dacca. "It was not a pukka house"—meaning it was made of palm fronds and bamboo rather than wood or bricks—"but it was still a house. We did not live on the street. We were not beggars." He worked as a farm laborer.

Then, about a month ago, the floods hit Fulchari Ghat. For a while, Rullah thought he could last out the flood. But then the waters rose higher and Rullah realized he would not escape.

Slowly, the mud embankment his house stood on dissolved like paste. He could no longer patch it together. One day, the house simply fell down.

Rullah knotted the few things he owned into a cloth and with his family walked and waded to the high ground of the railroad. "After a few days," he said, "a train came by. We got on."

Rullah paid no fare. He had no money, anyway. But the Bangladesh railroad authorities are used to passengers riding without tickets, and no one bothered him.

Eight days ago, the train—an ancient coal-fired steam engine—pulled into Kamalpur station.

Rullah was amazed by what he saw. The station is only a few years old, built while Bangladesh was still East Pakistan.

The central pavillion is a high-doomed circular structure, topped by dozens of enormous curved concrete petals. The effect, especially today with the station surrounded by a vast shallow lake of rainwater, is something like a giant lotus in full bloom.

Near the station, Rullah heard from a rickshaw puller that there were many government relief camps around the city. He and his family set out on foot to find one.

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Eventually they came to a school where a lot of people were living. "I asked if we could stay, too. They said we must go away. Anyway, some of the people staying in that school told me they were getting no food and they had to beg in the streets."

"So we came back to the railway station. We sleep here at night and beg in the streets during the day. Sometimes we get one or two taka in a day." The legal exchange rate for taki is 7.8 to the dollar.

This morning, Rullah said, police came to Platform No. 2 and began beating people with sticks. "They told us we had to leave the station. I don't know where to go."

A young police sergeant standing nearby, wearing sunglasses and a peaked cap, said Rullah and the others on the platform had misunderstood. "They must get off this platform," he said "But they can go to Platform No. 8."

More than a thousand people, it turned out, were living on Platform No. 8.

Women with breasts shriveled like prunes nursed children who should have been weaned two years ago; men too weak to do anything lay on the slim cement floor and stared at the high roof; infants with chronic diarrhea made themselves and their mothers filthy as flies swarmed over them; a few women who had begged handfuls of uncracked wheat warmed it over smoky fires.

The human din was punctuated by the occasional scream of a train whistle and the squealing of iron wheels on the tracks.

"We'll allow this for another day, or two," said railway police inspector Mohamed Amjad Hussein. "But we'll have to force them out then. There's too great a risk that an epidemic will break out here. And what better place to start a country-wide epidemic than at the central railway station?

"Not only that," he added, "but unless we force them out they'll never stand on their own feet."

The same line of thinking is followed by the government's Relief and Rehabilitation Ministry. Although heavy rains have begun again and reports of new flood threats are coming in, the ministry began yesterday to close all the 138 relief camps it had set up in the capital.

[From the Washington Post, Sept. 3, 1974]

FLOODS A CRIPPLING BLOW TO BANGLADESH

(By Lewis M. Simons)

DACCA, Sept. 2—In hungry Bangladesh, mothers commonly nurse their chilchildren until they are two to three years old. And, like those children, Bangladesh itself shows no signs of being weaned away from a world that has sustained it since birth 33 months ago.

If there was any hope that Bangladesh was slowly getting up on its own legs—and some Bengalis say they saw the first flickers a few months ago—that hope has been dashed by the floods still covering much of the country.

Like its millions of malnourished children, Bangladesh is assured of severe deprivation for the foreseeable future. Repair of flood damage nothwithstanding, economic planners estimate that the government will need half a billion dollars in foreign aid for the coming fiscal year. This represents 70 percent of the entire development plan for the year.

"There is no way for us to reduce our dependency," said a senior government planner. A consortium of Western governments is to meet in October or November, probably in Paris, to determine its level of assistance to Bangladesh. But no one in Dacca even dreams that the group will meet this country's needs.

This raises many questions, the most basic being: What is to become of Bangladesh? There are at least 75 million people in this country, the eighth most populous in the world. "We are not simply just going to go away," the editor of a leading Bengali-language newspaper said.

And while the questions burn, the answers—acceptable ones at least—are not to be found. Some observers have even begun to suggest that the only way for Bangladesh to survive is for the world to abandon it for awhile.

"You know, we do-gooders have played hell with Malthus in this part of the world for a long time," said a Western economist who has worked in Bangladesh for for five years. The Malthusian theory states that population will out-

strip the world's supply of food and other vital necessities unless man himself—or wars and disease—restrain population growth. "It's beginning to look like the only hope here is to let huge numbers, millions, of Bangalis dies," the economist said.

Such a prospect is unthinkable. Yet the cold statistics of exploding population growth and stagnant food supplies are swiftly adding up to a seemingly inescapable conclusion: Bangladesh may be the first country to prove Malthus' 19th century thesis.

Population is growing at 3 per cent a year, perhaps the highest growth rate in the world. The commonly used figure of 75 million was at best a calculated guess when it was made more than three years ago, when Bangladesh was still East Pakistan.

Demographers project a population of 150 million by the end of this century. One reason why thousands of Bengalis dies every year in floods is that people today are living in low-lying areas which only a decade or two ago would have been considered uninhabitable.

Every year since independence, the shortfalls in food crops has never been less than 2 million tons. Under current technological restraints, the gap must widen as more and more Bengalis are born.

Last week, a group of Asian agricultural specialists met in Dacca to discuss the development prospects of "deep-water rice," a variety that will grow in as much as 20 feet of water. Scientists are attempting to marry the existing breed of deep-water rice, which produces only limited yields, with high-yielding "miracle" rice. They hold out little chance of success in the next few years.

The government has a family-planning program. But according to foreign experts, results so far have been negligible. Prime Minister Sheikh Mujibur Rahman, they complain, pays lip service to the need for family planning, but fears taking the political risk of outspokenly supporting the program.

Critics say Mujib knows that the conservative moslem peasants who form his political power base have vehement moral and religious opposition to limiting the size of their families. But the prime minister denies that he is soft-pedaling.

"The most important thing is family planning," Mujib said in an interview. He acknowledged that he does not speak often on the subject, but added, "There is no need for me to talk about this every day. My people know my views and they are accepting my propaganda."

At the same time, though, Mujib and his government are looking for pie in the sky. Several officials spoke hopefully recently about satellite study which indicates that some 4,000 square miles of seabed are slowly rising in the Bay of Bengal adjacent to the southern fringe of Bangladesh.

"This could be the answer to our prayers for more space," said an agriculture ministry official.

But while the long-range conclusions of too many people and too little living space and food to sustain them are inescapable, Bangladesh has the potential to flourish in a modest way in the short term, perhaps until science and technology find a solution.

The country has a vast supply of natural gas, a commodity that is becoming increasingly more valuable as the price of crude oil rises. Current estimates are that the known gas fields hold 20 trillion cubic feet of natural gas, and there may be more in unexplored areas.

At the present minimal rate of exploitation, this reserve would last at least 200 years. Government planners consider this rate ridiculously slow. "We've got to start drilling and pumping like mad," said a planning commission source.

In the quest for oil, the government is expected to sign contracts next month with seven large U.S. and other Western firms, including Atlantic Richfield, to begin seismic surveys in a 25,000-square-mile area in the Bay of Bengal. Upon signing, the government will receive a $25 million bonus from the companies.

After struggling with tight state controls over a textbook socialist economic setup for 2½ years, the government announced recently that it was raising the ceiling on private investment in industry from the equivalent of $437,000 to $3.75 million and would allow foreign investors equal participation.

There has not yet been any response either at home or abroad, but foreign observers believe that there will be a reaction after the current flood crisis subsides.

In revising the investment pattern, Mujib broke with an ideology he and his supporters had espoused even before they split with Pakistan. The shift drove out

four of the top five members of the prestigious planning commission, a move that may prove more beneficial than harmful—if the new planners turn out to be more realistic than their idealistic, Harvord-trained predecessors.

The point is, though, that unless planners and political leaders do in fact become a lot more realistic, very quickly, there is no way for Bangladesh to ever become a viable economic entity. They still have a chance to evade Malthus.

[From the New York Times, July 9, 1974]

Bangladesh: Orphan in World With no Foster Parents

(By Kasturi Rangan)

Dacca, Bangladesh, July 2—Chunnu, 2 years old, is leaving for Sweden shortly to join his foster parents.

"We will miss him very much—he is a special child," said Sister Shouba, who looks after five dozen other children in Shishu Bhaban, a home for orphans.

Chunnu is the last of the 20 children born in the home to Bengalis who were raped by Pakistani soldiers during the military repression in Bangladesh, formerly East Pakistan, in 1971. The mothers have gone back to their husbands or parents. Some took their babies, others left them behind to be given in adoption.

Chunnu was adopted by a Swedish couple last week. After Government formalities he will be flown to an assured future.

NO FOSTER PARENTS

But Bangladesh, also born two and a half years ago, has no such assurance for her future. No country in the world is in a position to take care of this fledging nation of 75 million people with its myriad problems.

When Bangladesh was formed Secretary of State Kissinger described her as "an international basket case." That description fits more now than when he said it.

Bangladesh is in the midst of a serious economic crisis. Although several countries, led by the United States, have given generous aid in the last two years, production has slipped far below the levels reached during the last year of Pakistani control. Industries are working at 40 percent below capacity for want of spare parts and raw materials.

Although food production has increased marginally, population expansion—two million a year—causes growing food shortages. This has forced the Government to spend much of its financial resources and foreign aid to meet a deficit estimated at two million tons a year.

INFLATION IS SEVERE

Meanwhile, inflation has continued to intensify. Since independence prices of essentials have gone up two and a half times and continue to rise at 40 percent a year. Exports of jute and tea, the major foreign-exchange earners, have fallen. During the Pakistani days West Pakistan absorbed most of the jute and tea; today there is not much demand for either, since jute is facing severe competition from synthetics and Bangladesh tea is considered inferior to Indian and Ceylonese tea.

"The bubbling optimism that Bangladesh would prosper once the Pakistani exploiters were gone has now been replaced by all-round gloom," a Western diplomat commented.

Bangladesh industry and business have been facing new problems, he said, listing a lack of skilled manpower, including managers, labor indicipline aggravated by political interference, shortages of raw materials, components and spare parts, and the high cost of imported fuel and fertilizer.

Foreign aid has begun tapering off. The United States, which has made outright grants of nearly $500-million has stopped all commodity aid under a Congressional ban. For the current year a loan of $25-million has been approved.

India, which ranks second in aid with $270-million in two and a half years, has begun to feel the pinch, so the Indian Government is now giving preference to trade. Recent trade agreements have been favorable to Bangladesh, but India needs little from her—limited quantities of jute, newsprint and fish—and can sell only manufactured goods and nonessentials.

Smuggling across a 1,000 mile open border has also hurt Bangladesh's economy, with rice and jute going out in exchange for luxury items. The Indian Government has forbidden traders to go into Bangladesh and imposed severe restrictions on currency and traffic.

The popularity of the Indians, who fought the Pakistanis in support of independence for Bangladesh, has declined for no other reason than the increasing prices of rice and scarcities, which are attributed to the smuggling.

In direct proportion, sentiment toward Pakistan has softened. Generally people talk of the present "difficult days" and compare them with the "good old days" when Pakistan consisted of two wings. Except among Government leaders and intellectuals who suffered heavily, the bitter memories seem to have dissipated.

When Prime Minister Zulfikar Ali Bhutto of Pakistan visited here late in June, he received a surprisingly warm and friendly welcome from a large section of the people in the belief that the good old days would return with reconciliation with the Pakistanis.

A number of people, including some Government leaders, nurtured the hope, which proved vain, that Mr. Bhutto's visit would bring relief. Although the Government did not relish the popular welcome accorded him, by all accounts they shared the wish.

DEMAND FOR ASSETS

In talks with the Pakistani leader, the Prime Minister of Bangladesh, Sheik Mujibur Rahman, stressed the issue of $6-billion in assets held by Pakistan and claimed by Bangladesh, using atrocities and damage committed by the Pakistani military during the December war as a bargaining point.

Sheik Mujibar claimed gold reserves, foreign deposits and securities, aircraft and ships, defense stores and equipment, and embassy building. He wanted a token transfer of the gold and foreign deposits within two months so that the credit-worthiness of Bangladesh would be enhanced, encouraging foreign investment.

The country's foreign-exchange reserves have recently sunk to a mere $20-million. So grim is the position that exporters will not accept letters of credit drawn on the state-owned Bangladesh bank unless backed to a bank in Britain or United States.

Mr. Bhutto made no commitment, which bitterly disappointed the Government—so much so that on his departure people were kept off the roads by armed policemen.

A NATION'S RESOURCES

Western observers maintain that the biggest asset the country has is its leader, 53-year-old Shiek Mujib, who still commands respect and affection. Political stability is not likely to be disturbed while he is at the helm.

The Prime Minister has been telling visitors that he is aware of the problem and is contemplating drastic steps.

Once, according to reliable sources, is a switch to a presidential form of government that would give him full powers. Then he can appoint efficient technicians and executives, replacing the corrupt or inexperienced ministers, who are drawn from the legislature.

The observers also point to untapped resources—unexplored oil and natural gas deposits and the potential for more food production.

The mood among ordinary people is troubled.

"What's happened has happened," said Amir Khan, an 81-year-old farmer in Azimpur, a village 13 miles north of the capital. "It was the wish of Allah."

VILLAGE WAS DESTROYED

Mr. Khan and his family of 23 ran away when the Pakistani soldiers came. Returning after independence, they found the village burned and the property looted. Many relatives were missing and some were reported killed.

"I lost so much," Mr. Amir Khan said. "I lost $2,500, I wanted help from the Government. They gave us about $4. I said, "keep it yourself."

He said that he was able to raise a rice crop and rebuild his house, but he has not been able to afford enough fertilizer and pesticide, so yield is declining.

"Independence has only added to our sufferings," Mr. Amir Khan said.

However, neither he nor others interviewed would want to become part of Pakistan again.

"We want normal relations on the basis of sovereign equality," a businessman said. "Our economies are complementary to each other and trade will greatly help us."

APPENDIX V

SELECTED PRESS REPORTS AND COMMENTARIES ON THE CRISIS IN CYPRUS

[From the Christian Science Monitor, Aug. 29, 1974]

Refugee Problem on Cyprus Worsens While Sides Bicker

(By Joseph Fitchett)

Beirut, Lebanon.—The refugee problem on Cyprus becomes increasingly acute as time passes without a political breakthrough on the conflict between Greece and Turkey.

The Cypriot Government has asked for a UN Security Council meeting to debate its charges that Turkey has forcibly displaced tens of thousands of Greek Cypriots from their homes, properties, and livelihoods in the Turkish-occupied north of the island.

The Greek Cypriot leadership in Nicosia maintains that Turkish troops used terrorist tactics and other forms of intimidation to drive Greek Cypriot inhabitants south across the lines to Greek-populated parts of Cyprus.

The number of displaced persons is disputed. The United Nations figure is 150,000. Greek Cypriot officials insist the figure is nearer 200,000. Nobody disputes that something between one-quarter and one-third of the island's population has been uprooted.

TURKS SECURE

The overwhelming majority of the refugees are Greek Cypriots. Latest reports speak of more families, or women and children alone, fleeing from Turkish occupation every day.

The bulk of Turkish Cypriots, originally numbering less than one-quarter of the island's inhabitants, find themselves secure under Turkish protection.

The UN high commissioner for refugees, Prince Sadraddin Aga Khan, launched an initial relief project Aug. 28 for building eight refugee camps capable of accommodating a maximum of 40 persons. His agency plans to appeal for funds for other relief programs—to be shared by Greek and Turkish Cypriots alike.

The relief programs are being carried out by the Cyprus Government. The humantarian aspect appears to be the most successful part of UN Secretary-General Kurt Waldheim's fact-finding mission on the UN military presence. His recommendations are expected to echo his comment in Ankara, on the last stage of his journey, that the UN's peacekeeping role on Cyprus would have to be "redefined."

3-WEEK DEADLINE

On the political deadlock, there are no indications that the gap has narrowed between Greece and Turkey. Ankara, rejecting the Greek supported call by the Soviet Union for an enlarged Security Council debate on the Cyprus issue, simultaneously allowed Turkish Cypriot leader Rauf Denktash to set a three-week deadline for Greece and Greek Cypriots to start talking on Turkey's terms. Otherwise, Greece faces the creation of more Turkish "facts" on Cyprus.

A disturbing fact of the refugee problem, for instance, is that Turkey continues transferring Greek Cypriot males off the island to mainland Turkey. Confirmed figures are unavailable, but unofficial estimates leave no doubt that a minimum of 3,000 men have been taken to Turkey. Only some are classified as prisoners of war. The others are simply interned.

MAIN INSTALLATIONS

The part of Cyprus left by the refugees contains the main installations of the three highest-earning sectors of the Cypriot economy—agriculture, mining, and tourism. The citrus groves of the north coast (where this season's crop is reportedly threatened with disaster unless water reaches the trees within the next 10 days), the American-owned copper mines in the west, and the resort complex around Famagusta all now lie behind Turkish lines.

The Greek Cypriots' concerns are sharpened by the bitter contrast between the present situation and their own dreams of "enosis" (union with Greece), which precipitated the war.

Reasoning that they have nothing further to lose, young pro-enosis fighters of the EOKA guerrillas in Greek areas are threatening to launch a new guerrilla war against the Turkish occupation. But the threat of guerrilla warfare might give Ankara a pretext for emptying Turkish-controlled northern Cyprus of its remaining Greek Cypriot population.

FORCED EXCHANGE

A forced population exchange has always appeared desirable to the Turkish leadership if it could be made politically feasible. The next step might well be Turkish immigration to Cyprus.

Some Turkish newspapers have started calling for the "return" to Cyprus of Turks allegedly forced to leave the island under the rule of Archbishop Markarios.

[From the New York Times, Aug. 29, 1974]

ON BOTH SIDES IN CYPRUS, LITTLE HOPE FOR PEACE

(By James F. Clarity)

NICOSIA, CYPRUS, Aug. 28—Although the killing has subsided on this beautiful island, politicians and diplomats maneuver in other countries to arrange another round of Cyprus negotiations and most people here—Turks and Greeks—feel that it is only a matter of time before the bloodshed will start again.

The ethnic Greek majority of about 80 per cent of the population of 660,000 detests the prospect that it may permanently lose control of a sizable part of the island, if not the entire 40 per cent of it controlled by Turkish forces. The Turkish minority of about 18 per cent feels that its only security lies in a formally partitioned island, with autonomy in its own sector. While there has been a lull in the last week, both Greeks and Turks seem resigned to an eventual political settlement that will leave perennial ethnic and religious animosity and mistrust intact and lead to years of cruel, indecisive guerrilla warfare.

As the officials in Ankara, Athens, London, Washington and Moscow parry over new negotiations, this mountainous Mediterranean island of pines, cedars, lemon groves and sparkling harbors is pocked and scorched by the fighting and its people are anxious about the nervous peace.

In recent days life on the island, which is about half the size of New Jersey, has taken these forms:

The Cypriote Liberation Army, as a group of Greek officers call the guerrilla force they report they are organizing, says it is aware that guerrilla warfare involves sacrifices and that it expects Turkish reprisals.

A Turkish militiaman, sitting at his barricaded post in the Turkish sector of this capital, comments, "If they want to be guerrillas, then if they kill two or three of us, we go to their village and kill all of them—2,000 or 3,000."

Metaxas Square, in the Greek part of the capital, is quiet at night with the tourists missing. There is hardly anyone in the Lido Hotel bar. United Nations and Red Cross jeeps dominate the sparse traffic.

ROCK MUSIC AND RIFLES

Ataturk Square, in the Turkish section, is even quieter. Old men sit at a coffee shop and watch young soldiers from mainland Turkey in a jeep. The soldiers, their automatic rifles stowed carelessly, are listening to rock music on the radio.

On the road from Nicosia to Kyrenia, which is in Turkish-controlled territory, three tanks are poised on a charred hillside. Nearby, several squads of Turkish

soldiers with close-cropped black hair march around a field, apparently on drill.

At the small harbor of Kyrenia, a Trukish sailor in a soiled white uniform chats with two soldiers outside an abandoned cafe. Some of the shops on the waterfront have broken windows and their goods are gone; others have not been touched.

A few hundred yards away 500 Greek civilians are interned in the Dome Hotel, a luxury resort until the war began last month. The Greeks want to go home to see if their property has been looted. Their Turkish captors feed them mostly beans and say they must wait a few more days.

In Limassol, on the Greek-held southern coast, several thousand Turkish civilians are detained in schools and other public buildings. Many of their homes have been broken into, their furniture smashed. Greeks in the town admit that they looted but say the Turks did much more in the north.

BACK TO BAKING BREAD

At a refugee camp near the town of Ormidhia, in the southeastern corner of the island, Demosthenes Yiannakis, who fled his pastry shop in Famagusta two weeks ago, was kneading dough in a wooden vat under a tree. He said he began his trade 30 years ago as a baker of bread, because a maker of fancy pastries and now was making bread again for fellow refugees. His only complaint was that he did not have an electric mixer.

Lieut. Col. Jack Bowman, the Briton who is commander of the camp, which is in an autonomous British base area, said the Royal Regiment of Fusileers was acting as a security guard.

The fusileers have a red and white feather in their caps that the colonel said should be recognized as a symbol of authority. What if a disgruntled refugee threw a stone at the symbol? the colonel was asked. "People do not throw stones at the Royal Fusileers," he replied "They have been in Northern Ireland."

There are larger problems after six weeks of war and turmoil in the wake of the overthrow of Archbishop Makarios as President and the subsequent Turkish invasion, the economy is faltering. The tourists are gone. Prices rise as supplies dwindle, but there is no food shortage.

Factories in Nicosia and Famagusta were ruined by Turkish bombing raids. At least half the cows, pigs, sheep and goats are in Turkish-occupied territory, with no owners to tend them. The Greeks say the animals will starve; the Turks say they will feed them.

The Greek administration estimates that the Turks control land that contains about 70 per cent of the wealth. Of this 70 per cent, the administration says, virtually all was owned or controlled by ethnic Greeks who have fled or been detained by the Turkish forces.

The Greeks say there are not enough skilled Turks to handle matters. The Turks say help is on the way from Ankara. Some Greek businessmen say they might return to Turkish-controlled areas to work; others say they are ruined.

There is no reliable estimate of the amount of damage to the economy, but it is easily in the tens of millions of dollars.

Nor is there an accurate count of the number of refugees. At first the Greek community said there were 200,000 who had to flee the invaders; the figure is now down to 140,000. The Turks maintain that 20,000 Turkish Cypriotes are being detained in the Greek part of the island; they say that to this number must be added 15,000 who became refugees 11 years ago, during the last fighting. It would seem that 25 per cent of the population feel that they are being forced to live where they do not want to.

The Red Cross is distributing tons of food and thousands of tents, so conditions in the camps are not squalid.

The United Nations troops here—there are 4,400 now—say they try to be impartial in their peace-keeping and humanitarian work, but the Turks have expelled them from a few areas, have hampered their movements in others and have blocked their supply convoys. Secretary General Waldheim said he would seek a revision of the Security Council mandate that governs the force's activities.

The Turks say the force failed to prevent the overthrow of the Archbishop, the Greeks that it failed to deter the invading Turks.

The island's festering problems have the effect of hardening attitudes. Views of what happened here are apparently irreconcilable. Ethnic Turks say the Greek colonels in Athens wanted to annex Cyprus so they overthrew President Makarios, necessitating an invasion to protect the Turkish Cypriots. Most ethnic Greeks say that the overthrow of the Archbishop was bad, but that it did not justify the

invasion of an independent nation. The Greeks add that Turkey wanted to annex Cyprus.

Internal politics seems stable, at least for the moment. On the Turkish side, Rauf Denktash, Vice President and head of the Turkish administration, works closely with the Government in Ankara. President Glafkos Clerides, the head of the Greek community, said two days ago that he did not fear being thrown out of office. He says he will not prevent Archbishop Makarios from returning, but his attitude has been cool.

How much life has been lost in the fighting is uncertain. The Turks admit to several hundred battlefield deaths. The Greeks, who say they cannot count because many of the dead are behind enemy lines, are believed to have lost more than the Turks.

Both sides make frequent charges of atrocities, which are virtually impossible to check.

[From the Economist (London), Sept. 21, 1974]

THE EMPTY THIRD

For the "liberated" Turkish Cypriots life behind the Turkish line in Cyprus is a strange and uncomfortable business. For the visitor the first impression is one of eerie emptiness—natural enough when one realises that the area has been depopulated of 75 per cent of its former inhabitants. In the twin towns of Karavas-Lapithos, which had a joint population of about 7,000, there now lives a single British couple determined to protect their house from looting. "Even the sparrows have pushed off," says Geoffrey Brierley.

But where, one asks, are the Turkish Cypriots? One does not meet many on the roads because petrol has been strictly rationed (food for civilians is also in short supply because, like petrol, it now has to be shipped from Turkey and not as before bought from farms and orchards just down the road). But the main reason for the missing human element is the finely-meshed security net that has been fastened down over the Turkish-occupied area. The road from Nicosia to Famagusta is about 35 miles long but on it one is checked at least 25 times at road blocks manned by Turkish soldiers, whose shaven heads, high cheek-bones and conical helmets bring the cold breath of the steppes of central Asia into the warmth of the Levant. The frustration of foreigners at this interminable checking is mitigated only by the realisation that Turkish Cypriots have to endure it too; in what is supposed to be their own country they have to book in and out of their villages or towns, give their names and destination and, sometimes, their reason for travel.

The Turkish Cypriots brought this army control down on themselves by giving in to the temptation of looting. The network of checks, the Turkish army explains, is for police purposes rather than military security in order to stop looting by Turkish civilians. Famagusta was saved from looting only because the army promptly sealed the Turkish Cypriots into the walled city. Houses in Kyrenia are still being picked over for small objects that can be pocketed, and disappointed looters are now turning to vandalism with things being smashed and slashed—a Turner canvas in one house miraculously escaped. A Union Jack on the door no longer provides protection, and when one British boat owner tried to hoist the Red Ensign on his yacht in the harbour he was promptly ordered to haul it down by a Turkish sergeant. With animals and pets running wild it is now true, modifying the Rubaiyat, that the donkey and the lizard keep the villas where John Smith idled and drank deep.

On the other side of the line, the Greek Cypriot community is in a sorry emotional state, deeply wounded in its *philotimo*, the Greek concept of self-respecting honour. Large numbers of the middle class are simply running away from a country that perhaps gave them too much prosperity too quickly (in the National Guard most of the hard fighters were village boys). Belatedly, the Cyprus government announced over the weekend that there would be restrictions on leaving the island, and, in particular, on taking money out. Certainly, if the panicky Greek Cypriots do not pick up enough courage to go back to their homes, they will be inviting Turkish replacements, especially from mainland Turkey.

The Turkish government is already working towards that replacement. Since it has now been estimated that there are only 45,000 Turks in the Greek area (not 60,000 as claimed by the Turkish Cypriot leader Mr. Denktash) they could be that much more easily moved to the under-populated Turkish area. But one great

difficulty in any exchange of population is that Cyprus, though small, has a very varied crop pattern. Turkish vinegrowers from the south and west would be moving into northern areas where there are very few vineyards; Greek tobacco growers would be pushed into areas where no tobacco has ever been grown.

Both Cypriot communities have been ravaged by events. So has their natural environment and the economic infrastructure on which both equally depend. For no good reason the Turkish air force burnt down hundreds of acres of cedars and pine trees on the Troodos hills, which were far from any fighting. Immolated in the flames were 500 of the 600 moufflon, the rare mountain goat that is the national symbol of Cyprus, which had just been saved from extinction. The unwatered fruit orchards in the Turkish-held area are on the point of dying and hundreds of thousands of livestock are already dead. For the Greeks that is the rake of war; for the Turkish Cypriots it is the result of their supposed liberation.

[From the New York Times, Aug. 14, 1974]

CUTOFF TURKISH CYPRIOTES BITTER

(By Henry Giniger)

KNODHARA, CYPRUS, Aug. 13—This Turkish Cypriote village 19 miles northeast of Nicosia has been virtually cut off for three weeks by what its inhabitants consider "the enemy."

Here and in the nearby ethnic Turkish village of Chatos, the enemy are the Greek Cypriotes, who outnumber the Turkish community on the island 5 to 1.

"We prefer to die rather than live with the Greeks," Yashar Halil, a Turkish police inspector, said in an interview.

A Chatos teacher, Kemal Karadag, said: "There is not a single Turk who thinks it is possible to live side by side with Greeks."

These bitter attitudes help to explain the aggressive attitude of Turkey at the Geneva conference on a Cyprus settlement, where the Turks have insisted on a constitutional formula that would separate the Greek and Turkish communities physically and politically.

TENSION HIGH IN VILLAGE

This is a farming community, more interested in wheat than in politics. But the tension is as acute here as in Nicosia.

After some easing in the last two days, following withdrawals by Greek Cypriots forces from a few Turkish villages, the tension rose again today after reports from Geneva of a possible suspension of talks if Turkish demands were not accepted.

In Nicosia, a spokesman for the United Nations forces, which have been reinforced and now total 4,400 men, said that they had intensified their state of alert.

Following an invasion of Cyprus by Turkish forces on July 20, severe fighting broke out between Turks and Greeks. As a reaction to the invasion, Greek Cypriotes surrounded or occupied dozens of Turkish villages scattered across the island.

Knodhara, a village of 750 people, grew to 3,000 as Turks from six villages around it took refuge there. Some houses now have as many as 60 inhabitants and according to its authorities there is a scarcity of everything.

MAIN ROADS BARRICADED

The main roads leading to Knodhara and to Chatos are barricaded by Greek-Cypriotes and the Turks are virtual prisoners in their own villages.

"We have no vegetables here," one resident said. "We wanted to send people to get some potatoes that had been left behind in houses in one of the abandoned villages, but the Greeks would not let us."

There is some bitterness also with the United Nations and the Red Cross over inadequate help. The United Nations is trying to distribute food around the island to Turkish communities, and the Red Cross had been distributing medical and other supplies.

This morning two truckloads of American-furnished tents and cots were sent to Knodhara by the Red Cross.

VILLAGE DAMAGED IN BATTLE

The damage of battle is evident everywhere. The Turks fought with small arms and the Greeks used mortars, artillery and rockets. Many houses are burned out and the slender, graceful minaret of the mosque in Chatos has a huge shell hole. Chatos has no electricity and the flour mill is being powered by a generator. In Knodhara, a hospital with 11 cots has been set up in an old cafe. But the harried young Turkish doctor must send serious cases to the Turkish hospital in Nicosia, after alerting the United Nations so the patient can pass through the Greek lines.

These conditions have contributed to the enmity the Turks feel toward the Greeks. The Greeks are much more conciliatory and talk of how Greeks and Turks have lived together for thousands of years and must continue to do so.

"The Turkish people want to be with Greeks," a Greek schoolteacher in Chatos said. "We are like brothers. It is Turkey that wants to separate us."

A Greek Cypriote lieutenant colonel in the area said Turks were allowed to leave their villages if accompanied by United Nations and Red Cross personnel.

Less than 10 miles to the northwest of Chatos, the Turkish invaders are deployed with an estimated 300 tanks along the range of mountains that separate the central plain from the island's northern coast. The Turks of Chatos and Knodhara fervently hope the troops will advance to positions including their villages. "Only then will we feel safe," said a leader in Knodhara.

A visitor was struck by the lack of any sense of a Cypriote identity among the Turks and among a large number of ethnic Greeks as well. In each of the Turkish villages, there was a bust of Kemal Ataturk, the founder of modern Turkey, with expressions of his such as: "I am proud of being a Turk."

Not far away, Greek graffiti proclaim: "Union with Greece."

Mr. Karadag, the Chatos schoolteacher, who is a cochairman of the village committee, said: "We will do anything mother Turkey tells us." He and others expressed confidence that the Turkish Army would come to their rescue.

[From the New York Times, Aug. 24, 1974]

REFUGEES OF CYPRUS: HOW THE 'RICH' LIVE

(By James F. Clarity)

XYLOTYMBOU, CYPRUS, Aug. 23—In the wake of the Turkish Army offensive, which captured some of the most prosperous towns on Cyprus, many of the well-to-do Greek Cypriotes who fled Famagusta have settled their families along roadsides near this town 14 miles from the southeastern port city.

They are using their cars as part of their temporary homes, while the poorer Greek Cypriotes among the 80,000 refugees in this area seek shelter and food in the well-supplied British Army enclaves.

The Greek Cypriote administration of Cyprus estimates that the Turks now hold territory that accounts for about 70 per cent of the nation's wealth, much of it revenue from tourists. The middle-class and upper-middle-class businessmen from Famagusta, a thriving seaside resort until the Turkish invasion last month, are staying close to their town.

While the affluent Famagustans wait for something to be done about them in Nicosia, Athens, Ankara, London, Washington or Moscow, they wonder whether they will ever see their shops again, whether the Turks have stolen their television sets or ruined their orange and lemon groves. They feel that as businessmen, they are an important part of the Cypriote economy, but they say that they have changed overnight from staunch friends to bitter enemies of the United States because of its policy in the Cyprus crisis. They blame most of their problems on Secretary of State Kissinger personally.

BETRAYAL, THEY FEEL

The refugees feel that America betrayed them by not stopping the Turkish invasion. Pandelis Chiradis, the owner of two beach clubs, in Famagusta, told an American visitor: "In the second World War, Greeks made war on Germans with you. Turks sat home and drank coffee and made money. Now, you do not stop the Turks. Nixon was very bad for us. This new one, Ford, maybe he is better."

These refugees are uncomfortable sleeping on the ground on blankets or bamboo mats, and they are not pleased with the simple meals they prepare on wood fires or portable gas cookers. The wind blows the roadside dust in their faces; there is little they can do but sit and brood.

Mr. Chiradis now lives under a tree with another family in a cluster surrounded by four automobiles, including a new blue Citroën sedan, like the covered wagons of American frontier days. He said he had some money in the bank, then pointed to the road where a gray-haired man was carrying plastic water cans. "See him," said Mr. Chiradis, "He had 500,000 pounds. Now he has nothing. Now we are all the same. Like Communism."

The British Army-operated refugee camp at Athna has about 9,000 refugees from the Famagusta area. The camp, which was visited a few days ago by acting Presidnet Glafkos Clerides; is run by the Royal Regiment of Fusiliers under the command of Lieut. Col. Jack Bowman, who said it has refugee bakers, refugee policemen and refugee politicians.

One of the Athna refugees, Michael Schiniou, said that his housewares business in Famagusta had probably been ruined by the Turks, who had chased hundreds of his customers away from their homes while they still owed him money. He said the women in his family had dysentery, but were reluctant to see a camp doctor.

At a cafe in the village of Anglishidhes, a young cosmetics salesman from Famagusta said that Greek Cyprus would come under Communist influences, now that the United States had betrayed it. "You have made another Vietnam. You will see," the salesman said.

[From the Washington Post, Aug. 29, 1974]

VICTIMS OF VICTORY: TURKISH CYPRIOTS STRANDED BY WAR

(By Bernard D. Nossiter)

PAPHOS, CYPRUS., Aug. 28—The frightened Turkish Cypriots in this Greek-controlled town want to abandon their homes and flee to the Turkish sector in the north.

But they cannot move from their packed quarter. Greek Cypriot police guard every street leading out.

"We want to go to live under Turkish forces to be sure of our tomorrow and our future," said a school teacher.

"When we wake up, we want to see all our children alive. We don't want to lose our things we tried to so many years to have."

The 34-year-old teacher is afraid to give his name. He fears that if he is identified, Greek Cypriots will take him away to Yaroskipos, the prison camp outside town.

The 3,000 Turkish Cypriots trapped in this southwestern corner of the island are victims of a Turkish army sent to liberate them. Ever since the Turks invaded the island on July 20, these people have been living through an ordeal like that of Greeks caught in the north.

When the barriers are finally dropped, this island is almost certain to see a mass migration, with Greeks moving south to their zone and Turks going north.

Murad Husnu is the leader of the Paphos Turks, a 58-year-old welfare officer who is not afraid to give his name. He told some reporters of his people's nightmare.

The community put up a brief resistance on the invasion's first day but was forced to surrender under the pounding of mortar, artillery and an offshore gunboat. The Greek Cypriot National Guard collected the quarter's rifles, pistols and knives and then marched off 29 young men identified as fighters and the 40 local police to the prison camp.

But the real horror, Husnu said, came on Aug. 14, the date of the second Turkish assault. Greek Cypriots, he said, opened up on the disarmed Turkish quarter here with machine guns. When the firing stopped, the community counted six dead, including a three-year-old girl whose body was riddled with more than 30 bullets. A seventh resident later died of wounds.

Husnu said he saw men beaten with gun butts. "They entered into houses, looting, stealing," he said.

Just like the Greeks in the north, the Turks here lost radios, television sets, refrigerators, jewelry, money and cars.

"People were threatened," Husnu recalled. "They were told, 'Tomorrow we will kill you, cut off your heads.' "

It is not clear who committed these acts. A National Guard officer told Husnu it was not his men but irregulars, and promised swift punishment for wrongdoers.

The terror in the Turkish community has diminished this past week. Nobody had been abused and the looting has stopped.

"Today was better than yesterday," Husnu said. "Yesterday was better than the day before."

United Nations soldiers, British and Australian, patrol the quarter. "This makes a good effect on morale," the Turkish leader said.

Four wholesalers are allowed to cross the local dividing line under escort to buy food in the Greek market. There is bread, water and vegetables, and some Red Cross food convoys have reached the community.

But people are exhausting their meager savings, and some say they are down to their last few pounds. Commercial life is paralyzed, except for the coffee houses, where craftsmen, laborers and shopkeepers sit idly and in fear.

The community's farmers are not allowed out to their fields to harvest the ripe grapes or to water grapefruit orchards. Only shepherds are permitted out, to look after their flocks.

The schools are filled with refugees. Some are visitors from other villages who were trapped here on July 20, and some are Turks from Paphos who fear living too close to Greeks.

The community mosque offers no consolation. It was stripped of all but the most threadbare rugs, and a National Guardsman stands at the door.

The Paphos Turks have only the most tenuous links with the outside world. Their mail is brought in by the Red Cross only after Greek Cypriot police have inspected it, acocrding to Husnu. The quarter's telephones were cut off on the invasion's first day.

"We are kept as hostages here." Husnu said. "We want to go to the north where we will feel secure. People don't mind about their property. I think 100 per cent would go. I don't know anyone who wants to stay behind."

[From the New York Times, Sept. 23, 1974]

Cyprus Refugees Condemn British

Turks who fled to air base demand right to leave for resettlement on island

Episkopi, Cyprus, Sept. 22—About 8,000 Turkish Cypriotes who took haven on a British base here in July during the crisis between Turkey and Greece over Cyprus have warned they are prepared to provoke British troops to fire on them in a campaign to achieve transportation to Turkey.

The warning was given by the leader of the refugees after the third demonstration on the air base in a week.

Turkey has called on Britain to allow them to leave for Turkey for eventual resettlement in the Turkish-occupied northern area of Cyprus, Britain has replied that the disposition of refugees at the base must come within the framework of a general settlement of the refugee problem.

Members of the Turkish Cypriote administration in the camp have been inciting the refugees. In the forefront is the camp leader, Ziya Mehmet Rizki, a member of the Cypriote Parliament from the Limassol district. He led a march of several thousand refugees yesterday to the residence of the base commander.

"We are ready to die"

"So far, we have been able to keep matters under control," Mr. Rizki said. "But the people are very angry with Britain. They feel Britain is placing obstacles in their way when they could go to the north and start a new life. They will get angrier in the coming days and we fear that we may not be able to restrain them."

The refugee leader continued:

"If Britain does not say yes in the next three or four days things might happen. Perhaps they may start hunger strikes or sit down on the roads through

the base. They may even break into the service houses or storerooms. There may be something that we cannot even conceive at the moment. I fear British troops may be forced to shoot and some of my people will be killed. But we are ready to die for our right."

Asked if an improvement of living conditions would ease matters, he replied: "No, I am afraid not. The point is that the people have it in their minds that they can go to Turkey. The Turkish Government has made the offer and only Britain stands in the way. They will not be satisfied until they can go."

The Turks have confronted Britain with a sensitive and embarrassing problem. The Greek Cypriote leadership has asked the British Government not to allow the refugees to go to Turkey. It has maintained that this would be a breach of the terms for the British bases on the island, stipulated when Cyprus gained independence in 1960.

Furthremore, the Greek Cypriotes declare that the transportation of the refugees to the northern part of the island, at a time when the Greek Cypriotes face a severe refugee problem involving 150,000 to 200,000 people, would be unjust.

Most of the refugees fled to the base soon after Turkish troops landed on Cyprus on July 20. They are from Limassol and 11 villages in the Limassol district. Until recently, they were sheltered in the center of the base, but recently they were moved to the base's western perimeter.

They are free to return to their villages but prefer to remain under British protection out of fear of possible Greek Cypriote violence.

So far, the British authorities have done everything possible to avoid any clash with the refugees. During the march yesterday, the British even provided the refugees with a Royal Air Force jeep with flashing light and a megaphone for Mr. Rizki to deliver a speech.

[From the New York Times, Sept. 8, 1974]

The Hatred in Cyprus: Not Part of Negotiations

Brutality is common; there are thousands of refugees

(By James F. Clarity)

Nicosia—The Greek Cypriots have a word for it, and so do the Turkish Cypriotes. The word is barbarians and it is used by Cypriotes these days to express their anger in the wake of the political upheaval and war that have this island confused and bitter.

The ethnic Greeks, with 80 per cent of the population, talk about the "Anatolian Apes" who invaded their island on July 20, raped their women, looted their homes and are too stupid to handle the sizable amount of the economy they have captured along with 40 per cent of the island.

The ethnic Turks, with 18 per cent of the population, say the Greeks are greedy oppressors who refused for decades, if not centuries, to share the wealth that made Cyprus one of the most prosperous nations in the eastern Mediterranean, with a per capita income higher than that of Greece.

In the Greek view, the military coup of July 15 that deposed President Makarios was the internal affair of an independent republic. Whatever the merits of the Makarios ouster, the Greeks say, it did not justify the invasion. The Turkish reply is that the invasion was vital to protect the Turkish minority here.

The dialogue gets nastier: Near the Turkish village of Maratha, in eastern Cyprus, the Turks display at least 35 decaying bodies hidden in garbage pit. The Turks say the dead are Turkish Cypriotes murdered by the Greeks. Turkish women weep and moan at the garbage dump graveside. The Greeks decline responsibility, suggesting that some of the bodies, impossible to identify, may be Greek. The Greeks charge that hundreds of Greek Cypriotes were killed by the Turks elsewhere "in cold blood." Both sides call for an independent investigation by the United Nations peacekeeping force and the International Red Cross. But neither side follows up with the necessary formal application to the international agencies.

The dead are hard to count

Impartial officials here say there will never be an accurate count of the wartime atrocities. But they say that there is no question that there was a lot of vicious killing of civilians, at least 100 of them, by the two sides. Not even the

total of military combat killings is known. The Turks admit they lost about 300 soldiers; the Greeks say so many of their dead are now behind lines that they cannot count.

And while the polemics of atrocity stir the public mind, this naturally splendid island—half the size of New Jersey, but with mountains, cedars, small glistening harbors and clean white beaches, the legendary repose of Aphrodite, the place where Othello slew Desdemona—is left with enormous problems.

Perhaps a third of the 650,000 Cypriotes are now refugees. Proportionately more of the refugees are Greeks, about 190,000 of them. Turkish refugees number about 38,000. Some of the displaced (most of them on both sides are old people, women and children) are interned by the ethnic enemy in schools and public buildings or vacated hotels. But most live in makeshift camps, in the now cramped homes of friends or in roadside enclaves.

Many Greek refugees are middle-income people who fled in big shiny cars and still have bank accounts. But many more seem to have lost almost everything: homes, clothes, shops. There is no food shortage, yet. The government has frozen prices on food and profiteering, especially at the camps.

But even if the refugees soon find adequate new places to live, which most of them will not, the island's economy is crippled. Thousands of Greek Cypriots have already left the island, mostly for Greece, some for England. Those who remain say they are not sure they would go back to their homes and shops under a political settlement that left them under Turkish authority.

Impartial economists say the prospect, then, is that the Turkish minority will have to acquire manpower skills it does not now have to manage its captured wealth, especially the citrus groves and packing plants and the tourist hotels. The Turkish administration here says expertise and money are on the way from Ankara. How much of these necessities Turkey can spare is questionable.

The Greeks still control the island's electric power, its vineyards and wineries and vegetable producing areas. The prospect, barring new disruptions, is that Cyprus will slip from the modest prosperity of its recent years, but not enough to become an economic disaster area.

A FEDERATION IS LIKELY

Politically, no formal settlement is visible in the immediate future. There is an assumption among knowledgeable Greek Cypriotes and experienced diplomats that the island will probably be divided administratively into two autonomous parts of a federated state, as Turkey is insisting.

While Rauf Denktash, the head of the Turkish-Cypriote administration, sits confidently with the Turkish Army at his back, his Greek-Cypriote counterpart, President Glafcos Clerides, has to contend with potentially violent dissidence among the rightists and leftists in the Greek community. Some factions want Archbishop Makarios to return, and rumors of his return sprout almost daily in Nicosia. The rightists, particularly Eoka B which helped overthrow the archbishop in July, and some of the leftists, are surly and armed with rifles, pistols, machine-guns and grenades. Mr. Clerides is trying to confiscate the guns.

For the moment, the potential desperadoes of the Greek community, a minority, but powerful, and feared, seem to be regrouping. There are plans for organized guerrilla warfare against the Turkish Army. But there has also been an attempt to shoot down a leftist leader, Vassos Lissarides, on the streets of the capital. So there is no predicting which way the anger of the Greek activists will erupt. But there is little doubt that violence and hatred—the essence of barbarism—are still alive on Cyprus.

[From the Manchester Guardian Weekly, Sept. 14, 1974]

Turks Defied Red Cross

(By Martin Walker)

What is potentially the most important single document concerning the bloody and tragic events in Cyprus is now languishing, unpublished, in the plush headquarters of the International Red Cross in Geneva.

According to sources within the IRC, the Turkish Government officially wrote to the Red Cross, renouncing the Geneva Conventions on the rules of war shortly before the great attack on Famagusta on August 15. The Turkish Government

stated explicitly that in its view, the Geneva Conventions did not apply to the actions and behaviour of its troops on the island.

The Greek Information Ministry, to which this story has also been leaked via Geneva, is now preparing a major propaganda campaign on this issue. Its theme will be that the Turkish Government was effectively giving its troops a free hand in their conduct towards civilians on the island, and by implication, that this Turkish action was responsible for many of the atrocities and much of the misery that have ravaged the miserable isle.

On July 21, the day after the Turkish invasion of Cyprus, the International Red Cross wrote to the Turkish Government reminding the Turks that they were signatories to the Geneva Conventions, and that, moreover, standing committees of the IRC had been at work extending and elaborating the Protocols (in particular, the Protocols under Article 3 of the Convention, which applies primarily to the behaviour of armed forces towards civilians). These extended Protocols, the IRC wrote, were to be noted and applied by Turkish forces.

The Turkish reply to the IRC said that the Turks did not recognise that the Geneva Conventions applied to Cyprus. In Turkey's view the military operations on Cyprus were an internal affair, and essentially a peace-keeping operation. The writ of Geneva did not run. Forty per cent of the population of Cyprus, who are now refugees, may choose to differ from this ingenious line.

The IRC has traditionally not released correspondence of this kind, and has only released reports of its own investigations in special circumstances. It holds that the credibility and good standing of the IRC depends upon its maintaining a discreet and official relationship with all governments, in which the findings and views of the IRC are made known on a confidential basis.

The best known case of the IRC going public was when the Greek Government of the Colonels misleadingly edited an IRC report on conditions in Greek prisons. The IRC then published its damning report in full, to the Colonels' embarrassment. This precedent is now being cited by Greek diplomats as part of their attempts to persuade the IRC to release the Turkish letter.

[From the New York Times, Aug. 29, 1974]

CYPRUS IMPASSE: A TEST OF THE ALTERNATIVES TO FORCE

(By Steven V. Roberts)

ATHENS, Aug. 28—When Greece accepted the Soviet proposal for an international conference on Cyprus, she warned the Russians that she did not want to participate in another "propaganda forum." Any new meeting, the Greeks said, should consider specific ways and means for carrying out the United Nations Security Council resolutions that have called for removal of foreign troops from the island.

Greece expressed a central problem raised by the events in Cyprus over the last six weeks. What institutions, what procedures, are available to regulate relations among nations? What can be done, short of the use of force, to make international law and opinion effective?

Diplomats here are exhausted and depressed. They have watched various pieces of international machinery break down over the Cyprus issue. At the moment, most would probably agree with Cornelis Berkhouwer, president of the European Parliament, who said at a news conference last week: "For one more time the law of force has overruled the force of law."

COUP AIDED BY GREEKS

The first casualty was the 1960 agreement establishing an independent Cyprus and giving Britain, Turkey and Greece the right to intervene to guarantee that independence.

On July 15 the military junta then governing Greece helped organize a coup d'état that toppled President Makarios; instead of guaranteeing Cypriote independence, the junta was threatening it, apparently firm in the belief that the Turks would not retaliate.

At that point the treaty actually worked. Turkey invaded, under her rights as a guarantor power, causing the overthrow of the insurgent government. But as the new Greek Foreign Minister, George Mavros, noted recently, Turkey sent

a force large enough to occupy the island, not merely to protect the Turkish Cypriotes, who are almost a fifth of the population.

NO LEVERAGE ON TURKS

As the Turkish troops expanded their beachhead, international approval turned to condemnation, but to virtually no effect. The United Nations maintained about 4,000 men on the island to keep the peace between ethnic Greeks and Turks, but their mandate did not include stopping an invasion. The Security Council passed four resolutions calling for cease-fire and the removal of foreign troops. So did other bodies. They were all ignored.

The Greeks blamed the North Atlantic Treaty Organization for not preventing a conflict between two of its members, but many diplomats agree that NATO was designed to defend the West against the Communist bloc, not to mediate internal quarrels.

As a guarantor power Britain did try to mediate, but in two futile rounds of Geneva talks it became clear that neither she nor anyone else had much leverage on the Turks.

Though considerable criticism has been leveled at the United States for not stopping Turkey, even many Greeks are not sure what it could have done. What they did feel was a desperate desire, as the new Premier, Constantine Caramanlis, said many times, for the United States to do something.

One option mentioned frequently here would have been to interpose the Sixth Fleet between Turkey and Cyprus. Would that have worked? Suppose the Turks had ignored it; would the Sixth Fleet have shot down Turkish planes?

The other alternative was diplomacy. Secretary of State Kissinger has argued: "There is a limit to what diplomacy can achieve. It cannot substitute for an existing relationship of forces."

The United States, with many other countries, "made many démarches to Turkey to prevent the threatened military action," the Secretary has asserted. One thing Washington did not do was threaten to withdraw aid from Turkey, and it has been widely attacked for that.

President Lyndon B. Johnson halted a Turkish invasion of Cyprus in 1964 by threatening to withdraw military support, and that incident has rankled in Ankara ever since. Even if a similar threat had been effective, analysts here ask, does that mean that peace in the region depends on Washington's ability to give and take away aid?

After giving up on the British and the Americans, Greece has turned to the Soviet Union and its proposal for a conference of the Security Council members, plus Greece, Turkey and the Cypriots. The Russians are likely to face the same problem as everyone else: They can ask the Turks to withdraw their forces or at least pull them back, but, as a Western diplomat said acidly, "The Turks haven't listened to anyone else."

If the Turks do not listen, what means are available to enforce the resolutions calling for the removal of foreign troops? Is Moscow any more willing than Washington or London or Athens to dislodge them by force?

The Greeks acknowledge that the Soviet proposal, which has been rejected by Turkey, will probably die a natural death. They are already looking toward a major debate in the United Nations General Assembly, with a strong resolution condemning the Turkish actions. Mr. Mavros outlined the Greek strategy: "Against the military pressure and the policy of faits accompli Turkey is using, we place the moral pressure of international law." But as Mr. Berkhouwer noted, moral pressure has been a steady loser.

The Americans here are counting not so much on moral pressure as on Turkish self-interest. Though they concede that Turkey dominates the island and sees little reason to make meaningful concessions, they give reasons why the Turks might, eventually, offer enough compromises to restart the peace talks:

If Greece remains out of the NATO military structure and heads in a neutralist direction, Turkey's security would be threatened since she would be physically isolated from the rest of the alliance.

Turkey cannot afford the cost of the large section of the island she holds—about 40 percent—particularly if the Greek Cypriotes launch a guerrilla war from their mountain strongholds.

If Turkey persists in imposing a solution by force, she would be condemned by world opinion. After 50 years of struggling to become a Western nation, the Americans argue, she would again be considered a country of barbarous "Asian hordes."

Washington is trying to make these points to the Turks, just as Mr. Kissinger convinced the Arabs and the Israelis that self-interest dictated a peace settlement.

In the Cyprus situation, however, Mr. Kissinger's credibility has been seriously undermined and no likely replacement has emerged. While the British Foreign Scretary, James Callaghan, was widely praised for his work in Geneva, the talks failed. Secretary General Waldheim has just finished a fact-finding tour, but his mettle as a mediator is largely untested.

Meanwhile, Greece's request for deeds, not words, for ways and means and not just propaganda, goes unanswered. The machinery of peace lies rusting on the battlefields of Cyprus.

[From the Washington Star-News, Aug. 16, 1974]

SECRECY DIDN'T HELP: CYPRUS CAUGHT KISSINGER IN A NO-WIN DIPLOMACY

(By Oswald Johnston)

In Athens, the whispers in the aftermath in the Cyprus crisis have begun: "Kissinger's Watergate," according to one report. In Washington, it is more a matter of limiting the damage: Will Greece consent to return to the Atlantic alliance once the Turks have seized one-third of the island and passions have cooled? In the State Department, there is no agreement on that point.

For the first time in Secretary of State Henry A. Kissinger's career as diplomatic superstar, he is caught in a no-win game.

If the claim is made, as so often in the past, that every step in the crisis was strictly calculated in the national interest, then the United States stands suspect of coldly weighing the strategic value of Ankara against Athens and moving to sacrifice 25 years of Greek friendship for a stable Turkish presence on Cyprus.

If the admission is advanced, uncharacteristically, that the crisis veered out of Washington's control, then the best that can be salvaged is acknowledgment that U.S. policy was based on miscalculation—the error compounded perhaps by Kissinger's preference for diplomatic secrecy, which in this case only gave the mistakes the appearance of premeditation.

Significantly, high State Department officials are conceding openly that the public drift of U.S. policy in recent weeks might legitimately have provoked Greece to the anti-American gesture of pulling its forces out of NATO. "We understand the feelings in Athens," department spokesman Robert Anderson said in a statement yesterday.

More specifically, former ambassador to Cyprus Robert J. McCloskey, a member of Kissinger's inner circle, has admitted that U.S. policy makers could "legitimately" be criticized for failing to announce publicly what pressures were applied privately on the Turks through diplomatic channels.

The object of the policy, McClockey and other officials insist was to persuade Ankara not to press for too much on Cyprus and, in the end, resort to a war of aggression there.

Ranking officials concede further today that last Tuesday's statement of U.S. support for "a greater degree of autonomy" for the Turkish minority on the island, whether or not coupled with an American warning against Turkish military action, inescapably bore the appearance of a U.S. "tilt" toward Turkey—whatever the reality of Kissinger's policy at the time.

By now, the tilt has been perceived as fact by the new civilian government in Greece, and the withdrawal from NATO has been widely applauded across the Greek political spectrum. Sober observers in Washington doubt that the Greeks can easily be coaxed back into the alliance.

Within the higher reaches of the State Department, a new process of rationalization is apparently at work. Where a few years ago warnings against U.S. support of the Athens military regime were overridden by the "long-term strategic value" of U.S. 6th Fleet bases in Greece, now the argument is shifting to the "major strategic interests" of the U.S. in Turkey. It is pointed out that the Greek bases were of little use last October when the United States was supplying Israel during the Middle East War.

Accordingly, officials dismiss the argument that the United States should have put up a public display of pressure against Turkey and should cut off military supplies as soon as Ankara's plan to seize a large chunk of the island became apparent.

A supply cutoff would have had "no effect in the present situation," one official insisted. Rather, it might have "jeopardized" U.S.-Turkish relations and "created

instability" in an uncertain political situation in which the government, faced with a serious reverse over the Cyprus issue, might conceivably have taken "a turn to the left."

In such a context, Turkey, sharing a border with the Soviet Union and commanding the eastern approaches to the Mediterranean, is even more strategically situated than Greece, which in the heyday of the colonels was touted by the Pentagon as the key partner in the "southern flank of NATO."

Officials at State were apparently so diffident yesterday about the newly developed identity of U.S. and Turkish interests that spokesman Anderson had to deny a description of U.S. policy uttered by Turkish Premier Bulent Ecevit.

After a session with U.S. Ambassador William Macomber, Ecevit said, "America accepts the fact that the formation of a Cyprus state with two geographically-based autonomous administrations could be the most satisfactory and lasting solution for Cyprus." This appeared to endorse the legitimacy of the Turkish conquests on the island and its consequent partitioning. Macomber said no such thing, Anderson insisted, but he declined to elaborate.

In Athens, the conclusions being drawn from the appearance of U.S. policy are more damaging. Taken to their extreme, they amount to nothing less than an accusation that Kissinger is conniving against the popular new regime of Premier Constantine Caramanlis even as the United States is widely accused there of having connived against the now defunct Cyprus regime of Archbishop Makarios.

A chilling left-wing Greek version of the theory was reported yesterday in the respected French newspaper LeMonde. "The Americans are allowing the Turks to do as they please in Cyprus," an unnamed Greek politician was quoted as saying. "Everything is proceeding as if they had not abandoned the idea of partitioning the island, while inflicting on Greece a political and military disaster which Mr. Caramanlis could hardly survive."

In the overheated context of crisis diplomacy, it is not so much what may or may not actually have occurred under Kissinger's accustomed cover of secrecy, but what appears to have occurred. The Greek withdrawal from NATO, which only a few weeks ago was congratulating itself for its unity during the early stages of the Cyprus crisis, is evidence enough.

Washington on Wednesday put out new diplomatic feelers by sending letters to Caramanlis, Ecevit and Glafcos Clerides of Cyprus, offering, U.S. officials said, "to do anythink we can" to end the fighting and inviting suggestions.

The move was described as an attempt to see if the parties wanted to involve Kissinger or other American officials in the ngeotiation led until now by British Foreign Secretary James Callaghan.

[From the New York Times, Sept. 9, 1974]

INSIDE CYPRUS CRISIS: HOW U.S. POLICY APPEARED TO CHANGE COURSE

(By Leslie H. Gelb)

WASHINGTON, Sept. 8.—American diplomacy during the Cyprus crisis, touched off by the overthrow of President Makarios July 15, was by most official accounts neutral. A neutral stance, however, tended to favor the Greek military junta in the first phase of the crisis and worked to the advantage of Turkey thereafter.

The neutral stance was not sufficient to prevent the coup d'état or to induce the Greek junta to accept a workable compromise after Archbishop Makarios had been toppled, it appears on the basis of interviews with almost a score of Administration officials in an effort to piece together the course of American policy before and during the crisis.

Among other estimates of the Cyprus situation that emerge, it appears that once Turkish troops had landed on the island in force, the impartial American position enabled them to overrun Greek Cypriote forces and provided no time for diplomacy to work.

Top State Department officials expressed a sense of powerlessness to alter basic decisions in Athens and Ankara. Stiff pressures would not work, they judged, and public statements condemning dictatorships or aggression would be mere posturing. A middleman strategy, in which Washington would be acceptable to both sides as a mediator was the only way to moderate the crisis, they concluded.

CONFUSION AND ANGER

Confusion and anger inevitably developed, particularly in Athens and among critics of the policy here. Secretary of State Kissinger's pursuit of his favorite two-track diplomacy—limited and restrained public statements to save everyone's face, plus bustling activity behind the scenes to put the United States in the middleman role—intensified the adverse reactions.

Other major conclusions of the study were these:

Several days before the coup the State Department instructed the American Ambassador in Athens, Henry J. Tasca, to issue a direct warning to the leader of the Greek military junta against attempting the coup. But he failed to do so himself.

Military supplies continued to flow to Greece and Turkey, with only a few deliberate delays, without State Department opinion on whether this was consistent with aid law. The issue has still not been resolved.

Mr. Kissinger repeatedly told aides and legislators privately that the Greek military junta had precipitated the coup, which was carried out by rightist advocates of the union of Cyprus with Greece and was led by Greek officers. The Secretary implied that the Government of Constantine Caramanlis, which took over in Athens after the junta's collapse, would have to accept responsibility for the coup.

Top State Department officials concluded early in the crisis that the political position of the Turkish Premier, Bulent Ecevit, was weak, that the Turkish generals were the dominant force and that therefore American threats to deter Turkish military action by cutting off aid would not work.

There is no evidence that United States official policy was either to foster or to quietly go along with the coup against Archbishop Makarios or that the American objective was anything other than to prevent a conflict and to stop the fighting once it started.

There is a strong feeling now that the United States is in "good shape" on Cyprus and has improved its relations with Turkey, and it is expected that relations with Greece will work out over time.

SOME LINGERING QUESTIONS

The questions that linger, some of which may not ever confidently be answered, are:

How did Washington's private actions square with its public statements? How did Washington see its choices? Was it tilting? How does Mr. Kissinger's diplomacy compare with what was done in the 1964 and 1967 Cyprus crises?

The State Department first got word of the impending coup against Archbishop Makarios on June 27. Both Ambassador Tasca and the Central Intelligence Agency station chief in Athens, who had spoken with the junta strongman, Brig. Gen. Demetrios Ioannides, told Washington that the junta was planning to help topple the democratically elected Government, which was dominated by ethnic Greeks.

The State Department directed Mr. Tasca to tell General Ioannides that any effort to change the situation by violence would have serious consequences, but explicit pressures were ruled out by Mr. Kissinger, according to his aides, as interference in the internal affairs of another nation.

Mr. Tasca delivered the warnings at various levels of the Greek Government but decided to use the C.I.A. station chief in transmitting the caution to General Ioannides.

NEVER SAW THE GENERAL

Mr. Kissinger was concerned that Mr. Tasca had become too dependent on the C.I.A. men for liaison with the junta and that he may not have delivered the message with sufficient authority and credibility. The Secretary wanted Mr. Tasca to see General Ioannides.

The Ambassador continued to resist on the basis that it would be inappropriate for an American envoy to have contact with a person whose official position was still that of head of the secret police; moreover, Mr. Tasca said, General Ioannides had already received the message from the C.I.A. man.

Ambassador Tasca never did see the general. In fact, the first senior American official to meet him at the time of the crisis was Under Secretary of State Joseph J. Sisco, and that was some days after the coup.

For a variety of reasons still not entirely clear, Mr. Kissinger did not insist that Mr. Tasca, a 62-year-old career Foreign Service officer, carry out the order.

One official said that about July 11 the signals began to indicate that the coup was less likely than before. President Makarios seemed less worried and the C.I.A. station chief in Athens had a conversation "with a member of the junta" and reported that the plans seemed to be changing.

Another well-informed Washington official maintained that the Cyprus situation was simply "not on the front burner" for Mr. Kissinger and the White House. The situation of President Nixon was.

"CONSTITUTIONAL ARRANGEMENTS"

When the coup did take place, Britain and other members of the North Atlantic Treaty Organization came out strongly for the restoration of President Makarios, who had fled from Cyprus. The United States called for respect for the independence of Cyprus and a return to "constitutional arrangements."

Secretary Kissinger is said to have felt that he had only two real choices—the position he had taken or the direct involvement of American forces. Direct involvement was immediately ruled out, as were public pressures, on the ground that they would be both ineffective and counterproductive.

Once the Greek junta had refused to allow Archbishop Makarios to return and Turkish troops landed, some fighting was regarded as inevitable and Mr. Kissinger wanted to be in a position to mediate. He began a round of "telephone diplomacy"; nothing of substance could be learned about the conversations.

It is known, however, that Mr. Kissinger's actions were guided by the key assumption that the Greek junta could not back down politically by accepting the return of Archbishop Makarios and that Washington could not successfully put pressure on the junta to do so. Instead, the policy was to back the successor President, Glafkos Clerides, as a compromise political candidate and try to keep the Turks from invading.

These judgments were apparently shared at the top of the State Department, but not at certain middle levels.

THE SISCO MISSION

Mr. Sisco was dispatched to London, Athens and Ankara to warn against a resort to force and to say that fighting would jeopardize relations with the United States.

This basic message was enlarged on over the following weeks. "We painted a strong picture for both parties," a high official explained. "In particular we told the Turks that force would jeopardize relations with Greece and thus the security of the area that they couldn't solve the problem on Cyprus by force anyway."

It seems that the Pentagon and the State Department interpreted this message differently. Some Pentagon official thought it was a threat to cut off military aid, modest in the case of Greece but over $200-million a year for Turkey; State Department officials deny that there was any such intention.

Deliveries of military aid to both countries were delayed at certain times, for technical reasons, State and Defense Department officials agree, and to see if a policy decision was needed. Under American law aid may not be used for other than specified and United Nations purposes.

Hope for a negotiated solution rose when a fragile cease-fire was achieved late in July and three-cornered negotiations got under way in Geneva under British leadership. But the negotiations reached an impasse over the nature of guarantees that Ankara wanted for the Turkish community on Cyprus, which constitutes about a fifth of the population of 660,000.

The State Department declared that it favored greater protection and autonomy for the Turkish position was "arbitary and unreasonable."

U.S. AND BRITAIN DIVERGE

When the Geneva talks broke down, the Turkish forces on Cyprus rolled over Greek Cypriot opposition taking more than a third of the territory, much more than was inhabited by the Turkish community. The Caramanlis Government withdrew from the NATO military command in protest against the failure of the United States to prevent the Turkish invasion. Finally, another cease-fire, though an intermittently shaky one, went into effect on Aug. 19.

While Washington "deplored" Turkey's resort to military action, Mr. Kissinger again rejected stiff pressure, and once again he and his principal aides made a key assumption—that the Turkish generals would insist on clear-cut military

victory, that Premier Ecevit would have to go along and, indeed, that he would be strengthened politically.

Only one of the high State Department officials interviewed said that Mr. Kissinger's decisions were in part determined by the opinion that Turkey was more important to the United States than Greece. "We were having trouble with Turkey over the opium issue," he said. "We were worried about increasing Soviet influence in Ankara and the Soviets were breathing down our necks, so we had to take care of Turkey's interest first—but mainly we were neutral."

CRITICS OF U.S. POLICY

"We knew Caramanlis would have to be anti-American to fend off pressures from the left," the official added, "but we decided to suffer short-term reverses quietly, hoping that long-term interests would bring Greece back into the fold."

Critics of American policy say it can be argued that the neutral stance constituted de facto tilting throughout the crisis. Not applying explicit pressures on the weakened Greek junta, in this view, may have influenced its decision to go forward with the coup and to resist the return of Archbishop Makarios; not threatening the Turks with an aid cut-off and strongly condemning their military action may have encouraged them.

Also, the critics say, announcing support for greater Turkish autonomy on Cyprus just before the breakdown of the Geneva talks may have convinced Ankara that Washington was on its side.

The Greek junta, while it lasted, did not complain about American pressure, and just before the second cease-fire the Turkish premier praised Washington for "refraining from pressures."

A variety of Administration officials insist that Washington stayed on a steady and neutral course. The problem, one official said, was that "when we remained neutral even after the democratic Caramanlis Government replaced the junta, it made it look like a tilt toward Turkey."

Another said it was popular sentiment, not Administration policy, that shifted. "A change of Government in Athens changed American political sentiment from anti-Greek to pro-Greek," he said. "In contrast, the Administration's continued neutrality seemed pro-Turkey."

DIFFERENT APPROACHES

Whether Washington was tilting or not, the crisis was handled differently than were past Cyprus flare-ups. George W. Ball, former Under Secretary of State, who managed the situation in 1964, said in an interview: "When the Turks threatened to invade we told them strongly and explicitly that we would cut off aid and that they would be on their own [against the Russians]."

A former Deputy Secretary of Defense, Cyrus B. Vance, who was Special Ambassador in the 1967 crisis, said in an interview: "We told both sides that an aid cutoff might be necessary, but more importantly, we practiced cooperative diplomacy with the U.N. and NATO, and saw to it that the compromise proposals came from the U.N. to save face for the parties."

[From the Boston Globe, Sept. 22, 1974]

THE WAR TURNS 200,000 GREEKS ON CYPRUS INTO REFUGEES

(By Stephen Wermiel)

WASHINGTON—An estimated 200,000 Greek Cypriots, left homeless by the Turkish invasion of Cyprus, are living in makeshift refugee camps and overcrowded public buildings, according to three members of a congressional study mission to the Mediterranean island.

Many of the 200,000, they said, face dwindling food supplies and lack shelter, which at best consists of lean-tos propped against trees in southern forests. There is also a shortage of blankets, tents and beds, most have no means of economic stability.

The investigation, which lasted some two weeks late last month and early this month, was led by Dale S. deHaan with Jerry Tinker and Dennis Skiotis.

DeHaan and Tinker are staff members of Sen. Edward M. Kennedy's Judiciary Committee subcommittee on refugees and escapees. Skiotis is an assistant pro-

fessor at Harvard, offering courses in Greek and Turkish modern history and Ottoman history.

Total estimates of both Greek and Turkish Cypriots driven from their homes reach 300,000, almost half the island's population, they said.

Most of the Greek Cypriots—some 194,000—have fled to southern sections of the island, seeking refuge in cities like Larnaca and Limassol near the British air base of Dhekelia, and the towns of Ormidhia, Xylophagou and Xylotymbou.

"In the Achna forest near the British base," deHaan said, "people are living under trees, some in lean-tos. They are getting only shelter from the sun.

"But there will be serious problems in a few weeks when the rains begin—part of the Cypriot winter. They won't have the shelter or blankets."

"When we were in the southern area," Skiotis said, "there was still a constant stream of refugees, many of them fleeing for the second or third time, even at the rumor that Turkish troops were on the move.

On Friday, John Kelly of the UN High Commission for Refugees, issued an urgent plea for 250,000 blankets, 2500 tents and 50,000 camp beds.

The High Commission is also, according to Virandra Dayal in New York City, trying to raise money from member nations, having already received some $4 million in commodities like food. Dayal said the United States has pledged aid of $3 million so far, and said he expects additional support in the future.

But total pledges to date are far short of the $22 million Secretary General Kurt Waldheim seeks to cover the remainder of 1974.

In northern, Turkish-occupied areas, deHaan and Skiotis said, there are groups of Greek Cypriots living as hostages or in secretive clusters, coming out only at night for food and water.

One area where the mission was given no access in the northeastern Karpass peninsula, where there are also clusters of Greek Cypriots whose escape route was cut off in late July.

Skiotis said he asked Greeks in southern areas if they would return to their homes despite Turkish domination. "To a man, the answer was 'no'," he said, "but there was mixed reaction about possibly returning under a UN peace-keeping force."

Skiotis said: "Greeks and Greek Cypriots believe the US responsibility is very heavy. The believe the United States could have exercised pressure to stop or prevent the Turkish invasion.

"The Cypriots don't blame Greece for what happened," Skiotis said, "they blame the United States and Turkey."

In their travels and talks with Greek and Turkish advocates on the island, the mission found that in the area controlled by Turkish troops is almost all of the island industry, including citrus fruits, copper mines, the tourist attractions of Kyrenia and Famagusta, and the bulk of the land irrigated for agriculture.

Their talks included meetings in London with deposed President Archbishop Makarios, and sessions in Cyprus with President Glafcos Clerides and Turkish Cypriot leader Rauf Denktash.

Clerides, in fact, sent a letter back to Kennedy stating: "The refusal of Turkey to permit refugees to return to their homes parallel with negotiations, is an attempt to force us to accept the fait accompli created by the Turkish invasion.

"I earnestly hope . . . your great nation will not remain idle observers of the human and political tragedy of Cyprus."

[From the Christian Science Monitor, Sept. 27, 1974]

SUPPLIES, MONEY FROM DOZENS OF NATIONS: MASSIVE AID FOR CYPRUS REFUGEES

(By the Associated Press)

NICOSIA, CYPRUS—Relief experts are battling a host of problems to feed and shelter 234,000 refugees of the Cyprus war.

Food, blankets, beds, money have been donated by dozens of countries including the United States, the Soviet Union, China, as well as Greece and Turkey.

The Government of Cyprus estimates that the refugees' "food and lodging" bill is running $216,000 a day. The United Nations has appealed for $22 million to help the war victims on the island.

So far the United States has made the biggest contribution, pledging $6.2 million, including tents, blankets, and other supplies.

China has given $165,000 in medicine, canned food, and blankets. The Soviet Union has sent seed oil, sugar, fish, and condensed milk.

BABY FOOD SENT

Red Cross officials say that Red Cross societies in half a dozen nations have sent 21.5 tons of powdered milk, more than two tons of baby food, 150 tons of high-protein food, 8,192 cots, 20 tons of medical supplies, and 110,776 blankets.

About 30 percent of the relief goes to the Greek zone, where 183,000 Greek Cypriots have taken refuge since their towns and villages in northern Cyprus were occupied by the Turkish invaders. About 41,800 Turkish Cypriots are either camped at a British base on the south coast or marooned in the isolated villages in the south.

Red Cross teams tour the island with relief supplies, sometimes using loudspeakers to coax frightened refugees from hiding places.

Various relief officials say the supplies are getting to those who need them, but they emphasize that problems abound.

Greek and Turkish truck drivers are forbidden to cross the cease-fire lines between Greek and Turkish territory.

The Turkish military command restricts the movements of the UN peacekeeping troops in the northern third of the island, and most of the deliveries there can be made only by the Red Cross or its Turkish counterpart, the Red Crescent.

"I still am not allowed to travel freely in the north myself," says George Beauchamp, who came from Washington to hande the American relief effort. He said two truckloads of U.S. goods got caught in a Turkish enclave recently and before UN troops could recover them, 150 water cans were looted.

AIRPORT CLOSED

Getting supplies into the island is also a problem. The Nicosia international airport has been closed for two months because of bomb damage, and relief planes can land only at the British military base at Akrotiri. Relief ships can dock only at Limassol. The Turkish Army holds Famagusta, the island's biggest port.

Tents have been provided for many of the refugees, but most of them are still sleeping on the bare ground and eating mostly macaroni and rice.

[From the New York Times, Sept. 3, 1974]

CYPRUS ECONOMY CRIPPLED BY WAR

UNTENDED LEMONS ILLUSTRATE ISLAND'S PLIGHT—WEALTH SHIFTS TO ETHNIC TURKS

(By James F. Clarity)

LAPITHOS, CYPRUS, Sept. 1—Millions of unripe lemons still cling to the trees in the rich groves near this abandoned Greek Cypriot town on the northern coast of the Island.

The fruit—potentially worth several million badly needed dollars in exports—should be watered regularly now if it is to ripen for plucking and shipping at the end of the month. But the Greek Cypriots who own—or owned—the groves fled when the Turkish Army invaded six weeks ago.

Now the irrigation trenches are dry and the earth is cracked and parched. This afternoon, on a tour of several miles of groves, only one farmer was observed tending his lemons, and he was a Turkish Cypriot who had lived among the Greeks.

The situation around Lapithos illustrates the severe economic problems created on Cyprus by the war, which left the Turks in control of 40 percent of the island. Before the Turkish invasion July 20, Greek Cypriots controlled 80 percent of the wealth in the area now under Turkish control.

WHAT GREEKS LOST

The Greek administration estimates that the Turkish Cypriots, who make up 18 percent of the population, now control about two-thirds of the island's wealth, an estimate that is considered high, but not ridiculously so, by impartial economists here. The Greek Cypriots have now lost, possibly permanently, the lemon groves that gave the country substantial export income, half of the grain belt that feeds the island, and the richest port, Famagusta. Still, there is no food shortage now.

Greeks also controlled the now vanished tourist trade, which brought in more foreign exchange than the citrus crop.

The Greek Cypriots maintain that the Turks are not feeding the cows, sheep, goats and pigs that were left behind and there have been reports that some of the livestocks has already died for lack of fodder.

Turkish Cypriot officials here minimize the disruption caused by the invasion and the subsequent flight from Turkish areas of some 150,000 Greeks, but there seems little question that, for a while at least, the Turks have captured more of the economy than they can handle.

Turkey has announced that she will help develop the new wealth, but many Cypriots feel that Cyprus, until the war one of the most prosperous nations in the eastern Mediterranean with a per-capita income of $1,000, faces hard times for months if not years.

BRITISH HOLD BASES

Economists who are neither Greeks nor Turks point out, however, that substantial economic wealth remain in the hands of the Greek Cypriot population. This includes the ports of Limassol and Larnaca, the only two electricity generating systems on the island and the only petroleum refinery, the fruit orchards, vineyards and wineries of the south, and its light industry.

Two bases held by Britain as a guarantor of the 1960 treaty that gave Cyprus independence are also in the Greek part of the island. The British have about 20,000 people in Cyprus, including dependents, and spend about $60-million a year here. Similarly, the 4,400 United Nations troops here to keep the peace also pump money into the economy, mostly in the Greek part of the island. The United States, which has no aid programs here, contributes about $5-million a year to support the United Nations force.

Because of the dislocation of so many people, unemployment, usually 1 to 2 percent of the labor force, is expected to rise to as much as 10 percent. Foreign reserves—considered adequate at about $300-million, or enough to pay for imports for eight months—are declining, but not alarmingly.

Many Cypriot officials and businessmen agree that the immediate future of the island's economy is bleak ,at best. They say that thousands of Greek Cypriots will slip below the level of middle-class living they achieved in the last decade or so, while Turkish Cypriots strive to rise from relatively meaner conditions. There is a general acknowledgement on Cyprus, however, that only a renewal of warfare will make this country a permanent disaster area.

[From the Baltimore Sun, Aug. 18, 1974]

WAR SCARS CYPRIOT ECONOMY

NICOSIA, CYPRUS (AP)—"Everything is in an absolute shambles," Stellies Garanis, chairman of the Cyprus Employers Federation, said.

He was describing the state of the island's economy and the effect on the life of this eastern Mediterranean island, a tourist paradise with a high standard of living only five weeks ago.

'We haven't even got a rough estimate of the total damage yet, but it must be in the hundreds of millions of dollars," said the minister of finance, Caundreas Patsalides.

"We are faced with an immense task of reconstruction that is likely to take years to accomplish," he added. "But first of all we have the most urgent humanitarian problem of taking care of tens of thousands of refugees—more than a fifth of the total population. We have tried to feed them, house them, provide jobs for them, restore their dignity."

Nor could officials provide an estimate of the casualties since the Turkish Army invaded the island July 20.

"Hundreds, thousands who knows?" asked a health ministry official. "We haven't had time to count them. The fighting only ended yesterday. Hundreds of people are missing, and we don't know what is going on in the area occupied by the Turks."

The urgency of the task facing the government was underlined yesterday by the first decision of the government of President Glafcos Clerides after the cease-fire went into effect.

A special broadcast on Cyprus radio decreed that henceforth everyone on the island—civil servants, shopkeepers and workers—must work seven full days a week.

Estimates of losses and reconstruction needs are further complicated by the uncertainties of the political situation in the aftermath of the war.

The Turkish Army controls 34 per cent of the 3,752 square mile area, but the Turkish area incorporates installation and resources amounting to four-fifths of the economy, according to George Eliadis, director general of the Ministry of Commerce and Industry.

Most of the island's wheat granary in the Mesaoria plain and the orchards and citrus plantations around Morphou—representing a Greek Cypriot investment of millions of dollars whose export in money terms amounts to one-fifth of the total exports of the island—are all within the Turkish occupied area.

Much of the southern part of the island, the part left to the Greeks, used to be lush mountain pine forests. But even the potential exploitation of this timber wealth has been wrecked by the war. As much as 90 percent of the forests, with an estimated value of $600 million, was burned to cinders in the Turkish bombing raids, the director of the Cyprus Forestry Department said.

Two-thirds of the island's hotels—overwhelmingly Greek-owned and most of them luxury buildings erected in the economic boom of the past five years—also lie in the Turkish belt.

The Turkish government already has stated that the Greek Cypriots who fled the occupied area would be welcome to return to their homes and businesses.

But many Greeks are unwilling, through fear or political considerations, to live under a Turkish administration.

Many of the Turks in the Greek part of the island would like to move to the far more prosperous sector overrun by the invasion forces.

The desire of the Turkish community in the south to move north is evident at Larnaca, a quietly old-fashioned seaport south of Nicosia. Early last week Greek national guardsmen pulled out of the Turkish part of Larnaca, leaving the United Nations peacekeeping force in control.

Reporters who visited the Turkish quarter were told emphatically by Turkish political leaders that they wanted to move out lock, stock and barrel.

"We are happy to see the Greeks leave, but we are still not secure. We never will be until we are protected by the Turkish Army," Dr. Halouk Aini, a Turkish member of the Cyprus Parliament, said.

2-Way Autonomy Sought on Cyprus

Ankara (AP)—Premier Bulent Ecevit of Turkey said yesterday that Turkey's victories on Cyprus "laid the foundation for a federated Cyprus state with two separate autonomous regions, one or the Greek Cypriot majority and one for the Turkish minority."

Mr. Ecevit indicated at a news conference that Turkey would be inflexible in its demand for Turkish autonomy in at least one-third of the island, a demand supported by the Turkish Cypriot leader, Rauf Denktash.

Mr. Ecevit said he would be willing to return to the Cyprus peace talks at Geneva, which broke down Tuesday night, "as soon as possible." He also said he would be willing to meet with the Greek prime minister, Constantine G. Caramanlis, at a place and time chosen by the Greek leader.

"Given Up Our Empire"

When asked whether Turkey would be willing to give up any of the land captured by Turkish troops on the island, Mr. Ecevit answered: "This can be discussed later, I cannot say anything now."

"We do not have irredentist ambitions," the premier said. "We could have taken the whole island. But we have given up our empire for good."

He was referring to the Ottoman Empire which collapsed after World War I. It held Cyprus from the Sixteenth to the Nineteenth Century.

But Mr. Ecevit said Turkey would not give up the eastern port of Famagusta, where Turks have been living in the enclosed old city ever since the island became a British crown colony in 1925.

"We had no outlet to the sea before. We had no port facilities," he said.

The inaccessibility to ports has been the Turkish minority's most persistent complaint. Turkish troops now also control the small port of Kyrenia on the northern coast.

Mr. Denktash said possibly as many as a fourth of Cyprus's 120,000 Turkish residents are outside the zone now controlled by Turkish troops. There are 520,000 Greek Cypriots on the island.

"NOW FEEL SECURE"

But Mr. Ecevit said Turkey was not contemplating a third military advance to the south.

"Why should we resort to force? We now feel secure in Cyprus," he said.

He ruled out a new outbreak of fighting even if possible third-round negotiations in Geneva failed to produce results.

Mr. Ecevit did not elaborate on a federal state. But he said Turkey did not intend to enforce a population displacement by moving thousands of Turkish Cypriots north and Greek Cypriots south.

"The Greeks can stay in Turkish areas and the Turks in Greek areas," he said. "One will be the guarantee of the other."

But Mr. Denktash said of Turks living in the south that they "have no choice but to move."

[From the New York Times, Aug. 18, 1974]

THE MAD HONEY OF PONTUS

(By C. L. Sulzberger)

TRABZON, TURKEY—When Xenophon's Ten Thousand hacked their way out of the Ciscaucasian Mountains east of here 25 centuries ago, they screamed: "Thalassa, Thalassa" as they sighted the sullen Black Sea and stumbled down to the slate-colored rollers. Shortly afterward they were devastated by the famous "mad" honey distilled by frenzied bees from the azalea of this Pontus region.

The mad honey still exists. It is garnered in villages but not sold in the towns where city folk fear its effects. Yet, judging by events, it would seem to have been lavishly consumed by the successor governments of Pontus—now the Turkish republic in Ankara—and of the Xenophon—the Greek regime in Athens. Their recent behavior shows signs of being inflamed by the same exalted unreason for which the Pontic nectar was renowned.

I came up here to find out whether people feared that nearby Russia, which occupied Trabzon before the Czarist collapse in World War I, might again intrude amid the confusion of the Czarist crisis. Late one night in Trabzon a voice from Ankara, sounding over the dilapidated telephone system like the faint squeal of a worm, informed me things were going from bad to worse with Greece.

But residents of this area were less concerned with the immediacy of a potential Russian threat than the legacy of an ancient Greek quarrel. "We are used to Russia." said the acting governor. "When you're close to the fire you get accustomed to it." More urgent in the public mind—although there seemed a strange tranquility—was Greece.

Trabzon was the capital of a Greek Byzantine state, ruled by the Grand Compus, that fell to the Turks eight years later than Constantinople (Istanbul). Greeks lived here for immemorial times. When the Czar's armies withdrew after the Bolshevik Revolution, the Orthodox Metropolitan Chrysanthos sought to re-create an independent Pontus. This endeavor collapsed during the mass population exchange following the Asia Minor war, half a century ago. Chrysanthos had to shepherd out 164,000 Pontic Christians. None are left.

Unfortunately, all these old disputes come to mind when modern crises explode. During the Cyprus talks the present Athens foreign minister compared the loss of Kyrenia—a tiny Greek Cypriot town not even governed by Athens—with that of Constantinople in 1453 and Smyrna (Izmir) in 1923 (largely Greek inhabited but ruled by the Turks for generations save for a brief period after World War I).

The Turks, for their part, sometimes speak of the "generosity" of Kemal Ataturk, who defeated Greece and created the new Turkish Republic, in not having demanded sovereignty over his birthplace, Salonika, and over the Greek islands off Turkey's coast.

Cyprus is a symbol of all this. Ten years ago this month Greek and Turkish Cypriots were at it hammer and tong; the United Nations was voting cease-fires and Greece had announced it was withdrawing military forces from NATO. Aegean history repeats itself like a broken phonograph disk.

Now, it would seem, the rupture may last long. NATO is broken; the Turks appear unconcerned about the Soviet danger, which was why they joined the alliance originally; the allies don't know what to do. Henry Kissinger is trying

to get Greece fully back into NATO. He was planning official visits here and to Athens in October. Now it might prove perhaps an unpropitious time.

I have talked at length with the principal leaders concerned in this dangerous argument—Greek Premier Caramanlis and Defense Minister Averoff; Turkish President Koroturk, Premier Ecevit and Defense Minister Isik. They are intelligent, reasonable men on all subjects but one—Cyprus.

Ankara has a very legitimate claim to protect the Turkish Cypriot minority, which for long was badly treated by Archbishop Makarios and unofficial Greek Cypriot gangs. It also has justifiable concern about the island's strategic importance—lying just off Turkey's coast.

But the Greeks have every right to be furious about Ankara's high-handed ultimatum diplomacy, ignoring every sentiment of the new Athens democracy and endangering its existence, using the excuse of the previous military junta's mistakes to invade and partition Cyprus. This might risk ultimately destroying Premier Caramanlis—from the right, or from the left. It has already torn apart NATO.

Was the substitution of armed might for diplomacy worth these results to Ankara? That, I cannot believe. Meantime the entire Western alliance has suffered a crippling wound. It is time to stop tasting the mad Pontic honey, which seems so to impair the judgment of statesmen.

[From the Economist (London), July 20, 1974]

Cyprus: The Makarios Years

A state, but not a nation

(By Ken MacKenzie)

Cyprus has been the victim of geography for 3,000 years—and history has always lent a hurtful hand, too. This predominantly Greek island is only 50-odd miles from the Turkish mainland, but it is 600 miles from Athens. It may look only a speck on the map, but contemporary geopolitical factors give it a strategic significance out of all proportion to its size. Arguably, no country so minuscule has provided the world's press with more headlines, usually alarming ones, over the past 20 years. Privately, the Cypriots, spontaneous, volatile, theatrical, have rather enjoyed it—up to now.

At the outset it is important to understand what Cyprus is not. It is a state, but not a nation. Indeed, to talk about the Cypriots generically is almost misleading. The population is made up of some 520,000 Cypriot Greeks, and some 120,000 Cypriot Turks (plus a few thousand Armenians and British). After 14 years as a sovereign, independent state, Cyprus still does not have a national anthem; and the pallid Cyprus flag is significantly absent on occasions of national fervours. It is the blue and white colours of Greece or the blazing crimson of Turkey that dominate political gatherings.

In 1960 the hope was that the two communities would live in partnership, and that the hybrid state, hatched at the Zürich and London conferences of the previous year, would form a bond of friendship, rather than an apple of discord, between Athens and Ankara. This illusion was brutally shattered during Christmas week, 1963, when savage fighting in Nicosia between Greek and Turkish armed bands turned the tourist island of Aphrodite into a cauldron of hatred. (The Greek Cypriots, as the Turks are always eager to point out, were much the more heavily armed and better prepared, and the Turks inevitably were battered—but not subjugated.) After a great international flurry, a United Nations peacekeeping force was rushed to the scene, with a mandate for three months. Today, over 10 years later, it is still there, and looks like being there permanently.

There are, in fact, now six different armies (or armed contingents) on the island, which for a place much less than half the size of Wales seems a disproportionate concentration of military manpower: the Greek Cypriot National Guard, the Turkish Cypriot Fighting Force, the official Greek (mainland) contingent, the British garrison at the sovereign bases and the UN force. And, for good measure, there are still one or two private armies (very small in size but potentially dangerous politically), plus the para-military Police Tactical Reserve, which was the strong arm of President Makarios's government. The wry comment that every Cypriot regards a gun rather as an Englishman regards his umbrella is as valid as ever.

Nevertheless, the island, believe it or not, has been an oddly happy place. If that claim seems the ultimate in irrationality, it is another way of saying that any student of politics who is attracted by the paradoxical will find Cyprus a subject of inexhaustible fascination. A country where the head of the church has also been the head of state—and in tactical alliance with the communists—plainly does not conform to accepted political norms.

Yet for a small third-world state Cyprus can boast able administrators (one of the better by-products of British colonial rule) and a plethora of talent in the commercial field. Its citizens may be volatile, but—as thousands of tourists can testify—its hospitality is overwhelming. If it sorted itself out politically, it could go places. Alas, this is a big "if". Perhaps, in time, a sense of Cypriot nationhood will emerge; but many sound judges are skeptical about that. Meanwhile, the prevalent idea is that, despite the bloody events of the past few days, the island should remain an independent, sovereign state—enjoying and exploiting its 300 days of sunshine every year. This is one tourist brochure claim that cannot be falsified.

ANOTHER KIND OF MARATHON

During his brief visit to Nicosia in May for talks with Mr. Gromyko, his Soviet opposite number, Mr. Henry Kissinger is said to have told local journalists that, although he had been quite prepared to take on Vietnam and the Middle East, he would never tackle the Cyprus question. (The Cypriots took this as a compliment.) He was doubtless being facetious; but clearly if there were a solution to the Cyprus problem somebody would have thought of it long ago. Negotiations to work out a definitive settlement have been going on in Nicosia, the "intercommunal talks". The trouble is that they began six years ago (which must almost qualify them for the "Guinness Book of Records"), and are no nearer success today than they were in 1971 or 1972. Nevertheless, as always, jaw-jaw is better than war-war.

This week, the basic problem—the atavistic antagonism between the Greeks as a whole and the Turks—has been overshadowed by the coup in the Presidential Palace; but, though the eyes of the world are focused on the vendetta within the Greek community, the reaction of the Turks in the coming days could conceivably determine the island's fate. For a long time, President Makarios regarded Turkish opposition as an "artificial" factor, created by the British in a spirit of divide-and-rule. Latterly, he began to revise his ideas; but he has also been responsible for much intercommunal distrust which, historically, tarnishes his claim to statesmanship in other fields.

Understandably, the Turks make great play with the fact that, as they are outnumbered by four to one, they are physically at the mercy of the Greeks. Four to one is a tricky and, indeed, crucial ratio; if the Turks numbered about 35 per cent of the population, they would have a strong case for being treated as an equal and separate community. If they totalled only about 10 per cent, they would have no claim to anything more than the ordinary minority rights. Eighteen per cent, the actual percentage, is in between; and what matters, anyway, the Turks say, is the essential separateness of their cultural and religious traditions. They insist that they constitute a separate community; but in the equally adamant Greek view they are merely a minority. United Nations officials have suggested that the Turks should be described as a "minority community"; but this semantic compromise does not appeal to either side. Semantics, it needs hardly to be added, is always of paramount importance in Cyprus politics.

At the root of the Turks' craving for separatism is a deep-seated fear that, if they become a mere minority within a unitary state, they will be treated as second-class citizens. For tactical reasons, they have made great propaganda out of the excesses perpetrated by the Greek Cypriot armed bands during the onslaught of December, 1963. Yet basically it is the Greek assumption of moral and cultural superiority as much as the fear of physical persecution that sustains the Turkish Cypriots' determination to go their own way. This is what raises the hackles of the educated Turkish leaders, who regard themselves as the peers of their former Greek colleagues. For their part, the Greeks argue that they are indisputably the more dynamic people and that their ancestors ran the island centuries before the Turks ever set foot in it. (And the Greeks produce about 90 per cent of the wealth.)

In terms of the island's political configuration, the net result today is a bizarre ethnic montage, which cries out for rationalisation on social and economic grounds. Nicosia is almost as divided a capital as Berlin. During the last few years the Turks have begun to cross the artificial frontier that runs through the

city—the so-called "Green Line"—for business purposes or for shopping, and hundreds of them used to go daily to work in the Greek part of Nicosia; but the Greeks are still not allowed into the Turkish zone. The 17-mile road from Nicosia to Kyrenia, the island's most picturesque holiday resort, is under tight Turkish Cypriot control, the Greeks being permitted to use it only under the protection of a United Nations convoy. In the other main towns, notably Limassol and Famagusta, the sense of division is less pronounced, but by and large there is little intermingling of the two communities. In the north-west, around the town of Lefka and the hamlets of Kokkina and Mansoura, the Turks are penned into tightly controlled (and economically straitened) enclaves, which, of course, no Greek dares enter. On the outskirts of Nicosia there is a Turkish refugee centre, by now something of a township, which provides tolerable living conditions for 10,000 of the people who were driven from their homes in the fighting of 1963–64.

Over the last few years, President Makarios offered occasional inducements to the refugees to resettle in their former homes, but on the whole his policy was to leave the Turks to stew in their own juice. He clearly believed that time was on his side, and that Turkish resistance would crumble under the pressure of economic hardship. But there is very little sign of this at the moment; and the Turkish government seems prepared to go on subsidising the Turkish Cypriots, to the tune of £12m a year, rather than let them come under Greek Cypriot rule. It is arguable that, with every passing day, the de facto partition of the island simply hardens.

Can these conflicts and contradictions yet be resolved within the framework of a new constitution? The marathon intercommunal talks have been conducted by two able and likeable men who have known each other for years and who, on the face of it, ought to be able to do a deal with each other: on the Greek side, Mr Glafkos Clerides (who as speaker of the House of Representatives was President Makarios's deputy), and on the Turkish side Mr Rauf Denktash, who is both the leader of his community and the vice-president of Cyprus in accordance with the 1960 constitution (which is theoretically still operative). They have the assistance of two constitutional advisers from Greece and Turkey, and the special UN representative on the island is always at hand to provide his good offices.

It was—and is—argued that if Mr Clerides and Mr Denktash were left to themselves, they would hammer out a settlement. Unfortunately, nothing in Cyprus is as simple as that. Today, Mr. Denktash is more adamant than ever that the Turkish Cypriots must have the maximum degree of separatism; and his attitude has been supported by the new Turkish government. To the surprise of many observers, Mr Ecevit, who became prime minister in Ankara in January of this year, promptly came out in favour of "federation" as the best solution for Cyprus. This marked a reversion to the Turkish attitude of the mid-1960s.

Semantics are at large again. To the Greek Cypriots, the word "federation" is anathema, for rightly or wrongly they equate it with partition and with the concomitant spectre of Turkish mainland troops and officials installing themselves on Cypriot soil. Over this issue President Makarios came close this April to breaking off the negotiations once and for all. After a minor international contretemps, the talks were resumed in June, but in an unpropitious atmosphere. The atmosphere is worse now.

Of course, Mr Clerides and Mr Denktash could hardly have been talking away for six years without accomplishing something. By late 1971, or thereabout, the outline of a compromise had emerged. For example, the Turks agreed to relinquish the special veto rights (in defence and budgetary matters) that had been accorded them in the 1960 constitution; and broad agreement was reached on the composition of the new legislature (60 Greeks and 15 Turks, in accordance with the population ratio) and about the powers and functions of the executive and judiciary. But as the quid pro quo for relinquishing their veto rights at the top, the Turks wanted broader powers at the bottom, so to speak; hence their emphasis on regional autonomy, dressed up in the formula of "functional federation". (In plain language, this means separate Turkish street-sweepers and separate Turkish policemen.) The Greeks will have none of this; to all of them, it is inconsistent with the concept of a unitary state, on which they insist. If a new regime in Nicosia can resolve this dilemma, the world will be in its debt. But it is hard to see in the new circumstances anyone reaching a compromise with the Turkish leaders.

Even before this week's events, two dangers loomed. The first was that the talks would break down for good. Many western diplomats in Nicosia regarded the whole operation as a charade, and wondered how long it could be kept going; fortunately, neither side wanted to incur the odium of causing a final rupture. If the talks do finally end in failure, the more chauvinistic elements in the Greek camp would almost certainly clamour for a domestic economic blockade of the Turkish community (the Greeks imposed such a blockade during 1964); and that could mean the start of further trouble.

The second danger is more subtle, and more distant. If the present crisis should be resolved, the talks might yet be successful—but the end-product might be a constitution which, although meticulously fair on paper to both sides, would be so complicated as to be unworkable. Indeed, the amount of horsetrading which has already taken place over legal and constitutional minutiae is mind-boggling. The 1960 settlement produced a Frankenstein monster of a constitution which was patently unfair to the Greeks; the new constitution, if it ever is completed, will not make that mistake, but it could be of equally intolerable complexity. Even without the events of the past week, the experience of having to operate a second unworkable constitution would probably make most Cypriots despair of the whole concept of independence.

All this, however, is negative speculation. Conceivably, in Cyprus's peculiar fashion, the talks will be resumed and drag on, and on. But the recent comment of a senior UN official is apposite: "I can't see a settlement, because I don't think that either community wants one at the present moment." In other words, each side believes that time is on its side. And, after Monday's dramatic upset, further speculation about the talks seems academic now.

INSOUCIANCE WAS NOT ENOUGH

If Archbishop Makarios was reluctant to put his signature to another Cyprus settlement that rules out enosis, there were good psychological reasons for his hesitation. The signing of the Zurich and London agreements in February, 1959, was a traumatic experience for him. For the previous four years the Eoka guerrilla movement, inspired by Colonel (as he then was) Grivas, had fought for the ideal of enosis; this is what the bombs and bullets in Ledra Street were all about. At the twelfth hour, the archbishop, in Grivas's view, signed the Hellenic birthright away for a bowl of insipid pottage called independence. The fact that he did so under duress (mainly from the Greek government, although the British did their bit of armtwisting) did not mitigate his apostasy in the eyes of Grivas and his fanatical followers. By July, 1959, Grivas was denouncing the archbishop as a traitor, and a new chapter in the Cyprus saga had begun.

To give him credit, Makarios faced the continuing threat from Eoka B (the new version of Eoka formed by Grivas on his return to the island in 1971) with apparent insouciance, fortified by pride in his remarkable capacity for survival over 20 years. Since 1960, Greece (the supposedly stable parent power which under the 1960 settlement was empowered to keep a wary eye on the rumbustious Cypriots) has suffered two military coups and one abortive counter-coup; and Turkey (similarly empowered under the Zurich agreement) has had one full coup and the so-called mini-coup of 1971. Up to this week, Cyprus had had many alarms, but parliamentary government was preserved—though there is no shortage of cynics who will tell you that it was all a facade. The archbishop himself had a narrow squeak in March, 1970, when the helicopter in which he was travelling was shot down a few moments after taking off from Nicosia; he emerged shaken but unhurt. After that, he greatly strengthened his personal bodyguard, composed of his most trusted followers; but—apart from acquiring a healthy distrust of helicopters—he displayed remarkable confidence in his own inviolability, and in his capacity to outmanoeuvre his enemies: too much confidence, perhaps.

It is fascinating to speculate on what he might have become had he not entered the priesthood at an early age—conceivably, a smooth, London-educated lawyer, with a penchant for esoteric litigation. What is incontestable is that his position as head of the Church gave him his political base. As plain Michael Mouskos (his real name) Makarios would have started off as just one more politician (though a very skillful one).

At the same time, the support of the mass of the God-fearing peasantry has proved a diminishing asset, for the gradual emergence of anti-clerical feeling has been a significant political phenomenon in Cyprus in the past few years. Indeed, criticism of the church's involvement in the affairs of this world is now

openly expressed by many pro-Makarios partisans. To outside observers it is astonishing that, under the 1960 constitution, the church is wholly exempt from paying tax. How much of the island the church actually owns is hard to assess, but monuments to its affluence exist, for example, in at least three of Cyprus's luxury hotels. The archbishop did not help matters by his recent acquisition of 13 acres of land in the Seychelles, a transaction which has become a major *cause célèbre* in coffeeshop politics. (Asked why he chose of all places the Seychelles—to which he was deported by the British in 1956—he replied: "For sentimental reasons.") The archbishop has always had his sense of humour. What kind of leadership will emerge in the coming weeks is a baffling conundrum. The flamboyant Mr Nicos Sampson was nominated president on Monday, but he is a maverick. Mr Clerides, Makarios's heir apparent, is an able and perceptive man, admirably equipped to take on the burdens of the presidency if it were ever offered to him.

(His record includes distinguished wartime service in the Royal Air Force.) But, like many able and perceptive men, he lacks a broad political power base; and the Unified party, which he leads, must be about the most inappropriately named organisation in contemporary politics. It is certainly not unified and it is doubtful whether it is a party; rather it is a loose coalition, or front, of diverse centre or right-of-centre factions. It came out on top at the last general election in 1970, although it won only 15 out of the 35 Greek seats in the House of Representatives.

After Mr Clerides, the most prominent figure in the Unified party is Mr Tassos Papadopoulos, a brilliant lawyer who proved a highly capable minister of labour when still in his twenties. His ambitions are a subject of much speculation; by and large, he has contrived to keep in step with Makarios's policies during the vicissitudes of the past few years. A score of other names might be mentioned as possible future presidents, if democratic government is reestablished, not least that of Mr Nicos Dimitriou, the able ambassador in Washington. But at the moment everything is in the melting pot. Cyprus may be undergoing a revolution of historic proportions. To many perceptive people, Makarios's position as head of church and head of state was becoming an anachronism.

POLITICS OF POLARISATION

How strong is Eoka B? This is the teaser which men of the intelligence services—who seem to be deployed in droves all over the island—find unanswerable. Until recently, the accepted theory was that, after Grivas's death in January of this year, Eoka B lost its inspiration and its momentum; and, in the early spring, the archbishop seemed serenely confident that he was the master of the island's destinies. By early July, he had changed his tune; Eoka had fallen under the control of Greek officers, and the threat to the president was greater than ever. But he continued to believe that, somehow, he could outmanouevre his enemies: Ironically, if Grivas were alive today, Makarios would probably be more happily placed than he is now.

At the same time, Grivas himself remains a living legend. It is hard to imagine a man with a Chaplinesque gait and a Groucho Marx moustache possessing charisma, but Grivas had it in abundance; the thousands who make the pilgrimage to his grave in Limassol testify to it still. Moreover, he was imbued with a sense of messianic mission—to unite Cyprus with Greece—and he instilled into his followers an almost religious devotion to the concept of enosis.

That there was some effective central direction of Eoka after Grivas's death seemed apparent to all perceptive observers. Without such control, the local Eoka warlords would certainly have unleashed a wave of impromptu attacks on government targets; in fact, during the past few months Eoka has been a reasonably disciplined force. It may have had only 50–70 "paid-up" guerrillas in the mountains, as Makarios claimed, but it almost certainly had armed cells in all the main towns and many of the villages. In an underground movement of this kind, numbers are not necessarily very important. The archbishop certainly had the support of the great majority of his compatriots, but this was offset by the intensity of the hatred which his enemies bore him. And by repeatedly playing down Eoka as a minuscule, fanatical movement—a line which he unfailingly sold to visiting correspondents—the archbishop only enraged his enemies further.

Yet, until the coup on Monday the archbishop for several years displayed remarkable skills in holding the disparate Greek Cypriot factions together, and in maintaining Cyprus's status as an independent sovereign state. For a

country of its size, it played a relatively significant role in the affairs of the third world and of the Commonwealth. Indeed, in the early 1960s, the archbishop aspired to play a role on a larger stage—but the outbreak of the intercommunal fighting in 1963 killed these ambitions; he could hardly tell other nations how to conduct their affairs when his own country was in such disorder. During the past few years, he travelled extensively in Europe, Africa and Asia, solely with an eye to enlisting support for the Greek Cypriot case at the United Nations and elsewhere. His latest trip was to China in May of this year, to "balance out" his visit to Russia in 1971. Only last week he announced his intention to visit five of the east European countries. (This move probably contributed to the upheaval, for to the Athens junta it was intolerable that he should be curring favour with communist countries and simultaneously demanding the expulsion from Cyprus of Greek officers.) His enemies cannot gainsay that as leader of his country he had a presence—and for a small third-world state that was no small asset.

There was another remarkable achievement of the Makarios years. Despite the bitterness of the 1950s, relations between the Cyprus government and the British were remarkably harmonious. After being Britain's enemy, he became Britain's friend.

His biggest diplomatic failure—though nobody saw it in these terms at the time—was to fall foul of a coterie of Greek officers who served in Cyprus in the 1960s. One of these was a relatively unimportant captain, called Ioannidis; he is now Brigadier Ioannidis, the strong man of the Greek junta, and the person who probably gave the signal for the attack on Makarios.

Under constant pressure from the right, the archbishop, not surprisingly, turned to the left. There are few more law-abiding communist parties in the world than the Akel party of Cyprus. (Akel is an acronym for the Greek words meaning 'Progressive Party of the Working People".) Indeed, it is the only significant political group in the island which has never resorted to violence. But there were signs that the left was anxious to infiltrate the controversial Police Tactical Reserve units, the para-military organisation which President Makarios built up as a counterforce to the National Guard. The strong-arm methods of the PTR were an ominous portent; there is little doubt that it resorted to torture in its grilling of Eoka suspects.

In the 1970 election to the House of Representatives, Akel, for tactical reasons, put up only nine candidates for the 35 available seats; all nine were easily elected. If it had put up 15, probably all 15 would have been successful. As it was, the communists' share of the total poll came to over 40 per cent. Yet the total paid-up membership of the Akel party is only around 12,000. The secret of its success lies in its cohesion and superior organisation.

At the moment, the communists are both stunned and enraged by this week's events. They would get short shrift from a new regime. More than any other political group, Akel wants the intercommunal talks to succeed, for this would keep Cyprus an independent, non-aligned republic, outside the orbit of Nato. At the same time, the communists are careful never to go on record as opposing enosis in principle; when they adopted an anti-enosis posture in the late 1940s they lost ground to the Nationalists, and they are not going to make the same mistake again.

The communists' greatest source of strength lies in the trade unions. They wholly control the main workers' movement, the Pan-Cyprian Federation of Labour (PEO), which has over 40,000 members (though not all are paid-up). Its secrteary, Mr. Andreas Zhiartides, is respected throughout the island, and indeed internationally, for his moderation and skill as a negotiator. Paradoxically, it is the right-wing, pro-enosis workers' organisation, the SEK, that has set the pace in labour militancy, primarily with the objective of harassing the Makarios government. Its membership has increased remarkably in the last few years, and it has the services of some dedicated men, but it still lags behind the PEO in the techniques of labour-management relations.

Behind all these complexities and contradictions, there is a fundamental trend toward polarisation in Greek Cypriot politics. Inevitably, the enosis-versus-independence argument is crystalising into a right-versus-left conflict, on conventional European lines, the right being spearheaded by the National Council and Eoka and the left by Akel. There is an element of oversimplification in this theory, but it has a basic validity. The joker in the pack has been Makarios himself. During the past two years, with the Greek officers breathing down his neck, he became more and more beholden to the left. The communists, after all, were amongst his most vociferous supporters when Eoka B first posed its challenge

in 1972. Some of his closest counsellors were men of pronouncedly left-wing views, without being members of Akel. The most notable was Dr. Vassos Lyssarides, the archbishop's personal physician. Basically, however, President Makarios never wanted Cyprus to go communist; during his presidency, his aim always was to play one faction off against the other, walking the tightrope and riding the tiger at the same time.

THOSE DIFFERENT HISTORY BOOKS

Cyprus not merely has no national anthem, it has no university. It is an extraordinary lacuna for a country whose inhabitants, in cultural terms, can claim to be superior to much of the third world. Bright young Greeks flock to Athens or London—mainly the Inns of Court—for higher education; the Turks to Ankara and Istanbul (and London, too). Despite the bitterness of the late 1950s, the Cypriots still look to Britain as a shrine of cultural values. (In fact, because of the authoritarian nature of the present regime in Athens, an increasing number of Greek Cypriots want to study at British universities.)

There has been speculative talk about founding a national university in the island, through the possible help of one or two benefactors, but it is hard to see this happening in the foreseeable future. And what kind of university would it be? An institution where Greek and Turkish youths mixed freely together, absorbing each other's values, could contribute enormously to the growth of a sense of "nationhood". But, by the nature of things, it would be dominated by the Greeks, and would accentuate the ethnic division within the island.

In many ways the present system of school education is harmful politically. Through latitude or folly, British colonial administrators permitted the educational structure to be almost a carbon copy of that in Athens, with the result that generations of schoolchildren have absorbed Hellenic values; to them the central date in history is 1821—the start of the Greek War of Independence. Many of the teachers come from Athens, or have been educated there. Schoolchildren played an extraordinarily militant role in the first Eoka rebellion, as tension-raisers, and General Grivas used them astutely. Today, teachers and pupils are usually in the van of pro-enosis demonstrations and at the end of June President Makarios had to dismiss 62 primary school teachers who were noted for their right-wing views. In slightly less pronounced fashion, the Turks' schools follow the educatonal guidelines of Ankara and Istanbul; and because of the rigid separation imposed by the leaders of the Turkish Cypriot Administration, a generation of Turkish youth is emerging which has never had any contact with the Greeks. Education in itself rarely solves political problems; but until the scholastic system in each community sheds its nationalist overtones—and this applies particularly to the teaching of history—the concept of Cypriot nationhood will remain a distant dream.

OIL AND WATER

Some people may argue that the convulsions of the past week as based on a political illusion; and that Cyprus's real fate will be determined by the tidal wave of inflation, now engulfing the world. The Cypriots—and more particularly the Greek Cypriots—are beginning to feel the pinch, like everybody else. Inflation is currently running at a rate of 14 or 15 per cent a year. Some pessimists forecast that before long it will be about 20 per cent—which, one is told, is the level at which democracy becomes inoperable—but these prophecies are probably too alarmist. Through the medium of the central bank, the government in March imposed severe restrictions on borrowing; and for many local entrepreneurs it is a distasteful experience to be refused easy credit.

Cyprus was not directly affected by the Arabs' oil embargo, and supplies of crude oil have continued to arrive from Saudi Arabia and Iraq (via the Sidon and Tripoli pipelines) at a satisfactory rate. But as nearly every urban Greek Cypriot family has its car, the fourfold rise in oil prices has taken a heavy toll. A gallon of petrol after tax now costs about 570 mils (about 70p in sterling); only two years ago it was about a third of this price. A wide range of industries dependent on petroleum derivatives has been hard hit; and the cost of food and drink has soared. The days when the visitor could dine agreeably for around £1 are gone for good. This is the sort of inflation which might keep tourists away.

All this has caused considerable anguish to the man in the street and, more positively, considerable heart-searching among the ministers and officials concerned with the economy. As a result an embryonic prices and incomes policy

was initiated at the start of this year, under the aegis of an "advisory prices committee", which includes representatives from the government, employers, and the trade union federations. This is a voluntary system, based on the pious hope that the local manufacturers and importers will not increase prices unless this is absolutely necessary and that the workers will show a sense of responsibility in submitting pay claims. So far it has worked moderately well, but these are early days. The possibility of introducing a statutory system has not been ruled out, although officials are reluctant to talk about it. For the moment, the coup attempt has obliterated all else.

Linked with the prices and incomes policy is a new cost of living bonus system, which is claimed to be something peculiar to Cyprus but which is not so very different from what is now happening in Britain. Every three months the salaries and wages of public servants and all employees covered by collective agreements are statutorily reviewed against a price index, the basis of which (reckoned as 100) is the cost of living average for 1973. By May the index had risen to 115, and a large section of the labour force found itself entitled to a 6.9 per cent bonus in wages in June. This no doubt brought smiles to many faces, but it has not brought a check to the inflationary spiral.

The basic problem with Cyprus' economy, however, is that it rests on a silghtly wobbly tripod: agriculture, tourism and revenues derived from the British bases. The experts in the ministries of commerce and finance, who, by third-world standards, are capable men, know this only too well. Over the past year, agriculture has given them the worst headaches, because of the appalling droughts in 1972 and 1973. This year providence has been kinder, but the rainfall has still not been enough to replenish the reservoirs. The net result is that the growth rate in agriculture has been virtually nil since 1971. This in turn has affected the total growth rate, which last year was 6.5 per cent instead of the 7.4 per cent forecast in the present five-year plan (1972–76). In the process, the government has had to subsidise the drought-stricken farmers to the tune of around £5m annually.

What can be done to provide more water? Arguably, the government should have tackled the problem more energetically some years ago, but strenuous efforts are now being undertaken to make up for lost time. Backed by the World Bank, a £36m water development project, the biggest of its kind in Cyprus, is now under way in the Paphos district. With luck, this should boost the production of citrus fruits, grapes and bananas over much of the west of the island. There is also talk of building a desalination plant, probably near Larnaca, similar to the one already operating in the British base at Dhekelia; but desalination is a costly business. A more intriguing suggestion is that fresh water should be piped to Cyprus from the gushing streams of southern Turkey, only 50-odd miles away. This solution was mooted as long ago as 1961 by the UN special adviser on Cyprus' economy, Mr. Willard Thorp, but for political reasons the Greek Cypriots have always resisted it. They do not wish to depend on Turkey for something as essential as water, and they even conjure up nightmares of the tap being turned off in times of crisis.

With agriculture in the doldrums, the government's planners are wisely turning their attention more and more to the development of light industries; indeed, the files of the ministry of commerce bulge with memoranda about fertilizer plants, asbestos goods, hygienic equipment and the like. But the essential aim is to promote those industries with some export potential, diverting capital and effort from the product of "saturation" commodities, such as footwear and furniture. For new overseas markets, Cyprus is looking hopefully to Africa. Already countries like Libya and Tanzania are showing more than a modicum of interest in its light industrial goods. (Both countries were visited officially by President Makarios.) All this implies a sensible diversification of Cyprus' trade pattern, through it is hard to see Africa replacing Britain and western Europe as its most important market.

The island needs all the commercial openings it can get, for its trade deficit has risen appreciably in the last two years. There is cause for concern but probably not for alarm. Foreign exchange reserves stand at the reasonably healthy total of £105m, some £15m less than at this time last year but nevertheless enough to cover imports for the next eight or nine months. Other third world countries might be happy to be in such a position.

"The philosophy underlying our policy is that tourism should complement our national life and should not destroy its good qualities". This unexceptionable sentiment is the motif of a prolix review by the government of Cyprus' tourist prospects during the current five-year plan; and any future Cyprus government must trust that the troubles will be quickly forgotten by potential visitors. In terms of the economy as a whole, tourism has become one of the leading sectors and the plan is that it should earn about £42m gross between 1972 and 1976. At peak levels, tourist revenue could wipe off the trade deficit, and offset the financial losses that would be incurred if the British decide to withdraw from their two bases on the island.

The figures for 1972 and 1973 were encouraging; performance surpassed the target growth rate of 20 per cent. But it will be a different story this year. Quite apart from the fighting, potential visitors from Britain and western Europe do not have the money to spend. A modest growth rate may be achieved, but for a small country which has staked its future largely on tourism it may not be good enough.

The island has an immense amount to offer. It is one of the few places where in the spring one can ski in the morning and swim in the early afternoon. Or so the brochures say. The basic issue is what sort of place the tourist planners want Cyprus to be. At the moment, they give it the image of having a bit of everything. The variety of Cyprus's attractions does, indeed, appeal to many holiday-makers. But, by and large, the local entrepreneurs, backed by foreign capital, have moved in too fast; and in particular Famagusta—which has the best beach on the island—has been turned into a hideous rash of neon-lit cement. The Germans and the Scandinavians flock there, and it is the west European whom the Cyprus Tourist Organisation is particularly anxious to attract. This is now reflected in the menus of the leading hotels and restaurants.

What pains most Cyprus-lovers is the possibility that Kyrenia will go the same way as Famagusta. Paradoxically, Kyrenia's essential beauty was saved in the 1960s by the outbreak of intercommunal fighting, which temporarily scared off the property developers. After seven years of relative peace, its picturesque harbour is walled in by high-rise flats and hotels. A kind of Clovelly transplanted to the eastern Mediteranean, it has long been the haven of the retired British; a faintly pro-consular sniff used to be in the air, and there used to be much good conversation about more leisurely days.

Now, at the height of the package tourist season, the sniff is of eggs and chips, and the golden coves on either side of the town look like being converted into plages, which sounds distasteful if not actually hideous. But it all makes for invisible earnings and the Cyprus government needs the revenue. There is good potential in the western sector of the island, particularly around Paphos, which because of its distance from Nicosia tends to be the least visted; and a local entrepreneur who is about to launch a direct air-service could be on to a good thing.

But tourism, like other sectors of the economy, revolves around oil and water. With an inadequate public transport system, many tourists want to hire cars, and the cost is now becoming prohibitive to many ordinary holiday-makers. The continuing drought means that water-supplies at the height of summer are liable to be cut off; and it is not much fun paying for comfort and excellent service in a first-class hotel if one cannot get a shower.

But this may seem carping criticism. The fascination of the island lies in its life-style, which is neither easy to harness by a government department nor open to convncing description in a brochure. It is epitomised in the sip of an Anglias in a Troodos coffee-shop, or in the hilarity of Lemonias's tavern, in Nicosia, whose owner (once a Lieutenant-Quartermaster in the Cyprus Regiment) is a Hellenic Jove with the frame of a Vulcan and laugh that reverberates around the island like thunder. Whatever the regime, people like Lemonias are indestructible.

BASELINE

If Kyrenia is a Mediterranean Clovelly, Episkopi—the British Near East headquarters—is a Mediterranean Eastbourne. The essential point about the two British bases (Episkopi-Akrotiri and Dhekelia) is that they are as British as the Isle of Wright, being sovereign British territory. In 1960, after a marathon negotiation between President Makarios and Mr. Julian Amery (then Under-Secretary at the British Colonial Office), it was finally agreed that the British sovereign area should comprise 99 square miles. (It has never been absolutely clear to observers which soverign state, Britain or Cyprus, owns the Salt Lake near

Dhekelia; but, as its use for military purposes is problematical, to say the least, no dispute arises.)

The relationship between the British and the Greek Cypriots has long been a curious love-hate affair. If British colonial administrators made mistakes—as all colonial administrators do—the chickens came home to roost with unexpected ferocity on April 1, 1955. All-Fool's Day marked the start of General Grivas's guerrilla war to drive the British out—and to unite Cyprus with Greece. There followed nearly four years of Ulster-style terrorism, during which excesses were committed by both sides and the hatred between Briton and Greek could be cut with a knife. (The Turks were to some extent on the sidelines, but were basically pro-British.) The Greeks vehemently alleged, and still allege, that successive British governments deliberately favoured the Turkish community. Historically, that is at the root of the Cyprus problem. More recently, all has been sunshine—or almost.

After trying to kick the British out, most Greek Cypriots want the British who are left (mainly in the bases) to stay. It is not, of course, entirely a matter of sentiment, though sentiment enters into it. The basic factor is economic. Revenue, one way or another, from the bases is a pillar of the island's economy; last year it totalled over £30m. (The Makarios government, for understandable reasons, put the figure nearer £27m, but the exact total is hard to quantify.) Limassol, in particular, would become almost a ghost town if the British should quit Episkopi and Akrotiri, for one quarter of Limassol's population (around 55,000) is composed of British service families or civilians connected with the nearby base. For the Cypriots—Greeks and Turks alike—the bases mean jobs: clerical jobs, labouring jobs, catering jobs and so on. Even the police force within the two bases is composed of Cypriots, whose relations with the British authorities are harmonious.

It is a mark of the astute restraint of Mr. Zhiartides, the union leader, that he has never pushed the communist line on the bases to crisis point. Ideologically, he wants the British to quit—and that is the declared aim of the Akel party. But realistically, Mr. Zhiartides and the other communist leaders know that, if the British do leave, thousands of their compatriots would come on the labour market, and Mr. Zhiartides did not want to embarrass the archbishop. So the communists were prepared to impose on themselves a self-denying ordinance; in the new situation the communists' tactics may change.

With the British defence review still uncompleted, the future of the Cyprus garrisons is still in doubt. It is one thing to quit Singapore, and another thing to quite the Mediterranean, especially at a period of crisis in the Middle East. In the present explosive situation a hasty British withdrawal would create a dangerous vacuum in the island. Under the terms of the Cyprus treaties of 1960, the sovereign bases are to revert to the government of Cyprus in the event of a British evacuation. But the Turks have let it be known that they want at least part of the 99 square miles; and in this understandable claim there is the hint of a nasty new twist to the Cyprus problem. One possibility, obviously, is that the two bases might eventually be telescoped into one (Episkopi-Akrotiri), but this does not appeal to Britain's service chiefs, who claim that there are not really enough training grounds in the United Kingdom.

During the past decade, the Dhekelia base has served another extremely useful purpose; it has become the logistic centre for the United Nations peace-keeping force (Unficyp). Food and equipment for the 2,000-odd UN troops (who consist of British, Canadians, Danes, Finns, Swedes, Austrians and Irish) are sent through Dhekelia, and all the repairs are done there. As a result, the UN operation in Cyprus has run on oiled wheels, and UN officials are the first to admit it. Indeed, the facility with which the British have donned their blue berets has been one of the pleasanter aspects of the Cyprus story, especially after the acrimony between Britain and the UN secretariat during the Congo troubles in 1961. Over the past 10 years (March 1964–March, 1974) Cyprus has cost the UN $350m. Arguably, it is money well spent; but one wonders what greater use it could have been put to, in development aid, if the Cypriots had settled their affairs.

The Americans have argued that Unficyp could be reduced to a mere observation force, although, probably, it is too small as it is to be effective militarily (if fighting should break out again between the two communities). Again, this sends shivers down the spines of Cypriot traders and restaurant-owners; for the free-spending UN troops, like the British troops in the bases, boost Cyprus's invisible earnings substantially. The element of artificiality which this introduces in the island's economy is all too obvious.

ON A SEE-SAW

It is almost impossible to draw the contradictory strands of Cypriot history into a rational pattern, as the past week has amply demonstrated. Cyprus is a captive of its geography, as well as of ethnic compulsions. To the Turks, it is their offshore island. At the same time, the Greek connection has dominated its history, and will continue to do so.

However hard the Cypriots try to assert their independence, relations between Greece and Turkey will decisively sway the island's future. Even before Monday the strains between Athens and Ankara were acute; the prospect of sizeable oil deposits in the Aegean Sea has provoked a bitter dispute over continental shelf jurisdiction; the matter is being argued at the current international law of the sea conference in Caracas, but is unlikely to be resolved there.

Tension between the parent powers automatically has repercussions in Cyprus; the Greeks somehow become more Greek, and the Turks more Turkish. Even the Akel party has recently come out on the side of the Athens junta over the oil dispute, although the island's communists whisper privately that it is the inevitable result of "commercial imperialism".

On the face of it, the friction between Greece and Turkey seems to knock on the head, at least for the time being, the prospect of an imposed Athens-Ankara solution of the Cyprus problem. Such a deal has long been the aim of the Turkish government, and of the Turkish Cypriots, who feel that their destiny can be entrusted to their masters in Ankara. (President Makarios never felt any such sentiment towards successive Greek governments.) What is just conceivable, but unlikely, is that, instead of going to war, Greece and Turkey might put their heads together and make a package deal on all their contentious issues, Cyprus being the most important. The Makarios supporters bitterly resist this idea.

But would an imposed solution of Cyprus work? It was tried at Zurich in 1959, and four years later the settlement fell to pieces. On paper, there is a lot to be said for "double enosis" (which is a euphemism for partition). But the harsh reality was that President Makarios would not have it; and Cyprus has now had a history of 14 years as a sovereign independent state. The best minds in the Greek foreign ministry fully perceive this; and as a result Greece has continued to support the intercommunal talks designed to preserve Cyprus's independent status.

The 14 years of Makario's presidency are a curious mixture of achievement and confusion. History will pronounce its verdict upon him; but to have remained president for so long was in itself a singular accomplishment. And the Greek Cypriots prospered economically.

What is incontestable now is that the politics of the whole eastern Mediterranean have never been more complex, and possibly never more explosive. Greece is at loggerheads with Cyprus and Turkey; Turkey is all loggerheads with Greece and Cyprus; and Cyprus is at loggerheads with Turkey and Greece. If there were a triangular conflict, baffled observers wonder who would be on whose side. The answer is clear; the Greeks would close ranks—temporarily—against their "traditional" enemy. Such is the strength of nationalism.

Meanwhile, the island has blundered along, under a quixotic form of de facto partition. President Makarios periodically asserted his view that "enosis is desirable, but not feasible" (which in fact probably summed up his own inner thinking). The implied ambivalence in this statement infuriated the Turks, who somehow still detect enotist implications in every word uttered by the Cyprus government, not least during the present crisis.

During his presidency, Makarios came to the conclusion that Cyprus should stay as it is. That may sound defeatist, but he had one current of events pulling his way; and time has its way of altering the configuration of political problems. For all its troubles, the island was a happy place.

[From the New York Times, Sept. 11, 1974]

IN TURKEY AN EXODUS BY GREEKS

ATHENS, Sept. 10—"It was 19 years ago to the day when we fled Turkey after a night of terror, leaving behind our business, our house and our son," the old woman recalled. "He was 24 then, and today he still belives that the Greek element must not be wiped out of Constantinople," she added, referring to the Turkish city known since 1930 as Istanbul.

Last week, in the aftermath of the Cyprus crisis, an exodus of the Greek minority in Turkey began, with busloads of refugees arriving daily in Athens via Salonika, about 180 miles from the Turkish border. The old woman had gone to the border to meet her two young grandsons, who were among the 500 who arrived last week.

"My son called," the woman said, "and told me to pick up the little ones." The night before the baby was put to sleep on the kitchen table, while the rest of the family huddled around. It was the only safe place, they felt, after their Turkish neighbor—until yesterday their friend—strode to the fence dividing their property and shouted: "Bring me knives! Bring me guns! Not one Christian will stay alive tonight!"

Similar accounts are given by many of the Greeks fleeing Turkey, but they will talk only if guaranteed anonymity. There are about 15,000 Greeks living in Turkey. Those who have fled say they do not know what the Turks might do to their families if the names were given.

While many refugees describe rape, looting of shops and homes and demands for "protection money," a Greek Orthodox priest said that the accounts were exaggerated. "Nothing serious has happened," he said.

Later, however, when his Athenian relatives asked what was really happening in Istanbul, he said: "The Turks are not throwing us out, but how can we stay when three rapes have already been reported?"

A woman standing nearby with two giant sacks containing "my household" at her side adds that the night before her hurried departure "one of them threw a stone through my sister's window with a message: 'Whore, we'll get you tonight.'"

Many of the refugees, mostly men and children, are from the island of Indros, where the Greek community of 2,000 consists mainly of elderly persons who have lived there all their lives. Even now, with Turkish troops reportedly swarming over the island, they hesitate to give up their homes.

"My parents and brother will probably be coming here soon," a 17-year-old girl said. "They are trying to sell out their farm on the island, but whom do they think they can sell to? To the Turks? They will take everything anyway."

Her face pale and drawn, she said: "How can you think of land when your life is in danger?"

APPENDIX VI

[From Foreign Affairs, October 1974]

COPING WITH FAMINE

(By Jean Mayer)

Never throughout history has there been a time when there has not been a devastating famine in some part of the world. In our lifetime, widespread starvation in Asia, Europe, Africa and Latin America has taken the lives of millions of men, women and children. We know that somewhere, this year, there will be a new famine—the result of war or a major national catastrophe. Already there is starvation in the Sahel area south of the Sahara, and the threat of renewed serious crop failure in the Indian subcontinent. The presently bad—and worsening—state of the total world food supply, particularly the depletion of grain reserves in the United States and the shortage of the fertilizers needed to maintain the "green revolution" as a result of high oil prices, leads one to expect that the extent of any new famine will indeed be catastrophic. Historically we have proved ourselves ill-prepared to cope with famines. How well can we hope to deal with them in an even less propitious situation?

Up to now, individual nations, international voluntary agencies, and especially official international organizations have dealt with the specter of mass starvation as an unexpected crisis—as something to react to when it occurs rather than as a likelihood to be planned for in advance. Prevention has been the exception rather than the rule; Bihar in 1966–67, to be discussed later, remains the lone shining example of a large famine averted. Moreover, we act on the occasion of each famine as though mankind had no collective memory. Whoever is faced with the present famine usually acts as though there were no lesson to be derived from the melancholy succession of previous famines and previous efforts to cope with them.

Yet previous famines should have left one beneficial residue: there are individuals and organizations that have acquired firsthand knowledge of successful—and unsuccessful—ways of coping. So little is ordinarily taught of the physiological, psychological and social problems arising in famines, and of their solutions, however, that each new group of physicians and administrators who are generally called upon to deal with a new catastrophic situation tends to repeat some of the classic errors of omission and commission.

Today, we need, and are technically able to create, an organization that institutionalizes human memory in dealing with starvation. Over time we have made discoveries in compassion as well as in management and technology. For many centuries starvation was essentially inevitable, largely because means of information and means of transportation were not at hand. That there was some food somewhere else on the same or another continent was basically irrelevant: there was no way of delivering it when it was needed or of distributing it to the starving. We now have the technology to keep the whole world under surveillance and transmit early warnings of impending shortages; we can transport the food to the area of famine. Therefore we have obligations that did not exist in past generations.

II

For action purposes there is a sharp difference between a state of chronic starvation, which is endemic in some sections of certain populations, and a true famine. However precarious their previous state of nutrition may have been, the people involved feel and act differently in a famine; they become acutely conscious that something of a different order of magnitude is happening.

A true famine is unlike anything else. It can be defined as a severe shortage of food accompanied by a significant increase in the local or regional death

rate. In a chronic starvation area people may suffer and be crippled mentally and physically ; in a true famine they die in large numbers.

Almost all recorded famines have resulted from widespread crop failures.[1] These, in turn, may be caused by drought, crop diseases or pests, the impact of war or civil disturbance, or a combination of disturbances hitting both crops and farmers, such as floods or earthquakes. All these four sets of causes have been at work in the famines that have occurred since 1950 alone: flood, drought and civil disorder in India and Pakistan; locusts and earthquakes in the Middle East; floods and dislocation of the agricultural system in China; earthquakes in Latin America (including the recent Peruvian disaster) ; and drought and civil war in Africa (the Sahel, the Congo and Biafra).

All of the causes of crop failure and famine are very much alive in the world today. The most threatening, and growing, is now drought. Some scientists are saying that changes in climate have shortened the growing season and reduced the rainfall that we may now expect in key areas such as India and northern Africa. Whether this is true or not, the large areas of the world where rainfall is highly variable and seasonal are inherently drought-prone. In Western Europe or New England a dry year differs from a wet year by less than 20 percent; in immense land areas elsewhere, the variation may be 80 percent, and drought years may alternate with years of flood, when gigantic continental rivers, swollen by excessive rains in the mountains, burst their banks and destroy all crops.

Apart from their climate and natural characteristics, many nations and areas are particularly vulnerable to famine by reason of lack of communications or social inequality. Chinese famines of the past were due largely to the then-primitive transportation system, and lack of adequate communication is a major aspect of the current Sahel famine. These problems exist in many poor countries. Virtually all such countries are examples of social inequality and of the resulting defects in nutrition for large sections of the population. It may be useful to remember that in as rich a country as Britain in 1935, with an average intake of 2,000 calories daily, at least ten percent of the population was underfed to the point of growth retardation, and 40 percent ate a diet that was demonstrably too low in certain vitamins. Obviously, in a country like Egypt, where biblical farming methods can still be seen in operation not many miles from the modern capital, social inequalities and malnutrition are even more acute.

To move from causes to consequences, by the above definition the main and most immediate effect of famine is widespread deaths from starvation. The number of deaths is a good index of the severity of the famine, and conversely a drop in that number an index of the effectiveness of the measures employed in combatting it. It has been observed repeatedly that in famines old persons and young children die first, and that women and adolescents tend to survive better than men (although adolescents suffering from prolonged undernutrition are particularly susceptible to tuberculosis). For purposes of dealing with a famine, "old age" starts at about 45 years old. From then on, there is a drastic increase in mortality as compared with adult men and women below that age.

A second, and dangerous, consequence is the state of social disruption, including large-scale panics, that usually accompanies a famine. Generally people who are starving at home tend to leave it if they can and march toward the area where food is rumored to be available. As a result, families are separated and children are lost. The small children often reach a suicidal state of mind from self-inflicted starvation, refusing to eat because of their grief at the absence of their parents. Adolescents, finding themselves on their own, band together in foraging gangs that create further disruption. (Prolonged and successful practice of banditry also makes members of these gangs difficult to rehabilitate when the famine is over.) This breakdown of the social order makes any relief measure that much harder to put into effect.

Contrary to popular belief, however, famines (and, for that matter, prolonged severe undernutrition) are rarely accompanied by revolution. The gravely underfed usually are too feeble and too preoccupied with problems of immediate survival to summon up the energy, single-mindedness and organization required to initiate and follow through with a revolution. The type of disruption accompanying famine is more likely to entail a large number of unconnected anti-social acts, or, at most, regional jacqueries. In turn, revolutions are more likely

[1] A notable exception was the Great Plague of 1345–48 in Europe, in which 43 million people are said to have died. In that instance, the massive epidemic came first, totally dislocating society and bringing on famine.

to take place when food has been again available for some time, but while the memory of the actual or supposed corruption or incompetence shown by the government in dealing with the famine is still fresh. The experience of flood in Pakistan in 1970 contributed directly to the secession of Bangladesh in 1971.

A third common catastrophic result of famines is the spread of epidemics. The combination of physiologically-weakened human organisms and a disrupted social organism, with the attendant breakdown of public-health institutions and crowding, lends itself to the explosive spread of infectious diseases. Louse-borne typhus has been the traditional post-famine disease of Europe, cholera and smallpox the post-famine diseases in Asia, although plague, influenza, tuberculosis, relapsing fever, and many other diseases have also followed famine. When famine is due to a drought, malaria is not usually rampant at the same time, but is often deadly on a particularly larger scale when the rains finally come.

One last, long-term, consequence of many famines is the death of large domestic animals, often on a greater scale than that of humans, and the destruction of seeds for future crops, making it more difficult for farming to return to normal when the famine is over. (The Sahel famine is the most recent example of both points.) If one is to speak of coping with famine, one must include follow-on measures to restore the food supply and rehabilitate the area—or if this cannot be done, to resettle the population elsewhere.

III

To one degree or another, any famine situation has an element of politics. The nation or nations that contain the famine area must summon large quantities of help, which in an India or a China may come from other parts of the same country but which must usually come from outside. Thus international official organizations, notably UNICEF, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO), are almost always involved at an early stage, while international voluntary agencies (such as CARE and church groups) may become substantial sources and channels for relief. Finally, there are the individual outside nations that alone can furnish really large quantities of food, medical supplies and transportation.

Unfortunately even a crisis such as famine does not mean that all these various political bodies necessarily work in harmony either with each other or within themselves. For professional men trying to get on with the job, these political frictions are acutely painful; I shall say more about them later, especially in discussing the good example of Bihar and the rather grim one of the Sahel, and the lessons to be learned. Suffice it for the moment to make the obvious point: some adjustment and cooperative arrangement between the political entities involved is the first essential for coping with a famine—if this is smooth, all else becomes much easier; if not, the drag is immense.

The second obvious requirement is the procurement of food in amounts adequate to stop the developing famine, maintain the population in balance, and eventually rehabilitate the population. Food must be obtained through buying or otherwise acquiring it and moving it to the affected area. In spite of the efforts by some of the leaders of FAO, such as John Boyd Orr and André Mayer in the late 1940s, a World Food Bank or regional food banks for emergency situations have not yet come into existence. There is thus no universal and automatic pathway for famine relief. In the past, the availability of large surpluses of cereals in the United States, Canada, France, and other countries made relief possible; yet in spite of the creation of such national organizations as Food for Peace in the United States, the actual process of relief was often slow and cumbersome. Now the sharp reduction in North American food surpluses has created a potentially serious situation for famine relief efforts.

The third fundamental element in any famine relief effort is a clear-cut line of command and assignment of responsibility. Even under the most advantageous political conditions, in a country at peace and with a stable government, starvation causes intense political pressures. Typically, the opposition says poor government planning is the cause of the famine, government incompetence and corruption the causes of its continuation. Government sources accuse the opposition of presenting a picture far worse than the reality, of minimizing the effectiveness of relief efforts, and of starting disruptive rumors which further complicate the carrying out of relief programs. Unlike the more distant government authorities, relief personnel rapidly find themselves in the middle of a difficult argument, in which they present the government's side to the victims, while they vehemently

take the victims' case to the government. Even in a democracy, a famine is a special situation.

For these political reasons alone, the local authorities are usually in a poor position to run a relief operation properly. Moreover, such an operation, if it is of any significant size, requires able, decisive leadership with high managerial skills. Thus I, for one, am convinced that by far the best method of organization is to have the relevant political entities come together in the appointment of a single "relief director." Even fairly ancient history (to younger people) teaches us something here: Herbert Hoover's total control of relief to Belgium and Germany after World War I was by common consent largely responsible for the high degree of success of this pioneer effort in a threatened famine situation.

There is every possible advantage in the "relief dictator" being a member of the government or a high official of the country in the territory of which the famine is taking place. The U.N. country representative, or a person specially designated by the U.N. Secretary-General, can then coordinate, under the leadership of the relief chief, the work of the U.N. organizations and of the voluntary agencies. If a person not a citizen of the recipient country is put in charge, he should be detached from any previous tie—whether he comes from an international organization, a contributing nation, or one not directly involved. And while relief workers have to be dependent for pay and support on some single nation or organization, they should operate under the overall direction and control of the single director of relief. This would apply to the whole range of activities necessary to the relief organization, subject only to the obvious need to depend on cooperation from local government authorities who might be working at tasks (like running a railroad) not exclusively directed to the relief task. Similarly, although the director's word should ideally amount to a command to the supplying nations and organizations, in practice he (or she) would be dependent on their cooperation especially with respect to the furnishing and delivery of food and supplies as far as the affected area. For the most part, the commander of a relief operation must be on the spot.

IV

Whatever the command structure, the most immediate priority for the local administrator (or the representative of a benevolent power or organization) is to get a clear picture of the situation. With much of the structure of society breaking down with rumors flying, with government sources generally minimizing the extent of the catastrophe and anti-government sources exaggerating it, it is often difficult to know where the most pressing needs are what the scale of the need is. Certification of causes of death may be incomplete and late. Data on births may be unobtainable. The weakest persons, children and the elderly, in particular, may be staying indoors, so that the casual observer, seeing only adolescents and young adults walking about, may not realize the scope of the disaster.

All administrative and social agencies must be mobilized to gather and check statistical information. Hospitals and other health agencies must be asked to report causes of death as quickly as possible so that any increase in numbers of deaths due to starvation and the appearance of any deaths from epidemic infections can be detected early. Hospital admissions, numbers of persons in relief camps or in relief stations, are also important data. The rapid acquisition and analysis of such information are essential. At the same time, economic information is equally necessary: food stocks, prospects for harvest, rolling stock and trucks, fuel, repair shops, the state of roads and communications, money in private and governmental hands, and prices—all need to be followed closely.

Hence, the first requirement for a relief staff falls under the heading of *intelligence*. For this, enough persons with field training in statistics and epidemiology are needed, and use must be made of medical and paramedical personnel, teachers, and welfare workers for the rapid acquisition and analysis of information. Here computer techniques can be invaluable if the computers are manned by alert practical-minded personnel.

The next major job is of course the *distribution of food and medical services*. Here both method and personnel require comment.

Historically, distribution of available foods has been done through several methods. In the nineteenth century, and the first half of the twentieth, governments often attempted to improve the situation indirectly by conveying food to the merchants through the normal channels of trade, and making money

available to the starving populace through public works projects. This policy was consistent with Adam Smith's laissez-faire philosophy, and enjoyed a certain degree of success when the shortages were local and foreseen. It failed miserably in large-scale disasters, such as the potato famine in Ireland, or the Bengal famine of World War II.

In such cases, it is a classic example of an error of commission. This method of relief benefits least the most vulnerable groups—the young, the very old, the pregnant and nursing women. In addition, the energy expenditure of men involved in the public works is increased, not only through the caloric cost of manual labor, but also because such works, usually road building, take place at some distance from their homes. The work is rarely useful: important public roads and other projects cannot be devised and executed properly on the spur of the moment. The roads usually lead "from nowhere in particular to nowhere in general."

Instead, the preferred method of food distribution should be to set up as many distribution points as possible close to the centers of starvation. These may pass out food commodities or prepared meals, and provision should also be made to alow such food to be doled out, under supervised conditions, to patients too weak to leave their homes.

The feeding system would deal with the particular local situation: food must be acceptable to the people in terms of food habits and religion. It should include special foods for special needs, also determined by the local situation. It would consist of a limited number of items, high in nutrients, and easy to transport, store and distribute.

Similarly, medical services must be decentralized just as much as possible. A large but distant hospital is an invitation to migration and thus makes relief more difficult. The creation of a mass of small "famine hospitals," even though they may be staffed only with auxiliary personnel and medical students, has proved to be invaluable in checking panic, vaccinating, delousing, disinfecting, distributing insecticides, informing the administration, and taking care of the greater number of the starving sick.

To man any system of distribution, both specialized and general-purpose personnel are needed. Obviously nutritionists and food scientists are important. Medical and public-health personnel should be used to working under difficult field conditions, and to diagnosing and treating those diseases which arise as the machinery of society breaks down. While a physician normally concentrates on the most gravely ill patients first, and then cares for those less affected, in a famine the goal is to keep alive as many as possible, and this may mean that a severely limited amount of time and attention may be given to desperately ill patients. The physician may have to learn to delegate much heavier responsibilities to medical students, nurses, or even intelligent laymen, than he would normally do. Here and all through the relief organization, there should, of course, be maximum use of local nationals who are still able to work.

This calls for a word about priorities in rationing. Ideally, food should be distributed (usually on a family basis) giving special consideration to the following priority groups: (1) the most physiologically vulnerable; (2) the main work force; and (3) the relief and administrative personnel. Inasmuch as intense work is going to be asked of relief and medical personnel, and because they will also have access to food in transporting and distributing it, it is unrealistic to expect a lot of work from people who are hungry and not expect them to worry first about themselves and their own families. Rather than have food disappear in all sorts of ways, it is better to have a policy in which rations are set midway between what these people would take on their own and what they would receive if they were on the same level as everyone else. You can then hope that this rule can be enforced.

The second aspect concerns an opposite effect. Experience has shown that particularly when you are dealing with conscientious and compassionate nurses, medical students and young relief personnel, you may actually have to *make them eat*. Otherwise your whole relief system disintegrates.

The next heading is *logistics and communication*. Sooner or later, transport becomes the limiting factor in any relief operation. Maintenance personnel are as essential as logisticians and drivers. Spare parts may have to have priority over food in some areas. I can think of no better way to turn swords into plowshares than to employ some top military perosnnel in this group. One thing a good general staff officer knows supremely well is how to move a lot of material and equipment and personnel in difficult situations and in a great many different localities.

In all this, it is vital not to neglect the importance of *economic controls*. Price control is an essential measure. Failure to institute or to enforce it vigorously is a classic example of error through omission when dealing with a famine. Without such controls, high prices discriminate against the persons most in need. Furthermore, inflation will create a motivation for traders to withhold food at what would normally be the end of the famine, in hope of perpetuating high prices.

We have already seen the need for economists in monitoring the famine, and the progress of relief. While a relief effort should never be directed exclusively by economists to the exclusion of nutritionists and public-health personnel, it is just as absurd to plan relief operations without considerable advice from different types of economists.

It is also crucial to maintain *law and order*, to prevent looting and other abuses. This means that local police units, like the relief and medical personnel, will be expected to contribute intense work, and should also be given preferential treatment as regards food distribution. The relief organization needs personnel for liaison with civil authorities, the police in particular. Police, as well as other civil authorities, are invaluable in carrying information flow in two directions: from the field to the central planning office, and back from the central authority to local authorities, to field personnel, and to the populace.

Finally, even while the crisis is at its most acute stage, planning should be going forward for *rehabilitation* and even development of the area. We should be fully cognizant that relief is not always enough, particularly when the situation is not transient, but of long-standing, as is the case in the Sahel. Long-term rehabilitation and development plans are essential, and it is equally essential that they not be conducted by personnel who are either unfamiliar with the local problems, or too highly specialized to take the entire situation into consideration. Rehabilitation and development are interlinked; whereas at the height of a famine both untrained enthusiasts and overspecialized experts can make significant contributions under competent supervision, for these broader tasks we require personnel with a global view as well as those with a specialized competence. People with backgrounds in soil management, development economics, agricultural economics, home management, and employment training come to mind.

All in all, a relief operation is an immensely complicated undertaking. In describing what is admittedly an ideal form of organization, I have left out any number of refinements that might be mentioned. Even the fundamentals I have listed are, unfortunately, terribly hard to achieve in practice. Let us look at a good case of famine relief and then at the relatively deplorable Sahel performance still underway.

V

A fine example of coping with and containing a famine was the national and international effort during the famine in India during 1966–67. What the Indian Ministry of Food and Agriculture feared would be "a natural calamity of a magnitude unknown in recent times" became instead the object of what *The Washington Post* later described as "one of the biggest and most successful relief operations ever undertaken." Of all the subcontinent, the eastern Indian state of Bihar was most affected by the drought and subsequent famine, and it was here that the relief activities were concentrated.

Bihar had at that time the second largest population of the Indian states—roughly equivalent to that of France. Its economy was, and is, almost entirely agricultural; about nine-tenths of its 52 million people were engaged in farming, and of the 27 million acres in crops, less than one-fifth were irrigated, and of these only about seven percent from sure sources. While Bihar sits on one of the world's largest reservoirs of ground water, digging of wells and irrigation schemes had been postponed or delayed for almost a decade; when the monsoon failed for two years in a row, crop failure was inevitable. Over the two-year period, Bihar fell short of needed grain by almost 30 million tons. Reserves of food grains, including those necessary for seeds, had been mostly consumed; the crop of the fall before was at best one-fourth of normal, the spring crop only one-half. In addition, the Bihar state's administrative apparatus was relatively unsophisticated, and it had no child-feeding program which could have been used as the base of a relief effort.

However, when the famine began, there were some bright spots. During the lesser drought of the previous year, the Indian government had set up fair-price shops and practiced the logistics of importing and transporting large quantities of grain; voluntary agencies had acquired experience in setting up mass feeding

programs. Bihar itself had adequate storage and transportation facilities and an administrative structure that lent itself, especially in the Education Department, to relief operations. Moreover, ever since British times the Indian government had placed in the hands of its officials a comprehensive elementary guide to the handling of famines, called a Famine Code.

The basic priority of the Indian government was to obtain and dispense sufficient food. For this, three outlets were used: 20,000 fair-price shops distributed grain at fixed, subsidized prices; ten ounces of free grain was distributed each day to each aged or infirm person; and a child-feeding program provided one free meal each day to six million children and mothers. Members of the government, vividly aware, some of them for the first time, of the long-term personal and social effects of malnutrition, not only tended to favor the children in relief programs, but also speeded the development of a cereal-based, high-protein food, Bak Ahar, processed and packaged by Indian industry and distributed by the Indian government.

In the Bihar famine, the need for water was as great as the need for food. Lack of water threatened to cause the mass migration of villagers, thus destroying the food distribution system, in addition to posing health hazards in the hottest months of the year. To meet this need, the government began a program of well-drilling—some of the wells to be permanent, the rest of a more temporary nature, but each providing drinking water and irrigating half an acre of land through the driest period of the summer. Further needs for water were met by establishing an elaborate transport system, comprising modes of travel from railways to bullock carts.

Remembering the high death toll from cholera and smallpox during the Bengal famine of 1943, the government also disinfected wells and set up an immunization program. The response of the American government to the Indian request for vaccine, incidentally, was a model of promptness and efficiency—vaccine, injectors, and innoculation specialists to train Indians in their use arrived at Delhi five days after the formal request was made.

The government set up an information network that transmitted data by telephone or telegraph to a master control room where they were charted to give day-to-day information on food stocks and prices, water levels, disease rates and deaths, the numbers of people at free kitchens and on work projects, even the rate of local food looting. From this control center, field workers and the population were kept abreast of the changing situation by short-wave and public radio.

In addition, the government undertook to provide millions of dollars in loans to the Bihari farmers for the purchase of seeds, fertilizers, pesticides, and farm animals to rejuvenate the economy and prepare for the 1967–68 crop.

In all these efforts, the local Bihari government and the federal government of India were supported by supplies and cooperation from other nations, the United Nations, and international voluntary organizations. CARE alone set up 27,000 school feeding centers in Bihar to provide free meals to children and nursing mothers; the United States contributed one-fifth of its wheat crop.

In the end, the famine was contained. Instead of the millions of deaths predicted, the highest of the fairly reliable estimates was only a few thousand. It appears that among the poorest segments of society many were better fed during the famine than before—or perhaps afterward. The success of the emergency feeding program, especially in the health of the Bihari children (they were fed milk, and foods and food supplements high in protein, iron and other minerals, as well as vitamins, under fairly close supervision), led to a long-term commitment by the Indian government to the nutritional needs of the population. Even the work program, which certainly resulted, in some cases, in roads leading to and from nowhere, also sparked projects for more and better irrigation, field leveling, more efficient farming methods with higher yields, and better water conservation.

Despite the resolve of the Indian government to fight this famine with every possible resource, however, the struggle would have been hopeless without the dedicated cooperation of the international community. And even under these "ideal" conditions, as Alan Berg has pointed out, this "constitutes the first time in modern history that a government declared war on large-scale famine—and won." Despite its triumphant note, that is a melancholy statement.

VI

It is especially discouraging if we contrast Bihar with the disaster still taking place in the Sahel region in Africa. The area, just south of the Sahara, stretches from the west coast across the waist of the continent: about 4,000 miles across and 1,000 miles deep—approximately one-fifth of Africa. (Although Ethiopia is

not geographically a part of the Sahel, it shares its climate and its problems.) The population of this area of advancing sand and dwindling vegetation has been estimated at about 50 million. About one-third have been affected by the drought; U.N. Secretary-General Waldheim estimates that as many as ten million people may be facing starvation throughout the area.

In all these figures, "estimate" is the proper word, for although there are many settled farmers in the region growing subsistence crops of sorghum and millet, the population is primarily nomadic, moving with their herds through the Sahel along centuries-old grazing routes. Even with sophisticated administrative machinery and experienced personnel, it would be difficult to determine the condition and needs of a population in motion. The governments of the Sahel area are newly independent, have very few highly educated or technically-trained personnel, and no administrative infrastructure ready to cope with the drought. (Ethiopia, of course, until recently existed as a medieval kingdom, and until U.N. officials and the world press forced it on their attention, the corrupt government of Premier Wold had refused to recognize the existence of the famine except as a money-making enterprise. Indeed, students had been killed in demonstrations asking help for the starving peasants.)

Of the 12 new African nations in the Sahel area, Mauritania, Senegal, the Sudan, Mali, Upper Volta, Niger and Chad are severely affected; and, to a lesser extent, Ghana, Togo, Dahomey, Nigeria, and the Central African Republic. Except for Nigeria, which is growing wealthy from its oil deposits, these are among the poorest nations in Africa. Niger's gross national product is $80 per capita, Upper Volta's only $60. And, in fact, their attempt at development of the Sahel in the 1960s was a precipitating factor in the subsequent disaster. Like Bihar, this area lies on a large reservoir of ground water. Much of the foreign-aid program consisted of digging small power-driven ground wells, in a dry area, this would seem logical. However, the water could not be used to expand irrigation and production of millet and sorghum, but instead went to support increasingly large herds of cattle, particularly goats, belonging to the nomads. No provision was made for increasing the supply of feed for the animals, or of food—other than milk and meat from the cattle—for the growing human population, made possible by the beginnings of public health care in the area.

When, five years ago, the yearly rainfall decreased to less than half of normal, the herds competed for increasingly scarce vegetation, the nomads cut trees to provide more feed, and the voracious goats ate even the roots of the plants, destroying growth permanently. Animals began to die of starvation around the waterholes. Finally even the farmers, faced with the seemingly inexorable southward march of the Sahara itself, and the devastation of the nomads' herds, deserted their hamlets in increasing numbers, until few are now left to plan or tend next year's crop even if the rains should not fail again. If the population remains, the European Development Fund estimates that even with adequate rainfall there will be less food per capita in 1982 than there was in 1973.

Even where the effects of the drought became obvious to the governments of the Sahel, they were slow to act for a number of reasons. As I have said, they have few resources and few technically-trained personnel; there is no inter- or even intra-government mechanism for dealing with drought; there is very little cooperation among the 12 nations, and no tradition of worrying about the fate of some elements of the population—particularly the nomads. Rather, there is a long history of conflict between the nomads and the fixed agriculturalists.

Today's nomads are descendants of Arab slave traders who for over two centuries had preyed upon the other residents of the area; until the French colonists left Africa, they maintained a series of forts in the Sahel to prevent nomadic brigands from raiding the settled inhabitants. In the light of this history, as long as the drought affected primarily the nomads, there was a strong tendency to ignore it. It was only when the refugees, nomad and subsistence farmers alike, began piling up in the towns, starving and ill, that enough publicity was given to the death of cattle and people to inspire (or impose) relief programs.

Over a year ago, the Sahel governments finally set up a relief-coordinating committee, designed to distribute supplies from the international community to the individual nations, and to estimate and plan against future needs. However, the committee has been given no decision-making authority, so has been able to do comparatively little to help the situation. What coordination of relief there is (and it is better than in some previous famines) has been done through the FAO. However, the large sources of supply, from the United States, France, and the Common Market countries, exist autonomously, and are still not terribly well coordinated. (I would like to add here that by far the most important and effec-

tive help has come from the United States. All reports I have received, both as a member of the United Nations' Protein Advisory Group, and as Director of the Child Nutrition Task Force for UNICEF, indicate that it has been given efficiently, modestly, and on a considerable scale.)

While there has been considerable criticism of the FAO Early Warning System, it would be more accurate to say, not that the system did not work, but that it was not heeded—either by the Sahel governments or by the international community. The climatic changes were certainly known. International airlines keep careful tabs on all changes in weather patterns and had infomed the International Air Transport Association of the changes. The elements of knowledge were present, and there were warnings. That they did not result in action must be considered primarily due to a lack of interest on the part of the local governments, which, after all, must bear the first responsibility for the welfare of their own citizens.

However, in the final sense, it must also be said that neither France nor the United States, which had traditional or special responsibilities in the area—France in the Sahel and the United States in Ethiopia—did all they should have done to educate the local governments, either in competent administration or in the fact that a state must be concerned with the needs of every member of its population.

I may add that a sensitive early warning system should not only comprise information on climatic changes and the economic base. The report of the U.N. Task Force on Child Nutrition will recommend that there be regular careful examination of the state of health of the children in a given area, since this is the most sensitive indicator of any change for the worse in the health of the general population. It also has the advantage of differentiating among population groups and economic classes. The poor in any area are generally worse off in respect to health and nutrition as in most other aspects of life. The state of their children's health will make visible their increased needs even when the rest of the population, as in Brazil at the present time, has not suffered deprivation.

Even had the relief effort been as knowledgeable and well-organized as that in Bihar, however, the situation in the Sahel presents a much more difficult task. The distances in the area are gigantic. Transport of all kinds is inadequate. There are four old rail lines going up from the western ports to the southern part of the drought area. What roads there are are attacked by sandstorms in the dry season (so that driving is much like plowing through a succession of snow drifts), and washed out by rains during the rest of the year. In such conditions maintenance is a huge problem—as always in dealing with a famine, a limiting factor is lack of spare parts and trained mechanics. To best utilize that transportation "network" such as it is, food and medical supplies from overseas should be shipped to the African ports in preagreed tonnage, planned for the dry season and the carrying capacity of transport; otherwise food piles up in the receiving areas and is partially destroyed by pests before being moved. So far, however, with difficulties of communication and coordination between international donors and the Sahel governments' relief coordinating committee, this has not been possible. This year, as last, much of the distribution is being done by airlift, the fuel competing with supplies for transport space and available funds.

At present, it appears that there are quite adequate supplies of food in the main cities, but the relief efforts have not solved the problems posed by the Sahel famine. Looking to the future, it is by no means clear what we are actually dealing with. Is it an irreversible natural phenomenon—the downward drift of the Sahara, coupled with the failure of the polar air mass to move as far north as formerly? If this is the case, then it is pointless to try to rehabilitate the Sahel. It may as well be left for dead, and its residents resettled in other areas.

Or is it an ecological catastrophe, for which the sudden explosion of the nomadic way of life is responsible? If this is so, it may be possible to reclaim the Sahel by revising aid programs. Instead of the small wells, dug primarily to water animal and the human population, large irrigation projects may renew and expand farming in the area. But it will be necessary to persuade the nomads to limit their herds, particularly the goats, and to recognize the relationship between their actions and the well-being of their environment. From all indications so far this would be no easy task.

Or it is a complicated mixture of both causes? Before we can act wisely we must know. So far the Sahel has provided another tragic example of how not to approach development aid and how to deal with a growing famine.

VII

We should not leave a discussion of recent famines without at least a brief notice of the worst of all—the situation in which war is the cause and where one or more of the combatants may argue that it is an "internal matter." In such cases the humanitarian instincts of the international community may be dulled by political motives. There is essentially no chance, under the present conventions of international behavior, for a war-related famine to end anything but tragically.

The war in Vietnam and Cambodia is not yet over. How much permanent damage to the food supply the years of defoliation have done is now under investigation. The famines in Biafra and in 1972 in Bangladesh are of very recent memory. In the case of Bangladesh, the government itself, although new and untried, did relatively well at coping with the situation, in spite of the disorganization and disruption caused by the war. The expertise of the Indian government was also a big factor. International aid to Bangladesh was hampered by the fact that more than one government was involved, each with its own foreign policies to protect or further. The U.S. government did relatively well with its relief effort, but while it was useful, it was in this case not really a deciding factor.

Biafra was a more difficult situation. Although the Biafrans had their own territory and government, the international community persisted in considering their rebellion, at least officially, as an internal affair of the Nigerians. The United States, fearing that giving aid to the Biafrans, even for famine relief, would be considered a hostile act by the Nigerians, gave food through UNICEF and the Red Cross, but tried not to be involved. Although the Biafran government was competent and attacked the problem with organization and imagination, there was little it could do against the Nigerian blockade and the indifference of other nations.

As one who was closely involved in the relief efforts, I can state that much more could have been done had the United States and other national governments not lacked the courage. Even most of the U.N. organizations, in particular FAO and WHO, were as afraid of interfering as the United States. Indeed, in some instances they went to fantastic extremes not to be involved. UNICEF, alone of the U.N. organizations, worked without favor on both sides of the battle lines. And it is interesting and, I hope, instructive, that as a result it now has increased prestige and popularity throughout Nigeria, and elsewhere. This is a deserved tribute to the mixture of courage and goodwill that should have been uppermost in the entire international community even during a civil war.

Bangladesh is independent, Nigeria is at peace. Yet surely we need not repeat either of these man-made catastrophes.

While all men of goodwill recognize the need to outlaw chemical and biological warfare, is this enough? Both of these are indiscriminate in their effects, jeopardizing civilian bystanders as much as they do armed enemies. I would like to propose that starvation be similarly outlawed as a legitimate instrument of war, on the ground that it is worse than indiscriminate: it preferentially attacks small children, pregnant and nursing women, and the elderly.

Although starvation has been repeatedly defended by general staffs as an effective military weapon, history does not bear out this assertion. Sherman succeeded in arousing animosities that last to this day; it was the defeat of Robert E. Lee in battle that ended the Civil War. The French lost the Franco-Prussian War at Sedan and Metz, in the Loire Valley and on the Swiss border, while children died by the hundreds in the siege of Paris—and the garrison held. The German armies, during World War I, never lacked for abundant food, even while the Allied blockade was causing a high mortality from malnutrition in Berlin and Vienna. The children of Leningrad died by the tens of thousands in World War II, yet the Red Army kept its food supply going, and eventually broke out of the siege to join the advancing relief task force.

Yet for all this evidence, the attempt to starve enemies into surrender goes on. There is no sign that the crop destruction in Vietnam or the food blockade in Nigeria has had a decisive military result. As we have just seen, the effect on the civilian populations, particularly in Nigeria, was devastating.

The facts are that young, adult men are physiologically the most resistant to starvation, and that armed men rarely starve, particularly as they can always justify their requisitions by the nobility of their cause.

An international agreement to outlaw starvation as a weapon of war should be supplemented by one empowering suitable international organizations, such as UNICEF, the Food and Agriculture Organization, or the World Health

Organization, to enter a famine area to feed the non-combatant victims of starvation without prior authorization. How many large-scale disasters do we need before we learn that famine and pestilence are not purely "internal problems"? The time has come when, through international agreement and action, man-created famines should be eliminated. Any use of starvation as a means of pressure or punishment against individuals in small or large population groups is a violation of the rights of man.

VIII

What more can we do to deal with famine? Apart from the specific suggestions contained in the body of this article, there are certain central steps that could much improve relief performance in the future.

At present the FAO has a warning system, and a small U.N. office has been set up in Geneva to keep track of impending famine (and other disaster) situations and of available relief resources. However, the impact of this office is still essentially negligible.

I believe we must have, on the international level, a much stronger system not only to warn of famines but through which the United Nations and international voluntary agencies, along with all interested nations, could keep each other informed as to their preparedness and plans for cooperation. There should be a permanent secretariat of an international relief organization devoted solely to famine relief, which will keep up-to-date records on available relief resources and continually add new data that may be relevant to predict any disaster. The office should be counseled by an advisory body consisting of experts with wide experience in this field. This group would be "on call" for rapid assessment of an impending disaster situation in order to estimate when there would be a need, and what the needs would be. Some of the members would have the highly important task of recording the ensuing operations for a later review of their effectiveness and efficiency.

A principal continuing task of such a central organization should be that of training. Here there is the greatest lag when a crisis occurs. Regional workshops arranged by the international organization should be held to train persons who would then conduct training courses in their own countries. Each country also should train a cadre of personnel who would remain in their normal jobs but be available for disaster and famine relief work.

Inasmuch as coping with a famine is not unlike a military general staff exercise, it is possible to utilize some of the methods of preparation and education that have proved to be helpful in such staff training exercises, such as conducting paper-based maneuvers, where a hypothetical situation is created and the staff is asked to write in sequence the orders that are considered to be responsive to the information, with the "umpires" manufacturing new information as needed for the development of the exercise. Using modern technology, computer-simulation exercises could also be devised.

Finally, I would recommend that a suitable manual be prepared for governments and relief agencies, both to guide relief activities and to facilitate training, along the lines of the longstanding Indian Famine Code. In effect, this manual would be a loose-leaf notebook, based on recent experience and continually brought up to date. It should give general principles, supplemented by national, regional and local notes adapted to each local area.

Next, on the external level, donor governments should have a permanent coordinator of foreign aid (as the United States does in the AID organization). Internally, governments should have a permanent secretariat or office for national relief coordination, at the level needed to get prompt action through the government. The body should be headed by an influential person, who would maintain close liaison with other ministries, voluntary agencies, and so forth, which might be involved in dealing with any disaster. In normal times, the secretariat's duties would be to keep up-to-date information on national resources for use in time of disaster and to serve as contact with other national and international bodies.

Such organizational steps will not accomplish miracles. As the Sahel experience has sadly demonstrated, the capacity of local government sets limits on any relief effort. But a well-organized world community could make a big difference. The creation of the embryonic International Disaster Organization in the office of the Secretary-General of the United Nations is a beginning, but much more needs to be done: a solid, though small organization, a "reserve" of trained relief workers, manpower at the international and regional levels to educate national and international civil servants to deal with the many variables in a famine.

In addition, a world food reserve must be created, along the lines proposed

by Director-General Boerma of the FAO, and recently endorsed by many witnesses at the Senate Hearings on a National Nutrition Policy. Incidentally, the bulk of the reserves are best stored in cold countries (probably in the countries of such food producers as the United States and Canada) with regional stocks and possible diversion of grain ships at sea used to ensure the flexibility needed to take care of emergencies. As part of this preparation, it is obviously necessary that we reevaluate our national and international economic policies in regard to food. That this necessity for survival is no longer to be treated solely as a commodity for international exchange is shown by the convening this November of the World Food Conference which, we hope, will function at the very highest governmental level.

In the end famine is, of course, only the highly dramatic and destructive extreme example of malnutrition. Indeed, in this article I have found myself writing of rehabilitation after a famine as though the effects of malnutrition on Man were reversible. This may not be the cast even for adults. It certainly is not the case for malnutrition affecting infants during the critical growth of the central nervous system; no amount of later education or training may be able to make up for such damage. The problem of malnutrition is much broader than that of famine alone; in terms of stunted lives and coldly economic costs, its impact may be even greater. Any wise efforts for development must seek to ensure that (as is not at all necessarily the case in many countries today) economic growth means at least equal increases in the nutritional levels of the poor.

We now live in a much smaller world, from which some of our contemporaries have stepped out to look at the space ship in which we are all traveling. There is greater realization that all human beings are born equal and are of equal value. However, we have not arrived there yet. Let us hope that we have at least reached the stage where famine, wherever it takes place, however it has arisen, is seen as the enemy of Mankind. For us to feel that way, and to act effectively, we need to educate ourselves in compassion, as well as in technology.

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