

Immediate relief needs for Somalia

by Marcia Merry

The following is a checklist of immediate relief requirements to be met in Somalia as of December 1992. It covers the needs of day-to-day life, and progress in meeting these needs. Most of these emergency measures are interdependent. For example, as soon as water, shelter, and security can be provided, centers providing cooked food could be shut down, in favor of distributing foodstuffs directly to households and communities, and then restoring and expanding food output potential. The Red Cross estimates that over 75% of the nation's population are displaced as of year end, and forcing people to trek to feeding stations prolongs the displacement.

The quantities cited are based on meeting needs for 4 million people. As of mid-December, American Red Cross officials reckoned that 1.5 million Somalis were at risk of starving, and another 3 million (out of a total population of 6 million) were suffering from lack of food. Overall, 95% are malnourished, and 75% suffer severe malnutrition. Therefore, an average of 4 million was taken for calculations purposes.

Emergency measures

Food: As of year end, the flow of emergency food staples required per month for Somalia are: 1,800 metric tons of cereal grain products, 345 metric tons of beans, and 110 metric tons each of oils and milk powder. Additionally, there is need for a quantity (to be determined by nutrition experts) of specially fortified foods for "re-feeding" or "pre-feeding" for the critically malnourished, and infant formula. An example of a "re-feeding" product is "Unimix," a fortified food that can be made from specially milled corn, rice, wheat, or other grain, with oils and other ingredients added for nutrition and easy digestion. Unimix is used for small, frequent meals.

Complete-diet food items, such as meat, fish, dairy and poultry products, fruits, and vegetables must be mobilized for mass-scale provisioning as soon as the sickly are rejuvenated enough for full diets.

The volumes of cereals and other staples are calculated on the guideline factors of daily per person rations of 1 pound of cereal stuffs; 3 ounces of dried beans, peas, or other pulses; 1 ounce of dried milk powder; and about 0.06 pounds of oil or other fat.

Distribution: Providing dry rations to household groups in their own villages and residences at the earliest time must be the objective. As of December 1992, the Red Cross was

operating 900 "wet feeding" stations in the country, serving cooked food for over 1 million people, because they feared that dry staples might be stolen, and also because hundreds of thousands of displaced people had no means to prepare meals. As of mid-December, 55% of Red Cross relief food was provided in wet rations and 45% in dry form.

Water: Each person requires at least 8 glasses (roughly 2 liters) of safe water a day for drinking, and additional water per capita for basic hygiene, cooking, and other vital functions (on average, another 90 liters). For 4 million dependent Somalis, this means about 106 million gallons a day (400,000 cubic meters) for personal needs. In addition, water must be provided for various public uses (administrative centers, hospitals, and feeding operations) and for livestock and agriculture.

To meet immediate needs, all wells must be freed of debris and river waterworks made right. Necessary volumes of chlorine, alum, and other supplies, portable water purification equipment, such as that used by the U.S. military during the Persian Gulf incursion, and large quantities of rehydration packets are essential.

Logistics/transport: Food relief should be organized on the needed scale in all locations immediately, instead of the slow pace followed by the U.S. deployment in mid-December, proceeding place by place. Rapid delivery can be done by a combination of airlift, sea delivery, and road transport. This ready-on-the-spot approach is also required for vaccines, water treatment equipment, etc. Somalia has two international airports (Mogadishu in the south central area, and Berbera in the north), and five other domestic airfields (Kismayu, Burao, Hargeisa, Alula, and Bosasso). The major seaports are Mogadishu, Berbera, and Kismayu, but other coastal sites can be used for unloading cargo by military logistics methods, for example, the "Ro-Ro" ships, which carry loaded trucks ready to roll-on and roll-off.

Shelter: Housing is required on a mass scale. Red Cross officials estimate that 75% of the population is displaced. Villages and major towns, where over 38% of the population lived, have been destroyed, and thousands of the 70% or more of the population who tended livestock have been impoverished and lost their movable hut homes. The modern German and Japanese spray-concrete construction techniques can be brought to use in the towns and villages, and portable tents and similar emergency housing can be made available to nomadic people as desired.

Public health care: Besides clean water and general sanitation, the basic vaccinations and other public health measures against measles, pertussis, diphtheria, tetanus, polio, and typhoid must be implemented immediately, and measures must be taken to deal with tuberculosis and other afflictions now rampant. Veterinary emergency vaccination and other measures are also required for the flocks and herds. As of mid-December, vaccinations had been administered to 2.5 million sheep and goats, 500,000 camels, and 500,000 cattle

in a program run by the Red Cross, and covering 175 villages.

Medical care: Specialty centers must be set up to provide surgical procedures, and care for chronic and rehabilitation conditions—artificial limbs, etc.

Power: Emergency diesel fuel power, kerosene lighting, and central power systems for the largest towns must be installed or restored nationwide.

Economy: Seeds and livestock herd replenishment are essential to restore output potential of the farming and pastoral economies. Since December 1991, the Red Cross has provided 1,260 metric tons of seed (corn, sorghum, and cow peas) and 18,000 hand tools for the Juba Valley, but much more remains to be done.

Army Corps of Engineers approach

Most of the above emergency measures can potentially be met by the combined efforts of military personnel, especially combat engineers, and the charitable agencies working in Somalia—International Committee of the Red Cross and Red Crescent, the Catholic Relief Services, Save the Children, World Vision, CARE, and a few others.

However, the additional essential relief measures require an Army Corps of Engineers approach to intervene with the infrastructure projects, the education and job training, and restoration of social life and economic activity that will be the foundation for hope and prosperity. The following are the guidelines.

Water projects: The run-off and other available fresh water in Somalia is about 11.5 cubic kilometers, of which only about 7% is made use of. The central water works of Mogadishu, restored to service the week of Dec. 14, must be refurbished, with new hook-ups extended beyond the current reach to properly serve the city. New urban waterworks must also be built in other towns and major centers, with the standard 40-50 year lifespan built in.

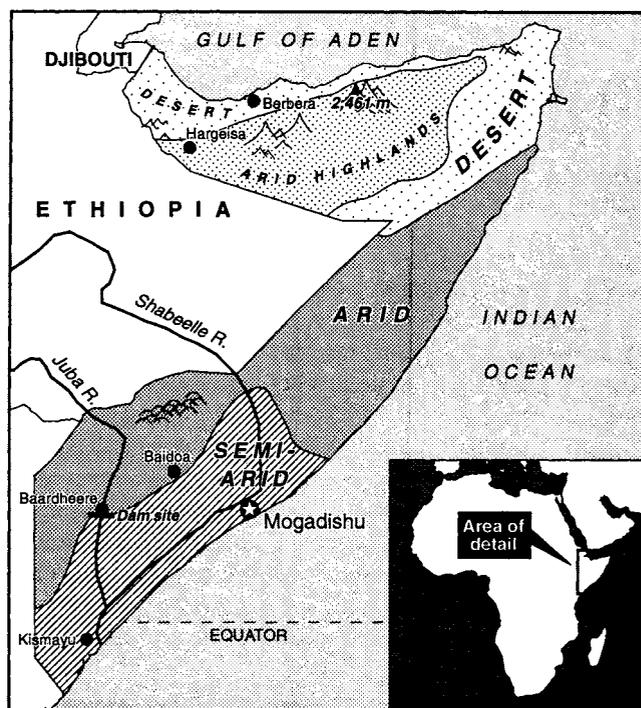
In the northern and western highlands, watering places for livestock (camels, goats, sheep, cattle) must be restored and augmented immediately.

Overall, only 37% of the Somali population (50% urban and 29% rural) had access to safe water as of 1990, even before the present breakdown crisis. Only 18% at that time had access to adequate sanitation facilities (44% urban and 5% rural.) Over 1987-91, it was estimated by Unicef that there was a 78% use rate of oral rehydration treatment among Somali children because of insufficient and contaminated water.

The waterworks centerpiece of the nation should be a strategically located nuclear-powered seawater desalination plant (nuplex) that could provide 100 million gallons a day, and plenty of power for food processing, modern arid-agriculture methods, and other needs.

Agriculture: All the waterworks (valves, channels, catchment areas, pumps) must be restored to use in the Juba-Shabeelle rivers region to allow maximum harvests at the

Somalia: selected physical features



earliest time. With proper water management, this region of the Somali-Ogaden Desert can be transformed into the "Imperial Valley" of Africa, with citrus crops, high-yield grains, vegetables, tropical fruits, and flowers.

Coastal: infrastructure is required for deep-sea shipping, cheap coastal transport, and to provide the basis for a fishing industry. There is a fabulous potential fish catch in the north from the Gulf of Aden. Processing facilities are also needed.

Food processing: and preservation facilities are needed. Plans exist for modern food-irradiation plants that could provide the technology to preserve the meat from the highlands, and ocean catch that could guarantee good diets in the future, with no need for refrigeration.

Inland: transport requires the initiation of the first trans-Somalia rail line, to connect the pastoral highlands, southern irrigated farm regions, and coastal settlements.

Health facilities: A network of primary and secondary health care centers needs to be constructed and up and running as early as possible. As of 1990, on average only 18-30% of Somali children had been immunized by the time they were one year old.

Education: facilities and programs must be made universally available. As of 1990, Unicef estimates of literacy in Somali were 36% for men and 14% for women. An Army Corps of Engineers approach to constructing vital infrastructure provides the opportunity for teaching principles of science and technology in action.