In the past 15 years food insecurity, malnutrition, and disinvestments in health systems have contributed to increasing national crises and made countries more vulnerable to systemic shocks. Over this period the world has experienced an alarming increase in costly humanitarian disasters that have tragically affected millions of people each year. Shocks have included violent internal conflicts; natural traumas such as droughts and hurricanes; economic shocks; and the surging HIV/AIDS epidemic. The greatest numbers of affected people have been those uprooted by war and natural disasters, which doubled from 20 million in 1985 to 40 million in 1994 and remained over 35 million in 1999, and those living with HIV/AIDS, which increased from only a few million in the early 1980s to 34 million in 2000.

Besides causing terrible suffering and death, these crises have caused many developing countries to suffer serious economic and food production setbacks. Global expenditures for humanitarian crisis interventions have grown while official development investment has stagnated or declined, adding to the drag on development. For instance, from 1985 to 2000 the World Food Programme shifted the balance of its program toward emergency response and away from sustainable development of food security and nutrition.

It is now time to invest in nutrition as a tool for crisis prevention, mitigation, and management for three reasons:

1. Good nutrition relieves the social unrest underlying violent conflict;
2. Good nutrition decreases the human vulnerability that transforms systemic shocks into humanitarian disasters; and
3. Good nutrition lowers the death rate and promotes timely return to equitable and durable development in the aftermath of crises.

Nutrition Problems as a Cause of Conflict

Studies of “state failure” show that the most powerful predictor of future conflict within a country is an infant mortality rate above the global median. This is not because infant deaths per se cause conflict but because infant mortality is the single most efficient variable for reflecting a country’s overall quality of material life. In fact, a group of variables causing mortality, such as malnutrition, poor health care, and lack of education, would be just as predictive. As nutritionists know well, more than half of all child deaths in the world each year are associated with poor nutrition. And just as for conflict, the key basic and underlying causes of malnutrition are scarce resources mediated by faulty political economic systems that limit food availability and equitable access to food, education, and health care. Basic causes of malnutrition are similar to the basic causes of conflict—they involve violation of basic human rights and the state’s unwillingness or inability to distribute resources equitably.
Food insecurity is usually implicated in conflicts arising from competition over scarce, depleted, or poorly distributed resources such as land and water. Deteriorating ecological relationships and lack of agricultural inputs push land productivity to its limits, forcing farmers to compete for scarce resources with other ethnic groups in both rural and urban settings. Ethnic conflicts subsequently arise against a backdrop of struggle over scarce food or other components of livelihood, often in a context of political manipulation and state failure. In the poorest countries food production not only supplies needed food, but is also a major source of income and livelihood. Under conditions of poor food security even food-producing households often have inadequate access to food. Affected groups become ripe for rebellion when given the opportunity, even if it involves lending their support to spurious causes and predatory elite forces. In the long term, malnutrition causes conflict, and conflict in turn delays nutritional improvement, undermining productivity and deepening poverty and political instability, thus furthering the invidious spiral.

**Nutrition and Vulnerability to Shocks**

Not all crises turn into humanitarian disasters. The key is human vulnerability, which is the difference between the intensity of a shock (or hazard) and the capacity of the society to cope with it. When a crisis hits or an emergency develops over time, the degree of initial malnutrition and the intensity of its underlying causes are sensitive measures of the level of suffering and death that people will experience. When a population’s underlying nutrition is poor before the crisis, the limited nutritional stores of young children are soon depleted, increasing their risk of severe malnutrition, disease, and death. Crisis can also provide an opportunity for underlying micronutrient deficiencies to tip over into outright conditions such as scurvy, pellagra, and beriberi, as has frequently been the case in Eastern Africa and other disaster areas.

Crises are amplified by the impact on the underlying causes of malnutrition: food insecurity, poor health systems, and poor interpersonal caring. Food-insecure, marginal agricultural areas faced with drought, high winds, floods, or shocks from global financial markets are highly vulnerable to the cycle of humanitarian disaster and poor nutrition. People in poor and food-insecure countries are four times more likely to die in natural disasters. Conflicts and drought in the Horn of Africa or the economic shocks in Indonesia in the 1990s triggered famine and violent conflict and led to millions of deaths of noncombatants. In contrast, Hurricane Mitch caused less political instability, population dislocation, and human suffering in Central American countries in 1998 probably because of better baseline food security.

Nowhere is the synergy between infection, poor nutrition, and high mortality more clearly demonstrated than in disasters. In a crisis, deaths due solely to food shortage are often less common than deaths from diseases that kill because of increases in disease susceptibility due to malnutrition. Poor health conditions in a society, including poor water supplies and poor health care infrastructures, become a deadly prescription for disease and death in a crisis. Inadequate water, sanitation, and shelter systems magnify public health crises common under conditions of displacement and distress migration.

Also, the ability of households to provide the necessary care for good nutrition is undermined in a crisis. Uprooted and fragmented households are seriously challenged to care for their members, and wherever caregivers are initially ill informed on the benefits of infant feeding practices under stress and in illness, their vulnerability to crisis is higher.

Because the initial nutritional condition of the affected population is critical in famine prevention and disaster mitigation, policy choices that improve nutrition will reduce famine vulnerability. Such policies include reducing crop and livestock production risks, stabilizing food prices, lowering employment and income risks, and lowering risks to health. They also include improving baseline birth weights and at a minimum the general nutritional status and micronutrient nutrition of children and mothers. These
steps should be viewed not only as strategies for reducing crisis vulnerability, but also as morally right public actions that are beneficial for economic development.

**Nutrition in the Management of Crises**

Closer attention to nutrition as part of early warning, relief, and rehabilitation efforts can help improve management of humanitarian disasters.

Early warning systems have become much more effective in recent decades because of careful attention to indicators of food insecurity and the basic causes of malnutrition. For instance, the early warning of the Ethiopian and Kenyan drought in summer 2000 led to an early response that helped avert a famine of the magnitude experienced in the mid-1980s, when more than 1 million died. Although nutritional status itself is a trailing indicator for early warning purposes, nutritional surveillance can pinpoint geographic areas that are more vulnerable to crisis and stimulate and target programming.

All relief efforts should include plans for protecting or reestablishing the sustainable food and livelihood security of the affected groups when the crisis subsides. In the worst-case scenario, food-insecure populations facing a crisis embark on a series of deleterious coping responses ranging from degrading their diets and eating their seed to selling productive assets and finally abandoning their homes in search of food. Nutritionally depleted and destitute families arrive at central locations with children and other individuals requiring immediate therapeutic feeding. Relief agencies require ongoing information systems and institutional capacities to prevent such scenarios. Frequent and appropriate provision of adequate food is a most important measure. Otherwise, agencies face not only the management of costly feeding in camps for refugees or internally displaced persons, but also formidable problems of resettlement and reestablishment of livelihoods before normal economic conditions can resume. Such conditions can also increase chances of relapse into crisis, and substantial lapses in nutrition support to pregnant women, infants, and young children can damage the long-term human capacity of the population for mental and physical work.

Inappropriate provision of relief, however, can have adverse political and economic effects, contributing to the crisis because of undersupply, oversupply, or misuses of food aid. Consequently, relief efforts should include proper initial assessment and periodic monitoring of the needs and uses of food in relation to other livelihood needs and an analysis of the opportunities and risks involved in providing only food. Indicators such as weight-for-height (wasting) of children under five should be used to monitor the situation in order to predict the risks of death and the progress of the relief effort.

In planning, relief, and rehabilitation phases, it is critical that crisis management include trained nutritionists, preferably local professionals of both genders, to manage the nutrition situation. Such persons should direct assessments of the extent and causes of malnutrition, estimate the size and mix of food rations according to international standards, promote protective behaviors such as breastfeeding, and advocate with relief agencies and donors for the most appropriate food assistance programming and policies for the full duration of the emergency operation.

**Suggested Reading**


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