Fionnuala J. Carey, Student Participant Farragut High School Farragut, IA

Ethiopia's ominous drought

Abdi sits in front of his hut looking at the bare land before him. Worry is all that has been on his mind lately; not knowing if the rains will come tears at his emotions. He knows that if rains come, crops will grow and his family will survive, but if rains fail to arrive, the land will stay barren and his family unfed. Abdi and his family are just a small part of the 45 percent of Ethiopians living below the poverty line.

Watching Abdi sit idly on the parched ground, one would not imagine that this ten-year-old boy is the man of the household. His father died last year from AIDS, and his mother is ill – slowly dying from the same virus that took his father.

The livestock have been all that has kept his family alive, but now the gaunt herd of animals behind his home are down to only a few. The crops are Abdi's last hope for survival, but lately hope, itself, has become scarce.

Introduction

A drought has swept across eastern Africa affecting countries such as Kenya, Eritrea, Somalia, Ethiopia, Djibouti, Tanzania, Burundi, Rwanda, and Uganda. Ethiopia is among the hardest hit in one of the most food insecure regions in the world. Poverty is persistent, and even in years of adequate rainfall, there is not enough food to feed the population. The cycle of poverty and drought has created chronic malnutrition; caloric intake is below sustainable levels and a significant proportion of children exhibit growth stunting.

The situation in Ethiopia is a complex emergency; lack of infrastructure and education, HIV/AIDS, population growth, and violence all complicate the problems created by the drought. This crisis undoubtedly has the potential to undermine traditional livelihoods, and only international intervention will help to reverse its effects.

Ethiopian Land

Ethiopia is a land of diverse altitudes and climactic conditions. Temperature, rainfall, and soil types vary among the different altitudes.

Water is abundant in areas of higher altitude. Rivers flow out of the Ethiopian highlands in all directions; the Blue Nile starts its 4,000 km voyage to Egypt by racing over cliffs, watering the rainforests beneath, and lakes, such as Lake Tana which covers more than 3,600 square kilometers, dot the landscape.

Dry land consists of the areas of lower altitude and makes up 66.6 percent of the country's total landmass. This land has potential to increase yields through appropriate

management of resources, but knowledge of dry land biodiversity is limited, and indigenous practices are either unknown or undocumented.

Land that is steep, rocky, or unfit for crop production is often submitted to the nomadic pastoral system. This system is in danger for several reasons. The growing population is threatening the nomadic lifestyle and creating conflict with settled farmers, and reduced crop means that the land is not able to support the livestock.

Failed Rains and Causes of Crisis

Ethiopian crops depend upon two rain seasons throughout the year; a short season, Belg, beginning in February, and a long season, Meher, beginning in June. These intense rains are unpredictable, and the times they don't come are severely fatal. Two successive years of failed rains have facilitated an ominous drought.

This drought has been so relentless that successful rain seasons have done little to reverse the crisis. The loss of livestock has been too great to quickly replenish the herds, and drought has reduced the fecundity of the remaining herds. Also, cold water on malnourished livestock causes hypothermia decreasing the number of herds even further. The heavy rains also cause a temporary flood that destroys the country's infrastructure, being absorbed so quickly that the land is left parched again within only a few hours.

Although drought has been the catalyst of the Ethiopia crisis, other factors have also contributed to creating such a dire situation.

Lack of education only aids the plague sweeping the nation. Women are even less educated than men, which results in 80 percent of households run by women suffering from malnutrition. Lack of knowledge of contraceptives has created a booming population and soaring number of HIV/AIDS. In fact, the East-African population has more than doubled since 1974 and is expected to increase by another 40 percent by 2015. Despite rural-to-urban migration, there are still more people dependent on agriculture than ever before.

Armed conflict creates a security issue for both aid recipients and workers. The long-term border dispute between Ethiopia and Eritrea, poverty, and lack of food has made violence endemic in some areas.

Statistics

The drought in Ethiopia has created inconceivable statistics and has ranked the country 21st in the world for under-five mortality rate. Only 24 percent of households have access to safe drinking water. For many Ethiopians, crop production is only adequate for 6-9 months of the year; therefore, malnutrition affects a large portion of the population. Approximately 6 million people are in desperate need of humanitarian assistance, and 1.2 million children under the age of five are threatened by malnutrition and disease. 47 percent of children are underweight, 25 percent are stunted, and 11 percent are wasted.

Food Aid

Food Aid, though extremely beneficial, creates difficulties as well. Getting the food aid is much easier than dispersing it to the needy population. Ethiopia is landlocked and must depend upon the port of Djibouti to accept shipments that have arrived from a 32-day sail across

treacherous weather conditions and pirate invaded waters. The food aid must also remain dry on this trip or it is of no use.

Once the shipments reach land, another trek begins. Trucks transport the cargo across a 220 km ramshackle road just to get to the Ethiopian border. Violence among ethnic groups makes the shipments vulnerable to armed fighting along the poor, remote roads. These transportation difficulties also greatly weaken access to markets.

Solutions

Organizations and Programs

Numerous benevolent projects and programs have been started to help the situation in Ethiopia. The African Development Bank (AfBD), World Food Programme (WFP), World Health Organization (WHO), Food and Agriculture Organization (FAO), and the United Nations Development Programme (UNDP), along with smaller organizations have created projects dealing with water/sanitation, environmental degradation, poverty, education, nutrition, and HIV/AIDS.

All of these programs and practices must first understand the nature and complexity of the land and the situation. Once research is done, natural vegetation may be developed and/or restored through proper planning for implementation of conservation programs involving sound environmental policies and strategies.

Sustainable Irrigation

Some programs aim to increase production by improving traditional small-scale irrigation schemes. Irrigation projects are difficult, risky, and expensive. In order to succeed, sustainability must be taken into account. Sustainability depends upon 4 factors.

- Scheme Location Projects must be close to markets and not where there are too many competitors for water.
- Social Structure Projects must work with natural resources and existing social structures.
- Study and Design Not all modern irrigation is an improvement over traditional practices. Farmer's views must be heard.
- On-going Support Donors must recognize the need for on going support so there are no shortages of funds.

Pastoralism

Pastoralism is a subsistence pattern that has been proven sustainable and successful for thousands of years. Pastoralists migrate seasonally, tending to herds – mainly cattle, and small-scale agriculture is practiced during rainy seasons. The livestock provide protein, fat, calories, and micronutrients to their diet, and agriculture provides carbohydrates and additional nutrients.

Pastoralism has survived numerous droughts but none as severe as the current condition. A cycle of droughts has caused a decimation of more than 70% of livestock in the region. Remaining herds are being sold off, pushing many pastoralists further into poverty.

Research shows, however, that pastoralism is still the most sustainable livelihood for the region and that most people *want* to remain pastoralists. UN officials, aid providers, researchers, and local leaders all agree that pastoralism must be sustained but must also adapt to the changing economy.

Programs are being implemented, teaching the population to settle and farm. Policy makers see pastoralism and agriculture as two separate ways of life. In reality, most people practice both. Policies and programs should be tailored to support the pastoral livelihood rather than permanently stationary farming. This can be achieved through mobile aid stations, programs that don't force long-term sedentariness or create economic incentives for sedentary farmers, and flexible international borders and improved infrastructure to allow easy movement and access to markets. Pastoralists must be seen as economical contributors, and policy makers must have an understanding of the pastoral lifestyle.

Regional Approach

In 2002, per capita GDP was US\$89, and only 24 percent of the population had access to clean drinking water. Ethiopia ranks among the lowest countries in the world in human development. Strategies to raise government awareness, therefore, are probably not going to be effective because the government has little resources to aid their citizens.

A regional approach is more logical and, most likely, more effective. Inequality of aid has caused migration and displacement in East Africa. A regional approach would ensure that all countries in need receive aid. A regional approach is also more appropriate because of factors such as weather patterns, widespread underdevelopment, and exponential population growth.

Work Needed on Many Fronts

Ethiopia's situation and the situation of other countries in Eastern Africa are part of a complex crisis with no simple solution. Environmental factors intensify problems brought on by underdevelopment, poverty, violence, and extensive poor health. Innovative programs must be created that use strategies including:

- Nutritional Aid Improvements need to be made on obtaining dependable sponsors. Shipment of cargo both on and off land can be improved by developing better shipment strategies and improving the state of roads and infrastructure.
- **Development** Development of both economy and infrastructure would benefit the people not only during droughts but in day-to-day living.
- Education Programs Education has a direct effect on malnutrition. Educating the population would lower numbers of HIV/AIDS and death by underweight. Pastoralism creates a problem to education; if people are constantly migrating, an education system must be created that moves with the people, or is standard throughout the region.
- **Healthcare** Healthcare is necessary in all societies, but extra care will be needed to deal with the problems that have already developed due to lack of

attention. Problems dealing with HIV/AIDS and malnutrition must first be settled before creating a sound, sustainable healthcare system for the country.

Respect of Culture

Regional beliefs and culture must be respected by generating community involvement projects without forcing lifestyle changes. Aid that goes against cultural practices and traditions will not be as successful as aid that supports the community. Support should enhance lives rather than revolutionize them.

Conclusion

The situation is Ethiopia is complex, and there is no easy way to resolve it. Terrain, remoteness, and climate all pose significant challenges to crop and livestock production. A severe drought has brought about a famine, leaving much of the population malnourished. Basic agricultural technologies, unreachable markets, and violent politics only add to the already dismal situation.

There are many ways to approach the problem, but no matter how one attempts to approach it, they must first understand the nature and complexity of the region, and of the situation. Research must be done not only on the problems of drought and malnutrition, but also on the lifestyles and culture of the people. Help must be compatible with the land, agricultural practices, and infrastructure, as well as the people who suffer there every day.

Works Cited

- "Ethiopia Facing Food Crisis." BBC News 26 July 2002. 12 July 2007. http://news.bbc.co.uk/2/hi/africa/2153837
- "Ethiopia: Enhancing Food Security Through Small-Scale Irrigation." International Fund for Agricultural Development (IFAD) April 205. 14 July 2007. http://www.ifad.org/evaluation/public_html/eksyst/doc/profile/pf/ethiopia.htm
- "Ethiopia's Unprecedented Crisis." BBC News 1 October 2002. 12 July 2007 http://news.bbc.co.uk/2/hi/africa/2290541.stm
- "Q&A: Why is Ethiopia Facing Another Famine?" BBC News 11 November 2002. 12 July 2007 http://news.bbc.co.uk/2/hi/africa/2440793.stm
- Dagim Mersha. "Dry Land Areas for Development, Biodiversity in Ethiopia." Ethiopian News Agency The Ethiopian Herald. 14 July 2007 http://www.ena.gov
- Danforth, Elizabeth. "East African Drought. Environment, Poverty, Violence: Is Pastoralism a Thing of the Past." PowerPoint emailed to Fionnuala Carey. 31 July 2007.
- Nita Bhalla. "Getting Food to Hungry Ethiopians." BBC News 1 November 2002. 12 July 2007. http://news.bbc.co.uk/2/hi/africa/2387863.stm