



Hungry for Food Security- The East African Experience
Senior 4: World Geography – A Human Perspective

- HANDOUTS -

1. Handouts for Lesson One:
 - Note taking sheet for PowerPoint presentation
 - Homework after Lesson One – Researching Key Indicators
2. Handouts for Lesson Two:
 - Case Study – Dibaba, Ethiopia
 - Case Study – Chambwe, Malawi
3. Assessment Assignment
 - Assessment Assignment Expectations / Rubric
 - Newspaper Article for Reproduction
4. Teacher Feedback Form

Hungry for Food Security- The East African Experience

During the PowerPoint presentation, please make sure to take good notes so that you don't miss important information. This information will be useful for you as we work through this unit.

1. What is the definition of 'food security'?

2. How many people in Africa considered undernourished?

3. What are some causes of food insecurity?

4. What is 'sustainable livelihoods approach'?

5. What are some possible grassroots solutions for rural African communities?



HOMEWORK –

RESEARCHING KEY INDICATORS FOR FOOD SECURITY

For your assigned country, research key indicators which you can use to evaluate the causes of food insecurity. Your research will prepare you to form an opinion on which areas of development require the most attention given current levels of progress.

Assigned Country: _____

Key indicators to consider:

- Food Insecurity Rates
- Environmental Degradation (deforestation rates, desertification etc.)
- Climate (average rainfall, length of growing season etc.)
- Human Conflicts
- HIV/AIDS prevalence rates (and other diseases such as malaria which can cause a shortage of labour power)
- Average Household Income

Useful Websites for Research:

Food & Agriculture Organization (FAO)

- 2006 State of Food Insecurity (SOFI Report)
<http://www.fao.org/docrep/009/a0750e/a0750e00.htm>

World Health Organization (WHO)

- Core Health Indicators by Country/Topic Database
http://www3.who.int/whosis/core/core_select.htm

World Bank

- Data Query – World Development Indicators by country
<http://devdata.worldbank.org/data-query/>

United Nations

- United Nations Development Program – 2006 HDI Data
<http://hdr.undp.org/hdr2006/statistics/data/>

UNAIDS

- AIDS Information by Country
<http://www.unaids.org/EN/geographical+area/by+country.asp>

CASE STUDY – DIBATE WOREDA , ETHIOPIA



Overview

Dibate is one of the least developed Woredas (districts) in Ethiopia and the majority of households in the region are considered to be highly food insecure.

Protein Energy Malnutrition (PEM) and other micronutrient deficiencies are common throughout Ethiopia and are especially prevalent in Dibate. Vitamin A, iron and iodine deficiencies are also prevalent amongst children under the age of five and women.

Poor natural resource management practices are resulting in environmental degradation which is evident in high rates of deforestation, reduced biodiversity and declining soil fertility. Moreover, inefficient farming techniques and prevalence of pests contribute to low productivity of both crops and livestock. To make matters worse, very little off-farm income generation taking place as the Dibate is very isolated and lack of roads for transport limits economic opportunities. Due to this isolation, access to education – including agricultural extension training – is very limited. Finally, traditional practices, especially those related to gender, also result in intra-household inequalities in food consumption.

Key Issue: Natural Resources Management and Low Productivity

Two types of farming are practiced in Dibate, the grain-plough complex brought by new settlers to the area and the traditional shifting cultivation of the indigenous Gumuz people where farmers grow crops on a plot for only 2-3 years before moving to new land, which now, due to increased competition for land, requires clearing of forests.

Only 22, 211 hectare or 6% of the land is currently used for crop production, which means only 2.54 hectares per household. The limited land used for crops has low productivity due to declining soil fertility and unimproved farming practices such as monocropping, lack of water, the prevalence of common pests and the use of low-yield crop varieties.

Though the economic role of livestock is important to Dibate, its productivity is low. The distribution and ownership of livestock in the Woreda is highly unequal, varying greatly between villages and households. There are rampant livestock diseases. Livestock are sources of both food and income. Competition for land has also led to overgrazing which is taking its toll on the land.

Key Issue: Inadequate Infrastructure and Human Resources

Dibate remains relatively isolated. All weather roads, markets, credit facilities and communication services are all in short supply. Local people often cite this isolation as a major contributing factor to their poverty and food insecurity as lack of alternative economic activities limits their ability to cope with shocks to household food supply.

High illiteracy rates and lack of access to educational services also cause significant problems. There is little in the way of agricultural extension training taking place and little coordination amongst stakeholders in the agricultural sector.

CASE STUDY – CHAMBWE VILLAGE, MALAWI



Overview

Chambwe Village is located in the Nkhata Bay district of northeastern Malawi. Chambwe is home to over 1000 people living in 190 households. Many of the households are headed by women and/or by elderly guardians of AIDS orphans.

Residents of Chambwe are considered to be highly food insecure. Children under the age of five are especially vulnerable to malnutrition and micronutrient deficiencies. As in the district as a whole, the majority of Chambwe's residents are dependent on subsistence farming.

Key Issue: Nature of Food Production

The staple crop in the region is Cassava, which is very labour intensive to produce – both in terms of agricultural production and processing into edible porridge. Poor nutrition is therefore an issue, both due to unstable supply (caused by shortage of labour) and the fact that cassava-based staple diet simply does not provide enough protein. While some households also grow maize and rice, overall crop diversification is not widely practiced. Furthermore, low-levels of household income prevent the purchase of protein-rich food to supplement the diet.

Heads of households in Chambwe, who are largely elderly and/or women, also have limited knowledge and skills in areas such as agroforestry, crop diversification and irrigation that could enable them to increase the productivity of their gardens for the long-term.

Key Issue: HIV/AIDS

Neighboring villages nicknamed Chambwe 'Nakongwa' meaning 'the feverish village', due to a high incidence of HIV/AIDS. By 1996, the death rate due to AIDS peaked at four deaths per week. By this time, the most productive segment of society – men and women between the ages of 27 and 35 - began falling ill. By 2001, older members of the community were almost the only ones left to take care of the hundreds of orphaned children.

Household resources in Chambwe are stretched in order to meet increased demand for food as household sizes have increased due to orphan-care as many households are caring for as many as four or five AIDS orphans. Food supplies and income are also needed to provide for the sick, who have an increased need for nutrients and to provide needed care and medical support.

At the same time, with the loss of the most productive labour groups to AIDS, food production has declined as a result of shortage of labour power and shortage of knowledge and agricultural expertise.

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Media Response

The issue of food security often appears in the media. Using the sustainable livelihoods approach and the research you have conducted in this unit, examine the example of recent coverage of the issue and write a response, in the form of the letter-to-the-editor, in which you apply what you have learned:

- point out the details in the article/broadcast which effectively address the issue of food security
- explain additional factors that affect food production and supply in the case described
- explain how the community is currently responding to the food insecurity
- apply the sustainable livelihoods approach to proposing another possible intervention and predicting its impact on achieving and maintaining food security and eliminating hunger in the case described

Assessment Rubric

Name _____

<i>Criteria</i>	<i>No</i>	<i>Satisfactory</i>	<i>Good</i>
Knowledge and Understanding <ul style="list-style-type: none"> • identifies factors that affect food production and supply • identifies ways in which the community responds to food insecurity. 			
Thinking and Inquiry <ul style="list-style-type: none"> • determines additional factors affecting food security through analysis of article/broadcast • explains the impact of the factors on availability and cost of food 			
Application <ul style="list-style-type: none"> • suggests a possible intervention that applies the Sustainable Livelihoods Approach • predicts the impact of intervention using the Sustainable Livelihoods Approach 			
Communication <ul style="list-style-type: none"> • uses the terminology and concepts of food security and Sustainable Livelihoods Approach effectively in responding to the details of the article/broadcast. • writes an effective letter-to-the- editor 			

Comments:

African child hunger on rise, report warns; More cash needed to meet U.N. targets, it says Money needed for roads, irrigation, education

Karen Palmer. Toronto Star. Toronto, Ont.: Aug 13, 2005. pg. A.11

Africa needs a major infusion of cash if it is to meet U.N. targets for reducing hunger over the next two decades, a report says.

Money is needed for everything from new roads to irrigation systems, says the International Food Policy Research Institute study, which looks at how to feed Africa's growing population.

"The number of hungry children will actually increase over the next decade" if African countries continue with current farming routines and crop yields, said Mark Rosegrant, director of the environment and production technology division at the Washington- based institute.

"In fact, hunger would actually increase and Africa would be the only continent where we would see number of hungry children increase," he said.

The study forecasts developments in the food situation in Africa between now and 2025.

Millennium goals set by the United Nations and supported by developed and developing countries have marked 2010 as the target for reducing the number of hungry children by half, from 30 million to 15 million in Africa.

Using computer modeling, however, the food policy institute determined that if African countries don't put more money and energy into educating women, setting up ready access to clean water, competing on international commodity markets and pushing agricultural research - including planting techniques, fertilizer use and genetically modified organisms - the number of hungry children on the continent will increase to 38 million.

The modeling made even more dire predictions if countries make a misstep and see poor harvests resulting in even a half per cent reduction in crop yields. Under "pessimistic" scenarios, the number of hungry children rockets to 55 million.

"I'm not convinced other regions are on target either," said Otto Farkas, a program manager at World Vision. "Certainly Africa is the most alarming, in that trends have not even stayed the same. They're deteriorating."

The food policy institute recommends that world leaders start implementing promises they've already made - like providing \$50 billion in debt relief. Developing countries will also have to boost foreign aid by an additional \$4.7 billion (U.S.), on top of the \$6 billion that already makes its way to Africa, Rosegrant said.

"That's about two days of military spending worldwide. We're talking big numbers, but not overwhelming numbers," Rosegrant said.

Money won't be enough, said Mia Vukojevic, Oxfam Canada's humanitarian co-ordinator.

"It's not enough just to do one of the things. You can't just do debt relief and think that will solve the problem. It has to be development, aid relief and trade justice," she said.

"From where I sit, it's too simplistic," she added. "They may be totally right, but from where I look, you can get new conflicts, you could get new droughts. It's really difficult to predict it that way."

Rosegrant acknowledges that things like the impact of HIV/AIDS, climate change and population control, which may help Africa stave off hunger, can't simply be keyed into a computer.

"I'm certainly more optimistic now than I have been in many years," he said. "We have this idea that all of Africa is a basket case, but there's a sense of recovery in a lot of countries."

Although the continent appears to be off-track, it still needs ambitious goals, Farkas said.

End.

Teacher Feedback Form



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Or by mail to: CPAR, 1425 Bloor St West, Toronto, ON M6P 3L6

Teachers who complete this form will receive a FREE copy of the book "Where on earth are we going?" by Maurice Strong, former Canadian Ambassador to the United Nations.

Thank you for taking the time to provide your feedback!

Teacher Name:

School:

Course Name:

*For each section, please provide a score (where 1 is poor and 5 is excellent).
Please also provide any comments in the space provided.*

1. Lesson One

Teaching notes are adequate and appropriate? 1 2 3 4 5

Lesson content is relevant to course expectations? 1 2 3 4 5

Photos and examples used are appropriate and effective? 1 2 3 4 5

Lesson is complete and covers all needed issues? 1 2 3 4 5

Additional Comment & Suggestions for Improvement:

2. Lesson Two

Teaching notes are adequate and appropriate?	1	2	3	4	5
Lesson content is relevant to course expectations?	1	2	3	4	5
Photos and examples used are appropriate and effective?	1	2	3	4	5
Lesson is complete and covers all needed issues?	1	2	3	4	5

Additional Comment & Suggestions for Improvement:

3. Lesson Three (if applicable)

Teaching notes are adequate and appropriate?	1	2	3	4	5
Lesson content is relevant to course expectations?	1	2	3	4	5
Photos and examples used are appropriate and effective?	1	2	3	4	5
Lesson is complete and covers all needed issues?	1	2	3	4	5

Additional Comment & Suggestions for Improvement:

4. Homework

Homework instructions are clear?	1	2	3	4	5
Homework expectations are appropriate to course and grade level?	1	2	3	4	5

Teacher notes are adequate? 1 2 3 4 5

Additional Comment & Suggestions for Improvement:

5. Assessment Assignment

Assignment instructions are clear? 1 2 3 4 5

Assignment expectations are appropriate to course and grade level? 1 2 3 4 5

Marking scheme is clear and appropriate to grade level? 1 2 3 4 5

Teacher notes are adequate? 1 2 3 4 5

Additional Comment & Suggestions for Improvement:

6. Unit as a Whole

Unit addresses course expectations 1 2 3 4 5

Content is appropriate for grade level? 1 2 3 4 5

Teacher notes are clear and adequate? 1 2 3 4 5

Do you plan to use this material again? 1 2 3 4 5

Additional Comment & Suggestions for Improvement:

Thank you again for providing your feedback!