

PD-ABI-014

Best available copy -- faded type

**QUARTERLY REPORT - April 1 through June 30, 1993
AID BIDEN-PELL DEVELOPMENT EDUCATION GRANT
PDC-0230-G-00-1059-00**

**Nancy E. Horn, Ph.D., Project Director
International Programs
Washington State University**

This report covers the third quarter of project implementation, with activities falling under the fourth and fifth objectives of the project - D) development and implementation of curriculum and activities in target communities to impart an action-oriented comprehension of international agricultural development, as it relates to hunger and the alleviation of poverty; and E) program impact evaluation.

SPECIFIC ACTIVITIES

- April 1 "Entering New Worlds Today," Cle Elum High School Culture Faire (in conjunction with Model UN)
(see Appendix A)
- April 2 Kittitas Teacher Global Education Workshop
(see Appendix B)
- April 5-9 "Images of Africa" Shourcourse, Washington State University
(see Appendix C)
- April 12-16 "Bringing the World Home" workshop for Family Living Research and Extension Faculty, Washington State University
(see Appendix D)
- April 22 "Women's Rights in Developing Countries," Ellensburg League of Women Voters
(see Appendix E)
- April 22-23 "Resource Utilization and Sustainable Development," shortcourse at Central Washington University, Ellensburg
(see Appendix F)

During the final quarter of our project, we will complete our book of curriculum materials generated over the last two years, and complete the impact analysis conducted in June.

DICSUSSION OF ACTIVITIES

1) The impact analysis was conducted with all groups to which we had provided programs. In Kittitas County, this includes:

Central Washington University - students and faculty members who participated in course
Ellensburg League of Women Voters
Kittitas Middle School
Kittitas High School
Cle Elum High School
Kittitas County 4-H
Kittitas County Teachers

In Franklin County, this includes:

Benton-Franklin Counties Cooperative Extension
Hispanic Leaders participating in programs

In Whitman County, this includes:

Besse Mechlyng Group
"Images of Africa" shourtcourse faculty
"Bringing the World Home" participants
SWEA student/teacher organization
Lincoln Middle School
Pullman High School

The data gathered for this assessment (and other evaluations) will be included in our final report.

2) The book we are developing will have several parts. In general, it is organized on a topic basis, with curriculum materials identified for specific age groups. For example, materials appear under "hunger" or "trade," with modules appearing for age groups related to grades in school. We are hoping to complete this volume by the end of the project, and make it available for distribution utilizing several resources at our disposal both within the state and throughout the U.S. The final report will include our distribution plan.

APPENDIX A

ENTERING NEW WORLDS TODAY
Cle Elum/Roslyn High School Culture Faire

THE OWL

Briefing for the X-Ians

Your are a member of Country X, an ancient land of high culture, which has, in the course of the centuries, tended to develop along somewhat isolationist line. X-ians have a deep and complete acceptance of a way of life which no outside influence has altered in any appreciable way for many years, due to the sense of perfection and harmony of life which each X-ian derives from her/his culture.

In Country X, **women** are the natural leaders, administrators, heads of households, principal artistic creators, owners of wealth through whom inheritance functions, and rulers of the State. **Men** rarely work outside the home, where they keep house, cook, mind children, etc., and then only in menial positions where heavy labor is required. Among X-ian women, education is important, with a high percentage going on to the university level. Among, men there is little interest and no encouragement to go beyond basic literacy. In all respects, women know themselves to be superior to men, and are acknowledged to be superior by the men, both in individual attitudes and as expressed institutionally. There is a well-known expression, for example, which goes, "Don't send a man on a woman's errand."

Knowing much of the outside world - and rendered somewhat uncomfortable by what they know of male-female relationships in many other countries - X-ians have tended to withdraw into themselves. In Country X, marriage is between two women, forming what is known as the Bond. The two women (the Bond) then may wish to receive jointly a man into their household, for purposes of creating children, for tending the home, etc. Two women in the Bond are equal in all respects, jointly agree in all decisions, mutually have responsibility for a man, should he be affiliated with them. Relating to a Bond, a man is legally regarded as an entity, having protection from the Bond. The man is considered "cherished" by the Bond. The women are "married;" his relationship is to the Bond, whereby he is "cherished." A state of being "cherished" is considered very desirable among men.

The artistic powers of X-ian women are famous, particularly in having developed the design and care of gardens into a unique artform. In Country X, the Queen's Garden is open once a year on her birthday to the women of the country (no men allowed) in celebration of the natural processes of growth and rebirth. No foreigners have been able, so far, to observe the Queen's Garden Festival, though there is no law to the contrary which would prevent it from happening.

X-ians share with some cultures of the world a marked discomfort with prolonged eye contact. They, of course, look at another person with brief, polite glances when they are in conversation, but do not hold another person's eyes with their own. In Country X, one is very careful not to "stare," since it is very impolite, and considered to be the worst kind of aggressiveness.

You are an X-ian Bond, Ms. Alef and Ms. Beh, with your Cherished Man, Peh. Ms. Alef holds an important position in the Ministry of Foreign Affairs, as Directress of Cultural Affairs. Ms. Beh holds a position also in the Ministry of Foreign Affairs, as Special Assistant to the Minister. Both women are distantly related to the Queen. Cherished Man Peh has been taken along by the two women of the Bond on one of their official trips outside Country X. The three of you are now in a restaurant in Athens, and have been spotted by an American couple whom you have met once before but do not know very well.

When speaking with the Americans you must limit your vocabulary to words of only one or two syllables. The purposes for this are: 1) your native language is that of Country X, and thus it is quite natural for you to be limited in your command of English; and 2) by making you conscious of your language, it is an easy way to prevent a use of vocabulary and concepts which people rarely use except as sociologists and anthropologists.

This American couple will attempt to gain your help in getting permission to observe the next Queen's Garden Festival. They will talk with you for about 15 minutes. At that time, on some pretext, the American couple will excuse themselves for a few minutes, then return to the three of you. At that time they will ask you for your help.

You must decide whether to say "yes" or "no." There are three things to consider. Basically, you should decide "yes" if, in your judgment, the Americans have shown cultural sensitivity to what X-ians are like. This means looking for three main things:

1. The American woman must be the one asking for permission, and she must ask the X-ian Bond (not Peh). The men in the role play (both the American man and Peh) must not be involved in the request.

2. You must decide how thoughtful the Americans have been about your limitations in the use of English. They should not just rattle on, when it is obvious by your speech that you may not understand them very well. If they show sensitivity in this, it will be one factor toward saying "yes."

3. The Americans must also show sensitivity to your customs in eye-contact. If they continue to "stare" at you during the conversation (and the request), then your answer would be "no."

ENTERING NEW WORLDS TODAY
Cle Elum/Roslyn High School Culture Faire

THE OWL

Briefing for the Americans

You are two Americans, male and female, both of you well-known journalists.

Both of you have M.A.s in Journalism from recognized schools, and have spent several years in international travel and reporting on political, cultural and artistic subjects in a number of countries.

Never at a loss to detect a possible "story," you are pleased to encounter three people in a restaurant in Athens whom you have met once before briefly. You do not remember their names, but do remember that they are from Country X, a rather exotic and unusual place not often visited by foreigners. Country X is one of those places in the world about which there are more legends than facts. It is known, however, to be a society with highly developed arts, literature and gardens (which are apparently some kind of art form); with an atmosphere of being inaccessible and not too interested in getting into the world tourism business. One of the intriguing things about which speculation sometimes appears in the Sunday Supplements is the X-ian Queen's Garden Festival, which takes place apparently once a year, and which no one has ever visited or photographed. To do so, especially to be the first, would be a true journalistic "scoop."

In this exercise, you will approach the X-ians at their restaurant table and ask to join them. Talk with them for about 15 minutes. Then, find a pretext and leave the table for one or two minutes and decide together what would be the best way to approach your real subject: can you get permission to observe the next Queen's Garden Festival and do a story with pictures?

Try not to let your conversation run too long. After you return from your two or three minutes of conferring, make your request to the X-ians. You will get a "yes" or "not" answer. At that point, the exercise is over, and you then excuse yourselves again and leave.

ENTERING NEW WORLDS TODAY
Cle Elum/Roslyn High School Culture Faire

THE TRADE GAME

American Manufacturer/Commerce Department Briefing Sheet

You are from the Northwest in the United States. You are a manufacturer of agricultural machinery that is needed in developing countries. You are interested in establishing a trading relationship with developing countries because your own country has been saturated with the type of machinery you manufacture and you want to expand your market. Accompanying you is a senior member of the Commerce Department who has been authorized to work with you on establishing a trading relationship.

The people in your country eat well. They have a great deal of variety in their foods because your country has established export plantations in several developing countries. Because the people in your country have become used to "exotic" foods, you have been asked to identify a source for guavas. You know these are grown in abundance in particular areas of Mozambique, a country in Southern Africa. It is your thought that you could negotiate a trading relationship on the basis of guavas and your machinery.

You have certain specific guidelines from the leaders of your home country. You must sell your machinery for the highest price possible in order to generate revenue both for the state and your company. In return, you must purchase food commodities - in this case guavas - at the lowest price possible in order that your country can keep food prices low - even if the food is imported. You are authorized to make any type of "deal" you can that will satisfy these two needs. You are allowed to be innovative in your negotiations.

In your negotiations, you must consider how to overcome the problem of hard and soft currencies. As an American company, you must obtain hard currencies for your machinery, but you know this will be a problem to the Mozambicans. You must find a way out of this dilemma. Also, since your machinery is bulky and weighs a lot, you must find a way to factor into the negotiation the cost of shipping and handling.

You have learned that the people in Mozambique feel they have something to offer the developed world, not only primary agricultural commodities, but also some manufactured items. The leaders have all been highly educated in your country and are familiar with your country's needs. However, as leaders, they must put their own country's needs first.

Your job is to negotiate a contract that fits the guidelines you have been given.

ENTERING NEW WORLDS TODAY
Cle Elum/Roslyn High School Culture Faire

THE TRADE GAME

Mozambican Ministries of Agriculture & Trade Briefing Sheet

You are senior members of the Ministry of Trade and Ministry of Agriculture in the country of Mozambique in Southern Africa. Your country is interested in establishing trading relationships with manufacturers in the U.S., Europe and Japan. You are deeply concerned, however, about making the terms of trade favorable for your country. That is, you don't want relationships that will benefit the other side; you want to ensure that your country and your producers benefit equally from any relationships that are established. For this reason, you want to trade in a range of commodities: primary agricultural, mining commodities and manufacturing.

Your country is relatively poor. Its GNP per capita is only \$80, and personal incomes range from \$120 to \$10,000 per year, with an average per capita income of only \$273. Your people are primarily farmers, growing a number of locally-consumed and export crops. Your country has "agricultural growth zones" where certain crops grow very well. During colonial days, however, the Portuguese did not construct roads to these zones because the crops in many of these zones were mostly fruits and vegetables. Despite attempts to become food self-sufficient, current agricultural practices, soils and rain patterns require that you import a portion of your foodstuffs, especially wheat and rice. You must use foreign or hard currency to make these purchases internationally, often placing your country in debt.

Farmers in your country are experiencing a record production year. The rains were good, labor to help on farms was available, and the civil war ended with a peace treaty. Even small, family farms experienced a record harvest in grains, all of which have provided your citizens with an adequate food supply in most commodities. The blend of old and new technologies farmers are using, in addition to the favorable weather conditions, has indicated to both your ministries that when agricultural practices are implemented efficiently, good results can ensue.

Since you know the potential of agricultural production in your country, the leaders have decided that diversification of the economy is timely. To support industrialization, you require a range of machinery, including those for farm mechanization. You have recently learned that a U.S. manufacturer would like to meet with you and discuss an arrangement to import their machinery and, in return, discuss the possibility of exporting guavas. You believe this to be a good idea, since guavas will be harvested in record numbers, but you are concerned about getting them to the airport quickly since the roads to the guava groves are very poor.

Your job is to negotiate the highest price for the guavas, and pay the lowest price for the machinery. You have broad latitude to be very innovative in the way you negotiate. You can make any type of barter, hard currency, exchange agreement you think will benefit you and your country, especially if it will provide support to construct the road to the guava groves.

ENTERING NEW WORLDS TODAY
Cle Elum/Roslyn High School Culture Faire

THE TRADE GAME

Debriefing Sheet

1. What sort of "deal" did each of your teams make?
2. What were the considerations of the U.S. manufacturer and the Commerce Department Official? What were the considerations of the Ministries of Agriculture and Trade in Mozambique?
3. Given what Jane said about food production and consumption systems, what sort of impact would you expect the exporting of guavas to have on Mozambique?
4. What considerations were not presented in "The Trade Game" that you think ought to be taken into account?
 - world commodity markets
 - airline shipping prices
 - hard currency/soft currency exchange rates
 - ownership of guava groves
 - relationship of government to owners of guava groves
 - other potential traders
 - infrastructural development
5. What do you understand about some of the reasons for hunger in Africa by playing this game? What about "getting the most for the least" attitude?
6. What have you learned about developing countries through this game?

ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE
April 1, 1993

The Gentlemen of the Jungle
A Kikuyu Tale Told by Jomo Kenyatta¹

Introducing the tale, Jomo Kenyatta says "The relation between the Kikuyu and the Europeans can well be illustrated by this Kikuyu story."

Once upon a time an elephant made a friendship with a man. One day a heavy thunderstorm broke out, the elephant went to this friend, who had a little hut at the edge of the forest, and said to him: "My dear good man, will you please let me put my trunk inside your hut to keep it out of this torrential rain?" The man, seeing what situation his friend was in, replied: "My dear good elephant, my hut is very small, but there is room for your trunk and myself. Please put your trunk in gently." The elephant thanked his friend, saying: "You have done me a good deed and one day I shall return your kindness." But what followed? As soon as the elephant put his trunk inside the hut, slowly he pushed his head inside, and finally flung the man out in the rain, and then lay down comfortably inside his friend's hut, saying: "My dear good friend, your skin is harder than mine, and as there is not enough room for both of us, you can afford to remain in the rain while I am protecting my delicate skin from the hailstorm."

The man, seeing what his friend had done to him, started to grumble; the animals in the nearby forest heard the noise and came to see what was the matter. All stood around listening to the heated argument between the man and his friend the elephant. In this turmoil the lion came along roaring, and said in a loud voice: "Don't you all know that I am the King of the jungle! How dare anyone disturb the peace of my kingdom?" On hearing this the elephant, who was one of the high ministers in the jungle kingdom, replied in a soothing voice, and said: "My lord, there is no disturbance of the peace in your kingdom. I have only been having a little discussion with my friend here as to the possession of this little hut which your lordship sees me occupying." The lion, who wanted to have "peace and tranquility" in his kingdom, replied in a noble voice, saying: "I command my ministers to appoint a Commission of Enquiry to go thoroughly into this matter and report accordingly." He then turned to the man and said: "You have done well by establishing friendship with my people, especially with the elephant, who is one of my honourable ministers of state. Do not grumble any more, your hut is not lost to you. Wait until the sitting of my Imperial Commission, and there you will be given plenty of opportunity to state your case. I am sure that you will be pleased with the findings of the Commission." The man was very pleased by these week words from the King of the Jungle, and innocently waited for his opportunity, in the belief that naturally the hut would be returned to him.

¹ Excerpted from Rutherford, Peggy (ed.) (n.d.). African Voices. New York: Grosset & Dunlap.

The elephant, obeying the command of his master, got busy with other ministers to appoint the Commission of Enquiry. The following elders of the jungle were appointed to sit on the Commission: 1) Mr. Rhinoceros; 2) Mr. Buffalo; 3) Mr. Alligator; 4) The Rt. Hon. Mr. Fox to act as chairman; and 5) Mr. Leopard to act as Secretary to the Commission. On seeing the personnel, the man protested and asked if it was not necessary to include in this Commission a member from his side. But he was told that it was impossible, since no one from his side was well enough educated to understand the intricacy of jungle law. Further, that there was nothing to fear, for the members of the Commission were all men of repute for their impartiality in justice, and as they were gentlemen chosen by God to look after the interests of races less adequately endowed with teeth and claws, he might rest assured that they would investigate the matter with the greatest care and report impartially.

The Commission sat to take the evidence. The Rt. Hon. Mr. Elephant was first called. He came along with a superior air, brushing his tusks with a sapling which Mrs. Elephant had provided, and in an authoritative voice said: "Gentlemen of the Jungle, there is no need for me to waste your valuable time in relating a story which I am sure you all know. I have always regarded it as my duty to protect the interests of my friends, and this appears to have caused the misunderstanding between myself and my friend here. He invited me to save his hut from being blown away by a hurricane. As the hurricane had gained access owing to the unoccupied space in the hut, I considered it necessary, in my friend's own interests, to turn the undeveloped space to a more economic use by sitting in it myself; a duty which any of you would undoubtedly have performed with equal readiness in similar circumstances."

After hearing the Rt. Hon. Mr. Elephant's conclusive evidence, the Commission called Mr. Hyena and other elders of the jungle, who all supported what Mr. Elephant had said. They then called the man, who began to give his own account of the dispute. But the Commission cut him short, saying: "My good man, please confine yourself to relevant issues. We have already heard the circumstances from various unbiased sources; all we wish you to tell us is whether the undeveloped space in your hut was occupied by anyone else before Mr. Elephant assumed his position?" The man began to say: "No, but. . ." But at this point the Commission declared that they had heard sufficient evidence from both sides and retired to consider their decision. After enjoying a delicious meal at the expense of the Rt. Hon. Mr. Elephant, they reached their verdict, called the man, and declared as follows: "In our opinion this dispute has arisen through a regrettable misunderstanding due to the backwardness of your ideas. We consider that Mr. Elephant has fulfilled his sacred duty of protecting your interests. As it is clearly for your good that the space should be put to its most economic use, and as you yourself have not yet reached the stage of expansion which would enable you to fill it, we consider it necessary to arrange a compromise to suit both parties. Mr. Elephant shall continue his occupation of your hut, but we give you permission to look for a site where you can build another hut more suited to your needs, and we will see that you are well protected."

The man, having no alternative, and fearing that his refusal might expose him to the teeth and claws of members of the Commission, did as they suggested. But no sooner had he built another hut than Mr. Rhinoceros charged in with his horn lowered and ordered the man to quit. A Royal Commission was again appointed to look into the matter, and the same finding was given. This procedure was repeated until Mr. Buffalo, Mr. Leopard, Mr. Hyena and the rest were all

accommodated with new huts. Then the man decided that he must adopt an effective method of protection, since Commissions of Enquiry did not seem to be of any use to him. He sat down and said: "Ng'enda thi ndagaga motegi" (Much silence has a mighty noise), which literally means "there is nothing that treads on the earth that cannot be trapped," or in other words, you can fool people for a time, but not forever.

Early one morning, when the huts already occupied by the jungle lords were all beginning to decay and fall to pieces, the man went out and built a bigger and better hut a little distance away. No sooner had Mr. Rhinoceros seen it than he came rushing in, only to find that Mr. Elephant was already inside, sound asleep. Mr. Leopard next came in at the window, Mr. Lion, Mr. Fox and Mr. Buffalo entered the doors, while Mr. Hyena howled for a place in the shade and Mr. Alligator basked on the roof. Presently they all began disputing about their rights of penetration, and from disputing they came to fighting, and while they were all embroiled together the man set the hut on fire and burnt it to the ground, jungle lords and all. Then he went home saying: "Peace is costly, but it's worth the expense," and live happily ever after.

ENTERING NEW WORLDS TODAY
Entering New Worlds Today
April 1, 1993

"Secrets" in Kenya

You have recently taken on an assignment to work in Kenya to report on the activities occurring in Somalia. Your news agency has posted you to Mombasa, a large port city on the coast of Kenya, because working out of Somalia is very dangerous for reporters. From Mombasa, you will move in and out of Somalia and report what you find out about the ethnic fighting occurring there. You have learned that the person who previously held your post had specific "contacts" within both ethnic factions within Somalia. You have tried to get in touch with these people, but you have been having difficulty. The last note you received from your "contacts" was encoded, and you worked very hard to decipher the code, but you were given no clue.

Just yesterday, someone in the coffee shop where you were having your breakfast surreptitiously tossed a folded piece of paper on to your table. Quickly, you picked up the note and put it in your pocket. You leave the coffee shop and return to your apartment. After locking the doors, you remove the paper, unfold it, and start to examine the contents. It is a map, and another encoded message. This time, however, there is a clue. You note that there is a time mentioned, followed by some letters you believe, when transcribed, spell "hours." It is your task, now, to decode the message and follow through on the instructions you are given.



Mz mhul gxqqhe xm nunizlr rc vwq yvuc.
Nhhe jvt cghuh cthlqrj rc 0700 gvtul.

ENTERING NEW WORLDS TODAY
Entering New Worlds Today
April 1, 1993

"Secrets" in Kenya

Key to Answers

"Papers hidden in Mombasa at Old Fort. Meet you there Tuesday at 0700 hours.

Through processes of both deduction and deduction, students should be able to "crack the code" and decipher the message.

Inductively - from clues given, student can work deductively in deciphering letter by letter.

Deductively - student can construct a "patterned" way of deciphering all the letters. The alphabet has been "manipulated" in the following manner: Beginning from the end, letters of the coded alphabet were assigned to the normal listing of the alphabet, skipping every two letters. Hence, the code looks as follows:

A = R	O = V
B = I	P = M
C = Z	Q = D
D = Q	R = U
E = H	S = L
F = Y	T = C
G = P	U = T
H = G	V = K
I = X	W = B
J = O	X = S
K = F	Y = J
L = W	Z = A
M = N	
N = E	

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

MAKING CARNIVAL MASKS AND HATS

Materials:

tag board
construction paper
pencils
glue
scissors
sequins
glitter
aluminum foil
yarn
marking pens
any other colored or shiny materials for decorating masks and hats

Directions:

Draw a pattern for a mask or hat on construction or tag board. Cut out mask or hat. Decorate with yarn, sequins, glitter, foil, and/or any other materials that you wish to make a colorful, "brilhante" costume piece. Punch two holes near the outer edges of mask or hat, and attach string or yarn so that it can be tied at the back of your head.

Put on your costume piece, play some "samba" (typical Brazilian music for Carnival), and enjoy dancing and celebrating Carnival!

ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE

Carnaval

1. Images of Brazil
2. Celebrations in Brazil: family, religious
3. Carnaval
 - Origins in Portugal: Joke/Game - "Limoes de Cheiro"
 - Relationship to Easter, Lent
 - Costumes, music, dance (samba), competitions
 - African Influence
 - Ranchos
 - Blocos
 - Big Clubs or Societies
 - Frevo clubs
 - Bandas
 - Afoxes
 - Blocos Afros
 - Escolas de Samba
 - Carnaval around the World
4. Make Masks

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

MAKING YARN COLLAGE (Latin America)

Materials:

posterboard
variety of colored yarn
scissors
white liquid glue

Directions:

Spread a handful of yarn pieces on a table and let shapes and colors suggest design arrangement for collage.

Experiment with designs by placing yarn in desired patterns on posterboard before gluing.

Glue completed design in place and embellish with fluffed-up bits of yarn.

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

MAKING ADINKRA-PATTERNED T-SHIRTS

MATERIALS NEEDED

100% Cotton T-Shirt
Color-fast Fabric Paints
Small Spray Bottles or Sponges
Adinkra Pattern Cut-Outs
Large pieces of paper to absorb paints

METHOD

Place the T-shirt on top of a large piece of paper that will absorb any extra color.
Place a piece of absorbant paper under layer of cloth you wish to print.
Place the adinkra patterns of your choice on the t-shirt.
Taking either a sponge (dipping the smaller end of the sponge in the paint) or a small spray bottle, dab or spray the open spaces on the spong until you are satisfied with the coloring.
Remove pattern carefully.
Repeat in designs desired.
Let dry.
Rince in cool, salted water to set dies (to be done at home).

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

MAKING AREPAS (Colombian Corn Cakes)

Ingredients:

2 cups corn masa flour
1 cup warm water
1/4 teaspoon salt
1/2-3/4 cups monterey jack cheese, grated
small amount oil or margarine

Method:

In a bowl, mix the flour and salt with a fork. Add the warm water and mix until dough sticks together. Add the grated cheese and continue mixing with hands until dough forms a ball. It should be stiff enough that it doesn't stick to your hands.

Wet hands slightly. Then take small balls of dough (1/4 cup dough) and form them into patties about 1/3" thick.

Cook over medium heat in a pan greased with a small amount of oil or margarine until arepas start to brown.

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

MAKING BRIGADEIROS (BRAZILIAN CANDY)

Ingredients:

1 can sweetened condensed milk
1 cup milk
2 heaping teaspoons cocoa
1 jar chocolate sprinkles

Method:

Put the sweetened condensed milk, milk, and cocoa in a saucepan. Heat at medium-high, stirring constantly with a wooden spoon. Keep cooking and stirring the mixture until it thickens enough that it easily comes away from the sides and bottom of the pan, and starts to hold together in the middle of the pan (about pudding consistency).

Remove pan from heat, and continue stirring as mixture cools. When you see that a teaspoonful can hold its shape when placed on wax paper, start dropping the candy onto the paper using two teaspoons.

Place the chocolate sprinkles in a small bowl. Roll the semi-cooled candies in the sprinkles until they are covered.

Eat and Enjoy!

**ENTERING NEW WORLDS TODAY
CLE ELUM CULTURE FAIRE**

Cooking Maandazi - Kenyan Donuts

RECIPE

To make approximately 16 donuts of about 1-by-3 inches:

2-2/4 cups of all-purpose flour
1 tsp double-acting baking powder
2 tbsp sugar
1/4 tsp salt
1 egg, slightly beaten
3/4 cup water
vegetable oil for deep frying

METHOD

Sift 2 cups of the flour and the baking powder, sugar and salt together into a deep bowl. Make a well in the center and into it pour the egg and water. Gradually stir the dry ingredients into the egg and water, and when they are well mixed, continue to stir with a spoon or knead with your hands until the dough is firm enough to be gathered into a compact but somewhat soft ball. If the dough is sticky, add up to 1/4 cup more flour, 1 tbsp at a time. Cover with a dampened kitchen towel and let the dough rest for approximately 30 minutes.

Pour oil into a deep fryer or large, heavy saucepan to a depth of 2 to 3 inches and heat the oil until it reaches a temperature of 350 degrees.

On a lightly floured surface, roll the dough out into a rough rectangle 1/2 inch thick. With a ruler and a pastry wheel or sharp knife, cut the dough into rectangles about 2 inches long and 1-1/2 inches wide. Gather the scraps of dough into a ball, roll it out again, and cut as many more rectangles as possible.

Fry the maandazi 4 or 5 at a time, turning them occasionally with a slotted spoon for about 4 minutes, or until they are crisp and richly colored on all sides. As they brown, transfer them to the lined baking sheet to keep warm in the oven. Serve the maandazi warm.

APPENDIX B

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
PROGRAM OUTLINE**

Friday Afternoon/Evening - 4:00 - 7:00

1. Introduction (4:00 - 4:30) - Nancy
Project
Development Educators
Workshop Outline
Geographic Principles
2. Icebreaker (4:30 - 5:00) - Jane - Introduction: Mike - De-brief
Country-Region Match - MENA, LAC, Sub-Saharan Africa, Asia
Images Exercise within Regions
Large-group De-Briefing
3. THE WORLD AS IT WAS - THE WORLD AND ITS PEOPLES - Global/Regional
 - A. Processes and De-Briefing (5:00 - 6:00)

Geography - Carmen Sandiego - Jane
Human Settlements and Survival Systems - Nancy
Nonformal Education - Mike

BREAK - (6:00 - 6:15)

- B. A potpourri of ideas for a range of disciplines -
History, Geography, Home Ec, Art
- C. How Can You Use What You Have Learned So Far?
Teacher Brainstorm Session and Wrap-Up. (6:15 - 7:00) - Nancy

Saturday Morning - (8:00 - 11:30)

1. Introduction to the Day - (8:00 - 8:15) - Nancy
2. Icebreaker - (8:15 - 8:45) - Nancy - introduction; Jane - De-Brief
(exercises - 15 minutes, De-Briefing - 15 minutes)

The World in My Closet - Jane
Picture-Map Exercise - Mike
News Headlines - Nancy

3. THE WORLD AS IT CHANGED - Country Specific

A. Zaire's Colonization of Kittitas (8:45 - 9:45) - Mike and Nancy - Whole Group

BREAK - (9:45 - 10:00)

B. Substantive Learning through Teaching Processes - (10:00 - 11:00)
(Three Groups)

Diffusion of Foods - Jane

- Wheat - Middle East
- Cocoa - Amazon/Brazil
- Coffee - Ethiopia
- Rice - South China

Diffusion of Technology - (A potpourri of Ideas) - Mike

- Art and Music
- Machinery
- Medicines
- Math/Writing/Calendars

Governments and Interdependence - Shipwreck - Nancy

How are people/citizens represented?

De-Briefing - (11:00 - 11:30) - Jane

LUNCH - (11:30 - 12:15)

Saturday Afternoon - (12:15 - 4:00)

1. THE INTERDEPENDENT WORLD AS IT IS - Country Specific

A. Discipline Focused Processes - (12:15 - 1:15)
(Three Groups) Introduction - Mike

Agricultural Production, Distribution and Consumption Systems;
Tracing the Coffee Bean - Jane

Trade Game - Nancy

Circle of Poisons/Environment - Mike

De-Briefing (1:15 - 1:45) - Jane

BREAK - (1:45 - 2:00)

B. Development - (2:00 - 3:00) - Nancy, (all help small groups)

Senegal

Brazil

Somalia

Zaire?

De-Briefing (3:00 - 3:30) - Nancy

2. WHERE TO NOW? - (3:30 - 4:00) - Mike

Resources

Wrap-Up

Evaluation

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

Geographic Principles in Globalizing the Curriculum

During the course of the workshop, frequent referral will be made to the following five themes approach to teaching about peoples and cultures both in the U.S. and in other countries developed by the National Geographic Society in its Geographic Education Program.

LOCATION:

- Where is the country (longitude, latitude, continent, hemispheres)?
- How far away from home is it (travel time by plane, distance in miles or kilometers, number of time zones away)?
- What countries are neighbors of the country?

PLACE:

- Describe the country (size, shape).
- What is the climate (temperature, rainfall).
- What kind of physical features are there (mountains, rivers, deserts)?
- Describe the people who live there (nationalities, occupations, traditions).
- How do the plants and animals compare with those at home (similarities, differences)?

HUMAN/ENVIRONMENT INTERACTIONS:

- How do the people use the land (farming, herding, mining, industry)?
- How have people changed the land?
- Where do most people live (near a river or coastline, in the mountains)?
- Why do you think people settled there (water, safety, food, natural beauty)?
- What kinds of resources exist there (water, plants, minerals)?

MOVEMENT:

- How will you travel to the country (route, modes of transportation)?
- Does the country export goods to other places? If so, what and where?
- Does this country import goods from other places: If so, what and from where?
- Why would people move to the country (jobs, family, climate, political sanctuary)?
- Why would people leave the country (jobs, family, climate, political strife)?

REGIONS:

- What language(s) do the people speak?
- What are the political divisions of the country (state, provinces, republics)?
- How is the country similar to any of its neighbors (traditions, language, climate)?

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

COUNTRY/GEOGRAPHIC REGION MATCH

GOALS AND OBJECTIVES

Goals: To begin a process of familiarizing students with the location of countries within their geographic regions, and what would be important to know about other countries.

Objectives:

1. Be able to match a country with the geographic region in which it lies.
2. Be able to identify, as a group, one thing that they know about each country.
3. Be able to identify, as a group, five things that would be important for others to know about the United States.
4. Be able to identify, as a group, five things that they would like to know about any of the countries of a geographic region.

Process: Introduce the activity as a geographic matching game. Give each student the name of a country. Have students find the geographic region (Northern Africa and the Middle East, Sub-Saharan Africa, Asia, Latin America and the Caribbean) to which their country belongs. (Have signs posted, and a world map available for their reference).

Once students have found their regions, in their regional groups, have them list one thing that the group knows about each country in their region.

Provide Commentary as each group reports on their list.

Then, in the region groups again, have each group list five things that they would want a pen-pal to know about the United States.

Again, provide commentary as each group reports on their list.

A third time in the region groups, have each group list five things that they would like their pen-pal to tell them about their country.

As a whole class, discuss how what they would like to know about another place is similar or different than what they feel is important to share with others about the U.S. Point out importance for us to learn about people and places around the globe.

DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993

LATIN AMERICA /CARIBBEAN

BRAZIL	COLOMBIA	PARAGUAY	URUGUAY
SURINAME	FRENCH GUIANA	CHILE	BELIZE
HONDURAS	PUERTO RICO	DOMINICAN REPUBLIC	
JAMAICA	CUBA	MEXICO	GUATEMALA
HAITI	NICARAGUA	EL SALVADOR	COSTA RICA

SUB-SAHARA AFRICA

MAURITANIA	SENEGAL	GUINEA	TOGO
BENIN	MALI	CHAD	NIGER
NIGERIA	CAMEROON	GABON	CONGO
ZAIRE	ANGOLA	ZAMBIA	MALAWI
NAMIBIA	BOTSWANA	MOZAMBIQUE	LESOTHO
SOMALIA	ETHIOPIA	SUDAN	TANZANIA

ASIA

CHINA	JAPAN	PHILIPPINES	MALAYSIA
THAILAND	CAMBODIA	LAOS	VIETNAM
SRI LANKA	TAIWAN	SOUTH KOREA	NORTH KOREA
INDONESIA	BURMA	NEPAL	INDIA

NORTHERN AFRICA AND THE MIDDLE EAST

MOROCCO	ALGERIA	LIBYA	EGYPT
TUNISIA	SYRIA	JORDAN	SAUDI ARABIA
IRAQ	IRAN	OMAN	YEMEN
UNITED ARAB EMMIGRATES		KUWAIT	WESTERN SAHARA

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

IMAGES EXERCISE

GOALS AND OBJECTIVES

Goal: To demonstrate how we develop images and how these shape our views of a geographic area or people

Objectives:

1. To outline the images young people have about a given geographical area, people or issue.
2. To draw out how the images are formed, specifying the role of the young person, parents, teachers, media, and the political and cultural environment.
3. To encourage students to ensure that they guard against negative images when they do not understand the full context of a situation.

The exercise involves a question and answer session. The teacher starts by asking what an image is and explaining it after a few students have attempted to answer the question. The teacher, thereafter, asks each child to jot down the images he/she has about an area, people or issue. These are thereafter written on the board or chart. (It is preferable to write them on a chart so that they can be referred to at a later time. Images of the students in your class can be compared with those of young people elsewhere).

The teacher asks how the students developed these images about the area/situation. The purpose of this question is to indicate to the kids that the way we develop images has a lot to do with our exposure to information. If the information we have available is stereotypic and negative, we tend to develop negative and stereotypic images. It is therefore important that we try to get as accurate information as possible. The teacher should aim at encouraging the students to be more critical and analytical about information they are exposed to.

The exercise can be as long as 30 minutes or as short as 10 minutes depending on the age group and how much ground one wants to cover. It is important to allow discussion among the students.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

PSST...CARMEN SANDIEGO IS IN AFRICA!

GOALS AND OBJECTIVES

Goal: To engage students in a fun activity that will help them learn about major geographical features and resources in Africa.

Objectives:

1. Be able to "crack" the clues given in the exercise from information presented in class
2. Be able to scan their reading materials for any additional information needed to "find Carmen and the treasure".
3. Be able to identify, through the completion of the exercise, of major geographical features and natural resources of Africa.

This exercise is very useful as a follow-up to assigned readings and/or a classroom discussion about geographic features and resources in Africa. If slides are available to you, they also provide an interesting and effective way of helping students really understand what Africa looks like.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

PSST...CARMEN SANDIEGO IS IN AFRICA!

O.K. Classroom gumshoes...our top sleuths tell us that Carmen Sandiego is in search of a valuable treasure somewhere within the continent of Africa. Sly as she is, Carmen has been seen in various locations, but nobody has been able to catch her...nor figure out just what treasure it is that Carmen is after. It's up to you, gumshoes, to trace Carmen's path from the clues given below, and FIND HER...AND THE TREASURE! Good Luck!

1. Word has gotten out that, after cuddling koalas and basking on the beaches of Australia, Carmen Sandiego fled that land, heading due West. Her plane ran out of fuel just short of mainland Africa, and Carmen was forced to land on an African Island just East of Mozambique. Where did she land?
2. Anxious to find her treasure, Carmen went straight to the place famous for its mines. In talking with local officials there, Carmen learned that these famous mines were the source of most of the world's gold...a wonderful resource, but not what Carmen was after. What country did she go to?
3. Disappointed with not finding her treasure on the first try, Carmen decided to get a new perspective on her situation. She headed north, and was next seen on Africa's highest mountain. What mountain was she on, and in what country was Carmen seen?
4. To plan out her search strategy, Carmen thought it best to contemplate by relaxing on the shores of Africa's largest lake. Where did she go?
5. With her map in hand, and travel plans worked out in her head, Carmen hopped over to the country that borders Africa's largest lake to the North. She was seen catching a boat on the river well known in Hollywood for its "jewel." On what river was her boat?
6. It must have been a long boat trip, because Carmen was spotted next one week later in a capital city where the "Blue" and the "White" meet. What city and country was Carmen in?
7. Discovering that the "jewel" found in that region was not the treasure she was after, Carmen took a plane to Zaire, as she had heard that, in this country, one of the world's most precious resources lied. (Could this be the home of her treasure?) What mineral resource was Carmen to find in Zaire?
8. Thrilled by the beauty of the resource she found in Zaire, but disappointed that it was not her treasure, Carmen caught a bus to Zaire's southern neighbor where she followed one of Africa's principal rivers to a region also well-known for one of its natural resources. Not knowing what the resource was, Carmen stayed on the river until she caught word that, if she

didn't go ashore, she would take a great "fall." Where was Carmen?

9. After hanging out to find out more about this region, and what treasure might be found in its natural resources, Carmen learned that she had been in it...Yes, the resource was water, and it was important for Africa because it provided an important energy source for the Southern countries of Africa. What do you call this type of power?

10. Well, what was good for Africa, in this case, was not so good for Carmen Sandiego...she was still without her treasure. Carmen was not going to give up, though, so she asked to be taken to a country that would put her closest to Arab Africa...as she knew that this part of Africa was well-known for its riches (although Carmen did not know what they were...poor Carmen, she should have studied her geography!). There she found herself, right in the middle of a desert! Where was Carmen?

11. Asking to be directed to the nearest body of water, she was taken to a lake near the capital city of N'djamena. What lake was she taken to, and what countries bordered her there?

12. Carmen's last hope was to check out a West African country, also famous for one of its natural resources. She headed south to Cameroon, and there started upstream on the Benue, the river which would take her to her treasure (so she thought). Traveling just long enough to cross a national border, Carmen got off the boat to ask about valuable resources in that country. What did she learn?

13. Exhausted from her travels, Carmen decided to abandon her search for her treasure in Africa. Her next plan was to make her way to the rain forests of Latin America, in search of the delight she had been craving these weeks of her journey throughout Africa. She caught another boat on the Benue, which met up with a major river in West Africa. Then she took this to the capital city of Niger. What was the major river, and what was the capital city?

14. From there, Carmen caught the next flight to Accra, where, low and behold, in the airport, she found the treasure she had been dreaming about for so long... Well, she found the main ingredient in that treasure, anyway. What country was she in, what was the treasure Carmen was after, and what major ingredient of that treasure did she find in Accra?

15. The problem that Carmen encountered was that, although the raw materials for the delectable delight she wanted are found in this West Africa region, the actual product that Carmen was looking for is not produced there. Boy, did Carmen ever go wrong this time! Now, she was going to have to travel to a place where she could get the yummy treasure she had searched for so diligently. If you can name the ocean you need to cross to find Carmen's treasure in Hershey, Pennsylvania, before Carmen figures it out, you will beat her to the treasure, and have both Carmen, and the treasure in hand. What ocean must you cross?

WELL DONE DETECTIVES! NOW THAT YOU HAVE SUCCESSFULLY COMPLETED YOUR SEARCH, SEE YOUR TEACHER FOR YOUR TREASURE.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

ANSWER SHEET: "PSST...CARMEN SANDIEGO IS IN AFRICA!"

1. Madagascar
2. South Africa
3. Mt. Kilimanjaro; Tanzania
4. Lake Victoria
5. The Nile
6. Khartoum; Sudan
7. Diamonds
8. Victoria Falls or Zambezi River
9. Hydroelectric power
10. Sahara
11. Lake Chad; Niger, Chad, Cameroon, Nigeria
12. That there was oil in Nigeria
13. The Niger; Niamey
14. Ghana; chocolate; cocoa
15. The Atlantic Ocean

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

Human Settlements and Environmental Adaption

1. Introduction

If we think about what people need to survive, we can determine where major settlements of people occur in Africa. So, what are elements needed for survival? **Water, Food, Shelter**

In what places would we most likely find the things we need - bear in mind what Jane just told us about geography:

- climate - rain and weather patterns
- soils
- lack of disease

2. How geography determines human settlement patterns and modes of economic survival

- climatic zones: steppe or high mountain, grassland (semi-arid), savanna, mediterranean, forest, tropical rain forest, desert, coastal sand (tropical and ocean-wind determined)
- land use: subsistence farming, ranching or grazing, crops & livestock, forest products, nomadic herding, manufacturing
- disease zones: tsetse fly, malaria
- population settlements: crops & livestock zones, forest zones, manufacturing and trade

3. Settlement Patterns/Economic Basis

As mentioned, different people who have different skills settled in certain areas. In general, people organized themselves in three different ways, that coincide with geographic features:

- Hunters and Gatherers - animals, roots, berries, plants
- Pastoralist Herders - water, grazing land, nomadic/semi-nomadic
- Agriculturalist Farmers - good soil, rainfall, sedentary

What I'd like you to do now is to divide up into groups. Decide what you would like the basis for your economy to be - Hunters/Gatherers, pastoralist herders, or agriculturalist farmers. Look at your maps, and have your group decide where you want to live and why. The sheets I am distributing now should help you understand what you need for survival.

HUNTERS AND GATHERERS

People who survive on the basis of hunting animals for meat or gathering vegetables, roots and berries must have special skills. Men who hunt must know about weapons and poisons to use to kill animals, as well as how to track them and kill them. Women who gather vegetables, roots, tubers and berries must have skills in identifying where to dig, what berries are not poison, and how to prepare the food they find.

Hunters and Gatherers live in very small bands (no more than 25 people) because only so many people can be fed from the resources in the surrounding area. Bands also move frequently, since food resources may be used up for the season.

In general, people who practice this type of economy are found where it is very warm and the temperature does not change much throughout the year. They must also live where food resources and water are available. Since they walk wherever they go, they do not generally have many possessions as these must be carried wherever they go.

PASTORALIST HERDERS

People whose economy is based in having herds require relatively large expanses of land on which their animals can graze. They must also be near water both for themselves and their animals. Some pastoralists are nomadic - they move from place to place constantly in search of good grazing lands for their animals. Other pastoralists travel in seasonal rounds, that is, they leave some of the family in one place to live permanently, while the rest of the family moves with the herds to better grazing places for the season. At the change of seasons, the family is joined together in one place.

Pastoral societies can grow quite large, numbering in the hundreds, providing the pasture and water resources can provide for that many people.

Men and boys generally move with the herds, while women and small children stay together in a more permanent location - if they are "transhumant" pastoralists (i.e., move in seasonal rounds). Because there is a lot of movement among pastoral societies, "government" is what is called "acephalous" - or headless. Decisions are made by the heads of families, and all agree as to what is best for the entire group.

Pastoralists like to live not too far from agriculturalist farmers because they like to trade the milk their animals produce for the grain crops that farmers produce. A problem occurs, however, when pastoralists are not careful where they move their animals; sometimes farmers become upset because pastoralists' herds are moved right over their fields.

AGRICULTURALIST FARMERS

Farmers live in certain areas permanently. They need good soils, water, seasonal rains, sources for seeds and fertilizers, and markets to sell some of their crops. Farmers also need adequate land on which to grow crops to feed their families and sell some of their crop to earn cash. Farmers also need a good supply of labor to help at peak agricultural times, like planting, weeding and harvest.

Most of all, farmers need a way to peacefully grow their crops. They need the support of their neighbors and the political system in order to provide a reliable food supply. For this reason, social organization among agriculturalist farmers is more hierarchical, since to avoid fighting over land, someone must have the authority to say who will get what parcels of land. The authority is often a "headman" or "chief," and sometimes is a king.

Farmers like to live not too far from roadways and markets in order that they can move their crops easily and sell them at markets. Farmers generally accumulate more assets since they remain in one place year after year. They must, however, have adequate water resources for their crops and their families.

Because farmers are sedentary, they also want education for their children, health care for their families, and access to other resources such as wood for house building, or markets to buy manufactured goods. Along with these, farmers also want electricity and access to information to become better farmers. Since most farmers keep animals to help with plowing and to eat, they also want help in keeping their animals healthy.

INDUSTRIALIST/WORKER

Workers need factories and offices in which to work. Factories must be located near major sources of water, and be right next to major transportation arteries. They must also be close to the areas where raw materials are either grown or imported in order not to increase the price of the items produced by the cost of transportation.

Industrialist/workers also need housing that can accommodate themselves and their families. They need to be assured of water and food availability, as well as of obtaining the goods they need to live. Because many industrialist/workers are needed in one factory or office, housing is generally not adequate to grow an adequate food supply, so incomes must be liveable.

Transportation for workers is also required since not all can live close to their place of work. If roads and buses or cars are available, then they must also be cheap enough for workers to ride whatever means of transport.

Work opportunities must also be available for the rest of the family. If a spouse wishes to obtain work, then other factories or offices must be accessible. For children, schools must also be accessible and affordable for families. For the whole family, health care must be accessible and affordable.

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

"The World in Your Closet"

GOALS AND OBJECTIVES

Goals: To show the linkages between our lives and the rest of the world through the manufacturing of our clothes.

Objectives:

1. Be able to identify where one's own clothing comes from
2. Be able to locate, on a world map, the countries in which our clothes are manufactured
3. Be able to explain one way in which we (local citizens) are linked to the rest of the world (through the production of our clothes!)

To extend the exercise, you, as the teacher could engage your students in a discussion about the fact that many of our clothes, and/or the raw materials for them come from developing countries. Why? What does this mean for us, as buyers? What implications does this have for the people of the countries in which the clothes are manufactured? What do you know about the lives of these people? What processes are involved in the manufacturing of clothes? What resources are needed? Etc.

SEE HANDOUT FOR INSTRUCTIONS

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
April 2-3, 1993**

PICTURE/MAP EXERCISE

GOALS AND OBJECTIVES

Goals: To help students understand one important reason for knowing about other places and people around the globe - that their classmates and other people in the local community come from and represent many different countries worldwide.

Objectives:

1. Be able to locate various countries on a world map
2. Be able to associate classmates with their country/geographical region of origin
3. Be able to discuss one way that we (local citizens) are linked with the rest of the world (through classmates!)

Process: Give each student a picture of other students in the school or families in the community that are from other parts of the world. If there are not enough pictures to go around, or you do not have pictures available to you, give the students small pieces of paper with the names of students/families from other countries. On the back of the pictures or pieces of paper, write the name of that person's country of origin.

Then, have the students tape the picture/pieces of paper, according to their countries, on a world map. Have them then connect each picture/piece of paper from that country to your local area with a piece of string or yarn.

In the follow-up discussion with the students, point out how the picture/map exercise shows how we are globally connected just by the fact that who we live, study and work with are from many different parts of the world. For this reason alone, it is important for us to learn about people and places around the globe.

To extend the discussion, you could ask the students what they know about these different parts of the world, whether or not any of them have traveled to these countries, etc. This type of exercise also opens up many possibilities for drawing on your international students' experiences and expertise, and bringing community members representing different countries into the classroom.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

WHOSE NEWS IS MY NEWS?

The newspaper is full of stories which demonstrate our global linkages, but students don't always make the connection between international events and their own lives. The following exercise is one which will help your students apply what they have learned from a global studies unit or country study to understand the complexities of a real issue.

Objectives:

1. To encourage students to use critical thinking skills in determining the potential consequences of international events at the local, state or national level. Students may explore the environmental, social, political or economic impact of the issues addressed, keeping in mind the focus of their particular unit.
2. To help students understand the relationships between their global learning units and the critical issues facing our world.

Process:

1. Either write your own news stories or find news articles which demonstrate global linkages. (Of course, you will need to use appropriate language for the grade level you are teaching.)
2. Provide your students with only the headline and first paragraph of your stories, keeping in mind that you will need to provide them with sufficient information in the first paragraph to complete their stories.
3. Ask your students to complete their stories, either in small groups, pairs or as individuals, and prepare to share their articles with their classmates.

Oil Shortages Threaten Agricultural Exports

Geologists have just confirmed that the oil deposits in central Saudi Arabia are drying up. Because of the impending shortfall, all OPEC countries have agreed to increase their prices by 50 percent. The Wheat Commission and the Pea and Lentil Commission are getting together to discuss what effects the rising price of oil will have on wheat and lentil production. Of utmost concern is the cost of running farm machinery and the petroleum derivatives found in pesticides and fertilizers.

Cool Weather in South America Freezes Loan Repayments to U.S. Banks

Record low temperatures in Columbia and Brazil have severely damaged this year's coffee crop. Because of the frost, yields are expected to be only twenty percent of what was projected. Mr. Arturo Lopez, spokesperson of FEDECAFE, Columbia's national coffee grower's federation, said this will be the worst year for coffee since the "Roya" plague of 1972. Since both Brazil and Colombia depend on coffee to earn hard currency, it is expected that both these countries will have to renegotiate the repayment of their loans to U.S. banks.

NAFTA: The President's Final Word Alerts Local Economies

In his final days of the U.S. presidency, President Bush met with Mexican president Carlos Salinas de Gortari and the Canadian Premier to sign the North American Free Trade Agreement. The White House issued a statement saying that this agreement will ease the flow of goods between all three countries. Demonstrators outside of the White House, however, said that too many American jobs would go to Mexico. Growers in the Yakima Valley are concerned about potential competition from Mexican produce. A clothing company originally considering moving to Moscow, Idaho because of its availability of labor is now reconsidering this move.

Political Unrest in Somalia Challenges Efforts of Farmers in Pacific Northwest

Three hundred people died of starvation today in Somalia while awaiting the shipment of food from the western world. Although several cargo ships in the port of Mogadishu are waiting to be off-loaded, workers are afraid to come to the docks for fear rival factions will harm them. Awaiting in the strongholds of these ships are tons of food from the Pacific Northwest, including wheat, dried lentils and corn. Ports in the Pacific Northwest have been particularly efficient in transporting the food to where it is needed. Farmers in the Northwest have also been very cooperative in bringing their harvests to the ports. Without security being restored in Somalia, no more food will be received in the ports and more people will die.

These Shoes are Made for Walking

Yesterday, a major confrontation took place between the female factory workers at the Sao Paulo Shoe Factory, an exporter of 60% of the USA's footwear imports, and the management of that company. Women, who comprise 87% of the laborers, said they would no longer put up with their intolerable working conditions, the low salaries, and the lack of facilities for child care. Luz Baraquin, the organizer of the strike, said the women wanted proper lighting throughout the factory, an hourly wage of \$2.00, and a child care center in close proximity to the factory that was supported by the company. Ms. Baraquin said that the factory owners had made many false promises to women in order that they would accept employment. But after the women had signed their work contracts, conditions worsened.

The U.S. imports a majority of its footwear from the Sao Paulo Shoe Factory. Implications of this strike continuing are far-reaching.

THE CASE PROFILE

ZAIRE COLONIZES KITTITAS?

Zaire is a politically and economically powerful industrialized country in Sub-Saharan Africa. In its early exploration of the world, looking for raw materials for its industries and seeking global markets, Zaire came across Kittitas, an agriculturally rich area. Kittitas grows hay and has a thriving beef production industry which are the basis of the livelihood of its population.

The people in Kittitas are mostly atheists. Not surprisingly, a lot of missionaries arrive from Zaire, a Christian country, to convert the people of Kittitas to Christianity. Along with missionaries are industrialists who come to Kittitas to explore possibilities of setting up commercial activities. As these industrialists establish their businesses, they realize that there is need for administrative control of Kittitas to ensure that their businesses are not threatened. So they urge their government to establish Zairian administrative structures in Kittitas. Zaire does so. The new administrative systems make all local leaders in Kittitas subordinate to the colonial administration. In fact, Zaire's own language, Luba, is to be taught in all schools and used as the official language. Thus Zaire has economic and political control over Kittitas.

During the term of Zaire's colonization of Kittitas, the demand for tea in Europe and other countries in Africa grows tremendously. Zaire does not have an appropriate climate for growing tea; Kittitas does. Zaire decides to establish tea plantations in Kittitas. This involves introducing a strange crop to the area and moving people away from their residences and fertile areas to make room for huge tea plantations. The colonialists in Kittitas embark on moving the people from the valley to surrounding hilly areas where the climate and terrain are not suitable for hay growing and cattle production. Having very little power to negotiate and change the decisions of the colonial office, the people are settled in their new areas. Since they cannot continue to produce hay and cattle for their export markets in Asia and Latin America, they end up as laborers on the tea plantations. Their wages are determined by the Zairian industrialists. As the industrialists' concern is to maximize profit, they pay only minimal wages for the labor.

YOUR TASK

Discuss:

1. What your initial reaction would be.
2. How your lives, as Kittitasans, would change. Examine the economic, social, and political parameters of your lives.
3. The implications of this change for your generation and future ones, and how you would adapt to the situation.
4. Your overall response to the situation. Again explore economic, social, and political parameters. Why would you react that way to the situation?

KITTITAS TEACHER WORKSHOP
April 2 - 3, 1993

EFFECTS OF COLONIZATION

GOALS AND OBJECTIVES:

Goal: To appreciate the impact of colonization on indigenous people and the rise of global interdependence.

Objectives:

1. To show how lives of indigenous people changed as a result of colonization.
2. To demonstrate the implications of such change on the lives of colonized people.
3. To show how and why people reacted to colonization in the short-term and long-term.
4. To show that one spin-off of colonization, perhaps an inevitable one, is international interdependency.

DEBRIEFING ON COLONIZATION EXERCISE

1. What are your general feelings about the exercise you have been involved in? What do you think the impacts of Kittitas being colonized by Zaire? Do you think the practice of colonization would have been better than was the case for Kittitas?

2. Let us explore the reasons for colonization:

- Missionary activities
- Seeking raw materials for industries
- Global markets
- Expansion of empires (subjects)
- Human Change
- Globalization

3. Colonization had both negative and positive impacts. Let us explore the positive impacts **(to identify them and list)**: education, health care, missionary work, globalization, understanding the world more, trade, human development, etc. Let us now explore the negative effects: subjection and control of others, disruption of culture, exploitation, etc.

4. The end result of the early explorations that led to colonization was putting the whole world into one big village in that the world is economically, politically, socially, and environmentally integrated and interdependent. Perhaps this was inevitable; it was going to happen anyway. But what this means is that we need each other to survive. I guess it is very important for our kids and their kids to know this.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

"The Diffusion of Foods"

GOAL:

The goal of this activity is to learn about the history and movement of peoples through the study of the diffusion of crops.

OBJECTIVES:

1. be able to trace the history of coffee, cocoa, wheat and rice.
2. be able to identify the groups of people involved in the history of each of these crops, and what their role was in the diffusion of the crop.
3. be able to track the movement of peoples throughout history, and discuss the reasons for this movement
4. be able to identify the impact that the the diffusion of foods has had on people.

PROCESS:

1. Tell students that they are going to do some research on the history of one of their favorite things: food!
2. Give pairs or small groups of students the description slips of the histories of cocoa and rice, or coffee and wheat. Each group should have 20 separate slips of paper, each with one fact describing something about the history of one of their crops.
3. Ask students to separate out, and put into chronological order (where applies), the slips of paper according to the crop they describe.
4. Have each group list out the facts about one of their crops on flipchart paper. Make sure that all crops are represented among the groups.
5. On large world map, have representatives of each crop trace, with yarn, the movement of that crop over history. Use small pieces of paper to mark the dates and label the crops.
6. De-Brief: Have representatives from each crop present their fact sheet and movement of their crop on the world map. Engage the students in a discussion based on the following questions:

- What did the exercise show you about the use of foods over history?
- What did you learn about things other than food in this exercise?
- What does tracing the history of a food crop tell you about people?
- How were these foods transferred from one place to another?
- Why were these foods transferred from one place to another?
- How did the utilization of these crops change over time?
- How does the diffusion of foods affect people?

7. Follow-up Exercise: As an extension to this exercise, you could ask each student to focus in on one of the peoples involved in their historical sketches, and research the history and culture of that group of people. To focus the research assignment more, you could have them look at a group of people at a particular time period relevant to the history of the crop they were involved with. The results of their research could be presented orally, through artwork, or as a writing assignment.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

Diffusion of Foods Exercise

COCOA:

Maya and Aztec Indians of Central America used this crop as a form of currency.

It was the chief ingredient in the cold beverage of the Mayas and Aztecs, called cacahuatl.

In the 1500's, Spanish explorers noted the popularity of this crop, but didn't like its bitterness. They added sugar, creating a hot beverage called chocolatl.

Hernan Cortes took this product to Spain.

From the 1500's to 1700's, a product of this crop gained fame in Europe, and it became fashionable to serve it to royal guests.

In 1720, the Swedish botanist and taxonomist, Carolus Linnaeus, gave this crop the scientific name which means "food of the gods."

Cortes recognized this crop's quality of helping one "build up resistance and fight fatigue" upon its consumption.

In the late 18th century, the French and Dutch experimented with methods of defatting this liquor to form a powder and butter.

Because of its food value, a product made from this crop was included as standard rations for troops in the South African War, and World Wars I and II.

Today, this crop is a key ingredient in the U.S. Army ration "D: - an emergency starvation prevention.

RICE:

This crop was cultivated in South China as early as 4500 B.C.

There was evidence of its cultivation in India in 2000 B.C.

This crop was grown in the Euphrates Valley in 400 B.C.

This was introduced to the Greeks with Alexander the Great's invasion of India, 326 B.C.

The Moors took this crop to Spain when they conquered it in 700 A.D.

Spaniards spread this crop to Italy in 1400 A.D.

The Spanish took this crop to South America and the West Indies with their colonization of these regions in the early 1600's.

The U.S. colonies exported this crop in the late 1600's.

Legend has it that in 1685, Captain J. Thurber, while sailing from Madagascar with this crop, was blown off course by a storm. Having taken refuge in what is now Charleston, South Carolina, he thanked the settlers for their help and hospitality by giving them seeds for this crop. Previously introduced to the region unsuccessfully, it flourished in the region this time.

In India, this word means "sustainer of the human race."

WHEAT:

This crop is believed to have been grown before recorded history.

The origin of this crop is obscure...perhaps from Mesopotamia (Iraq) or the valleys of the Euphrates and Tigris Rivers.

Archeologists have found carbonized specimens of this crop in rustic lake dwellings of Switzerland.

Carbonized remains of this crop have been found in the tombs of pharaohs in Egypt.

This crop was grown in China as early as 3000 B.C.

Columbus brought this crop to the West Indies in 1493

During war times of the 4th and 5th centuries, Athens depended on trade of this crop to replace that which was burned in the fields.

Hernan Cortes carried this crop to Mexico in 1519.

Jesuit and Franciscan Missionaries took this crop to Arizona and California.

In the United States, major production of this crop first began on the East coast in the early part of the 17th century, eventually spreading to the Midwest.

COFFEE

This crop has its origins in Ethiopia.

There is a legend that a goatherder observed unusually frisky behavior in his animals after they ate bright red berries from a tree growing wild in the pasture. The goatherder also tried the berries, and liked their stimulating effect.

This crop was brought to Arabia from Ethiopia, and cultivated in Arabia by 600 A.D.

It was used as food and medicine long before a beverage. One such preparation involved drying the berry, crushing it, and mixing it with fat to form a ball that was eaten.

This crop became a lucrative article of trade when, in Arabia, it was discovered that it could be used for a beverage.

This crop was spread from Arabia to Turkey in 1554.

In 1615, this crop was carried from Turkey to Italy, and eventually spread to other European countries.

The Arabs maintained this crop as a national monopoly until 1690 when the Dutch obtained a few plants and planted them in botanical gardens in The Netherlands.

In 1723, Gabriel Mathieu de Clieu, a French officer who served in Martinique, stole a plant from Paris and planted it in Martinique. There it flourished, and soon spread to the West Indies and the mainland of South America.

In 1727, this crop reached Brazil through a Brazilian army lieutenant, Francisco de Melo Palheta. Palheta was sent to arbitrate a boundary dispute between French and Dutch Guiana (both were cultivating this crop, but neither allowed the export of its seeds or seedlings). Palheta handled the situation adroitly, and so endeared himself to the wife of the governor of French Guiana that, upon his departure, she presented him with a bouquet. Hidden in the bouquet were fertile seeds and cuttings of the crop, which Palheta planted in Brazil.

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
April 2-3, 1993**

DIFFUSION OF TECHNOLOGY

GOALS AND OBJECTIVES

GOAL: To learn about the development, transfer, and impact of technology internationally.

OBJECTIVES:

1. Trace the origin and changes in technology for selected subject-areas.
2. Identify the reasons for the change in technology.
3. Define the technology transfer mechanisms particularly what pushed technology to move from one area to another.
4. Outline some impacts, both negative and positive, the development and diffusion of technology has had on humankind.

PROCESS

1. Identify the fields that you would like to follow up in tracing origin and development of technology. Such fields include Agriculture, Automobiles, Computers, Airplanes, Music, etc.
2. Using publications on historical timetables, Chronologies, or Encyclopedias, write up a summary of a few statements showing the origin and development of technology in your chosen area. Use different colors of paper for each different area, if possible.
3. Get actual examples of items showing differences in technology level, if you can. For example, you can have stones which were used for grinding peanuts into peanut butter and the modern blender.
4. Divide the class into groups of 3 to 5 people. Give each group a number of your write-ups on a particular subject. Ask them to sort out the technology by levels of complexity.
5. Having sorted out the order of their technology, ask them to sort out the origin of the different levels of the technology by continent or country. Next, ask them to paste each piece of paper to the particular continent/country where the technology originated.
6. Let them discuss in their groups what picture they get out of the map exercise. What does the situation reveal about technology?

KITTITAS TEACHERS WORKSHOP
April 2-3, 1993

TECHNOLOGY

PRESENTATION NOTES

Introduction and Group Assignment

We are going to talk about technology. We need to start with the basic question: what is technology? **(allow time for discussion)** A technology is basically a way of doing something. There is always a way of how something can be done better. Thus technology changes from a lower level to a higher one. I am going to divide you into groups. I will give each group some pieces of write-ups on a specific area in which there has been technological change. I would like you in your groups to do the following **(some groups may have actual examples of the items, their approach will slightly different)**:

1. Share the pieces of write-ups among yourselves. Read them and describe to each other the contents of the write-ups.
2. As a group, sort out the levels of the technology by appraising the complexity of the innovation or invention in question.
3. Discuss among yourselves the pattern in the development of the technologies in your allocated subject-area; suggest reasons for that pattern of development of the technology.
4. Next, sort out the geographical origin of the technologies and, using some clear cellotape, go and paste each piece of paper to the particular continent/country where the technology originated.
5. Discuss what this reveals about the character of technology and its diffusion.

Debriefing

1. Groups to feed back their findings and lessons to the larger group.
2. Let us summarize what we have learned about technology from this exercise **(group to give out the lessons)**.

.Technology progresses from simple to more complex

.Its development depends on the problems people face and the needs they seek to meet.

.It is usually problem or need specific; it does not consider the wider repercussions the solution of one problem will have on other aspects of people's life. As a result, it makes the "Challenge-and-Response" activity of humankind a continuous one. This is

a most unfortunate thing about technology.
.It has a geographical, time, and system character.

People, because of their ability to interact and communicate with one another, have been said to have the greatest ability to pass on information, ideas, innovations, attitudes, knowledge, and skills to one another with great efficiency. Humankind, unlike animals, have the ability to think through problems and seek solutions to meet their needs. Fortunately or unfortunately for human beings, addressing one problem has somehow led to the creation of other problems. Hence, people are always in a situation where they have to confront a problem. They have found that discussing the problem and sharing possible alternatives to its solution helps a great deal in progressing with meeting needs.

Inventions and recirculation of inventions or what has been called production and diffusion of technology has had a major factor in people's lives and their relationship. There ingredients in the production and diffusion of technology are:

1. **Relationship between people**
2. **Relationship between people and their environment**
3. **Relationship among the components of the environment**

In its geographical characteristic, technology diffuses from one place to another, transferring from one subset of the environment to the other through interactive activities of people. With regard to the time element in technology, people tend to always "improve" upon technology as time passes. No two individuals will look at the technology in the same way. One will always seek to improve upon the previous invention. And so technology undergoes some revolution. As a system, technology embodies the influences the relationship between components of an environment. It is in its influence on the environment that technology is a threat to the very existence of humankind. Energy and natural resources have been said to be the ingredients of our very existence. Technology is used to influence these so as to best meet people's needs; unfortunately its influence is, to a certain extent, a cause for alarm.

What is the basic model for technological diffusion? First, it starts from the basic interactions between people close to each other. A lot of decision-making processes as people appraise innovations in their ability to deal with the problems that the people are experiencing goes on. Such a process is at the micro level. The next one goes a step farther. People from one area, through travels for all kinds of reasons, go to other geographical space and start sharing with people in those areas; obviously bringing back other ideas. But the technology does not operate in a vacuum; it operates under the constraints of the environment in which people are. All technology uses components of the environment and is aimed at acting on the environment to be more "productive."

AUTOMOBILES

A man, 29 years of age, starts off from Malawi going to South Africa to work in the gold mines to earn some income for his family. South Africa is some 1,100 miles away from the man's home. He has no money; so he can not take a bus. In any case, there are no buses between his home and South Africa. So he follows the same method others have followed before; he walks the 1,100 miles for several months.

A man arrives from working in the gold mines in South Africa. He has brought a bicycle. It is the pride of the village. A lot of young men come to this man and are willing to do some work for him in his garden in exchange for learning how to ride the bicycle.

A Chinese man has developed a cart which is drawn by animals. It is a useful means for transporting agricultural produce as well as people but it is slow and depends very much on the conditions of the animals. The Chinese develops a steam-turbine to propel the cart.

Using the steam-powering system, a British improves on it to create more power thereby inventing the first passenger carrying vehicle powered by steam.

Improving further the steam-power, a French develops a two-stroke internal combustion engine powered by illuminating gas.

A German, also concerned with improving land transport system, designs a three-wheeled, gas driven motor vehicle.

Coming into the computer age, an American wonders whether there is a place for use of computers in automobiles and ends up with developing computer chips and installing them in vehicles. Faced with the problem of traffic congestion in a city, another American is working on how a computer system in a car can be connected with a traffic monitoring system in the city to tell the driver how to avoid traffic congestion.

AGRICULTURE

Life is a free lance adventure. People survive on hunting and gathering wild fruits and edible leaves. Seeing wild dogs, they domesticate them and this helps with the hunting.

In the Near East, wild goats and sheep are domesticated by the hunting and gathering people as these people settle down to horticultural activities. Women use digging sticks to plant seeds of wild grass.

Village farmers replace the food gathering and hunting habits in much of Greece. Organized farming seems more efficient as people settle down in different areas.

Great civilizations arise in places near rivers. The most well known are those of the Nile, Tigris, and Euphrates. The Egyptians on one part of the Nile use the shaduf to irrigate their crops.

In the Tigris and Euphrates river valleys, cattle are domesticated mainly for meat purposes. Villagers cooperate to build irrigation canals and ditches.

To ease agricultural work, Sumerians in the Near East harness domesticated cattle to plows. Other people in the Near East region raise cattle not only for meat but also for milk.

The Egyptians try to domesticate antelopes, gazelles, and oryx but abandon the task. Watermelons are cultivated in much of Africa.

In China, among the Shang Dynasty, water buffaloes are domesticated along with several species of fowl. This is regarded as the beginning of poultry production.

Romans use blood and bones as fertilizer. They grow clover and alfalfa to maintain soil structure and texture but disdain the use of human excreta as manure despite the fact that it seemed very nutritional to the soil.

A United States farmer successfully interbreeds two strains of corn. This is the earliest recorded hybridization of corn.

Combine, Cultivators, and a variety of steam-powered machinery are invented mostly in the United States, displacing a lot of farm labor by machines.

Several varieties of genetically bred, high yielding varieties of corn are commercially available; all-purpose tractors are invented in the United States and come into use not only in the United States but in many parts of the world as well.

A computer-based program for analyzing the nutrient requirement of soils for various crops is developed in the United States. Similarly, a computer-based program for analyzing insect and disease infestation on crops is developed.

The first bio-insecticide to eliminate insects without harming the environment is developed; also robots are used for fruit-picking in experiments in the United States.

FOOD STORAGE, PRESERVATION, AND PROCESSING

A family has just harvested its corn and bean crop in Zimbabwe. The village has no electricity. Wood is the main source of energy and the ash from firewood is mixed with the beans and stored in a locally constructed muddied store. The corn, enough to last some twelve months, is also stored in a muddied grain store. The family ensures that they grow the flint corn because it is harder and weevils cause little damage when the corn is stored.

Shima, as the Bemba of Zambia call it, is the staple carbohydrate for most Zambians. It is prepared from corn, cassava, millet, sorghum or other types of flour. To process the corn into flour, women take the cobs from a grain store, shell it, then pound it in a mortar to remove the outer coat of the grain. Thereafter, they soak the pounded corn for some three to five days and pound it again in a mortar into flour.

In Lusaka, a city in Zambia, shima is still the main source of carbohydrate. Unlike in the villages, both the first and second pounding to turn the corn into flour, is done by grinding mills.

In Uganda, a lot of millet is grown. They also process the millet into flour that they use for cooking shima or ugali as the Swahili call it there. To process the millet into flour, women use a big stone and a small one and grind the millet in between the stones.

An African student at one of the United States universities, would like to prepare an African dish that requires use of groundnut powder. If she were in her home country, she would have used the mortar to grind the peanuts into powder. However, she has the privilege of using a blender to grind the nuts.

A wheat farmer in Whitman county has these huge grain silos for storing the wheat before marketing it. This enables the farmer to store the wheat until a time when she knows she will be able to make a lot more money because of the good prices.

It is almost mandatory for every home in the United States to have a refrigerator for storage of food. It seems a fridge is a necessity not a luxury.

MEDICINE

A child is sick in a remote village in the Amazon area in Brazil. The family is worried. They visit a medicine woman who prescribes something. She goes into the forest to collect some roots to make the needed medicine which the parents can give to the sick child.

A young man has a broken arm in a village in China. The village's eldest man goes into the forest and takes some herbs. He boils them and using tree barks and strings, he bandages the arm.

Sumerian physicians practice a mixture of primitive medicine and magic around 3,000 B.C.

By 1,550 B.C., the Egyptians were said to have developed a cure for a malady of the "king's nostrils." They also are recorded to have developed the earliest known cures for baldness.

By 500 B.C., a Greek Physiologist is recorded to have performed the first dissection of a human body for research purposes. He identified the brain as the center for intelligence.

First cataract operations were performed in India with the earliest hospital being built in Sri Lanka (Ceylon).

By 100 B.C., Chinese Physicians form an accurate theory of circulation of blood in the human body.

Christiaan Barnard, a South African, performs the first heart transplant. The patient lives for only 18 days. After 74 days, Barnard performs a second heart transplant; the patient survives much longer.

First glass eyes are invented in the United States and come into use there.

United States scientists develop the first radiography equipment that can be used to see a child in a pregnant woman.

COMPUTERS

A German builds the first known mechanical calculator.

An Englishman devises the first known analytical engine to help with mathematical problems.

The first large-scale analog computer is built at MIT.

A prototype digital computer, 50 feet long, is built at Harvard. The computer uses electromechanical switches.

An American physicist invents the transistor. It is seen as the invention that revolutionized the computer industry.

An American designs the first computer that is used for commercial use. The computer, 15 feet long with 1.5K memory, uses magnetic tape for data storage.

An American invents the micro-processor. It is a step to the production of the first desktop micro-computer that becomes available in 1975.

An advanced super-computer that can perform 1.72 billion computations per second is produced in the United States.

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

Shipwreck Goals and Objectives

Goal: To understand how governments are formed and shaped by their environments.

Objectives:

- To be able to articulate the basis on which governments operate
- To be able to discuss the human concerns of being governed
- To be able to identify rights that must be guaranteed to citizens

Process:

Divide your class into groups of 7 - 10. Hand out the exercise, and have each group organize themselves in such a way as to guarantee their "survival," e.g., sub-groups to find food, build shelter, find water. Have them write down these different sub-groups and how they decided to create these particular groups. Then have them devise rules to ensure their own survival, and have them write them down on a piece of newsprint (to be shared later). Have them also try to innovate a rescue strategy.

Debriefing:

The following questions might be helpful in guiding and directing your students to the theme of comparative government:

- After you overcame the shock of your shipwreck, what thought came to your mind first?
- How did you organize yourselves?
- On what did you base your organization?
- How did leadership emerge?
- What qualities did this person have?
- Who made the decisions in how you went about accomplishing your goals?
- What strategies did you develop to ensure your survival?
- What strategies did you develop to be rescued?
- Did anybody not participate? Why?

After a discussion of what each group has written, begin to draw parallels to our own government, how it is organized to meet the needs of people, how it tries to ensure equal rights to everyone, and how each person has responsibility to participate. On a structural level, you can begin to identify various departments of government designed to administer regulations and laws. This can be done either with U.S. Government or a range of governments.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

SHIPWRECK/THE ISLANDERS

After a harrowing night of stormy weather and battles with the crushing winds which overturned the cruise ship upon which you and your classmates were sailing, you find yourself washed ashore on a deserted island. The island is very lush and covered with tropical forests. In the center of the island is a mountain peak that looks like an extinct volcano. A sandy beach surrounds the island. As you stand on the beach, the surrounding view is quite beautiful and the vegetation abundant.

After you overcome your initial shock about what happened, you realize that you may be on this island for some time. You must decide, along with the others, how you are going to provide for your needs of food, clothing, shelter. You also want to design a plan to be rescued.

The specific issues you must resolve are:

1. How you are going to organize yourselves for survival
2. What rules you will initiate to ensure that everybody gets what they need
3. What strategy you will devise for being rescued

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

Shipwreck Debriefing

1. What processes did you use to undertake the tasks of survival?
2. How did you know to use these processes?
3. A parallel can be drawn between the shipwreck/island scenario and the development of "government" in its most essential forms. If you consider the environment in which people lived as civilizations evolved, what kinds of social institutions and government would be necessary for people who:
 - a. lived off the land, hunted meat and gathered roots, berries and leaves?
 - b. raised cattle to eat and exchange, and had to move seasonally to different places?
 - c. cultivated horticultural crops until the yields declined and then moved on
 - d. cultivate agricultural crops intensively
4. How would the tenets of democracy come into play in the development of government? Would they evolve naturally, or is there a greater tendency to be autocratic and authoritarian? Why?
5. What other factors affect the form a government takes?
 - Economics
 - Religion
 - Traditional and Philosophical Beliefs
 - Family and Kinship Structure
 - Environment
6. If any of these factors changes, what implications would there be for changes in government?

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

Tracing the "Coffee Bean" to Its Origins

GOALS AND OBJECTIVES

Goal: To have students understand the international nature of our daily food consumption and how we are linked to many developing countries through the food we eat.

Objectives:

1. To be able to document the path a primary commodity takes from planting in one country to the dinner table in another country.
2. To be able to link your home in one state/country to another home in another state/country.
3. To understand how the world is food interdependent

FOOD PRODUCTION AND CONSUMPTION SYSTEMS.

Directions:

1. Fold your paper in half.
2. Think for a minute about the farming that takes place around here in the Palouse. On one side of your paper, which represents agricultural production, take the next 3 minutes to write down at least 10 resources needed for on-farm agricultural production...i.e. What do you need to grow crops?
3. De-Brief: (land, capital - \$, credit, water, fertilizer, seeds, sunlight, labor, technology, machinery, energy source, cooperative weather, good soil, etc...)
4. The second part of your paper is you. What do you need in order to have access to food once it is produced/harvested? Again, take 3 minutes in your groups to list as many things as you can.
5. De-Brief: (market, money, employment, transportation, local supply, storage, refrigeration...)
6. Discussion: What is involved in getting the food from the farm to the market? (processing plants, energy, labor, technology, storage, transportation, fuel, infrastructure, refrigeration, time). These factors make up what is called distribution. Distribution is one of the major problems in Africa's food system.

These two exercises combine to illustrate the major elements of a food production and consumption system. When any part of this system gets a kink in it, the whole system is affected. For example, what happens when there is a drought? Or, what would happen if you couldn't get needed parts to the trucks that carried wheat from the grain elevators to the mills? What if you lost your job? If the kinks or breakdowns in the system are severe enough, the whole food system will breakdown, leading to a situation of hunger.

7. Tracing food products back to their points of origin. Assign foods: cocoa, peanut oil, coffee, yams, cassava, guavas. For the next 12-15 minutes, in your groups, I'm going to have you trace a food item that comes from different parts of the world backward from when we eat it to the initial point of on-farm production. In your picture, include the elements of food systems that we have talked about today: production, processing, storage, distribution, accessibility, land, inputs, weather, natural resources, infrastructure, technology, markets, political constraints, human resources, AND, be able to discuss possible ways that your food system could break down.

8. De-Brief: Have groups present their "tracings." Discuss ways of systems breaking down: You have identified a few ways in which your food systems could break down, and eventually leave people facing hunger. Identify some of the ways in which the system can break down and result in hunger.

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

The Trade Game

GOALS AND OBJECTIVES

Goal: To have students learn, from their own personal economic viewpoint, what international trade is all about and the constraints developing countries face in earning hard currencies through trade. In particular, students will gain an understanding of why developing countries find it so difficult to establish and maintain a balanced trading relationship with countries in the developed world. This exercise can be used to illustrate personal as well as international budgeting, and seeks to help students come to terms with why developing countries are generally poorer than developed countries (e.g., their economies are based largely on agricultural production). Another goal is to try and help students understand why there is hunger in Africa.

Objectives:

1. Be able to define what a comparative advantage is in trade.
2. Be able to define the difference between hard and soft currencies.
3. Be able to negotiate favorable terms of trade.
4. Be able to identify reasons why developing countries are at a global disadvantage in trade

1. Economics and You

What is an average amount someone your age gets for an allowance?
How is it supplemented? Work? Babysitting?

Process 1

Let's start learning about trade by actually doing it. Half of you will be given various amounts of money. The other half will be given various amount of commodities to sell, like movie tickets, video game playing cards, clothes, food and snacks, and other things you might be interested in purchasing. The problem in making purchases is that there is no set price for the commodities; you have to find a mutually agreeable price by considering the laws of supply and demand* - i.e., when the demand is greater than the supply, the price goes up; when the supply is greater than the demand, the price goes down.

Your goal, those of you with money, is to buy as many of the items being sold that you want. Those of you with commodities, your goal is to get the highest price for the commodity as you can, since this is your business. Any type of "deal" is OK.

Debriefing

- What "deals" did you make?
- What is the highest price paid for each commodity?
- What is the lowest price paid for each commodity?
- What accounts for the differences in pricing?

What you have just done on a micro level is to illustrate the way the world market works on a macro level. When a country produces something another country needs, and there is not a very good supply, the price goes up, and the producing country has more money. The opposite is also true. When too many countries produce the same item, more than the demand, the price goes down.

When we apply these principles to Africa, we generally find that African countries produce a lot of primary commodities, like food and minerals from mines. The problem is, a lot of other developing countries produce similar things and glut the market, making the price go down. As Jane mentioned yesterday, Ghana used to be the world's cocoa supplier, and today it has only 10% of the market share. Zambia used to produce the world's copper supply, but today that market share has been reduced by the discovery and mining of copper in other countries.

The problem gets even bigger when the trade in primary commodities is reduced because then developing countries can't earn what we call hard currency, i.e., those currencies that can be converted to any other currency. If African countries can't get hard currencies by trading primary commodities, that means they can't purchase industrial equipment. This starts a vicious cycle, because without money to buy equipment, they can't industrialize, and so they become even more dependent on primary commodities.

As you learned yesterday, there are a lot of problems related to production, distribution and access to food. What might be some other issues that would prevent African countries from generating a good harvest to trade?

3. The Trade Game

What you have just learned from trading in items you want will now be applied to Africa. Before we begin, I want you to be familiar with certain terms: BALANCE OF TRADE, UNFAVORABLE TERMS OF TRADE, PRIMARY COMMODITIES, GUAVAS.

Process 2

Divide yourselves into groups of four. Two of you will be representatives of the U.S. and two from the country of Mozambique. The Americans have come here to sell something, and the Mozambicans are here to buy, but they also have something to sell. As Americans, your job is to get the best price for your equipment; as Mozambicans, your job is to get the best terms of trade for your guavas, and maybe for something else.

You must bear the following points in mind: Mozambicans are a very poor people with very

little opportunity to earn hard currency. They grow fresh fruit during the winter seasons in Europe and the U.S. and would like to export this fruit. Americans need to develop more trading relationships in order that the U.S. Government does not go further into debt. You must negotiate a trading relationship that will satisfy both.

Debriefing (see other sheet)

4. What did you learn about hunger in Africa today? How have some of your images of Africa changed as a result of what you have learned today?

THE TRADE GAME

American Manufacturer/Commerce Department Briefing Sheet

You are from the Northwest in the United States. You are a manufacturer of agricultural machinery that is needed in developing countries. You are interested in establishing a trading relationship with developing countries because your own country has been saturated with the type of machinery you manufacture and you want to expand your market. Accompanying you is a senior member of the Commerce Department who has been authorized to work with you on establishing a trading relationship.

The people in your country eat well. They have a great deal of variety in their foods because your country has established export plantations in several developing countries. Because the people in your country have become used to "exotic" foods, you have been asked to identify a source for guavas. You know these are grown in abundance in particular areas of Mozambique, a country in Southern Africa. It is your thought that you could negotiate a trading relationship on the basis of guavas and your machinery.

You have certain specific guidelines from the leaders of your home country. You must sell your machinery for the highest price possible in order to generate revenue both for the state and your company. In return, you must purchase food commodities - in this case guavas - at the lowest price possible in order that your country can keep food prices low - even if the food is imported. You are authorized to make any type of "deal" you can that will satisfy these two needs. You are allowed to be innovative in your negotiations.

In your negotiations, you must consider how to overcome the problem of hard and soft currencies. As an American company, you must obtain hard currencies for your machinery, but you know this will be a problem to the Mozambicans. You must find a way out of this dilemma. Also, since your machinery is bulky and weighs a lot, you must find a way to factor into the negotiation the cost of shipping and handling.

You have learned that the people in Mozambique feel they have something to offer the developed world, not only primary agricultural commodities, but also some manufactured items. The leaders have all been highly educated in your country and are familiar with your country's needs. However, as leaders, they must put their own country's needs first.

Your job is to negotiate a contract that fits the guidelines you have been given.

THE TRADE GAME

Mozambican Ministries of Agriculture & Trade Briefing Sheet

You are senior members of the Ministry of Trade and Ministry of Agriculture in the country of Mozambique in Southern Africa. Your country is interested in establishing trading relationships with manufacturers in the U.S., Europe and Japan. You are deeply concerned, however, about making the terms of trade favorable for your country. That is, you don't want relationships that will benefit the other side; you want to ensure that your country and your producers benefit equally from any relationships that are established. For this reason, you want to trade in a range of commodities: primary agricultural, mining commodities and manufacturing.

Your country is relatively poor. Its GNP per capita is only \$80, and personal incomes range from \$120 to \$10,000 per year, with an average per capita income of only \$273. Your people are primarily farmers, growing a number of locally-consumed and export crops. Your country has "agricultural growth zones" where certain crops grow very well. During colonial days, however, the Portuguese did not construct roads to these zones because the crops in many of these zones were mostly fruits and vegetables. Despite attempts to become food self-sufficient, current agricultural practices, soils and rain patterns require that you import a portion of your foodstuffs, especially wheat and rice. You must use foreign or hard currency to make these purchases internationally, often placing your country in debt.

Farmers in your country are experiencing a record production year. The rains were good, labor to help on farms was available, and the civil war ended with a peace treaty. Even small, family farms experienced a record harvest in grains, all of which have provided your citizens with an adequate food supply in most commodities. The blend of old and new technologies farmers are using, in addition to the favorable weather conditions, has indicated to both your ministries that when agricultural practices are implemented efficiently, good results can ensue.

Since you know the potential of agricultural production in your country, the leaders have decided that diversification of the economy is timely. To support industrialization, you require a range of machinery, including those for farm mechanization. You have recently learned that a U.S. manufacturer would like to meet with you and discuss an arrangement to import their machinery and, in return, discuss the possibility of exporting guavas. You believe this to be a good idea, since guavas will be harvested in record numbers, but you are concerned about getting them to the airport quickly since the roads to the guava groves are very poor.

Your job is to negotiate the highest price for the guavas, and pay the lowest price for the machinery. You have broad latitude to be very innovative in the way you negotiate. You can make any type of barter, hard currency, exchange agreement you think will benefit you and your country, especially if it will provide support to construct the road to the guava groves.

THE TRADE GAME

Debriefing Sheet

1. What sort of "deal" did each of your teams make?
2. What were the considerations of the U.S. manufacturer and the Commerce Department Official? What were the considerations of the Ministries of Agriculture and Trade in Mozambique?
3. Given what Jane said about food production and consumption systems, what sort of impact would you expect the exporting of guavas to have on Mozambique?
4. What considerations were not presented in "The Trade Game" that you think ought to be taken into account?
 - world commodity markets
 - airline shipping prices
 - hard currency/soft currency exchange rates
 - ownership of guava groves
 - relationship of government to owners of guava groves
 - other potential traders
 - infrastructural development
5. What do you understand about some of the reasons for hunger in Africa by playing this game? What about "getting the most for the least" attitude?
6. What have you learned about developing countries through this game?

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
APRIL 2-3, 1993**

CIRCLE OF POISONS

GOALS AND OBJECTIVES

Goals: To understand that chemicals produced anywhere in the world have the ability to circulate around the whole world.

Objectives:

1. To show students the circular nature of poisons.
2. To show students the complexity and the global nature of the Circle of Poisons problem.
4. To help students to realize that they can be part of the solution.

The study is designed as a group participation exercise. There are twelve brief readings included, each covering a different aspect of and effect of the Circle of Poisons. Depending on the size of the group, one or more of these can be given to individuals or small groups for their reading and/or discussion. The information is then reported to the larger group, allowing participants to be the teachers and information providers. Visual aids are encouraged to be used in the presentations. Each issue or topic is to be recorded, using key words, within a circle. It is important to organize the groups to ensure an easy flow of information in the circle. At the end, participants in the large group should exchange ideas about solutions or interventions to break the Circle of Poisons. Individuals should seek to outline how they can do something about the Circle of Poisons.

This exercise can be used in full or in part as part of some training about development. In fact, the concept of a circle of something can be used to illustrate global linkage on different global issues.

KITTITAS TEACHER WORKSHOP
April 2-3, 1993
Decisions for a Developing Country

You are a member of a the national legislative body of a specific "developing" country. Your government has allocated US\$7,500,000 in the budget for development projects. The national legislature is to decide which programs are to be funded. Identify those projects you believe should be funded.

- | | |
|-------------|---|
| \$3,000,000 | 1. Build primary schools to accommodate 200 students in 50 villages. |
| \$2,000,000 | 2. Import irrigation equipment and teach farmers in three regions of the country how to irrigate to improve agricultural production of export crops. |
| \$2,500,000 | 3. Build a highway for carrying lumber from a forest to a seaport from which it can be exported. |
| \$2,000,000 | 4. Install systems to purify water in 200 villages. |
| \$3,000,000 | 5. Conduct a nationwide campaign to immunize all children under 5 against smallpox, measles, whooping cough, and polio. |
| \$1,700,000 | 6. Build, furnish, and equip four-room health center in 50 villages. |
| \$1,000,000 | 7. Make funds available to banks so they can make loans of \$200 with very low interest charges to 5,000 farmers. |
| \$500,000 | 8. Train 100 high school graduates to teach literacy in village schools. |
| \$1,000,000 | 9. Equip 20 minibuses to provide health care and family planning services in remote villages; train and pay salaries of workers on the buses. |
| \$500,000 | 10. Train 50 village fieldworkers and pay their salaries for a year; each of the fieldworkers will teach 100 farmers to use a new kind of seed and improved farming techniques. |
| \$1,000,000 | 11. Establish a family planning program throughout the nation, with regional information centers. |
| \$1,500,000 | 12. Establish regional small business development centers to advise women on how to market their vegetable crops for local consumption and export. |
| \$2,500,000 | 13. Build dams along the country's rivers to siphon off water for irrigation. |
| \$2,000,000 | 14. Develop a housing and industrial scheme in one rural location to provide |

- incentives for urban migrants to move to rural areas.
- \$1,500,000 15. Establish a small grants program for NGOs to develop community-based plans to promote sustainable use of forests.
- \$3,000,000 16. Fund a public works project to create a proper sewage and wastewater treatment system in one of the suburbs of the capital city.
- \$2,000,000 17. Develop a relief cum development program for displaced persons.
- \$500,000 18. Develop a pilot rural-based leadership training program that will provide women and men in how to make community-wide decisions.

KITTITAS TEACHER WORKSHOP
April 2-3, 1993

Development in Senegal

Excerpted from "In Senegal, Grassroots Efforts Illustrate Development in Action" by Laura Lorenz Hess, Front Lines, November 1992.

A comprehensive approach is being taken to development in Senegal that integrates the needs of family, community and country. The approach is being utilized outside a dry and dusty town not far from Dakar, the capital, where the village association of 50 women has planted 5,000 trees and been reimbursed for more than half of them through the project. The planting of trees is critical in Senegal, whose rapidly growing population and dependency on fuelwood and charcoal for energy pose a serious threat to the country's economic and natural resources.

The project is unique: it is national in scope, and the participants have to provide initial funding for their start-up costs. The project reimburses them at least 50 percent of their costs one year after planting, based on the percentage of trees that survive.

"The government of Senegal trained us about the importance of trees," says Fatou Ndiaye of the Pout Women's Village Association. "We know that trees bring rain. We formed an association and asked the government for some land. When we heard about the project, we already had some money saved and were ready to plant trees."

The association will begin to realize the earnings on its forestry investment in two more years, when the trees begin to be harvested for fuel and construction.

To save on the use of wood for fuel, a new charcoal cooking stove has been introduced. They are made by local blacksmiths and potters that are trained under the project. They are in such high demand that the blacksmiths can't keep up with the demand. "If I have the stock, I can sell about 20 stoves a day from the third to the tenth of each month," says Pape Thiam, who makes a 15 percent profit on each stove.

The cost of buying the stove, which is four times more expensive than other locally made stoves, is offset by its economical use of charcoal. Buyers also find the hourglass design and red ceramic lining attractive as well as practical. The stove requires 40 to 70 percent less charcoal than the stoves most commonly used in homes and restaurants at all economic levels. Thiam says that his mother used to use eight kilos of charcoal every day, but now she buys only 2-1/2 kilos and still has some left over.

KITTITAS TEACHER WORKSHOP
April 2-3, 1993

SENEGAL COUNTRY PROFILE

Senegal has an area of 75,955 square miles (about the size of Nebraska) with a population of 7 million people, creating a population density of 92 people per square mile. Its annual population growth rate is 2.8%. The average rate of adult literacy is 38%, with adults having achieved only 0.8 means years of schooling. About 40% of Senegal's population has access to health services, and 54% has access to safe water. Senegal has an under-five mortality rate of 185 per thousand, mainly due to diseases that can be prevented through immunization.

Senegal became independent from France in 1960. It has had a stable government, initially under President Senghor, but in more recent years under President Diouf. This is one of the most peaceful countries in Africa.

Senegal has a varied climate with 4 to 5 months of rainfall amounting to some 65 inches in some areas. Agriculture comprises about 10% of the GNP, but employs more than 70% of the working population. The majority of the remaining GNP comes from manufacturing and services.

Groundnuts are the main cash and export crop. Their cultivation takes up about 40% of Senegal's arable land. Output of groundnuts declined from 1,168,000 tons in 1965 to 678,753 tons in 1990/91, mainly due to droughts and international price fluctuation. Governemnt is trying to diversify its export crops into cotton, rice, and sugarcane, but international market opportunities are limited due to competition. Other primary commodities include oil seeds, phosphate ores, and a small amount of petroleum. Droughts have also affected food supply. This has led the government to import food for its population.

Senegalese people herd cattle, sheep, and goats, which are produced mainly for internal consumption. The country has no significant minerals. The country depends on agriculture, manufacturing and services to obtain foreign currency. Financial problems have led to the closure of a number of factories, as government has had to allocate more resources to importing food.

Senegal's GNP per capita is \$650. Growth of the GNP was 4% per year during 1981-85, but declined to 2.9% per year during 1985-89, just keeping apace with the population growth rate.

KITTITAS TEACHER WORKSHOP
April 2-3, 1993

Statistics on Senegal

Food Staple Self-Sufficiency Ratio:	67%
Food Aid in Cereals (% of Total Cereal Import):	23.6%
Food Imports (% of Total Imports):	40%
GNP/Capita:	\$650
GNP/Capital Annual Growth:	-0.80%
Rural Population Below Poverty Line:	70%
Life Expectancy at Birth:	48
Adult Literacy:	28%
Primary School Enrollment (% of age group):	60%
Population per Physician:	13,100
Infant Mortality (per 1,000 live births):	129
Under-Five Mortality (per 1,000):	220
Rural Population with Access to	
Health Services	40%
Safe Water	38%
Sanitation	2%
Rural Population (% of Total):	62%
Agricultural Population (% of Total):	79%
Rural Female-Headed Families:	36%
Annual Deforestation (1,000 hectares):	50
Salinity (1,000 hectares):	765
Arable Land Per Head of Population (hectares):	0.95
Irrigated land:	3%
Share of Agriculture in GDP:	22
Share of Agriculture in Total Labor:	78.8
Annual Crop Growth Rate	
Rice	-0.92
Maize	-0.93
Sorghum	-0.96
Groundnuts	-1.00
Cotton	-2.19
Sugarcane	-3.92
Maternal Mortality (per 100,000 births):	530
Women Using Contraceptives:	4%
Female Adult Literacy:	19%
Gross Primary Female Enrollment:	49%
Gross Secondary Female Enrollment:	10%
Female Agricultural Labor Force:	88%
Female Non-Agricultural Labor Force:	12%

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
April 2-3, 1993**

Statistics on Brazil

Food Staple Self-Sufficiency Ratio:	88 %
Food Aid in Cereals (% of Total Cereal Import):	1.5 %
Food Imports (% of Total Imports):	14 %
GNP/Capita:	\$2,160
GNP/Capita Annual Growth:	3.60 %
Rural Population Below Poverty Line:	73 %
Life Expectancy at Birth:	65
Adult Literacy:	78 %
Primary School Enrollment (% of age group):	103 %
Population per Physician:	1,100
Infant Mortality (per 1000 live births)	64
Under-Five Mortality (per 1000 live births)	87
Rural Population with Access to	
Health Services	21 %
Safe Water	56
Sanitation	1
Rural Population (% of Total):	25 %
Agricultural Population (% of Total):	26 %
Rural Female-Headed Families:	14 %
Annual deforestation (1,000 hectares)	2,323
Salinity (1,000 hectares):	4,503
Arable Land Per Head of Population (hectares)	1.80
Irrigated Land:	4 %
Share of Agriculture in GDP:	9 %
Annual Crop Growth Rate	
Rice	.31
Wheat	.81
Maize	-4.01
Sorghum	-6.58
Groundnuts	-.73
Coffee	-7.48
Cotton	1.21
Long-term external debt (% of GNP)	29 %
Maternal Mortality Rate (per 100,00 live births):	150
Women Using Contraceptives:	65 %
Female Adult Literacy:	76 %
Gross Primary Female Enrollment:	99 %
Gross Secondary Female Enrollment:	45 %
Female Agricultural Labor Force:	12 %
Female Non-Agricultural Labor Force:	88 %

DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
April 2-3, 1993
BRAZIL COUNTRY PROFILE

Brazil has an area of 3,286,488 square miles (about the size of the Continental U.S.), and about 155.5 million inhabitants, 70% of whom are under the age of 30. Its annual population growth rate is 2%. The average number of children born by a woman is 3.5, and a newborn can expect to live about 65 years. For every 1,000 babies born alive, 64 die as infants. 8-9% of the babies weigh less than 5.5 pounds at birth, indicating that the mothers are malnourished. The maternal mortality rate is 150 per 100,000 live births.

Of Brazil's total population, 25% live in rural areas. Of these, only 21% have access to health services, 56% to safe water, and 1% to sanitation. The average rate of adult literacy is 78%, although this figure is much lower for rural areas.

When the Portuguese arrived in Brazil in 1500 A.D., the native Tupians quickly established economic relations with the Europeans who were interested in the valuable dye wood, "pau-brasil," that was so abundant in the region. Brazil then gained its independence from Portugal in 1822. Brazil was ruled by the military from 1964 until 1985. The first Brazilian president to be chosen through direct elections since the military rule, Fernando Collor de Mello (1989), resigned from office on December 29, 1992. During the course of that year, investigation and impeachment processes had been undertaken in response to allegations of Collor's misuse of funds. Ex-Vice President, Itamar Franco, took office shortly after Collor's resignation was announced.

In order to finance Brazil's multi-billion dollar debt, the government has tried to increase both agricultural and industrial exports. Agriculture employs 31% of the population, services 45%, and industry 27%. Brazil is nearly self-sufficient agriculturally, except for wheat. Major crops include coffee, rice, corn, sugarcane, cocoa, and soybeans. Small farms in the south which have been converted to industrialized agriculture for export crops have displaced thousands of people from the land. Major industrial commodities include textiles and other consumer goods, shoes, and chemicals.

Deforestation and desertification in the extremely poor northeast have driven people to southern cities and development projects in the Amazon Basin. In the early 1970's, the federal government began giving land to those who would settle in western Brazil in the Amazon Valley. By 1984, a highway through the Amazon was complete, and the migration of people was heavy. The damage to the environment has been severe. As much as 20% of the rain forest may have been destroyed. Immigrants cut roads into the rain forest and clear large tracts of land to secure claims.

Brazil is a two-tiered society where wealth is concentrated in the hands of a small fraction of the population and the majority is poor. The average per capita income is about \$1,750. The nation is also divided by the impoverished tropical north and the concentration of industry and wealth in the south.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

Development in Brazil

(Excerpted from , "The Church and Land Conflicts in Brazil: A Delegation Report;" August, 1986)

In an attempt to finance its multi-billion dollar debt, over the last 20 years Brazil's government has promoted the expansion of exports, both in the industrial arena as well as in agriculture. The shift towards agro-industry has greatly affected land use, labor relations, and migration patterns throughout the country.

Conflict over land has been part of Brazilian history since the colonial period when the country was divided into 15 giant feudal captaincies by its Portuguese colonizers. But the conflict has taken on new vigor since 1985 when the Ministry of Reform and Agrarian Development (MIRAD) was established to develop a plan for agrarian reform. MIRAD drafted a moderate reform, entitled the National Plan for Agrarian Reform (PNRA) which emphasized the modernization of the country's agricultural production via rural enterprise and disappropriation of all large farm holdings (latifundios) that were not in production.

As could be expected, wealthy farm owners and land speculators reacted aggressively against PNRA. A by-product of the anti-PNRA campaign was the creation of a right-wing association of large landowners and farmers called Uniao Democratica Ruralista (UDR). The UDR professedly raises money to support government candidates who oppose the agrarian reform, and allegedly serves as the principal source of arms support to large landowners. The increase in conflict and violence over land tenure has been dramatic. Whereas 58 rural workers were killed in 1982, 222 were killed in 1985. As well, there has been evidence of homes being burned, fields and crops destroyed, death threats, torture, intimidation, defamation of character, and falsification of land titles and other documents.

It is important to note that the rural violence in Brazil reflects the violence inherent in the Brazilian social structure. The conflicts over land tenure arise from a social system and a history of massive inequality of opportunity. Within Brazil's total population of 155 million people, 10% of the 5.2 million landowners own 80% of the farmland.

All the while, 60 million Brazilians live in extreme poverty. In the last 10 years alone, 15 million landless people migrated to the large urban centers, such as Recife, Belo Horizonte, Sao Paulo, and Rio de Janeiro. To these migrants' disillusionment, in the major cities they encounter little work and poor labor conditions, inadequate housing, sewage systems, transportation, education, and medical facilities.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

SOMALIA CASE PROBLEM

Your country is plagued by regional and clan-based rivalries arising from colonial lack of understanding of the local situation and culture when they were establishing their administration. The governments that took over power from the colonialists have not been respected by the local people. People have generally struggled against governments ousting them out of power through coups. Unfortunately this has led to a lot of clan-control of various parts of the country, resulting to serious and continuing Clan-based rivalries. There is no central control. Each clan seems to want to do its own thing. The situation has been worsened by droughts. Droughts coupled with clan rivalries have led to continuing shortages of food. International food aid hardly reaches the suffering people. The USA has sent in troops to help in controlling clashes between different clans to allow food to flow to hungry people. This is only short-term relief for the suffering people; what happens when the troops leave is anybody's guess.

You are a group of concerned Somalis and would like to see your country proceed on a development path that reaches all the population and has a sustainable solution to the clan clashes. Discuss what you would do. Using the information provided, plan a development program for your country, ensuring that it addresses clan differences and puts into place an administrative structure that has international and local support.

**DEVELOPMENT EDUCATION PROJECT
KITITAS TEACHER WORKSHOP
April 2-3, 1993**

SOMALIA COUNTRY PROFILE

(Excerpted from EIU Country Report No 4, 1992)

Somalia, with an area of 246,201 square miles and a population of 7.5 million as of 1991, is a country torn with clan-based rivalries. There are five main "warlords" seeking control of parts of the country after the overthrow of Siad Barre in January, 1991. General Muhammad Abshir Musa, leader of the Somali Salvation Democratic Front, controls the north-eastern part of the country. Ali Mahdi Muhammad who represents a part of the United Somali Congress, proclaimed a provisional government in August, 1991 and is regarded as the president of the country. He controls the northern bit of Mogadishu. General Aideed who represents the other arm of the United Somali Congress controls the south of Mogadishu and claims control over most of southern Somalia. Morgan, a son-in-law of the ousted Siad Barre, runs the Somali National Front and controls the Bardera area in the centre of the country. Colonel Jesse runs the Somali Patriotic Movement and controls Kismayu, a port in the south of the country.

The rivalries in Somalia are extremely concerning. It was reported that almost 1,000 people were dying per day in mid-1992 as a result of clan clashes. A representative of a Non-Governmental Organization was quoted as saying, "We are losing an entire generation here [in Somalia]." A lot of people remain confused about the origin and reasons for the rivalries.

The clan clashes in Somalia are rooted in the culture of Somalis, colonial history, World War II, and United Nations arbitration. Somalis were pastoralists and have had clan fights over resources for their livestock. Somehow, they maintained some balance and cooperation among themselves till colonialism. During colonialism, national boundaries were set and the migrations of Somali herders was restricted. This created more tension between the clans. Events during World War II worsened the situation. Italy, fighting from Ethiopia, drove the British from the south of the country occupying that part of the country forcing the British to move to the north. A 1940 counterattack from the British led to the British re-occupation of Somaliland in 1941. In 1949, the United Nations created an Italian trusteeship of the southern part of the country which they had occupied before. Italy terminated its trusteeship and the British withdrew. The south and north became one country in July, 1960.

In 1969, Mohammed Siad Barre took over government in a bloodless coup and instituted strong control over the country. Barre was from the south and got most of his support from that part of the country. The first five years of Barre's rule were years of economic progress and stability. Barre's strong control and later poor economic performance of Somalia led to increasing dissatisfaction by people over the government. Anti-government movements arose. To arrest the problem, Barre set different clans against each other. However, Barre could not contain the problem and was overthrown in 1991. None of the anti-government movements was in full control of the situation after Barre was ousted. The result has been continued rivalries.

With nearly a million Somali refugees in other countries, about 400,000 displaced Somalis in the country, and critical food shortages, the future of Somalia is bleak. Distribution of food donated by other countries is being hampered by insecurity. The economy is shattered. With a current account balance of US\$(482) million, the job to rebuild Somalia seems a formidable task.

KITTITAS TEACHERS WORKSHOP

April 2-3, 1993

ZAIRE COUNTRY PROFILE

Zaire is the second largest country in Africa, second to Sudan. It has an area of 905,365 square miles with a population of 40 million, a population density of 44 people per square mile, and an annual population growth of 2.8%. The average literacy rate is 72%. Adults aged 25 years or more have on average attended formal school for 1.6 years. About 26% of the population has access to health services and 34% has access to safe water. The under-five mortality rate is 130 per thousand.

The country gained independence from Belgium in 1960. Its first prime minister and president were murdered by the army which took over the leadership of the country in 1964. Mobutu Seseseko, an army officer, has been the president of the country since then. Various uprisings in different parts of the country have been heavily crushed under the dictatorship of Mobutu.

Zaire has enormous economic potential, richly endowed with mining and forestry resources, and good climate for agriculture. It has substantial amounts of oil, cobalt, diamonds, gold, uranium, etc. Mining, mineral processing, and petroleum extraction account for some 17% of the GNP and 75% of export earnings. The country exports substantial amounts of cobalt to the United States. Agriculture contributes 32% of the GNP but employs 65% of the active work force. The rest of the GNP comes from manufacturing and services.

The main crops grown in zaire are maize, cotton, millet, sorghum, beans groundnuts, tea, and coffee. Cotton, tea, and coffee are grown both for food and as a cash crop. There are cattle, sheep, goats, and pigs but are used mainly for internal purposes.

The economy has suffered from "capital flight". Those growing tea and coffee plantations, and mines invest their money not in Zaire but European banks. This has greatly contributed to the reduction of the GNP annual growth rate from an average of 7% during 1968-1974 to 6.8% in 1975 and improving only to 2.8% in 1990. Its current GNP per capita is \$260 per annum.

**DEVELOPMENT EDUCATION PROJECT
KITTITAS TEACHER WORKSHOP
April 2-3, 1993**

STATISTICS ON ZAIRE

Population	35.6 million
Population density per square mile	44
Annual Population growth	2.8%
Access to health services	26%
Access to safe water	34%
Under-five mortality rate (per 1000)	130
Agricultural Contribution to GNP	32%
Agriculture employees of the active labor force	65%
Annual GNP growth	2.8%
GNP per capita (per annum)	\$260
Life expectancy at birth	53.0
Real GDP per capita	\$380
People below poverty line	17.2 million
Maternal mortality rate (per 1000 births)	40
Rural population	61%
Infant mortality rate (per 1000 live births)	79
Low birth weight babies	13%
Food import dependency ratio	5.7
Cereal imports (per 1,000 metric tons)	323
Food aid in cereals	17%
Food aid (US\$ millions)	27
Average Literacy rate	71.8%
Adult average formal school attendance	1.6 years
Mean years of schooling: male	2.4%
female	0.8%
Combined primary & secondary enrollment ratio	54
Apparent primary intake rate	81%
Apparent primary intake rate female	75%
Primary enrollment ratio female	53%
Completing primary level (%)	64%
Primary repeaters (as % of primary enrollment)	21%
Secondary technical enrollment (as % of total sec.)	23.1%
Third level students abroad (as % of those home)	14.7%
Public expenditure on education (as % of GNP)	0.9%
Labor force (as % of total population)	36.9%
Women in labor force	35.9%
Percentage of Labor force in:	
agriculture	71.5%
industry	12.9%
services	15.6%
Forest area as % of total land area	79%
Annual rate of deforestation (%)	0.2%

APPENDIX C

IMAGES OF AFRICA

International Week, April 5- 9, 1993
Todd 144, 276 and CUB - Small Ballroom

Course Outline

Course Coordinators:

Dr. Nancy Horn, Anthropology and International Programs, 141 Todd, 5-6896
Dr. Frances Jones-Sneed, CAC and History, 120 Wilson, 5-4560

Goal: This course is designed to provide students an initial insight into Africa and to promote interest in taking other courses on Africa in subsequent semesters.

Course Content: Materials and analytical points covered in this course are not meant to represent a comprehensive "image" of Africa. Rather, it has been designed to present essential information on a limited number of topics in order that students might become more interested in Africa and its peoples, and interested in taking more discipline-based courses on Africa.

Organization of Course: This course meets for 9 sessions (Monday through Thursday, 4:00 - 5:30 and 7:00 - 9:00; and Friday 4:00 - 5:30). The initial session will provide an overview and introduction to the course. Succeeding sessions will be taught by faculty from a number of departments.

Credit: The course is offered on a pass/fail basis for one credit; registration to commence March 22 and to be completed by April 5.

Evaluation: Each student will maintain a "Learning Log" detailing each of the presentations made and summarizing assigned readings. A take-home essay exam will be required, and must be handed in on Monday, April 12, along with the Learning Logs. All materials will be returned to students by Monday, April 26.

Readings and Assignments: Each presenter has outlined a number of readings to be undertaken prior to class presentations. Readings will be on reserve in Holland Library, some will be available for purchase at Kinko's, and some will be handed out in class.

Absences: Since this course is offered for only one week, it is expected that students will be present for all sessions. If emergencies arise, the student must call either of the course coordinators and indicate the reason for the lapse in attendance. Failure to attend may result in failure of the course.

Course Schedule

Monday, 4/5 - TODD 144

4:00 - 5:30 Overview of Course; Expectations; Assignment; Pre-Course Assessment; Drs. Nancy Horn, Anthropology, Frances Jones-Sneed, CAC and History, and James Long, AYE

Library Handouts/Information - Ms. Alice Spitzer, WSU Libraries

Geographic Orientation, Earliest Times in Africa, and African Kingdoms - Dr. Nancy Horn, Anthropology

7:00 - 9:00 European Encroachment, Internal and Atlantic Slave Trade, and Colonialism - Dr. Frances Jones Sneed, CAC and History

Tuesday, 4/6 - TODD 276

4:00 - 5:30 The Poetry of Negritude - Dr. Paul Brians, English

7:00 - 9:00 African Arts - Dr. Carol Ivory, Fine Arts

African Music - Dr. Paul Smith, Music

Wednesday, 4/7 - TODD 276

4:00 - 5:30 Food Security in Africa - Dr. David Holland, Agricultural Economics

7:00 - 9:00 The Diversity of Environments - Dr. Eldon Franz and Mr. Omarou Badini, Environmental Science and Regional Planning

Demography and Health - Dr. Barry Hewlett, Anthropology

Thursday, 4/8 - TODD 276

4:00 - 5:30 The Family in Africa - Dr. Sherril Richarz, CCFS

5:30 - 7:30 Reception and Dinner Multicultural Center

7:30 - 9:00 Contrasting Images of Africa - Guest Lecturer, Fulbright-sponsored African Scholar, Dr. Mbogeni Malaba, University of Zimbabwe

Friday, 4/9 - CUB, SMALL BALLROOM

4:00 - 5:30 Women's Rights: A Third World Perspective - Guest Lecturer, Fulbright-sponsored African Scholar, Isabella Okagbue, Attorney, Nigeria.
Course Wrap-Up - Dr. Nancy Horn, Anthropology; Evaluation, Dr. James Long, AYE

IMAGES OF AFRICA

Readings

- Achebe, Chinua. 1958. Things Fall Apart. London: Heinemann. Chapter 25.
- Amin, M. and Eames, J. (eds.). 1985. The Ancestral People. Kenya. London: APA Productions, Ltd., pp. 81-86.
- Clark, John Pepper. 1984. "Night Rain," in Moore, Gerald and Ulli Beier (eds.). The Penguin Book of Modern African Poetry. 3d ed. London: Penguin, pp. 196-197.
- Clark, John Pepper. 1984. "Olokun," in Moore, Gerald and Ulli Beier (eds.). The Penguin Book of Modern African Poetry. 3d ed. London: Penguin, p. 195.
- Cole, Herbert. 1989. "Useful Images, The Life of Art in Africa," in Icons: Ideals and Power in the Art of Africa. Washington, D. C. and London: Published for the National Museum of African Art by the Smithsonian Institution Press, pp. 24-37.
- Conrad, Joseph. 1899. Heart of Darkness. Full text included in Murfin, Ross C. (ed.). 1989. Joseph Conrad. Heart of Darkness. A Case Study of Contemporary Criticism. New York: St. Martin's Press.
- Dadie, Bernard. 1975. "A Wreath for Africa," in Kennedy, Ellen Conroy. The Negritude Poets: An Anthology of Translations from the French. New York: Viking Press, pp. 173-174.
- Dadie, Bernard. 1975. "I Thank You Lord," in Kennedy, Ellen Conroy. The Negritude Poets: An Anthology of Translations from the French. New York: Viking Press, pp. 170-171.
- Davidson, Basil. 1970. The Lost Cities of Africa. Boston: Little, Brown & Co. Part Three, "Kingdoms of the Old Sudan," pp. 51-124.
- de Sousa, Noemia. 1984. "Appeal," in Beier, Ulli and Gerald Moore. The Penguin Book of Modern African Poetry. 3d. ed. London: Penguin, pp. 161-162.
- Diop, David. 1975. "Africa (To My Mother)," in Kennedy, Ellen Conroy. The Negritude Poets: An Anthology of Translations from the French. New York: Viking Press, pp. 186-187.
- Ellis, J. E. and D. M. Seift. 1988. "Stability of African Pastoral Ecosystems: Alternate Paradigms and Implications for Development." Journal of Range Management. Vol. 41, No. 6, pp. 450-459.
- Glantz, M. H. 1987. "Drought in Africa." Scientific American. Vol. 256, No. 6, pp. 34-40.

- Gordon, April A. 1992. "Population Growth and Urbanization," in Gordon, A. A. and D. L. Gordon (eds.). Understanding Contemporary Africa. Boulder, CO: Lynne Rienner, pp. 123-147.
- Grant, James T. 1993. The State of the World's Children 1993. United Nations Children's Fund Report. New York: Oxford University Press.
- Hall, Martin. 1987. The Changing Past: Farmers, Kings and Traders in Southern Africa, 200-1860. Cape Town, South Africa: David Philip. Chapter 6, "The Nature of Society," pp. 61-73.
- Janzen, John M. 1978. "The Human Setting of Healing in Lower Zaire," in Quest for Therapy: Medical Pluralism in Lower Zaire. Berkeley, University of California Press, Chapter 1, pp. 3-36.
- Jordan, Winthrop D. 1975. "Initial English Confrontations with Africans," in Scheiner, Seth M. and Tilden G. Edelstein (eds.). The Black Americans: Interpretative Readings. Huntington, NY: Robert E. Krieger Pub. Co., pp. 19-37.
- Lappe, Frances Moore and Joseph Collins. World Hunger Twelve Myths. New York: Grove Press, pp. 1-22, 47-66, 138-149.
- Lesing, Doris. Going Home. Chapter 7 - "The Ten Shillings."
- Mungoshi, Charles. Coming of the Dry Season. London: Heinemann, Chapter 6 - "The Lift."
- Okara, Gabriel. 1984. "The Mystic Drum," in Moore, Gerald and Ulli Beier (eds.). The Penguin Book of Modern African Poetry. 3d ed. London: Penguin, pp. 172-173.
- Rabearivelo, Jean-Joseph. 1984. "No. 18 from Traduits de la nuit," in Beir, Ulli and Gerald Moore. The Penguin Book of Modern African Poetry. 3d. ed. London: Penguin, p. 131.
- Rodney, Walter. 1975. "African Slavery in the Context of the Atlantic Slave Trade," in Scheiner, Seth M. and Tilden G. Edelstein (eds.). The Black Americans: Interpretative Readings. Huntington, NY: Robert E. Krieger Pub. Co., pp. 38-52.
- Senghor, Leopold Sedar. 1970. "Black Woman," in Shapiro, Norman R. Negritude: Black Poetry from Africa and the Caribbean. New York: October House, Inc.
- Senghor, Leopold Sedar. 1991. "Mirrors Still," in Dixon, Melvin. Leopold Sedar Senghor: The Collected Poetry. Charlottesville: University Press of Virginia, pp. 184-85.
- Senghor, Leopold Sedar. 1991. "To New York," in Dixon, Melvin. Leopold Sedar Senghor: The Collected Poetry. Charlottesville: University Press of Virginia, pp. 87-89.

Silverman, Raymond A. 1989. "Expressions of Africa," in Expressions of Africa. East Lansing, Mi: Michigan State University.

Soyinka, Wole. 1984. "Telephone Conversation," in Moore, Gerald and Ulli Beier (eds.). The Penguin Book of Modern African Poetry. 3d ed. London: Penguin, p. 187.

Tam'si, Tchaicaya U. 1984. "A Mat to Weave," in Beier, Ulli and Gerald Moore. The Penguin Book of Modern African Poetry. 3d. ed. London: Penguin, pp. 64-65.

MEMORANDUM

TO: Students Interested in Africa

FROM: Nancy E. Horn, Anthropology and International Programs
Frances Jones-Sneed, CAC and History

DATE: March 19, 1993

SUBJECT: SHORTCOURSE ON "IMAGES OF AFRICA," APRIL 5-9, 1992

The Africa Interest Group is sponsoring a one-credit shortcourse on Africa entitled "Images of Africa," to be offered during Internaitonal Week, April 5-9, 1993. Meeting hours will be 4:10-5:30 Monday through Friday, and 7:00 - 9:00 Monday through Thursday. The class will meet in Todd 276.

If you are registered for between 12 and 17 credits, you may add the course at no additional charge. If you have under 12 or 18 or over credits, you must pay for one credit.

Registration will take place in CAC, 111 Wilson Hall, March 22 through April 5. All you need do is pick up an add slip, fill it out, and leave it at CAC. Questions about registration can be answered at CAC - 335-2605. Four options are available: Anthropology 302; CAC 302; History 302; or Environmental Science/Regional Planning 302.

A course schedule is attached.

Evaluation will be based on a take-home integrative essay question that will be due Monday, April 12. You will be required to keep a "Learning Log" - a journal summarizing what you have learned from each presentation and from each of the readings - and to be present for each of the sessions.

If you have any questions, call Dr. Nancy Horn (335-6896).

Encl.

93

IMAGES OF AFRICA
THE PREHISTORY AND KINGDOMS OF AFRICA
Monday, April 5
Dr. Nancy Horn, Anthropology

Readings

Davidson, Basil. 1970. The Lost Cities of Africa. Boston: Little, Brown & Co. Part Three, "Kingdoms of the Old Sudan," pp. 51-124.

Hall, Martin. 1987. The Changing Past: Farmers, Kings and Traders in Southern Africa, 200 - 1860. Cape Town, South Africa: David Philip. Chapter 6, "The Nature of Society," pp. 61-73.

Presentation Outline

1. Introduction to Africa through Maps
2. Africa: Cradle of Humankind
3. Environmental Adaptation
 - Hunters and Gatherers
 - Pastoralists
 - Horticulturalists
 - Agriculturalists
4. Technological Growth and Changing Social Structure
5. The Origin and Development of Kingdoms
 - Egypt
 - Meroe
 - West Africa
 - Southern Africa
6. European Incursions

IMAGES OF AFRICA
AFRICAN HISTORY
Monday, April 5
Dr. Frances Jones-Sneed, CAC and History

Readings

Jordan, Winthrop D. 1975. "Initial English Confrontations with Africans," in Scheiner, Seth M. and Tilden G. Edelstein (eds.). The Black Americans: Interpretative Readings. Huntington, NY: Robert E. Krieger Pub. Co., pp. 19-37.

Rodney, Walter. 1975. "African Slavery in the Context of the Atlantic Slave Trade," in Scheiner, Seth M. and Tilden G. Edelstein (eds.). The Black Americans: Interpretative Readings. Huntington, NY: Robert E. Krieger Pub. Co., pp. 38-52.

Presentation Outline

1. African history: Some Myths and Legends:
 - the "dark" continent
 - from popular culture - the Tarzan myth

2. Overview of African history - by period: the need for reinterpretation of the facts
 - Pre-colonial
 - European Encroachment
 - Slave Trade
 - Colonial Period
 - Independent Nations

3. Summary: Some Problems in Contemporary African History

IMAGES OF AFRICA
Black Orpheus vs. Ogun: The African Debate Over Negritude in Poetry
Tuesday, April 6
Dr. Paul Brians, English

Readings

A selection of poetry (7 pp.)

Presentation

We will explore the history of the concept of negritude as it developed in the African diaspora and as it was reimported to Africa, as well as the response of noted Anglophone writers such as Wole Soyinka, who famously stated: "The tiger does not need to proclaim his tigritude." We will spend most of the session discussing individual poems by Aime Cesaire, Leopold Sedar Senghor, Wole Soyinka, Gabriel Okara, and Christopher Okigbo.

The roots of this debate illustrate well many of the problems which African writers still face in trying to define themselves, and we will try to explore as many angles on the topic as possible in the allotted time.

IMAGES OF AFRICA
AFRICAN ARTS
Tuesday, April 6
Dr. Carol Ivory, Fine Arts

Readings

Cole, Herbert. 1989. "Useful Images, The Life of Art in Africa," in Icons: Ideals and Power in the Art of Africa. Washington, D. C. and London: Published for the National Museum of African Art by the Smithsonian Institution Press, pp. 24-37.

Silverman, Raymond A. "Expressions of Africa, " in Expressions of Africa. East Lansing, MI: Michigan State University, pp. 3-12 and illustrations.

Presentation Outline

1. Introduction to historical depth of African art:
 - rock art from Tassili, Drakensburg Mountains
 - kingdoms of Benin, Zimbabwe, Meroe

2. Overview of African art - by medium: the need to re-examine "art" in African Context
 - textiles
 - body decoration
 - gourds
 - architecture
 - masquerades
 - sculpture

3. Overview of African art - by function
 - leadership/power
 - status
 - religion
 - funerary

4. Contemporary Africa
 - traditional arts in transitio
 - western style arts

IMAGES OF AFRICA

Music of Africa

Tuesday, April 6

Dr. Paul Smith, School of Music and Theatre Arts

Rather than trying to survey the overwhelming variety of musical traditions in Africa, this presentation will focus on an individual performer from Mali, Ali Farka Toure, and a group from Zimbabwe, the Bhundu Boys. These performers both have firm roots in the vibrant musical traditions of their regions while adopting new musical technology and ideas from American music (much of which is in fact originally influenced by African traditions). The traditional musical cultures which form the foundations for these contemporary African artists will be explored, as well as the compatibility of the technology and musical ideas they have integrated with these traditions.

General Overview

Uses of Music

Some general features of Sub-Saharan music

"Patterns" - polyrhythm and polyphony

Contrast with North African music

Ali Farka Toure (Mali, West Africa)

The Griot

West African influence on the blues

Blues influence on Toure's music

The Bhundu Boys (Zimbabwe, Southern Africa)

Community music-making in Zimbabwe

From mbira to marimba to electric guitar

African music in the era of the worldwide music industry

IMAGES OF AFRICA
THE PROBLEM OF HUNTER IN AFRICA
Wednesday, April 7
Dr. David Holland, Agricultural Economics

Readings

Lappe, Frances Moore and Joseph Collins. World Hunger Twelve Myths. New York: Grove Press, pp. 1-22, 47-66, 138-149.

Presentation Outline

Review the basic causes of hunger in Africa, pointing out that what often appears to be the problem isn't really the problem it seems to be. Review some suggested solutions to the hunger problem such as control of population growth, the green revolution, and increased commercialism and trade. Explain why these strategies won't solve the problem of hunger. Suggest more fundamental solutions to the problem - democratic reform, food first, sustainable agriculture. Conclude with the promise and problem of sustainable agriculture.

Aspects of the problem:

- food supply
- population growth
- environmental destruction
- green revolution
- trade
- aid
- tribalism
- control of the state
- control of resources

Elements of a solution:

- food first
- democratic reform
- sustainable agriculture
- the role of aid

IMAGES OF AFRICA
ECOLOGY: THE DIVERSITY OF ENVIRONMENTS AND LIFE
Wednesday, April 7
Dr. Eldon Franz, Environmental Science & Regional Planning
Mr. Omarou Badini, Environmental Science & Regional Planning

Readings

Glantz, M. H. 1987. "Drought in Africa." Scientific American. Vol. 256, No. 6, pp. 34-40.

Ellis, J. E. and D. M. Swift. 1988. "Stability of African Pastoral Ecosystems: Alternate Paradigms and Implications for Development." Journal of Range Management. Vol. 41, No. 6, pp. 450-459.

Presentation Outline

1. The Environmental Context
 - Geology
 - Climate
 - Hydrology
 - Soils

2. The Land Use Mosaic
 - Biotic Systems
 - Management

3. Objectives for Adapting to Change
 - Ecological Stability
 - Management Resilience
 - Production Sustainability
 - Economic Reliability

IMAGES OF AFRICA
HEALTH AND DEMOGRAPHY IN AFRICA
Wednesday, April 7
Dr. Barry Hewlett, Anthropology

Readings

Gordon, April A. 1992. "Population Growth and Urbanization," in Gordon, A. A. and D. L. Gordon (eds.). Understanding Contemporary Africa. Boulder, CO: Lynne Rienner.

Janzen, John M. 1978. "The Human Setting of Healing in Lower Zaire," in Quest for Therapy: Medical Pluralism in Lower Zaire. Berkeley: University of California Press (Chapter 1).

Presentation Outline

Culture and Perceptions of Health and Illness
AIDS in Africa

Basic Demographic Features of Africa

- Mortality
- Fertility
- Migration
- Demographic Changes in the Last 100 Years

Health

- Distribution and Prevalence of Tropical Diseases in Africa
- Diseases Associated with International Development
- Primary Health Care Systems in Africa

IMAGES OF AFRICA
FAMILIES IN AFRICA
Thursday, April 8
Dr. Sherill Richarz, CCFS

Readings

Amin, M. and Eames, J. (eds). 1985. The Ancestral People, Kenya. London: APA Productions, Ltd., pp. 81-86.

Grant, James T. 1993. The State of the World's Children 1993. United Nations Children's Fund Report. New York: Oxford University Press.

Presentation Outline

This part of the course will examine the diversity of families and family life throughout the African continent. We will explore the evolution of family life from pre-colonial times to the present by describing areas such as:

- changing family roles
- internal and external support
- the rural-urban population shift
- the current economic base for the family

Class discussion will then focus on the needs and concerns of the many types of families in Africa today and on ideas for how to meet these needs.

IMAGES OF AFRICA
CONTRASTING IMAGES OF AFRICA IN LITERATURE
Thursday, April 8

Dr. Mbongeni Malaba, Fulbright African Senior Research Fellow (Zimbabwe)

Readings

Achebe, Chinua. 1958. Things Fall Apart. London: Heinemann. Chapter 25.

Conrad, Joseph. 1899. Heart of Darkness. Full text included in Murfin, Ross C. (ed.). 1989. Joseph Conrad. Heart of Darkness. A Case Study of Contemporary Criticism. New York: St. Martin's Press.

Lesing, Doris. Going Home. Chapter 7 - "The Ten Shillings."

Mungoshi, Charles. Coming of the Dry Season. Chapter 6 - "The Lift."

APPENDIX D

BRINGING THE WORLD HOME

Introductions

CUB B11-13

Agenda, Monday, April 12, 1993

- 12:00 Welcoming Luncheon - Cascade Room, CUB
Larry James, Interim Director, Cooperative Extension
Importance of Globalizing Perspectives and Programs in Extension
Jan Noel, International Programs
Globalizing the University in the Washington Community
- 1:30 "So what if my shoes come from Brazil?" - Recognizing Global Connections
Nancy Horn, Jane Barga and Mike Mtika, Development Education Project, WSU
- 2:15 Orientation to Part I of Course - **Lorna Butler**

Reading Assignments - **Lorna Butler and Louise Parker**

Personal/Global Insights and Interests re Bringing the World Home - **Lorna Butler, Nancy Horn, Janet Kiser, Myrna Miller, Dora Rumsey, and Louise Parker**
- 3:15 Break
- 3:30 Bringing the World Home: Implications and Applications
What Does All This Mean for Me and My Clientele? - **Mary Andrews**, Michigan State University
- 5:00 Recap of the Day - **Lorna Butler**
- 5:15 Adjourn
- 5:30 Reception - Great Hall Alumni Center

BRINGING THE WORLD HOME
Economic Self-Sufficiency
CUB B11-13
Agenda, Tuesday, April 13, 1993

- 7:30 Continental Breakfast, CUB B25
- 8:00 Introduction to International Resources - **Rita Fisher, Holland Library**
- 9:00 Goals and Objectives of the Day - **Nancy Horn**
Discussion of Reading Assignment
- 9:15 World Economic Overview - Macroperspectives, **John Donnelly, Economics, WSU**
- 10:00 Break
- 10:15 Work, Entrepreneurship and the Informal Economy - **Nancy Horn, Jane Barge and Mike Mtika, WSU Development Education Project, WSU**
- 11:15 Response Panel and Discussion re How Can What We Have Learned this Morning be Applied to Our Work - **Janet Kiser, Lorna Butler, and Pat BoyEs**
- 11:45 Lunch
- 12:30 "Growing Pains - Transitions from an Informal Enterprise to Professionally Managed Business, El Salvador" - Case Study - **Nancy Horn, Jane Barga and Mike Mtika - Development Education Project, WSU**
- 2:30 Break
- 2:45 Women and Minority Entrepreneurs in Washington - **Kathy Norwood, Washington Department of Trade**
- 3:45 "Going Global - Racing Strollers in Yakima" - **Lorna Butler**
- 4:45 Economic Interdependence: An Individual's Perspective - **Mary Andrews, MSU**
- 5:15 Adjourn

BRINGING THE WORLD HOME
Physical Self-Sufficiency
CUB B11-13
Agenda, Wednesday, April 14, 1993

- 7:30 Continental Breakfast, CUB B25
- 8:00 Goals and Objectives of the Day - **Janet Kiser**
Discussion of Reading Assignment
- 8:30 Refugees in Our Midst - **Dr. Marjorie Muecke, UW School of Nursing**
- 9:30 Break
- 9:45 Real Life Stories of Migration - Roundtable Discussions
Ms. Tina Garza, Mexico; Mr. Hiram Perez, Cuba; Ms. Toi Mulligan, Vietnam and China; Sister Theresa Avila Nanjobe, Uganda; Mr. Evans Mbajah, Kenya; Mr. Tesfai Getahun, Ethiopia/Eritrea; Dr. Yuri Stetsenko, Ukraine; Mr. Sergei V. Cemenenkoff, Russia; Ms. Olga Camp, Russia.
- 11:00 Response Panel and Discussion re How Does What We Have Learned This Morning Relate to Our Work? - **Myrna Miller, Gregg Van Doren, and Carol Bezold**
- 11:45 Lunch and Time in Resource Room (Video - "Peace Has Not Been Made")
- 1:30 The Costs and Contributions of Moving: Quality of Life - **Dr. Marjorie Muecke, UW.**
- 2:00 Discussion - **Janet Kiser**
- 2:30 The Washington Apparel Industry: Off Shore Linkages and Impacts - **Dr. Charles Cox, WSU; Introduction - Myrna Miller**
- 3:15 Break
- 3:30 A Case Study of a Washington Clothing Manufacturing Firm
- 4:30 Local Perspectives on How We Can Bring the World Home - **Dr. Mary Andrews, MSU**
- 6:00 Group No-Host Dinner at Indian restaurant

BRINGING THE WORLD HOME
Social Self-Sufficiency
Alumni Center - Regents Room
Thursday, April 15, 1993

- 7:30 Continental Breakfast, Alumni Center
- 8:00 Goals and Objectives of the Day - **Louise Parker**
Review of Reading Assignment
- 8:30 Family and Gender in the Law: US and International Perspectives - **Karen Sayre, Attorney, Spokane; Amowi Philipps, Attorney, Ghana**
- 9:30 Break
- 9:45 Case Studies on Families, Gender and the Law - **Karen Sayre, Attorney, Spokane**
- 10:45 Case Debriefing/Response Panel re How Can What We Have Learned Be Applied to Our Work? - **Louise Parker, Margaret Viebrock, and Val Hillers**
- 12:00 Lunch
- 1:00 Leadership, Collective Action and Empowerment - Individuals Taking Action - Community and State/National Policy - Women in state/national politics - **Libby Walker**
- 2:15 Break
- 2:30 Resources for Women's and Families' Support
1. Personal Resources (extended family, women helping women, etc.). Identify individuals on WSU campus Pullman - **Jane Barga and Manuel Acevedo, Development Education Project and Chicano/Latino Student Counselor, WSU; Roshan and Said Abdallah, Tanzania**
- 3:30 2. Institutional Resources - what resources can women and families access? - International NGOs; U.S. - Community Action Centers- **Claudia Allen, CAC, Pullman; Michael Mtika - World Vision Malawi; Carol Brown - Center for Sharing, Walla Walla.**
- 4:30 Thinking Backward - Moving Forward - **Ms. Emilia Gonzalez Clements, University of Kentucky**
- 5:15 Adjourn

BRINGING THE WORLD HOME
Research Projects and Closing
CUB B11-13
Friday, April 16, 1993

- 7:30 Continental Breakfast, Cub B25
- 8:00 Goals and Objectives of the Day - **Lorna Butler**
- 8:15 "Becoming a Learner in Your Own Global Community - From Role of 'Expert' to Role of Learner" - **Emilia Gonzalez Clements, University of Kentucky**
- 10:15 Break
- 10:30 Recap/review of what we have learned this week; implications of individual learning for work - **Lorna Butler and Louise Parker**
- 10:45 Developing a Plan of Action
- Plans for Research Activity, Part II
- The Resource Guide
- 11:30 Feedback/Reporting of Ideas Generated
Larry James - Response to Project Ideas
Discussion of Part III Format
- 12:15 Course Evaluation
- 12:30 Adjourn

BRINGING THE WORLD HOME
April 12-16, 1993
INVITED PARTICIPANTS

Ms. Roshan Abdallah received her BS in Botany from the University of Dar-es-Salaam, Tanzania, in 1983. Since that time, she has worked for the Tanzanian Ministry of Agriculture, and in 1988 was appointed Director of the National Plant Quarantine Station in Arusha. In 1985 she received her MS in Seed Pathology from the Institute of Seed Pathology for Developing Countries in Copenhagen, Denmark. Ms. Abdallah will finish a Master's program in Plant Physiology at WSU in May, and will then work towards her Ph.D. in the area of virology.

Contact: Ms. Roshan Abdallah, NE 1400 Valley Road, #15, Pullman, WA 99163;
(509) 334-5769

Mr. Said Seif Abdallah received his BS in Physics and Math from the University of Dar-es-Salaam, Tanzania in 1982. In 1987, he attended a British Telecommunications Management Course, and was appointed Director of Marketing for the telephone company in the Northern Zone of Tanzania. Mr. Abdallah is an MBA Marketing candidate at WSU.

Contact: Mr. Said Seif Abdallah, NE 1400 Valley Road, #15, Pullman, WA 99163;
(509) 334-5769

Mr. Jose Manuel Acevedo is the Counselor for Chicano/Latino students at WSU. He received his BA in Philosophy from Santo Tomas University in Bogota, Colombia, and, in 1986, he received a Professional Graduate Degree in Catholic Ministry from the Major Seminary of the Yarumal Foreign Mission Society of Colombia, Medellin. In Colombia, Mr. Acevedo served as the Pastor for the Diocese of El Guaviare from 1986-88, and was the Executive Assistant of the Training Division of CODECAL (Integral Corporation for Cultural and Social Development) in Bogota from 1989-90. He is currently working toward a Master's degree in Counseling Psychology at WSU.

Contact: Mr. Jose Manuel Acevedo, Counselor, Chicano/Hispanic Student Center, Washington State University, Pullman, WA 99164-4011; (509) 335-2617

Ms. Claudia Allen received her B.S. in Sociology in 1982, and her MA in Adult and Continuing Education in 1987 from WSU. She is currently the Assistant Program Manager of the Community Action Center in Pullman. In this capacity, she is in charge of the Low Income Home Energy Assistance Program, which includes an Energy Assistance Program, Energy Crises Intervention Program, Emergency Shelter Assistance Program, and the Legal Referral Program. Ms. Allen also supervises the Vista worker who is implementing the Energy Education Program.

Contact: Ms. Claudia Allen, Pullman Community Action Center, W. 105 Main Street,
Suite 1, Pullman, WA 99163; (509) 334-9147

Dr. Mary Andrews is the Associate Dean for Extension, Research and International Programs in the College of Human Ecology at Michigan State University, and Director of the International Extension Training Program for the Michigan Cooperative Extension Service. Through Dr. Andrews' leadership, Michigan is viewed as a national leader in internationalizing extension programs and has assisted other states in their efforts. Dr. Andrews received her doctorate in family ecology from Michigan State University with a specialization in child development and communications. She is active in women in development, farming systems, and child survival activities, and has extensive experience as a researcher and program evaluator. Her major interests are improving the measurement and design of applied research studies to assist in program and policy decision making.

Contact: Mary Andrews, Ph.D., Associate Dean, College of Human Ecology, Michigan State University, East Lansing, MI 48824; (517) 353-9890

Ms. Jane Barga received a BA in Health Education from Lewis and Clark University, Portland, Oregon in 1984. She worked from 1986-89 as a Maryknoll Lay Missioner in Sao Paulo, Brazil. There, her activities included working with an adult literacy program, participating in a Base Christian Community, accompanying local residents in their efforts to secure closed sewage systems and street lights for their neighborhood, and facilitating programs among the Maryknoll Missioners. From 1989-1991, Ms. Barga taught English in Bogota, Colombia. In 1991, she returned to the Pacific Northwest with her husband and daughter, and is currently working on WSU's International Development Education Project while she pursues her Master's Degree at the University of Idaho in Teaching English as a Second Language.

Contact: Ms. Jane Barga, International Programs - Development Education Project, Washington State University, Pullman, WA 99164-6226; (509) 335-6896

Ms. Carol Brown is the Director of the Women of Worth Program at the Center for Sharing in Walla Walla, WA. Ms. Brown has spent over thirty years in the accounting field, and ran her own accounting business for eleven years. In 1988, she went into retail, opening up "Four Seasons Fashions." Two years ago, Ms. Brown went into full-time Christian work with women. Her belief is that "all women are women of worth," and she helps to foster that belief in women whose self-esteem has been shattered by abuse, poverty, and abandonment.

Contact: Ms. Carol Brown, Center for Sharing, 103 East Main Street, Walla Walla, WA 99362; (509) 529-8557

Ms. Olga Camp was born and raised in Russia. At 22, she had "had enough," packed one suitcase, and arrived in the United States with \$200 in her pocket. Ms. Camp is a classical pianist who graduated from the Moscow Conservatory of Music. Currently, she works in Spokane with the Satellite Education Program for ESD #101. She expects to make a career change by studying Marketing and International Business at Eastern Washington University.

Contact: Ms. Olga Camp, East 524 Liberty, Spokane, WA 99207; (509) 483-8654

Mr. Sergei V. Cemenenkoff received his MA in Journalism and German Language from Moscow State University, Russia, in 1990. With his fluent language skills in Russian, German, and English, Mr. Cemenenkoff has worked as an interpreter, television interviewer, translator, writer, and consultant. In 1991, he received a Journalism fellowship from the Information Center of the Senate of Berlin. Currently, Mr. Cemenenkoff is a native language consultant and curriculum coordinator for ESD #101. He coordinates a Russian language satellite course that is transmitted to six states. Since 1990 he has also worked with International Ambassador Programs.

Contact: Mr. Sergei Cemenenkoff, 4221 South Hatch, Spokane, WA 99203; (509) 838-3263

Dr. Charles E. Cox is an Associate Professor of Apparel, Merchandising, and Textiles in the College of Agriculture and Home Economics at WSU. Dr. Cox was formerly the Vice President and National Sales Manager for Mid-Lakes Corporation, a textile manufacturer specializing in knitted nylon netting used in a variety of industrial and consumer products. He has had over 20 years of teaching experience at WSU and the University of Tennessee. Dr. Cox has focused his recent research on the economic impact of home-based businesses on the Washington economy.

Contact: Dr. Charles E. Cox, Associate Professor, Apparel, Merchandising & Interior Design, Washington State University, Pullman, WA 99164-2020; (509) 335-5665

Dr. John Donnelly is an Associate Professor of Economics at WSU. He received his BA in Economics from Lawrence University, and Ph.D. in Economics from Vanderbilt University in 1970. Dr. Donnelly's primary fields of specialization are international development economics, comparative economic systems, and the global political economy. In 1990-91, he served on WSU's Task Force on Internationalization of University Curricula and Programs. In 1992, Dr. Donnelly assumed a new half-time position as Faculty Associate in International Programs with the primary responsibility of developing strategies to promote and assist further internationalization of WSU's undergraduate curriculum.

Contact: John T. Donnelly, Ph.D., Faculty Associate, Office of International Education, Associate Professor, Department of Economics, Pullman, WA 99164-5110; (509) 335-4508, (509) 335-6651

Ms. Tina Garza is an undergraduate at WSU in Education and Earth Sciences. She was born in Monterrey, Mexico, and gained permanent resident status in the United States as an infant. Throughout her childhood, Ms. Garza spent the months of March through November each year travelling with her family and working in agricultural production in the states of California, Washington, Minnesota and Nebraska. As an adult, Ms. Garza settled in Othello, Washington, where she began working with migrant education. She worked in migrant classrooms, served on school advisory boards at state and national levels, and is currently working on an appointed committee to make the national goals for Education 2000 attainable by all disadvantaged children.

Contact: Ms. Tina Garza, B-9 Valley Crest Village, Pullman, WA 99163; (509) 335-2179

Mr. Tesfai Getahun is from Ethiopia, and worked for a German company, Olympia International, in Ethiopia for seventeen years. He moved to Spokane from Atlanta, GA, in 1991. Mr. Getahun speaks English, Amharic, Italian, and Eritrean.

Contact: Mr. Tesfai Getahun, East 1413 Hartson, Apt. #4, Spokane, WA 99202;
(509) 536-9345

Ms. Emilia Gonzalez Clements holds a BA in Sociology from Niagara University and an MA in Cultural Anthropology from Texas Tech University. Currently, she is a doctoral student in Applied Anthropology at the University of Kentucky. She is President of Development Systems/Application, a consulting firm specializing in cultural systems and professional/organizational development, including strategic planning and group facilitation. Her overseas experiences include work in Mexico, Peru, Nicaragua, the Dominican Republic, and Bangladesh. Ms. Gonzalez Clements has implemented projects for the University of Nebraska-Lincoln, Creighton University, Nebraska State Health Department, Concordia College, Lincoln and Omaha Public School Systems, and Iowa State University. She has been a speaker at numerous seminars and conferences, including national conferences for the United Nations Association and the Mexican American National Women's Association.

Contact: Ms. Emilia Gonzalez Clements, Anthropology Department, University of Kentucky, 11 Lafferty Hall, Lexington, KY 40506-0024; (606) 245-2017 or 257-2710

Mr. Evans Mbajah is a student at Whitworth College in Spokane. He is majoring in Psychology and International Relations. He speaks Swahili, English, and is learning Japanese.

Contact: Mr. Evans Mbajah, Whitworth College, Piki 105, Box 778, Spokane, WA 99251;
(509) 468-3410

Mr. Michael Mtika received a BS in Agriculture from the University of Malawi in 1978, and an MS in Agriculture Extension from Reading University, UK, in 1980. Mr. Mtika worked in Extension and Training for the Malawian Ministry of Agriculture from 1975-1986, and with World Vision - planning, implementing, and evaluating projects - from 1986-1991. Currently, he is working on a Ph.D. in Political Sociology and Community Development at WSU. His research interests include rural participatory development processes, globalization, and sustainable agriculture.

Contact: Mr. Michael Mtika, Development Education Project, International Programs, Washington State University, Pullman, WA 99164-6226; (509) 335-6896

Dr. Marjorie Muecke is a Professor in the School of Nursing at the University of Washington. She is a Nursing Anthropologist in Community Nursing, and has focused her work and research on Southeast Asia. Dr. Muecke has developed and taught a course on Refugee Health at the University of Washington for over ten years, is a consultant on refugee mental health, and has worked with programs in refugee camps in Thailand. She has published numerous articles on refugee mental health in The Western Journal of Medicine, American Medicine and Public Health, Social Science and Medicine, and The Western Journal of Nursing Research.

Contact: Dr. Marjorie Muecke, School of Nursing, University of Washington, Seattle, WA 98195; (206) 685-0811

Ms. Toi Mulligan was raised in Vietnam. She speaks English, Chinese, Vietnamese, and some French and Spanish. She has worked as a minority consultant with Spokane Community Mental Health, and is interested in interpreting for the Court System.

Contact: Ms. Toi Mulligan, No. 4515 Addison, Spokane, WA 99207; (509) 487-1316

Sister Theresa Avila Nanjobe was born and raised in Uganda. She received a B.S. from Seattle University in the 1960's. She returned to her country to teach geography, religion, history, and biology for ten years in the Ugandan equivalent of U.S. high school. Her order is Daughter of Mary, and her work is directed at helping young people grow in Christian principles and moral standards. Currently, Sister Theresa is pursuing her Master's degree at Gonzaga University.

Contact: Sister Theresa Avila Nanjobe, Box 278, Spokane, WA 99258; (509) 328-4220, ext. 4072

Ms. Kathy Norwood is the Program Manager of the Women and Minority Business Assistance Program, Washington State Department of Trade and Economic Development. She serves in an advocacy role for minority and women-owned businesses, and has provided influential testimony to the Washington State Legislature and the U.S. Department of Commerce Minority Business Development Agency on issues relevant to minorities and women in business. She has owned her own real estate business, has managed a large housing development from ground-breaking to occupancy, and served as a Planning Commissioner for the City of Hanford, CA. She administered an Economic Development Administration Revolving Loan Fund for \$1.2 million.

Contact: Ms. Kathy Norwood, Manager, Women and Minority Entrepreneurs, Business Assistance Center, Department of Trade, 919 Lakeridge Way, SW, Suite A, Olympia, WA 98504; (206) 389-2562

Mr. Hiram Perez came to the United States from Cuba in 1962 under the U.S.-sponsored, "Operation Peter Pan." He received his BA in Speech from WSU's Theatre Arts and Drama Department. His major emphasis is the application of theatre technology for amateur and professional stage, and the performing arts. Since 1968, Mr. Perez has been employed by WSU's School of Music and Theatre Arts as a Production Supervisor, Technical Director, Designer and Stage Production Manager. Presently, he manages Kimbrough Concert Hall and Bryan Hall Theatre. He is an active member of the United States Institute for Theatre Technology (USITT) at regional and national levels.

Contact: Mr. Hiram Perez, School of Music and Theatre Arts, Washington State University, Pullman, WA 99164-5300; (509) 335-4148

Ms. Amowi Sutherland Phillips is a Partner in the Law Firm Asiedu Phillips and Associates, registered in Ghana. She has adjunct status in the Departments of History, and Political and International Studies at Whitworth College, and at Gonzaga University School of Law. Ms. Phillips has delivered numerous presentations and has participated in workshops on Africa, Women, Children and Environment. From 1984-1988, she was a consultant and member of the Legal Committee of Ghana's National Commission on Children, and served as rapporteur in national seminars on child law and child labor. She is a member of the Ghana Bar Association, the Spokane Chapter of the United Nations Association-USA, and the International Federation of Women Lawyers (FIDA). Through her work with FIDA in Ghana, Ms. Phillips pioneered the establishment of a Legal Aid Center for Women and Children.

Contact: Ms. Amowi Sutherland Phillips, Attorney, 1222 West Elmwood Court, Spokane, WA 99218; (509) 467-3422

Ms. Karen Sayre is a President of the Law Firm of Sayre & Sayre, P.S., Spokane, Washington. Ms. Sayre received her BS from Gonzaga University in 1980 and her JD from Gonzaga University in 1985. She is a member of the Washington, American, Spokane and Lincoln County Bar Associations, the Washington State Trial Lawyers Association, the Association of Trial Lawyers of America, Washington Women Lawyers (Spokane Chapter President, 1988; Woman of the Year, 1991), and the National Academy of Elder Law Attorneys. She serves as the current Chair of the Spokane County Legal Assistant registration program, and is a board member of numerous charitable organizations in Spokane County. Her practice emphasizes litigation, employment discrimination, estate and disability planning, governmental benefits law for disabled individuals and elder law. She is a frequent lecturer on women's issues in the law.

Contact: Ms. Karen Sayre, Attorney, Sayre & Sayre, West 111 Cateldo, Suite 21, Spokane, WA 99201; (509) 325-7330

Dr. Yuri Stetsenko received a Doctor of Medicine degree from Kiev Medicine Institute in his home country, the Ukraine. In the Ukraine, Dr. Stetsenko practiced Psychiatry. In 1992, he came to the United States with his wife and daughter.

Contact: Dr. Yuri Stetsenko, 2026 West 4th, #41, Spokane, WA 99204; (509) 747-2316

Dr. Libby Walker is an Assistant Professor in Political Science and Women's Studies at WSU. She received a BA in History from the University of Colorado, and an MA in History from SUNY Buffalo. In 1984, Dr. Walker received her Ph.D. in Political Science from WSU. She has taught Political Science and Women's Studies for many years, and is particularly interested in decision-making processes. In 1992, Dr. Walker was a candidate for the State Legislature.

Contact: Dr. Libby Walker, Women's Studies Department, Washington State University, Pullman, WA 99164-4032; (509) 335-5286

BRINGING THE WORLD HOME
April 12-16, 1993

"SO WHAT IF MY SHOES COME FROM BRAZIL?"

Introduction: (Mike)

How is it that we, as citizens of Washington State, are connected to the rest of the world? (give time for responses) Well, let's see if we can understand a little better just a few of the ways we are, in fact, connected to people in other countries and regions.

Here we have a box of items, or symbols of items that we use daily. What I'd like each of you to do is to get one of these items from the box and see where it is manufactured. If the item itself doesn't give you this information, talk with your fellow workshop participants to see if they can help you identify the origin of this product.

Once you've discovered where your item is from, tape its location on the world map.

De-Brief: (1st part - Mike)

Where do the products we use daily come from? (go through items)

Why is it that some items are manufactured in some regions, and others in other regions?

- natural resources, labor laws and wages, environmental regulations

Who had items labeled, "Made in the U.S.A...It matters!" What does that mean?

De-Brief: (2nd part - Jane) **WHAT IS THE IMPACT OF OUR SHOES BEING PRODUCED IN BRAZIL?**

On the Brazil Side

1. What are the physical resources required to produce shoes in Brazil? (cattle herds, land, grain, factories, cardboard boxes, trees, energy source, etc.)
2. What are the human resources required in the production of shoes in Brazil? (labor, training, education, etc.)
3. What are the technical resources required to produce shoes in Brazil? (machinery, knowledge, parts, etc.)

On the U.S. Side

What is the impact on the U.S. of shoes being manufactured in Brazil? Let's look at physical, human and technological resources again.

1. What happens to physical resources? (reduction in hides needed, reduction in cattle herds, reduction in amount of graze land or feed needed, less machinery needed, less energy expended,

etc.)

2. How are human resources in the U.S. affected by our shoes being produced in Brazil? (better prices, less jobs, less training, less money, etc...)
3. How is technology in the U.S. affected by our shoes being produced in Brazil? (less research and development, less training, less technical expertise)

Conclusions

Shoes, as many other products we use on a daily basis, are produced in other countries. As your diagram shows, this means that a lot of energy and activity in those countries is dedicated to production, to economic activity. On the other hand, what we see in the U.S. is not an increase in production and the development of skills and technology, but a decrease. We are not as much a producing society as we are a consuming one. What our model here shows is how supply and demand functions in a global economy. We have created a demand for leather shoes, and Brazil is able to supply us with the product we want. So, what happens when, let's say, disease wipes out significant numbers of cattle in Brazil? How is the global economy affected? (Brazilians lose money, perhaps a whole market, other countries may have new opportunities for producing leather...developing a market, shoes may become more expensive for consumers, Brazil has fewer resources with which to repay their debt, the IMF receives less payments from Brazil, etc...) In numerous ways, we are globally connected.

BRINGING THE WORLD HOME

Work, Entrepreneurship and the Informal Economy

Nancy Horn, Ph.D., Jane Barga and Mike Mtika,
Development Education Project

1. Introduction

John Donnelly has just given us some thoughts on aspects of the world economic order and how national boundaries have been eroded due to our global exchange system. This macroperspective provides us with the context in which families must struggle to survive worldwide.

What we would like to do now is to bring our focus to the microperspective and examine some of the aspects of how families survive economically, paying particular attention to the role of women and work, and how women's economic contributions to the household are critical to its survival.

2. Definitions

Before we begin, there are a few terms I want to make sure you are familiar with:

a. **Informal Economy** - the "undocumented" set of activities that generate income - may be illegal - but in most cases it is the sum total of goods and services that are exchanged but do not get recorded in national statistics for a number of reasons: government does not necessarily require business licenses; income taxes are not filed; or activities may be unremunerated, but have economic significance. For example, grandma taking care of grandchildren while the child's parents go to their waged or salaried jobs. What are other examples of activities you would find in the informal sector?

b. **Microentrepreneur** - is a person who has established his/her own business and may "employ" up to 10 people. A term used mainly in developing countries, but in the U.S. we refer to as "small business." What are some examples of microenterprises/small businesses?

c. **Work** -

Work as Production Tasks - tasks in which people are paid for their labor with wages or receive payment for income-earning activities, i.e., employment, jobs, casual labor. What are some examples of Production Tasks?

Work as Reproduction Tasks - tasks involved in the biological reproduction of human beings and the daily maintenance of the labor force but also social reproduction, the perpetuation of the particular social system. Much of what women do in informal sector seen as an extension of this. What are some examples of Reproduction Tasks?

Work as Integration Tasks - tasks that serve to hold the society together and build morale in the community; aims at tempering grief, disappointments, failures and celebrating success and

joy; often involve life stages rituals associated with birth, passage to adulthood, courtship, marriage and death, i.e., holding the social unit together. What are some examples of Integration Tasks?

Work as Status Enhancement Tasks - tasks that lead to increased prestige for an individual, family, or group within their community or society, i.e., volunteer work organizing public events. What are some examples of Status Enhancement Tasks?

In discussing these definitions for application on a micro level, we set up a model to help us understanding why families, and women, struggle so hard to maintain themselves economically. Both women and men can be variously characterized as either working or not, depending on what sector of the economy they derive their income from, whether they are in business for themselves, and what the nature of their particular activities is. A critical point in terms of roles within the family is how much each member supports the other in what they are trying to accomplish economically, i.e., women generally engage in the four types of tasks in support of their husbands and families, but can the same be said for male support of his spouse?

3. The Video - Women and Work in Latin America

We are going to look at a short video now. As you view what people are doing, bear the definitions we just discussed in mind. Take out a piece of paper, and jot down the various activities you see depicted and try to classify them in terms of the definitions. You will have a few minutes after the video to finalize your classification.

4. DeBriefing

Discuss activities of women noted in video and reasons why classifications were made in this way. Categories - Informal Sector, Microentrepreneurship and Work. How are the three sets of definitions enmeshed? How do these activities relate to the overall macro-perspective John spoke about earlier?

What do these families and women in Latin America have in common with families and women in Washington?

5. Application - What Does This Mean for the Work We Do?

Perhaps the first thing we need to do is look at our communities. What is it women and families need to know in order to be economically self-sufficient? How can we provide services that will help women and families become more economically self-sufficient?

Needs Assessments - How do we ascertain what needs there are for programs in our communities? What is going on in your communities that has a direct effect on the economic well-being of women and families? What are the major public issues with which you are coping in your community? Methodologically, we conduct a needs assessment to determine what issues are of critical importance. How do we do this? Various groups exist in our communities that can be interviewed using the focal group format in the "Applications" section of your Notebook.

Alternatively, individual interviews can be conducted using the guidelines for community research developed by anthropologists, also in the "Applications" section of your Notebook. What groups should you address? How would you go about identifying those groups?

Designing Programs - Once you have ascertained what constituent needs are, you can determine the strategy to meet those needs. In your Notebook there are a number of ideas emanating from developing countries that can be utilized in your own community. In developing countries, whenever a meeting is held, training is also offered in skills to enhance women's economic capabilities. Illustrating to women how they can create professional and skills networks is also a focus for training. From your needs assessment, you will have ascertained the kinds of tasks and activities in which women and families participate. What kind of program can you offer that will strengthen those skills and make them marketable. Leadership and organizational skills are always important. And what about public speaking?

How do you empower people to make the changes they need to create economic self-sufficiency? If women's ability to generate income through employment or otherwise is critical to family economic self-sufficiency, what will you do to help them achieve this? What is the nature of the intrahousehold dynamic to enable all to achieve this?

Challenge - The real challenge in this whole economic self-sufficiency endeavor is to put yourself in the shoes of your constituents, to learn of their needs, and then to design programs that will provide them what they need economically. Linking with a community college might be appropriate to provide women training as well as a sense of well-being to participants.

Conclusion - If we think about it, everything we do has an economic consequence. By focusing on economic self-sufficiency, we help provide a way for family needs to be satisfied. Perhaps we can consider three terms as a reminder of how we should perceive programs under economic self-sufficiency: Learning - both you and your constituents; Doing - generating programs that will provide women and families with the skills they need; and Going - doing what you have learned to do to become economically self-sufficient.

BRINGING THE WORLD HOME

Growing Pains: Transition from an Informal Enterprise to a Professionally Managed Business, El Salvador

Presentation Notes Development Education Project

This case study exemplifies the origin and development of a number of businesses worldwide. In this particular case, women who were once a part of a homemaker group had desires of doing something else that would enhance their economic self-sufficiency. With assistance from TechAid and OEF (similar to the assistance provided by SBDC counselors), they were able to get their business going. They are at a juncture, however, that many small businesses face - whether to expand, diversify, or change.

As extension agents, you probably encounter individuals who wish to establish businesses. This case can serve as a pattern or model of business development particularly in the food processing area. Later on this afternoon, we will hear about similar cases in the U.S. and here in Washington. We hope these will provide some insight with regard to how you can assist people asking for similar help from you? We also hope that this will enable you do your job better. We would advise that you look for commonalities of small business development as you study these cases. The policy and financial assistance environment will vary from state to state and country to country, but the human relation issues, development of skills and knowledge/know-how, organization, and decision-making processes are all similar regardless of your particular location.

In designing programs to meet constituent needs in small business development, it would be worthwhile for you to take note of the critical points raised in the cases: human relations, organization structure and behavior; technology; information; strategies for development; extent of support; and control. All of these elements, of course, have to do with the business itself.

The task you have in discussing this case is to identify the developmental processes and dilemmas which characterize stages of small business growth. Among other things, cover the following areas/questions in your discussions:

1. What are the human relations issues confronting this group? How would they affect the group and the business.
2. What are the human development (skill enhancement) issues the group must address? What would you suggest they do.
3. What are the organizational issues that the group faces? Is the organizational structure appropriate for the changes they are thinking of making? If not, what should it be like?
4. What commonalities can you draw between small businesses in the U.S. and this one?

APPENDIX E

ELLENSBURG LEAGUE OF WOMEN VOTERS
Women's Rights in Africa
April 2, 1993

"SO WHAT IF MY SHOES COME FROM BRAZIL"

Introduction: (Mike)

How is it that we, as citizens of Washington State, are connected to the rest of the world? (give time for responses) Well, let's see if we can understand a little better just a few of the ways we are, in fact, connected to people in other countries and regions.

Here we have a box of items, or symbols of items that we use daily. What I'd like each of you to do is to get one of these items from the box and see where it is manufactured. If the item itself doesn't give you this information, talk with your fellow workshop participants to see if they can help you identify the origin of this product.

Once you've discovered where your item is from, tape its location on the world map.

De-Brief: (1st part - Mike)

Where do the products we use daily come from? (go through items)

Why is it that some items are manufactured in some regions, and others in other regions?

- natural resources, labor laws and wages, environmental regulations

Who had items labeled, "Made in the U.S.A...It matters!" What does that mean?

De-Brief: (2nd part - Jane) **WHAT IS THE IMPACT OF OUR SHOES BEING PRODUCED IN BRAZIL?**

On the Brazil Side

1. What are the physical resources required to produce shoes in Brazil? (cattle herds, land, grain, factories, cardboard boxes, trees, energy source, etc.)
2. What are the human resources required in the production of shoes in Brazil? (labor, training, education, etc.)
3. What are the technical resources required to produce shoes in Brazil? (machinery, knowledge, parts, etc.)

On the U.S. Side

What is the impact on the U.S. of shoes being manufactured in Brazil? Let's look at physical, human and technological resources again.

1. What happens to physical resources? (reduction in hides needed, reduction in cattle herds, reduction in amount of graze land or feed needed, less machinery needed, less energy expended,

etc.)

2. How are human resources in the U.S. affected by our shoes being produced in Brazil? (better prices, less jobs, less training, less money, etc...)
3. How is technology in the U.S. affected by our shoes being produced in Brazil? (less research and development, less training, less technical expertise)

Conclusions

Shoes, as many other products we use on a daily basis, are produced in other countries. As your diagram shows, this means that a lot of energy and activity in those countries is dedicated to production, to economic activity. On the other hand, what we see in the U.S. is not an increase in production and the development of skills and technology, but a decrease. We are not as much a producing society as we are a consuming one. What our model here shows is how supply and demand functions in a global economy. We have created a demand for leather shoes, and Brazil is able to supply us with the product we want. So, what happens when, let's say, disease wipes out significant numbers of cattle in Brazil? How is the global economy affected? (Brazilians lose money, perhaps a whole market, other countries may have new opportunities for producing leather...developing a market, shoes may become more expensive for consumers, Brazil has fewer resources with which to repay their debt, the IMF receives less payments from Brazil, etc...) In numerous ways, we are globally connected.

ELLENSBURG LEAGUE OF WOMEN VOTERS
Women's Rights in Africa
April 2, 1993

Notes on "Women and Work in Africa" Video

1. Introduction

Women have always been closely related to natural resources, and they have always been viewed as a resource to their families, either in productive or reproductive ways.

In the video you are about to view, note in each case described the types of resources women utilize on a daily basis. Try to categorize them as we have for this course: human, physical and technological. Note also how these three blend under the rubric of women's work.

2. The Video

3. Process

Women are both human resources and utilizers of resources. I'm going to divide you into two groups now - one that will look at women as resources, and the other at women as utilizers and caretakers of resources.

Women as Resources - For this group, I want you to consider how women were depicted in this video as resources. Next, I want you to come up with several ideas as to how women as resources can be further developed. Finally, come to terms with the issue of women being underutilized resources. What would you do in a given country to make them more prominent as resources?

Women as Users of Resources - For this group, I want you to list out all the resources women utilize - physical and technological. Next, what are some ideas you have on how to help women become more efficient users of resources. Finally, what plans can you generate to enhance women's ability to be better caretakers of resources, i.e., what other types of resources would they have to have access to?

[Students will take butcher paper and create their plans.]

Let's have each group present their findings. Where do they overlap? What are the "persistent inequalities" that prevent women from being able to participate in the ways you have outlined? What is the next step?

APPENDIX F

**CENTRAL WASHINGTON UNIVERSITY
SHORTCOURSE ON
RESOURCE UTILIZATION AND SUSTAINABLE DEVELOPMENT**

Ann Denman, Chair, Anthropology Department, and John Ressler, Resource Management, want us to deliver a shortcourse on Friday and Saturday, April 23-24 (6:30 - 10:00 p.m. Friday; 8:30 - 5:00 Saturday). Possible students include graduates and undergraduates in Resource Management, Geography, Anthropology, and Women Studies. The focus of the course will be on the role of women in resource utilization and conservation. The intended outcome will be a "manifesto" - operational principles for sustainable development - how one analyzes and plans sustainable development - how natural and cultural resources blend - concentrating on themes in world issues as applied to different regions. The course will be offered for one credit under a 499 designation, with 30 hours of work expected of each student (10 hours in class; app. 10 in reading and app. 10 in an assignment). Since the course will be advertised in the spring quarter coursebook and on special flyers the Anthro Dept will develop, others from the community may wish to register. She will know the actual size of the course by the end of February. Course Outline must be delivered to Dr. Denman while we are in Ellensburg January 4-8.

Of the possible students - probably 18 or so (although we have set no limit) - Dr. Denman feels they do not have much international background, except from Anthro classes. Many work on Northwest Resources and know something about adaptation, production systems, industrial adaptation. Format for these courses has been lecture methodology, and we made it clear that a significant portion of what we will be doing is workshop format. As geography or antho majors, students have familiarity with countries of the world and have knowledge of a few specific cases/problems in development, but that this knowledge is not very sophisticated.

Many students know each other, but some do not, so it is advisable to do some "ice breaking" at the outset.

We will have a small budget for materials - \$50 - and anything requiring copying should be sent to Ann no less than 24 hours in advance. She will provide snacks, slide projector, overhead, screen, maps.

Reading Lists must be provided to Dr. Denman by the first week in March in order that she can place materials on reserve in the library. If books are to be ordered, we should let her know by the first week in January.

We should observe a class when we are in Kittitas the week of January 4 (e.g., Ecological Anthropology).

CWU SHORT COURSE
RESOURCE UTILIZATION AND SUSTAINABLE DEVELOPMENT
April 23 - 24, 1993

Nancy E. Horn, Ph.D.
Adjunct/Anthropology Department
Director, Development Education Project
(509) 335-6896

Mike Mtika and Jane Barga
Development Education Project

COURSE OBJECTIVES: Through an exploration and analysis of resources - physical, human, and technological - in the developing world, focusing specifically on gender, students will be able to:

1. Discuss ways in which gender affects and influences the utilization and management of resources in developing countries.
2. Be conversant with critical issues in the design of development plans that ensures sustainable utilization of resources in developing countries.
3. Be able to elaborate on the parameters of development utilizing physical/natural, human, and technological resources.

REQUIRED READINGS: to be read before the course:

Dankelman, I. and J. Davison, 1988. Women and the Environment in the Third World. London: Earthscan Publications.

Case Study - "Sabotage in Santa Valley: The Environmental Implications of Water Mismanagement in a Large-Scale Irrigation Project in Peru" (to be picked up from the Anthropology Department one week prior to the course)

From the attached reading list, choose one article/reading per section and be prepared to discuss it in class.

EVALUATION: You have a choice among the following to provide evidence of what you have learned:

1. Write a development plan for a specific developing country in which resources - forestry, water, land, human - are utilized effectively and are sustained for the coming generations.
2. Write an analytic paper on how gender considerations must be included in the way utilization of resources is perceived in developing countries.
3. Conduct a field research project in your own community in which you ascertain ways in which gender considerations are/are not included in the planning process for resource utilization.

Analyze the reasons for gender being/not being a consideration.

4. Write a developing country case study in which you assess a project that has been implemented to enhance resource utilization and increase sustainability.
5. Conduct a five-year review of a journal addressing issues of resource development in developing countries, and abstract all articles on a specific theme, e.g., forestry, land, water, human issues in resource development. Such journals might include Development and Change, Social Forestry, Agriculture and Human Values, and many others. Be sure to include a full bibliographic entry for each abstract you write. Your analysis should include your opinions on the sustainability of the ideas expressed.

COURSE OUTLINE

Friday Evening, April 23, 1993

1. Paradigms and Theories of Development
2. Case Study: "Sabotage in Santa Valley"

Saturday, April 24, 1993

1. Humans As Resources and Users of Resources
2. Physical/Natural Resources: Land, Water, Forests
3. Technological Resources: What is Appropriate for Whom?
4. Sustainable Development
5. Wrap-Up and Conclusions
6. Course Evaluation

READINGS

1. Environment - Overview

Clarke, W. C. 1986. "Sustainable Development of the Biosphere: Themes for a Research Program," in Clarke, W.C. and R.E. Munn (eds.), 1986. Sustainable Development of the Biosphere. Cambridge: Cambridge University Press, pp. 5-48.

Daniels, Nomsa, 1991. "Garden of Eden" in Africa Report, September-October, pp. 13-17.

Jazairy, Idriss; Mohiuddin Alamgir; and Theresa Panuccio, 1992. The State of World Rural Poverty: An Inquiry into its Causes and Consequences. International Fund for Agricultural Development: New York University Press, Chapter 10: "Alleviating Rural Poverty through Natural Resource Management and Preservation," pp. 305-321.

World Bank, 1992. World Development Report 1992. Development and the Environment. New York: World Bank, Chapter - Overview (pp. 1-14), Chapter 1 - Development and the Environment: A False Dichotomy (pp. 25-43), and Chapter 2 - Environmental Priorities for Development (pp. 44-63).

2. Theories of Development

Crenshaw, Edward. 1992. "Cross-National Determinants of Income Inequality: A Replication and Extension Using Ecological-Evolutionary Theory," in Social Forces, Vol. 71, No. 2, December, pp. 339-363.

Kottack, Conrad Phillip. 1985. "When People Don't Come First: Some Sociological Lessons from Completed Projects," in Cernea, Michael M. Putting People First. New York: Oxford University Press, pp. 325-356.

So, Alvin Y. 1990. Social Change and Development. Newbury Park: Sage, Chapter 8 (pp. 169-199).

Valenzuela, J. Samuel and Arturo Valenzuela. 1981. "Modernization and Dependency: Alternative Perspectives in the Study of Latin American Underdevelopment," in Munoz, Heraldo (ed.). From Dependency to Development. Boulder: Westview Press.

3. Humans as Resources

Griffin, Keith and John Knight. 1992. "Human Development: The Case for Renewed Emphasis," in Wilber, Charles K. and Kenneth P. Jameson. The Political Economy of Development and Underdevelopment. New York: McGraw-Hill, Inc., pp. 576-609.

Horn, Nancy E. 1993. Education and Labor Force Participation. Washington, D. C.: Academy for Education Development.

Repetto, Robert. 1991. "Population, Resources, Environment: An Uncertain Future," in Population Bulletin, Vol. 42, No. 2, pp. 3-43.

4. Gender and Resource Utilization

Collins L. Jane, 1991. "Women and the Environment: Social Reproduction and Sustainable Development" pp. 33-58 in R.S. Gallin and A. Ferguson (eds.), The Women and International Development Annual, vol. 2. Boulder: Westview Press.

Jazairy, Idriss; Mohiuddin Alamgir; and Teresa Panuccio, 1992. The State of World Rural Poverty: An Inquiry into its Causes and Consequences. International Fund for Agricultural Development: New York University Press, Chapter 9: "Rural Women in Development," pp. 273-304.

Rodda, Annabel, 1991. Women and the Environment. New Jersey: Zed Books Ltd.

Rosser, V. Sue, 1991. "Eco-Feminism: Lessons for Feminism from Ecology." Women's Studies International Forum, vol. 14 No. 3: 143-151.

5. Physical Resources Management

Barraclough, Solon and Krishna Ghimire. 1990. The Social Dynamics of Deforestation in Developing Countries: Principal Issues and Research Priorities. Vienna: United National Research Institute for Social Development, Discussion Paper No. 16.

Goheen, Miriam. 1991. "The Ideology and Political Economy of Gender: Women and Land in Nso, Cameroon," in Gladwin, Christina (ed.). Structural Adjustment and African Women Farmers. Gainesville: University of Florida Press.

Nesmith, Cathy. 1991. "Gender, Trees, and Fuel: Social Forestry in West Bengal, India," in Human Organization, Vol. 50, No. 4, Winter, pp. 337-348.

Picchi, Debra. 1991. "The Impact of an Industrial Agricultural Project on the Bakairi Indians of Central Brazil." Human Organization, Vol. 50, No. 1, pp. 26-38.

Uquillas, Jorge E. 1989. "Social Impacts of Modernization and Public Policy, and Prospects for Indigenous Development in Ecuador's Amazonia," in Schumann, Debra A. and William L. Partridge (eds.). The Human Ecology of Tropical Land Settlement in Latin America. Boulder: Westview Press, pp. 407-431.

Various Authors. 1987. "Focus on Tropical Forests," in Panoscope, No. 3, October, pp.

World Bank, 1992. World Development Report 1992. Development and the Environment. New York: World Bank, Chapter 5 - Sanitation and Clean Water (pp. 98-113).

6. Technological Resources

DeWalt, R. Billie and David Barkin. 1987. "Seeds of Change: The Effects of Hybrid Sorghum and Agricultural Modernization in Mexico" pp. 138-165 in H. Russell Bernard and Pertti Pelto (eds.), Technology and Social Change. Prospect Heights: Waveland Press.

Jiggins, Janice, 1989. "Agricultural Technology: Impact, Issues, and Action" pp. 25-55 in R.S. Gallin, M. Aronoff, and A. Ferguson (eds.), The Women and International Development Annual, vol. 1. Boulder: Westview Press.

Moles, Jerry A. 1989. "Agricultural Sustainability and Traditional Agriculture: Learning from the Past and its Relevance to Sri Lanka," in Human Organization, Vol. 48, No. 1, pp. 70-78.

7. Sustainable Development

MacNeill, Jim. 1989. "Strategies for Sustainable Economic Development." Scientific American, September, pp. 155 - 165.

Pietila, Hilikka. 1990. "The Daughters of Earth: Women's Culture as a Basis for Sustainable Development," in Engel, J. Ronald and Joan Gibb Engel. Ethics of Environment and Development. Tucson: University of Arizona Press.

CWU SHORT COURSE
RESOURCE UTILIZATION AND SUSTAINABLE DEVELOPMENT
April 23 - 24, 1993

COURSE DESCRIPTION

An exploration and analysis of resources - physical, human, and technological - in the developing world with specific focus on aspects of gender in the utilization of resources.

COURSE OBJECTIVES

1. To be able to discuss ways in which gender affects and influences the utilization and management of resources in developing countries.
2. To be able to design a development plan that ensures sustainable utilization of resources in developing countries.
3. To be able to elaborate on the parameters of development utilizing physical, human, and technological resources.

COURSE OUTLINE/SCHEDULE

Friday, April 23, 1993

6:00 - 6:30: Introduction

The Development Education Project - Nancy
Expectations of the Students - Nancy
Objectives and evaluation of students' performance - Nancy
Icebreaker - Jane

6:30 - 7:30: Theories of Development - Nancy and Mike

7:30 - 9:00: Resource Utilization and Sustainable Development
"Sabotage in Santa Valley" Case Study - Jane

Saturday, April 24, 1993

8:00 - 8:30: Introduction to the Day

- Map Exercise - Jane

8:30 - 10:30: Human Resources (Global, National, and Local levels) - Nancy

- Gender, Human Systems, and Patriarchy: A Theoretical Perspective

- Labor force participation, economy, and work

- Human beings as resources and users of resources

- Process

- Debriefing - Nancy

10:30 - 10:45: Break

10:45 - 12:45: Physical/Natural Resources (Global, National, and Local levels) - Mike

- Sustainable Use of Physical Resources: A Theoretical Perspective
- Dilemmas:
 - The Amazon - Jane
 - Wildlife in Zimbabwe - Nancy (slides)
 - Land Use in Nepal/Bangladesh - Mike (video)
- Debriefing: An Appraisal of Sustainable use of resources - Mike

12:45 - 1:15: Lunch

1:15 - 3:15: Technological Resources (Global, National, and Local levels) -

- Technology in Resource Utilization: A Theoretical Perspective - Mike
 - Technology production and consumption.
 - Technology's Impact on Ecological Capital.
- Process
 - Video: Linkages - Your Role in the World's Food Connections
 - Video: Women and Work in Africa
- Debriefing

3:15 - 3:30: Break

3:30 - 4:15: Sustainable Development - Nancy

- Group Problem Solving Exercise
- Debriefing
 - Meaning of Sustainable Development - global and local perspectives.
 - Towards a Strategy of Sustainable Use of Resources.

4:15 - 4:30: Conclusion

- What have we learned?: A Model of Sustainable Resource Utilization.
- Where do we go from here?
- Course Evaluation

CWU Shortcourse
RESOURCE UTILIZATION AND SUSTAINABLE DEVELOPMENT

Glossary of Terms Used in International Development

Appropriate Technology - A technology that is appropriate for existing factor endowments. For example, a technology employing a higher proportion of labor relative to other factors in a labor-abundant economy is usually more appropriate than one that uses smaller labor proportions relative to other factors.

Balance of Payments - A summary statement of a nation's financial transactions with the outside world.

Balanced Trade - A situation where the value of a country's exports and the value of its imports of visible items are equal.

Basic Needs - A term used by the International Labor Organization to describe the basic goods and services (food, shelter, clothing, sanitation, education, etc.) necessary for a minimum standard of living.

Birthrate, Crude - Number of children born alive each year, per thousand population (e.g., a crude birthrate of 20 per 1,000 is the same as a 2% increase).

Capital Accumulation - Increasing a country's stock of real capital (i.e., net investment in fixed assets). To increase the production of capital goods necessitates a reduction in the production of consumer goods. "Economic" development largely depends on the rate of capital accumulation.

Capital-Intensive Technique - A more capital-using process of production; that is, one using a higher proportion of capital relative to other factors of production such as labor or land per unit output.

Capital/Output Ratio - A ratio that shows the units of capital required to produce a unit of output over a given period of time.

Cash Crops - Crops produced entirely for the market (e.g., coffee, tea, cocoa, cotton, rubber, pyrethrum, jute, wheat).

Casual Employment - Employment on an ad hoc basis without regular hours or a wage contract; constitutes employment in the informal sector.

Centralized Planning - The determination by the state of what shall be produced and how factors of production shall be allocated among different uses. Central planning is done at the "center" and then dictated to various sections in the economy.

Child Death Rate - The number of deaths among children 1 to 4 years of age per 1,000 children of that age in a given year.

Common Market - A form of economic integration in which there is free internal trade, a common tariff, plus the free movement of labor and capital among partner states. The EEC (European Economic Community) provides an example.

Comparative Advantage - A country has a comparative advantage over another if in producing a commodity it can do so at a relatively lower opportunity cost in terms of the foregone alternative commodities that could be produced.

Cost-Benefit Analysis - A basic tool of economic analysis in which the actual and potential costs (both private and social) of various economic decisions are weighed against actual and potential private and social benefits. Those decisions or projects yielding the highest benefit/cost ratio are usually thought to be most desirable.

Debt-Equity Swaps - Mechanism used by indebted LDCs to reduce the real value of external debt by exchanging equity in domestic companies (stocks) or fixed-interest obligations of the government (bonds) for private foreign debt at large discounts, e.g., replacing \$100 million of debt obligations with \$50 million of equity claims against domestic real assets.

Debt Service - The sum of interest payments and repayments of principal on external public and publicly guaranteed debt.

Debt-Service Ratio - Ratio of interest and principal payments due in a year to export receipts for that year.

Debtor Nation - A Nation with a balance of payments deficit.

Dependence - A corollary of dominance; a situation where the LDCs have to rely on developed country domestic and international economic policy to stimulate their own economic growth. Dependence can also mean that the LDCs adopt developed country education systems, technology, economic and political systems, attitudes, consumption patterns, dress, etc.

Dependency Burden - That proportion of the total population of a country falling in the ages of 0 to 15 and 64+, which is considered economically unproductive and therefore not counted in the labor force. In many LDCs the population under the age of 15 accounts for almost as much as half of the total population, thus posing a burden to the federally small productive labor force and to the government which has to allocate resources on such things as education, public health, housing for the consumption of people who don't contribute to production.

Development - The process of improving the quality of all human lives. Three equally important aspects of development are: (1) raising people's living levels, i.e. their incomes and consumption levels of food, medical services, education, etc., through "relevant" economic growth processes; (2) creating conditions conducive to the growth of people's self-esteem through the establishment of social, political, and economic systems and institutions which

promote human dignity and respect; and (3) increasing people's freedom to choose by enlarging the range of their choice variables, e.g. increasing varieties of consumer goods and services.

Disguised Underemployment - A situation in which available work tasks are split among resources (typically labor) such that they all seem fully employed, but in reality much of their time is spent in unproductive activities.

Disposable Income - The income that is available to households for spending and saving after personal income taxes have been deducted.

Division of Labor - Allocation of tasks among the workers such that each one engages in tasks that he performs most efficiently. Division of labor promotes worker specialization and thereby raises overall labor productivity.

Economic Community - Economic union of countries seeking to coordinate fiscal and monetary policies as a step toward a common currency. This takes place in addition to maintaining a common external tariff and similar commercial policies and to removing restrictions on trade within the community.

Economic Growth - The steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national income.

Economic Policy - Statement of objectives and the methods of achieving these objectives (policy instruments) by government, political party, business concern, etc. Some examples of government economic objectives are maintaining full employment, achieving a high rate of economic growth, reducing income and regional development inequalities, maintaining price stability. Policy instruments include fiscal policy, monetary and financial policy, and legislative controls.

Economic System - The organizational and institutional structure of an economy including the nature of resource ownership and control. Major economic systems include subsistence economy, pure market capitalism, advanced capitalism, market socialism, command socialism, and the "mixed" systems that characterize most LDCs.

Economies of Scale - These are economies of growth resulting from expansion of the scale of productive capacity of firm or industry leading to increases in its output and decreases in its cost of production per unit of output.

"False-Paradigm" Model of Underdevelopment - The proposition that Third World countries have failed to develop because their development strategies (usually given to them by Western economists) have been based on an "incorrect" model of development, one that, for example, overstressed capital accumulation without giving due consideration to needed social and institutional change.

Fertility Rate, General -yearly number of children born alive per 1,000 women within the childbearing age bracket (normally between the ages of 15 and 49 years).

Fertility Rate (total) - The number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children at each age in accordance with the prevailing age-specific fertility rates.

First World - The now economically advanced capitalist countries of Western Europe, North America, Australia, New Zealand, and Japan. These were the first countries to experience sustained and long-term economic growth.

Foreign Aid - The international transfer of public funds in the form of loans or grants either directly from one government to another (bilateral assistance) or indirectly through the vehicle of a multilateral assistance agency like the IBRD (World Bank).

"Formal" Educational System - The organized and accredited school system with licensed teachers, standard curricula, regular academic years, and recognized certification. Encompasses primary, secondary, and tertiary educational institutions.

Free Trade - Trade in which goods can be imported and exported without any barriers in the form of tariffs, physical quotas, or and other kind of strictures.

Green Revolution - The revolution in grain production associated with the scientific discovery of new hybrid seed varieties of wheat, rice, and corn which have resulted in high farm yields in many LDCs.

Gross Domestic Product - Measures the total final outputs of goods and services produced by the country's economy--i.e., within the country's territory by residents and nonresidents, regardless of its allocation between domestic and foreign claims.

Gross National Product - Measures the total domestic and foreign output claimed by residents of a country. It comprises gross domestic product plus factor incomes accruing to residents from abroad, less the income earned in the domestic economy accruing to persons abroad.

Human Capital - Productive investments embodied in human persons. These include skills, abilities, ideals, health, etc., that result from expenditures on education, on-the-job training programs, and medical care.

Import Substitution - A deliberate effort to replace major consumer imports by promoting the emergence and expansion of domestic industries such as textiles, shoes, household appliances. Requires the imposition of protective tariffs and physical quotas to get the new industry started.

Income Per Capita - Total GNP of a country divided by the total population. Per capita income is often used as an economic indicator of the levels of living and development. It however, can be a "biased" index because it takes no account of income distribution and the ownership of the assets which are employed to generate part of that income.

Inflation - A period of above-normal general price increases as reflected, for example, in the consumer and wholesale price indexes. More generally, the phenomenon of rising prices.

Institutions - Norms, rules of conduct, and generally accepted ways of doing things. Social institutions refer to well-defined and formal organizations of society that govern the way that society operates--e.g., class system, private versus communal ownership, educational system--while political institutions refer to the systems that govern the operations of the government of a particular society--e.g., formal power structures, political parties, mechanism of getting into power.

Integrated Rural Development - The broad spectrum of rural development activities including small-farmer agricultural progress; the provision of physical and social infrastructure; the development of rural nonfarm industries; and the capacity of the rural sector to sustain and accelerate the pace of these improvements over time.

Inward-Looking Development policies - Policies that stress economic self-reliance on the part of LDCs, including the development of indigenous "appropriate" technology, the imposition of substantial protective tariffs and nontariff trade barriers in order to promote import substitution, and the general discouragement of private foreign investment.

Labor Force - Describes economically active persons, including the armed forces and the unemployed, but excluding housewives, students, and economically inactive groups.

Labor- or Capital-Augmenting Technological Progress - Technological progress that raises the productivity of an existing quantity of labor (or capital), e.g., labor by general education, on-the-job training, etc., and capital by innovation and new inventions.

Land reform - Deliberate attempt to reorganize and transform existing agrarian systems with the intention of improving the distribution of agricultural incomes and thus fostering rural development. Among its many forms, land reform may entail provision of secured tenure rights to the individual farmer; transfer of land ownership away from small classes of powerful landowners to tenants who actually till the land; appropriation of land estates for establishing small new settlement farms; instituting land improvements and irrigation schemes, etc.

Life Expectancy at Birth - Indicates the number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth.

Literacy Rate - Percentage of population aged 15 and over able to read and write.

National Income - Total monetary value of all final goods and services produced in an economy over some period of time, usually a year.

Neocolonial Model of Underdevelopment - Model whose main proposition is that underdevelopment exists in Third World countries because of continuing exploitative economic, political, and cultural policies of former colonial rulers toward less developed countries.

Newly Industrializing Countries (NICs) - A small group of countries at a relatively advanced level of economic development with a substantial and dynamic industrial sector and with close links to the international trade, finance, and investment system (Argentina, Brazil, Greece, Hong

Kong, South Korea, Mexico, Portugal, Singapore, Spain, Taiwan, and Yugoslavia).

Noneconomic Variables - Elements of interest to economists in their work but which are not given a monetary value or expressed in numerals because of their intangible nature. Examples of these include beliefs, values, attitudes, norms, and power structure. Sometimes noneconomic variables are more important than the quantifiable economic variables in promoting development.

"Nonformal" Education - Basically, any "out of school" program that provides basic skills and training to individuals. Examples include adult education, on-the-job training programs, agricultural and other extension services.

"Nontariff" Trade Barrier - Barriers to free trade that take forms other than tariffs such as quotas, sanitary requirements for imported meats and dairy products.

Opportunity Cost - In production, the real value of resources used in the most desirable alternative--e.g., the opportunity cost of producing an extra unit of manufactured good is the output of, say, food that must be foregone as a result of transferring resources from agricultural to manufacturing activities; in consumption, the amount of one commodity that must be foregone in order to consume more of another.

"Opportunity Cost" of a Woman's Time - Real or monetary wages or profits that a woman sacrifices by deciding to stay home and bear children instead of working for a wage or engaging in profit-making self-employment activities. The higher the opportunity cost of a woman's time involved in bearing children, the more unwilling she will be to have more children--at least in terms of the microeconomic theory of fertility.

Primary Products - Products derived from all extractive occupations--farming, lumbering, fishing, mining, and quarrying--namely, foodstuffs and raw materials.

Private Sector - That part of an economy whose activities are under the control and direction of nongovernmental economic units such as households or firms. Each economic unit owns its own resources and uses them mainly to maximize its own well-being.

Second World - The now economically advanced socialist countries. Major Second World countries include the Soviet Union, and other Soviet-type economies of Eastern Europe such as Poland, Czechoslovakia, and Yugoslavia.

Self-Reliance - Reliance on one's own capabilities, judgment, resources, and skills in a bid to enhance political, economic, social, cultural, attitudinal, and moral independence. Countries may also desire to be self-reliant in particular aspects such as food production, manpower, and skills. Increasingly, the term "collective self-reliance" is being used in Third World forums.

"Stages of Growth" Model of Development - This Theory of development is associated with the American economic historian W. W. Rostow. According to Rostow, in achieving development, a country inevitably passes through the following five stages: (1) traditional and stagnant low per capita stage; (2) transitional stage (in which the "preconditions for growth" are

laid down); (3) the "takeoff" stage (beginning the economic growth process); (4) the "drive to maturity" stage; and (5) industrialized, mass production and consumption stage (development stage).

Structural Adjustment Loans - Loans by the World Bank designed to foster structural adjustment in the LDCs by supporting measures to remove excessive governmental controls, getting factor and product prices to better reflect scarcity values and promoting market competition.

Structural Theory of Underdevelopment - Hypothesis that underdevelopment in Third World countries is due to underutilization of resources arising from structural and/or institutional factors that have their origins in both domestic and international dualistic situation. Development, therefore, requires more than just accelerated capital formation as espoused in the "stages of growth" and "false paradigm" models of development.

Structural Transformation - The process of transforming the basic industrial structure of an economy so that the contribution to national income by the manufacturing sector increasingly becomes higher than that by the agricultural sector. More generally, an alteration in the industrial composition of any economy.

Subsistence Economy - An economy in which production is mainly for "own consumption" and the standard of living yields no more than the basic necessities of life--food, shelter, and clothing.

Technical Assistance - foreign aid (either bilateral or multilateral that takes the form of the transfer of expert personnel, technicians, scientists, educators, economic advisers, consultants, etc., rather than simple transfer of funds.

Terms of Trade (commodity) - the ration of a country's average export price to its average import price. A country's terms of trade are said to improve when this ration increases and to worsen when it decreases, i.e., when import prices rise at a relatively faster rate than export prices (the experience of most LDCs over the past two decades).

Third World - The present 144 or so developing countries of Asia, Africa, the Middle East, and Latin America. These countries are mainly characterized by low levels of living, high rates of population growth, low levels of per capita income, and general economic and technological dependence on First and Second World countries.

Tied Aid - Foreign aid in the form of bilateral loans or grants that require the recipient country to use the funds to purchase goods and/or services from the donor country--thus the aid is said to be "tied" to purchases from the assisting country.

"Trickle Down" Theory of Development - The notion that development is purely an "economic" phenomenon in which rapid gains from the overall growth of GNP and per capita income would automatically bring benefits (i.e. "trickle down") to the masses in the form of jobs and other economic opportunities. The main preoccupation is therefore to get the growth job

done while problems of poverty, unemployment, and income distribution are perceived to be of secondary importance.

Underdevelopment - An economic situation in which there are persistent low levels of living in conjunction with the following characteristics: absolute poverty, low per capita incomes, low rates of economic growth, low consumption level, poor health services, high death rates, high birth rates, vulnerability to and dependence on foreign economies, and limited freedom to choose between variables that satisfy human wants.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Ice-Breaker - Exercise 1 (Friday evening)
"Where in the world are our resources?"

Introduction: Since we will be talking a lot about human, physical and technological resources in developing countries during the next couple of days, let's begin by identifying some of these resources around the globe.

Each of you will get a few small slips of paper with the name of or information about human, physical and technological resources of Latin America and the Caribbean, Asia, or Africa. On each slip of paper is a symbol representing resource - forests, water, land, human, or technological. On the regional maps that we have hanging here, find where your resources belong and tape your symbols and information slips to their locations on the maps.

Now that we have identified some of the our resources around the globe, divide yourselves among the three regions, and list out on butcher paper other physical, human, and technological resources you know about in that region.

De-brief:

O.K., let's have each region briefly point out to the rest of us some of the major physical, human and technological resources in their region. (group presentations)

Great. Now that we've identified many of our resources, in the next day or so, we are going to look at how these resources are being utilized around the world, how the use of one interacts with the use of others, and what issues underly the management of them.

Exercise 1 - Information

Forests

The Amazonian Rainforest comprises 48% of Ecuador's territory.

Sixty-seven percent of Brazil's area is forest and woodland. Its lands form 60% of the Amazon Basin Rainforest.

Costa Rica is often said to have the world's greatest biological diversity per square foot.

Mexico has more indigenous pine species than any other nation.

Fifteen percent of Nigeria's land is wooded or forested.

The size of Texas, Madagascar has one of the world's largest numbers of plant and animal species.

The Congo Basin is the largest rainforest area of continental Africa.

The Philippines, an archipelago of over 7000 islands, is 40% forest and woodland.

Thirty percent of Thailand's lands are wooded or forested.

Sixty-three percent of Malaysia is forest or woodland.

Water

Mexico has numerous fresh water rivers, including the Rio Grande which runs along its border with the United States.

Brazil is home of the Amazon River and Iguazu Falls, the latter which is actually over 275 falls, each the height of Niagara Falls.

Lake Titicaca sits 15,000 feet above sea level in the Andes Mountain Region.

The Zaire is the fourth largest river in the world. Basin.

Victoria Falls, which drops 325 feet, is found along the borders of Zimbabwe and Zambia.

Lake Victoria, the largest lake in this region, is bordered by Kenya, Uganda, and Tanzania.

Lake Malawi, which covers 20% of Malawi's territory, is the single body of water in its region

holding the greatest variety of fish.

The Ganges River runs through this region.

In Bhutan, the average annual rainfall is over 80 inches.

The average annual rainfall in Nepal is over 80 inches.

Land

Ethiopia has diverse climatic zones, including the Agarro Rain Forest.

The Nile Delta of Egypt is a rich area for cultivation.

The Andes Mountain Range lies in the Western part of this region.

Diverse geography accounts for the representation of 12 "life zones" in Costa Rica.

Colombia is home to the world's largest coal reserves.

Afghanistan is rich in petroleum.

Seventy percent of the population of Bangladesh depends on agriculture for its subsistence.

In Nepal, 92% of the population relies on agriculture for its survival.

Out of Zaire comes 40% of the world's diamonds.

Colombia, Ecuador and Venezuela are rich in oil reserves, some of which have been discovered only in the last couple of years.

Human

China's population of 1.1 billion represents 22% of the world population. Its population projection for 2025 is 1.6 billion.

The population of Bangladesh is 115.6 million; its population projection for 2025 is 196 million.

Malaysia has a population of 17.9 million; it is expected to have 31 million people by 2025.

Thailand's population numbers 55.7 million; it is expected to reach 83 million by 2025.

The population of Burkina Faso is 9.0 million; its 2025 population projection is 23 million.

Egypt's population is 52.4 million; its 2025 population projection is 86 million.

The population of Nigeria is 115 million; it is expected to be 298 million in 2025.

Zaire's population is 35.6 million; its 2025 projection is 86 million.

The population of Bolivia is 7.3 million; its 2025 projection is 16 million.

Brazil's population is 150.4 million; it is expected to reach 236 million by 2025.

The population of Costa Rica is 3 million; it should reach 5 million by the year 2025.

Technology

Kariba Dam can be found on the Zambezi River along the borders of Zambia and Zimbabwe.

Ghana is home to the Upper Volta Dam.

Suez Canal

Itaipu, one of the world's largest hydroelectric plants, is located in Brazil.

Panama Canal

Colombia houses CIATT, the International Research Center for Tropical Agriculture.

Philippines is home to the International Rice Research Institute.

CIP, the International Center for Potato Research, is located in Peru.

Malaysia is the world's largest producer of computer chips (U.S. company).

The Tehri and Kishau Dams of India are the 6th and 7th largest ones in the world.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Ice-breaker: Exercise 2 (Saturday Morning)
"How are we utilizing our resources?"

Last evening you very nicely identified many of the physical, human and technological resources of three geographical regions: Latin America and the Caribbean, Asia, and Africa. Now we'd like to take a look at what is happening to these resources as they are being utilized.

Each person will receive a piece of paper describing what is happening to the resources in one of three geographical regions: Asia, Africa or Latin America.

In your groups, outline out the general problems with resource utilization that you find in your region, and what you understand to be their causes. Then discuss what relationships seem to exist between the utilization of human, technological and physical resources. Be prepared to discuss your ideas when we gather again as one group.

De-brief:

O.K., let's have each group present their list.

- What are some of the similarities we see?
- What regions seem to have resource utilization problems that are unique to the region?
- What relationships seem to exist between the utilization of human, technological and physical resources?

For the remainder of the day, we will be taking a closer look at the utilization of each of these resources: human, technological, and physical. As you have suggested, the relationships that exist between them are complex and many. What we hope that you come away with is an understanding of how these resources are used in developing countries, and why they are used in the ways that they are. This should also give you insights to the real possibilities and complexities of practicing sustainable development in these regions.

Exercise 2 - LATIN AMERICA

Forests

Rapid exploitation of oil, which provides 70% of Ecuador's national revenue, has led to deforestation and the displacement of indigenous peoples.

Every year 5,335 square miles of forests are destroyed in Brazil due to cattle ranching, logging, and government colonization policies.

At current rates of deforestation, Costa Rica will have no more forests in 10 years.

Due to national economic development efforts, within 25 years, 1/3 of Oaxaca's Sierra Juarez forests were destroyed by a foreign-owned paper and pulp company.

Water

More than half of the 2000 American-owned plants along the U.S.-Mexican border generate hazardous wastes and raw sewage.

In 1991, more than three million children died in Brazil due to waterborne diseases.

Rivers, lakes and marine habitats are increasingly contaminated by agricultural run-off and industrial waste and sewage. Key aquifers are polluted by garbage dumps.

Land

In the highly infertile Andes region, heavy winds cause problems of erosion on the open lands.

Costa Rica has a long history of exploiting its land revenues as a path to development.

Through the transport of coal in open trucks, coal dust is causing respiratory and other serious health problems in Colombia's people and animals.

Human

The percentage of literate adult males and females in Bolivia is 85 and 71, respectively. Bolivia's maternal mortality rate per 100,000 live births is 600.

Brazil's literacy rate for adult males and females is 83% and 80%, respectively. The maternal mortality rate per 100,000 live births in Brazil is 200.

Adult literacy in Costa Rica is 93% for both men and women. The maternal mortality in Costa Rica is 36 per 100,000 live births.

Exercise 2 - Africa

Forests

In Nigeria, complete deforestation is expected by the year 2000.

Madagascar is expected to lose 30% more of its forests by the year 2000.

Sixty-eight percent of the rain forests of the Congo are scheduled for clearing.

Water

In Zaire, 21% of the rural population has access to safe drinking water.

In Zimbabwe, drought has dried up well used for humans and animals.

Recent discussion of exploiting oil beneath Lake Malawi poses a potential to the future well-being of the lake and its habitat.

Land

In Egypt, heavy pesticide subsidies for agriculture are causing chemically-related deaths and pollution.

Ethiopia loses millions of tons of topsoil annually due to drought and overcultivation.

Currently comprising about 25% of Africa's land mass, the Sahara Desert is expanding every year.

Human

The percentage of literate males and females in Egypt are 63 and 34, respectively. The maternal mortality rate per 100,000 live births is 320.

Burkina Faso's adult literacy rate is 28% for men and 9% for women. The maternal mortality rate is 810 per 100,000 live births.

The percentage of literate adults in Nigeria is 62 for men and 40 for women. The maternal mortality rate is 800 per 100,000 live births.

In Zaire, 84% of the adult males and 61% of the adult females are literate. The maternal mortality rate per 100,000 live births is 800.

Exercise 2 - Asia

Forests

In the Philippines, severe deforestation causes killer floods and will leave no virgin forest by the year 2010.

At current rates of deforestation (mostly for export to Japan), the forests of Peninsular Malaysia, will be nearly gone by the year 2000.

Thailand lost 45% of its forests between 1961 and 1985.

Water

In India, 50% of the rural population has access to safe water; 2% have access to sanitation.

Nineteen percent of Bhutan's rural population has access to safe water.

In Nepal, 25% of the rural population has access to safe water.

Land

Nepal suffers severe land erosion problems due to heavy rains and deforestation.

In Bangladesh, less than 5% of the original rain and monsoon forest cover remains, causing heavy flooding with seasonal rains.

Afghanistan experiences ongoing problems of drought.

Human

In China, the adult literacy rates are 84% for men and 62% for women. The maternal mortality rate is 95 per 100,000 live births.

The percentage of literate adults in Bangladesh is 42 for men and 20 for women. The maternal mortality rate is 600 per 100,000 live births.

Malaysia's adult literacy rate is 87% for men and 70% for women. The maternal mortality rate is 59 per 100,000 live births.

Thailand's literate adult population includes 96% of the men and 90% of the women. The maternal mortality rate per 100,000 live births is 270.

CWU SHORT COURSE
April 23 - 24, 1993

RESOURCE UTILIZATION AND SUSTAINABLE DEVELOPMENT

THE EARTH AND ITS INHABITANTS

1. Description of the Earth and its Inhabitants:

- a) The Atmosphere
- b) The Hydrosphere
- c) The Geosphere
- d) The Biosphere

2. Some Definitions:

- | | |
|-------------------------------|--------------------------|
| a) Global Cycles | (i) Ecology |
| b) Biotechnology | (j) Ecosystems |
| c) Deforestation | (k) Global Warming |
| d) Desertification | (l) Ozone |
| e) Resource | (m) Biological Diversity |
| f) Environment | (n) Biotic |
| g) Socio-Cultural Environment | (o) Abiotic |
| h) Environmental Ethics | (p) Investment |

The biosphere is inhabited by an immense number of organisms that very much depend on and relate to each other. We want to focus our attention on this relationship. We would like to labor with the questions, "Is there a pattern of behavior the organisms of the earth must exhibit to one another in order to sustain themselves? What of the earth's inhabitants are the most responsible in terms of imbalancing a sustainable relationship? What changes in behavior patterns would we like to see among the different organisms that would promote the desired relationship?" Let us aim at developing a model of a sustainable relationship between the inhabitants.

I will divide you into different groups representing different types of organisms (living or non-living) of the earth. The groups:

1. Trees
2. Human Beings
3. Grass and Shrubs
4. Soil
5. Rocks
6. Water
7. Air
8. Wild terrestrial animals
9. Aquatic animals
10. Light

In your groups, I would like you to do the following:

- a) Describe who you are, how you sustain yourself, how much of the earth you occupy, and what role you play in ensuring that your relationship with other organisms is not to their detriment. Separately, describe the role you can play and the problems that make it difficult for you to play that role.
- b) Who, amongst the other organisms, is your worst enemy? What do they do to you that you really hate? What would you like them to do to you that would promote your welfare?
- c) Who, amongst the other organisms, are your best friends? What do they do to you that you would like them to continue doing? What are they doing that you would like them to stop?
- d) Define all the good things that others should be doing to you that would prevent your destruction. Define all the bad things being done to you that you would like the other organisms to stop doing. What are your future fears? Do you think it possible that the good things can be done to you. If not, how do you see yourself surviving? What are you going to do about the situation?

In the larger group:

1. Let us develop the mode of relationship that encourages wanton depletion of the resources or the ecological capital from the bad things organisms are doing to one another.
2. Let us develop a mode of relationship that encourages sustainable availability of resources from the list of good things that organisms are doing to one another or can do to one another.
3. Is it practical to expect that only the good things can be done to each other. If yes, how do we go about promoting that. If not, why and what do we do about the situation?

CWU SHORT COURSE
April 23 - 24, 1993

THEORIES OF DEVELOPMENT

MODERNIZATION, DEPENDENCY AND WORLD SYSTEMS THEORY

Nancy E. Horn, Ph.D.
Washington State University

1. Introduction

Theories of development have both a theoretical and historical/critical incident context, each of which has contributed to the parameters of the theories themselves. In general, however, most world-wide theories have been generated on basic assumptions of the world political economy. In other words, in the final instance, economic priorities rule the day. Other theories exist, however, that have been generated on the basis of events internal to a country and more directly related to the human aspects of development - e.g., self-sufficiency, empowerment, and participation. In this brief introduction to theories of development, I will cover both the global and local levels of development theory and provide you with an all too abbreviated introduction to the field. For purposes of this lecture, I will distill key elements of these theories to provide you a framework for thinking about development and to provide a basis for your thinking about different elements as we move through this course.

2. Definitions

3. Theories of Development

a. Modernization

Overall, modernization theory is derived from the Western experience of social change over time. The goal of modernization is to promote the economy and enhance political independence. Theory is based on what is termed **evolutionary functionalism**, that is, the transition from traditional to modern society.

- Evolutionary
- Phased, irreversible, progress
- Direction toward universal model - Homogenizing/Westernizing
- Modernity not compatible with tradition

1) Philosophical Orientation - Comte - Evolutionary Functionalism

Social change is unidirectional

Movement is "good" as it represents progress

Rate of movement is slow from simple and primitive to modern and complex

2) Functionalist Orientation - Parsons - Organism Metaphor

Harmonious coordination of parts of a system

Functional Imperative - each piece works for good of system
Economy - adaptation to environment
Government - goal attainment
Legal/Religious - integrative
Family & Education - maintenance of values
Homeostatic Equilibrium - control intervention to maintain equilibrium
Pattern Variables - enduring social relations
Affective (traditional) vs. affective neutral (modern)
Particularistic vs. universalistic
Collaborative orientation vs. self-orientation
Ascription vs. achievement
Functionally diffuse vs. functionally specific

3) Patterns of Implementation

a) **Sociological** - Smelser - Structural Differentiation

From complicated structures that perform multiple functions to simple structures that perform one function; coordinated institutions; if no coordination among simple structures, social disturbance ensues.

b) **Economics** - Rostow - Five Stages of Growth and "Take Off"

a. Traditional

b. Change - entrepreneurs, markets, population expansion - all preconditions; at this stage, there is little momentum for growth as population is growing at the same time change is taking place

c. Stimulus + capital and resources to raise investment to 10% of national income, brought about by taxes, banks, stock market, trade, and direct foreign investment (this is where AID comes in)

d. Drive to maturity

e. High mass consumption society

c) **Political** - Coleman - differentiation, equality - separation and specialization of roles; secularization of political culture to promote equality, which in turn enhances capacity of political system.

This approach was the basis for development assistance through the better part of the 1960s and 1970s. It was adapted, however, when empirical evidence suggested several anomalies:

- Tradition and modernization can mix
- Each country can follow its own development path

WHAT IMPLICATIONS DOES THIS THEORY HAVE FOR SUSTAINABLE DEVELOPMENT?

b. Dependency

Overall, dependency theory has its origins in Latin America - a voice from the Periphery. Historically, the ideas for this theory came out of the failure of the modernization strategy implemented in the Economic Commission for Latin America (ECLA) in the 1960s and out of the crisis in Marxism that did not come to terms with the processes of development.

The ECLA scheme was to rely on the export of food and raw materials in exchange for the import of capital goods in order to proceed with industrialization. The scheme did not work because of unfavorable terms of trade which inhibited the accumulation of capital, which in turn did not allow the countries to move toward the "take off" anticipated by the Rostow school. Marxist condemnation of the modernization approach yielded insight into the imbalances in the world system and how former colonial countries could not achieve industrialization because the exchange of primary commodities and raw materials for capital goods would never yield equity. What resulted from these thoughts was a structural model of dependency in which formerly colonized countries would always be in a dependent position vis-a-vis the former colonizers. Each of the theorists have a slightly different twist on dependency.

1. Development of Underdevelopment - Andre Gunday Frank

Underdevelopment itself is a product of colonialism; before colonialism, many "countries" had advanced; colonialism reversed this process. Colonial countries maintained a satellite relationship with their former colonies in order to continue extracting surplus for their own benefit, which was translated by local governments into a similar pattern.

2. Structures of Dependence - Dos Santos

Dominant and Dependent countries - surplus of latter transferred to the former, and this limits development of an internal market. Dependence can take many different forms:

- colonial
- financial-industrial
- technological-industrial (development of export sector to get \$ for technology); deficit-producing balance of payments; dependent on technology monopolies of west/imperial countries

Effects: "modern" vs. traditional sectors; wage levels askew; unequal production structure leading to low purchasing power of labor force and sending profits abroad.

3. Transition to Peripheral Capitalism - Samir Amin

- Retrogression due to force of central capitalism on pre-capitalist formations
- Extraversion - distortions of export-oriented economy
- Hypertrophy - of unproductive activities
- Investment capital does not have the same multiplier effect in the periphery
- Disarticulation of factors of production
- Peripheral Capitalism not possible without major challenge to central capitalism

The dependency theory makes several assumptions:

- Ideal type of dependency is rooted in the historical development of capitalism

- Imposed from outside, and is a perpetuation of inequality
- Rests on the economic condition of extracting surplus
- Regional polarization of global economy - underdevelopment in the periphery and development in the core
- Dependence is incompatible with development

It sets forth certain requirements as well:

- Development is to improve the living standards of those in the periphery
- This can be accomplished only if ties with dominant countries are severed
- Self-reliance should be fostered
- Trade should be conducted among countries of the periphery
- Reduce elements of foreign penetration

This approach ran counter to many modernization activities, which sought on one level to reproduce capitalism in former colonies. Inherent in capitalism, however, is the need to depend on producers of raw materials. This means an exploitative, dependent economic relationships which are incompatible with development. While the ideal would be to sever ties and facilitate trade within the periphery, the reality of the network of relationships already established meant that countries could not easily opt out. Empirical studies indicated that development was occurring despite dependent relationships, and that dependency also exists internally in any given country.

WHAT IMPLICATIONS DOES THIS THEORY HAVE FOR SUSTAINABLE DEVELOPMENT?

c. **World Systems Theory** - Immanuel Wallerstein

Overall, the failure of modernization theory and the inability of dependency to replace modernization theory, as well as the anomalies of the East Asian "miracle", the bankruptcy of revolutionary Marxism and the crisis in U.S. capitalism, have all led to a rethinking of development on a global level. The inequities that persist in trade and industrial development, the global changes that have taken place over long periods of time, as well as the cyclical rhythms or framework of the system led Wallerstein to take a long look at the political economy of the globe. He contends that the world is engaged in a system that itself has a history, and that in order to understand development we must consider the system as the unit of analysis. He also contends that this system has undergone three sets of changes: to begin with, the world was composed of "mini" or localized systems which then were transformed into world-empire systems (ca. 8000 BC to 1500 AD); these were then transformed again into world-economies (ca. 1500 - capitalism). He argues there has always been an unequal distribution of accumulated surplus, and that this final phase of capitalism is really not different than previous attempts, except on the level of scale.

Wallerstein also contends that the system is trimodal: core, semi-periphery, and periphery. Dependency principles are a part of this theory, but the semi-periphery is added: it brokers the unequal exchange between core and periphery. These countries can trade in either direction, but they also focus more on home markets for home-made products.

Movement from periphery to semi-periphery and semi-periphery to core is possible, mainly by taking advantage of certain opportunities: world market contraction where prices of primary export commodities goes down faster than the cost of industrial exports from core centers (following a strategy of import substitution); where competition exists for multinational investment, countries can collaborate with external capitalists to ensure a more advantageous position in the world market; self-reliance can be promoted to generate internal economic strength, thus reducing external dependence (e.g., Tanzania and Ujamaa). In more advanced stages, market demand can justify the cost of technology in order to produce at a lower cost (instead of more labor-intensive technologies needed for self-sufficiency).

The world system, which is capitalist, incorporates antisystemic mechanisms: how can internal equality be developed at the same time as rapid economic growth. Capitalism depends on exploitation. Hence, is development really possible? Production takes place on a world scale with each country gaining or losing advantageous positions - more like a zero-sum game. If periphery countries really want to gain power, they must withhold surplus primary commodities. This is their livelihood, however, unless internal distribution systems can adequately deal with a surplus.

Criticisms of this theory focus on the assertion that World Systems is really a research tool, not a reified reality. It leaves out classism and stratification, as well as realities at the state and local level.

WHAT IMPLICATIONS DOES THIS THEORY HAVE FOR SUSTAINABLE DEVELOPMENT?

CWU SHORT COURSE

April 23 - 24, 1993

THEORIES OF DEVELOPMENT

THE ECOLOGICAL-EVOLUTIONARY THEORY

The central thesis of the Ecological-Evolutionary theory of development is that technical, economic, and cultural heritage influences rates and patterns of development. The central premise of the theory is that a process of selection has been at work among human societies in which people adapt to the changing environment as they strive to address their varied problems, seek to satisfy needs, and struggle to fulfill desires. Such adaptation involves preserving some of the indigenous ways of doing things, but more often, it involves adopting new and innovative ways. Thus human beings have abilities to adapt to changes but also maintain or seek to continue with some of the ways they have been used to dealing with things. This ability to adapt to change and to consider continuity is something that human beings are always dealing with as they encounter their environment.

Change and continuity are survival mechanisms for organisms. Organisms that cannot adapt become extinct. It follows that those that have better mechanisms of adapting to the changing environment have better chances of survival. These adaptive mechanisms are cumulative processes in which earlier developments influence the course of later developments (Lenski et al., 1991:8). These developments are a function of the social systems of the people involved, the resources available to them, and the technological advances. In other words, cultural systems (which are constantly changing) stipulate ways of doing things and the direction whatever development takes. People will act to let some cultural systems to continue and let others die off.

For Lenski, Lenski, and Nolan (1991), who are considered the founders of this theory, change and continuity drive human systems since people are always seeking to adapt to new situations and deal with the difficulties they experience. Lenski et al. argue that this is true not only for human beings but other organisms that share the biosphere with people. Hence the relation between human societies and their environment is of utmost importance to human development.

Lenski et al. build their theory on three basic assumptions. First, they argue that there is a fundamental relationship between human beings themselves, between humanity and the environment, and between other organisms in the environment. In these profound relationships, organisms influence each other in a variety of ways. As a result, human societies must keep on adapting to the human social environment itself but also to a biophysical environment. The environment is an essential element in the survival of humankind. It provides essential resources but can be a critical source of problems if the relationship is adversely disproportionate.

Second, human beings being part of the environment, are endowed with a genetic heritage that profoundly influences their actions. Their genotype is influenced by their experiences in their interaction with the environment and the evolution human beings have undergone. Third, the genetic heritage enables human societies to create cultural heritages which enables human beings to be able to think, learn, process information, invent, and adapt to different situations much

faster than many organisms.

Our central question is what has this got to do with development? It is difficult to accept this theory as a development theory. It does not seem to say much about improvement of the conditions of living of human beings which is the focus of development. Thus the ecological-evolutionary theory seems more a human systems and evolution paradigm, since much of its focus is human society and adaptation, than a theory of development. It under-plays the vital role of capital and technology, and the relationships that exist between nations in the flow of capital and technology. These issues have been the main factors upon which much of the discussion regarding modernization and dependency theories is based. Ecological-evolutionary theory seems not connected to these foundations of the discourse in development theory.

Development, defined as purposive change directed at addressing problems to meet needs and fulfill desires (Edwards and Jones, 1976), is basically dependent on the relations of society to the environment, relations of societies to each other, and the genetic and cultural heritage. Lenski et al. contend that these have been fundamental in the development processes that have been taking place in the world. According to Lenski et al., development is not just an issue of capital and technology flows as the dependency theorists would argue or a linear journey from traditionalism to western standards of living as the modernization theorists would argue. It is founded on the relationship people have with their environment and the genetic and cultural heritage in a given society. These factors influence people's economic ventures through influencing capital creation and technological innovative behavior. Ecological-evolutionary theory emphasizes the importance of technology and technological innovation in the life of human society but does not see technology alone nor capital as the only forces that explain change and continuity in society. Culture and the whole evolutionary process that culture undergoes are very important.

For Crenshaw (1992), the ecological-evolutionary theory is currently the best for explaining the multi-dimensional nature of social change. Examining income inequalities in various countries, Crenshaw argues that we need a more multi-faceted theory to explain income distributions in various countries. He argues that modernization and dependency/world systems theories, which are basically economic and politically-oriented, can not explain the prevalent inequalities because they leave out environmental factors, heritage influences, and indigenous techno-economic parameters.

What implications does this theory have for sustainable development? OPEN DISCUSSION THEN SUMMARIZE: Perhaps because cultural issues and environmental aspects in programs geared at improving conditions of living among people have been left out by the more or less economic growth oriented theories and practice of development, we are in a situation where what we seem to see as development is essentially a premise for human destruction. Our over-focus on improvement of GNPs has brought about so much destruction to the environment that the future of humankind is gloomy. Some cultural values that gave great respect to natural resources have been ousted out by the ideology of economic growth. As Young (1992) and Capra (1983) point out, our so called investment into development has neglected the aspect of investing in the environment and people's culture as well. What we called development seems to be a longterm process of marginalization of the earth leading to our own possible destruction.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Decisions for a Developing Country

You are a member of the national legislative body of either Brazil or Senegal. Your government has allocated US\$7,500,000 in the budget for development projects. The national legislature is to decide which programs are to be funded. Identify those projects you believe should be funded, any why, specifying how the project activities would involve and impact the physical, technological and human resources.

- | | |
|-------------|---|
| \$3,000,000 | 1. Build primary schools to accommodate 200 students in 50 villages. |
| \$2,000,000 | 2. Import irrigation equipment and teach farmers in three regions of the country how to irrigate to improve agricultural production of export crops. |
| \$2,500,000 | 3. Build a highway for carrying lumber from a forest to a seaport from which it can be exported. |
| \$2,000,000 | 4. Install systems to purify water in 200 villages. |
| \$3,000,000 | 5. Conduct a nationwide campaign to immunize all children under 5 against smallpox, measles, whooping cough, and polio. |
| \$1,500,000 | 6. Conduct training seminars for women throughout the country on how to construct and use more heat-efficient cooking "stoves." |
| \$1,000,000 | 7. Send 50 male agricultural extension agents for courses in the US on how to train their constituents on proper agroforestry techniques. |
| \$500,000 | 8. Train 100 high school graduates to teach literacy in village schools. |
| \$1,000,000 | 9. Purchase insecticide to eradicate a particular worm that is eating up the forest in one region of a country where cash crops are grown. |
| \$500,000 | 10. Train 50 village fieldworkers and pay their salaries for a year; each of the fieldworkers will teach 100 farmers to use a new kind of seed and improved farming techniques. |
| \$1,000,000 | 11. Establish a family planning program throughout the nation, with regional information centers. |
| \$2,500,000 | 12. Build dams along the country's rivers to siphon off water for irrigation. |
| \$500,000 | 13. Develop a pilot project to train local women on the care and maintenance of water pumps after they have been installed in three villages. |
| \$1,500,000 | 14. Establish a small grants program for NGOs to develop community-based plans to promote sustainable use of forests. |
| \$3,000,000 | 15. Fund a public works project to create a proper sewage and wastewater treatment system in one of the suburbs of the capital city. |
| \$500,000 | 16. Develop a pilot rural-based leadership program that will train women and men in how to make community-wide decisions. |

1/1/11

CWU SHORT COURSE
Resource Utilization and Sustainable Development
April 23-24, 1993

SENEGAL COUNTRY PROFILE

Senegal has an area of 75,955 square miles (about the size of Nebraska) with a population of 7 million people, creating a population density of 92 people per square mile. Its annual population growth rate is 2.8%. The average rate of adult literacy is 38%, with adults having achieved only 0.8 means years of schooling. About 40% of Senegal's population has access to health services, and 54% has access to safe water. Senegal has an under-five mortality rate of 185 per thousand, mainly due to diseases that can be prevented through immunization. The GNP per capita is \$650. Growth of the GNP was 4% per year during 1981-85, but declined to 2.9% per year during 1985-89, just keeping pace with the population growth rate.

Senegal became independent from France in 1960. It has had a stable government, initially under President Senghor, but in more recent years under President Diouf. This is one of the most peaceful countries in Africa.

Senegal has a varied climate with 4 to 5 months of rainfall amounting to some 65 inches in some areas. Agriculture comprises about 10% of the GNP, but employs more than 70% of the working population. The majority of the remaining GNP comes from manufacturing and services.

The total arable and permanent crop land is 5,226,000 hectares. Fifty thousand hectares of forest are cleared every year. In 1990, the country had a total of 4.48 million cubic meters of round wood removals (excluding bark) of which 3.864 million cubic meters was for fuelwood; the remainder was for industrial purposes. Senegal River is a major resource for fishing and transportation. As of 1988, 220 km of the river were navigable. Plans were to increase this distance to 924 km. The river is also a source of a variety of fish including shrimp. Dams have been constructed on the Senegal to supply hydro-electric power. The river, emptying into the Atlantic ocean, forms a wide flood plain that characterizes most of the country. The plain is a rich agricultural area but the delta soils are saline and not very suitable for agriculture. However, the delta gives rise to a broad belt of live dunes rich in calcium, aluminum phosphates, and a small amount of petroleum.

In 1990, Senegal produced 700,000 metric tons of sugarcane; 698,000 of groundnuts; and 661,000 of millet/sorghum. Groundnuts are the main cash and export crop. Their cultivation takes up about 40% of Senegal's arable land. Output of groundnuts declined from 1,168,000 tons in 1965 to 678,753 tons in 1990/91, mainly due to droughts and international price fluctuations. The government is trying to diversify its export crops into cotton and rice, and to grow more sugarcane, but international market opportunities are limited. Droughts have affected food supply. This has led the government to import food for its population. Financial problems have led to the closure of a number of factories, as government has had to allocate more resources to importing food.

Senegalese herd cattle, sheep, and goats, which are produced mainly for internal consumption. In 1990, Senegal had a total of 9,085 head of livestock of which 3,920 were sheep; 2,740 cattle; and 1,200 goats.

CWU SHORT COURSE
Resource Utilization and Sustainable Development
April 23-24, 1993

Statistics on Senegal

Food Staple Self-Sufficiency Ratio:	67%
Food Aid in Cereals (% of Total Cereal Import):	23.6%
Food Imports (% of Total Imports):	40%
GNP/Capita:	\$650
GNP/Capital Annual Growth:	-0.80%
Rural Population Below Poverty Line:	70%
Life Expectancy at Birth:	48
Adult Literacy:	28%
Primary School Enrollment (% of age group):	60%
Population per Physician:	13,100
Infant Mortality (per 1,000 live births):	129
Under-Five Mortality (per 1,000):	220
Rural Population with Access to	
Health Services	40%
Safe Water	38%
Sanitation	2%
Rural Population (% of Total):	62%
Agricultural Population (% of Total):	79%
Rural Female-Headed Families:	36%
Annual Deforestation (1,000 hectares):	50
Salinity (1,000 hectares):	765
Arable Land Per Head of Population (hectares):	0.95
Irrigated land:	3%
Share of Agriculture in GDP:	22
Share of Agriculture in Total Labor:	78.8
Annual Crop Growth Rate	
Rice	-0.92
Maize	-0.93
Sorghum	-0.96
Groundnuts	-1.00
Cotton	-2.19
Sugarcane	-3.92
Maternal Mortality (per 100,000 births):	530
Women Using Contraceptives:	4%
Female Adult Literacy:	19%
Gross Primary Female Enrollment:	49%
Gross Secondary Female Enrollment:	10%
Female Agricultural Labor Force:	88%
Female Non-Agricultural Labor Force:	12%

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

BRAZIL COUNTRY PROFILE

Brazil has an area of 3,286,488 square miles (about the size of the Continental U.S.). Seven percent of this land is arable, 1% is used for permanent crops, 19% comprises meadows and pastures, and 67% is forest and woodland. Brazil's water resources include the Iguazu Falls, which actually numbers 275 falls the size of Niagara Falls, and the Amazon River, which carries one-fifth of the world's freshwater supply. Brazil is nearly self-sufficient in agriculture, except for wheat. Major crops include coffee, rice, corn, sugarcane, cocoa, and soybeans.

Brazil is a two-tiered society where wealth is concentrated in the hands of a few, and the majority of its 155.5 million inhabitants are poor. The average per capita income is about \$1,750. Seventy percent of Brazilians are under the age of 30. Its annual population growth rate is 2% , and life expectancy is 65 years. For every 1,000 babies born alive, 64 die as infants. The maternal mortality rate is 150 per 100,000 live births. Twenty-five percent of Brazil's population lives in rural areas. Of these, only 21% have access to health services, 56% to safe water, and 1% to sanitation. The average rate of adult literacy is 78%, although this figure is much lower for rural areas.

When the Portuguese arrived in Brazil in 1500 A.D., the native Tupians quickly established economic relations with the Europeans who were interested in the valuable dye wood, "pau-brasil," that was so abundant in the region. Brazil then gained its independence from Portugal in 1822. It was ruled by the military from 1964 until 1985. The first Brazilian president to be chosen through direct elections since the military rule, Fernando Collor de Mello (1989), resigned from office on December 29, 1992. During the course of that year, investigation and impeachment processes had been undertaken in response to allegations of Collor's misuse of funds.

In order to enhance economic growth and finance its multi-billion dollar debt, the Brazilian government has supported the increase of agricultural and industrial production for exports. The increase in large-scale agricultural production has displaced thousands of smallholder farmers, forcing them to migrate to urban areas and the Amazon Basin. In fact, between 1969 and 1977, the Brazilian government set up sixteen colonization projects in the Amazon Basin, giving land and providing incentives to those who would settle there. The opening of the Transamazonia Highway in 1984 led to more migration, increased logging and cattle ranching, and buying of the rainforest lands by large companies for land speculation.

These changes have severely damaged the forests of the Amazon Basin. As much as 20% of the rain forest may have already been destroyed, and 2,323,000 hectares of forest land continue to be cleared annually.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Statistics on Brazil

Food Staple Self-Sufficiency Ratio:	88%
Food Aid in Cereals (% of Total Cereal Import):	1.5%
Food Imports (% of Total Imports):	14%
GNP/Capita:	\$2,160
GNP/Capita Annual Growth:	3.60%
Rural Population Below Poverty Line:	73%
Life Expectancy at Birth:	65
Adult Literacy:	78%
Primary School Enrollment (% of age group):	103%
Population per Physician:	1,100
Infant Mortality (per 1000 live births)	64
Under-Five Mortality (per 1000 live births)	87
Rural Population with Access to	
Health Services	21%
Safe Water	56
Sanitation	1
Rural Population (% of Total):	25%
Agricultural Population (% of Total):	26%
Rural Female-Headed Families:	14%
Annual deforestation (1,000 hectares)	2,323
Salinity (1,000 hectares):	4,503
Arable Land Per Head of Population (hectares)	1.80
Irrigated Land:	4%
Share of Agriculture in GDP:	9%
Annual Crop Growth Rate	
Rice	.31
Wheat	.81
Maize	-4.01
Sorghum	-6.58
Groundnuts	-.73
Coffee	-7.48
Cotton	1.21
Long-term external debt (% of GNP)	29%
Maternal Mortality Rate (per 100,00 live births):	150
Women Using Contraceptives:	65%
Female Adult Literacy:	76%
Gross Primary Female Enrollment:	99%
Gross Secondary Female Enrollment:	45%
Female Agricultural Labor Force:	12%
Female Non-Agricultural Labor Force:	88%

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Dilemmas

Water

In Zimbabwe and other Southern African countries, drought has dried up watering holes used by humans and animals alike. Irrigated crops have died in their early stages leaving no harvest. Women must walk over 30 miles to and from a source for water, but it is brackish and not very healthy for family consumption. A non-governmental organization has just dug wells and installed pumps in the region, and the community was told the aquifer was somewhat limited and that water should only be used for human consumption. But the animals are dying.

In Senegal and Gambia, industrialization in major cities along the Senegambia River has increased the demand for electricity. Development of cotton as a cash crop on the river valley highlands has generated a need for water for irrigation. These two needs led government to request assistance to build several dams along the river. The social impact assessment indicated riverain rice production would cease due to flooding, thus decreasing women's ability to feed their families and generate some income. The environmental impact statement indicated a change in the river ecology owing to the blocked flow of fresh and saline water (from the Atlantic Ocean) and the predicted demise of certain species of fish.

Many of the household responsibilities of rural women in Pakistan are activities that require them to spend a large part of their time collecting water: cooking, washing clothes, house cleaning, caring for children, and tending livestock. Due to lack of facilities, as well as technical and social constraints, women's access to water is less than that of men's. For example, purdah restricts a woman's mobility within the village and denies her access to water sources located in public places where men might be present. Mosques, which are popular sites for water taps and standpipes, are usually unavailable to women. As well, women may not have access to the animals needed for animal-drawn facilities. Due to these constraints, the work of rural Pakistani women is burdensome, these women use minimal amounts of water for personal hygiene, and their families' health is put at risk.

CWU SHORT COURSE
Resource Utilization and Sustainable Development

DILEMMAS ON LAND UTILIZATION

A husband and wife with five children in rural Malawi must decide how to use their three acres of land. They normally grow corn, beans, and peanuts along with some rainfed vegetables for food, as well as tobacco as a cash crop. The marketing board has increased the tobacco purchase prices for the next marketing season by 35%. The husband sees this as an opportunity to grow more tobacco to make money, and wants to plant two acres of tobacco. The wife, worried about food shortage which the family has been experiencing for the last three years, wants to put more land to food crops. Agricultural extension agents trust the man as a credit worthy individual in the village, and have always granted him credit for the growing of tobacco. In fact, such farmers are seen as important to the country because its economic growth depends on agriculture. Agricultural products constitute over 90% of domestic exports and tobacco alone contributes over 65%. Yet the "curing" of tobacco demands a lot of firewood, which has led to a lot of trees being cut for firewood during the tobacco curing season.

In Guatemala, coffee is a commercial crop and earns a lot of money for the country. The development of large coffee plantations has displaced smallholder farmers from fertile lands, and forced them to move to marginal lands. Being stripped of fertile lands, most young men have had to move to urban areas or to coffee plantations seeking employment. They have left behind women, particularly middle-aged and elderly ones, who struggle to survive on the marginal lands. They use these marginal lands both for the cultivation of food crops and for raising livestock. Plantation owners, who use only 70% of their leasehold lands are unwilling to part with the remaining 30% unused portion of their property.

In India, like many other areas in developing countries, women are responsible for taking care of nutritional needs of the family. To do so, they grow the crops that are used for feeding the family. This includes cultivation of local varieties of rice and horticultural crops. It takes hours to water and tend these gardens. Men have been more focused on the growing of hybrid rice varieties for cash. These demand use of fertilizer and pesticides. Ammonia-based fertilizer has been found to be the most suitable for rice and yet it is known for increasing soil acidity especially in dryland rice. As well, along with improving the vegetative growth of rice, fertilizer also lets the weeds grow profusely. This demands a lot more weeding and men have involved women at peak rice husbandry times when a lot of labor is needed, consequently cutting into women's time for other household responsibilities and income generating activities.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Dilemmas

Forests

In efforts to achieve economic growth, the Ecuatorian government has supported the increase of agricultural production. The expansion of the cattle industry, in particular, has been encouraged, as beef brings in good export money. To support the industry, the government has provided incentives to ranchers who will use the Amazon lands for grazing their herds. The growing cattle ranching industry in Ecuador has led to the clearing of much forest land, and the destruction of forest resources vital to the livelihood of many indigenous Amazonian peoples. Women, who could once gather the fruit, palm hearts, pulp, starch, and sap from the buriti tree to provide for the needs of their families, now must desperately seek out alternative food sources for household consumption.

The predominantly rural population of Madagascar numbers 11.2 million, more than twice what it was in 1970. It is estimated that Madagascar's population will reach 28 million by the year 2025. The growing population has meant that more of Madagascar's forests are cleared for the cultivation of rice, cassava, maize and other staple food crops. With continued clearing of forests, wood, the primary source of fuel for the rural population is increasingly difficult to find. Women, who are responsible for gathering firewood and preparing food for the family, spend an equivalent of one and a half days each week gathering fuel wood for cooking.

In India, up to 580 square miles of forested land is converted to other uses every year. More than 10,000 square miles have been occupied by settlers or shifting cultivators, and the remaining forests are often degraded by logging, fuelwood collection and clearance for grazing land. In India, women, who are responsible for gathering medicinal plants used in treating common ailments, have been negatively impacted by their country's rapid deforestation. Due to the scarcity and extinction of these valuable medicinal resources, caused by the deforestation, women must travel long distances to gather the herbs, leaves and plants they need to care for the health of their family members.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Notes on Sabotage in Santa Valley Case Study

Process

1. Have students summarize the case.
2. Show TechnoServe slides and read script.
3. Debriefing:

- a. What are the various resources involved in the Santa Valley case?

Human - Technoserve people, Old/New Valley residents, labor, health problems, lack of training; cooperatives and associations; women?

Physical - land, water

Technological - Irrigation, fertilizers, new crops, Technoserve's research

- b. What are the main issues/problems presented in this case?

Human Resources - Old/New Valley relationships

Cooperatives and Associations - organization and management

Potential Impacts on Women

Legal titles

Children's health

Training

Physical Resources - Distribution of water

Salt and minerals in soil

Toxicity of alkaline soil when mixed with water

Technological Resources - Irrigation

Pesticides and herbicides in water

Control of water by New Valley

Flooding of Lower Valley

- * What are the driving forces behind these issues?

- Economy, greed (?), other

4. Issues to be resolved: (Group Work) - see question sheet
5. De-briefing tip: point out complexity of issues and interrelationship of utilization of different resources.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

Notes on "Women and Work in Africa" Video

1. Introduction

Women have always been closely related to natural resources, and they have always been viewed as a resource to their families, either in productive or reproductive ways.

In the video you are about to view, note in each case described the types of resources women **utilize** on a daily basis. Try to categorize them as we have for this course: human, physical and technological. Note also how these three blend under the rubric of women's work.

2. The Video

3. Process

Women are both human resources and utilizers of resources. I'm going to divide you into two groups now - one that will look at women as resources, and the other at women as utilizers and caretakers of resources.

Women as Resources - For this group, I want you to consider how women were depicted in this video as resources. Next, I want you to come up with several ideas as to how women as resources can be further developed. Finally, come to terms with the issue of women being underutilized resources. What would you do in a given country to make them more prominent as resources?

Women as Users of Resources - For this group, I want you to list out all the resources women utilize - physical and technological. Next, what are some ideas you have on how to help women become more efficient users of resources. Finally, what plans can you generate to enhance women's ability to be better caretakers of resources, i.e., what other types of resources would they have had access to?

[Students will use butcher paper and create their plans.]

Let's have each group present their findings. Where do they overlap? What are the "persistent inequalities" that prevent women from being able to participate in the ways you have outlined? What is the next step?

CWU SHORT COURSE
Resource Utilization and Sustainable Development

LAND USE IN NEPAL

There are different types of land which can be grouped in various categories based on what a particular piece of land can be used for. Land on steep slopes, for example, would be recommended for forestry as this would control run-off water during rain seasons. Plains may be most appropriate lands for agricultural activities including crop production. Categories of land use could be based on topography, soil structure and texture, water table levels, or even wind and rain factors.

Nepal is a mountainous area. The land is characterized by the Himalaya slopes. Most of the land would be condemned for human settlement because of the steep slopes and the fragility of the environment. This notwithstanding, we find that people are settled in this area. It is important to understand why this is the case and what alternatives the people have. Essentially, we have a challenge of what is ideal and what is the situation in the real world. From a technical point of view, the mountainous land that characterizes the situation in Nepal, for very good reasons, should be reserved for anything other than forestry. The whole country, being the way it is, is an environment not suitable for human settlement. What would be our advice to the Nepalese?

Such dilemmas are not confined to Nepal. The collision of the ideal and the real situation beleaguers us in one form or another every where. What is ideal may not be what is practical; it may not be representable in the real situation. While we may designate some particular type of land as not suitable for human settlement, we are left with the question of what the people ought to do. This affects use of land and other resources like water, forestry, and such others. The debate is between what is ideal and what is practical. Science may tell us what is ideal but we need to grapple with what is practical too; what is necessary for the survival of people in any given area.

Gender differences are a tendency for men to run away from or psychologically underplay concerns about land. For example, issues of land use particularly the ever decreasing amount of land per farming household are more an issue of factors related to men than women. In most rural areas in the developing world, decisions on family size, whether to move from one area or not, use of income, and resource allocation, etc are issues where men play a much more decisive role than women. In situations of critical land shortage, for example, men have left the rural area in search of employment elsewhere leaving the women to experience the biological and social, of having less and less land. Nepal, like many other countries in the developing world, has had this kind of experience.

CWU SHORTCOURSE
Resource Utilization and Sustainable Development

FORESTS IN LATIN AMERICA - NOTES

I. Forest Lands in Latin America

The major rainforest areas of Latin America are found in the Amazon Basin, the Atlantic Coast of Brazil, and throughout Central America and the Caribbean Islands.

60% of the remaining tropical forests of the world are found in Latin America. These forest lands comprise 25% of the world's total forest area.

The Amazon is by far the largest rainforest reserve in the world. Its areas touches 9 countries: Brazil makes up 60% of the Amazon Basin; Colombia, Ecuador, Venezuela, Suriname, Guiana, French Guiana, Peru, and Bolivia all have territory in the Amazon Basin.

II. Why deforestation is a problem

Latin America has a long history of exploitation of its forest resources. Brazil's "Pau Brasil," a dyewood of great interest to the Portuguese colonized the region. Currently, Brazil's forests are being cleared at a rate of 0.5% annually. It is estimated that 95% of Brazil's Atlantic forests have been destroyed.

In Central America, the annual deforestation rate is 1.5%. Costa Rica, which now has implemented innovative conservation programs, has also exploited its forest resources for in order to stimulate economic growth.

Colombia, Peru, and Ecuador have also experienced great amounts of deforestation, especially in recent years with the discovery of mineral resources (coal, oil) in these regions.

III. Causes of deforestation in Latin America

Logging - is used for industrial use; Not the major reason for deforestation in L.A.

Flood - dams constructed for hydroelectric power. In Brazil, the Tucucurui dam is an example of such projects to cause major flooding problems. Over 100 hydroelectric plant projects were planned, but with pressures from other countries, the World Bank withdrew its funding for them.

Mining - Iron ore is mined through the Grande Carajas Project. Oil in Colombia, and Venezuela also has led to the clearing of forest lands.

Cattle - for export. Governments provide incentives for ranchers to "open up"

2

174

Land Speculation - Big companies are buying land for future investment; the clearing is tied to land tenure system

Land Tenure - In order to gain title to land, one must prove that they are making productive use of it. Clearing the land for cattle ranching is one way of doing this. Recently, due to world pressures, the Brazilian government has cut its tax incentives for cattle ranchers to settle in the Amazon.

Resettlement - Brazil set up 16 colonization projects in the Amazon between the years of 69 and 77. Capitalist expansion has led to increase of large scale agricultural production for export. Smallholder farmers displaced. Transamazonia Highway - attracted more settlers, loggers, investors. Immediate need of paying off foreign debt kept cycle going

IV. Environmental and Social Impacts

Environmental:

Reduction of biodiversity of plant and animal species; countless species of flora and fauna have become extinct or endangered. This has diminished gene pools.

Destruction of resources that local indigenous peoples rely on for food, fuel, and medicine.

Increased amount of rainfall and intensified erosion. Tropical soils are not suitable to agriculture. Bolivia, Peru - problems with erosion.

Threatened global environment - Amazon's important role in gas exchanges, production of oxygen.

Social:

Displacement of thousands of local populations, families...health, food, nutrition
Indigenous people depend in large part on tropical forests for their

Industries created by newly established industries (timber, cattle ranching) usually depend on the initial conversion period. Need people at the beginning to establish infrastructure and guidelines later.

Transition from rural and urban poverty to poverty in forest areas. Poor migrants who arrive in forest areas do not know how to live in that environment; they can't make a

V. Summary, conclusions

The world economy is driving the current utilization of the forests in the Amazon. The Latin American countries are trying to make use of their resources to gain economic growth and pay off foreign debt. The destruction of the forest resources in the Amazon has negative impacts both on the local people as well as the entire globe. This raises many issues about the sovereignty of these resources. Who should have control over their uses?

Some efforts have been made so that Latin American countries utilize their forest resources in ways that are more sustainable: community forestry projects, combining agriculture and forestry activities, "debt-for-nature" swaps, cutting incentives and subsidies to those who want to settle or use the Amazon resources in non-sustainable ways.

CWU SHORT COURSE
Resource Utilization and Sustainable Development

TECHNOLOGY IN RESOURCE UTILIZATION: A THEORETICAL OVERVIEW

1. There is always technology; the difference is in its levels. Some is more advanced while the other is more basic. Cultivation using hoes is more backward than cultivation using disc ploughs. Use of hybrid seedlings is more modern than using unimproved seed varieties. Using a computer to analyze soil test results is more advanced than assessing the richness of soil visually.

2. Different terms have been used to describe the different levels of technology. There are terms like appropriate technology, blend technology, traditional technology, indigenous technology, high tech technology. These terms relate to complexity of the technology and the audience for whom the technology is developed. A tractor may be seen as an inappropriate technology for women based on culture or other factors in that a woman would not be able to use a tractor.

3. Development of technology is based mainly on four factors. Technology is developed to solve some problem that people may be experiencing. Second, it may be developed for the sake of efficiency to save time or fulfill their needs or fulfill their desires. Third, a technology may be developed to address the need for efficiency. Lastly, a technology may be developed to improve the quality of life with something.

Technology is historical and has a geographical, time, and system character. It tends to change over time, presumably more advanced and hopefully better. The next level of technology is usually more advanced and better than the previous. It is usually issued in response to the wider repercussions of the solution of one problem will have on other aspects of people's life. As a result, it makes the "Challenge-and-Response" activity a continuous one. Addressing one problem or need leads to creation of other

4. The relationship between human, physical, and technological have some form of relationship. Technology is ever changing based on problems, needs, desires, efficiency, and other issues that people experience. On the other hand, the people have to apply their own resources to produce the products they would like to have. This relationship between human, physical, and technological resources

TECHNOLOGICAL CHANGE AND RESOURCE UTILIZATION: PROCESS

1. Tracing out resources used in agricultural production in Kittitas
- 1950s as an example
2. Slide of agricultural production in a developing country
3. Distribution on slides and tracing out resources used in this example of agricultural production
4. What are the impacts that these two types of technology have on human and physical resources? How do they meet the needs of the people
- 1950s as an example for one case
5. Distribution
- 1950s as an example
- 1980s as an example
- 1990s as an example
- How do these two types of technology in terms of physical and human resources meet the needs of the people
6. How do we meet the need to meet the needs of people without degrading other resources?

Relationship Between Resources:

PHYSICAL RESOURCES

- . renewable
- . non-renewable
- . relation between

HUMAN RESOURCES

- . population
- . productivity
- . relations external

TECHNOLOGICAL RESOURCES

- . changes in
- . impacts within
- . influence on others

Complex processes of change and continuity are involved within each resource category and between categories. Let us, for example, take us, as an example, to examine just one area in which processes involving resources has occurred.

As a case study, Karl Kautsky (1854-1938), writing in the 1880s, investigated the fate of the peasantry who used physical resources with hand tools to produce the food and other necessities of life. Following the Marxist rhetoric, that the emergence of capitalism, with surplus production, surplus to the needs of a population, which was traded for profit, was going to dissolve the peasantry. Kautsky gave a more explicit explanation of the fate of the peasantry. He contended that it is not capitalism, *per se*, that would lead to the dissolution of the peasantry. Capitalism needed the cheap labor provided by the peasantry. The marginalization of the peasantry would lead to the marginalization of capitalism. The proletarianizing the peasantry was a more complicated method of increasing the productivity of the peasantry to supply the needed labor. However, as more and more profit was made, capitalist developed technology which would reduce the need for labor. According to Kautsky, it is technology which is responsible for the dissolution of the peasantry and all its values including those that encourage the peasantry. The commercial farmers, arising from capitalist market orientation, are necessary to replace the peasants labor with technology. This technology, however, creates new problems and enables them to go about their business with fewer threats. Mechanization of agriculture enables capitalists to smother the peasantry for the market where efficiency in the whole business of manufacturing is the key.

5. Technology is diffusing to different human societies as it is being used. Systems like extension services, journals, conferences, people, and in many other ways that facilitate interaction between people to interact and communicate with one another, people have known how to pass on information, ideas, innovations, attitudes, and great efficiency. Humankind, unlike animals, have

the ability to think through problems and seek solutions to meet their needs or fulfill their desires in an efficient and effective manner. It is because people are somehow always on the look out for solutions to their problems and the difficulties they experience that technology has a fertile ground for development [if it is being used].

6. Another attribute of technology is that it has a tendency to replace practices that may seem to be more effective for people in meeting their challenges. The introduction of sorghum in Mexico is a good example. Sorghum gives an interesting example. Unknown in Mexico until 1944, it quickly took on a central place in the Mexican economic growth endeavors leading to a production of more than corn (of course the money factor enhanced the growth of sorghum). The introduction of hybrid sorghum could yield more influenced farmers to adopt it.

7. The environmental impact of technology on the environment. At one level, there is a concern that our single growth oriented development paradigm is eroding the ecological capital of the earth. The earth will reach a point that it can not support us. Capra (1985) and others (see, for example, Steiner (1992) calls this economic growth paradigm our conventional growth paradigm) courageously requests the western world to consider reducing its growth oriented development in order to control the onslaught on the environment. Technology, which was developed with the idea of enabling people, countries, and institutions to grow, is increasingly becoming a threat to the ecological capital. A bunch of people, including scientists, generally agree that we are wantonly mining the ecological capital of the earth for the earth to sustain human populations with its resources. If we have technology as the means that would help humanity to deal with the problems of the past, it should be able to help us address problems in the past, it should be able to help us address the problems of humankind. **What are your views on the issue?**

CWU SHORT COURSE
Resource Utilization and Sustainable Development

SUSTAINABLE USE OF PHYSICAL/NATURAL RESOURCES

1. Definition of physical and natural resources.
2. The nature of physical/natural resources (Young, 1992:9) **DISCUSS** - that they are finite, limited, unevenly distributed (some countries have more than others), and diminishing.
3. That their management is just as much a global concern as it is a national and local concern.
4. That we can invest them and in them just as we invest capital to produce commodities. The character of the investment will be to invest the resource and in the resource to enhance the resource. But the investment management will be different from the conventional.
5. That survival of humankind probably depends on them more than on anything else. Conventional investment management of resources depends on human beings activities (Clark, 1986 and Young, 1992:9).
6. That the exponential growth of the population growth not only of human beings but other organisms, and the growth of the world economy that seek to maximize profit without a comprehensive understanding of the consequences (Young, 1992).
7. Possibility of resource mobility from place to place. Developing countries, where most of the population is engaged in agriculture where agriculture is the backbone of the economic growth, are more dependent on the resources than in industrialized countries. However, the industrialized countries are directly or indirectly involved with resource use. We can't say that the industrialized countries is involved to natural/physical resources.
8. That the impact of resource use for the industrialized world has more negative impact on the environment than the developing. Results of the Gallup Research on global awareness shows that the people in the developed countries are more concerned, as people in the industrialized countries.
9. That the management of natural resources is a growing research agenda. Answers may not be simple. The research agenda includes many areas of possible research ranging from issues of resource management, the resources through human-technological-natural resource management, and the global interdependencies in the use of these resources.
10. A growing awareness of the need to act at the global level seeking to come to some understanding of the causes of environmental degradation (cf Rio de Janeiro summit) and the need to help on struggling to take care of themselves.

