

Unit III: Our World Economics

Rivers and Ruins: What Is Valuable?

Unit Learning Objectives

Unit III, Rivers and Ruins, explores common goods, resources that are considered valuable but are not necessarily well preserved in a free market. Culture... Language... Nature... How can a modern capitalist system go about protecting these instances of global heritage?

By the end of this unit, *ALL* students should be able to:

- Give examples of different types of common goods including natural resources, cultural resources and public goods.
- Understand the concept of an opportunity cost and realize that there are costs and benefits to any particular economic decision.
- Explain the concept of sustainable development and compare and contrast key attributes of actual sustainable development projects.
- Understand the process for nominating a site to the UNESCO World Heritage List.

ADVANCED students should be able to:

- Understand the concept of a positive sum solution and be able to think creatively of positive sum solutions for scenarios involving conflicts.
- Discuss different factors that determine price and availability in an international trade milieu.

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*La Mano Amiga:
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Unit III

Overview of Activities

1. Video: Rivers and Ruins
Overview of Samaipata, a UNESCO World Heritage property, and Amboró Natural Park, a preserve supported by the Nature Conservancy. Introduction to common goods, opportunity costs, cultural and natural preservation.
2. Opportunity Costs
Exercise highlighting the fact that all economic decisions entail a decision to forego a different set of options.
3. Catchy Quechua
Essay and questions exploring the value and preservation of multilingualism.
4. Ancient Tourism
Internet research assignment and classroom discussion focusing on cultural heritage.
5. IAF Notes
Comparison of four different real-life sustainable development projects.
6. Trading Partners
Class game exploring international trade, common goods and renewable resources. Reinforcement of supply and demand.
7. Utilizing UNESCO
Group presentations, including Internet research, utilizing the World Heritage List and its criteria.

III.1. Rivers and Ruins: Video Instructions

Synopsis

Rivers and Ruins highlights preservation attempts at two very different sites: the Fort at Samaipata, a prehistoric world heritage site; and Amboró National Park, a one and a half million acre nature preserve representing one of the world's most biologically diverse regions.

The video discusses the opportunity costs of preserving common goods; that is, the need to protect valuable resources that competes with the need, especially of poor people, to use these same resources to generate an income.

Class Discussion: Follow-Up Questions

- 1) What were the two sites that Germán visited? Even though they both seem different, what do they have in common?

Germán visited a prehistoric site, the Fort at Samaipata, and a nature preserve, Amboró National Park. Although one is a cultural site and one is a natural site, they both have in common the need for special measures in order to protect them. Both sites can be considered common goods – resources that do not necessarily belong to anyone and that can benefit all human beings or that, alternatively, could be exploited by private individuals.

- 2) What are some examples of common goods in your community: E.g., resources that belong to the entire community that everyone benefits from? List as many on the board as possible.

When economists refer to common goods, they typically refer to instances of nature that belong to no entity in particular – the air we breathe, rainwater, groundwater, rivers, access to sunlight.

Public works, such as sidewalks and roads, while not belonging to private individuals, belong to a corporation – the town, city or state – and are therefore usually referred to as public goods. As corporations purchase nature preserves, as countries claim extended rights to oceans and waterways, or as individuals sue for the right to an unencumbered skyline, the distinction between common goods and public goods is blurring.

- 3) Germán mentioned a mechanism under the aegis of the United Nations to protect precious sites and instances of intangible culture. What was it, and how does it work?

Germán mentioned the UNESCO World Heritage List. When a country makes a nomination to this list, the country pledges to help preserve the

nominated site. Inclusion on the list also attracts more tourists, more donor funding, and more opportunities for fundraising to maintain the site.

4) Conservationists are trying to save Amboró Park by helping people to find ecologically sustainable ways to make money from the park. Why is this necessary?

Poor people living around the edge of the park must farm the land or allow their cattle to graze there in order to make an income. If farmers are helped to grow chocolate, raise bees or harvest nuts, then they can potentially earn money without damaging the park.

5) Germán mentioned a term, opportunity costs. What does this mean? What is the opportunity cost of not cutting down a tree?

An opportunity cost refers to what is forfeited when a decision is made. Opportunity costs of not cutting down a tree are that the wood cannot be used for lumber, the lumber cannot be used to build, and business people cannot earn money from the lumber.

One opportunity cost of preserving Samaipata might be that it is not possible to build a luxury hotel on the site. Ongoing opportunity costs for preserving Amboró are the inability to ranch cattle or to conduct subsistence farming within the park's territory.

Additional Reading for Teachers and Advanced Students

For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future. Herman Daly, Jr. and John B. Cobb.

Considered a modern classic, this work, written at a university level, is one of the first to look at the preservation of natural resources from both an economic and ethical point of view.



III.2. Opportunity Costs: Instructions

Objectives

- To provide practice with the concept of opportunity costs.
- To underscore that possible opportunity costs for a decision can be as unlimited as the imagination.
- To show that even a socially conscious decision may end up forgoing options that could be very helpful to certain groups of people.

Instructions

Assign the activity sheet in class or as a homework assignment. Depending upon the level of your students, ask them to come up with two to five possible opportunity costs for each question.

Follow-Up Discussion

For the short answer questions, write some of the students' answers on the board. Encourage students to come up with as many answers as possible:

Short Answer Questions

What are some of the possible opportunity costs for...

1) Spending all your lunch money on soft drinks?

Someone who chooses to do this will be hungry, and will probably have a sugar headache. They will be giving up the opportunity to have a healthy lunch.

2) Taking a taxi to visit your aunt instead of taking a bus?

The taxi will cost maybe \$10.00 more than the bus. This \$10.00 could be spent on going to the movies, buying a gift for your aunt, adding to your savings account. A taxi, a private vehicle, also causes more air pollution than a public bus.

3) Shopping at Fancy Dancy Grocery Store instead of shopping at Neighborhood Discount Groceries?

Groceries might cost 25 percent more at Fancy Dancy. This money could be spent on more groceries; or it could be spent on other household items such as new lampshades or a new carpet at the end of the year; or it could be spent on Christmas presents...

4) Shopping at Neighborhood Discount Groceries instead of at Fancy Dancy Grocery store?

The selection and quality of food at Discount Groceries is not as good as at Fancy Dancy. They do not carry organic produce. It is not possible to find imported Norwegian cheese. There are no Spanish olives stuffed with almonds...

5) Deciding to build an orphanage on 20 acres of beautiful forest land.

Many animals will lose their habitat. Raccoons, squirrels, toads and blue birds will all be without a home. County residents will no longer be able to enjoy the beautiful scenery. There will be slightly less fresh air in the community. Water and runoff problems may be introduced, as less rainwater will be absorbed into the ground and filtered through the forest trees' root systems.

6) Deciding to preserve 20 acres of beautiful forest land and not to allow any building there.

Developers will not be able to cut the trees for building projects, lumber, paper and furniture. The planned county orphanage will have to be built in an urban site not nearly as beautiful for the children.

Additional Discussion Questions

1) How many possible opportunity costs are there for any given decision?

The array of possible opportunity costs is usually unlimited. (The class as a whole should have come up with many different answers for each question.)

2) Is there a right or a wrong answer for whether or not to take a taxi to visit your aunt?

Not necessarily. If it is raining and you might catch pneumonia; or if it is late and you might insult your aunt; or if it is simply very uncomfortable to take the bus; then, the taxi might be the right decision. If, on the other hand, your family needs to save money, then it would probably be better to take the bus.

3) Is there a right or a wrong answer for which grocery store to shop at?

As with the decision to take a taxi, the decision to go to a particular grocery store depends on a family's goals and resources. If a family needs to save money, it probably makes more sense to go to the less expensive store. On the other hand, if this same family has a child who

is highly allergic to various food additives, it may be imperative to purchase organic foods at the more expensive store.

- 4) Regarding the use of the 20 acres of forest land, ask students which decision they favor more strongly and ask them to give their reasons.

There is not necessarily a right or a wrong way to use these 20 acres of property. Each decision will have its opportunity costs. This is a question of values and one that a township (or the class) could spend a great deal of time debating.

Advanced Discussion Questions

- 1) How is the question of whether or not to build an orphanage parallel to the question of how appropriately to protect Amboró National Park?

Just as the orphans can benefit from the forest land, poor people living on the borders of Amboró National Park can benefit from utilizing the land for agriculture or for ranging cattle. The decision to protect the park, can, potentially, mean a decision to deny people a means of livelihood or even a place to live.

- 2) Economists often speak of a positive sum solution. (Write this term on the board.) A positive sum solution refers to a creative way of solving a problem so that both sides in a conflict may benefit. With the example of the orphanage, a positive sum solution might be: only to use a small amount of the land for building; to build a “green” orphanage with solar heating, a green roof, a turf parking lot, and other eco-friendly innovations; to use the orphanage as a showcase for how to build in harmony with nature.

The video mentioned a positive sum solution for solving the problem of inhabitants on the edge of Amboró who need to utilize the park. What was this solution?

The video mentioned that different organizations are trying to introduce agro-forestry methods that do not harm the forest; for example, cultivating honey bees for profit on park territory.

Opportunity Costs: Activity Sheet

Opportunities are not free. Every time you decide to buy something, you spend money that you cannot use to buy something else. Every time you decide to do something, you decide not to do something else.

For example, if you decide to buy a \$200 leather jacket, possible opportunity costs are:

- You could have bought a warm wool jacket, a hat, gloves, scarf and a pair of boots.
- You could have taken your whole family (including aunts, uncles and cousins) out for dinner.
- You could have continued wearing your old coat and spent the money for some needed dental work.

An opportunity cost of ongoing building is that many wild animals are losing their natural habitats.



Come up with at least _____ possible opportunity costs for:

- 1) Spending all your lunch money on soft drinks.
- 2) Taking a taxi to visit your aunt instead of taking a bus.
- 3) Shopping at Fancy Dancy Grocery Store instead of shopping at Neighborhood Discount Groceries.
- 4) Shopping at Neighborhood Discount Groceries instead of at Fancy Dancy Grocery Store.
- 5) Deciding to build an orphanage on 20 acres of beautiful forest land.
- 6) Deciding to preserve 20 acres of beautiful forest land and not allowing any building there.

III.3. **Catchy Quechua:** Essay: Instructions

Objectives

- To explore how languages, like other forms of culture, have intangible value.
- To raise awareness that cultural preservation of language requires economic investments.

Advance Homework Assignment

Catchy Quechua essay and short-answer questions.

Short-Answer Questions

1) What do you imagine are some of the difficulties of maintaining a multilingual society?

Communication requires additional effort in multilingual societies. Individuals must learn second and third languages. Documents must be translated. Services must be offered in more than one language. Multilingual societies devote a great deal of time and money to insuring that their citizens can communicate with one another.

2) Why do you think so many countries are multilingual?

It is a part of our global heritage that there are currently about 7,000 languages spoken in the world. People feel a natural inclination toward using their mother tongue, and each language contributes its own nuances and history to human culture. The ability to speak one's own language is often recognized as a human right. Many countries choose to be multilingual in order to protect human rights among diverse constituencies and also to preserve a part of human culture.

3) Why do you think organizations such as the European Union devote so much money to translations?

EU regulations requires that all major meetings and documents be translated into all official languages. These regulations reflect both a respect for human rights and a practical recognition of the needs and demands of its constituents.

Group Discussion

1) Why do we value diversity? Encourage students to bring up examples of the value of foreign languages and culture:

- How many students in the class are bilingual or have parents who are bilingual?
- How many are studying foreign languages and why?
- Why do people enjoy foreign films and foreign cultures?
- How does it enrich our own language to incorporate foreign concepts such as *déjà vu* or *Zeitgeist* or *eureka*?

2) Can students guess the six official United Nation languages? What reasons do they give for their guesses?

Official United Nations languages are Arabic, Chinese, English, French, Russian and Spanish. While these are some of the most commonly spoken languages in the world – either as first or second languages – it should also be noted that these languages represent former colonial powers, current economic powers, and/or United Nations Security Council members. Note that Hindi, Bengali, Portuguese, Japanese, German and Indonesian all claim more speakers than does French.

3) To what extent should we invest resources – money, effort and time – to insure that our world and our communities remain multilingual?

Imagine a world without the idea of *déjà vu*. In his book, *Language Death*, David Crystal points out that Australian aborigines have many different words for grubs depending upon on what type of bush the insects are found. When such a language is lost, so is a wealth of knowledge about biology. Today, most anthropologists and sociologists maintain that languages, like other parts of human culture, are rich not only in sentimental value but also in meaning, and that they should, if at all possible, be preserved.

Recommended DVD

Our World Economics recommends the Sydney Pollack film, *The Interpreter*. A mystery and a thriller, the film showcases the multilingual environment of the United Nations. While the African country it portrays is fictional, some of the conflicts resulting from a colonial heritage experienced by this fictional country do mirror reality.

Catchy Quechua: The Value of Multilingualism

If someone said “sulpayki” to you in Bolivia, they would be telling you “thank you” in Quechua. Quechua (pronounced keh-chwa) is one of the four official languages of Bolivia. The other official languages are Spanish, Aymara and Guaraní. Typically, a country’s official languages are those recognized by the government to be used in schools, public communications, and for government purposes. Almost nine million people live in Bolivia, making its population nearly as large as the State of Georgia’s. If four official languages seems a lot for a country this size, think about this: Actually, about 36 languages are spoken every day in Bolivia. These include: another European language, German; many South American Indian languages such as Chiquitano and Yuracare; and even Bolivian sign language used by deaf people.

In fact, many countries in the world practice multilingualism. In Canada, for example, all government information must be provided in French and English. Children also learn French and English in school. In Switzerland, the government recognizes French, German, Italian and Romansh. Although English is the official language of the government, India recognizes 23 additional official languages in its constitution, and hundreds more languages are spoken by Indian citizens every day.

Multilingualism is certainly nothing new, and Bolivia was even more multilingual four centuries ago when it was part of the Inca Empire. In fact, historians believe that there were as many as several hundred different local languages in use throughout the Inca Empire in South America. Imagine if every time you went to a different city or town the people there spoke a different language! To help keep their empire organized, the Inca leaders recognized Quechua as their one official language. In the United States, even though English is used so widely, only about eight out of ten people in this country speak English as their native language. Altogether, about 330 languages are spoken every day throughout this land by our many citizens, and currently the United States has no federally designated official language.



A newstand offers publications in various languages.

The United Nations recognizes six official languages, each selected, in part, because it represents large numbers of people in different geographic regions of the world. The European Union (EU), an international economic and political entity comprised of over 25 different nations, devotes a significant amount of money each year to insuring that all of its official documents are translated into 20 official languages; moreover, high-level European Union meetings are often interpreted, live, into all of the official languages. In 2004, when ten new member states joined the European Union, EU officials anticipated a rise in the official translation budget from \$134 million to \$179 million per year.

Sadly, the number of languages spoken in the world is diminishing rapidly. As people immigrate, as ethnic groups are absorbed, as more widely spoken languages dominate and prove more convenient, languages with few speakers are forgotten or “die.” Currently, there are almost 7,000 languages spoken around the globe, and linguists and ethnologists estimate that one language dies every two weeks. Altogether, half of the world’s languages are expected to disappear within the next century. Ethnographers and linguists work to preserve written and audio recorded examples of languages, but encouraging people to continue using certain tongues, in the face of so many social pressures, is proving a nearly impossible task.

Catchy Quechua: Short-Answer Questions

- 1) What do you imagine are some of the difficulties of maintaining a multilingual society?
- 2) Why do you think so many countries are multilingual?
- 3) Why do you think organizations such as the European Union devote so much money to translations?

III.4. Ancient Tourism: Internet Research Assignment: Instructions

Objectives

- To raise awareness of the value of cultural heritage and cultural artifacts, and to underscore how many examples of world heritage have already been lost.
- To prepare students to explore modern approaches to protecting world cultural heritage.

Advance Homework Assignment

The Ancient Tourism activity sheet is an Internet research assignment. The assignment can be limited or extensive, depending upon how many wonders of the ancient world you assign students to research.

Follow-Up Discussion

- 1) With student input, make a list of all of the seven ancient wonders and their descriptions on the board.
- 2) Ask students which wonders they would most like to visit and why. Make a tally on the board of how many students would like to visit each site.
- 3) Hand out the descriptions of the seven wonders and allow students to read these descriptions.
- 4) Only one of the wonders has survived to the modern day, the Great Pyramid. Discuss some of the reasons why the other wonders did not survive.

Many of the losses were unavoidable. For example, the temple of Artemis and the statue of Zeus were both lost in fires. The Colossus of Rhodes and the lighthouse of Alexandria were both toppled by earthquakes.

- 5) How do students feel about the fact that only one ancient wonder has survived to modern times?
- 6) Discuss how in this day and age it might be possible to preserve such types of cultural artifacts.

Today, there are many ways to preserve valuable buildings. Modern sprinkler systems might have saved the temple at Artemis or the statue of Zeus. In places like California, using new materials and modern architectural techniques, engineers build multi-story skyscrapers that can withstand even relatively violent earthquakes.

7) It is also necessary to have the political desire to preserve certain reminders of our heritage. The Statue of Liberty, for example, is now considered a historic landmark, which means that public funds are used to insure that it is kept in good condition.

Ask students to mention other landmarks that they believe are worthy of special preservation. These landmarks might be man-made or natural sites; they might be in the United States or abroad.

Write students' suggestions on the board. Discuss why they think these sites are worthy of protection.

Ancient Tourism: Activity Sheet

If you could travel anywhere you wanted on vacation, you might want to make a list of the most interesting things you'd like to see and do.

Well, the ancient Greeks had the same idea. Maybe you've heard of the Seven Wonders of the Ancient World...

Seven Wonders of the Ancient World

Colossus of Rhodes
Great Pyramid of Giza
Hanging Gardens of Babylon
Lighthouse of Alexandria
Statue of Zeus at Olympia
Temple of Artemis at Ephesus
Mausoleum at Halicarnassus

This list of the most incredible man-made tourist attractions of ancient times was compiled in Greece in the second century BC. If you were a tourist 2,300 years ago, how would you plan your trip?

Using the Internet, Find some basic information about _____ of the seven wonders of the ancient world: Write one paragraph describing each of the wonders you selected. Include the wonder's location, when it was built, its size, and its purpose.



If you could travel anywhere, you might want to see the prehistoric-style reed boats of Lake Titicaca, the highest navigable lake in the world.

Ancient Tourism: The Seven Wonders of the Ancient World

1

The Statue of Zeus

Maybe you have heard of the original Olympic games that were held in ancient Greece to honor the god, Zeus. At that time, in the city of Olympia, you could also find a 40 foot **statue of Zeus** in the city temple. Zeus was seated on his throne — much like Abraham Lincoln at his memorial today — but instead of being made from marble, the king of the gods was made from ivory. The entire statue, built around 457 BC, was 40 feet tall, and Zeus wore a gold robe and a wreath on his head. The statue was later moved to Constantinople, but in 462 AD it was destroyed by a fire.

2

The Hanging Gardens of Babylon

Maybe you've heard of the Nebuchadnezzar ship in the movie, *The Matrix*. King Nebuchadnezzar II was the monarch of Babylon (ancient Baghdad) around 600 BC. It may be only a fable, but according to writings of a local priest, Nebuchadnezzar built the **hanging gardens of Babylon** for one of his wives. The gardens were supposed to be about 400 square feet, hung 75 feet above the ground, and had trees, flowers, and even animals. Slaves worked in shifts with water screws to pipe water from the Euphrates River to irrigate the gardens.

3

The Colossus of Rhodes

If you asked people what the most famous statue in America today is, most people would name the Statue of Liberty. For a short while, in ancient Greece, there was a statue just as large, also overlooking a harbor. Approximately 120 feet high and made out of bronze, the **Colossus of Rhodes** overlooked the waters from the Greek Island of Rhodes in the Aegean Sea. Without the modern equipment, it took 12 years to build the statue, which was supported on the inside by iron bars and stone blocks. The statue survived for less than 60 years before it was destroyed by an earthquake.

4

The Great Pyramid of Giza

The **great pyramid of Giza** is one of 10 pyramids built between about 2,700 and 2,500 BC on the west bank of the Nile River near Cairo. The oldest and largest of the pyramids in this site, the Great Pyramid was built for Pharaoh Khufu. Although some of the top of the pyramid has eroded over time, it stands an incredible 450 feet high and its base covers about 13 acres of ground.

6

The Lighthouse of Alexandria

When it was built around 270 BC, the **lighthouse of Alexandria** was one of the world's tallest skyscrapers. Four hundred feet high, this building served an important commercial purpose. It guided ships safely toward the harbor of the Egyptian city of Alexandria. For 1,500 years, sailors depended upon its light – generated by a mirror during the day and by a fire at night – to safely navigate the waters. In the 14th Century AD, an earthquake toppled this ancient wonder into the Mediterranean Sea.

5

The Mausoleum at Halicarnassus

Today, the word “mausoleum” means any large, elaborate tomb. The first mausoleum was built around 353 BC to hold the remains of King Mausolus and his wife, Artemisia. This enormous structure was about 135 feet high and decorated with sculptures and ornamentation around the four sides. The **mausoleum at Halicarnassus** survived over 1,800 years, but an earthquake finally destroyed this monument in the early 15th Century. Only a few pieces are left, some of which can also be found in the British Museum in London.

7

The Temple of Artemis

If you were to visit the British Museum in London today, you could find statues there from the Greek **temple of Artemis** built in 550 BC. The Greeks erected this enormous, sophisticated temple in the city of Ephesus (now part of Turkey) to honor their goddess, Diana. The temple was about 80,000 square feet with hundreds of columns believed to be between 40 and 60 feet high, sculptures, and a tile roof. The temple burned down in 356 BC, was rebuilt again, and burned down entirely again in 262 AD.

III.5. IAF Notes: Instructions

Objectives

- To provide students with practice in working with real examples of economic development projects.
- To allow students to compare and contrast different types of development projects and different project elements.

Instructions

Assign the Inter-American Foundation (IAF) Notes and the IAF Notes Project Analysis activity sheet. The purpose of the activity sheet is to prepare students to consider the projects in depth during the class discussion.

Group Discussion

Hand out the Project Analysis Answer Sheet and allow students to check their answers.

1) The four projects are all examples of economic development projects. How would students define economic development?

Economic development refers to attempts to build or grow businesses and enterprises and to improve a community's wealth or economic well-being.

2) Which projects would students most enjoy being involved in, and why?

3) Ask students to read the description of the Inter-American Foundation and its guidelines. The description mentions that IAF aims to "strengthen participation" in its projects. Participation by whom?

Participation by the local people and/or the target audiences. This is an important point because the old school of thought in foreign aid was to provide large amounts of money for public works projects that ignored local people's needs and disrupted social systems. A classic example would be the building of a dam to develop electric capacity – a project that could, in turn, flood nearby villages and drive people from their homes.

4) It is often a problem that a development project receives funding for a fixed period of time and then the project dies out after the funding period. Which projects seem most likely to endure beyond their funding periods?

For the Argentine project, the 400 young people may learn professional skills that allow them to find work and earn a living after the project is over. (Realistically, many of the youth will not find work, but project developers hope

that some youth will succeed.) Similarly, the Nicaraguan project may help some local women entrepreneurs, but not all, to start lasting small businesses.

The Bolivian project teaches forest residents techniques in agriculture that they may continue to use indefinitely. It is possible that the Tsimane and Moseten families may permanently change their ways of life. The Mexican project is similarly designed and may have similar lasting effects.

5) In 1987, the World Commission on Environment and Development defined “sustainable development” as development that “meets the needs of the present generation without compromising the ability of future generations to meet their own needs.”

Read this definition out loud to your students. Write the term “sustainable development” on the board.

6) Which of the IAF projects meet the needs of the present generation without compromising future generations?

The projects in Bolivia and Mexico are both deliberately designed to help target audiences protect their natural environments. In Bolivian forests, the production of chocolate would replace more invasive forms of agriculture that entail clearing trees and other wild plants. The measures in Oaxaca, planting nurseries and training residents in land-use planning, constitute specific conservation measures.

While the two urban projects in Argentina and Nicaragua do not deliberately aim to protect the environment, they are both, nonetheless, very benign to their natural surroundings.

7) Ask students to suppose they saw a product for sale that was rainforest-friendly: For example, an ice cream made out of rainforest nuts cultivated in an environmentally friendly manner, or a chocolate bar produced in the rainforest using sustainable agro-forestry. Would they buy the product — even if it was more expensive? Would they go out of their way to buy the product? Why or why not?

IAF Notes: Activity Sheet

Funding from Inter-American Foundation (IAF): 2006 Awards

Argentina

Recipient: Foundation Ph15 for the Arts
(Fundación Ph15 para las Artes)

\$111,100 over two years

Ph15 will use photography to improve the employment prospects and social integration of 400 young people from shantytowns in Buenos Aires by strengthening skills and providing work experience. The project will indirectly benefit 1,500 other residents of the participating communities. (AR-344)

Bolivia

Recipient: Sustainable Social Development for Bolivia
(Desarrollo Social Sostenible Para Bolivia (DESSBOL))

\$226,880 over three years

DESSBOL will provide technical assistance and training in coconut and cacao agroforestry, and in marketing and processing cacao and chocolate, thereby improving the incomes of 150 indigenous Tsimane and Mosen families in the Pilon de Lajas area of northern La Paz department. (BO-504)

Mexico

Recipient: Environmental Services of Oaxaca
Servicios Ambientales de Oaxaca, A.C. (SAO)

\$286,800 over three years

SAO will work with residents and local authorities in 10 indigenous Zapotec, Chinantec and Mixe communities in Oaxaca to improve their capacity to manage natural resources sustainably and to increase their income through offering environmental services such as carbon and water capture and biodiversity conservation. The program will include community meetings and diagnostic sessions, and training and ongoing technical assistance related to land-use planning, ecosystem mapping and monitoring, and the development of five tree nurseries on communal land. (ME-481)

Nicaragua

Recipient: Foundation for the Development of Women
Fundación para el Desarrollo de la Mujer (FUNDE MUJER)

\$289,210 over three years

FUNDE MUJER will promote the economic and civic empowerment of female entrepreneurs in the Department of Estelí through access to credit, institutional strengthening for the Association of Female Micro-Entrepreneurs of Estelí (AMME), training

and technical assistance, product fairs, the development of new markets, and opportunities for engagement with municipal government. (NC-267)

About the IAF

The Inter-American Foundation (IAF) is an independent agency of the United States government that provides grants to nongovernmental and community-based organizations in Latin America and the Caribbean for innovative, sustainable and participatory self-help programs. The IAF primarily funds partnerships among grassroots and nonprofit organizations, businesses and local governments, directed at improving the quality of life of poor people and strengthening participation, accountability and democratic practices.

Guiding Principles

The guiding principles of the Inter-American Foundation are to support people, organizations, and processes; channel funds directly to the non-governmental sector; promote entrepreneurship, innovation, and self-reliance; strengthen democratic principles; empower poor people to solve their own problems; and treat partners with respect and dignity.



Through sustainable development, environmentalists hope to avoid natural disasters such as floods.

IAF Notes: Project Analysis: Activity Sheet

The descriptions for funding from the Inter-American Foundation refer to real grants that have been awarded for actual projects in four developing countries. Read the project descriptions carefully and check the appropriate columns:



Microenterprise funding can help individuals to start successful small businesses.

	<u>Argentina</u>	<u>Bolivia</u>	<u>Mexico</u>	<u>Nicaragua</u>
Target Audience				
Which project focuses on helping...				
<i>women?</i>	-	-	-	-
<i>400 urban youth?</i>	-	-	-	-
<i>Zapotec, Chinantec, Mixe?</i>	-	-	-	-
<i>Tsimane and Mosen?</i>	-	-	-	-
Funding Amount				
Which project awards...				
<i>\$286,800</i>	-	-	-	-
<i>\$289,210</i>	-	-	-	-
<i>\$226,880</i>	-	-	-	-
<i>\$111,100</i>	-	-	-	-
Location				
Which project takes place in...				
<i>Buenos Aires shantytowns?</i>	-	-	-	-
<i>the Department of Estelí?</i>	-	-	-	-
<i>Oaxaca?</i>	-	-	-	-
<i>the forests of La Paz?</i>	-	-	-	-
Strategies				
Which project implements...				
<i>training in chocolate industry?</i>	-	-	-	-
<i>training in photography?</i>	-	-	-	-
<i>establishing five tree nurseries?</i>	-	-	-	-
<i>credit for entrepreneurs?</i>	-	-	-	-

**IAF Notes: Project Analysis:
Answer Sheet**

Agroforestry offers hope to save the habitats of forest dwellers.



	<u>Argentina</u>	<u>Bolivia</u>	<u>Mexico</u>	<u>Nicaragua</u>
Target Audience				
Which project focuses on helping...				
<i>women?</i>	-	-	-	X
<i>400 urban youth?</i>	X	-	-	-
<i>Zapotec, Chinantec, Mixe?</i>	-	-	X	-
<i>Tsimane and Mosesten?</i>	-	X	-	-
Funding Amount				
Which project awards...				
\$286,800	-	-	X	-
\$289,210	-	-	-	X
\$226,880	-	X	-	-
\$111,100	X	-	-	-
Location				
Which project takes place in...				
<i>Buenos Aires shantytowns?</i>	X	-	-	-
<i>the Department of Estelí?</i>	-	-	-	X
<i>Oaxaca?</i>	-	-	X	-
<i>the forests of La Paz?</i>	-	X	-	-
Strategies				
Which project implements...				
<i>training in chocolate industry?</i>	-	X	-	-
<i>training in photography?</i>	X	-	-	-
<i>establishing five tree nurseries?</i>	-	-	X	-
<i>credit for entrepreneurs?</i>	-	-	-	X

III.6. Trading Partners: Instructions

Objectives

- To demonstrate some of the processes in the international trade of goods and services.
- To focus on the trade of a renewable resource, lumber, and endangered species, and medicinal plants.
- To provide additional practice with supply, demand and pricing.

Advance Preparation

This activity requires exactly 81 labeled index cards. Each card represents a commodity, and there are 9 types of commodities:

Money - 10 cards
Lumber - 13 cards
Architects - 9 cards
Pharmas Factories - 11 cards
Medical Staff - 11 cards
Labor - 6 cards
Beds - 8 cards
Blankets - 8 cards
Medicinal Plants - 5 cards

Classroom Instructions

- 1) Break the class into five groups. Distribute a copy of the Global Inventory of Resources to every student. Assign each group to be one of the five countries. Distribute the 81 labeled resource cards to each country according to the resources indicated on the Global Inventory Sheet.
- 2) Explain to the class that this game is like the real world. Some countries are poorer and some countries are wealthier, and each country will have to do the best it can with the resources it has available. The object is for each country to build as many hospitals as possible. In order to build a hospital, a country needs *at least one of each of the nine resource cards*.
- 3) Explain that the game is played in alternating phases. Write the names of these phases on the board:
 - (a) **Strategic planning sessions.** During these sessions, each country decides what resources it needs and what resources it is willing to trade in order to acquire its needs. Each country also decides who will act as negotiator for the upcoming round of trade talks.

(b) **Trade negotiations.** When the teacher calls time, the five selected negotiators meet. Other students should observe, but they are not allowed to speak. *Each negotiator may only make the type of trades that have been agreed upon in its country's planning session.* The round may continue as long as transactions are occurring. If students reach an impasse and no trading is taking place, the teacher should call time. A new session of strategic planning then begins.

4) The teacher determines the number of trading rounds. The Supply and Demand should be played for at least 20 minutes and can last up to an hour. Once time is called, the country with the most hospitals wins. If there is a tie, the country with the most resource cards, in addition to its hospital cards, wins.

Follow-Up Discussion

1) What is the most important determinant of whether a country will win or lose at Trading Partners?

How wealthy it is to begin with.

2) What strategies did the poorest countries employ to try and win?

3) What advantages did the wealthy countries have when negotiating trades? Did they have any weaknesses?

The wealthy countries had an overall preponderance of resources. At the same time, neither of the wealthiest countries had medicinal plants.

4) What was unusual about the medicinal plants cards?

Initially, they all belonged to one country. In real life many of the world's medicinal plants are concentrated in one geographic region, the South American rainforests.

According to Raintree Nutrition, there are at least 120 chemicals derived from rainforest plants in use internationally in important medications. To give one example, the chemical, quinine, used to treat malaria, was originally derived from the bark of a rainforest tree. Many more medicinal tropical plants have not even been discovered yet.

5) Write three terms on the board: "common goods," "opportunity costs," "sustainable development." How are these concepts related to the growth and distribution of medicinal plants in the real world?

a) The rainforests may be preserved as a common good, or they may be exploited for private and public uses.

b) Two opportunity costs of leaving rainforests pristine are the inability to practise traditional farming or ranching.

c) Slashing and burning of rainforests for agriculture, as well as for building projects, is greatly reducing the world's biodiversity. Sustainable development efforts (similar to the project promoted by DESSBOL in the IAF Notes exercise) are attempting to harvest and market precious Amazonian resources in a sustainable manner.

6) What commodity in Trading Partners would be considered a renewable resource in the real world? Is it possible to run out of renewable resources?

Lumber is a renewable resource, since new trees can be grown. It is important to remember that, if the demand is too great, it is possible to run out of lumber, just as may have happened for some countries in the Trading Partners game: A mature oak tree takes 60 years to grow and only minutes to cut down.

Advanced Discussion Question

How are supply and demand related to price in Trading Partners?

- What cards did different countries prefer to hold on to?
- What cards did different countries prefer to trade?
- Under what conditions were countries willing to trade a great many cards in order to obtain one particular card?

Trading Partners: Global Inventory of Resources

Resource Cards	Farmacia	Fabricante	Forestania	Richland	Wealthetania
Money:	2	1	0	3	4
Lumber:	2	1	3	3	4
Architects:	1	1	0	3	4
Pharma Factories:	3	1	0	3	4
Medical Staff:	2	1	0	4	4
Labor:	1	2	3	0	0
Beds:	3	1	0	2	2
Blankets:	1	3	0	2	2
Medicinal Plants:	0	0	5	0	0
Total Cards:	15	11	11	20	24

GLOBAL TOTAL: 81 Resource Cards

(Complete set of all 9 resource cards equals one hospital.)



At least 120 chemicals from rainforest plants are used internationally in important medications.

III.7. Utilizing UNESCO: Group Presentations: Instructions

Objectives

Students will work in groups to identify worthy examples of global heritage not currently on the UNESCO World Heritage List, to review the criteria for inclusion on the list, and to argue before the class that a particular nomination is worthy for inclusion based on specified criteria.

Instructions

- 1) Divide students into teams.
- 2) This is a long-term assignment. Review the activity sheet to determine how much preparation time your class will need.
- 3) If students experience difficulties in thinking of a nomination, suggest that they conduct an Internet search on the “Seven Modern Wonders of the World.” This publicity campaign, launched in 2006 and 2007, generated a long list of noteworthy cultural properties.

Oral Presentations

- 1) Provide each group with 10 to 15 minutes to conduct its presentation.
- 2) Follow each presentation with a question and answer session; encourage the rest of the class to ask questions of each presenting group.

Suggestions for Grading/Evaluation of Presentation

- To what extent did groups follow directions and include all of the required information in their presentations?
- How was the quality of hand-outs and visual materials?
- How well structured/organized was each presentation?
- How poised were the speakers?
- Did the UNESCO selection criteria apply soundly to the nominations?
- How well did speakers respond to questions posed by the class in the question and answer sessions?

Follow-Up Discussion

- 1) What are some of the sites already on the World Heritage List that students found particularly inspiring?
- 2) In conducting their research, were students surprised about some of the properties that are *not* contained on the list?

3) How strongly do students feel that their particular nominations should be on the World Heritage List?

4) Why is cultural preservation also about economics?

Cultural preservation is not free. When a country nominates a site to the UNESCO heritage list, it pledges to preserve that site. Besides the direct costs of preserving the site, the country must also consider the opportunity costs; that is, how the site might otherwise be used to generate an income.

5) How many students, after completing Unit III, now have an interest in:

- Some day working in the field of cultural preservation?
- Supporting the field of cultural preservation now through donations or volunteer work?

Utilizing UNESCO: Activity Sheet

Background Brief

The United Nations Educational, Scientific and Cultural Organization, UNESCO, approves buildings, monuments, ancient sites, natural phenomena, and intangible examples of culture from around the world for inclusion on its World Heritage List. Altogether, the list includes 660 cultural, 166 natural, and 25 mixed properties.

A site on the World Heritage List tends to attract more tourists, raise more money, and, furthermore, to enjoy the protection of its mother country as a valuable resource. Indeed, plans for protection and management of properties are an important consideration in inclusion on the list. In order to include a site on the list, a country must demonstrate that a particular site meets at least one of ten criteria and that it is of outstanding universal value.

In addition, UNESCO oversaw the 1972 World Heritage Convention, an international meeting of world leaders that took place in Miguashu, Canada. There, convention participants pledged to be responsible stewards of our world's cultural and natural heritage.



Salar de Uyuni, a World Heritage Site in Bolivia, is the largest salt flat in the world.

Oral Presentations

1) Visit the UNESCO World Heritage Site and familiarize yourself with the entries on the list. Together with your teammates, select a property or an intangible example of culture that is not on the list and that you believe is worthy of inclusion. Your example can come from anywhere in the world.

2) Carefully review the 10 criteria for inclusion on the World Heritage List. Decide which criteria apply to your chosen nomination.

3) Prepare a 10 to 15 minute presentation for the class explaining your choice for nomination to the World Heritage List. Your presentation should include visuals or hand-outs.

4) The presentation must include a description and history of your nomination, and an overview of which selection criteria make your nomination eligible and why. Finally, also provide a plan for ensuring that the nomination remains protected in the future.

World Heritage List: The Ten Selection Criteria

- 1 To represent a masterpiece of human creative genius.
- 2 To exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.
- 3 To bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.
- 4 To be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.
- 5 To be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.
- 6 To be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria).
- 7 To contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.
- 8 To be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features.
- 9 To be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.
- 10 To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.



The techniques for creating these dance costumes exemplify intangible cultural heritage.