



URBANIZATION IN THE AMAZON BASIN: CAN INDIGENOUS PEOPLE SURVIVE?

Level: *grades 9 - 12*
Course: *geography*

Rationale

Any geography course must incorporate strong content and sound geographical principles to be successful. It also must go beyond learning place names, and challenge students to see the dynamic side of the discipline. When students realize they use geography every day, and that it is a critical thinking tool applicable to every area of their lives, they become empowered with an exciting and practical life skill. This lesson challenges students to experience the dynamic aspect of geography, not just knowing where places are located, but being able to explain why things are the way they are, and how they got to be that way. This lesson also gets at the heart of a grave modern problem—how do we preserve the cultures of indigenous peoples, or should we? Students will examine this question in detail as it relates to urbanization.

Lesson Overview

“Urbanization in The Amazon Basin” is designed for use in a high school geography course, although it will fit nicely in history, language, and contemporary issues classes as well. Using the Amazon Basin as its setting, the lesson highlights the concept of urbanization, and focuses on the effects of urbanization and modernization on indigenous peoples, particularly those in Rondonia, a state in Brazil. Using geography skills, students will investigate issues surrounding urbanization and its effect on indigenous peoples, and pose possible solutions to current

by
Darren Bessett
bessett@bvsd.k12.co.us
Fairview High School
1515 Greenbriar Blvd.
Boulder, CO 80303
303-499-7600

conflicts. This is an issues based, inquiry lesson using real data. This lesson is ideally administered in a "movement" unit in geography or a Latin American history unit. Some background on the physical geography of the Amazon is required.

Objectives

Students will

1. recognize the relationship between economic development and social change of indigenous peoples.
2. understand the complexity and interconnectiveness between indigenous groups and developers, and the international community.
3. hypothesize the steps required to balance growing urbanization and cultural preservation of indigenous people.

Time Need

Three to five class periods.

Materials

Handouts included in this document, reference material (student and teacher class texts), atlases. Optional: This lesson contains many suggested activities for extending the lesson; if used, other resources will be required: library, video equipment, access to Internet.

Procedures

This is a cooperative learning exercise. Any cooperative learning activity must have the following elements in place for the students to be successful: common goal, individual accountability, and structure. Therefore the procedures of the lesson are broken into these three parts. Students should be divided into groups of three, each student representing a specific category of people who have a vested interest in the Amazon Basin.

Person one: Indigenous tribes representative

Person two: Brazilian governmental official

Person three: World Bank representative

Optional person four: Environmental activist

Common goal - Each group will work together to produce a final document that outlines a sustainable development plan that will achieve a balance between modernization of rural indigenous tribes and cultural preservation of those tribes. The plan's contents should have the following elements:

1. Address the needs and objectives of each of the representatives (items in the proposal).
2. Offer sound, short annotated rationales for each item on the proposal, and explain why those items are important (do not oversimplify).

3. Contain a map describing the spatial relationships among the key elements of the proposal. (Geography for Life: National Geography Standards is a good resource)
4. Offer an explanation of how this plan will affect the indigenous populations specifically as it relates to urbanization and modernization.

Option: If your school has access to video equipment, have students produce a video addressing the same guidelines.

Individual accountability - Prior to the development of the final document, each individual in the group must develop and submit their own proposal to the other two members. The final document guidelines should be used.

Lesson Steps

1. Students read Introduction and Data Sheet One. Using the data sheet as a springboard for discussion, students should use this information to begin formulating their ideas and positions concerning the overall task. (Record group thoughts.)

Option: Students may want to do further study or research in the school library, as the data sheet is not comprehensive, but rather is designed as a tool to stimulate further inquiry. Students who have access to the Internet may want to subscribe to discussion lists concerning indigenous peoples and the Amazon.

2. Students read Data Sheet Two. Repeat discussion process as in step one.
3. By now, students probably have a good idea on where they stand on issues brought out in the data sheets. Ideally, they have been inspired to search out some of their own questions stimulated by the material. Remind them of their overall task, and have them read the last handout, Data Sheet Three (and optional Data Sheet Four).
4. Individuals prepare proposals to submit to the other group members. The teacher may want to collect these at the end of the exercise.
5. Discussion groups draft their final document using the provided guidelines.

Follow-up activities

The classroom teacher and students have the greatest insight on how this activity fits into the greater scheme of things. Here are some suggestions on how to amplify the effect of the lesson:

1. Students present proposals to class
2. Write a class letter to appropriate government or business officials (e.g. Brazilian ambassador, member of the IMF) explaining some of the proposals' creative ideas.

Terms

sustainable development
indigenous people
urbanization
multilateral development banks
infrastructure

Handouts

Data Sheet Introduction: Urbanization in the Amazon Basin: Can Indigenous People Survive?

During the colonialization of South America, the Spanish and Portuguese left a lasting imprint on the Indian way of life. Never again will indigenous peoples experience life as their predecessors knew it. This is true because the European explorers and colonizers introduced new ways of thinking, and laid claims to the New World itself. It was a new world, not because it was new to the Europeans, but because the Americas became a place where two distinct, and often times incompatible, cultures collided. Even though they were incompatible, however, they both remained, resulting in a forced “coming together.”

This blending together reached a new height when the Industrial Revolution took place in Europe during the late 1700s and early 1800s. Not only did Europeans extract resources from the Americas, but they also introduced new technology, new ways of thinking again, and of course, a new type of economy.

Since the 1500s to the present day, this cycle has repeated over and over again. Society continues to develop, and more homogenization of traditional culture occurs. Today in the 1990s, we have become extremely advanced, and the groups who have somehow remained out of the “blending” cycle are growing smaller and smaller. How can we preserve the cultures and traditions of indigenous groups, or should we?

What affects these groups the most is urbanization and modernization, as you will see in the following activity. South American governments, international banks, and indigenous people all play significant roles in this urbanization and modernization. The indigenous people in the Brazilian state of Rondonia provide a good case study of this issue.

Your task is to work in a team of three students, each representing a group of people who have a vested interest in the Amazon Basin, and develop a professional proposal.

Person one - Indigenous tribes representative
Person two - Brazilian governmental official
Person three - World Bank representative
Optional person four - Environmental activist

Common goal - Each group will work together to produce a final document that outlines a sustainable development plan that will achieve a balance between modernization of rural indigenous tribes and cultural preservation of those tribes. The plan's contents should have the following elements:

1. Address the needs and objectives of each of the representatives (items in the proposal).
2. Offer sound, short annotated rationales for each item on the proposal, and explain why those items are important (do not oversimplify).
3. Contain a map describing the spatial relationships among the key elements of the proposal. (Geography for Life: National Geography Standards is a good resource)
4. Offer an explanation of how this plan will affect the indigenous populations specifically as it relates to urbanization and modernization.

Option: If your school has access to video equipment, you may want to produce a video addressing the same guidelines.

Data Sheet One : Why are Developers Interested in the Amazon?

Brazil is the world's fifth largest country. It spans three time zones, and is closer to Africa than it is to Europe or the United States. For the most part it greatly lacks accessibility and hospitality to humans. Much of Brazil is scarcely populated with 36% of the nation's territory in the Amazon Basin; most of this basin was not thoroughly explored until this century. New mountains, rivers, and Indian tribes are still being discovered. Of course this basin is largely comprised of fragile tropical rain forests, home to millions of biological plant, insect, and animal species. These all exist in a very complicated and sensitive ecological cycle.

Throughout the 1980s, most of South America experienced a serious economic crisis.

The external debt of South America was about \$390 billion in 1988. Roughly speaking, 64 cents of every dollar earned in South America is owed to somebody else. Under this kind of pressure, many South American governments have looked toward rapid development to solve the problem. Brazil is one of these countries. The cost of environmental protection, careful and restrained planning, and indigenous peoples' cultural preservation is viewed as unaffordable.

Brazil has aggressively pursued rapid development. In an effort to promote economic growth, government officials have created roads through the rainforest to meet two objectives: improve the infrastructure between cities, which stimulates trade and commerce, and provide greater access to developers in extracting rain forest resources. In many cases land has been cleared to raise cattle for beef sales to North American and European restaurants and grocers. In fact, one third of the Amazon Basin's deforestation has occurred due to land clearance for cattle ranches. A Brazilian highway project known as BR 364 was created to improve the infrastructure of Brazil while opening the rain forest to Japanese importers of tropical hardwoods. A single hardwood tree sells for around \$700,000. Moreover, Japan's high demand for paper products and low domestic timber supplies has driven it to look towards places like the Amazon Basin. These are examples of just two of the many development projects in the Amazon Basin.

What are other interests in Amazon Basin development?

What effects are these developments having on the basin?

Data Sheet Two: What Effect Has Development had on Indigenous People?

In addition to the biological, plant and animal life, the Amazon Basin is also home to tens of thousands of indigenous peoples. In fact, at one time, around 1500 AD, the estimated population of indigenous people was around six million. There are several reasons for the decline, development of the rain forest is one of them. This is because of the Indigenous peoples traditionally strong relationship, or interaction with their physical environment. Their entire culture is dependent upon the rain forest.

Two cultural concepts are applicable here. The first is the “museum culture” concept. A museum culture is preserved for outsiders to look at and study. Emphasis is placed on preserving cultural traditions. The second is the “Twentieth Century culture” concept. According to this view, whether a culture exists in Lisbon or the Brazilian rainforest, it must have both the freedom to make choices, and information to base those choices on. If traditions are lost as a result of entry into the 20th century, then that is the price that must be paid (GIGI, Development Effects, 1995).

The indigenous people of Rondonia, an Amazonian state in Brazil, provide us with an excellent case study of this apparent conflict. The overall population of Rondonia increased from 113,000 in 1970 to 491,000 in 1980, and 1.4 million in 1988 due to the influx of settlers. Forest cover declined from 99% to 76% of the state's 23.4 million hectare surface area. This dramatic increase in population and decrease in the rainforest created several problems. To address the problem, the World Bank approved a US \$167 million loan to finance a broad based sustainable development program for the state of Rondonia. Sustainable development is basically responsible development, finding a balance between economic objectives of the state and preservation of resources, including the cultures of indigenous peoples. Program objectives included protection for indigenous tribes.

The Indians of Rondonia face two unique problems related to this concept of sustained development. One, as Rondonia develops and modernizes, the process of urbanization—rural to city migration—occurs. As urbanization increases, so does the need for further development. This development, whether it be resource extraction, cities, or roads displaces indigenous people from the region. Two, many Indian people give up their culture to find prosperity and jobs in cities. Most Rondonian Indians have migrated to nearby cities, urbanized areas. This migration causes another kind of problem. Those Indians who remain behind feel abandoned by those who migrate to the cities. This creates a cultural division between indigenous peoples.

What organizations have been formed to protect indigenous people?

What is the effect of foreign debt on development, and thus indigenous people?

Data Sheet Three: How does the World Bank Fit in?

Remember that during the 1980s, Brazil amassed a great amount of foreign debt. The World Bank is one of four Multilateral Development Banks which loans money to Brazil for future economic development. (This development in theory will provide a foundation to make profits, and thus pay back loans.) Multilateral loans in Brazil have financed road building, mining, agricultural, and energy projects.

While the World Bank strives to enable Brazil to develop economically, which it desperately needs to do, many have been critical of its actions. Referring to the Rondonian loan project, the San Francisco-based Sierra Club director said the new project is designed primarily to compensate for damage caused by a series of huge World Bank-financed road and agricultural modernization projects in the early 1980s in Mato Grosso and Rondonia states (LADB, 3/24/92). An area of tropical forests and woodlands the size of Great Britain was opened to tens of thousands of settlers who contributed to massive deforestation of the region. Epidemics of contagious diseases threatened indigenous populations, the native rubber tappers, and the settlers themselves. The result was an ecological, health, and social catastrophe for which then-World Bank president Barber Conable apologized five years ago (LADB, 3/24/92).

According to the World Bank, the new project incorporates the lessons that both the Brazilian government and the Bank have learned over the last ten years on how to balance the promotion of economic development with environmental protection and preservation of indigenous tribes.

What geographical processes promote or inhibit success in sustainable development?

Why did Brazil sink so quickly into debt during the 1980s?

What other institutions lent Brazil money?

Data Sheet Four - Optional: Is It Too Late to Find a Solution?

Many environmental activists are strongly pushing for protection of the rain forest environment and indigenous people in Brazil because they believe Brazil, of all other locations around the globe, provides the best chance to succeed in their efforts. These activists are championing the cause of the environment and the indigenous people together because they realize the strong connection between the two.

Mining and illegal timber exploration in Brazil are the two major problems that have led to the destruction of Indian preserves. Mining is done by thousands of prospectors who collectively form small enterprises which have a great impact on the environment. Dishonest timber merchants utilize Indian preserves for raw material sources without any reforestation and forest management (Luciano Pizzato, testimony before U.S. Congressional hearing). In many cases the government has taken no action against those miners and loggers who take natural resources from tribal lands.

Moreover, several people are concerned about the "traditional" knowledge, which can be useful to all of us, lost by Native Americans. Traditional knowledge is knowledge dating back hundreds, and maybe even thousands, of years that provides a base for indigenous peoples' culture. In Brazil, it promotes a life that is tied to the environment. An example of losing this traditional knowledge is the "in situ" gene banks. The "in situ" gene banks, developed and conserved by indigenous groups for over a millennia are now being exploited by foreign companies. Megoran Txucarramae, a Brazilian indigenous tribal leader testifying before a U.S. Congressional hearing, sums up the idea. "These resources are being appropriated by your scientists and businessmen, with no return or respect for our long-term labor of selection and maintenance of these genetic resources. Regional economic interests are sacrificing equally precious plants and animals that, I am sure, could serve us all, and not only the rich" (Congressional Hearing, pg.8). As development occurs, more and more indigenous people will abandon their traditions and move to the cities, and quite possibly pay for the products created through quick development of their own ancient peoples' ingenuity.

What exactly are "in situ" gene banks?

What other forms of traditional knowledge are in jeopardy?

Bibliography

"Agueda Martinez: Our People, Our Country." Esparza/Katz Productions, 1985.

Video chronicles the life of Agueda Martinez, a rural rancher and weaver in north Mexico. Her life demonstrates the change in home and community due to the introduction of modernization and development. 13 minutes.

American Indian Publishers, Inc. Biographical Dictionary of Indians of the Americas, 1991.

Offers a concise, but informative biography of hundreds of notable Indians in North and South America.

"Arctic to Amazonia: Indigenous Perspectives on Development and Survival of the Planet."
Turning Tide Productions, 1993.

Features Native activists from North and South America presenting first-hand information on the impact of industrial development upon their land and cultures. They review the history of European colonization in the Americas, and critique patterns of consumerism and commercial development. 21 minutes.

Draffen, Andrew. Brazil: A Travel Survival Kit. Lonely Planet Publications, 1989.

This travel guide gives a good overview of Brazil's geography, history, and culture.

Ellis, William S. "Rondonia's Settlers Invade Brazil's Imperial Rainforest." National Geographic Magazine, December, 1988.

Excellent article describing the entire background of development issues in Rondonia. It highlights the conflict, sometimes violent, between indigenous groups and new settlers.

Gall, Norman. "Letters from Rondonia." American Universities Field Staff Reports, 1978, No.10.

Explains the impact of a developing infrastructure, the creation of road BR-364, throughout the western regions of the Amazon Basin. Attention is given to indigenous peoples and settlement history.

"Geography Education Standards Project." Geography for Life: National Geography Standards, 1994. National Geographic Research and Exploration, 1994.

Details the national geography standards, while offering suggestions on how to implement quality geography in the classroom. Is an excellent guide to the geography and history teacher.

"Geographic Inquiry into Global Issues: Development Effects." Britannica Global Geography System. Encyclopedia Britannica Educational Corporation, 1995.

This lesson module focuses on Latin America, and answers the question: what are the effects of development on the Amazonian region?

"Geographic Inquiry into Global Issues: Urban Growth." Britannica Global Geography System. Encyclopedia Britannica Educational Corporation, 1995.

This lesson module focuses on Latin America, with a special emphasis on Mexico. The six lesson module is excellent for modeling rural to urban migration.

Hirsch, E.D., Jr. The Dictionary of Cultural Literacy. Houghton Mifflin Company, 1988.

Comprehensive guide to cultural heritage. Offers insight into indigenous issues relating to modernization.

"The Indigenous Peoples of Brazil." Hearing before the Subcommittee on the Western Hemisphere Affairs of the Committee on Foreign Affairs. U.S. House of Representatives, 103rd Congress, July 14, 1993.

Chronicles actual minutes of the Congressional meeting, where congressmen hear testimony from indigenous groups and lawyers that support those groups. Excellent source of information.

Latin American Data Base. "Brazil: US \$167 Million World Bank Loan for Conservation Program in Rondonian State." 3/24/92. Article number 015920. URL: <http://ladb.unm.edu>

Highlights the struggle of indigenous peoples in Rondonia, a state in Brazil. Gives a detailed history of the World Bank's actions concerning development in the Amazon.

Latin American Data Base. "Summit of the Americas: 'Plan of Action'." 12/16/94. Article number 021650. URL: <http://ladb.unm.edu>

The article delineates the plan by 34 participating nations to promote greater cooperation among American nations. Addresses indigenous struggles relating to urbanization.

"The Latino Family." Films for the Humanities, Inc. 1993

This program shows the changes in and the endurance of traditional Latino families. In following the paths of three generations of one Mexican-American family, it shows patterns of migration and cultural change. 28 minutes.

Perdigao, Francinete. Migrantes: Amazonicos. Edicoes Loyola, 1992.

This book, written in Portuguese, discusses the various issues relating to migration. Special emphasis is given to the history of Brazilian development, and chapter five gives a good overview of the indigenous people in Rondonia.

Rainforest Action Network. "Native Peoples of Tropical Rainforests."

URL: [Http://www.yahoo.com/Economy/Organizations/Public_Interest_Group](http://www.yahoo.com/Economy/Organizations/Public_Interest_Group)

Provides an overview of the rainforest and rainforest issues in the Amazon. Much like a mini-encyclopedia, the article addresses indigenous peoples, the Word Bank, and other pertinent topics.

Waddell, Jack O. American Indian Urbanization. Purdue Research Foundation, 1973.

Book addresses the historical aspect of Indian rural to urban migration. It highlights the division within the Indian community caused by urbanization.

Waddell, Jack O. and Watson, Michael. The American Indian in Urban Society. Little, Brown, and Co. 1971.

Book addresses the urbanization trends among Indians in the United States, including the Southwest. Special emphasis is put on participation by Indians in modern social institutions.