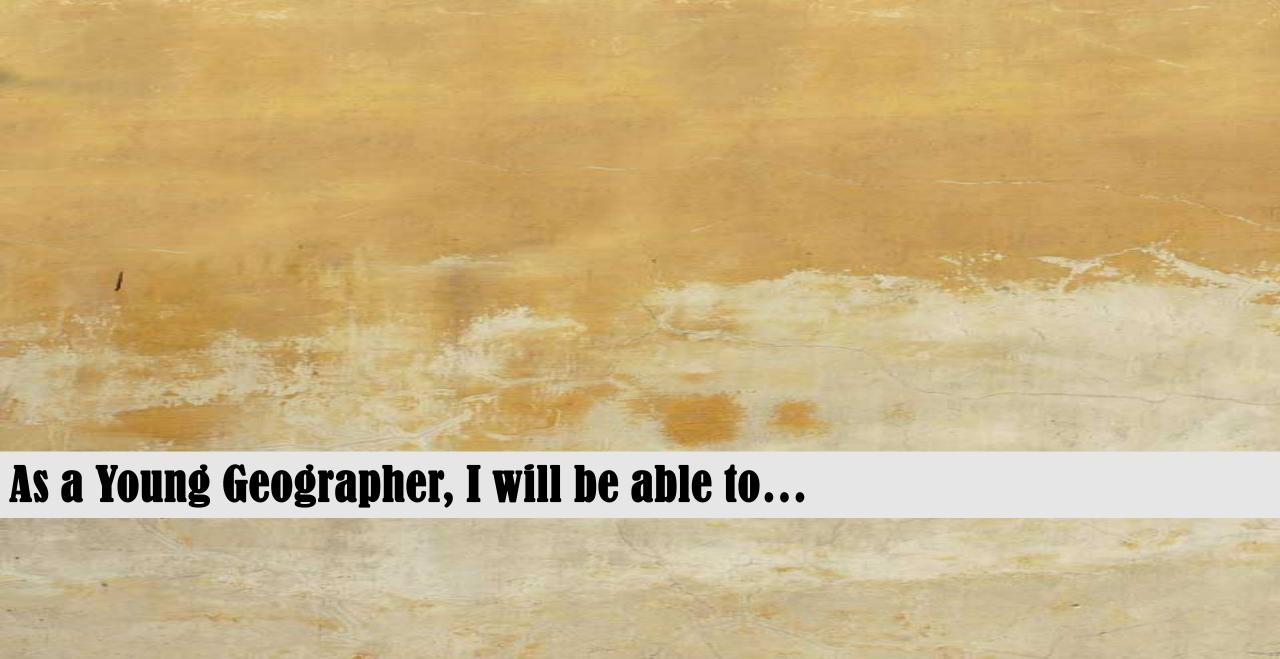


People & Their Environment: South America



Managing Resources-Rainforests

South America is home to some of the largest reserves of forest & agricultural resources in the world.

Issues such as deforestation, soil erosion, desertification (land becoming a desert) & pollution affect the region

Rainforests hold about half of all plant & animal species on the planet & deforestation has drastically dropped numbers

About 20% of the Amazon Rainforest has been destroyed as of today.

Only 10% of the Atlantic Forest remains today

Rainforest Land Uses

50 million acres of rain forest worldwide destroyed annually

Mahogany, cedar harvested, exported from Amazon

Poor native farmers clear rain forest for crops

Poor soil fertility, increased erosion lead to more timber clearing



Over half of Amazon rain forest is in Brazil!

-growing population: 173 million in 2000, 2000 million projected in 2020

Price of Destruction

Rain forests regulate climate: absorb carbon dioxide, produce oxygen

Fewer forests means less carbon dioxide absorbed

- a. It builds up in atmosphere, prevents heat from escaping into space
- b. Global warming-atmospheric temperature rises, weather patterns change





Managing resources-Soil

Farming, construction, logging, fires, & overgrazing has caused the rate of soil erosion to skyrocket

Oxisol- A Thick, weathered soil of the humid tropics that is largely depleted of fertility & nutrients

Monoculture- The cultivation or growth of a single crop over a wide area for a consecutive number of years

This disrupts the natural cycle of growth & the soil cannot build up nutrients, causing soil erosion



Soil & Desertification

All this damage has been greatly changing the landscape of South America

The primary cause of Desertification is land mismanagement rather than drought

Wind will sweep the soil from an area & remove the essential topsoil

Happens more in livestock industry from Argentina, Uruguay, Brazil, & Paraguay



Human Impact

Large-scale economic production & urban growth has created massive environmental pollution

Poor migrants move to big cities into favelas (slums) made up of crudely built shakes outside cities

Cities also struggle with sewage issues as they lack the funding & organization to build extensive networks of pipes

Rivers have become polluted, such has the Pallina River that flows into Lake Titicaca



Mining Issues

Illegal mining has damaged the land & water features of South America

People have been clearing forests & panning the Amazon River in search of gold, releasing toxic chemicals into the environment

Anti-guerrilla troops in Columbia have been using mining efforts to help finance their efforts



Addressing the Issue

Fixing environmental issues are not important for only protecting regional biodiversity, but also to preserve the livelihood of human populations

Changing weather patterns & loss of fertile lands affect the health & economies of several countries

Paraguay passed the Zero Deforestation Law in 2004, prohibiting forested areas from being converted to other landscapes in eastern Paraguay

Farmers have had to implement management strategies to slow soil erosion, such as implementing certain fertilizers



Conservation

Soil erosion happens much more rapidly than soil fertility, a millimeter of soil is generated in about 100 years

Countries have been implementing laws to reduce air pollution & reduce greenhouse gasses

Cities have been increasing urban transports with bussing & trains for example





