Andy Tonnesen

## Sustainable development in Brazil

After viewing the video, <u>Sustainable development in Brazil</u>, my eyes were opened to a new admiration for Brazil, and especially the city of Curitiba. Curitiba, is a city located roughly 1000 kilometers from Brazil's most recognizable city of Rio de Janeiro. Curitiba, is home to approximately 2 million people and is one of, if not the greenest, or most environmentally friendly cities in the world. The city began by the portuguese in 1693, and the economy depended on agriculture and cattle farming. As we know cattle raising is not an environmentally friendly practice, so the green ideals found their place in the later 1980's from the mind behind the revolution, Jamie Lerner. Lerner was the driving force behind the cleanup and environmental reform of Curitiba, basing all of his decisions off the bases that people are more important that the economy. With this attitude and a good work ethic, Lerner was able to drastically change the city for the good, in a matter of a few years.

The key to the continually being green is recycling and garbage. Curitiba separates its organic trash from the inorganic, and takes the waste to a facility built of recycled material. It is said that two thirds of the garbage is recycled and turned back into new items and reused. It has no more cost than tossing the trash into a landfill and there is an increase in jobs. This is a great thing! Not only is there no landfills, and garbage is being reused, it's creating needed jobs for the people as well. This is a win win situation for everyone involved. The introduction of the Green Exchange only

enhanced the productivity of the recycling scheme. The exchange allows low income people to exchange recyclable trash for food and other items. This benefits both parties by giving the poor the food and supplies they need and allowing the government to sit back and collect the trash instead of trying to battle the too narrow streets.

Overall, America can learn a lot by adopting even a few of these practices. Instead of just filling up a landfill we could knock out a group of problems, such jobs and need for new landfills, just by taking a little time and separating our garbage.

An increased amount of parkes and the heightened quality of them, alleviated many problems that plague cities throughout the world. The floodwaters only enhance the lake, the more green space takes away space from squatters and a benefit for skyscrapers is imposed to allow them to build higher if greenery is installed near the bottom or cash is paid to the city for environmental improvements. In America we do give developers breaks if they mitigate wetlands, but that is only if they damage it in the first place. This benefit is imposed on all contractors so that they are guaranteed to never lose all of the green in the parks.

Integrated transportation allows for the biggest cut to the carbon footprint. By simplifying the efficiency of the bus system, Curitiba is able to more 4 time more people than a regular bus system and cut down the amount of carbon emissions. Unlike in America where everyone needs to drive there oversized SUV to work by themselves, Brasil uses public transportation. This cuts down on congestion in the city, and cuts a huge amount of carbon output. In America we are caught up in our own lives so much that we won't even carpool let alone take a bus. If we look at the benefits of leaving our

vehicles at home for a few days, it would change so many minds. Unfortunately this will never happen because it is seen as low class to take a bus, and people refuse to give up their status with their vehicles.

Curitiba has the lowest air pollution in Brazil, but yet it relies on manufacturing to support the economy. How could this be? It's because the main manufacturing firm, Volvo, worked to make better busses for the city. Most of the air pollution comes from automobiles, and if Volvo makes a better, more efficient bus the overall air pollution is going to drop even if there are huge manufacturing plants there. It is a simple concept, but it has such a huge effect on the environment.

Urban planning is another key aspect to the environmental friendliness of Curitiba. Lerner devised a plan to turn the streets from a place for cars to a place with people. In a matter of 72 hours, the streets were shut down to traffic and converted to an outdoor mall. At first it was met with opposition, but it was already done. This eliminated so much unnecessary time inside. This allowed people to get outside and interact. This lead to lower usage of electricity from lights air conditioning, etc. The less vehicles in the street cut down on air pollution too.

Curitiba seems to have it all figured out when it comes to being green. Every aspect of the city somehow demonstrates a promise to being green. From the revolutionary recycling program, to the improved and efficient transportation system, Curitiba is the leader in sustainability. America can learn a lot by adopting a few of these aspects, as well as reforming some of the programs we already have in place. Unfortunately, it takes more than just one city in the world thinking green to change the earth. It is a worldwide effort, but every little bit matters and we can learn from each other's practices. Let us learn from Curitiba and help them take the world one step closer to being completely green.