

Creating sustainable communities research paper examples

[Environment](#), [Plants](#)



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Human society has reached a certain level of development that everybody enjoys especially in the Western countries like the United States of America. For the convenience of human beings, people invented how to generate electricity, domesticate livestock in a large scale manner, and mass produce food. Because of these inventions, food has become more accessible to people, more technologies are invented for transportation, communication and many other essentials for communities. However, the basic element of the earth that is giving life to all creatures is at stake. The bodies of water started to be threatened by the massive urban and community developments in most parts of the United States.

Coal Fired Power Plants

According to Tox Town, coal fired power plants is the biggest source of energy in the US. It generates 44.6% of the country's energy needs. US have more than one thousand generators and more than 400 facilities for this purpose. The coal fired power plants has become an international debate because of its hazardous impacts to environment. Social movements had been calling for governments around the world to stop generating electricity from coal and other fossil fuel and instead, switch to renewable sources like wind, hydro and thermal powers. Aside from the grave impacts of coal fired power plants to the air, it has also threatened bodies of water. One of the chemicals that this power plant emits is mercury.

The Environmental Protection Agency (EPA) stated that coal fired power plants are the number one source of mercury. It pollutes lakes, streams, rivers and it can even seep through the underground water. Tox Town also

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stated that almost all kinds of fish and shell fish are contaminated of mercury. Also, in the United States, those who are consuming fish including Native Americans, Vietnamese, Laotian, African-American, Hispanic and Caucasians are susceptible to mercury intake. Aside from mercury, the said power plants emit other hazardous chemicals that include arsenic, benzene, cadmium, carbon dioxide, chromium, lead, methane and many more.

Chemical Storage Tanks

Chemical storage tanks on the other hand, are one of the major culprits for many oil spills that polluted seas, streams, and rivers. These storage tanks contain unrefined petroleum, liquefied natural gas, and others that are essential in farms, vehicle maintenance, petroleum products like diesel and gasoline and many others. This kind of storage according to Tox Town is not sustainable as it will eventually leak because of corrosion, poor maintenance, overfills, and chemical transfers. Leakage will eventually cause pollution of lakes, streams, coastal ecology, and it can even contaminate ground water. EPA mentioned that 50% of US water supply comes from underground water, and it is alarming that most of the underground storage tanks of petroleum companies are found near underground water sources. It poses a major threat on American citizen's access to clean water. Tox Town enumerates chemicals that can harm the water bodies and it includes acetone, ammonia, chlorine, crude oil, diesel, natural gas, gasoline, methanol and many others.

Urban Sprawl

Development of town centers and cities resulted to the influx of more people leading to what they call urban sprawl. Land areas that used to be forested

and agricultural are continuously converted into residential areas. As the people compressed in the developed area, business entities are built thus, the town centers and cities become economic zones. The sprawl usually leads to increased use of energy, water and air pollution, worsens traffic, contamination of potable underground water and water run-off. Most of the developed cities and suburbs experience this kind of problem. Urban sprawl spawns another common problem which is the solid waste management. Without a sustainable comprehensive land use plan, the urban sprawl becomes an urban decay due to the garbage problem. Garbage affects most the water system from sewerage, streams, rivers, until the seas.

Tox Town suggests an alternative which is called smart growth. This kind of urban community encourages walking, bicycling, using subways and other forms of public transportation. It gives importance for space for people, and other creatures to breathe. It promotes physical activities and the essence of community neighbourhood. Smart growth caters development, equal opportunities, and care to the environment especially to water, air and plants.

There are already models for smart growth in the US that are worth replicating. Middleton Hills in Wisconsin for example has pleasant streets that offer traditional neighbourhood and diverse styles of homes. The whole town was designed to make the stores and parks accessible through walking and bicycling. This technique can reduce the use of diesel for transportation. Moreover, in Southern New Jersey, around 40, 000 acres of forest and farm lands are permanently protected. This serves as a breathing space of Texas which is a densely populated state.

Human Activities Hastens Coastal Change

Subsequently, human activities can contribute to coastal change. While natural activities like tide, waves and weather have been the major reasons for coastal change, it cannot be discounted that human activities hasten the changes caused by the natural phenomena. Water pollution in rivers causes sedimentation of coasts resulting to the rise of sea water level. The Texas coast in Galveston Bay has experienced an alarming rise of sea level. This is also attributed to the long running extraction of fossil fuel in the area.

The dwindling landfills especially in the urban areas caused the dumping of garbage in the bodies of water leading to the coasts. In 1988, medical wastes were washed into the beaches of New York and New Jersey leading to pollution of marine life due to contamination. It caused the decline of fish supplies in the said state as the area was banned for fishing purposes for a certain period.

Watson J. M. (2008) concluded that human activities in local levels hasten the doom of mother earth. The grave impacts of these destructive human activities have reached the seas that will eventually eat land areas due to its alarming water level.

There is no question that human beings are intelligent for inventing technologies that provided comfort to humanity. They built technologies that were just visions in the far past. However, there is a need to re-examine their impacts to our environment. There is a need explore technologies that are earth friendly. The doom of the mother earth will mean the doom of humanity. It is then a challenge to all communities to build smart growth suburbs to help the coast revive its previous state. There is also a need for a

political will of leaders in order to radically switch into more sustainable and renewable energy sources. It is only then that we can help in lengthening the life of mother earth. The aforementioned examples regarding smart growth communities are signs of hope that human beings can build a more sustainable earth for the future generations.

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