

A very significant impediment to the sustainability of our planet is the accumulation of greenhouse gases in the atmosphere, more specifically the build up of carbon dioxide. The accumulation of carbon dioxide in the atmosphere is a major impediment to the sustainability of our planet, as carbon dioxide contributes to a large portion of the green house effect. I believe that major cities need to implement greenspaces, more specifically, urban farms in order to reduce atmospheric levels of carbon dioxide.

Urban greenspaces are a great way to improve the sustainability of the environment for a multitude of reasons. The most notable reason is that urban vegetation directly decreases the amount of carbon dioxide present in the air, as carbon dioxide is a necessary component for photosynthesis. This is crucial in an urban setting due to the high rates of carbon dioxide emissions in cities. The reduction of carbon dioxide in the air improves the quality of the air and helps to reduce the build up of atmospheric carbon dioxide, which reduces the greenhouse effect. Furthermore, urban greenspaces also reduce cooling costs by providing shade and have an aesthetic benefit on the property where they are placed by providing beauty.

Urban greenspaces can also provide food. I propose that urban greenspaces should be utilized as urban farms so that urban vegetation also produces food for city inhabitants. This is beneficial as it still provides vegetation that reduces carbon dioxide emissions, reduces cooling costs, adds to the aesthetic appeal of a property, while also producing food. This production of food is not only beneficial as it is a source of food for inhabitants of the city; it is also beneficial as it reduces carbon dioxide emissions, as food does not have to be transported into the city. Furthermore, creating organic and sustainable urban farms helps improve the quality of food. It also brings the means by which food is grown to the attention of the public, as the green space where food is grown would be in an urban setting. This is important as it creates a concern for

how food is grown and the means by which our food is produced. This can help to create a society that is more mindful about the food that it is consuming.

In addition to green spaces being used as urban farms I would also propose that multi-layered plantings be implemented. An example of this would be having a planting where there is a layer of vegetable bearing plants at ground level, fruit bearing shrubs above them and nut bearing trees at the top of the planting. This maximizes the volume of foliage on each plot of land, which is beneficial as it maximizes the carbon dioxide uptake of the plants and the yield of vegetables, nuts, and fruits that are produced from the plot.

In order to increase the amount of urban greenspaces a multitude of changes need to occur. The government needs to increase urban green space by requiring a certain percentage of roof space of flat buildings to be converted to green space. The government also needs to issue tax credits to subsidize the installation of green spaces in order to incentivize cities to increase the amount of green space, which indirectly benefits the city itself by reducing energy consumption and boosting the value and appeal of the city. Also business owners and residence complexes should increase the amount of greenspace on their properties. This can be done in a multitude of ways, such as converting paved or concrete areas to green space, by building parking garages be underground in order to preserve above-ground greenspace, by maintaining plantings and putting effort into upkeep of gardens and by converting their plantings to multi layered plantings in order to increase the volume of foliage. Lastly, homeowners should consider creating and maintaining vegetable gardens, which is a small change that if is made by everyone will greatly improve the city, and make a major difference.

I believe urban greenspaces are a step in the right direction. It is important that we address the buildup of greenhouse gases in the atmosphere as it is a direct effect of

industrialization and it is our duty to preserve the earth instead of to destroy it. Urban greenspaces are a great way to do this as they directly decrease the amount of atmospheric carbon dioxide, which will help reduce the greenhouse effect thus improving the sustainability of our planet.