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## **Biofuels in Kenya**

Kenya is a low income country. Three hundred and sixty dollars in US money is about the average per capita for an income in Kenya. Being poor country Kenya ranks 148<sup>th</sup> out of 177<sup>th</sup> on the developmental scale. Most of the land in Kenya is medium to high potential of crop growth soil wise. Having so many people the people to land ratio is more than doubled. Many things are the cause of poverty in Kenya. Some of those things are somewhat manageable such as low agricultural productivity, other things such as AIDS/HIV is an uncontrollable thing which plans a major part in the percent of deaths and poor people. There is not a lot of income which leads to the small family farmers having less land available to them. Most of the small family farms are just that ... small family farms. Not a lot of area to expand and definitely not enough money to expand. Agricultural productivity is low because the typical family does not have enough money to keep a farm going if the family would contract a deadly disease. In most cases this is the problem. A deadly disease affects the family in a very powerful way.

Not having enough water is a major problem because the corn needs the water to grow and then to be able to be used for a bio-fuel sort of way. The climate is very harsh on the corn. The long droughts that Kenya will sometimes go through will suck up all the water from the ground and then that leaves the corn dry really fast and not enough time for it to produce enough for agricultural productivity to really increase. The droughts have been causing some serious ground problems. One thing that is directly affected is the amount of workable land. When it hasn't rained for so long the land becomes hardened and not as workable as it was before. Having less land to work is becoming more common and that leads into less time for the farmers to earn their needed small income.

Right now, natural resources are becoming more and more out of the picture. Not only in Kenya but in all parts of the world. The United States is right now having a lot of trouble and we need to find some other form of energy simply to save the resources we do have left. In Kenya, the natural resources are a little bit more limited then we would think. The amount of stuff they have is not very high but we think that since the productivity is low that they aren't needed very much however no matter where you are in this world it is very important to know that you have access to whatever it is that you may need to keep your family happy, healthy, and growing. Women, who live in the poorer areas, are disadvantaged because they aren't as equally treated socially so they depended more on farming. In fact, only about 30% of the women do not directly depend on farming as a source to stay alive.

Natural resources will always very slowly be diminishing away. No matter how hard everyone tries to keep them here, they will eventually either be used to the extreme and be washed away or worse yet the resources from a developing country such as Kenya will be transported to countries already developed such as the United States leaving the Kenyan people with that much less to work with. Not having the accessibility to water will also become a major problem. Suffering through a major drought is something that will always happen geographically and the will be nothing that anyone and accomplish with that. However, learning how to manage the water that they have available will help dramatically. Climate change is happening all over the world and with having that problem there is no man-powered solution. It all must be done environmentally. The trend tends to be that gradually over time this problem of erosion will always be there. Therefore, there needs to be some sort of fix so that the crops that have started to grow can continue to grow and will be productive. If for example, corn was grown on a hillside that has a problem with erosion and they continue to plant there and that is the most fertile place then a retaining wall could essentially be placed there to keep the ground in place. A retaining wall does not

necessarily have to be from stone and bricks, but in the climate situation in Kenya having a tree line retaining wall would not be the best solution.

Improving the amount of natural resources would help out many Kenyan families in the matter that they would not have to live moment by moment if they knew that there was something out there in the area to help them with their direct farming. Not only would improving or increasing the amount of natural resources available help but also so increase the amount of water available would help. Because people often contract water-borne illnesses they are unable to continue to farm and that lowers their chance to increase farming which harms their chances of survival. So you see that people in Kenya are constantly fighting to live day by day. If more corn was able to be grown then people could eat more sell more and earn more. There are however down sides to this. If more corn was grown they would then have to work more and that would be bad on them physically. The food situation is not good. So when they are in the fields working, since they do not have the machine technology that more developed nations such as the United States of America has, they have to do everything manually. Working in the fields everyday most days sun-up to sun-down and then some is hard on the body. Not having sanitary conditions is also a factor. The corn would more than likely not be used to power vehicles but more be used to power a generator or air-conditioning in a house. Bio-fuels would be very important to the developing countries in the forms other than transportation. The fuel needed is more for human consumption and such as. Having new ways to produce corn would be very beneficial because corn can be transformed into many things.

Having more corn or other crops produced would be used to treat the ill and hopefully eventually increase the life expectancy. It would not help women socially unless not being able to produce a large amount of crop is what is keeping them separated. However in most cases that is not the situation. Women are just not looked at as highly as men are in Kenya, Africa. It, meaning the ability to produce a large amount of crop, would help out the farmer in many ways. As mentioned before, crops mean life or death in most places of Africa. When you can produce many, many crops it is always good. Yields that are steadily increasing are always positive. If the small farmer would produce a surplus in crops just one full-term year then that would allow them to pay off maybe some of the debts that the family has accumulated over their lifetime.

If a developing country could find a way or be taught a way to use crops to not only feed and clothe the poor but a way to be used as medicine and other health things then maybe the amount of illness related things would go down and people could do more with their lives. Having bio-fuels would be a nice thing to have accessible to people so that they would be able to learn more. People in Kenya are not as educated as they could overall be. Because of the low income and small amount of crop yields, families can not afford to send their children or child to a school. Most children will actually start out helping on the family farm and what they are able to learn there is what they know until they are able to send themselves to a further education.

Kenya has a government much like the United States of America's government in the matter that we both have a president, vice-president and a cabinet. The people of Kenya are able to exercise their citizenship rights. Parliament is the supreme power of government in Kenya. The people can though elect people for an office and the vice president does automatically become president if the president dies and is no longer able to fill in the spot.

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