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Sustainable Development: Strategies to improve the World's quality of life

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TECNOLÓGICO DE MONTERREY.
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SUSTAINABLE DEVELOPMENT: STRATEGIES TO IMPROVE THE WORLD'S QUALITY OF LIFE

Nowadays, our planet is suffering from a food crisis. The chain of problems that haunts our communal home is starting to choke our way of life. Pollution, hunger, poverty, war, natural resources that are becoming more scant second after second; they are all links that appear as causes and consequences of the dreadful circle that we have all created with the treatment that we have given to Earth. The consequences of our lack of responsibility are now more evident than ever. A few years ago, most people thought that this growing scarcity of fertile lands mattered only to farmers and ecologist organizations; but now, any house-wife shopping at a super market can tell the great impact that these problems have caused on the price of food. Yet, even if it is very clear for the different sectors of the society and government now, these issues are perceived differently.

While middle-class and upper-class' complains are mainly about the extra expense that they have to make (but, in one way or another, it's an expense that they can cope with), the lowest levels of economic solvency have to struggle even more with hunger and undernourishment. People are starving because they have no possibility to work their lands with the increasing price of seeds and other cultivation inputs; and to earn their keeps is getting more and more difficult every time, for the prices on eatable items is increasing as well. Recent studies have demonstrated that "war victims, migrants, ethnic minorities, among other unprivileged sectors of society, are the most vulnerable part of the population to suffering malnourishment and hunger" (Feeding minds). People with the greatest need of help are being the most harmed by the new policies and taxes on food, which prevent them to have a decent quality of life. The real question, the one that each one of us should ask to ourselves is: Does it really have to be like this? The answer is quite simple: No, it does not. With the right measurements, we can turn this situation around and give these problems a solution instead of postponing the matter, which is what we have been doing for a long time.

In the case of Mexico, the investment assigned to agricultural development, such as new technologies for sowing and harvesting, and better work conditions for the countrymen, is certainly not enough if one takes in count that 45% of the food in this country is imported; shocking fact being that 24% of the population in Mexico is rural, according to the latest UN data. For the SAGARPA (The Secretariat of Agriculture, Cattle breeding, etc. in Mexico) the biggest challenge for the Mexican nation in agricultural development is to overcome the structural outdistance compared to other nations, as well as the enormous disparity in the intern regions of the country, giving more support to the most needed sectors and creating a n environment with conditions of productivity and efficiency. These goals are a true challenge, for the budget assigned to the country is really low compared to the quantity of people that makes a living out of it.

A typical country family is composed by approximately five or six members, even though there are cases where some couples procreate more children. Their diet is based mainly in beans and maize (present primarily in tortillas) and many of these families are living with only $1.25 USD per person per day. Actually, the poor life conditions in the country are a very important factor in the migration to urban zones, a very common phenomenon at present. Among other reasons, there is also the considerable increase in the prize of seeds, which reduces the possibilities of obtaining a rentable crop; the significant impoverishment of the land due to the use of cheaper (but prejudicial) transgenic seeds and the lack of proper instruction about rotation crops are other factors. On the other hand, the need of sowing land is leading to deforestation: many square kilometers of tropical zones, present mainly in the South-Western part of the nation, are being knocked down in order to provide some fertile soil to the countrymen. The situation gets more complicated as we analyze that this deforestation leads to more pollution; more

pollution leads to more diseases, and that leads to a long etcetera of dreadful consequences that take part on the vicious circle of the world's actual problems.

An alternative to change this situation would be creating new fertile land in the deforested territories that were turned into desert by their over-exploitation. In fact, a Mexican Indigenous man named Jesús León Santos achieved to do so to the formerly deserted territory of La Mixteca, Oaxaca, which made him earn the 2008 Goldman Environmental Award, the most prestigious prize of ecology. Santos created the CEDICAM (for its name in Spanish), an organization that is dedicated to plant and grow over 200 thousand trees per year in that region. Their hard work has indeed paid off, for La Mixteca is starting to be fertile again. This is a consistent proof of the possibility of rescuing fecund land that was thought lost. If this kind of programs were to be applied in all, or at least most, of the rural zones in Mexico, the possibilities for country families to have a good land and improve their quality of life would indeed increase. That way, it would not be necessary to cut down forests and jungles in order to have crop soil; and the migration index would start to reduce.

Another thing to do would be to provide the unprivileged people with the means to progress. UN's Millennium Development Program number One Goal is to eradicate hunger and poverty. One way to achieve this goal would be investing some of the funds destined to this matter in communal lands for the poor. With advice from biologists and agriculture specialists, they could be thought to sow the proper way and to do rotary crops so the land would not impoverish. Seeds and other needed tools would be given to them with a subsidy. It will work as a "Buy now, pay later" deal; the countrymen would pay a 5% of their crop per year (payment with product) to pay for the land and the implements. When the initial price of the property is covered, the family will be given the ownership of their parcel. All the parcels will be given to each countryman with a size proportional to the size of their family (each terrain will have an established limit of parcels). This way they will be able to grow their own food and to earn a patrimony. If the production grows enough, enterprises interested in participating and investing will help to get to the next phase: when the production of their family parcel grows enough to aloud them to commerce with his products, they could sell them to the before mentioned enterprises with a buying agreement that would guarantee a fair price for both sides of the deal. The benefit that enterprises will obtain out of this agreement is saving an important amount of importation expenses; on the other hand, country families will have an extra income that will aloud them to reinvest in their families and in their lands and increase their quality of life. When the production of food increases, it will result in an obvious diminution of its prices, something that will benefit us all. The most important thing is that these people will be able to sustain their families and will have the option to progress and cooperate with their country's development. Offering new technology to farmers to improve the harvest (such as more effective watering systems) would also increase the productivity without problematic side-effects that other items imply, such as transgenic seeds.

Another point to consider is the actual development of a new science that affects agriculture greatly: Biotechnology. Biotechnology is the application of new know ledges, such as genetic, advanced chemistry, etc., to improve biological issues (such as alimentation and medicine) either in a medical or industrial way. One of its more famous (and debated) achievements at present are the called "transgenic seeds". The transgenic situation is a very polemic issue nowadays. The people who are in agreement of the use of genetically modified seeds declare that these pips are the salvation of the millions of starving people all around the world. Still, it's not our dream utopia come true, not yet, at least. Indeed their brief growing period and more plague-resistant plants do sound appealing as a solution for food scarce; but there is a down side: the scientific tests made to them cannot prove that they have no negative side-effects in a long term period. The FAO admits that is no guarantee that these "super seeds" may increase or decrease levels of naturally occurring proteins, toxins or other harmful compounds in foods, or the soil itself. Research should be a lot more profound before this new genetically modified flora is designated to population nourishment. After all, one must ask to oneself: why do governments use natural seeds and not

transgenic ones in the research for natural alternative fuels? Yet, why do they don't hesitate to give them to the populace?

To increase the production of food, especially seeds, it's a priority in many countries; the problem is that sometimes it is not to benefit the poor. In many industrialized countries, the price of food is increasing dramatically due to the impel to the creation of new alternative fuels based on natural oils, thought to make up for the increasing scarcity of petroleum. These new politics have caused many prejudicial effects to the population: from a decrease in the demand of the market due to the very high prizes, to street riots. These situations are creating social break-ups and more difficult conditions to the underprivileged sectors of society. Producing new fuels, even though is a very important task in order to reduce pollution and release the industry from its dependence to petroleum, should never be more important than feeding the population. Scientific research about this alternative fuels should not be stopped; but it must never be put above the well being of the people. Applying some of the before mentioned measurements of providing people with the right means to progress will assure that research's continuity and people's well being can be balanced and not affected by one another.

Now, it is important to say that solutions are not magical. Nobody should expect that after a week of applying the program, they'll get miraculous results and have a forest surrounding them at the blink of an eye. This is a long term commitment that requires effort and compromise, as well as a great deal of perseverance in order to give results. The planet was not in risk of collapsing overnight; it was a constant process of years and years of over-exploitation. Therefore, to nullify our negative influences on Earth may take as long. The most important thing to remember is that temporary solutions are not the answer; the root of the problem must be attacked in order to finish it. As in the popular saying: "Give a man a fish, and he will eat one day; teach him how to fish and he will eat forever", instead of investing constantly in concerts and funds to feed the poor for only a couple of months, if families are able to produce their own food, they will get the chance to be independent and productive, which is a desirable thing for every member if society.

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