

Genetically engineered crops



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The use of genetically engineered food has gained much popularity with over 60% of the processed food in America being Genetically Engineered. Most of beers and cheese in the world are from genetically modified foods as well as medications. A recent research shows that farmers in America increased their yields by 5.3 billion pounds and increased income to \$22 billion. This resulted from the use of Genetically Engineered Foods. Miguel and Rosset agree that with the increased number of malnourished people in the world, questions remain whether the use of genetically engineered foods would result in dealing with the hunger crisis around the world.

Biotechnologists pride in innovating breakthroughs essential in protecting the environment, reducing poverty in third world countries, and feeding the world. However, this view holds some assumptions, which creates doubt as to whether these innovations would achieve the above. First, they assume that genetically engineering is the one and only best way to improve agricultural production and provide for the world's food needs. The second assumption is the misconception that the real cause of hunger is population. The main reasons for hunger are inequality, lack of education, poverty, and lack of access. Many people across the world are too poor to purchase food despite the fact that food is available. Research shows that food production per an inhabitant today is greater than ever before. This means that the best way to deal with poverty is addressing the question of illiteracy, inequality, and lack of food accessibility.

The second reason why genetically manufactured foods may not be a solution to hunger is because most of the innovations made are profit-driven instead of being need-driven. Biotechnology companies produce seeds that

intensify farmers' dependence on them. For instance, engineering seeds that produce their own insecticides. Farmers end up relying on these seeds only and forego the practice producing, sharing, and storing their own seeds. The companies then forbid farmers from keeping or selling these seeds since they have intellectual property rights protection. The companies, therefore, aim at maximizing profits rather than taking into account the needs of the farmers. Moreover, it becomes quite difficult for the third world countries to afford to pay for these intellectual property rights. Eventually, the developed countries would have to give aid to the developing countries to be able to afford these foods.

Recent experimental studies show that engineering seeds genetically do not increase the harvest of crops. A research by USDA Economic Research Service revealed that in 1998, the yields of engineered and conventionally produced crops did not have significant differences. Cotton, which is Glyphosphate tolerant, did not exhibit any increase in yields. Another research on 8, 000 trials revealed that conventionally produced soybeans yielded more bushels than Round-up Ready soybeans. This means that the world cannot depend on genetic engineering to increase food productivity and meet future food needs in the world.

Consumption of genetically engineered food is harmful to health though scientists claim it is harmless. Recent research shows that there are probable risks from consuming such foods. This is because, the new proteins in the genetically engineered foods act as toxins, which change food metabolism. It leads to the production of new toxins or decreases the nutritional value of the meals (Miguel and Rosset, 2005). For instance, the <https://assignbuster.com/genetically-engineered-crops/>

herbicide resistant soybeans contain less isoflavones, known for preventing a number of cancers in women than the conventionally produced soybeans. This means in attempting to reduce hunger problems, more problems like health may arise. Increased health problems would require more medical resources and equipments, which most countries may not have access to. It is, however, common knowledge that some traditional crops have medicinal values, which would reduce the health issues.

If the genetically engineered foods do not have any effects, then the producing companies should not fight against labeling of the food as genetically engineered food. It is an excuse not to label these foods because of the fact that it will result to additional costs. Research shows that a majority of Americans want these foods labeled. People should be allowed to choose whether to buy these foods while at the market and not be forced to plant them (Froma, 2011).

The world scramble for markets shares is forcing companies to deploy genetically engineered crops around the world without adequate tests on the probable impact of the foods on human health and the ecology (Froma, 2011). Confidential information revealed to the public show that even scientists distress over the increased large-scale use of transgenic crops. This is because, they feel that these crops pose several environmental risks, which threaten the agricultural sustainability. This will worsen the current hunger situation.

According to Miguel and Rosset, the impact of the genetically engineered crops on the ecology remains a complete mystery. Environmental groups

advocate for the establishment of appropriate regulations to govern the testing of the crops. There is urgency to look at the impact of the crops not just the target crop, weed, or insecticide, but also on the indirect impact on the crop, like metabolic changes, the nutrient content, and growth. However, there is limited availability of funds to carry out such research. Without the adequate research and information on potential effects, this remains a disaster in the waiting since the genetic pollution cannot be reversed.

The genetically modified crops are likely to follow the paradigm of pesticides. These plants produce their own insecticides and farmers do not need to use any other forms of insecticides. However, with time, the pests become resistant to insecticides, they develop and adapt resistance to the insecticide produced by the crop. Miguel and Rosset argue that when genes are engineered in the crops, there is an increased exposure of the pesticides, which dramatically accelerates resistance. This means that, in the short and long run, the scientists will have to re-engineer the crop so that they produce plants that have insecticides. Moreover, the genetically modified plants raise other ecological and environmental concerns. For instance, these crops could result in pesticide resistant weeds and insects, which contaminate the crops and other crops in the same family.

Rauch shows that organic production has enjoyed enormous success over time, though it has its own flaws. With organic production, farmers do not use artificial fertilizers, but make use of a lot of manure. This manure has the potential of polluting water in the environment and contaminating food Jonathan. Though the conventional farmers use remarkably little herbicides, they do a lot of ploughing, which exposes the soil to erosion from the rains.

In addition, it releases the gases from the solid to the environment. One should not forget that this kind of farming requires a lot of land, but with minimal chemicals.

According to Coleman, the strategy would be approaching genetically engineered foods with a lot of caution. Many people especially in the sub-Saharan Africa die, with a person dying every 3.6 second due to hunger. It is a moral disgrace that governments return genetically engineered food just because they were grown using biotechnology while people die for hunger. There are no proven health effects yet of the Genetically Engineered Foods, and the Roman Conference gave solid grounds that the food is healthful, useful and non-harmful. In situations of dire need for food, people should embrace the moral obligation of providing food for the malnutrition, even if it means the Genetically Engineered Foods .