

Global Poverty and the Ethics of Gene Technology

GLOBAL FAKİRLİK VE GEN TEKNOLOJİSİ ETİĞİ

Juha RÄIKKÄ^a

^aDocent in Practical Philosophy The Vice Head of the Department University of Turku Department of Philosophy, Assistentinkatu 7 20014 Turku, FINLAND

Abstract

Each year, some 18 million people die prematurely from poverty-related causes such as malaria, lack of clean water and malnutrition. This makes 50.000 deaths per day, including 34.000 children under the age of five. A suggestion has been made that we could reduce the number of deaths by the help of genetically modified organisms (GMO's). GM agriculture in the developing countries may (1) produce bigger harvests, (2) make food more nourishing and (3) make food cheaper. However, there are well-known arguments against this proposal. In my presentation I will evaluate those arguments and argue that they are not entirely convincing.

Key Words: Gene technology, extreme poverty, hunger, ethics

Türkiye Klinikleri J Med Ethics 2005, 13:71-73

Özet

Her yıl yaklaşık 18 milyon kişi sıtma, susuzluk ve yetersiz beslenme gibi yoksullukla ilgili nedenlerden dolayı zamanından önce ölüyor. Bu, 5 yaşın altında 34.000 çocuğun da dahil olduğu, günde 50.000 ölüm etmektedir. Genetik olarak modifiye edilmiş organizmaların (GMO) yardımı ile ölümlerin sayısını azaltabileceğimiz önerisi yapılmaktadır. Gelişmekte olan ülkelerde genetik modifikasyon ziraatı, (1) daha fazla ürün üretebilir, (2) gıdayı daha besleyici ve (3) daha ucuz yapabilir. Bununla birlikte, bu öneriye karşı iyi bilinen argümanlar vardır. Sunumumda, bu argümanları değerlendireceğim ve bunların bütünüyle inandırıcı olmadığını tartışacağım.

Anahtar Kelimeler: Gen Teknolojisi, aşırı yoksulluk, açlık, etik

Each year, some 18 million people die prematurely from poverty-related causes such as malaria, lack of clean water and malnutrition. This makes 50.000 deaths per day, including 34.000 children under the age of five.

A suggestion has been made that we could reduce the number of deaths by the help of genetically modified organisms (GMO's). GM agriculture in the developing countries may; (1) produce bigger harvests, (2) make food more nourishing and (3) make food cheaper.

There are well-known arguments against this proposal. In my presentation I will evaluate those arguments and argue that they are not entirely convincing. However, I

will begin my discussion by briefly showing that at the moment there is *no feasible political solution* to the poverty problem. Contrary to the facts, the standard arguments against GM agriculture seem to assume that there is such a solution.

1. Poverty problem

There is no doubt that people are familiar with the fact of extreme poverty. The main purpose of the United Nations' *Millennium Declaration* is to eradicate extreme poverty and hunger. According to the Declaration, accepted by General Assembly, the goal is [t]o halve, by the year 2015, the proportion of the world's people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.

But how to do this? The Declaration lists the following means, among others. The industrialized countries should (1) adopt a policy of duty- and quota-free access for essentially all exports from the least developed countries, (2) implement the enhanced programme of debt relief for the heavily indebted poor countries without further delay and agree to cancel all official bilateral debts of those countries in return for their making demonstrable commit-

Geliş Tarihi/Received: 01.09.2005

Kabul Tarihi/Accepted: 23.09.2005

Yazışma Adresi/Correspondence: Juha RÄIKKÄ
Docent in Practical Philosophy
The Vice Head of the Department
University of Turku
Department of Philosophy
Assistentinkatu 7
20014 Turku, Finland
jraikka@utu.fi

Copyright © 2005 by Türkiye Klinikleri

ments to poverty reduction, and (3) grant more generous development assistance, especially to countries that are genuinely making an effort to apply their resources to poverty reduction.

Now, the goal of the Declaration is modest. Why is the purpose only to *halve* the number (or percent) of people who live in extreme poverty? And why is the time period 15 years? (The Declaration was given in 2000.) Naturally, the idea is that more demanding goals would be unrealistic, and perhaps this view is justified.

It is important to note that the means of eradicating poverty – i.e. (1) fair trade, (2) debt relief and (3) more intensive development assistance – do not *oblige* any country. They are based on every country's free political will which they do not have. This is one reason why the means do not work properly. Statistics show that the goal of halving poverty is even farther away than it was five years ago. Other reasons for failure are related to the means themselves. Fair trade, debt relief and development assistance are very complex tools, and one can use them in a counter-productive way (as the history of development assistance shows).

Are there other means to eradicate poverty? Of course there are. Among other proposals, they include (1) Tobin Tax, which is a global tax on currency transactions as a means of financing foreign aid and stabilizing the international financial system, and (2) Global Resources Dividend, according to which states and their governments shall not have full libertarian property rights with respect to the natural resources in their territory, but can be required to share a small part of the value of any resources they decide to use or sell (6).

There are many similar proposals, and what is common to all of them is that they are based on the assumption that rich industrial countries are willing to participate in enforcing them. Unfortunately, the assumption may be mistaken, although there are some positive signs that rich countries will seriously try to eradicate extreme poverty. Future will show whether there will be even more political willingness, as there should be. If (1) extreme poverty threatens rich countries themselves in the future (for instance because of population growth) or if (2) there is more political and moral pressure toward political leaders of rich democracies, then perhaps they will start to take some kind of action effectively.

A problem is that rich industrialized countries may cause poverty in the developing world. Rich countries grant loans to governments of poor countries even if they are not democratic, and dictators sell the natural resources of their land at giveaway prices (and keep the money). This (1) helps authoritarian governments to maintain themselves in power even against near-universal popular discontent

and opposition, (2) imposes huge debts of corrupt predecessor regimes upon their democratic successors, and (3) strengthens the incentives to coup attempts (6). The actions of IMF and World Bank have also undemocratic consequences: they partly determine the policies of the countries they help. The lack of democracy has a correlation to poverty.

In conclusion, then, at the moment there is no feasible political solution to the poverty problem. When we evaluate the ethical acceptability of GM agriculture it is important to keep this in mind.

2. GM agriculture and poverty

Let us consider five typical arguments against using GM agriculture in helping the poor.

Argument 1. The major cause of poverty and hunger in the world is not lack of food. The distribution of the means to acquire food and the actual distribution of what is already available is poor. Therefore, there is no need to use GM agriculture.¹

Argument 1

- does not tell whether GM agriculture will be useful in the future: even if there is enough food now, GM agriculture may be necessary in the future.
- does not prove that GM agriculture is useless: *if* GM agriculture gives bigger harvests or makes food more nourishing or cheaper, then it may be very helpful.
- assumes wrongly that there is a feasible political solution to the problem.

Argument 2. Gene-altered plants will induce allergies, or rock the delicate balance of nature. Gene manipulated grain and other species are living pollutants, the effects of which are beyond anyone's grasp to comprehend. Therefore, GM agriculture should not be used.²

Argument 2

- is based on the unproven assumption that GM food has harmful effects on health or environment: European Union stresses the risks of GM agriculture, but the reasons behind these arguments may be economical rather than environmental or social.
- is based on the suspect ethical claim that it is more important to avoid health and environmental risks than to try to save people's lives: if GM agriculture saves five percent of people who would otherwise die, it saves 2.500 people every day.

Argument 3. Genetic engineering means that the poor in rural areas of the South may well become more dependent on the multinational companies who provide seeds to local farmers. This is social injustice. Therefore, GM agriculture should be rejected.³

Argument 3

- reveals one problem that is related to GM agriculture, although one should remember that *all* agriculture have similar consequences in poor countries: the problem is not related only to GM agriculture.

- is based on the suspect ethical claim that it is more important to oppose social injustice than try to save people's lives: social injustice need not kill anyone.

Argument 4. Even if gene technology were to yield bigger harvests, it would not help solve the hunger problem. The causes underlying hunger are political and economic, they are not technical. Therefore, GM agriculture is futile.⁴

Argument 4

- points out that, at best, GM technology provides partial solutions to hunger and poverty: clean drinking water and cheaper medicines, among other things, are needed as well.

- assumes wrongly that political problems cannot have technical solutions: it is common in politics that difficult questions are solved by technical means.

- is based on a suspect claim that nothing need be done if everything cannot be done: of course, one must try to save one person even if it is impossible to save ten.

Argument 5. The biotech industry says genetically modified seeds will help to feed the world's growing population, but so-called Terminator and Traitor seeds will only add to the world's hunger problems, because local farmers will lose their own seeds. Therefore, GM agriculture is wrong.⁵

Argument 5

- points out a possible danger of GM agriculture.

- is speculative and insufficient to show that we should not try to use GM agriculture among other means when fighting against extreme poverty.

3. Conclusion

The problem of poverty should be resolved by political means, but at the moment there is no feasible political solution. The ethical acceptability of GM agriculture should be evaluated in this context, and it seems that we should try to use *all* the means we could possibly have to reduce the number of unnecessary deaths. It is difficult to say how helpful GM technology in agriculture could be; the future may show that it is not very helpful, at least in eradicating poverty.

REFERENCES AND NOTES

1. "A reason that is currently advanced by GM foods advocates is that these will reduce poverty and hunger in poor developing countries. Given the reality of hunger and the consequent death and malnutrition in many parts of the world, this reason could easily turn anybody emotional and irrational. But the premise on which this reason is based is shaky. The major cause of poverty and hunger in the world is not lack of food. (...) But the distribution of the means to acquire food and the actual distribution of what is already available is poor." The Ram's Horn. URL: <<http://www.ramshorn.ca/archive2003/214.html>>.
2. "Claims have been heard that gene-altered food could alleviate the problem of world hunger. (...) We are afraid that gene-altered plants will induce allergies, or rock the delicate balance of nature. We have learned the term frankenfoods, somewhat like Frankenstein's food. We regard manipulated grain and other species as living pollutants, the effects of which are beyond anyone's grasp to comprehend." IFPRI in the News. URL: <http://www.ifpri.org/media/innews/2002/042102.htm>
3. "Genetic engineering means that the poor in rural areas of the South may well become more dependent on the multinational 'Life Industries', so called, in the North." The Swedish Society for Nature Conservation. Gene Technology Policy. URL: <<http://www.gm-unccd.org/FIELD/NGO/SSNC/SSNC.htm>>
4. "Even if gene technology were to yield bigger harvests, it would not help solve the hunger problem. The causes underlying hunger are political and economic, they are not technical." IFPRI in the News. URL: <http://www.ifpri.org/media/innews/2002/042102.htm>
5. "The biotech industry says genetically modified seeds will help to feed the world's growing population, but (...) so-called Terminator and Traitor seeds will only add to the world's hunger problems." Conscious Choice. URL: <<http://www.consciouschoice.com/2005/cc1804/killerseeds1804.html>>
6. Pogge Thomas. World Poverty and Human Rights. Cambridge: Polity Press, 2002.