

## To GM or not to GM?

A few hundred years ago it was thought that because there was a fixed amount of farmland the production of food would not keep up with the increasing population. Since then modern improvements and world trade have enabled most developed countries to avoid food shortages. Nowadays there are more than 6 billion people in the world and likely to be 9 billion by 2050, and again there is a concern that a shortage of food is looming. It is estimated that soon more than a billion people in the world will be undernourished.

Genetically modified (GM) crops are seen by some as the answer to food shortages. Supporters of this new technology claim that by using disease and drought resistant crops, more land can be cultivated and existing agricultural land used more efficiently, also goods such as rice and tomatoes could be modified to contain cures for diseases.

Do GM crops guarantee 'food security' or is lack of money in underdeveloped countries the real problem? Poor people are starving because they cannot afford to eat the food they produce. Also the pollen from GM crops can affect the crops of nearby organic businesses and many GM crops have resistance to weed-killers and pesticides, meaning farmers can make use of more chemicals resulting in a reduction of wildlife and biodiversity. Furthermore the long-term risk to human health from eating GM foods has not yet been properly investigated.

It costs ten times as much to develop a new GM crop than a conventional crop and only large seed manufacturers can afford to carry out research. Globally one American company controls over 80 per cent of the seeds for the area of planted GM crops, this company does not allow farmers to save seeds for planting and makes them buy new seeds each year.

There is no clear answer to the GM debate because most evidence on each side is contested. It is impossible to know whether GM crops will boost productivity to feed the world or if the market will fail due to monopoly, environmental damage and adverse side-effects to human health.