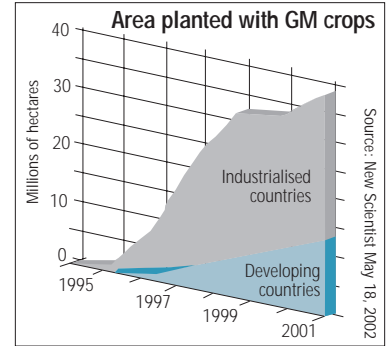


the gene genie?

Biotech: Big Business

The global biotech research is in the control of fifteen major corporations, thirteen of which are North American



Why do we need GMOs? Top corporations based in rich developed countries have invested lot of money in the research and development of these modified crops. These conglomerates say that genetic modification increases the yield of the land. Scientists and environmentalists on the other hand believe it is still a rich man's technology as it is financially beneficial to produce products of supermarket. Are high returns the reason why conglomerates propagating GM crops as the only solution to world hunger?

Global Biotech research is controlled by 15 major corporations out of which 13 are in North America. They are called

the Miami Group. In 2000, about 109.2 million acres were planted with transgenic crops. Countries that grew 99% of the global these crops were the United States (68%), Argentina (23%), Canada (7%), and China (1%)

US is the largest producer of GMOs in the world. In 1999, it exported \$60 billion in agriproducts. Having the largest interest in the market, it dictates rules. It also detests any regulation in the laws. Declare GM products on their label? "No, No," says the US, "Importing countries should implement balance and checks before letting any GMO product enter. If anything goes wrong with any GM crop, the buyer should be held responsible." The producer doesn't pay here, it just collects checks.

Environmentalists cry foul. The developed world excluding Argentina and China have only 1% stake in this business. But it is this 1% that bears the brunt of these partisan policies. The small poor countries do not have the technology to check the kind of crop entering their boundaries. Land and resources are being used as field trials here by the GM conglomerates, polluting their biodiversity. What these companies do not get by fair means, they take by sleath. Local farmers lose out in the price and quality battle.



RUSTAM VANIA

'Golden rice' a solution to hunger and malnutrition?

Biotechnologists have added beta-carotene in the genetically modified version of rice to enhance the vitamin content. Though accepted by organisations like International Rice Research Institute, Manila, Farmers in Philippines and NGOs the world over are sceptical.

FOR:

Project scientists, some international organisations

- Genetic Engineering is helping alter rice to produce vitamins like folic acid (prevents birth defects) and vitamin A (prevents eye problems).
- Enhancement of nutrients would meet the nutrient needs of economically poor people of Bangladesh and India, where rice is a staple food, by providing more nutrients in the same amount of rice.
- DNA sequencing in rice could help us understand the sequence of different genes in various other crops like maize, corn, wheat, etc. With improved plants farmers can use specific plant varieties for specific ecosystems.



AGAINST:

Some farmers and NGOs

- This is a roundabout way to get inroads into the seed market. This will lead to privatisation of sowing thus depriving small farmers.
- Each person will need more than 2 kilos of rice per day to meet the vitamin demands.
- People should not survive on rice alone. Crop rotation and multiple cropping by local farmers will help better than a huge yield of a single crop throughout the year. Monoculture would be encouraged by this.
- Nature gives us abundant and diverse sources of vitamin A. Polished rice is not the only answer to it.