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## [Argentina: Genetic engineering causes deforestation](#)

Genetic engineering is the state of the art output of the Green Revolution. It has deepened a pattern where monoculture, land concentration, and dependence --on the technology, on the seed-- are the rule.

GE has been heralded by the same promises of the Green Revolution: that it will feed the starving. Promoters of GE have even tried to make its critics feel guilty: "The day you look into the eyes of a starving person, your opinion over transgenic crops changes ... Today, 24,000 people a day die because of malnutrition. So when the North, Europe, decides not to use this technology, this is morally unacceptable", said Dr Clive James, biotech specialist at International Service for the Acquisition of Agri-Biotech Applications (ISAAA).

In 1996, the Argentinian government eagerly approved the introduction of transgenic soy and became a major global producer of Monsanto's Roundup Ready (RR) soy, mainly for export. Meanwhile, hunger keeps on increasing. In spite of record-breaking harvests, nearly half of Argentinians are living in poverty. As of May 2002, 18 million people --almost 50% out of a population of approximately 37 million-- cannot afford to meet their basic needs.

More than twenty years ago, the Nobel Laureate economist Amartya Sen demonstrated that hunger and famine can and often do occur in situations where there is no overall shortage of food. Sen explained that when, even in situations of overall food abundance, a household's 'entitlement' (that is, its ability to acquire food through legal means) is eroded because of a fall in ownership of assets (crops, livestock, property, jobs and so on), households will face hunger and starvation, unless there is some form of social security to protect them.

Also, the arguments of the biotech group has been that GE crops will help protect the environment by increasing yields on land that is already cultivated, and so reduce the need to clear forest or other precious habitats for agriculture. However, the huge increase in Argentinian soybean production --from around 10 million tonnes in 1991 to nearly 27 million tonnes in 2001-- is a result of increasing acreage, not increasing yields. The increase in acreage has come about both through the replacement of other crops --not least on what were once small and medium sized family farms growing food for local and national consumption-- and by deforestation.

A Greenpeace study reveals how GE soybean has contributed to the accelerated destruction of the Yungas forest, in the northern province of Salta --one of the economically poorest but biologically richest in Argentina. The Yungas mountain rainforest, or 'cloudforest', is probably the most biodiverse area of Argentina. The forest can be divided into four zones according to altitude, which ranges from 300m (950ft) to more than 4000m (14,000ft). The first zone, the Selva Pedemontana (forest at the foot of the mountain), is the most threatened. This zone harbours 30% of all biodiversity of this valuable ecosystem. But less than 20% of the Yungas remains in good condition for either conservation or sustainable development activities.

The Selva Pedemontana is the zone at highest risk and has traditionally suffered conversion to sugar

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cane and orange plantations. More recently, beans and tobacco monocultures have contributed even further to forest destruction. But now Roundup Ready Soy threatens to strike a final blow to this unique and wonderful ecosystem. "At this pace we can forget about the Selva Pedemontana in 5 years" says Dr Alejandro Brown, founder of the Ecological Research Yungas Laboratory at the National University of Tucumán. According to Dr Brown's report, 1000 hectares (2500 acres) a year of Selva Pedemontana are transformed to GE Soy in the areas of Orán and Tartagal in the province of Salta.

The rural poor lose an ecosystem which can provide them with numerous goods such as food, medicines, raw material for handicrafts or products that they can trade. Like the Green Revolution, Genetic Engineering has failed to feed the world. For the biotech industry, it has been always all about money.

Article based on information from: "Record harvest-record hunger", Greenpeace, June 2002, [http://archive.greenpeace.org/~geneng/reports/food/record\\_harvestembargo.pdf](http://archive.greenpeace.org/~geneng/reports/food/record_harvestembargo.pdf)