



India Position paper

Country: India

Committee: Legal committee

Topic: Ethics and Legality of Genetic Engineering

India, officially the Republic of India, is a country in South Asia. It is the seventh-largest country by area. It is stated to become the most populous country in the world during the year 2023, making it the most populous democracy in the world. Their long occupation, initially in varying forms of isolation as hunter-gatherers, has made the region highly diverse, second only to Africa in human genetic diversity.

Historically, India has been at the forefront of genetic research and biotechnology. One of the earliest examples of genetic engineering in India was the development of hybrid varieties of wheat and rice in the 1960s and 1970s, which helped the country achieve self-sufficiency in food production. However, genetic engineering in India has also faced significant ethical and legal challenges.

One of the most controversial aspects of genetic engineering in India has been its potential impact on traditional agricultural practices. For example, the introduction of genetically modified (GM) crops has been criticized for displacing small farmers and destroying traditional seed varieties. In response, several Indian states have banned the cultivation of GM crops.

Another area of concern has been the use of genetic engineering in medical research. While genetic research has the potential to revolutionize healthcare, it has also raised questions about privacy, informed consent, and the potential for discrimination against vulnerable populations. In India, these issues have been particularly salient in the context of genetic testing and counseling.

The Indian government has attempted to address these ethical and legal challenges through a series of laws and regulations. For example, the Genetic Engineering Approval Committee (GEAC), which was established in 1989, is responsible for approving the use of genetically modified organisms (GMOs) in agriculture and other sectors. Similarly, the Indian Council of Medical Research (ICMR) has developed guidelines for genetic research involving human subjects.

Despite these regulations, however, genetic engineering in India remains a contentious issue. Some critics argue that the government's regulatory framework is inadequate to address the complex ethical and legal issues raised by the field. Others argue that the benefits of genetic engineering, such as increased food production and improved healthcare, outweigh the potential risks.

In conclusion, the ethics and legality of genetic engineering in India have been shaped by the country's long history of cultural and social diversity, as well as by its experience with biotechnology and genetic research. While the field has the potential to revolutionise agriculture and healthcare, it has also raised significant ethical and legal questions, which the Indian government has attempted to address through a series of laws and regulations. However, the debate around genetic engineering in India is likely to continue as scientists, policymakers, and the public grapple with its potential risks and benefits.