**POSITION PAPER**

Committee: Health Committee

Issue: What are the constraints necessary to genetic modification of the human gene pool?

Author: The Netherlands

Genetic modification is the direct manipulation of an organism's genes using biotechnology. The government would like the Netherlands to play a leading role in expanding knowledge of biotechnology, albeit in a responsible manner

Dutch involvement

There are five ministries within the Dutch government that are directly concerned with biotechnology; These are the Ministries Of Economic Affairs (EZ), Agriculture, Nature Management and Fisheries (LNV); Education, Culture and Science (OC&W), Housing, Spatial Planning and the Environment (VROM) and Health, Welfare and Sport (VWS). In addition, the ministry of Foreign Affairs is responsible for biotechnology policies in relation to developing countries.

General viewpoint

The dutch government follows a ‘yes, providing’ policy.

The Dutch government realises that developments in biotechnology are happening worldwide and are unstoppable. On the basis of its view that this technology will offer great opportunities to society, the government has adopted a policy of encouraging research and innovation in biotechnology. The government would like in Netherlands to play a leading role in expanding knowledge of biotechnology, albeit in a responsible manner.

The most important issues remain, however, the safety of public health, the environment and biodiversity. Ethical issues concerning biotechnology applications are also important.

Healthcare

In the Dutch government’s opinion, biotechnology has already resulted in new methods for prevention, screening and treatment of human diseases. It is generally expected that biotechnology will become increasingly important for healthcare in the future. Yet it remains to be seen whether everything that is technically possible is indeed desirable. The Dutch government has prohibited cloning of human beings. The same technology may, however, be used to cultivate tissue for transplant purposes. Transplanting animal organs into humans (xenotransplants) will remain prohibited as long as the risks for patients and public health remain unacceptable.

The Dutch government has announced it wants to allow growing human embryos “under strict and limited conditions” for scientific research, thereby giving hope to parents struggling to conceive. The research has to do with infertility, artificial reproduction techniques and hereditary or congenital diseases. It also specifically included people who became infertile after being treated for cancer at an early age.

The Netherlands will change its laws on embryonic research, which until now only allowed tests to be conducted on leftover embryos procured from in vitro fertilization processes. The so-called “14-day rule” – which says that human embryos cannot be cultured in the lab for more than two weeks – will also still strictly be adhered to. The Dutch government believes that until now the ban on the cultivation of embryos has hampered research which could help with the treatment of diseases on the short to medium-long term. This included various hereditary illnesses such as mitochondrial diseases, which affect cells in the body.

Ethical aspects

Developments in biotechnology are happening very rapidly and the possibilities seem endless. It is doubtful, therefore, whether society will accept everything that is technically possible. The Dutch government is promoting an open dialogue on the desirability of biotechnology applications.

Economic interests

The Dutch government believes that biotechnology will be crucial for the future and wants to strengthen the Dutch position in this area.It will consequently be investing large sums of money over the coming years in research and new biotechnology company start-ups. However, the government realises that it is important that any new developments take place in a responsible manner.