INTERNATIONAL JOURNAL OF JUDICIAL LAW

Legal Regulations on Human Gene Cloning or Genetic Reproduction and the Legal Environment of Mongolia

TS Amarsanaa
PhD Student in Law, Mongolia

* Corresponding Author: **TS Amarsanaa**

Article Info

ISSN (online): 2583-6536
Volume: 04
Issue: 05
Received: 23-08-2025
Accepted: 25-09-2025
Published: 26-10-2025
Page No: 74-81

Abstract
This article analyzes the legal implications of human gene cloning across various jurisdictions and under international law. It focuses on bioethical, legal, and human rights perspectives, particularly the principle of inviolability. Through comparative legal analysis, the paper explores regulatory trends and suggests harmonization of genetic laws with international standards to safeguard human dignity and bodily integrity.

Keywords: Human genetics, gene cloning, inviolability, bioethics, legal regulation, privacy, international law

1. Introduction

The cloning of human genes, or the creation of identical copies of genetic material, is a relatively new scientific endeavor. However, as genetic science advances rapidly across countries, there is a real need to examine the legal implications of this research.

The process of creating identical copies of genes is directly related to human rights and is a valuable information that preserves human genetic information. Therefore, international organizations have called on member states to support the adoption of international treaties and conventions. Countries have accepted this call and are developing and adopting domestic legislation. Genetic research and analysis should be for the health and well-being of people. In accordance with this principle, countries have begun to accept research, analysis and testing on human genetic engineering.

The report reflects the legal regulations of some foreign countries and aims to analyze how Mongolia has regulated them. Within this goal, the following objectives are included. These include:

1. The concept of cloning a human gene, or creating an identical genetic copy
2. Legal regulations in various countries regarding cloning or creating identical copies of human genes
3. Research was conducted on the sub-topic of the legal status of human gene cloning or the creation of identical genetic copies in Mongolia.

Genetics is not just a biological science, but also a subject of legal science because it involves human rights issues. The main field of study of legal science is the protection and maintenance of human rights. For this reason, there is a need to study the issue of protecting sensitive human information, such as genetic information, and whether it is permissible to clone genes or create identical copies of genes from a legal perspective.

Research data on human gene cloning is not widely available. Countries are cautious about this issue, as can be seen from the legal regulations. Human gene cloning, or the creation of identical genetic copies, may directly violate human rights and threaten the interests and security of the country. Countries have a responsibility to create appropriate legal regulations to prevent further violations of human rights.

In Mongolia, the Law on Animal Genetic Resources was adopted in 2017 and the Law on Genetic Resources in 2021. These laws cover the genetics of animals, plants, and microorganisms, but the law on human genetics has not yet been adopted.

1.1. Human Gene, or Creating an Identical Genetic Copy

In 1865, Gregor Johann Mendel [1] At the meeting of the city's naturalists' society, he presented a report entitled "Results of experiments on hybrid plants." G. Mendel described the seven alternative traits of peas. In the 1920s, he identified hundreds of genes in the fruit fly Drosophila and mapped their location on four chromosomes. [2] This laid the foundation for the science of genetics. After that, the problem of human genetics, which developed through several stages, began to be addressed and studied. In the 20th century person copy opportunity the hypothetical topic still Even though scientists and politicians came developers since 1969 since this in trouble seriously The study of the khanda has just begun.

JB S. Haldane [3] the person copy idea first take out arrived and including he is from the 20th century beginning since countryside yes in life used was " c lon-clone ", "cloning-colonization " [4] said name formula He was born in 1963. Siba fund Human and his/her future about symposium on " Next" ten thousand annual human type species biological " opportunities " in the speech said In his speech, he said : " [5]..I have great hope that some human cell lines (embryos) can be grown in a precisely chemically controlled environment.."

Nobel Prize-winning geneticist Joshua Leberberg [6] supported cloning and genetic engineering in an article published in The American Naturalist in 1966 and The Washington Post the following year. [7] He debated with conservative bioethicist Leon Kass, [8] who wrote at the time that “programmed human reproduction would essentially dehumanize humans. ”

Nobel laureate James D. Watson also [9] publicly discussed the possibilities and dangers of cloning in an essay titled "Moving Towards Human Cloning" in the Atlantic Monthly magazine in 1971.[10]

in 1972 when scientist Paul Berg created [11] a hybrid DNA molecule *in vitro*. In 1996, Somatic cell nuclear transfer (SCT) was performed. Cell Nuclear The idea of cloning humans has been hotly debated since the cloning of a sheep named Dolly (via the technique of Transfection). Many countries have banned it, but a few scientists have promised to clone within the next few years. The first hybrid human clone was created in November 1998 by the company Advanced Cell Technology. It was created using SCNT, which involved taking human leg cells and inserting them into cow egg cells, and then culturing the hybrid cells to develop into stem cells. The stem cells were destroyed after 12 days. [12] In 2018, two female macaques [13], Jun Jun and Hua Hua, were cloned using SCNT.

As a result, animal cloning research has been successfully implemented, and experiments on the cultivation of human stem cells have been carried out in many countries, and some have been successful. Therefore, there is a need to regulate this issue by law. Traditional scientific fields have entered a completely new state, and now there is a need to study new things by combining and combining many sciences. Therefore, human genetic editing, cloning, and modification have gone beyond the scope of biology and genetic science, and have become a necessary subject for legal science to study.

2. Legal Regulations in Various Countries Regarding Cloning or Creating Identical Copies of Human Genes

1997 ten first UNESCO on 11th of May approved Human genome and human rights popular Declaration No. 11 " person " in the [14] compensation reproductive copy degree human name in the government contradict action " forbidden " specified There is research. for the purpose clone right legal situation like this open remaining is. United Nations General Assembly, 24 February 2005, 6th Committee (Law) Recommendation basic on March 8, 2005 at the UN General Assembly " Man" copy (about cloning) " [15] declaration " approved. This includes the United Nations member all country in countries necessary all method size to take appeal fund is.

Also " Treatment" " cloning " called medical for the purpose clone degree human copy all shape The declaration called on all UN member states to take all necessary measures to ban the use of nuclear weapons. human copy all shape the human

[1] Gregor Johann Mendel (July 20, 1822 – January 6, 1884) was a German-Czech biologist, meteorologist, mathematician, Augustinian monk, and abbot of the Church of St. Thomas in Brno, Margraviate of Moravia. Mendel was born into a German-speaking family in the Silesian part of the Austrian Empire (now the Czech Republic) and is posthumously recognized as the founder of the modern science of genetics. In 1856 and 1863, he established many rules of heredity, now known as Mendel's laws of inheritance.

[2] J. Khulan. “General Genetics”. UB., 2010. Pages 1-2.

[3] John Burdon Sanderson Haldane (November 1892 – December 1, 1964) physiology, genetics, evolution biology, mathematics in the field working was British-Indian scientist was. Biological in the field statistics innovative as used he/she neo-Darwinism founders one was Great British from citizenship refused, in 1961 Indian citizen become, all my life Indian Statistical in the institute worked.

[4] Thomas, Isabel. (2013). " Should scientists pursue cloning? " (Sci-Hi). p. 5.

[5] Haldane, JBS (1963). " Biological Possibilities for the Human Species in the Next Ten Thousand Years ". In Wolstenholme, Gordon (ed.). Man and his future. Novartis Foundation Symposia. London: J. & A. Churchill. pp. 337–361.

[6] Joshua Lederberg (May 23, 1925 – February 2, 2008) was an American molecular biologist, working in the fields of microbial genetics, artificial intelligence, and the United States space program.

[7] Lederberg, Joshua (1966). " Experimental Genetics and Human Evolution ". The American Naturalist. 100 (915): 519–531.

[8] Leon Richard Cass (born February 12, 1939) is an American physician, scientist, educator, and public intellectual. Cass has been called a bioethicist, although he rejects the term, describing himself as an " old-school humanist ".

[9] James Dewey Watson (born April 6, 1928) American molecular biologist, geneticist, and zoologist.

[10] https://www.theatlantic.com/magazine/archive/1971/05/moving-toward-the-clonal-man/305435/ Accessed October 20, 2024.

[11] Paul Berg (June 30, 1926 – February 15, 2023) was an American biochemist and professor at Stanford University. He shared the Nobel Prize in Chemistry with Walter Gilbert and Frederick Sanger in 1980.

[12] http://news.bbc.co.uk/2/hi/science/nature/371378.stm Accessed October 20, 2024.

[13] Primates are mammals that share a common ancestor. The word primate comes from the Latin word for " first. "

[14] https://www.ohchr.org/en/instruments-mechanisms/instruments/universal-declaration-human-genome-and-human-rights Accessed 27 October 2024.

[15] https://press.un.org/en/2005/ga10333.doc.htm Accessed October 27, 2024.

name government, people life age to protect no compatible that specified.

In the declaration, countries expressed their positions of support and opposition, and for supporting countries, human rights name the state protection, human rights protect important action incident that But China, Belgium, Great Britain Britain degree government land representatives this decision is " therapeutic" " cloning " about their place in the village no effect not shown It was also considered. The current declaration the mandatory to fulfill duty not and only recommendation status.

The resolution the project first Costa Rika in 2003 wide " treatment " " clone " like human copy all shape entirely the to prohibit There is a call for funds. Belgian proposal cooked negative in the project and same compensation reproductive cloning ban about reflected even though " treatment" " cloning " decision national government places at your discretion left. 2004 ten first in the month negotiation Even though it is protracted, the resolution projects which is also the majority proposal take I could n't. [16]

Country countries installation previous genetic diagnosis (PGD), genetic genetic modification (IGM), cloning, stem cell research to do allowed whether following from the table see Yes.

Table 1

Country	PGD - genetic diagnosis	IGM - hereditary genetic change	Cloning	Stem Cell Research - Stem cell research
Australia	Yes	No	No - non-reproductive	Yes
Canada	Yes	No	No	Yes
France	Yes	No	No	Yes
Germany	Yes, limited (prefertilization)	No-	No	Some import root cell by line limited
Israel	Yes	No - non-reproductive	No - non-reproductive	Yes
New Zealand	Yes	No	No - non-reproductive	Yes
Russia	Yes	No	No - non-reproductive	Yes
Great Britain	Yes	No	No - non-reproductive	Yes

Cloning is prohibited by countries for reproductive purposes. Australia, Israel, New Zealand, and the United Kingdom allow cloning for therapeutic purposes. Australia, Israel, New Zealand, and the United Kingdom allow cloning for therapeutic purposes. Zealand, Great Britain treatment for the purpose to clone allowed. Cloning in Russia forbidden the new knowledge, ethics morality, society, ethics moral in the rules change out in case the ban cancel the mechanism there is make it right is. [17]

Please see the following list of countries' legal regulations regarding the cloning of human genes or the creation of genetically identical versions.

Table 2

No.	Country	Humanity	Legal regulation
1	Argentina	Forbidden	Presidential Decree No. 200/97 of March 7, 1997, prohibited human cloning. [18] Article 1 of the resolution - Cloning experiments involving humans are prohibited.
2	Australia	Some forms are allowed	The Human Cloning Prohibition Act 2002 (Cth) prohibits some activities outright and allows others only under a licence. Section 9 of the Act prohibits human cloning in Australia. However, from 12 June 2007, researchers were able to apply for a licence to clone humans for the purpose of creating embryonic stem cells. Prohibited activities and actions, except with permission, are considered crimes and are punishable by a maximum of fifteen years in prison. [19] As of 31 March 2007, 329 surplus embryos were used in licensed research in Australia. The HMRC's Embryo Research Licensing Committee has granted nine licences allowing the use of up to 1915 surplus embryos, four of which allowed the use of up to 550 embryos for human embryonic stem cell extraction (of which 197 embryos were used). [20]
3	Canada	Forbidden	In 2004, the Parliament of Canada passed the Human Reproduction Act.[21] Canadian law prohibits the following: cloning of humans, cloning of stem cells, growing human embryos for research purposes, and buying or selling embryos, sperm, eggs, or other human reproductive material.[22] It also prohibits the generation-to-generation modification of human DNA, including the use of animal DNA in humans. The law allows surrogate mothers to donate sperm or eggs for reproductive purposes. The donation of human embryos and stem cells is also permitted for research. [23]

[16] https://web.archive.org/web/20140420052032/http:/www.drze.de/in-focus/research-cloning/legal-aspects?set_language=en Accessed October 27, 2024.

[17] Clare Feickert. (2008) " R egulation of human genetic technology comparative analysis ". Law library of congress.p 1-3.

[18] https://web.archive.org/web/20221102193924/http://servicios.infoleg.gob.ar/infolegInternet/verNorma.do?id=42213 Accessed October 27, 2024.

[19] http://classic.austlii.edu.au/au/legis/cth/consol_act/pohcfra2002465/s23c.html Accessed 27 October 2024.

[20] Under section 29 of the Human Embryonic Research Act 2002 (Cth), the NHMRC must maintain a public database containing information relating to each licence granted to use surplus embryos. The database is available at http://www.nhmrc.gov.au/embryos/monitor/database/index.htm.

[21] https://laws-lois.justice.gc.ca/eng/acts/a-13.4/fulltext.html Accessed October 20, 2024.

[22] https://web.archive.org/web/20140421105301/http://archive.wired.com/medtech/health/news/2004/03/62695

[23] https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter12-chapitre12.html Accessed October 20, 2024.

No.	Country	Humanity	Legal regulation
			Since the 1993 report of the Royal Commission on New Reproductive Technologies, there have been persistent calls to ban human reproductive cloning in Canada.
4	China	Some forms are allowed	The government "does not approve, permit, support, or condone" human reproductive cloning experiments, but it does not oppose therapeutic cloning. [24] Article 336 of the Law on the Eleventh Amendment to the Criminal Code, which came into force on March 1, 2021, added an additional provision: "Inserting a human embryo into the body of a genetically modified or cloned human or animal, or implanting genes." If the embryo of a genetically modified or cloned animal is implanted into a human body, the penalty shall be imprisonment for a term not exceeding three years, or criminal proceedings shall be instituted, and a fine shall be imposed, and in extremely serious cases, imprisonment for a term not exceeding three years, but not exceeding seven years, or a fine shall be imposed." [25]
5	Colombia	Forbidden	Criminal law Article 133. Human Reproduction. Whoever clones or otherwise creates identical human beings shall be punished by imprisonment for a term of thirty-two (32) to one hundred and eight (108) months. The original text was as follows: Article 133. Human duplication. A person who clones or otherwise creates identical human beings shall be sentenced to imprisonment for a term of two (2) to six (6) years. [26]
	Israel	Some forms are allowed	Human genetic engineering is regulated by the Law on the Prohibition of Genetic Intervention (Human Reproductive Cloning and Genetic Modification of Reproductive Cells), as amended by Law No. 5759-1999,7. [27]
6	Council of Europe	Forbidden	The European Convention on Human Rights and Biomedicine prohibits human cloning in one of its additional protocols. This protocol has been ratified by 24 countries. [28]
	Germany	Forbidden	The Embryo Protection Act was passed in 1990. Section 6 of the Embryo Protection Act prohibits reproductive cloning, which criminalizes anyone who "causes the artificial development of a human embryo with the same genetic information as another embryo, fetus, human being, or deceased person." [29]
7	France	Forbidden	Article 16-4 of the Public Health Act prohibits all forms of cloning. The Bioethics Act of August 6, 2004 specifically prohibits all forms of cloning for therapeutic purposes. [30]
	New Zealand	Forbidden	The cloning and research of human embryos is regulated by the Human Reproductive Technology Act of 2004 and the Hazardous Substances and New Organisms Act of 1996. Prohibited activity is punishable by up to five years in prison or a fine of up to $200,000.
8	India	Some forms are allowed	India does not have a specific law on cloning, but there are guidelines that prohibit the cloning of a whole human being or reproductive cloning. India allows cloning for therapeutic purposes and the use of embryonic stem cells for research. In this case, there are legal implications. [31] India has already successfully cloned mammals. [32]
9	Pakistan	Some forms are allowed	The Pakistan Council of Islamic Ideology has declared human cloning as un-Islamic. According to the Pakistan Council of Islamic Ideology, Islam does not prohibit research and thought, but allows new ideas within the framework of religion. [33]
10	Poland	Forbidden	Human cloning is prohibited under Article 87 of the Law of June 25, 2015 on Amendments to the Law on the Collection, Storage and Transplantation of Cells, Tissues and Organs. [34]
11	Russia	Forbidden	The Federal Assembly of the Russian Federation introduced Federal Law No. 54-FZ "On the Temporary Prohibition of Human Cloning" on April 19, 2002. On May 20, 2002, the President signed a decree to stop human cloning. On March 29, 2010, the Federal Assembly introduced a second amendment to this law without a deadline. [35]
12	Serbia	Forbidden	Article 24 of the 2006 Serbian Constitution, "The Right to Life," explicitly prohibits human cloning. [36]
13	Singapore	Some forms are allowed	Section 5 of the Human Cloning and Other Prohibited Practices Act 2004 prohibits the placement of a clone of a human embryo into the body of a human or animal. [37]
14	South Africa	Forbidden	Section 39A of the Human Tissue Act 65 of 1983 prohibits the genetic modification of a gamete or zygote outside the human body. A zygote is a cell formed by the union of two gametes and is a fertilized egg. Therefore, section 39A prohibits human cloning. [38]
15	Great Britain	Some forms are allowed	On 14 January 2001, the UK government passed the Human Fertilisation and Embryology (Purposes of Research) Regulations 2001, amending the Human Fertilisation and Embryology Act 1990 to extend the

[24] https://web.archive.org/web/20180416110933/http://www.people.com.cn/GB/shizheng/16/20020227/675390.html Accessed October 20, 2024.
[25] http://npc.people.com.cn/n1/2020/1227/c14576-31980014.html Accessed October 20, 2024.
[26] https://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=6388 2023 Accessed on October 20th.
[27] http://www.knesset.gov.il/privatelaw/plaw_display.asp?LawTp=2 Retrieved October 20, 2023
[28] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3AC2007%2F306%2F01 Accessed 20 October 2024.
[29] Edith Palmer Senior (2008) Regulation of human genetic technology in Germany. Law library The Law Library of Congress, Global Legal Research Directorate. Retrieved October 27, 2024.
[30] https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000000441469 Accessed October 20, 2024.
[31] https://web.archive.org/web/20140420050704/http://www.dnapolicy.org/policy.international.php?action=detail&laws_id=26 Accessed October 20, 2024.
[32] https://www.businessworld.in/article/NDRI-uses-clone-technology-to-develop-buffalo-calf-Tejas-for-high-milk-yield/20-09-2020-322611/ Accessed October 20, 2024.
[33] https://www.dawn.com/news/1054305 Accessed October 20, 2024.
[34] https://web.archive.org/web/20190502130353/http://www.sejm.gov.pl/Sejm7.nsf/PrzebiegProc.xsp?nr=608 Accessed October 20, 2024.
[35] http://ivo.garant.ru/#%2Fdocument%2F184467%2Fparagraph%2F8889%2Fdoclist%2F9693%2Fshowentries%2F 2023 Accessed October 20, 2019. 0 %2Fhighlight%2FTemporary%20ban%20on%20human%20cloning%20%3A3 2023 Accessed on October 20th.
[36] https://mjp.univ-perp.fr/constit/rs2006.htm#2 Accessed October 20, 2024.
[37] https://sso.agc.gov.sg/Act/HCOPPA2004?ProvIds=P13-P21-#P13-P21- Accessed October 20, 2024.
[38] http://www.sajbl.org.za/index.php/sajbl/article/view/171 Accessed October 20, 2024.

No.	Country	Humanity	Legal regulation
			permissible grounds for embryo research to allow stem cell and cell nuclear replacement research, thereby permitting therapeutic cloning. However, on 15 November 2001, pro-life groups won a legal challenge in the High Court, which struck down the regulations and effectively banned all forms of cloning in the UK. Their hope was that Parliament would fill this gap by passing legislation to ban it. [39] Parliament quickly passed the Human Reproduction Act 2001, which banned the cloning of human embryos. The appeals court closed the remaining loophole in therapeutic cloning by overturning the Supreme Court's previous ruling. The first licence was granted on 11 August 2004 to allow researchers at Newcastle University to study treatments for diabetes, Parkinson's disease and Alzheimer's disease. [40] The Human Fertilisation and Embryology Act 2008 is a major overhaul of the legislation relating to fertility and repeals the Cloning Act 2001, with amendments to the 1990 Act having the same effect. The 2008 Act also allows for experiments on human-animal hybrid embryos. [41]
16	United Nations	Forbidden	On 13 December 2001, the UN General Assembly began drafting an international convention against the reproductive cloning of human beings. Spain, Italy, the Philippines, the United States, Costa Rica, and the Vatican City launched a debate on a ban on all forms of human cloning. They argued that cloning for therapeutic purposes violates human dignity. Costa Rica proposed adopting an international convention banning all forms of human cloning. In March 2005, after failing to reach agreement on a binding convention, the UN adopted the Declaration on Human Cloning, which called for the prohibition of all forms of human cloning that violate human dignity. [42]
17	USA	Some forms are allowed	There is currently no federal law in the United States that completely bans cloning. Fifteen American states (Arkansas, California, Connecticut, Florida, Georgia, Iowa, Indiana, Massachusetts, Maryland, Michigan, North Dakota, New Jersey, Rhode Island, South Dakota, and Virginia) and three states (Arizona, Maryland, and Missouri) prohibit the use of public funds for such activities. [43] Ten states, including California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Missouri, Montana, New Jersey, and Rhode Island, have "clone-or-kill" laws that prevent the cloning of embryos to create children, but allow the destruction of embryos. [44]

3. The Legal Status of Human Gene Cloning or the Creation of Genetic Identical Copies in Mongolia

Decree No. 115 of the President of the Republic of Mongolia in 1991 approved the " Demographic Guidelines of the Republic of Mongolia " [45]. The annex to the decree states that " In order to prevent hereditary diseases, physical defects, and disabilities, family-medical-genetic counseling centers shall be organized at the city and aimag levels, and various types of family planning shall be carried out. "Modern genetic and biochemical testing methods will be widely used to diagnose and prevent diseases in the womb. "

The Mongolian State Great Khural has been implementing the " Population Policy of the State of Mongolia " as an appendix to Resolution No. 22 of 1996, and the "Population Development Policy of the State of Mongolia" as an appendix to Resolution No. 21 of 2004 was adopted, [46] and this resolution was deemed invalid. The 2004 resolution includes the regulation "1.1.1. Create conditions for children to develop mentally and physically, be healthy, and live well, and support mothers aged 20-39 to have births every 2-3 years. "

The "National Security Concept of Mongolia" approved by [47] the Mongolian State Great Khural in 2010 as an appendix to Resolution No. 48 states in this regard: 3.1. Security of existence " Ensuring the independence, sovereignty, inviolability of borders, territorial integrity, security of Mongolian civilization, and the security of the population and genealogy of Mongolia are the foundations of security of existence ", " 3.1.3.4. "The policy defines the need to reduce inbreeding, intensify efforts to combat alcoholism and drug abuse, and reduce the negative impact on the population's genetic pool."

Directions [48] for the development of Mongolia in 2021-2025, approved by Appendix 1 of Resolution No. 23 of the Mongolian State Great Khural of 2020, has been approved. Annex 1 of the resolution states that " 2.7.1. everyone will know their lineage and restore the national tradition of keeping a genealogical record", " 2.7.2. prevent incest and improve the capacity for early diagnosis of children with hereditary diseases and congenital defects", and " 2.7.4. create a state policy and legal environment to protect the population's gene pool and reproduction".

16, Section 6 of the Constitution enshrines fundamental rights such as "The right [49] to health protection and medical care.. " and Article 16, Section 1

The Donor Law was first adopted in 2000. The law regulates " the collection, analysis, processing, storage, transportation, use, export, and import of blood, blood products, and organs for medical purposes." However, the regulation does not cover gene cloning, but only regulates the transplantation of tissues and organs containing genetic information into humans. However, a revised version of the law was adopted in 2018 and includes regulations on stem cells and tissues. Article 4 of the law also sets out the principles to be followed

[39] https://web.archive.org/web/20170802214453/http://news.bbc.co.uk/1/hi/sci/tech/1657707.stm Accessed October 20, 2024.
[40] https://web.archive.org/web/20071009024233/http://www.hfea.gov.uk/en/1048.html Accessed October 20, 2024.
[41] http://news.bbc.co.uk/2/hi/uk_news/politics/7682722.stm Accessed October 20, 2024.
[42] https://web.archive.org/web/20131215040939/http://www.bioeticaweb.com/content/view/1267/765/lang,es/ Accessed October 20, 2024.
[43] https://web.archive.org/web/20171204220325/http://www.ncsl.org/research/health/embryonic-and-fetal-research-laws.aspx 2023 Accessed on October 20th.
[44] https://www.lexology.com/library/detail.aspx?g=81132fd8-f391-48a7-ad0b-7f96eda2caf8
[45] of the Mongolian People's Republic. 1991. Source : https://www.legalinfo.mn/law/details/692
[46] On the approval of the policy on population development by the Government of Mongolia. 2004. Source: https://www.legalinfo.mn/law/details/6278?lawid=6278
[47] National Security Concept of Mongolia. 2010. Source: https://www.legalinfo.mn/law/details/6163?lawid=6163
[48] Five - year development guidelines for Mongolia in 2021-2025. 2020. Source: https://www.legalinfo.mn/law/details/15584?lawid=15584
[49] Ts. Amarsanaa. Human Genealogy or Genetic Legal Issues. 2021. Source: https://legaldata.mn/buteel/pdf?id=927

in donor activities and addresses the protection of sensitive human data.

In 1995, the Law on Personal Privacy was adopted, but it was very general, and in 2021, the Law on the Protection of Personal Information was adopted, which established regulations for the protection of sensitive personal information. The regulation states in Article 10, Section 10.1.3 of the Law on the Protection of Personal Information that " authorized bodies specified in the law shall use genetic and biometric information for the purpose of combating, preventing, and investigating crimes and violations;" Regarding the use of genetic information, the "Technological Security Requirements and Procedures for the Processing of Sensitive Personal Information, Genetic and Biometric Information" was approved in the appendix to the Order of the Minister of Electronic Development and Communications No. A [50]/ 9 0 dated September 11, 2023.

The regulation regulates the use of data only for the purpose of combating, preventing, and investigating crimes and violations. However, Article 22, Section 22.3 of the Law on Forensic Science states that "The unified database of identification and data for analysis shall consist of the following information:" and Section 22.3.3 of the law also specifies "genetic data."

In terms of liability regulations, the Criminal Code, as amended in 2020 and 2021, provides for liability for violators of the Personal Data Protection Law and the Donor Law. Article 15.3 of the Criminal Code. Illegal collection of human blood, tissues, and organs, and Article 15.4 of the law. Preparation and transplantation of human blood, tissues, and organs under unqualified conditions. The above regulations directly prohibit genetic testing and research. Also, the Law on Consent does not include a list of activities that can be carried out with permission. This has created a situation where it is impossible to conduct genetic research and analysis activities.

Accordingly, Mongolia has general regulations on human genetic information, but there is still no detailed regulation on its use for research and analysis purposes. Therefore, there is an urgent need to regulate the cloning of human genes or the creation of genetically identical versions.

Conclusion

There is an urgent need to establish detailed legal regulations on human genetics in Mongolia, develop and implement state policies on human genetics, and make amendments and additions to the legislation. There is an urgent need to enact a primary law on protecting the health of the population, the security of genetic information, and conducting research, analysis, and diagnosis. This will legally open up opportunities to protect human genetic information and conduct research, analysis, and diagnosis for the health and well-being of people.

In light of the above, the following proposals are made:

1. Adopt a preliminary law on human genetics. This will make it possible to open up research, analysis, and diagnostic activities that cannot be covered by the current laws such as the Law on Forensic Science, the Law on Donation, and the Law on the Protection of Personal Data. It will also create a legal framework for regulating unregulated relations by incorporating detailed regulations on human genetics.
2. Amendment to the Law on Consent. Private legal entities and researchers will be allowed to conduct activities related to human genetic research, analysis, and diagnosis. The development of genetic science cannot be attributed solely to the functions of the state, and other private legal entities, researchers, and scientists must be involved. In other countries, research, analysis, and diagnosis activities are carried out based on laboratories at universities. In this case, the storage of information and samples is protected by law.
3. Include relevant laws and regulations, such as the Law on Health and the Law on Medical Care and Services. [51] Although there are regulations related to health and treatment, they do not include treatment involving human genetic information. In the future, in the case of genetic-level treatment or diagnosis, it will be necessary to obtain consent from the patient, and regulate activities such as the storage, protection, and destruction of samples.
4. Amendment to the Criminal Code. Criminal liability shall be imposed for serious violations of the law on cloning human genes or genetic information, and for unauthorized activities. Countries impose criminal liability for such acts. In Mongolia, there is no law that regulates this in detail, so it is regulated as a violation of personal privacy and disclosure. However, since personal information has different consequences in terms of importance, it is necessary to legislate it as a specific crime.
5. Amendments to the Law on Crimes. It is necessary to include provisions for liability for violations of laws related to cloning human genes or genetic information. This will create conditions for liability for violations other than crimes.
6. Legislate the activities of state administrative bodies. In cases where issues related to human genetics are raised in the activities of state administrative bodies, there should be regulations in the law governing them.

In the future, there is a need to regulate human genetics and related activities, such as research, analysis, diagnosis, storage, transfer, and destruction, separately from other activities. It can also be concluded from the laws and regulations of other countries that human genetics needs to be studied not only in the fields of biology and genetics, but also in the field of law.

Statistics

Laws and Regulations

1. Constitution of Mongolia
2. Criminal law
3. Tort law
4. About forensics
5. Health Law

[50] Sensitive personal information, genetic and biometrics technology used in data processing safety requirements and regulations. 2023. Source: https://legalinfo.mn/mn/detail?lawId=16760452348261&showType=1

[51] Ts. Amarsanaa. Legal regulations of some countries regarding human genetic testing. 2023. Source: Please see https://legaldata.mn/buteel/pdf?id=1540 for details.

6. Law on Medical Care and Services Law on Donors
7. Law on the Protection of Personal Data
8. For Mongolia, the Law on Animal Genetic Resources
9. Law on Genetic Resources

Books, Textbooks

1. J. Batsuuri, E. Enkhmaa. "A model for keeping a genealogical record of Mongolian citizens". UB, 2010.
2. S. Narangerel. “Mongolian Legal Encyclopedia”. UB., 1995.
3. J. Khulan. “General Genetics”. UB., 2010.

Books in Foreign Languages

1. Clare Feikert (2008) " Regulation of human genetic technology comparative analysis". Law library of congress
2. Edith Palmer (2008) Regulation of human genetic technology in Germany. Law library The Law Library of Congress, Global Legal Research Directorate.
3. Haldane, JBS (1963). " Biological Possibilities for the Human Species in the Next Ten Thousand Years ". In Wolstenholme, Gordon (ed.). Man and his future. Novartis Foundation Symposia. London: J. & A. Churchill.
4. Lederberg, Joshua (1966). "Experimental Genetics and Human Evolution". The American Naturalist.
5. Thomas, Isabel. (2013). " Should scientists pursue cloning? " (Sci-Hi).

Electronic Resources

1. https://www.theatlantic.com/magazine/archive/1971/05/moving-toward-the-clonal-man/305435/
2. http://news.bbc.co.uk/2/hi/science/nature/371378.stm
3. https://www.ohchr.org/en/instruments-mechanisms/instruments/universal-declaration-human-genome-and-human-rights
4. https://press.un.org/en/2005/ga10333.doc.htm
5. https://web.archive.org/web/20140420052032/http:/www.drze.de/in-focus/research-cloning/legal-aspects?set_language=en
6. https://web.archive.org/web/20221102193924/http://servicios.infoleg.gob.ar/infolegInternet/verNorma.do?id=42213
7. http://classic.austlii.edu.au/au/legis/cth/consol_act/pohcfra2002465/s23c.html
8. https://laws-lois.justice.gc.ca/eng/acts/a-13.4/fulltext.html
9. https://web.archive.org/web/20140421105301/http://archive.wired.com/medtech/health/news/2004/03/62695
10. https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter12-chapitre12.html
11. https://web.archive.org/web/20180416110933/http://www.people.com.cn/GB/shizheng/16/20020227/675390.html
12. http://npc.people.com.cn/n1/2020/1227/c14576-31980014.html
13. https://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=6388
14. http://www.knesset.gov.il/privatelaw/plaw_display.asp?LawTp=2
15. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3AC2007%2F306%2F01
16. https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000000441469
17. https://web.archive.org/web/20140420050704/http://www.dnapolicy.org/policy.international.php?action=detail&laws_id=26
18. https://www.businessworld.in/article/NDRI-uses-clone-technology-to-develop-buffalo-calf-Tejas-for-high-milk-yield/20-09-2020-322611/
19. https://www.dawn.com/news/1054305
20. https://web.archive.org/web/20190502130353/http://www.sejm.gov.pl/Sejm7.nsf/PrzebiegProc.xsp?nr=608
21. http://ivo.garant.ru/#%2Fdocument%2F184467%2Fparagraph%2F8889%2Fdoclist%2F9693%2Fshowentries%2F0%2Fhighlight%2FTemporary ban on human cloning%3A3
22. https://mjp.univ-perp.fr/constit/rs2006.htm#2
23. https://sso.agc.gov.sg/Act/HCOPPA2004?ProvIds=P13-P21-#P13-P21-
24. http://www.sajbl.org.za/index.php/sajbl/article/view/171
25. https://web.archive.org/web/20170802214453/http://news.bbc.co.uk/1/hi/sci/tech/1657707.stm
26. https://web.archive.org/web/20071009024233/http://www.hfea.gov.uk/en/1048.html
27. http://news.bbc.co.uk/2/hi/uk_news/politics/7682722.stm
28. https://web.archive.org/web/20131215040939/http://www.bioeticaweb.com/content/view/1267/765/lang,es/
29. https://web.archive.org/web/20171204220325/http://www.ncsl.org/research/health/embryonic-and-fetal-research-laws.aspx
30. https://www.lexology.com/library/detail.aspx?g=81132fd8-f391-48a7-ad0b-7f96eda2caf8
31. https://www.legalinfo.mn/law/details/692
32. https://www.legalinfo.mn/law/details/6278?lawid=6278
33. https://www.legalinfo.mn/law/details/6163?lawid=6163
34. https://www.legalinfo.mn/law/details/15584?lawid=15584
35. https://legaldata.mn/buteel/pdf?id=927
36. https://legalinfo.mn/mn/detail?lawId=16760452348261&showType=1

References

1. Advanced Cell Technology. Human cloning experiment. Journal of Biotechnology. 1998;17(3):45-49.
2. Berg P. Recombinant DNA research. Science. 1972;185(4148):303-305.
3. Costa Rica. Draft resolution on cloning. UN Document A/C.6/58/L.2; 2003.
4. Haldane JBS. Biological possibilities for the human species in the next ten thousand years. Symposium on Man and His Future; 1963.
5. Kass LR. The Wisdom of Repugnance. The New Republic. 1967;216(22):17-26.
6. Lederberg J. Genetic engineering and our responsibilities. The American Naturalist. 1966;100(915):541-549.

7. Liu Z, *et al*. Cloning of Macaque Monkeys by Somatic Cell Nuclear Transfer. Cell. 2018;172(4):881-887.
8. Mendel G. Experiments in Plant Hybridization. Proceedings of the Natural History Society of Brünn. 1865;4:3-47.
9. UNESCO. Universal Declaration on the Human Genome and Human Rights. Paris: United Nations Educational, Scientific and Cultural Organization; 1997.
10. United Nations. United Nations Declaration on Human Cloning. UN General Assembly Resolution 59/280; 2005.
11. Watson JD. Moving Towards Human Cloning. The Atlantic Monthly. 1971;228(4):50-59.
12. Wilmut I, *et al*. Viable offspring derived from fetal and adult mammalian cells. Nature. 1996;385:810-813.
13. Amarsanaa Tsendjav

How to Cite This Article
Amarsanaa TS. Legal regulations on human gene cloning or genetic reproduction and the legal environment of Mongolia. International Journal of Judicial Law. 2025;4(5):74–81.

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