

International Monsanto Tribunal

Advisory Opinion

The Hague, 18 April 2017

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ABBREVIATIONS AND ACRONYMS

CEDAW – Convention on the Elimination of All Forms of Discrimination against Women

CRC – Convention on the Rights of the Child

ECHA – European Chemicals Agency

EFSA – European Food Safety Authority

EPA – United States Environmental Protection Agency

EU – European Union

GMO – Genetically modified organism

IARC – International Agency for Research on Cancer

ICCPR – International Covenant on Civil and Political Rights

ICESCR – International Covenant on Economic Social and Cultural Rights

OHCHR – Office of the United Nations High Commissioner for Human Rights

PAN – Pesticide Action Network

PCB – Polychlorinated biphenyl

RAC – European Chemicals Agency Committee for Risk Assessment

UN – United Nations

UN Guiding Principles – United Nations Guiding Principles on Business and Human Rights

UNEP – United Nations Environment Programme

WHO – World Health Organization

I. INTRODUCTION

I.i. An Opinion Tribunal

The International Monsanto Tribunal (hereinafter “the Tribunal”) is a so-called “Opinion Tribunal”. An Opinion Tribunal is neither an ordinary court that falls within the judicial order of a State, nor a court set up by an international organisation. It is an “extraordinary” court born out of the determination of civil society that takes the initiative and is actively involved in it. It follows the long tradition of opinion tribunals created in 1966 under the impetus of the philosophers Bertrand Russell and Jean-Paul Sartre and whose principles are well-known. In 1979, at the initiative of the senator and theorist Lelio Basso, the Russell-Sartre Tribunal extended into the Permanent Peoples’ Tribunal¹. Several opinion tribunals have already been held in different countries and on various subjects².

Opinion tribunals are tasked with examining, using a judicial method, the rules of law applicable to highly problematic events or situations which directly affect and are of serious concern to people or groups of people as well as to society as a whole. Their objective is twofold: alerting public opinion, stakeholders and policy-makers to acts considered as unacceptable and unjustifiable under legal standards; contributing to the advancement of national and international law.

The work and conclusions of opinion tribunals are shared with all relevant actors and widely disseminated in the national and international community. Most opinion tribunals have had a considerable impact, and it is now accepted that they contribute to the progressive development of international law.

I.ii. The International Monsanto Tribunal

The Tribunal was established by the Monsanto Tribunal Foundation, the Statutes of which were adopted on 4 June 2015. The Tribunal was requested to produce an advisory opinion answering six questions in the terms of reference drawn by the Monsanto Tribunal Organization Committee. In order to do so, the Tribunal was asked to examine the effects of Monsanto Company’s (hereinafter “Monsanto”) activities on the human rights of citizens and on the environment, and to offer conclusions about the conformity of Monsanto’s conduct with the principles and rules of international human rights law and humanitarian law.

The Tribunal sat in The Hague from 16 to 18 October 2016. It was composed of five judges from Argentina, Belgium, Canada, Mexico and Senegal³, all of them legal professionals or practising judges called upon to render an advisory opinion on the basis of a legal analysis and reasoning.

Monsanto’s officials were invited to send their observations in writing and participate in the Tribunal’s hearings to express their views on the issues under review. On 6 June 2016, a letter was sent

¹ See <http://permanentpeopletribunal.org/>.

² Concerning, *inter alia*: The policies of the International Monetary Fund and the World Bank I (Berlin, 1988) and II (Madrid, 1994); Asylum right in Europe (Berlin, 1994); Human rights violations in Algeria, 1992-2004 (Paris, 2004); The European Union and transnational corporations in Latin America: policies, instruments and actors complicity in the violation of peoples’ rights (Madrid, 2010); Session on agrochemical transnational corporations (Bangalore, 2011).

³ The Members of the International Monsanto Tribunal are: Dior Fall Sow (Senegal), Jorge Fernández Souza (Mexico), Eleonora Lamm (Argentina), Steven Shrybman (Canada) and its President, Françoise Tulkens (Belgium). The Registry was held by Prof. Dr. Marcos A. Orellana (George Washington University School of Law), assisted by Chancia Plaine (lawyer specialising in environmental law, France).

to Monsanto headquarters in the USA by the President and Vice-President of the Tribunal⁴. However, no response was received to this letter and no official from Monsanto turned up at the hearing. Given the fact that Monsanto is advocating dialogue, the Tribunal regrets their absence.

The Tribunal heard 28 witnesses from various countries who referred to their experience concerning Monsanto's activities⁵. Many of them provided the Tribunal, ahead of or during the hearings, with documents in the form of books, papers, memoranda, reports, pictures, CD-ROMs, pen drives (USB), a.s.o.⁶.

The Tribunal has no investigative powers; nor is its advisory opinion binding. However, in contrast to other similar initiatives emanating from civil society, the advisory opinion it will deliver is an opinion based on legal considerations, grounded in international human rights law and international humanitarian law.

I.iii. The Terms of Reference

Six detailed questions have been submitted to the Tribunal and they constitute its terms of reference. They focus respectively on the right to a healthy environment, the right to food, the right to health, freedom of scientific research, complicity in war crimes and the crime of ecocide.

The specific terms of reference are as follows:

- i. Did the firm Monsanto, by its activities, act in conformity with the right to a safe, clean, healthy and sustainable environment, as recognized in international human rights law (Resolution 25/21 of the Human Rights Council of 15 April 2014), taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?
- ii. Did the firm Monsanto, by its activities, act in conformity with the right to food, as recognized in Article 11 of the International Covenant on Economic, Social and Cultural Rights, in Articles 24.2(c) and (e) and 27.3 of the Convention on the Rights of the Child, and in Articles 25(f) and 28.1 of the Convention on the Elimination of All Forms of Discrimination against Women, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?
- iii. Did the firm Monsanto, by its activities, act in conformity with the right to the highest attainable standard of health, as recognized in Article 12 of the International Covenant on Economic, Social and Cultural Rights, or the right of child to the enjoyment of the highest attainable standard of health, as recognized by Article 24 of the Convention on the Rights of the Child, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

⁴ See Annex 1. Letter sent to Monsanto Headquarters in the United States by the President and Vice-President of the Tribunal on 6 June 2016.

⁵ See Annex 2. List of witnesses who appeared in the hearings before the Tribunal.

⁶ All these documents are available at www.monsanto-tribunal.org.

iv. Did the firm Monsanto act, by its activities, in conformity with the freedom indispensable for scientific research, as guaranteed by Article 15(3) of the International Covenant on Economic, Social and Cultural Rights, as well as the freedoms of thought and expression guaranteed in Article 19 of the International Covenant on Civil and Political Rights, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

v. Could the firm Monsanto be held complicit in the commission of a war crime, as defined in Article 8(2) of the Statute of the International Criminal Court, by providing materials to the United States Army in the context of operation “Ranch Hand” launched in Vietnam in 1962?

vi. Could the past and present activities of Monsanto constitute a crime of ecocide, understood as causing serious damage or destroying the environment, so as to significantly and durably alter the global commons or ecosystem services upon which certain human groups rely?

I.iv. Applicable Law

The standards upon which the Tribunal bases the present advisory opinion are contained mainly in the following United Nations instruments: the International Covenant on Civil and Political Rights (ICCPR) of 16 December 1966; the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 16 December 1966; the Convention on the Rights of the Child (CRC) of 20 November 1989; and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) of 18 December 1979.

Even if these international treaties do not directly impose obligations on non-state actors, they impose binding obligation on States Parties. Therefore, States can be held responsible for human rights violations and breaches of their obligations to respect, protect and fulfil the rights recognized in these instruments. In addition, these international human rights treaties also establish and express human rights norms and values, and thus provide important normative benchmarks against which corporate conduct can be measured, *i.e.*, the conduct of Monsanto, as such conduct was reported to have taken place. This advisory opinion therefore looks at the questions whether Monsanto’s conduct has offended, impaired or otherwise negatively affected the rights recognized in these international treaties.

Moreover, the above-mentioned universal human rights treaties form the basis of the responsibility of corporations as articulated by the UN Guiding Principles on Business and Human Rights. These Guiding Principles were developed by the UN Secretary General’s Special Representative on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises. They were endorsed by the Human Rights Council in its resolution 17/4 of 16 June 2011⁷.

While the UN Guiding Principles on Business and Human Rights have attracted widespread international support to encourage responsible business conduct⁸, it should be noted that they are not, strictly speaking, legally binding at international law, nor do they impose international obligations on

⁷ *UN Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Protect, Respect and Remedy’ Framework*, A/HRC/17/31, 21 March 2011 (available at: www.ohchr.org/documents/issues/business/A.HRC.17.31.pdf). See also *The Road from Principles to Practice. Today’s Challenges for Business in Respecting Human Rights*, Report by The Economist Intelligence Unit, March 2015; S. Cossart and R. Lapin, “La sphère d’influence des groupes de sociétés et les principes directeurs des Nations Unies”, *La Revue des droits de l’homme*, 15 June 2016.

⁸ See the G7 Leaders Declaration issued following the G7 Summit at Schloss Elmau, Germany, on 7-8 June 2015.

companies. The UN Guiding Principles, however, identify responsibilities of companies to respect human rights and to provide victims with the right to an effective remedy. As is explained in the Introduction to the UN Guiding Principles, the Principles' "normative contribution lies not in the creation of new international law obligations but in elaborating the implications of existing standards and practices for States and businesses; integrating them within a single, logically coherent and comprehensive template; and identifying where the current regime falls short and how it should be improved. Each Principle is accompanied by a commentary, further clarifying its meaning and implications"⁹. The Tribunal is referring to these Guiding Principles as a means, within the United Nations, to anticipate and enable further steps in the progressive development of international law¹⁰.

I.v. The Tribunal's Procedure

As has been underlined repeatedly during the hearings, the Tribunal is not called upon to establish the possible criminal or civil liability of Monsanto. Nor is it required to assess the amount of damages that may be due to victims in individual cases. Rather, the Tribunal's role is to provide an advisory opinion on the questions included in the above-mentioned terms of reference. The advisory opinion delivered here is a *de jure* and not a *de facto* opinion, in that it elaborates legal considerations in relation to Monsanto's conduct as reported in the hearings and other documents in the file.

The Tribunal adopted the methods utilized by the International Court of Justice in rendering advisory opinions¹¹. There is therefore no "plaintiff", no "prosecutor" and no "defendant" in the judicial sense of these terms. Instead, there are legal questions requiring a legal interpretation of the Tribunal.

The Tribunal received a number of written submissions. Several legal briefs were filed, in addition to *amicus curiae* briefs, reports of scientific experts¹², as well as legal reports prepared by law students from the Université catholique de Louvain (Belgium) and from Yale University (USA).

The Tribunal held hearings on 15 and 16 October 2016 to inform itself of the factual and legal context relevant to the terms of reference. The Judges listened and asked questions to the witnesses and legal experts that appeared at the hearings¹³.

The Tribunal has no reason to doubt the sincerity or veracity of those who volunteered to testify before it. But, because their testimony was not given under oath or tested by cross-examination, and because Monsanto declined to participate in the proceedings, the Tribunal is not in a position to make

⁹ *UN Guiding Principles on Business and Human Rights*, *op. cit.*, p. 5, § 14.

¹⁰ On 3 March 2016, the Committee of Ministers of the Council of Europe adopted a new Recommendation to Member States on Human Rights and Business (CM/Rec(2016)3). Building on the 2011 UN Guiding Principles, this text provides more specific guidance to assist Member States in preventing and remedying human rights violations by businesses and insists on measures to induce businesses to respect human rights. The Recommendation elaborates on access to judicial remedies, drawing on Council of Europe expertise and legal standards in the field. It puts special emphasis on the additional protection needs of workers, children, indigenous people and human rights defenders. A mid-term review of the implementation of the Recommendation is foreseen within the five years following its adoption, a period during which good practices will be collected and shared among Member States. See also "Business Enterprises Begin to Recognise their Human Rights Responsibilities", Comment by the Council of Europe Commissioner for Human Rights, Nils Muižnieks, 4 April 2016. Along the same lines, on 20 June 2016, the Council of the European Union adopted the "Council Conclusions on Business and Human Rights".

¹¹ See Chapter IV of the Statute of the International Court of Justice and Part IV (Articles 102 to 109) of the Rules of Procedure of the Court.

¹² All these written submissions are available at www.monsanto-tribunal.org.

¹³ See Annex 2. List of witnesses who appeared in the hearings before the Tribunal, and Annex 3. List of legal experts who appeared in the hearings before the Tribunal.

findings of fact concerning the allegations of various company misdeeds. Rather, for the purpose of answering the questions posed for the Tribunal's consideration, the Tribunal will assume that the facts and circumstances described by the witnesses would be proven.

By giving the floor to those witnesses who have expressed themselves publicly and by putting together a file comprising extensive documentary material, the Tribunal has helped in alerting the public, policy-makers and the media to the nature and the consequences of the activities of Monsanto.

The Tribunal has aimed to contribute to the progressive development of international human rights law by proposing new legal avenues for corporate accountability and new legal concepts such as the international crime of ecocide, understood as causing serious damage or destroying the environment. Significantly, the Prosecutor of the International Criminal Court decided on 15 September 2016 to include environmental concerns within its scope of investigation¹⁴.

Lastly, the advisory opinion could provide legal tools to all those – victims, lawyers, judges, civil servants, NGOs and other civil society actors – who, on the ground, wish to take action to make corporations accountable for the respect of human rights, environmental protection and democratic processes.

¹⁴ See International Criminal Court, Office of the Prosecutor, *Policy Paper on Case Selection and Prioritisation*, 15 September 2016, §§ 7 and 41 (French version: Cour pénale internationale Bureau du Procureur, *Document de politique générale relative à la sélection et à la hiérarchisation des affaires*, 15 septembre 2016, §§ 7 et 41).

II. QUESTIONS IN THE TERMS OF REFERENCE

Question 1: The Right to a Healthy Environment

Did the firm Monsanto, by its activities, act in conformity with the right to a safe, clean, healthy and sustainable environment, as recognized in international human rights law (Resolution 25/21 of the Human Rights Council, of 15 April 2014), taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

II.Q1.i. Applicable law

The recognition of the fundamental character of the right to a healthy environment and its indissoluble linkage with human dignity can be traced back to the UN Conference on the Human Environment held in Stockholm, Sweden, in 1972. The Stockholm Conference and resulting Declaration were able to place a narrative in the collective imagination of humanity at a time when the environment was only peripheral to policy-making¹⁵. This narrative led to the incubation of the right to a healthy environment in national constitutions. It also marked the inception of the notion that the environment is a precondition for the enjoyment of human rights.

The Stockholm Declaration's first preambular paragraph states that “[b]oth aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself”¹⁶. This proclamation affirms the fundamental character of the right to a healthy environment. Moreover, the very first Principle of the Stockholm Declaration on the Human Environment expressly recognizes the linkage between the environment and a life of dignity. Principle 1 proclaims that “[m]an has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. In this respect, policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated”¹⁷.

Since the 1972 Stockholm Conference on the Human Environment, environmental protection began to be seen as a categorical imperative in many States, and this new perspective on the fundamental importance of the environment in policy-making led to unprecedented normative and institutional developments. Perhaps the most important legal development is the so-called “environmental rights revolution”¹⁸. Many States amended their national constitutions – the framing of the basic social contract and the values enabling society – to incorporate environmental considerations in them¹⁹. Back in 1994, the Special Rapporteur on Human Rights and Environment of the Sub-Commission on the

¹⁵ M.A. Orellana, “Keynote Address: Habitat for Human Rights”, *Vermont Law Review*, Vol. 40, Book 3, 2016, pp. 418 et seq.

¹⁶ “Declaration of the United Nations Conference on the Human Environment”, *Report of the United Nations Conference on the Human Environment* (Stockholm, 5-16 June 1972), UN Doc. A/CONF.48/14/Rev.1, New York, United Nations, 1973, pp. 3-5.

¹⁷ *Ibid.*

¹⁸ D.R. Boyd, *The Environmental Rights Revolution – A Global Study of Constitutions, Human Rights and the Environment*, Vancouver, UBC Press, 2012, p. 3. See also J. May and E. Daly, *Global Environmental Constitutionalism*, Cambridge, Cambridge University Press, 2015.

¹⁹ These references to the environment in national constitutions were often formulated as a duty of the State for environmental protection or as an individual or collective right enforceable in court. See *Review of Further Developments in Fields in Which the Sub-Commission Has Been Concerned: Human Rights and the Environment, Final report prepared by Mrs. Fatma Zohra Ksentini, Special Rapporteur*, Annex III: Developments in National Legislation and Practices, UN Doc. E/CN.4/Sub.2/1994/9, 6 July 1994, pp. 81 et seq.

Prevention of Discrimination identified over 60 countries devoting constitutional provisions to the environment²⁰. In 2011, the Office of the UN High Commissioner prepared a detailed analytical study on human rights and environment that identified about 140 countries devoting constitutional provisions to the environment²¹.

This widespread State practice evidences the crystallization of the right to a healthy environment, including on account of its fundamentally norm-creating character, as a norm of international customary law. This legal development was highlighted by the UN High Commissioner's aforementioned study, which concluded that "[t]he increasing constitutional recognition of environmental rights and responsibilities globally reflects growing awareness of the importance of environmental values and greater acceptance of a right to a healthy environment"²².

The normative content of the right to a healthy environment can be found in the law on human rights and the environment²³. The Special Rapporteur on Human Rights and Environment (previously an Independent Expert) has undertaken the task of mapping this vast normative *acquis*²⁴. In response, the Human Rights Council has recognized that "human rights law sets out certain obligations on States that are relevant to the enjoyment of a safe, clean, healthy and sustainable environment"²⁵.

Specifically, the Special Rapporteur on Human Rights and Environment has identified rights threatened by environmental harm, including the rights to life, health, food and water, and has mapped procedural and substantive obligations, including obligations to protect against environmental harm from private actors and obligations relating to transboundary environmental harm. Moreover, the Special Rapporteur has identified particular duties in respect of vulnerable groups and has articulated the implications of fundamental principles such as non-discrimination and non-regression. This normative *acquis*, as derived from the environmental dimensions of existing protected rights and fundamental human rights principles, is brought together under the umbrella of the right to a healthy environment.

Despite the diversity of sources in human rights law, there is a remarkable commonality among them in outlining the character of obligations pertaining to the right to a healthy environment. Two main dimensions stand out: one procedural and another substantive. Procedural obligations sustain a society's ability to engage in civil dialogue to foster effective environmental policy. This procedural dimension of the right to a healthy environment involves critical issues for the social exchange of ideas and debate such as access to information, meaningful participation, access to justice, and freedom of assembly, association and expression. At the same time, substantive obligations sustain an environmental quality conducive to a life of dignity. This substantive dimension of the right to a healthy environment directly

²⁰ *Ibid.*, § 241.

²¹ OHCHR, *Analytical Study on the Relationship between Human Rights and the Environment*, UN Doc. A/HRC/19/34, 16 December 2011, § 7.

²² *Ibid.*

²³ *UNEP Compendium on Human Rights and the Environment – Selected International Legal Materials and Cases*, Nairobi, UNEP-Center for International Environment Law, March 2014. See also the fourteen individual reports that inform and accompany the *Mapping Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, John H. Knox (U.N. Doc. A/HRC/25/53, 30 December 2013), available at: www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/MappingReport.aspx.

²⁴ *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, John H. Knox, *Mapping Report*, UN Doc. A/HRC/25/53, 30 December 2013.

²⁵ Resolution 25/21, *Human Rights and the Environment*, adopted by the UN Human Rights Council on 28 March 2014, UN Doc. A/HRC/25/L.31.

links with the conditions that enable a healthy planet, such as clean water, air and soils, a balanced climate system, and healthy and diverse ecosystems.

II.Q1.ii Testimonies

The Tribunal heard various witnesses account for impacts on the environment and human health resulting from Monsanto's activities. The issues that were presented to the Tribunal included impacts on human health, impacts on soils and plants, impacts on animal health, impacts on biodiversity, impacts on farmers and impacts on scientific researchers. These various impacts directly and indirectly affect the right to a healthy environment.

In regard to impacts on human health, Ms. Sabine Grataloup and Ms. Maria Liz Robledo described the malformations of children in France and Argentina resulting from exposure to glyphosate. Dr. Channa Jayasumana and Mr. Marcelo Firpo also described chronic kidney disease in Sri Lanka resulting from Roundup use as well as increased cancer rates in Brazil. In regard to impacts on soils and plants, Mr. Diego Fernández described loss of soil fertility and diversity as well as contamination of farms with genetically modified organisms (GMOs). In regard to impacts on animal health, Mr. Ib Borup Pedersen and Dr. Monika Krueger described severe health differences between animals – pigs, in particular – fed from genetically modified and from non-genetically modified plants. In regard to impacts on biodiversity, Ms. Angelica El Canché and Mr. Feliciano Ucán Poot described impacts on organic honey production and bees resulting from the introduction of genetically modified soy. María Colin also described how GMO permits were granted without informing communities of the risks and without respect for the right to free and prior informed consent of indigenous communities. Mr. Steven Marsh and Mr. Percy Schmeiser further described genetically modified canola contamination in Australia and Canada respectively. In regard to impacts on farmers, Mr. Ousmane Tiendrebeogo and Dr. Krishnan Bir Choudhary in turn described the failure of genetically modified cotton to produce yields, as well as the attempts by Monsanto to monopolize the seed markets in India. Mr. Pedro Pablo Mutumbajoy and Mr. Juan Ignacio Pereyva also described the aerial spread of glyphosate in the failed war on drugs as well as the contamination of water sources with glyphosate in Argentina.

II.Q1.iii. Monsanto's conduct has negatively affected the right to a healthy environment

Monsanto has engaged in practices that have serious and negative environmental impacts. These impacts have affected countless individuals and communities in many countries, as well as the health of the environment itself, with its consequent impacts on plants and animals and biodiversity.

Monsanto produces and aggressively markets Roundup, an herbicide whose key ingredient is glyphosate in addition to other dangerous chemicals. Monsanto also patented genetically modified seeds that are tolerant to glyphosate. This design and combination has led to the proliferation of glyphosate-resistant GMO seeds and an increase in the use of glyphosate-containing herbicides. While the World Health Organization's International Agency for Research on Cancer (IARC) concluded that glyphosate is carcinogenic, Monsanto has continued to produce and market glyphosate-containing herbicides.

Glyphosate not only affects human health, however. The use of glyphosate has adverse effects on aquatic ecosystems and organisms²⁶; application of glyphosate poses a threat to fish reproductive

²⁶ C.D. Luijendijk *et al.*, *Measures to Reduce Glyphosate Runoff from Hard Surfaces*, Wageningen, Plant Research International, May 2005.

systems and results in acute toxicity²⁷. The use of glyphosate also has adverse effects on soil health, reducing soil fertility and the diversity of micro-organisms, as established by Dr. Art Dunham. Glyphosate also leads to compacting of soils, which in turn leads to flooding and erosion, as observed by Mr. Diego Fernández and by Dr. Don Huber, who was represented at the hearings by Dr. Dunham.

Since glyphosate is often spread aerially, it inevitably results in the contamination of untargeted crop species. In Colombia, for example, the impacts of the aerial spread of glyphosate have affected not only wild plants but also other crops such as cacao. Researchers have documented the symptoms of injured plants, including chlorosis of the youngest leaves, necrosis, stunted growth, and plant death within a week of exposure²⁸.

The combined use of GMO crops and glyphosate, aggressively marketed by Monsanto, also resulted in damage to biodiversity and ecosystems. The use of glyphosate results in the spread of glyphosate-resistant weeds²⁹. In Oaxaca, Mexico, traditional local varieties of corn are allegedly threatened by Roundup contamination, which also threatens dependent species such as monarch butterflies. The spread of monocultures is also decimating the diversity of local plants and crops. The impacts on bees and pollinators of the use of herbicides are further undermining biodiversity, as explained by Feliciano Ucán Poot.

The impacts of Monsanto's conduct on biodiversity have also negatively affected the rights of indigenous peoples and local communities. These impacts are all the more grave, given the close dependency of indigenous peoples and local communities on the environment. The lack of adequate information on risks posed by herbicides and GMOs and the lack of adequate mitigation measures, the lack of credible environmental impact assessments, and the lack of meaningful consultations; they all further underscore Monsanto's interference with human rights.

²⁷ S. Guilherme *et al.*, "European Eel (*Anguilla anguilla*) Genotoxic and Pro-Oxidant Responses Following Short-Term Exposure to Roundup – A Glyphosate-Based Herbicide", *Mutagenesis*, Vol. 25, No. 5, 2010, pp. 523 et seq.; R. Annett *et al.*, "Impact of Glyphosate and Glyphosate-based Herbicides on the Freshwater Environment", *Journal of Applied Toxicology*, Vol. 34, No. 5, 2014, pp. 458 et seq.

²⁸ K.N. Reddy *et al.*, "Biological Responses to Glyphosate Drift from Aerial Application in Non-Glyphosate-Resistant Corn", *Pest Management Science*, Vol. 66, No. 10, 2010, pp. 1148 et seq.

²⁹ V.K. Nandula *et al.*, "EPSPS Amplification in Glyphosate-Resistant Spiny Amaranth (*Amaranthus spinosus*): A Case of Gene Transfer via Interspecific Hybridization from Glyphosate-Resistant Palmer Amaranth (*Amaranthus palmeri*)", *Pest Management Science*, Vol. 70, No. 12, 2014, pp. 1902 et seq.

Question 2: The Right to Food

Did the firm Monsanto, by its activities, act in conformity with the right to food, as recognized in Article 11 of the International Covenant on Economic, Social and Cultural Rights, in Articles 24.2(c) and (e) and 27.3 of the Convention on the Rights of the Child, and in Articles 25(f) and 28.1 of the Convention on the Elimination of All Forms of Discrimination against Women, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

II.Q2.i. Applicable law

The right to food is firmly recognized in international law. The Universal Declaration of Human Rights provides in its article 25: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”.

The International Covenant on Economic, Social and Cultural Rights (ICESCR) states in its article 11(1) that “[t]he States Parties ... recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent”. The Covenant further affirms in article 11(2) “the fundamental right of everyone to be free from hunger”.

As recognized and articulated in the ICESCR, the right to food has therefore two aspects: the right to adequate food which is a relative standard and the right to be free from hunger which is an absolute one³⁰.

The UN Committee on Economic, Social and Cultural Rights has clarified the normative content of the right to food in its General Comment No. 12, where it stated: “The right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement”³¹. The Committee further considers that the right implies food that is free from adverse substances, and asserts that States must implement food safety requirements and protective measures to ensure that food is safe and qualitatively adequate³².

The duties incumbent upon States in regard to the right to food are also relevant to the conduct of business entities. For example, the Guidelines for Multinational Enterprises of the Organisation for Economic Co-Operation and Development (OECD) establish standards of great significance for the

³⁰ S. Narula, “The Right to Food: Holding Global Actors Accountable Under International Law”, *Columbia Journal of Transnational Law*, Vol. 44, 2006, pp. 691 et seq., at p. 706.

³¹ UN Committee on Economic, Social and Cultural Rights, *General Comment No. 12: The Right to Adequate Food (Article 11 of the International Covenant on Economic, Social and Cultural Rights)*, UN Doc. E/C.12/1999/5, 12 May 1999, § 6.

³² UN Human Rights Council, *Report of the Special Rapporteur on the Right to Food*, UN Doc. A/HRC/34/48, 24 January 2017.

realization of the right to food³³. The “Concepts and Principles” section of the Guidelines contains recommendations from governments to multinational enterprises³⁴. The “General Policies” section of the Guidelines establishes that enterprises should “[r]espect the internationally recognized human rights of those affected by their activities”³⁵. Therefore, where the conduct of multinational enterprises affects food issues, these business entities should respect the right to food.

The responsibility of business enterprises to respect the right to food is also established in the UN Guiding Principles on Business and Human Rights. Principle 12 states: “The responsibility of business enterprises to respect human rights refers to internationally recognized human rights – understood, at a minimum, as those expressed in the International Bill of Human Rights”³⁶. It is well known that the International Bill of Human Rights encompasses those rights recognized in the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, in addition to those rights found in the International Covenant on Civil and Political Rights. Moreover, Principle 23 (a) states: “In all contexts, business entities should comply with all applicable laws and respect internationally recognized human rights, wherever they operate”³⁷.

Even if the Guiding Principles on Business and Human Rights are not considered to be legally binding, they nevertheless reflect the normative expectations of society and are thus an important benchmark to evaluate the propriety of business conduct. This role of the Guiding Principles is consonant with General Comment No. 12 of the UN Committee on Economic, Social and Cultural Rights, which recalls that “private business sector has *responsibility* in the realization of the right to adequate food”³⁸. Therefore, while the right to food is particularly relevant to companies in the food sector³⁹, all business entities must respect the right to food.

All of these international norms, in addition to the linkages between the right to food and the rights to life, health and a healthy environment, support an interpretation of the right to food that cannot be restrictive or narrow. The right to food cannot be understood simply as the right to eat or to feed. The right to food comprehends the chance to feed properly and sufficiently; healthily and permanently; in addition to being understood as the possibility of producing food (for consumption or for marketing) or as the possibility of obtaining and accessing food also in a permanent and sustainable way.

In this regard, the UN Special Rapporteur on the Right to Food has noted that one must have “regular, permanent and free access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear from hunger”⁴⁰.

³³ Organisation for Economic Co-Operation and Development (OECD), *OECD Guidelines for Multinational Enterprises*, Paris, OECD, 2011.

³⁴ *Ibid.*, pp. 17-18.

³⁵ *Ibid.*, p. 19.

³⁶ *UN Guiding Principles on Business and Human Rights*, *op. cit.*, p. 13.

³⁷ *Ibid.*, p. 21.

³⁸ UN Committee on Economic, Social and Cultural Rights, *General Comment No. 12: The Right to Adequate Food*, *op. cit.*

³⁹ *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*, adopted by the 127th Session of the Food and Agriculture Organization of the United Nations (FAO) Council in November 2004, Rome, FAO, 2005.

⁴⁰ UN Commission on Human Rights, *The Right to Food, Report by the Special Rapporteur on the Right to Food, Mr. Jean Ziegler*, UN Doc. E/CN.4/2001/53, 7 February 2001.

Therefore, the right to food is firmly established in international law as a fundamental human right, both for individuals and communities. Business entities have a clear responsibility to respect it.

II.Q2.ii. Testimonies

The Tribunal heard various witnesses account for impacts on the right to food resulting from Monsanto's activities.

Dr. Channa Jayasumana, health expert from Sri Lanka, referred to the negative effects of the use of glyphosate to the ecosystem in the rice farm, submitting that it turned sandy and significantly lowered production, affecting the right to food of the farmers. He described how the conditions to produce food such as rice, and to obtain food with the sale of the same product, were drastically affected by glyphosate.

Mr. Kolon Saman, also from Sri Lanka, submitted that in the 1980's his community started to use the so-called "improved seeds" and was induced in the monoculture, highlighting that, before that, their crops were varied (rice, millet, sesamum, vegetables, fruits and grains). He explained that, with the help of Dr. Jayasumana, they reintroduced the traditional variations of rice and obtained better harvests. He added that, given the damages caused by Roundup and other five agrochemicals, these products were prohibited in 2015.

In their testimonies, Dr. Jayasumana and Mr. Saman described impairment of the right to food resulting from the disruption of the diversity in agricultural production, the negative changes in the type of varieties for rice cultivation, and damages to the soil, to the nutrients that acted against the conditions for the crops, and to the water currents used for the same agricultural work.

Dr. Damián Verzeñassi, a medical doctor from Argentina, explained that the use of GMOs had negatively altered lifestyles and ways of production and land management. He noted in particular that, where food had been produced before, there were now poison-dependent transgenic plants that had affected dairy and livestock production. Dr. Verzeñassi described in his testimony how the reduction of the possibility of producing food resulting from the use of GMOs represented a serious offense to the right to food.

Mr. Diego Fernández, an Argentine farmer in the Province of Santa Fe, where he owns 150 hectares, reported the changes experienced by his field when it was converted to exclusive production of soybeans and, particularly, since 1996, when he started using transgenic soybeans: transgenic soybeans increased the use of Roundup, and livestock was displaced, which in turn affected the natural fertility that was derived from agricultural rotation livestock. Before the conversion of the field, he used a litre of Roundup per hectare per year; after the conversion, he used between 10 and 12 litres, which had caused soil compaction, no live roots and less microbiological activity. Soil compaction had also caused flooding because the water was no longer filtered. Another consequence, he submitted, had been the emergence of invasive plants resistant to herbicides.

In the case of maize, Mr. Fernández stated that varieties that are not genetically modified were left out of the market. He submitted that, although he had been able to plant these varieties, they were contaminated with genetically modified ones. Moreover, he added, Monsanto had been charging royalties for soybeans sown for the last six years.

Ms. Angelica El Canché and Mr. Feliciano Ucán Poot are Mayan beekeepers from the village of Hopelchén, Campeche, Mexico. They reported that the cultivation of transgenic soy had negatively affected honey producers in their region. They explained in particular that honey had been contaminated because the bees produced it from flowers of soy planted with genetically modified seeds. They added that the commercialization to the European market had been particularly affected given the fact that it requires that honey must be GMO free.

According to their testimonies, more than 59,000 hectares of jungle were lost in Hopelchén between 2005 and 2012, many of which are now grown with transgenic soybeans, deforestation that adds to the damage caused to the production of honey by the use of transgenic soybeans together with glyphosate-containing herbicides.

Mr. Krishan Bir Choudhary, from India, is a farmer leader and a scientist. He submitted that the use of genetically modified Bt cotton had not helped farmers to increase the yield of their crops, as promised by Monsanto, particularly due to poor adaptation of these transgenic seeds to the Indian environment.

Mr. Ousmane Tiendrebeogo, a farmer from Burkina Faso fighting against genetically modified cotton introduced in 2003, highlighted the negative impacts of genetically modified Bt cotton. He submitted in particular that the yield that should have produced between 12 to 15 tons only produced between 5.50 and 8 tons. Because of this failure, he added, small farmers had abandoned their fields, and some of them had lost their livestock, which had forced them to retreat to neighbouring countries.

Ms. Farida Akhter, a political analyst and spokesperson for a farmers' movement and the Coalition against Bt Brinjal in Bangladesh, described how Monsanto is trying to impose its genetically modified aubergine on Bangladeshi farmers without their consent.

II.Q2.ii. Monsanto's conduct has negatively affected the right to food

The above-mentioned testimonies reveal that in all cases there has been an infringement of the right to food suffered by the witnesses as well as by the communities and persons referred to by the witnesses.

Monsanto's activities have negatively affected food availability for individuals and communities. Monsanto has interfered with the ability of individuals and communities to feed themselves directly from productive land.

Monsanto's activities have caused and are causing damages to the soil, water and generally to the environment, thereby reducing the productive possibilities for the production of adequate food. Communal agricultural activities as well as forests that provide food resources are being devastated by the spread of genetically engineered seeds that use large amounts of herbicides like glyphosate. These activities by Monsanto are interfering with the right to produce food.

Monsanto is also interfering with the right to food by denying peasants access to means. Farmers in countries that adopted GMO crops have seen their seeds choice restricted⁴¹. Non-GMO seeds are being withdrawn from the market, leading to decreased seeds choice.

⁴¹ A. Hilbeck *et al.*, "Farmer's Choice of Seeds in Four EU Countries Under Different Levels of GM Crop Adoption", *Environmental Sciences Europe*, Vol. 25, No. 1, 2013, Article 12.

Moreover, GMO seeds are not always affordable to small farmers and may only be available to large business entities. The use of GMOs all around the world is undermining the ability of farmers to access seeds and damaging agricultural production by communities. This situation is also affecting food sovereignty⁴², which implies priority of peoples' right to food and food production, rather than corporate interests⁴³.

Monsanto's activities also threaten biodiversity, as an increasing number of farmers use exactly the same GMO seeds and grow exactly the same monocrops. As explained by the Special Rapporteur on Human Rights and the Environment, "the degradation and loss of biodiversity undermine the ability of human beings to enjoy their human rights"⁴⁴. Specifically with regard to the right to food, the Special Rapporteur has observed that "[t]he benefits of biodiversity are particularly evident in relation to the right to food"⁴⁵. Therefore, by reducing crop biodiversity and local plants, Monsanto has interfered with the right to food and is moreover aggravating the risks of food security and undermining the resilience of local food production systems.

Another relevant dimension of the right to food that was exposed by the witnesses is the impact of GMO seeds on their property rights. Property rights, in relation to the right to food, have also been affected by Monsanto's activities, first of all, as a consequence of genetic contamination⁴⁶, *i.e.*, farmers who have not bought or used Monsanto's seeds in their fields but which nevertheless become contaminated by GMO seeds⁴⁷. In a number of cases, farmers have been forced to pay royalties to Monsanto and have also been deprived from selling their products as organic or free from GMOs⁴⁸. Furthermore, Monsanto has aggressively pursued intimidation tactics that have damaged the fabric of communities and caused great anxiety and mental affliction.

In this connection, the Tribunal agrees that seeds patents "are in contradiction with the principle of human right to food which guarantees access to nutrition, the basic need for every human to exist.

⁴² Article 5(4) of the Draft UN Declaration on the Rights of Peasants and Other People Working in Rural Areas presented by the Chair-Rapporteur of the Working Group on the Rights of Peasants and Other People Working in Rural Areas (UN Human Rights Council, UN Doc. A/HRC/WG.15/3/2, 8 March 2016) defines food sovereignty as follows: "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through socially just and ecologically sensitive methods. It entails peoples' right to participate in decision-making, and to define their own food and agriculture systems".

⁴³ Declaration of Nyéléni, 27 February 2007, available at <https://nyeleni.org/spip.php?article290>.

⁴⁴ UN Human Rights Council, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc. A/HRC/34/49, 19 January 2017, § 5.

⁴⁵ *Ibid.*, § 19.

⁴⁶ Genetic contamination also harms human groups, including both individuals and nations, by eliminating the option to maintain a transgene-free environment.

⁴⁷ One interesting example to follow is the *EU Directive 2015/412 of the European Parliament and of the Council of 11 March 2015 amending Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory*, which requires Member States to "take appropriate measures in border areas of their territory with the aim of avoiding possible cross-border contamination into neighbouring Member States in which the cultivation of those GMOs is prohibited, unless such measures are unnecessary in the light of particular geographical conditions" (*Official Journal of the European Union*, 13 March 2015, L 68/5).

⁴⁸ GMOs are prohibited in foods sold with United States Department of Agriculture "Organic" labels (7 C.F.R. § 205.2 (2015)). In the European Union, foods labelled GM-free may be subject to recall or import bans if found to contain transgene contamination at levels above 0.9% (Regulation (EC) No. 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms, *Official Journal of the European Union*, 18 October 2003, L 268/27).

Intellectual property rights should be rightfully respected, but when companies are taking hold of sources of nutrition, should it be under closer scrutiny”⁴⁹.

The aggressive marketing of GMO seeds has also interfered with the right to food by forcing farming methods that do not respect traditional cultural practices⁵⁰. Farmers that have fallen prey to Monsanto’s aggressive and misleading tactics have been forced to buy seeds every year and have lost the ability to save seeds. Since the advent of agriculture thousands of years ago, farmers have been saving seeds for cultivation the next season. This cultural practice has allowed for diversity and resilience in period of drought or against pests. But the spread of GMO seeds by Monsanto has denied farmers the ability to practice agriculture according to their traditional cultural practices. A non-commercial seeds system must exist and expand, ensuring that farmers have the ability to preserve their traditional knowledge⁵¹.

Today’s dominant agro-industrial model is highly problematic, not only because it is dependent on dangerous chemicals, but also due to its negative effects on climate change, its impact on the loss of biodiversity, and its inability to ensure food sovereignty⁵².

A rise in organic agricultural practices in many places illustrates that farming with less, or without, pesticides, herbicides, and other dangerous chemicals is feasible. Studies have indicated that agroecology is capable of delivering sufficient yields to feed the entire world population and ensure that people are adequately nourished⁵³.

⁴⁹ J. Mäki, “Disputes over GM Maize in Mexico from the Perspective of Human Right to Food”, *Nürnberger Menschenrechtszentrum*, 7 March 2016, p. 6.

⁵⁰ K. Bustos, “Sowing the Seeds of Reason in the Field of the Terminator Debate”, *Journal of business ethics*, 2008, Vol. 77, No. 1, p. 67.

⁵¹ UN General Assembly, *Seed Policies and the Right to Food: Enhancing Agrobiodiversity and Encouraging Innovation*, Report of the Special Rapporteur on the Right to Food, Olivier De Schutter, UN Doc. A/64/170, 23 July 2009, § 7.

⁵² UN Human Rights Council, *Report of the Special Rapporteur on the Right to Food*, UN Doc. A/HRC/34/48, 24 January 2017.

⁵³ International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD), *Agriculture at a Crossroads – Synthesis Report*, Washington-Covelo-London, Island Press, 2009.

Question 3: The Right to Health

Did the firm Monsanto, by its activities, act in conformity with the right to the highest attainable standard of health, as recognized in Article 12 of the International Covenant on Economic, Social and Cultural Rights, or the right of child to the enjoyment of the highest attainable standard of health, as recognized by Article 24 of the Convention on the Rights of the Child, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

II.Q3.i. Applicable law

The right to health is fundamental to the ability of individuals to enjoy a life of dignity. The right to health is firmly established in international human rights law and has direct links not only with the right to life, but also with rights that enable health, such as the rights to food, water and sanitation, and a healthy environment.

At the global level, the right to health has been recognized in Article 25(1) of the 1948 Universal Declaration on Human Rights which affirms: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing ...”. The right to health has been reaffirmed and codified in Article 12 of the 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR), which explicitly sets out the right to the “highest attainable standard of physical and mental health” and defines the steps that States should take in order to realize it, including in respect of the “improvement of all aspects of environmental ... hygiene”.

Additional references to the right to health can be found, among others, in Article 5(e)(iv) of the 1965 International Convention on the Elimination of All Forms of Racial Discrimination (CERD), in Article 12 of the 1979 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), in Article 24 of the 1989 Convention on the Rights of the Child (CRC), in articles 28 and 43(e) of the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, and in Article 25 of the 2006 Convention on the Rights of Persons with Disabilities.

The right to health is also recognized in several regional instruments, such as the African Charter on Human and Peoples’ Rights (1981), the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, known as the Protocol of San Salvador (1988), the European Social Charter (1961, revised in 1996), and the Charter of Fundamental Rights of the European Union (2000).

The normative content of the right to health must be understood by reference to the Constitution of the World Health Organization (WHO), which defines health broadly, as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”⁵⁴.

In light of this definition, health not only has a physical dimension but also mental and social dimensions. In that regard, the human right to health encompasses the socio-economic conditions in

⁵⁴ Preamble to the Constitution of the World Health Organization, as adopted by the International Health Conference held in New York from 19 June to 22 July 1946.

which people can lead a healthy life. Moreover, the right to health extends to the “underlying determinants of health”, such as food and nutrition, housing, access to safe and potable water, healthy working conditions and the environment⁵⁵. Therefore, interferences with any of these underlying determinants of health may offend the right to health.

In regard to the particular situation of children, the right to health is strongly linked to their right to development⁵⁶. The UN Committee on the Rights of the Child interprets children’s right to health as encompassing “a right to grow and develop to their full potential and live in conditions that enable them to attain the highest standard of health”⁵⁷. The Committee has also noted that “States should regulate and monitor the environmental impact of business activities that may compromise children’s right to health, food security and access to safe drinking water and to sanitation”⁵⁸.

In relation to business activities and the right to health, the UN Guiding Principles on Business and Human Rights lay down global standards that are currently expected of all businesses in the human rights sphere. Principle 15 (b), in particular, states that corporations should adopt a due diligence process in order to meet their responsibility to respect human rights and defines due diligence as the process whereby businesses “identify, prevent, mitigate and account for how they address their impacts”⁵⁹ on human rights⁶⁰.

The due diligence process requires, *inter alia*, that business entities inform consumers and communities potentially affected by the activities, even in situations where science is uncertain. In this regard, the right to know is directly linked to the “precautionary principle” whereby lack of scientific certainty is not an excuse to delay environmental protection measures⁶¹.

II.Q3.ii. Testimonies

The Tribunal heard various witnesses account for impacts on human health resulting from Monsanto’s activities.

Ms. Sabine Grataloup, from France, and Ms. Maria Liz Robledo, from Argentina, are the mothers of Theo and Martina respectively. They described the malformations of their children resulting from exposure to Monsanto’s glyphosate.

⁵⁵ UN Committee on Economic, Social and Cultural Rights, *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Article 12 of the International Covenant on Economic, Social and Cultural Rights)*, UN Doc. E/C.12/2000/4, 11 August 2000, § 4.

⁵⁶ See Article 12.2(a) of the International Covenant on Economic Social and Cultural Rights; UN Human Rights Council, *Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health, Dainius Pūras*, UN Doc. A/HRC/29/33, 30 April 2015, §§ 40-41.

⁵⁷ UN Committee on the Rights of the Child, *General Comment No. 15 on the Right of the Child to the Enjoyment of the Highest Attainable Standard of Health (Art. 24)*, UN Doc. CRC/C/GC/15, 17 April 2013, § 2.

⁵⁸ *Ibid.*, § 49.

⁵⁹ An “adverse human rights impact” occurs when an action removes or reduces the ability of an individual to enjoy his or her human rights. Actual impact requires remediation (see Principle 22 of the UN Guiding Principles on Business and Human Rights). Potential impact – or human rights risk – requires action to prevent it from materializing, or at least to mitigate (reduce) as far as possible the extent to which it may do so (see Principles 17-21 on human rights due diligence of the Guiding Principles).

⁶⁰ *UN Guiding Principles on Business and Human Rights, op. cit.*, p. 15. According to a legal dictionary, due diligence means “such a measure of prudence, activity, or assiduity, as is properly to be expected from, and ordinarily exercised by, a reasonable and prudent [person] under the particular circumstances; not measured by any absolute standard, but depending on the relative facts of the special case” (*Black’s Law Dictionary*, St. Paul, Minnesota, West Group, 6th edition, 1990).

⁶¹ E. Wery and T. Leonard, “Entre principe de précaution et défaut d’information, Monsanto est condamnée”, *Droit et Technologies*, 14 September 2015.

Ms. Christine Sheppard, an American woman diagnosed in 2003 with Stage 4 Large B Cell Non-Hodgkins Lymphoma, and her lawyer, Mr. Timothy Litzenburg, submitted that, according to several studies, Roundup exposure produces Non-Hodgkins Lymphoma.

Mr. Paul François, a French farmer who won a court case against Monsanto, described how he was poisoned by Lasso, one of Monsanto's herbicides, and the unbearable pressure that he went through during the subsequent legal proceedings because of Monsanto's threats.

Mr. Kolon Saman and Dr. Channa Jayasumana, from Sri Lanka, reported that Roundup had been used for 25 years in their community and that, because of its health consequences, people had been diagnosed with chronic kidney diseases, renal damage and diabetes, and some had already died. According to their testimonies, the lack of equipment for personal protection was due to misinformation.

Dr. Damián Verzeñassi, from Argentina, is the Director of the Institute of Socio-Environmental Health at the Faculty of Medicine of the National University of Rosario; he has conducted a project called "Sanitary Camp" which has carried out studies in 27 localities of four Argentinian provinces. With data from 96,874 people in these localities, the studies have found serious damages to people's health. Dr. Verzeñassi affirmed that the diseases affecting the studied population had their origin in the use of GMO crops and exposure to glyphosate produced and marketed by Monsanto.

The Tribunal also heard the testimony of Mr. Marcelo Firpo, a Brazilian researcher and a member of a collective health association (ABRASCO). According to his submissions, the increase of soy monoculture had forced Brazilian farmers to buy agro-toxics, which had resulted in the degradation and destruction of the ecosystem, environmental conflicts, and health problems, specially an increase of cancer rates.

II.Q3.iii. Monsanto's conduct has negatively affected the right to health

The above-mentioned testimonies describe situations that point to Monsanto's responsibility for abuses in respect of the right to health. According to the testimonies, Monsanto's activities have not only negatively affected the physical health of individuals and communities. Monsanto's conduct has also interfered with the mental health of countless individuals and communities around the world. Moreover, Monsanto's activities have had a negative impact on the realization of the underlying factors of the right to health, including access to adequate and safe food and water, as well as the enjoyment of a healthy environment.

As described in detail below, Monsanto has actively employed dangerous substances, including polychlorinated biphenyls (PCBs), glyphosate and GMOs, that allegedly interfere with the enjoyment of the right to health.

1. Polychlorinated biphenyls (PCBs)

Polychlorinated biphenyls, also known as PCBs, are a chemical compound obtained by the mixture of benzene and chlorine. PCBs are one of the twelve original persistent organic pollutants covered by the 2001 Stockholm Convention on Persistent Organic Pollutants. For over half a century PCBs have been used in a wide variety of industrial products⁶².

⁶² They were for instance used as coolants in electric transformers and industrial hydraulic machines, but also as lubricants in applications as varied as plastics, paint, ink, paper, turbines, pumps, and food distribution equipment for cows. They were also a

The United States Environmental Protection Agency (EPA) gathered “evidence for potential carcinogenic effects”⁶³. It demonstrated that the health implications of exposure to PCBs are extremely serious. It listed 159 scientific studies conducted in the USA, Europe, and Japan that all reached the same conclusion: the three main sources of human contamination by PCBs are direct exposure in the workplace, living near a polluted site, and the food chain⁶⁴.

There is also a range of non-cancerous, health effects reported by EPA, such as: negative impacts on fertility, child development and the immune system⁶⁵. In addition, PCBs also cause skin irritations.

Laboratory studies have also demonstrated that chronic toxicity in fish, birds and mammals generated negative developmental effects, reproductive failure, liver damage, cancer, wasting syndrome and death. Moreover, it has been demonstrated that PCBs can affect birds’ and marine mammals’ immune system⁶⁶.

Since the beginning of the twentieth century, Monsanto has developed a number of highly toxic products that include substances such as PCBs. Monsanto was the primary and only manufacturer in the USA of PCBs, under the trade name of “Aroclor”, from approximately 1935 to 1979⁶⁷. Despite the knowledge regarding its deleterious health impacts, for many years Monsanto produced and marketed PCBs.

2. Glyphosate

Monsanto produces and markets throughout the world Roundup, an herbicide (weed killer). The key ingredient in Monsanto’s widely used herbicide is glyphosate⁶⁸. Glyphosate is a chemical substance produced by Monsanto that kills any plant not genetically modified to resist it⁶⁹.

Glyphosate is included in the “List of Highly Hazardous Pesticides” elaborated by Pesticide Action Network (PAN) International⁷⁰. The global network is calling for the herbicide to be replaced by agroecological approaches to weed management in diversified cropping systems and non-crop situations.

Glyphosate is sprayed on numerous crops and plantations, including about 80% of genetically engineered, or GMO crops, as well as a pre-harvest desiccant, which results in high food residues. Glyphosate is also widely used in home gardens and public places including roadsides, and semi-natural and natural habitats. Due to its widespread use, residues are now detected in different types of foods,

component of the paint used for the walls of reservoirs, grain silos, swimming pools (particularly in Europe), and road markings and were used in the manufacture of oils used in metal fabrication, solder, adhesives, carbonless copy paper, and more.

⁶³ See www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects. See also *Review of PCB Levels in the Environment*, Washington, DC, Office of Toxic Substances, Environmental Protection Agency, Report No. EPA-560/7-76-001, January 1976.

⁶⁴ Agency for Toxic Substances and Disease Registry and US Environmental Protection Agency, *Public Health Implications of Exposure to Polychlorinated Biphenyls (PCBs)*, Atlanta, US Department of Health and Human Services, 1998.

⁶⁵ See www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects.

⁶⁶ National Research Council, *A Risk-Management Strategy for PCB-Contaminated Sediments*, Washington, DC, The National Academies Press, 2001, p. 40.

⁶⁷ See 116 Cong. Record 11695, 91st Congress (14 April 1970) (“Insofar as the Monsanto Co., the sole manufacturer of PCB’s is concerned, ...”); 121 Cong. Record 33879, 94th Congress (October 23, 1975) (“The sole U.S. producer, Monsanto Co., ...”).

⁶⁸ See www.monsanto.com/products/pages/roundup-pro-concentrate.aspx.

⁶⁹ See Friends of the Earth Europe, *The environmental impacts of glyphosate*, June 2013, p. 1.

⁷⁰ See PAN *International List of Highly Hazardous Pesticides (PAN List of HHPs)*, December 2016.

drinking water, wine and beer; and even in non-food products derived from GMO cotton. The extent of human exposure is confirmed by the presence of glyphosate in human urine wherever it has been tested, principally in Europe and North America; it has also been found in breast milk in the USA⁷¹.

Monsanto sells an enormous amount of herbicides. From 2013 to 2015, for example, Monsanto's sales from "Agricultural productivity" products netted more than \$ 4 billion per year (the glyphosate-based herbicides Roundup and Lasso make up the majority of Monsanto's Agricultural productivity sector)⁷². Monsanto also invented GMO seeds that are resistant to glyphosate⁷³ and are therefore suitable for use with Roundup⁷⁴. This design allows farmers to spray the herbicide – killing weeds – but not damaging those crops that are genetically modified to tolerate glyphosate⁷⁵. The proliferation of these glyphosate-resistant GMO seeds has led to an increase in the use of glyphosate-containing herbicides⁷⁶.

That was also highlighted by the UN Special Rapporteur on the Right to Food who stated that glyphosate is a prime example of controversy around genetically engineered crops⁷⁷.

In March 2015 glyphosate was declared "probably carcinogenic to humans" by WHO's International Agency for Research on Cancer (IARC)⁷⁸. IARC also observed that Non-Hodgkin's Lymphoma⁷⁹ and other hematopoietic cancers are the cancers most associated with glyphosate exposure⁸⁰.

A review of all studies on glyphosate, conducted by Brazilian researchers, corroborated the report and findings of the IARC, asserting the genotoxicity of glyphosate on humans⁸¹. Moreover, according to the testimonies and several scientific studies, glyphosate produces a number of serious diseases on humans⁸² and animals⁸³.

⁷¹ Pesticide Action Network (PAN) Europe, "Comprehensive New Review of Monsanto's Glyphosate Underscores Urgent Need for Global Action", 11 October 2016.

⁷² See Monsanto, *2015 Annual Report*, pp. 6 and 22.

⁷³ See Friends of the Earth Europe, *The Environmental Impacts of Glyphosate*, *op. cit.*

⁷⁴ Monsanto International sàrl and Monsanto Europe sa, *The Agronomic Benefits of Glyphosate in Europe – Review of the Benefits of Glyphosate Per Market Use*, February 2010, p. 5.

⁷⁵ *Ibid.*

⁷⁶ V.M. Davis *et al.*, "Growth and Seed Production of Horseweed (*Conyza Canadensis*) Populations Resistant to Glyphosate, ALS-Inhibiting, and Multiple (Glyphosate + ALS-Inhibiting) Herbicides", *Weed Science*, Vol. 57, No. 5, 2009, pp. 494 et seq.

⁷⁷ UN Human Rights Council, *Report of the Special Rapporteur on the Right to Food*, UN Doc. A/HRC/34/48, 24 January 2017.

⁷⁸ See "IARC Monographs Volume 112: Evaluation of Five Organophosphate Insecticides and Herbicides", Press release, Lyon (France), IARC, 20 March 2015.

⁷⁹ H.H. Mcduffie *et al.*, "Non-Hodgkin's Lymphoma and Specific Pesticide Exposures in Men: Cross-Canada Study of Pesticides and Health", *Cancer Epidemiology Biomarkers and Prevention*, Vol. 10, No. 11, 2001, pp. 1155 et seq.; L. Hardell *et al.*, "Exposure to Pesticides as Risk Factor for Non-Hodgkin's Lymphoma and Hairy Cell Leukemia: Pooled Analysis of Two Swedish Case-Control Studies", *Leukaemia and Lymphoma*, Vol. 43, No. 5, 2002, pp. 1043 et seq.; A.J. De Roos *et al.*, "Integrative Assessment of Multiple Pesticides as Risk Factors for Non-Hodgkin's Lymphoma among Men", *Occupational Environmental Medicine*, Vol. 60, No. 9, 2005, E11.

⁸⁰ See *Open letter: Review of the Carcinogenicity of Glyphosate by EFSA and BfR*, 27 November 2015 (available at: www.efsa.europa.eu). See also Center for Food and Safety, *Glyphosate and Cancer Risks: Frequently Asked Questions*, Fact Sheet, May 2015.

⁸¹ See *Dossiê ABRASCO: um alerta sobre os impactos dos agrotóxicos na saúde*, Rio de Janeiro-São Paulo, Escola Politécnica de Saúde Joaquim Venâncio-Expressão Popular, 2015.

⁸² Among others, concerning Roundup contamination of farmer's urine, see J. F. Acquavella *et al.*, "Glyphosate Biomonitoring for Farmers and Their Families Results from the Farm Family Exposure Study", *Environmental Health Perspectives*, Vol. 112, No. 3, 2004, pp. 321 et seq.; A. Samsel and S. Seneff, "Glyphosate's Suppression of Cytochrome P450 Enzymes and Amino Acid Biosynthesis by the Gut Microbiome: Pathways to Modern Diseases", *Entropy*, Vol. 15, No. 4, 2013, pp. 1416 et seq. On the higher risk of spontaneous abortion when exposed to glyphosate within the three months before conception, see T.E. Arbuckle

The Tribunal does not ignore a report by the European Food Safety Authority (EFSA) that concludes that glyphosate is not a carcinogenic substance⁸⁴. The United States Environmental Protection Agency (EPA) has also issued a report in September 2016 that concluded that glyphosate was “not likely carcinogenic to humans”⁸⁵. But, in a report released in March 2017, some of the panel members who reviewed the research disagreed with EPA’s conclusion, emphasizing the value and importance of the findings reported from several dose-response analyses and meta-analyses⁸⁶. These panellists noted several considerations including that, while the majority of the individual studies are not statistically significant, combining the results using meta-analysis shows a scientifically important and statistically significant elevated Non-Hodgkin’s Lymphoma risk that is relevant for understanding carcinogenic potential. These panellists recommended that EPA revises its conclusion along the following lines: “Based on the weight-of-evidence from epidemiological studies and meta-analyses, the Agency cannot exclude the possibility that observed positive associations between glyphosate exposure and risk of Non-Hodgkin’s Lymphoma suggest human carcinogenic potential of glyphosate, even though study limitations and concerns about potential biases remain”⁸⁷.

The Tribunal does also not ignore that, in an opinion on the harmonised classification for glyphosate delivered on 15 March 2017, the European Chemicals Agency (ECHA) Committee for Risk Assessment (RAC) has agreed to maintain the current harmonized classification of glyphosate as a substance causing serious eye damage and being toxic to aquatic life with long-lasting effects⁸⁸. The RAC concluded in particular that the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction. It should be stressed that this classification is based solely on the hazardous properties of the substance. It does not take into account the likelihood of exposure to the substance and therefore does not address the risks of exposure. The risks posed by exposure are considered, for example, when deciding whether to renew the approval of glyphosate as a pesticide in accordance with Regulation (EC) N° 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market⁸⁹.

et al., “An Exploratory Analysis of the Effect of Pesticide Exposure on the Risk of Spontaneous Abortion on an Ontario Farm population”, *Environmental Health Perspective*, 2001, Vol. 109, pp. 851 et seq.; A. Samsel and S. Seneff, “Glyphosate, pathways to Modern Diseases II: Celiac Sprue and Gluten Intolerance”, *Interdisciplinary Toxicology*, Vol. 6, No. 4, 2013, pp. 159 et seq.; A. Walia, “What Parents Need To Know About Monsanto: By 2025 One In Two Children Will Be Autistic”, *Collective Evolution*, 20 December 2014.

⁸³ See, among others, R.A. Relyea, “The Impact of Insecticides and Herbicides on the Biodiversity and Productivity of Aquatic Communities”, *Ecological Applications*, Vol. 16, No. 5, 2005, pp. 618 et seq., and see also Monsanto, “Response to ‘The Impact of Insecticides and Herbicides on the Biodiversity and Productivity of Aquatic Communities’”, April 2005; *Idem*, “The Lethal Impact of Roundup on Aquatic Terrestrial Amphibians”, *Ecological Applications*, Vol. 15, 2005, pp. 1118 et seq.; R.A. Relyea *et al.*, “Pesticides and Amphibians: the Importance of Community Context”, *Ecological Applications*, Vol. 15, 2005, pp. 1125 et seq.; N. Benachour and G.-E. Séralini, “Glyphosate Formulations Induce Apoptosis and Necrosis in Human Umbilical, Embryonic, and Placental Cells”, *Chemical Research in Toxicology*, Vol. 22, No. 1, 2009, pp. 97 et seq.

⁸⁴ While the research made by the IARC was carried out by experts recruited expressly for this study on the basis of their competence and their lack of conflict of interest, the EFSA in its report explicitly refused to reveal the scientists’ identities. Therefore, and even though the EFSA is saying it made sure there was no conflict of interest, it is impossible to determine or to check whether any of them actually has a conflict of interest. Neither is it possible to determine their competence.

⁸⁵ EPA’s Office of Pesticide Programs, *Glyphosate Issue Paper: Evaluation of Carcinogenic Potential*, EPA, 12 September 2016.

⁸⁶ See the Meeting Minutes and Final Report of the December 13-16, 2016 Federal Insecticide, Fungicide, and Rodenticide Act (IFRA) Scientific Advisory Panel (SAP) held in Arlington, Virginia, No. 2017-01.

⁸⁷ *Ibid.*

⁸⁸ See “Glyphosate not classified as a carcinogen by ECHA”, Press release, ECHA/PR/17/06, Helsinki (Finland), 15 March 2017.

⁸⁹ RAC’s opinion on the harmonised classification for glyphosate will be taken into account when the European Commission and EU Member States consider whether to renew the approval to use glyphosate as an active substance in pesticides, later this year. By the time the present advisory opinion was submitted, almost 600,000 people had signed a European Citizens’ Initiative calling on the European Commission to ban glyphosate, reform the EU pesticide approval process and set mandatory EU targets

As analyzed below, under Question 4 concerning freedom indispensable for scientific research, the Tribunal is concerned about the independence of the studies⁹⁰.

Internal Monsanto documents released in March 2017 as a result of a court order of the U.S. District Court, Northern District of California (San Francisco)⁹¹, show that the Monsanto's long-standing claims about the safety of its top-selling Roundup herbicide do not rely on sound science as the Company asserts, but on efforts to manipulate the science⁹². Therefore, the scientific controversy about the cancer risks associated to glyphosate may be over. In light of the evidence and considering the risks and negative impacts resulting from glyphosate, Monsanto's conduct has offended the right to health.

3. Genetically modified organisms (GMOs)

GMOs are genetically modified organisms. Despite the fact that the genes being transferred occur naturally in other species, there are unknown consequences to altering the natural state of an organism through foreign gene expression. These consequences may influence not only the GMO itself, but also the natural environment where it is released⁹³.

There is an absence of scientific consensus about the direct harmfulness of GMOs on human health. At the same time, independent scientists and policy analysts have expressed the concern that relevant risk assessment and safety testing are not being carried out for GMOs, for several reasons. These reasons include the inadequate design of regulatory frameworks, their dependence on company data, the lack of transparency in the process, and the inability of independent researchers to conduct their safety studies⁹⁴, as the case in San Francisco described previously has shown⁹⁵. These concerns are further amplified by studies that show a strong statistical association between scientific authors' professional connections to the biotechnology industry and research findings that were favourable to transgenic food products⁹⁶.

Although the scientific question of GMO toxicity on human health remains open, in light of the concerns regarding inadequate risk assessments for GMOS (highlighted in the paragraph above), there is no political consensus on the cultivation of GMOs. For instance, the European Union did not

to reduce pesticide use (see <https://stopglyphosate.org/>).

⁹⁰ See *infra*, II., Question 4: Freedom Indispensable for Scientific Research.

⁹¹ *Roundup Products Liability Litigation*, MDL 2741, U.S. District Court, Northern District of California (San Francisco).

⁹² See, among others, J. Rosenblatt, "Monsanto Cancer Suits Turn to EPA Deputy's 'Suspicious' Role", *Bloomberg*, 28 February 2017; C. Gillam, "Judge Threatens to Sanction Monsanto for Secrecy in Roundup Cancer Litigation", *The Huffington Post*, 10 March 2017; J. Rosenblatt *et al.*, "EPA Official Accused of Helping Monsanto 'Kill' Cancer Study", *Bloomberg*, 14 March 2017; D. Hakim, "Monsanto Weed Killer Roundup Faces New Doubts on Safety in Unsealed Documents", *The New York Times*, 14 March 2017; S. Foucart, "Les experts européens blanchissent le glyphosate", *Le Monde*, 16 March 2017; C. Gillam, "Monsanto Weed Killer Deserves Deeper Scrutiny As Scientific Manipulation Revealed", *The Huffington Post*, 17 March 2017; S. Foucart, "Ce que les 'Monsanto Papers' relèvent du Roundup", *Le Monde*, 18 March 2017.

⁹³ T. Phillips, "Genetically Modified Organisms (GMOs): Transgenic Crops and Recombinant DNA Technology", *Nature Education*, Vol. 1, No. 1, 2008, pp. 213 et seq.

⁹⁴ E. Millstone *et al.*, "Beyond 'Substantial Equivalence'", *Nature*, Vol. 401, No. 6753, 7 October 1999, pp. 52 et seq.; J.L. Domingo, "Health Risks of GM Foods: Many Opinions but Few Data", *Science*, Vol. 288, No. 5472, 9 June 2000, pp. 1748 et seq.; W. Freese and D. Schubert, "Safety Testing and Regulation of Genetically Engineered Foods", *Biotechnology and Genetic Engineering Reviews*, Vol. 21, 2004, pp. 299 et seq.; S. Bardócz and A. Pusztai, "Post-Market Monitoring of Transgenic Plants", *Acta Alimentaria*, Vol. 33, No. 4, 2004, pp. 333 et seq.; E. Waltz, "Under wraps", *Nature Biotechnology*, Vol. 27, No. 10, 2009, pp. 880 et seq.

⁹⁵ *Roundup Products Liability Litigation*, MDL 2741, *op. cit.*

⁹⁶ J. Diels *et al.*, "Association of Financial or Professional Conflict of Interest to Research Outcomes on Health Risks or Nutritional Assessment Studies of Genetically Modified Products", *Food Policy*, Vol. 36, No. 2, 2011, pp. 197 et seq.

reach an agreement on the authorization of genetically modified plants. Furthermore, the spread of GMO crops has dramatically increased the amount of pesticide and herbicide usage per hectare in recent years, and contributed to the spread of glyphosate-resistant weeds⁹⁷. In that sense it has been shown that, by exposing communities and individuals to the higher risks of increased pesticide and herbicide use, GMOs have indirect impacts on health.

It is important to stress that the UN Special Rapporteur on the Right to Food, in its report presented at the 34th session of the Human Rights Council, pointed out that, “[c]onsidering their probable grave effects on health and the environment, there is an urgent need for holistic regulation on the basis of the precautionary principle to address the genetically engineered production process and other new technologies at the global level”⁹⁸.

As a manufacturer and marketer of GMO seeds that increase the use of glyphosate, Monsanto has engaged in practices that have had negative impacts on human health.

⁹⁷ C.M. Benbrook, “Impacts of Genetically Engineered Crops on Pesticide Use in the U.S. – The First Sixteen Years”, *Environmental Sciences Europe*, Vol. 24, No. 1, 2012, Article 24.

⁹⁸ UN Human Rights Council, *Report of the Special Rapporteur on the Right to Food*, UN Doc. A/HRC/34/48, 24 January 2017.

Question 4: Freedom Indispensable for Scientific Research

Did the firm Monsanto act, by its activities, in conformity with the freedom indispensable for scientific research, as guaranteed by Article 15(3) of the International Covenant on Economic, Social and Cultural Rights, as well as the freedoms of thought and expression guaranteed in Article 19 of the International Covenant on Civil and Political Rights, taking into account the responsibilities imposed on corporations by the Guiding Principles on Business and Human Rights, as endorsed by the Human Rights Council in Resolution 17/4 of 16 June 2011?

II.Q4.i. Applicable law

The two universal human rights covenants recognize rights that safeguard the freedom indispensable for scientific research. Article 15 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), for example, recognizes the right of everyone “to enjoy the benefits of scientific progress and its applications”, and it commits the States Parties to respect “the freedom indispensable for scientific research”.

The freedom indispensable for scientific research allows a society to gain increasing awareness of the environmental risks that it faces, and thus it links directly with the ability of communities and individuals to take measures to protect their health and environment. The freedom indispensable for scientific research is therefore key to safeguarding other rights, such as the right to health, food, water and a healthy environment, that may be negatively affected by environmental harm.

The freedom indispensable for scientific research also relates to freedom of thought and expression, as well as the right to information. These rights are protected in Article 19 of the International Covenant on Civil and Political Rights (ICCPR), which recognizes “the right to hold opinions without interference” and “the right to freedom of expression”. This Covenant further provides that the right to freedom of expression shall include “freedom to seek, receive and impart information and ideas of all kinds”. As the Human Rights Committee has explained in its General Comment No. 34, freedom of expression is the basis for a self-standing right to information⁹⁹.

The right to information is underscored in the UN Guiding Principles on Business and Human Rights, which point to the responsibility of business enterprises to communicate how they address human rights impacts. Principle 21 (b) also points to the corporate responsibility to “provide information that is sufficient to evaluate the adequacy of an enterprise’s response to the particular human rights involved”¹⁰⁰.

The UN Special Rapporteur in the Field of Cultural Rights has explained that the normative content of the freedom indispensable for scientific research “means ensuring that the scientific enterprise remains free of political and other interference, while guaranteeing the highest standards of ethical safeguards by scientific professions”¹⁰¹ and includes “the right to freely communicate research results to others,

⁹⁹ UN Human Rights Committee, *General Comment No. 34, Article 19: Freedoms of Opinion and Expression*, UN Doc. CCPR/C/GC/34, 12 September 2011, § 18.

¹⁰⁰ *UN Guiding Principles on Business and Human Rights*, *op. cit.*, p. 20.

¹⁰¹ UN Human Rights Council, *Report of the Special Rapporteur in the Field of Cultural Rights, Farida Shaheed, The Right to Enjoy the Benefits of Scientific Progress and its Applications*, UN Doc. A/HRC/20/26, 14 May 2012, § 39.

and to publish and publicize them”¹⁰². The Special Rapporteur has also underscored the linkages between the freedom indispensable for scientific research and freedom of expression and access to information: “Given the enormous impact that scientific advances and technologies have on the daily lives of individuals and peoples, the right to science must be read in conjunction with freedom of expression, including the freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers ...”¹⁰³.

According to these human rights standards, scientists are free to express their opinions and publish their research, and the public has a corresponding right to be informed by them. Observance of these rights is particularly important in areas where the impacts of scientific and technological advances are controversial and may be harmful.

The Tribunal takes note of the “Venice Statement” that emerged from a 2009 meeting of experts organized jointly by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the European Inter-University Centre for Human Rights and Democracy. In the preamble to their recommendations, the experts stress that the freedom indispensable for scientific research engenders the requirement to ensure that scientific researchers are able to express themselves freely and to be protected for acting as whistle-blowers¹⁰⁴. As the experts acknowledge, the relationship between human rights and science is further complicated by the privatization of many formerly public scientific research functions, which has now resulted in corporations and other private entities often being the principal producers, or funders, of scientific research. They also note the importance of ensuring protection from the abuses and adverse effects of science and its applications and list among the areas in which such controversy arises – GMOs, and generic seeds that can be reused. They underscore the importance of ensuring the scientific impact assessments be carried out as an integral part of the product development process – and for the public to be informed of these assessments in a transparent way.

II.Q4.ii. Testimonies

The Tribunal heard various testimonies that alleged that Monsanto has routinely employed dishonest, deceptive and non-transparent tactics to gain approval for its genetically engineered crops and their associated herbicides. Monsanto is accused of operating through surrogates to discredit and shut down scientific research and debate that threaten its commercial interests, promoting weak regulatory processes, and using bullying and illicit tactics to pressure countries to permit the marketing of its products. In the result, sound scientific inquiry and debate is undermined or silenced, with the consequent effect of increasing risks to health and the environment.

The following testimonies have a direct bearing on the freedom indispensable for scientific research.

Mr. Miguel Lovera is an agronomist. Between April 2010 and June 2012, he has served in the Cabinet of the President of Paraguay, Fernando Lugo, and was president of the Paraguay National Agricultural Service (SENAVE), an autonomous body whose mission and function is to ensure the quality and safety of food production and seeds in Paraguay.

Mr. Lovera’s testimony described a pattern of alleged activity by Monsanto in his country that involved bribing public officials, smearing those raising concerns about the impacts of genetically

¹⁰² *Ibid.*, § 40.

¹⁰³ *Ibid.*, § 21

¹⁰⁴ *The Right to Enjoy the Benefits of Scientific Progress and its Applications (Venice, Italy, 16-17 July 2009)*, Paris, UNESCO, 2009.

modified products, and as having engaged in the indiscriminate and illegal planting of genetically modified corn. He stated in particular that, following a coup that took place in August 2012, effective regulatory control of genetically modified products and herbicides all but vanished and Monsanto was free to introduce genetically modified cotton, corn, and wheat – often with disastrous consequences for local farmers and posing serious risk to native seeds.

Dr. Gilles-Éric Séralini, a French biologist, professor of molecular biology at the University of Caen and member of the Scientific Board of the Committee for Independent Research and Information on Genetic Engineering (CRIIGEN), was substituted at the hearing by Dr. Nicolas Defarge (biologist, CRIIGEN).

Dr. Defarge stated that in September 2012 the *Food and Chemical Toxicology* journal published a peer-reviewed paper entitled “Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize” – a toxicity study conducted at the University of Caen by Professor Séralini and seven colleagues. This study showed that the two Monsanto products concerned had toxic effects on rats, including liver and kidney damage. That study also pointed to increased tumor rates and the need for further study.

Professor Séralini’s research team accuses Monsanto of fraudulently misrepresenting the toxic effects of glyphosate (commercial formulations) when delivered in combination with other agents.

Dr. Defarge also described a massive public relations campaign to discredit the study and pressure on the journal to retract it. He submitted that this public relations campaign was marked by dishonest attacks on the scientific basis of the Séralini paper and a lack of transparency on the part of those behind the campaign, including Monsanto operating through surrogates with undisclosed links to the Company.

Dr. Shiv Chopra is a microbiologist. From 1969 to 2004 he was employed as a senior scientific advisor to the Canadian Ministry of Health, until he refused to approve various drugs for food-producing animals, including a Monsanto bovine growth hormone.

Dr. Chopra’s testimony described the determined efforts by Monsanto to have Health Canada officials ignore his findings and he accused the Company of having offered the Department a \$ 2 million bribe to approve its growth hormone product. After refusing to retreat from his findings, and becoming outspoken about his views, Dr. Chopra came under increasing pressure from within his Department, and ultimately had to go to court to successfully challenge an unjust work suspension.

Dr. Peter Clausing is an agronomist and a board-certified toxicologist who has held positions at two research institutes of former East Germany. As a postdoctoral scientist he worked at the US Food and Drug Administration’s National Center for Toxicological Research (1994-1996), as a toxicologist in a Danish contract research organization (1997-2001), and in a German pharmaceutical company (2001 until retirement in 2010). He published 54 papers and four book chapters in the area of toxicology. He is currently a member of the executive board of Pesticide Action Network (PAN) Germany. Since April 2015 he is involved in the debate on the re-approval of glyphosate in the European Union and wrote six PAN Germany position papers concerning aspects of the carcinogenicity of glyphosate.

Dr. Clausing accuses the European authorities of committing scientific fraud in their conclusion that glyphosate is not a carcinogen. He stated that there is ample evidence showing that European authorities twisted or ignored scientific facts and distorted the truth to enable the conclusion that glyphosate is not to be considered a carcinogen, thereby accepting and reinforcing the false conclusion proposed by the Monsanto-led Glyphosate task force.

Ms. Claire Robinson is editor at GMWatch.org, a public news and information service on genetically modified foods and crops. She is also a co-author of “GMO Myths and Truths”, published in 2015 by Earth Open Source.

Her testimony described “Monsanto’s history of involvement in dishonest, deceptive, and non-transparent efforts to control the scientific and public discourse on genetically modified foods and crops (and associated pesticides), and to force its products into countries across the globe”. She stated that, while Monsanto positions itself as a science-based company, its way of getting its products accepted in countries across the globe often owes little to science and much to bullying and illicit tactics. She cited as an example a report by the BBC that in 2005 Monsanto had agreed to pay a substantial fine for bribing an Indonesian official in a bid to avoid environmental impact studies being conducted on its genetically modified Bt insecticide-containing cotton.

Ms. Robinson’s testimony also described, and in some detail, what she characterizes as the underhanded, deceptive, and non-transparent tactics Monsanto uses to discredit scientific studies that present results that threaten the Company’s interests. She explained that, while in some cases these efforts are overt, more often the Company’s interests and messages are represented and voiced by third parties often failing to disclose their relationships with Monsanto, such as public relations firms or supposedly independent academics and scientists (the so-called “third-party public relations technique”).

II.Q4.iii. Monsanto’s conduct has negatively affected the freedom indispensable for scientific research

The testimonies heard by the Tribunal point to conduct by Monsanto that is alleged to:

- discredit independent scientific research that when it raises serious questions about the environmental and public health impacts of its products, including by seeking to undermine the employment or tenure of the authors of such reports;
- suborn false research reports including those by surrogates who fail to disclose their relationship with Monsanto;
- pressure and even bribe governments and public officials to approve Monsanto products notwithstanding credible and science-based reports indicating that such approvals should be withheld;
- distribute harmful products that have not obtained proper approval; and,
- intimidate, including by threatening to sue, parties that simply seek to inform consumers of the presence of Monsanto products in the goods and food they purchase and often consume¹⁰⁵.

This conduct offends the freedom indispensable for scientific research guaranteed in Article 15 of the ICESCR, in relation to the freedom of expression and the right to information guaranteed in Article 19 of the ICCPR.

¹⁰⁵ All these conclusions have also been appointed by a recent report of the Special Rapporteur on the Right to Food which highlights that “[c]ompanies often contest scientific evidence of the hazards related to their products, with some even standing accused of deliberately manufacturing evidence to infuse scientific uncertainty and delay restrictions. There are also serious claims of scientists being ‘bought’ to restate industry talking points. Other egregious practices include infiltrating federal regulatory agencies via the ‘revolving door’, with employees shifting between regulatory agencies and the pesticide industry. Pesticide manufacturers also cultivate strategic ‘public-private’ partnerships that call into question their culpability or help bolster the companies’ credibility. Companies also consistently donate to educational institutions that conduct research on pesticides, and such institutions are becoming dependent on industry owing to shrinking public funding” (UN Human Rights Council, *Report of the Special Rapporteur on the Right to Food*, UN Doc. A/HRC/34/48, 24 January 2017).

The abuse of the freedom indispensable for scientific research is aggravated by the health and environmental risks posed by Monsanto's conduct. Where scientists do not enjoy the freedom necessary to carry out their work, society lacks the tools to take measures that are necessary to safeguard fundamental rights. There are too many examples of corporations deliberately obfuscating scientific findings or attacking scientists in order to spread false information and confusion in society, such as with tobacco, climate change and chemical products, with the expectation that society will not take measures of protection.

There is in this regard a clear difference between taking policy positions where legitimate uncertainties are addressed in a scientific debate, on the one hand, and taking direct measures to silence or discredit scientists where their findings are not convenient to a particular business model, on the other. The latter situation crosses the boundary of what can be considered to be a legitimate public debate; it involves conduct that frustrates the scientific project and that is intended to undermine and silence scientists. That conduct is abusive of the right to freedom indispensable for scientific research and the right to freedom of expression including access to information.

Question 5: War Crimes Complicity and Agent Orange

Could the firm Monsanto be held complicit in the commission of a war crime, as defined in Article 8(2) of the Statute of the International Criminal Court, by providing materials to the United States Army in the context of operation "Ranch Hand" launched in Vietnam in 1962?

II.Q5.i. The international legal framework concerning war crimes

The 1998 Rome Statute of the International Criminal Court (ICC) is the key text of international criminal law that specifies the cases in which a war crime can be said to exist. Article 8 of the Rome Statute lists all the crimes which fall into the category of war crimes within the jurisdiction of the ICC. It defines and lays down a strict competency framework stemming from a concept of "war crime" specific to the Court.

Article 8(1) of the Statute determines the competence of the ICC. It reads as follows: "The Court shall have jurisdiction in respect of war crimes in particular when committed as part of a plan or policy or as part of a large-scale commission of such crimes". Conventional and customary law made use of various terms concerning crimes committed in armed conflicts. It is important that these concepts are clarified and framed so that the crimes in question can qualify as war crimes falling within the jurisdiction of the International Criminal Court.

Article 8(2)(a) sets out the grave breaches of the Geneva Conventions of 12 August 1949, namely, *inter alia*, wilful killing, torture or inhuman treatment, including biological experiments, extensive destruction and appropriation of property, not justified by military necessity, unlawful deportation or transfer, taking of hostages. Subparagraph (b) of the same Article lists other serious violations of the laws and customs applicable in international armed conflict, within the established framework of international law, namely: "intentionally directing attacks against the civilian population as such or against individual civilians not taking direct part in hostilities" (i); "intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated" (iv); "employing poison or poisoned weapon" (xvii) or "employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices" (xviii); "intentionally using starvation of civilians as a method of warfare by depriving them of objects indispensable to their survival, including wilfully impeding relief supplies as provided for under the Geneva Conventions" (xxv). Subparagraphs (c), (d) and (e) refer to violations in the case of armed conflicts not of an international character. According to international law, war crimes that fall within the jurisdiction of the International Criminal Court are exclusively those enumerated in Article 8(2) of the Rome Statute.

Finally, since, as defined in the Rome Statute, war crimes do not involve the criminal liability of legal persons, Article 8(2) applies only to natural persons as possible perpetrators of such crimes, within the meaning of, and in accordance with, Articles 1 and 25(1) of the Statute.

In this respect, the Tribunal deems that it would be welcome to include in the Rome Statute not only natural persons who may commit war crimes but also enterprises or companies themselves that contribute, through their products, to the commission of war crimes. This inclusion of legal person responsibility in the Rome Statute could be done in the same way as in Articles 27 and 28 of the Statute,

which relate to those acting in an official capacity and to the responsibility of commanders and other superiors.

II.Q5.ii. The Vietnam War and Agent Orange

Since the early 1960s and until 1973, the United States waged a war in Vietnam in which their armed forces used Agent Orange, manufactured by the Monsanto Company, in addition to military means and weapons. This herbicide and defoliating chemical, with its dioxin component, was sprayed on Vietnamese forests to destroy the habitat and the natural shelter of the Vietcong and North Vietnamese troops and prevent ambush. Having come into use starting from 1962, as part of the Operation “Ranch Hand”, it is estimated that until 1971 more than 70 million litres of Agent Orange were sprayed on approximately 2.6 million hectares¹⁰⁶.

Several studies have shown that the use of Agent Orange has caused serious harm to health among large segments of the Vietnamese civilian population, in particular deformities as well as prenatal and postnatal deaths. In addition to human suffering, the spraying of Agent Orange caused widespread harm to the environment during these years by deforestation.

Harm caused to human health by the use of Agent Orange also affected members of the military forces that fought in Vietnam. In 1984 several hundreds of former combatants of the US, New Zealand and Australian armed forces consequently filed an action against several chemical companies, including the Monsanto Company, manufacturer of the herbicide Agent Orange, concerning the harm to their health, which they claimed to have suffered due to their proximity of that herbicide during the war. The seven chemical company defendants, among which Monsanto, subsequently agreed to pay collectively a total of \$ 180,000,000¹⁰⁷, an inadequate amount given the harm caused but which pointed, however, to their responsibility.

In 2004, Vietnamese nationals belonging to the Vietnam Association of Victims of Agent Orange/Dioxin attempted to take legal action against Monsanto on account of the harm suffered by the use of poisoned weapons manufactured by the Company. That action was dismissed by the New York East District Court and, subsequently, by a judgment of 22 February 2008 of the Second Circuit Court of Appeals in Manhattan¹⁰⁸. The main argument in the Court’s decision was that Agent Orange, although it contained dioxin, had been used as a defoliant and not as a poison targeting human populations. A writ of *certiorari* was filed with the Supreme Court, but on 27 February 2009 the Supreme Court decided against hearing the case.

Another complaint was lodged before South Korea’s Supreme Court by Korean soldiers, veterans of the Vietnam War, based not on the provisions on war crimes but on the rules and regulations of product liability. In July 2013, South Korea’s Supreme Court ordered Monsanto and Dow Chemicals to compensate the 39 veterans, recognising that Agent Orange was the cause for their illness¹⁰⁹.

¹⁰⁶ *The Permanent People’s Tribunal Session on Agrochemical Transnational Corporations: Indictment and Verdict*, Pesticide Action Network (PAN) International, 2016, p. 17.

¹⁰⁷ *Agent Orange Act*, 1991, Pub. L. No.102-4, 105 Stat. 111, United States.

¹⁰⁸ United States Court of Appeals for the Second District, case no. 05-1953-cv, *Vietnam Association for Victims of Agent Orange v. Dow Chemical Co.*, judgment of 22 February 2008.

¹⁰⁹ Supreme Court of Korea, Decision 2006Da17539, 12 July 2013.

In the previous judicial proceedings, although the Monsanto Company was not charged or convicted for war crimes, it was established that the damage to the health of the US, New Zealand, Australian and Korean veterans had been caused by their contact with the Agent Orange. Indirectly, this confirmed the damage caused to the population of Vietnam by the same herbicide.

II.Q5.iii. Complicity in war crimes

By the seriousness of their actions, which provoked serious harm to the health of people, including the risk of causing death, and produced severe and irreversible damage to the environment, the conduct of the United States in the Vietnam War could have fallen under the notion of war crimes, within the meaning of Article 8(2) of the Rome Statute – grave breaches of the Geneva Conventions (a), serious violations of the laws and customs applicable in international armed conflict (b) or serious violations of article 3 common to the four Geneva Conventions of 1949 relating to prolonged internal armed conflicts (c). US commanders could have been held accountable for war crimes as a result of their use of Agent Orange.

In this respect, the well-known argument that Agent Orange was used by the US armed forces as a herbicide to defoliate forests and not “directly” as a weapon against the population seems irrelevant. The US knew or should have known that the use of Agent Orange would cause widespread damage to human health and the environment. Therefore, the distinction between direct and indirect use of weapons loses any sense of materiality.

Concerning Monsanto’s possible complicity, no relevant evidence has been provided before the Tribunal in this respect. Against this background, the Tribunal cannot make any definitive finding regarding war crimes complicity. Nevertheless, taking into consideration the historic fact of damage to the population of Vietnam, and even to US veterans and their allies, and of destruction of the environment, the Tribunal deems that force should be given to the hypothesis that relevant evidence was available regarding the facts that Monsanto: provided the means for the US campaign in Vietnam; knew how its products would be used; and had information on the damaging effects to health and the environment.

Finally, the Tribunal is of the view that, would the crime of Ecocide be included in the Rome Statute and encompass environmental crimes as a fifth international crime, it could address those acts of destruction of the environment committed in Vietnam.

Question 6: Ecocide

Could the past and present activities of Monsanto constitute a crime of ecocide, understood as causing serious damage or destroying the environment, so as to significantly and durably alter the global commons or ecosystem services upon which certain human groups rely?

II.Q6.i. Ecocide: Background

The Swedish Prime Minister opening the UN Conference on the Human Environment held in Stockholm, Sweden, in 1972, spoke of the Vietnam War as an “ecocide”¹¹⁰. As this Tribunal observed in relation to the right to a healthy environment, the Stockholm Conference succeeded in placing a narrative in human consciousness regarding the fundamental importance of environmental issues for human wellbeing. In light of this recognition and expanding awareness regarding the interconnections between humans and the environment, the international community began exploring ways in which the law could be used to safeguard essential environmental processes and ecosystems.

A whole body of environmental law began to develop within many States since the Stockholm Conference. This body of internal law included issues of constitutional and administrative law, as well as issues of civil and criminal law in relation to environmental protection. The inclusion of environmental crimes in domestic criminal statutes gave expression to the principle of *ultima ratio*, whereby the symbolic stigma of criminal sanctions attaches to conduct that offends values that underlie the possibility of societal coexistence. In this context, the fundamental value of environmental protection as enabling life on the planet and human wellbeing fully justifies the imposition of criminal sanctions for conduct resulting in serious environmental harm.

At the same time, international environmental instruments began to include provisions requiring the State to criminalize certain conduct offensive to the environment. For example, in order to address the cross-border dumping of hazardous wastes affecting health and the environment (usually affecting poor communities in the global south), the Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal of 22 March 1989 set up a system of controls to prevent harm. The Basel Convention also established that illegal shipments of hazardous waste are a crime (Article 4(3)). Similar provisions were adopted in respect of ozone depleting substances and illegal wildlife trade, among others¹¹¹.

The use of criminal sanctions in multilateral environmental agreements thus confirmed the increased awareness of how environmental harm negatively affects the fundamental values of society. The international community today understands that preserving the integrity of ecosystems and a healthy environment is vital for enabling society and securing a life of dignity for present and future generations. Therefore, attacks against the health and integrity of the environment are unethical human conducts and subject to criminal opprobrium.

¹¹⁰ A. Gauger *et al.*, “Ecocide is the Missing Fifth Crime Against Peace”, University of London School of Advanced Study, Human Rights Consortium, 2012.

¹¹¹ See *The Rise of Environmental Crime – A Growing Threat To Natural Resources Peace, Development And Security*, Nairobi, UNEP-Interpol, 2016.

On a separate track, international criminal law, as it developed during the 20th century began addressing the most serious crimes, including in respect of certain environmental issues¹¹². For example, Geneva Protocol I, Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, concluded in 1977, contains certain provisions that concern the environment. Similarly, the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques addresses the environment as a tool of war. The 1998 Rome Statute of the International Criminal Court (ICC) contemplates long-term, widespread and severe environmental harm as a war crime, and its definition of crimes against humanity could also be used to address egregious conduct resulting in serious environmental harm. In 2016, the Prosecutor of the ICC announced that it “will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, *inter alia*, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land”¹¹³. These international norms reflect the symbolic importance of the use of criminal law to secure environmental integrity.

Despite the patchwork of elements of criminal environmental protections established in domestic and international environmental law as well as in international criminal law, gaps of protection remain. International law has yet to articulate in precise terms criminal responsibility for the crime of ecocide, whether committed in times of peace or in the context of armed conflict. Given expanded human awareness regarding the central importance of environmental integrity for the perpetuation of the totality of life in our planet, the crime of ecocide at international law would help deter and punish conduct offensive to the most basic values of society¹¹⁴.

II.Q6.ii. Ecocide at international law: Elements of the crime

The term *ecocide* appears to have been first publicly used in 1970 by Arthur Galston, a plant biologist and chair of the Department of Botany at Yale University, whose research led to the invention of Agent Orange, the highly toxic herbicide sprayed by the United States in its war against Vietnam. Speaking in Washington, D.C. in 1970 before the Conference on War and National Responsibility, he called for a new international agreement to ban ecocide, which he understood as “devastation and destruction which aim at damaging or destroying the ecology of geographic areas to the detriment of all life, whether human, animal or plant”.

The terms of reference of this Tribunal understand the crime of ecocide as “causing serious damage or destroying the environment, so as to significantly and durably alter the global commons or ecosystem services upon which certain human groups rely”.

This definition identifies the specific elements of *actus reus* or material conduct that arise in the crime of ecocide. In addition to these elements, the crime of ecocide also involves general criminal elements, including: knowledge and intent (*mens rea*); complicity; and corporate criminal responsibility.

In terms of knowledge and intent, the crime of ecocide does not require the perpetrator to have the specific intent to destroy the environment. Rather, this Tribunal finds guidance in the Rome Statute in approaching the *mens rea* test for intent and knowledge. According to Article 30(2) of the Rome Statute,

¹¹² See M.A. Orellana, “Criminal Punishment for Environmental Damage: Individual and State Responsibility at a Crossroad”, *Georgetown International Environmental Law Review*, Vol. 17, 2005, pp. 673 et seq.

¹¹³ International Criminal Court, Office of the Prosecutor, *Policy Paper on Case Selection and Prioritisation*, *op. cit.*, § 41.

¹¹⁴ L. Neyret (ed.), *Des écocides à l'écocide. Le droit pénal au secours de l'environnement*, Brussels, Bruylant, 2015; see, in particular, E. Fronza and N. Guillou, “Vers une définition du crime international d'écocide”, *ibid.*, pp. 150 et seq.

an individual acts intentionally when “(a) [i]n relation to conduct, that person means to engage in the conduct; (b) [i]n relation to a consequence, that person means to cause that consequence or is aware that it will occur in the ordinary course of events”. Article 30(3) of the Rome Statute defines “knowledge” as “awareness that a circumstance exists or a consequence will occur in the ordinary course of events”. In accordance with these standards, where the perpetrator knew, or should have known, that its conduct could result in serious environmental destruction, the *mens rea* element of the crime is satisfied.

Criminal responsibility in ecocide is not limited to the author of the crime, but also covers complicity. Complicity was the subject of a focused study by the UN Secretary General’s Special Representative on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises¹¹⁵. The commentary to Principle 17 on human rights due diligence of the UN Guiding Principles on Business and Human Rights, elaborated by the Special Representative and adopted by the Human Rights Council in 2011, explains that “[t]he weight of international criminal law jurisprudence indicates that the relevant standard for aiding and abetting is knowingly providing practical assistance or encouragement that has a substantial effect on the commission of a crime”¹¹⁶.

Whereas the Rome Statute addresses individual responsibility of natural persons, this Tribunal observes that there is no conceptual or normative obstacle to holding a corporation criminally responsible for an international crime. The responsibility of the corporation as such is separate from the individual responsibility of corporate officers that may have been involved in the offensive conduct, including officers in management or members of the board of directors.

The Tribunal is of the view that the time is ripe for proposing to set up the new legal concept of Ecocide and to integrate it in a future amended version of the Rome Statute establishing the International Criminal Court. However, the Tribunal does not assimilate the crime of Ecocide to any of the forms of genocide that are contemplated in the Rome Statute and the 1948 Convention on the Prevention and Punishment of the Crime of Genocide.

Finally, in addition to criminal sanctions, civil responsibility of corporations for the crime of ecocide, including the obligation to restore the environment and the integrity of ecosystems, and the obligation to compensate for the damage caused, is also to be recognized and ensured.

II.Q6.iii. Monsanto’s conduct in relation to Ecocide

If the crime of Ecocide were recognized in international criminal law – *quod non* for the time being –, the activities of Monsanto could possibly constitute a crime of ecocide as causing substantive and lasting damages to biodiversity and ecosystems, affecting the life and the health of human populations. This assessment is based, in particular, on the following conduct allegedly imputable to Monsanto:

- manufacture and supply and aerial application of concentrated mixes of glyphosate herbicide used by the United States and Colombian Governments in implementing “Plan Colombia”, whose negative impact has been mentioned in his testimony by Mr. Pedro Pablo Mutumbajoy;
- large-scale use of dangerous agrochemicals in industrial agriculture;
- engineering, production, introduction and release of genetically engineered crops;
- severe contamination of plant diversity, soils and waters;

¹¹⁵ *Clarifying the Concepts of “Sphere of influence” and “Complicity”, Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and other Business Enterprises, John Ruggie, UN Doc. A/HRC/8/16, 15 May 2008.*

¹¹⁶ *UN Guiding Principles on Business and Human Rights, op. cit., p. 16.*

- introduction of a persistent organic pollutant, PCB, into the environment causing widespread, long-lasting and severe environmental harm.

III. THE GROWING GAP BETWEEN INTERNATIONAL HUMAN RIGHTS LAW AND CORPORATE ACCOUNTABILITY

Any consideration of Monsanto's obligations under international human rights and environmental law has to acknowledge the severe disparity that now exists between those obligations, on the one hand, and the rights and entitlements Monsanto now enjoys under international trade and investment law, on the other hand. Those rights are a consequence of the substantial advance of corporate rights and entitlements under the World Trade Organization and a myriad of international investment treaties.

III.i. The Need to Assert the Primacy of International Human Rights Law

Under these trade and investment regimes, products such as those developed and marketed by Monsanto are considered goods, engender investments, and often involve the delivery of services. As such they are subject to binding trade and investment disciplines that severely constrain the capacity of States at all levels of government to establish or maintain policies, laws and practices needed to protect human rights or the environment.

Moreover, trade and investment agreements have equipped private corporations with extraordinary and powerful tools for asserting and defending their commercial interests. Thus foreign investors have been accorded the unilateral right to invoke binding investor-state dispute settlement (ISDS) to claim damages for violations of the broadly framed rights they now enjoy under these treaties. Moreover, foreign investors have no reciprocal or other obligations whatsoever under these treaties.

The reports of the UN Secretary General's Special Representative on Human Rights and Transnational Corporations and Other Business Enterprises acknowledge the problems created by the "fundamental institutional misalignment" that now exists between the rights that corporations enjoy, including those gained under trade and investment treaties, and their accountability under both national and international law¹¹⁷.

The codification of such private rights creates an obvious and serious impediment to the realization of human and environmental rights. Treaty-based investor rights are now being asserted in a manner that fundamentally undermines the capacity of nations to fulfil current international human rights obligations. As the virtual explosion of foreign investor claims illustrates, private tribunals operating under these treaties are now engaged in arbitrating conflicts between human rights norms and those of investment and trade law – a role that at best, they are ill-suited to serve, given the persistent conflict of interests and other structural flaws of the investment legal regime.

The course of present events suggests that unless UN bodies are able to reassert their role as the fundamental arbiters of human rights, they risk becoming bystanders as key questions of human rights law are resolved by private tribunals operating entirely outside the UN framework. The continuing rapid advancement of international trade and investment law underscores the need to proceed in this regard with some urgency.

Fundamentally, it is essential in the Tribunal's view that human and environmental rights be accorded primacy in any conflict with trade or investments rights. Indeed this primacy has been recognized by the international community in the Vienna Conference on Human Rights of 1993, which affirmed that "[h]uman rights and fundamental freedoms are the birthright of all human beings; their protection and

¹¹⁷ These reports are available at: www.ohchr.org/EN/Issues/Business/Pages/Reports.aspx#srepresentative. The creation of the Special Representative's mandate was requested by the UN Commission for Human Rights in its Resolution 2005/69 on Human Rights and Transnational Corporations and Other Business Enterprises of 20 April 2005 (UN Doc. E/CN.4/RES/2005/69) and approved by the UN Economic and Social Council on 25 July 2005.

promotion is the first responsibility of government”¹¹⁸. The primacy of human rights law can also be derived from the paramount imperative of *Ius Cogens*, which as we know entirely concern human not commercial rights.

If the primacy of human and environmental rights measures is not asserted and recognized under these commercial regimes, the gap will only continue to grow between the protection of corporate interests and the protection of human rights, biodiversity and the environment. There is, therefore, an urgent need for human rights bodies to address these problems if corporations like Monsanto are to be accountable for conduct that harms health, the environment and biodiversity.

III.ii. Addressing the Limitations of Current Human Rights Instruments: The Need to Bind Non-State Actors

The other constraints that have encumbered the effectiveness of international human rights instruments arise from the general view that the obligations they engender have no direct application to non-state actors. The need to expand the application of international human rights law in this regard has been acknowledged by expert commentators and also recognized by General Comment No. 15 on the Right to Water of the UN Committee on Economic, Social and Cultural Rights¹¹⁹. The Tribunal deems that the need for such reform is indisputable. Similar reforms are also necessary to ensure that international financial institutions, international bodies such as the World Trade Organization, and UN bodies as well, adhere to and are accountable for non-compliance with the norms of human rights law.

The requirement for a fundamental rebalancing of corporate rights and obligations have often been greeted with doctrinal arguments that corporations cannot be considered “subjects” of international law, and therefore direct legal responsibility cannot be attributed to them. According to the UN Secretary General’s Special Representative on Human Rights and Transnational Corporations and Other Business Enterprises, it is time for such arguments to yield to new realities, and he notes in this regard that corporations are increasingly recognized as “participants” at the international level, including as claimants under bilateral investment treaties. The Special Representative’s report provides important authority concerning the need to address the “fundamental institutional misalignment” that now exists between the rights of corporations under both national and international law, and the capacity of many nations to comply with human rights norms.

While corporate codes of conduct have been promulgated by various institutions, these are voluntary and unenforceable. Yet whether the allegations of misconduct directed at Monsanto are borne out, it is indisputable that corporations are capable of, and indeed have often interfered with, the enjoyment of a broad range of human rights. Nevertheless, corporations are largely immune to liability for such violations, and their victims often remain without redress.

While according companies like Monsanto unprecedented rights and entitlements, international law has failed woefully to impose any corresponding obligation to protect human rights and the environment. However, it is beyond the scope of this advisory opinion to consider the breadth of reforms required to re-align the respective priorities of commercial and public interests that must be brought about under international law. Therefore, the Tribunal strongly encourages authoritative bodies

¹¹⁸ UN General Assembly, *Vienna Declaration and Programme of Action*, 12 July 1993, UN Doc. A/CONF.157/23, Article 1.

¹¹⁹ UN Committee on Economic, Social and Cultural Rights, *General Comment No. 15: The Right to Water (Articles 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)*, UN Doc. E/C.12/2002/11, 20 January 2003, § 60.

to address the legal and practical limitations that currently confine the scope, content and ultimately the effectiveness of international human rights law.

ANNEXES

Annex 1 – Letter sent to Monsanto Headquarters in the USA by the President and Vice-President of the Tribunal on 6 June 2016



Stichting/Foundation Monsanto Tribunal
Marnixkade 111 H
NL-1015 ZL Amsterdam
Pays Bas
juris@monsanto-tribunal.org

Mr Hugh Grant
Chairman and CEO
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, Missouri 63167
U.S.A.

The Hague, June 6th, 2016

Dear Mr Grant,

As you are aware, the Foundation Stichting Monsanto Tribunal was created in order to establish the International Monsanto Tribunal, an initiative of civil society groups that intends to allow for an open deliberation on the company's policies and their impacts.

The Foundation intends to convene the Tribunal in The Hague between 14 and 16 October 2016.

The Tribunal shall be asked to deliver an Advisory Opinion addressing six questions: the terms of reference, which identify these questions, are attached to this letter.

The result of an initiative of global civil society, the Tribunal is of course of symbolic value: it shall have no investigative powers; and its opinion is of a purely advisory nature. However, the members of the Tribunal shall deliver an opinion based exclusively on legal considerations, grounded in international human rights law and international humanitarian law; and they shall act in complete independence.

The Tribunal will be adopting its views on the basis of the principles described in Chapter IV of the Statute of the International Court of Justice, which describes the competence of the Court to deliver advisory opinions. It may also seek inspiration from Title IV of the Rules of the International Court of Justice, as regards procedural matters.

The Tribunal shall be presented with a number of written observations concerning the questions it has been submitted: teams of lawyers are already preparing these briefs. During the hearing, it shall hear testimonies from victims of Monsanto's conduct, as well as legal opinions presented by experts tasked with informing the Court about the legal issues involved in the questions it is presented.

The Foundation Stichting Monsanto Tribunal believes it to be of the highest importance that Monsanto itself is given ample opportunity to present its views to the Tribunal, in order to ensure that the Tribunal is fully informed and equipped to provide an assessment that is based on the fullest range of information possible.

We share this view.

We would therefore strongly encourage Monsanto to submit a written brief to the Tribunal, before the deadline of October 1st, 2016.

Moreover, Monsanto is invited to be represented at the hearings that the Tribunal shall hold on 15 and 16 October 2016 in The Hague. Please let us know by October 1st if you would like to make use of this opportunity.

Of course, we remain at your disposal to provide you with any further information you may require on the nature of this initiative and the conditions under which the Tribunal shall be operating.

We look forward to your answer.

Sincerely,

Françoise Tulkens, former vice-president of the European Court of Human Rights

A handwritten signature in blue ink, appearing to be 'F. Tulkens', with a horizontal line underneath.

Dior Fall Sow, former Advocate General of the International Criminal Tribunal for Rwanda

A handwritten signature in blue ink, appearing to be 'Dior Fall Sow', with a horizontal line underneath.

Annex: Terms of reference of the International Monsanto Tribunal

Annex 2 – List of witnesses who appeared at the hearings before the Tribunal

Farida AKHTER, policy analyst, Bangladesh
Krishan BIR CHOUDHARY, scientist, India
Shiv CHOPRA, expert regulatory agency, Canada
Peter CLAUSING, toxicologist, Germany
María COLIN, lawyer, Mexico
Art DUNHAM, veterinarian, USA
Angelica EL CANCHÉ, beekeeper, Mexico
Diego FERNÁNDEZ, farmer, Argentina
Marcelo FIRPO, public and environmental health researcher, Brazil
Paul FRANÇOIS, farmer and victim, France
Sabine GRATALOUP, victim, France
Don HUBER (represented by Art DUNHAM), biologist, USA
Channa JAYASUMANA, expert environmental health, Sri Lanka
Monika KRUEGER, veterinarian, Germany
Timothy LITZENBURG, lawyer, USA
Miguel LOVERA, agronomist, Paraguay
Steve MARSH, farmer, Australia
Pedro PABLO MUTUMBAJOY, victim, Colombia
Ib Borup PEDERSEN, pig farmer, Denmark
Juan Ignacio PEREYRA, victim, Argentina
Claire ROBINSON, academic research, United Kingdom
Maria Liz ROBLEDO, victim, Argentina
Kolon SAMAN, victim, Sri Lanka
Percy SCHMEISER, farmer, Canada
Gilles-Eric SÉRALINI (represented by Nicolas DEFARGE), academic research, France
Christine SHEPPARD, victim, USA
Ousmane TIENDREBEOGO, farmer, Burkina Faso
Feliciano UCÁN POOT, beekeeper, Mexico
Damián VERZEÑASSI, doctor public health, Argentina

Annex 3 – List of legal experts who appeared at the hearings before the Tribunal

William BOURDON
Claudia GÓMEZ GODOY
Maogato JACKSON
Gwynn MCCARRICK (represented by Maogato JACKSON) and Koffi DOGBEVI

