



# **Human Rights and environmental impacts of Bayer AG's genetically modified soy seeds and glyphosate-based pesticides in Argentina, Bolivia, Brazil and Paraguay**

**OECD Complaint presented to the German National Contact Point for the OECD Guidelines for Multinational Enterprises**

**Submitted by:**

European Center for Constitutional and Human Rights (ECCHR)

Centro de Estudios Legales y Sociales (CELS)

Fundación TIERRA

Terra de Direitos

Base Investigaciones Sociales (BASE IS)

Bischöfliches Hilfswerk Misereor

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## PART I. PRELIMINARY INFORMATION

### **A. The interested parties**

#### **1. Submitting Organizations**

1. The *Centro de Estudios Legales y Sociales (CELS)* is an Argentine human rights organization founded in 1979 to promote and defend the effective enforcement of human rights. Its objectives include research into the relationship between law, justice, economy and society to defend human dignity, popular sovereignty, community social and economic well-being – especially of the most vulnerable sectors, including indigenous and peasant communities – the environment, gender equality and the role of institutions for the protection of rights. For more than 40 years, CELS' interdisciplinary team has worked on these issues through strategic litigation, research, documentation and alliance building at national, regional and international levels.<sup>1</sup> CELS has been working on the affectation of the rights of rural communities, particularly indigenous and peasant communities in Argentina, for approximately two decades. It has intervened in land conflicts between peasant and/or indigenous communities and agricultural companies, mainly through litigation, both nationally and internationally, and providing technical support at the local level. In 2018, CELS appeared before the Supreme Court of Justice of the Nation as *amicus curiae* in the case *Monsanto Technology LLC v. National Institute of Industrial Property s/ denial of patent*, concerning the patent regime on genetically modified seeds.

Contact person: María José Venancio, Lawyer in the Land, Housing and Economic Justice area, CELS, [mjvenancio@cels.org.ar](mailto:mjvenancio@cels.org.ar)

2. Established in 1991, *Fundación TIERRA* is a Bolivian nongovernmental organization dedicated to researching and addressing agrarian, rural and environmental challenges in support of Bolivia's peasant and indigenous population. Geographically, TIERRA operates nationwide, with concentrated efforts in four distinct regions: the highlands, valleys, eastern lands and the Amazon. Over the past three decades, TIERRA has maintained a steadfast commitment to fostering innovative ideas and critical discourse, anchored in human rights advocacy and socio-environmental justice principles.<sup>2</sup> For several years, Fundación TIERRA has been studying the dynamics of agribusiness and its impact on land access and use for indigenous, native and peasant communities in Bolivia. TIERRA's work method of research action supports the establishment of a broad network of agrarian and rural researchers, community facilitators, activists and community leaders and builds management, negotiation and participation capacities of indigenous, native and peasant organizations.

Contact Person: Gonzalo Colque, Senior Researcher, Fundación TIERRA, [g.colque@ftierra.org](mailto:g.colque@ftierra.org)

3. Founded in 2002, *Terra de Direitos* is a Brazilian non-profit civil association dedicated to upholding economic, social, cultural and environmental human rights, as well as safeguarding human rights defenders. Operating from three regional offices located in the Amazon, Cerrado and Paraná, the organization engages in both national and international advocacy efforts. For years, Terra de Direitos has been at the forefront of exposing human rights violations stemming from the widespread use of pesticides, the cross-contamination of native seeds by transgenic seeds, and other environmental and biodiversity impacts linked to the predominant agribusiness model in the country. The organization advises traditional and quilombola communities, indigenous peoples, informal urban settlements,

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<sup>1</sup> <https://www.cels.org.ar/web/>

<sup>2</sup> <https://www.ftierra.org/>

and rural family farming communities on the protection of their collective social rights, including their right to land or territory.<sup>3</sup>

Contact Person: Daisy Ribeiro, Director Iguazu Program Terra de Direitos, [ribeiro@terradedireitos.org.br](mailto:ribeiro@terradedireitos.org.br)

4. *Base Investigaciones Sociales (BASE IS)* is a non-profit civil association and research center founded in June 1989, dedicated to social science research and the dissemination of knowledge about the rural reality in Paraguay, as well as capacity building for rural communities in the country. It focuses on serving grassroots organizations in the construction of a just society, based on solidarity and respect for human rights and nature. Since its beginnings, the institution has been dedicated to the analysis of rural reality, a theme that continues to be its central axis from which other related issues are investigated.<sup>4</sup> Every year BASE IS publishes several reports on soy agribusiness and its human rights and environmental impacts in Paraguay. BASE IS has also accompanied the communities that provided information for this complaint in several legal and political processes in Paraguay, including the complaint filed against the Paraguayan state before the United Nations Human Rights Committee for the death of Ruben Portillo Cáceres due to pesticide poisoning, which culminated in a decision in favor of the victims.<sup>5</sup>

Contact Person: Abel Areco, Director BASE IS, [abelareco82@gmail.com](mailto:abelareco82@gmail.com)

5. The *European Center for Constitutional and Human Rights (ECCHR)* is a German independent, non-profit legal and educational organization dedicated to enforcing civil and human rights worldwide. ECCHR also works to ensure that transnational companies are held to account for their operations in other countries that lead to or are complicit in gross human rights violations. Given the potentially significant impacts of large-scale agricultural production on human rights, ECCHR is committed to monitoring the European agricultural industry's adherence to international standards on human rights and environmental due diligence, toward the aim of putting an end to environmental degradation, deforestation and pesticide-related poisonings, which are still widespread among rural populations everywhere. ECCHR has engaged on these issues since 2015, including through an ad hoc monitoring report to the FAO Expert Meeting on Pesticides Management that also concerned the Responding Party of this complaint.<sup>6</sup>

Contact Person: Dr. Christian Schliemann-Radbruch, Co-Director of the Business and Human Rights Program, European Center for Constitutional and Human Rights, [schliemann@ecchr.eu](mailto:schliemann@ecchr.eu)

6. *Misereor* is the German Catholic Bishops' Organization for Development Cooperation. For over 60 years, Misereor has been committed to fighting poverty in Africa, Asia and Latin America. Misereor supports over 800 projects that contribute to improving food security worldwide. The main focus is on combating hunger in a long-term and sustainable manner, striving for food sovereignty and promoting human rights. Misereor has also supported and published reports on seeds and pesticides in Latin America and other regions.<sup>7</sup>

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<sup>3</sup> <https://terradedireitos.org.br/>

<sup>4</sup> <https://www.baseis.org.py/institucion/>

<sup>5</sup> UN Human Rights Committee, Communication No. 2751/2016, *Norma Portillo Cáceres et al v. Paraguay*, UN Doc. CCPR/C/126/D/2751/2016, September 20, 2019.

<sup>6</sup> <https://www.ecchr.eu/en/>.

<sup>7</sup> <https://www.misereor.de/>; Misereor, "Gefährliche Pestizide von Bayer und BASF – ein globales Geschäft mit Doppelstandards," April 2020, <https://www.misereor.de/fileadmin/publikationen/broschuere-gefaehrliche-pestizide-von-bayer-und-basf-globales-geschaefit-mit-doppelstandards.pdf>; Misereor, "Globale Agrarwirtschaft und Menschenrechte: Deutsche Unternehmen und Politik auf dem Prüfstand," 2020, <https://www.misereor.de/fileadmin/publikationen/bericht-globale-agrarwirtschaft-und-menschenrechte.pdf>.

## 2. The Responding Party

7. **Bayer AG** (hereinafter Bayer<sup>8</sup>) is a multinational corporation headquartered in Leverkusen, North Rhine-Westphalia, Germany. The company has three main divisions: Bayer Pharmaceuticals, Consumer Health and Crop Science. Bayer AG, represented by its Board of Management, performs the parent company functions for these divisions.<sup>9</sup>
8. The issues under analysis in this complaint, namely the negative environmental and human rights impacts associated with genetically modified (GM) soybean seeds and glyphosate based pesticides, are under the responsibility of Bayer's Crop Science Division. This division "is the world's leading agriculture enterprise by sales, with businesses in crop protection, seeds and traits."<sup>10</sup> GM soybean seeds and glyphosate-based pesticides, including the Roundup brands, are part of the activities of the Crop Science Division.<sup>11</sup> In September 2016, Bayer announced its merger with Monsanto through the acquisition of 100% of its shares, a transaction finalized after the approval of various national merger authorities including the European Commission in March 2018.<sup>12</sup> For the sake of this complaint, the Submitting Organizations consider Bayer AG as the legal successor of Monsanto in assuming responsibility for its actions and omissions.
9. In Latin America, Bayer is active in each country, as well as within the overarching structures for "Bayer Cono Sur" that cover Argentina, Bolivia and Paraguay, along with a Latin America division, which integrates Brazil. Also in this geographical context, the company maintains its internal division of business lines into Pharmaceuticals, Consumer Health and Crop Science.<sup>13</sup> Section E of this complaint includes a detailed description of Bayer's subsidiaries in four of these countries.
10. Only one complainant organization, Misereor, has had prior contact with the Responding Party in recent years regarding matters related to pesticides, transgenic seeds and the corporate responsibility to respect human rights and the environment in this geographical context, including an exchange on the publication "Advancing Together? Ein Jahr Bayer-Monsanto: eine kritische Bilanz"<sup>14</sup> and a public webinar including representatives from the Responding Party on the basis of the brochure published in 2020 "Gefährliche Pestizide von Bayer und BASF: Globales Geschäft mit Doppelstandards."<sup>15</sup>

### **B. Competence of the German NCP**

11. The German National Contact Point (NCP) is the competent authority to address this complaint *ratione materiae, ratione personae, ratione loci, and ratione temporis*. *Ratione materiae* on the actions and omissions of the Responding Party denounced in this complaint.

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<sup>8</sup> The complaint makes explicit reference to Monsanto when referring to facts that occurred previous to Bayer AG's acquisition of Monsanto.

<sup>9</sup> Bayer AG, "Annual Report 2023," March 5, 2024, <https://www.bayer.com/sites/default/files/2024-03/bayer-annual-report-2023.pdf>.

<sup>10</sup> Bayer AG, "Annual Report 2023," 28.

<sup>11</sup> Bayer AG, "Annual Report 2023," 29.

<sup>12</sup> European Commission, "COMMISSION DECISION of 21.3.2018 Declaring a Concentration to Be Compatible with the Internal Market and the EEA Agreement (Case M.8084 – Bayer/Monsanto)," March 21, 2018, para. 4.

<sup>13</sup> Bayer AG, "Bayer Cono Sur – Perfil y Organización," accessed April 19, 2024 <https://www.conosur.bayer.com/es/perfil-y-organizacion>.

<sup>14</sup> Misereor, "Advancing Together? Ein Jahr Bayer-Monsanto: Eine kritische Bilanz," April 2019, <https://www.misereor.de/fileadmin/publikationen/publikation-advancing-together-ein-jahr-bayer-monsanto-eine-kritische-bilanz.pdf>.

<sup>15</sup> Misereor, "Gefährliche Pestizide."

12. *Ratione personae* the complaint relates to the actions and omissions of Bayer, a German company based in Leverkusen, Germany.
13. The complainant organizations' mandates, objectives and longstanding work on the human rights and environmental impacts of agribusiness at the national and international level, demonstrates their legitimate interest in the subject matter of this specific instance (see Submitting Organizations). In this respect, the OECD's Guide for National Contact Points on the Initial Assessment of Specific Instances (NCPs Guide), provides that "organizations with mandates or objectives related to certain Responsible Business Conduct (RBC) themes may also have an interest in issues touching on those themes (i.e. instances of environmental harm, forced labor etc.). An NCP may consider the mandate of an organization as well as its stated objectives in submitting a specific instance in considering the legitimacy of its interests in a matter."<sup>16</sup>
14. *Ratione loci*, according to the German NCP's Procedural Guidelines, a complaint should generally be addressed by the NCP in the country where the issue arose, unless it concerns a non-adhering country and the involved company's headquarters are located in Germany.<sup>17</sup> In this regard, the Guide for National Contact Points on Coordination when handling Specific Instances, provides that "the 'issues' in question could refer to a general policy set by a company at headquarter level which may lead to impacts in several locations. In such a case the location of the 'issues' may be traced back to the location of the company headquarters."<sup>18</sup>
15. The issue concerning this specific instance relates to Bayer's inadequate – and in certain respects, nonexistent – human rights and environmental due diligence policies with regard to the company's GM soy seeds and glyphosate pesticide business in the four countries, which in turn has led to adverse impacts in several locations. The development and enactment of these policies at a global scale is decided at Bayer's headquarters in Germany. In this respect, Bayer has a group-wide human rights policy,<sup>19</sup> and under Bayer's company structure, the Board of Management has the ultimate responsibility to ensure respect for human rights.<sup>20</sup> The websites of the country subsidiaries do not contain additional policies but copy those of the headquarters. Furthermore, Bayer has incorporated the figure of a Human Rights Officer, an individual who, among other things, is tasked with overseeing Bayer's group-wide human rights risk-assessments and due diligence obligations, including those under the German Supply Chain Due Diligence Act.<sup>21</sup> The position is currently held by Matthias Berninger, Head of Public Affairs, Science, Sustainability, and Health, Safety & Environment.<sup>22</sup>
16. Therefore, while Bayer's inadequate policies have led to the materialization of severe risks impacting both local communities and the environment in four countries in Latin America, the German NCP

<sup>16</sup> OECD, "Guide for National Contact Points on the Initial Assessment of Specific Instances," 2019, <https://mneguidelines.oecd.org/Guide-for-National-Contact-Points-on-the-Initial-Assessment-of-Specific-Instances.pdf>, 7.

<sup>17</sup> Nationale Kontaktstelle (NKS), "Verfahrensleitfaden der deutschen Nationalen Kontaktstelle für die OECD-Leitsätze für multinationale Unternehmen," January 1, 2024, [https://www.bmwk.de/Redaktion/DE/Downloads/V/verfahrensleitfaden-oecd-010124.pdf?\\_\\_blob=publicationFile&v=2](https://www.bmwk.de/Redaktion/DE/Downloads/V/verfahrensleitfaden-oecd-010124.pdf?__blob=publicationFile&v=2).

<sup>18</sup> OECD, "Guide for National Contact Points on Coordination when handling Specific Instances," 2019, <https://mneguidelines.oecd.org/Guide-for-NCPs-on-Coordination-when-handling-Specific-Instances.pdf>, 6.

<sup>19</sup> Bayer AG, "Human Rights Policy," October 1, 2023, [https://www.bayer.com/sites/default/files/%5BVDS\\_v5%5D%20Human%20Rights%20Policy\\_EN.pdf](https://www.bayer.com/sites/default/files/%5BVDS_v5%5D%20Human%20Rights%20Policy_EN.pdf).

<sup>20</sup> Bayer AG, "Human Rights Officer at Bayer," accessed March 28, 2024, [https://www.bayer.com/sites/default/files/041323\\_Bayer\\_Human%20Rights%20Officer\\_JL.pdf.pdf](https://www.bayer.com/sites/default/files/041323_Bayer_Human%20Rights%20Officer_JL.pdf.pdf).

<sup>21</sup> Bayer AG, "Human Rights Policy," 10; Bayer AG, "Human Rights Officer at Bayer."

<sup>22</sup> Bayer AG, "Human Rights Officer at Bayer."

retains competence over the subject matter of this specific instance, as the issues refer to a general policy set by the company at headquarter level.

17. *Ratione temporis* the facts presented at the core of this complaint concern the current adverse human rights and environmental impacts in the four countries and Bayer's current policies and schemes to address the risks and actual occurrences of adverse impacts. Actions that have caused adverse impacts before June 2023 are only considered in so far as they continue to have an impact on individuals or communities. Thus, the complaint relies upon the 2023 version of the OECD Guidelines for Multinational Enterprises (hereinafter "the Guidelines"). Furthermore, given the NCP's general approach of mediating to find future-oriented solutions and improvements,<sup>23</sup> the complainants consider that an evaluation of Bayer's due diligence policies based on the previous version of the Guidelines, including recommendations based thereon, would be outdated and would not conform to current requirements at the outset.
18. The Submitting Organizations argue that the German NCP is also best placed to ensure consistent application of and compliance with the Guidelines in a manner that addresses the regional dimensions of the environmental and human rights impacts brought forward in this complaint. While Argentina and Brazil are OECD adhering countries and have established NCPs to oversee the implementation of the Guidelines, Bolivia and Paraguay are non-adhering countries and lack NCPs. A fragmented approach, with different aspects of the case handled by multiple NCPs, could lead to inconsistencies and inefficiencies, potentially undermining the integrity and effectiveness of the process and the uniform application of the Guidelines. Thus, a cohesive and resource-efficient approach is necessary, which only the German NCP can provide.<sup>24</sup>
19. For these reasons, the complainants emphasize that the German NCP is the only appropriate forum, and should be the Lead NCP in this case, even if it may consult with the Argentine and Brazilian NCPs on its competence.<sup>25</sup> This is especially important for ensuring that the interests and concerns of all stakeholders, especially those of non-adhering countries, are adequately represented and addressed. In conclusion, the competence of the German NCP is not only a matter of factual and procedural necessity, but is also imperative in order to ensure efficiency and consistency.
20. The complainants respectfully call on the NCP to accept this specific instance to facilitate Bayer's development of better due diligence policies and implementation schemes, when it comes to downstream impacts on human rights and the environment in agricultural value chains. The complainants believe that entering a mediation procedure under the guidance of the NCP will contribute to a better understanding of and yield future guidance concerning these important issues, which are not only relevant for the Responding Party but more generally for the effective implementation of responsible business conduct in the agricultural sector.

### **C. Executive Summary**

21. The Submitting Organizations file this complaint with the German NCP against Bayer for violating the Guidelines, insofar as: i) Bayer has failed to define, communicate, implement and track the implementation of environmental and human rights due diligence policies and processes that are adequate to effectively address the potential and actual adverse impacts related to its GM soy and pesticides value chains in Argentina, Bolivia, Brazil, and Paraguay, and ii) Bayer, through its GM

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<sup>23</sup> NKS, "Verfahrensleitfaden der deutschen Nationalen Kontaktstelle," para. 61.

<sup>24</sup> OECD, "Guide for National Contact Points on Coordination when handling Specific Instances," 6.

<sup>25</sup> NKS, "Verfahrensleitfaden der deutschen Nationalen Kontaktstelle," para. 33.



soy seeds and pesticides, is contributing to actual adverse impacts on the rights to a healthy, clean and sustainable environment, health and an adequate standard of living, including the rights to land and food, of rural and indigenous communities in the abovementioned countries. Concretely, Bayer's actions and omissions constitute a violation of Chapter II. General Policies, Chapter III. Disclosure, Chapter IV. Human Rights and Chapter VI. Environment of the Guidelines (see Bayer's Policies, Conduct and Omission to Act Violate the OECD Guidelines).

22. Indigenous, rural and semi-rural communities living in soy cultivation areas in Argentina, Brazil, Bolivia and Paraguay are experiencing severe adverse human rights and environmental impacts (see Environmental and Human Rights Impacts in the Southern Cone), as a result of the predominant agro-industrial model based on high levels of land concentration, GM soy seed cultivation and the intensive use of toxic pesticides.<sup>26</sup> The four countries together account for more than 99% of the soy production in South America,<sup>27</sup> and GM soybeans occupy large parts of the arable land in the four countries (see para. 44).<sup>28</sup> The impacts are widespread in each country and the region as a whole.
23. This complaint presents concrete cases of communities in each country denouncing the destruction of some of the world's most important ecosystems (see para. 178), often violent socio-territorial conflicts (see Socio-territorial conflicts and violations of the right to land and the right to food as essential elements of the right to an adequate standard of living), as well as adverse health effects (see Health impacts and violation of the right to health) and limited access to food (see paras. 175 and 176), due to the expansion of soy cultivation and associated indiscriminate pesticide application. In all cases, direct and circumstantial evidence was collected to establish the use of Bayer products, including information on market shares, the presence of distributors of Bayer products, government sources, and interviews with local inhabitants. According to the OECD-FAO Guidance for Responsible Agricultural Supply Chains (OECD-FAO Guidance)<sup>29</sup> and the OECD-FAO Business Handbook on Deforestation and Due Diligence in Agricultural Supply Chains (OECD-FAO Handbook),<sup>30</sup> the conditions in which Bayer markets its soy and glyphosate-based pesticides qualify as "red flag" contexts, which warrant a heightened human rights and environmental due diligence by agribusiness corporations like Bayer (see paras. 199, 201, 204, 216 and 230).
24. Following its merger with Monsanto in 2018, Bayer has established itself as the most important player in the GM seeds and pesticides market in the Southern Cone.<sup>31</sup> Through its Crop Science

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<sup>26</sup> European Parliament, "The use of pesticides in developing countries and their impact on health and the right to food," January 2021, <https://www.europarl.europa.eu/cmsdata/219887/Pesticides%20health%20and%20food.pdf>; Valeria Saccone, "América Latina, un continente infestado por los pesticidas," *esglobal*, January 3, 2018, <https://www.esglobal.org/america-latina-continente-infestado-los-pesticidas/>; BBC, "Las empresas que ganan millones vendiendo pesticidas peligrosos al mundo en desarrollo," *BBC News Mundo*, February 20, 2020, <https://www.bbc.com/mundo/noticias-51575375>; Claudio Mazzeo, "Pesticidas prohibidos persisten en aguas, suelos y fauna sudamericana," *SciDevNet*, April 7, 2020, <https://www.scidev.net/america-latina/news/pesticidas-prohibidos-persisten-en-aguas-suelos-y-fauna-sudamericana/>; Verzeñassi, D. et al, "Cancer incidence and death rates in Argentine rural towns surrounded by pesticide-treated agricultural land," *Clinical Epidemiology and Global Health* 20, March-April 2023.

<sup>27</sup> Hannah Ritchie et al, "Soybean Production, 1961-2021," *Our World in Data*, January 1, 2023, <https://ourworldindata.org/agricultural-production>.

<sup>28</sup> Agbio Investor, "GM Monitor," accessed March 12, 2024, <https://gm.agbioinvestor.com/>.

<sup>29</sup> OECD/FAO, OECD-FAO Guidance for Responsible Agricultural Supply Chains, 2016, <http://dx.doi.org/10.1787/9789264251052-en>. The Guidance covers agricultural upstream and downstream sectors from input supply to production, post-harvest handling, processing, transportation, marketing, distribution and retailing.

<sup>30</sup> OECD/FAO, OECD-FAO Business Handbook on Deforestation and Due Diligence in Agricultural Supply Chains, 2023, <https://doi.org/10.1787/c0d4bca7-en>.

<sup>31</sup> Bayer AG, "Soybeans Latin America," accessed March 27, 2024, [https://www.bayer.com/sites/default/files/BayerFieldShowcase2022\\_Leading%20in%20LATAM%20Soybeans.pdf](https://www.bayer.com/sites/default/files/BayerFieldShowcase2022_Leading%20in%20LATAM%20Soybeans.pdf), 6 -9;

business in the four countries, Bayer is engaged in the production, marketing and distribution of the two main commodities underpinning this agricultural model: GM soybeans and toxic pesticides, including glyphosate (under brands such as Round Up). Through the extensive commercialization of these products, Bayer AG has actively fostered the development of this model, is exposed to the human rights and environmental risks outlined above, and even contributes to the infringements already taking place. Notwithstanding the above, Bayer does not have an adequate human rights and environmental policy in place to specifically address the actual and potential risks documented in the four countries and reported by the communities that provided information for this complaint. While some of these risks have already materialized, resulting in actual impacts to which Bayer has contributed, the company has not taken adequate mitigation measures and remedial action, as required by the Guidelines (see Bayer's failure to cease and mitigate actual impacts and prevent potential impacts and Failure to provide a remedy for the actual impacts).

25. In particular, Bayer has violated the Guidelines for the following reasons:

- Failure to effectively identify and assess potential and actual adverse impacts on human rights and the environment in the four countries (see paras. 189-228)
- Failure to cease and mitigate actual adverse impacts to which it has contributed to and prevent the occurrence of potential adverse impacts on the right to health, the right to a healthy, clean and sustainable environment, as well as the right to food and land as elements of the overarching right to an adequate standard of living (see paras. 230-269) Bayer's failure to cease and mitigate actual impacts and prevent potential impacts
- Failure to provide clear, complete and comparable information at a sufficient level of detail on the actual and potential adverse impacts identified through its risks assessment process (see paras. 272-273).
- Failure to provide remedy for the adverse impacts on human rights and the environment to which it has contributed to (see paras. 275-276)
- Failure to track the implementation and effectiveness of its due diligence measures (see para. 271)

#### **D. Introduction**

26. The complaint is divided in two main parts. **“Part II. Facts”** outlines the factual basis of the complaint. To this purpose, the Submitting Organizations first present Bayer's Crop Science business line in the four countries, with a focus on the production and distribution chains of glyphosate-based pesticides and GM soy seeds. The complainants provide information on the company's soy seeds and glyphosate-based products commercialized in each country. This overview of the company's activities is relevant to the assessment of Bayer's conduct under the Guidelines and shows how Bayer's dominant market position ensures that its products are used everywhere in the four countries and that the company enjoys strong leverage over all actors in the downstream value chain.

27. Secondly, the complainants present a description of the main environmental and human rights impacts linked to the cultivation of GM soy and the associated use of pesticides in specific geographical locations in each of the four countries, denominated as “areas of interest.” In these areas, indigenous, rural and peri-urban communities living adjacent to GM soy plantations have reported serious impacts from the expansion of GM soy cultivation into their territories. These are also areas where Bayer products are extensively commercialized. In all cases, direct and

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Lianos, I; Katalevsky, D, “Merger Activity in the Factors of Production Segments of the Food Value Chain: - A Critical Assessment of the Bayer/Monsanto merger,” *Centre for Law, Economics and Society Policy Papers*, January 2017, [https://discovery.ucl.ac.uk/id/eprint/10045082/1/Lianos\\_cles-policy-paper-1-2017.pdf](https://discovery.ucl.ac.uk/id/eprint/10045082/1/Lianos_cles-policy-paper-1-2017.pdf).

circumstantial evidence was collected to establish the use of Bayer products, including information on market shares, the presence of distributors of Bayer products, government sources, and interviews with local inhabitants (see Environmental and Human Rights Impacts in the Southern Cone)

28. The concrete cases documented for the purposes of this complaint concern three Ava Guaraní indigenous communities (Aldea Pohã Renda, Aldea Y'Hovy and Aldea Tekoha Ocoy) in the state of Paraná, Brazil (see para. 118118), two peasant colonies (Colonia Yeruti and Colonia Yvypè) in the departments of Caaguazú, San Pedro and Canindeyú, Paraguay (see paras. 142 and 144), several rural communities in the department of Santa Cruz, Bolivia (see para. 99) and the peri-urban community of the city of Pergamino, Argentina (see para. 82). The Submitting Organizations in Brazil, Argentina and Paraguay have discussed the content and presentation of this complaint with these communities and obtained their consent to use their information to support the demands presented to the Responding Party in this complaint. In the case of Bolivia, communities were informed about the research being conducted, and they agreed to provide group interviews for any intervention that could lead to an improvement in their current situation.
29. The identification of the areas of interest was the result of a research process initiated in 2022 by the Submitting Organizations, based on their work to provide legal and social support to communities affected by soy agribusiness in the four countries. In an initial stage of desk research, the complainants investigated Bayer Crop Science's operations in the Southern Cone, in particular its production and distribution chains of GM soy seeds and glyphosate. In addition, the company's policies pertaining to respect for human rights and the environment, the schemes to be implemented and how these translate from the headquarters in Germany to the four countries were systematically analyzed.
30. For each country, the complainants mapped urban, rural and indigenous communities negatively impacted by large-scale GM soy cultivation and the use of glyphosate in areas where Bayer products are commercialized. Our sources included United Nations (UN), nongovernmental organization (NGO), governmental and media reports on human rights and environmental impacts related to GM soy cultivation and pesticide use in these areas. In a second stage of field research, the complainants carried out field visits to the areas of interest and conducted individual and group interviews with affected communities and individuals, local authorities, medical and school personnel, as well as with authorized Bayer distributors and warehouses. For a detailed overview of the field visits and interviews in each country, see Annex I.
31. One of the challenges faced during the research phase was the lack of evidence of the products used in the soybean plantations adjacent to the communities living in the areas of interest. The interviews revealed that due to land conflicts between soy farmers<sup>32</sup> and affected communities, community members couldn't obtain further information on this issue, as soy farmers wouldn't share this information or because doing so could put their safety at risk. In addition, in some areas of interest, both medical and school staff explicitly mentioned that they had been forbidden to talk about the impacts of fumigation in the area. This was particularly the case in the city of Pergamino, where the use of Bayer's glyphosate-products in the area was confirmed during the course of a judicial investigation (see para. 86). Finally, also official authorities did not share information about the products used in a district, as was the case for one municipality in Brazil (see para. 123). This lack

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<sup>32</sup> While peasant and indigenous communities may also plant soy in the four countries, for the purpose of this complaint, the term "soy farmer" refers to individuals or cooperatives owning medium- and large-scale soy plantations. We decided to use this term instead of landowners because of the uncertainty regarding land titling in the areas of interest, most of the time to the detriment of the rights of indigenous and peasant communities that have historically inhabited these territories.

of transparency increases the risk that Bayer's products will continue to be used inappropriately, with no opportunity for those affected to denounce the adverse impacts of its products either to the company or to government authorities. In addition, beyond the local use of Bayer products, consolidated and easily comparable data on market shares and product sales specifically for Bayer soy seeds and glyphosate-based pesticides could not be obtained by open source investigation. This holds particularly true for the most recent data on sales in 2024 and 2023.

32. In **Part II. Facts**, the complainants conclude by presenting an overview of the cross-cutting human rights risk and actual impacts related to GM soybean and indiscriminate glyphosate use in the areas of interest and, more generally, in the four countries (see Cross-cutting adverse human rights and environmental impacts). The regional dimension of the impacts are key for the assessment of Bayer's actions and omissions when compared to the Guidelines and needs to be addressed at the level of the company headquarters, where group policies are established.
33. The second main part, **Part III. Legal Assessment** provides a legal analysis of the violations of the Guidelines by Bayer concerning i) its human rights and environmental due diligence policies in place and ii) its relationship to adverse impacts in the four countries and particularly the areas of interest (see Bayer's Policies, Conduct and Omission to Act Violate the OECD Guidelines). The latter includes an assessment of Bayer's contribution to negative impacts on the right to health, to a healthy, clean and sustainable environment, as well as on the right to food and the right to land as elements of the overarching right to an adequate standard of living. In the final section of **Part III. Legal Assessment**, we present a set of demands aimed at providing a forward-looking vision of how Bayer is expected to fulfill its obligations under the Guidelines concerning its downstream GM soy seeds and glyphosate pesticides value chains in the four countries (see Summary of demands).
34. In the view of the complainants, the potential positive outcome of a mediation with Bayer on the subject matter of this complaint would not only improve Guidelines-adherence by a major agricultural company within the area of responsible agribusiness conduct – due to the leading role of the company in the industry and the region – but would also represent an opportunity to prevent, mitigate and remedy severe foreseeable and actual adverse impacts on the human rights of local communities and the environment in the four countries. This is all the more relevant as the OECD-FAO Agricultural Outlook 2022-2031 foresees the expansion of cropland in Latin America in the next decade, including due to a rise in the production of soybeans,<sup>33</sup> a trend confirmed by the US Department of Agriculture for all four countries.<sup>34</sup> This growing trend represents an actual risk for other biomes of global importance, beyond the areas of interest presented here, where Bayer also markets its products.<sup>35</sup> This is the case, for instance, with the Gran Chaco region in Argentina,

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<sup>33</sup> OECD-FAO, "OECD-FAO Agricultural Outlook 2022-2031," 2022, <https://www.oecd-ilibrary.org/docserver/f1b0b29c-en.pdf?expires=1713517763&id=id&accname=guest&checksum=ACD94242E2BCAF0C02C3ED7044BD2B5>, 50-52.

<sup>34</sup> US Department of Agriculture, "Agricultural Projections to 2030," February 2021, <https://www.ers.usda.gov/webdocs/outlooks/100526/oce-2021-1.pdf?v=392>, 73.

<sup>35</sup> Productiva, "Soja en expansion en el Chaco," January 2022, <https://www.productivacm.com/soja-expansion-en-el-chaco-impulsa-busqueda-de-nuevas-variedades>; Adriana Amâncio, "Glyphosate leaves its mark even in protected areas of Brazil's Cerrado," *Mongabay*, November 22, 2023, <https://news.mongabay.com/2023/11/glyphosate-leaves-its-mark-even-in-protected-areas-of-brazils-cerrado/>.

Bolivia, and Paraguay,<sup>36</sup> which is becoming the next soy deforestation frontier in the Southern Cone.<sup>37</sup>

35. Compliance with the Guidelines by Bayer, as demanded by the complainant organizations, would contribute to preventing and mitigating these risks substantially. All of this is of the utmost importance, especially in the context of the current climate crisis and the commitments under the Paris Agreement, which Bayer has voluntarily integrated as the basis of its climate policy.<sup>38</sup>

## PART II. FACTS

### E. Bayer AG in the Southern Cone

#### **1. Bayer's market presence in the region**

##### *a. Bayer's regional production and distribution chains of GM soy seeds and glyphosate-based pesticides*

36. Today, a small number of multinational companies dominate the soy agribusiness model, each of these holding significant market share in the production and distribution of GM soybeans and glyphosate. These are Bayer, BASF, Syngenta and Corteva.<sup>39</sup> In 2018, Bayer completed the acquisition of Monsanto, currently positioning itself as the agrochemical market leader in Latin America.<sup>40</sup>
37. Although the process varies from country to country and depends on national regulations, three main actors can be identified in the GM seed supply chain. First, a developer creates a GM seed by introducing a biogenetic event or "trait" into a plant's genome, in this case, Bayer. If allowed by national regulations, the new seed is protected by patents. Subsequently, breeders enter the production chain, adding additional traits, and thus creating their own varieties adapted to specific contexts for subsequent commercialization. Depending on national regulations, these new varieties can be subject to breeders' rights, which grant the owner the exclusive right to use the variation of the seed for commercial purposes, i.e. sell it, control its production, sale and distribution, and collect royalties from the sale of the seeds. For the soybean varieties developed through biotechnologies patented by Monsanto (i.e. Intacta RR2 Pro), the breeders require that their customers sign a license agreement with Monsanto.<sup>41</sup>

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<sup>36</sup> Kimberley Brown, "Can the EU's deforestation law save Argentina's Gran Chaco from soy?," *Mongabay*, June 6, 2023, <https://news.mongabay.com/2023/06/can-the-eus-deforestation-law-save-argentinas-gran-chaco-from-soy/>; Verena Fehlenberg et al, "The role of soybean production as an underlying driver of deforestation in the South American Chaco," *Global Environmental Change* 45, July 2017, <https://www.sciencedirect.com/science/article/abs/pii/S0959378017305964>, 24-34; Tiago Reis et al, "Soy Expansion Drives Deforestation in Bolivia," *Trase*, August 23, 2023, <https://trase.earth/insights/soy-expansion-drives-deforestation-in-bolivia>.

<sup>37</sup> Ewan Mitchell, Peter Elwin, "Gran Chaco: The Deforestation Dozen," March 2022, <https://planet-tracker.org/wp-content/uploads/2022/03/Gran-Chaco-LD-report.pdf>.

<sup>38</sup> Bayer AG, "Disclosure Insight Action - Climate Change 2022," <https://www.bayer.com/sites/default/files/Bayer-AG-CDP-Climate-2022.pdf>, 17; Bayer AG, "Our Targets to Be Met by 2030," accessed April 19, 2024, <https://www.bayer.com/en/sustainability/targets>.

<sup>39</sup> Laura Duarte Reyes, Christian Schliemann-Radbruch, "Transgenes Saatgut und Glyphosat in Lateinamerika: Wie weit reicht Bayers Verantwortung?," *Zeitschrift für die Menschen Rechte* 15, Nr. 1 2021, 116-141.

<sup>40</sup> Portal do agronegocio, "Brasil é o principal foco de investimentos da Bayer no mundo," accessed April 19, 2024, <https://www.portaldoagronegocio.com.br/gestao-rural/gestao/noticias/brasil-e-o-principal-foco-de-investimentos-da-bayer-no-mundo>.

<sup>41</sup> See for Argentina as an example: Intacta RR2 Pro, "Licencia de Uso," accessed April 19, 2024, <https://web.archive.org/web/20221206075736/https://www.intactarr2pro.com.ar/es-ar/quiero-intacta/licencia-de-uso.html>.

38. Multipliers are the last step in the downstream seed value chain. They are responsible for the commercial production of the seeds ultimately to be used by farmers. Bayer is involved in every stage of the seed production and distribution chain, either through its ownership of breeding companies, such as Monsoy in Brazil,<sup>42</sup> or by commercial licensing agreements entered into with third companies, which allow them to access Bayer's biotechnology.<sup>43</sup> For instance, Bayer developed licensing and royalty agreements with breeders, multipliers, distributors and end-users for certain traits, such as INTACTA RR2 Pro. These agreements enabled the company to: collect royalties for the use of seeds with its technology; establish predefined distributors to sell the seeds and collect payments; determine the collection points of the soybeans and/or the exporting harbors; and send inspectors to soy plantations, silos or harbors to verify payments, the illegal duplication of seeds, and the proper fulfillment of the agreement.<sup>44</sup>
39. This system is the result of the industry push for transgenic seeds, which started already in the mid-1990s, when the Southern Cone saw a significant increase in the exploitation of agricultural land for soybean cultivation due to the development of GM soy seeds resistant to glyphosate, introduced by agribusiness enterprises, spearheaded by Monsanto, and praised as "technology package" for a more efficient soy cultivation.
40. The instrumental role played by Monsanto in the introduction of GM soy seeds in the four countries becomes evident when looking at the introduction of the first GM seeds in each country. In the early 1990s, Monsanto developed the GM event "40-3-2 (MON-Ø4Ø32-6)", also known as "RR1" glyphosate-resistant soybeans. Argentina was the first country to authorize this event for commercialization in 1996 (see para. 47), soon followed by Brazil in 1998 (see para. 67), Paraguay in 2001 (see para. 78), and finally Bolivia in 2005 (see para. 60). In all four countries, Monsanto's seed was the first registered GM soybean event (see Annex II). In the case of Bolivia and Paraguay, it remained the only GM event for years to come.
41. In the following years, Monsanto continued to develop new events with similar technology, also resistant to glyphosate-based pesticides such as the INTACTA RR2 Pro, INTACTA Xtend and INTACTA 2 Xtend. Brazil is currently the only one of the four countries where all the mentioned events have an official registration (see para. 69). In Argentina, the event INTACTA RR2 Pro was registered and commercialized but Bayer stopped the sales and licensing of seeds with this event as of 31 December 2022.<sup>45</sup> Nonetheless, according to Bayer's own internal estimations, the INTACTA RR2 Pro is the leading soybean system in South America.<sup>46</sup> According to the latest available data, Bayer currently has a significant share of the GM seed market based on the traits authorized in each country, corresponding to 67% of the approved GM seeds in Bolivia, 44% in Brazil, 39% in Paraguay and 38% in Argentina.<sup>47</sup>

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<sup>42</sup> Bayer Brasil, "Monsoy," accessed April 19, 2024, <https://www.agro.bayer.com.br/marcas/monsoy>.

<sup>43</sup> See for instance Don Mario Semillas, "Condiciones General de Comercialización," n.d., sec. 15, <https://www.donmario.com/wp-content/uploads/2021/07/Oferta-publica-DM-SEPT.-ROBA-PAGINA-4X12-1990x2605-cm-1-1.pdf>.

<sup>44</sup> The license is available for Paraguay: Intacta RR2 Pro, "Licencia de Uso", accessed April 19, 2024, <https://www.intactarr2pro.com.py/es-py/modelo-de-negocios/licencia-de-uso.html>. Similar information for Brazil is available here <https://www.intactarr2pro.com.br/>. A similar license was available for Argentina on the same webpage until Bayer's announcement to stop the commercialization of the seed in Argentina.

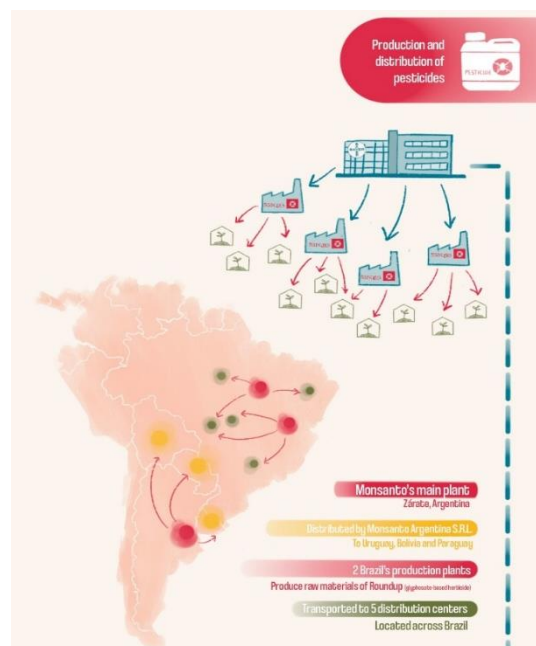
<sup>45</sup> Intacta RR2 Pro, "Suspensión del negocio de semillas y biotecnología de soja en la Argentina," August 30, 2021, <https://www.intactarr2pro.com.ar/es-ar/novedades/bayer-reorientara-sus-inversiones-en-la-argentina-hacia-proyecto.html>.

<sup>46</sup> Bayer AG, "A Global Leader in Health & Nutrition – Investment Case," August 2023, <https://www.bayer.com/sites/default/files/2023-08/bayer-ag-investment-case-august-2023.pdf>.

<sup>47</sup> Acción por la Biodiversidad, "Atlas del agronegocio transgénico en el Cono Sur," May 14, 2020, <https://www.biodiversidadla.org/Atlas>, 73.

42. As GM soybean cultivation expanded in the region, glyphosate-based pesticides became widely used in the Southern Cone, including Bayer's signature brand Roundup. Since its introduction in association with GM soy seeds until the expiry of its patent, Bayer's Roundup has been the overall leader in soybean glyphosate-based crop protection products<sup>48</sup> and continues to be Bayer's major brand in the four countries. Still today it has a significant market share in all four countries (see paras. 55, 56, 62, 63, 70, 71, 79 and 80). GM soy cultivation requires the use of glyphosate-based pesticides, including to a significant extent the Responding Party's glyphosate-based pesticides.
43. The manufacture of glyphosate-based pesticides includes the production of its key substance (glyphosate), as well as additional components, product completion, packaging, and labeling. The main production facility in the region is the Monsanto plant in Zárate (Argentina), where Monsanto Argentina SRL<sup>49</sup> produces its glyphosate-based herbicides, including the brands Roundup MAX and La Tijereta.<sup>50</sup> La Tijereta is also produced in Bayer's plant in Rojas (Argentina).<sup>51</sup> The products are then sold to Uruguay, Bolivia and Paraguay. Bayer has two other production facilities in Brazil,<sup>52</sup> which produce the raw materials for the Roundup herbicide for the domestic market. Bayer does not have production sites in Paraguay and Bolivia, as both countries import GM soybeans and glyphosate-based pesticides from Bayer's production facilities in Argentina and Brazil (see paras. 46 and 71).

**FIGURE 1. Bayer's pesticides production and distribution operations in the Southern Cone**



Source: Complainants based on Bayer AG's website<sup>53</sup>

<sup>48</sup> Elizabeth Bravo, Alexander Naranjo, "América Latina fumigada y crisis de las commodities. El caso del glifosato de Monsanto," *Ciencia Política* 11(21), 2016, 229-250, <https://revistas.unal.edu.co/index.php/cienciapol/article/view/60295/57784>, 235.

<sup>49</sup> Monsanto Argentina SRL is now a consolidated subsidiary of Bayer following the 2018 merger, Bayer AG, "Annual Report 2019," [https://www.bayer.com/sites/default/files/2020-11/bayer-ag-annual-report-2019\\_6.pdf](https://www.bayer.com/sites/default/files/2020-11/bayer-ag-annual-report-2019_6.pdf), 159.

<sup>50</sup> Bayer AG, "Bayer Cono Sur - Production Plants" accessed April 19, 2024, <https://www.conosur.bayer.com/es/plantas-de-produccion>.

<sup>51</sup> Bayer AG, "Bayer Cono Sur - Production Plants."

<sup>52</sup> Bayer AG, "Annual Report 2019," 28.

<sup>53</sup> Bayer AG, "Bayer Cono Sur - Production Plants".

44. This large-scale cultivation of GM soy seeds also left its mark in terms of land use in the four countries. It is estimated that between the early 1990s and 2017, more than 2 million hectares in the Southern Cone were razed each year to make room for GM soy crops.<sup>54</sup> Currently, GM soybean crops represent more than 90% of the soybeans grown in the four countries (see paras. 48, 61, 67, 74). GM soybeans occupy most of the cultivated area in the four countries.<sup>55</sup> In Paraguay, 67% of the total arable land is used to grow GM soybeans (see para. 74). In Argentina, a total of 40.62% of the arable land was dedicated to soybean production in 2021.<sup>56</sup> Similar data from 2021 shows that 65.94% of all arable land in Brazil was used for GM soybeans,<sup>57</sup> while in Bolivia soy occupied 28.39% of the total arable land in the same year.<sup>58</sup> In all countries, the area for GM soybean production has grown since then.<sup>59</sup> Brazil and Argentina are among the top three soy producers in the world, and Paraguay and Bolivia are the sixth and tenth biggest producers, respectively,<sup>60</sup> thus revealing the significance of this region for global soy production and for Bayer's business activities in this sector.

## 2. Bayer and its Crop Science line in Argentina

45. Bayer is present in Argentina through several subsidiaries, the most relevant of which are Bayer S.A. and Monsanto S.R.L., of which Bayer owns 100% of the shares.<sup>61</sup> Both companies are registered at the same address in the province of Buenos Aires. The main activities of Bayer S.A. include the manufacture of chemicals, insecticides, pesticides and agricultural-chemicals; wholesale of pesticides and fertilizers; and the application for commercial authorization of certain varieties.<sup>62</sup> Bayer S.A. also holds full ownership of Bayer Crop Science Argentina S.A.,<sup>63</sup> a company actively involved in the manufacturing of agrochemicals.<sup>64</sup> Monsanto S.R.L. manufactures insecticides, pesticides and agricultural chemicals, including the brand Roundup, hybrid cereals and oilseeds, such as soybeans, while also engaging in the wholesale distribution of fertilizers and pesticides.<sup>65</sup>
46. Bayer owns several production plants in the "core soybean area" (zona núcleo sojero) (see para. 83) of the northern province of Buenos Aires, namely:

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<sup>54</sup> Acción por la Biodiversidad, "Atlas del agronegocio," 80.

<sup>55</sup> Agbio Investor, "GM Monitor,".

<sup>56</sup> Total arable land according to: Banco Mundial, "Tierras Cultivables," accessed April 19, 2024, <https://datos.bancomundial.org/indicador/AG.LND.ARBL.HA?end=2021&locations=AR&start=1961&view=chart>, compared to area cultivated with GM soy: Agbio Investor, "GM Monitor," Argentina Soybean.

<sup>57</sup> Total arable land according to: Banco Mundial, "Tierras Cultivables," accessed April 19, 2024, <https://datos.bancomundial.org/indicador/AG.LND.ARBL.HA?end=2021&locations=BR&start=1961&view=chart>, compared to area cultivated with GM soy: Agbio Investor, "GM Monitor," Brasil Soybean.

<sup>58</sup> Total arable land according to: Banco Mundial, "Tierras Cultivables," accessed April 19, 2024, <https://datos.bancomundial.org/indicador/AG.LND.ARBL.HA?end=2021&locations=BR&start=1961&view=chart>, compared to area cultivated with GM soy: Agbio Investor, "GM Monitor," Bolivia Soybean.

<sup>59</sup> Agbio Investor, "GM Monitor,".

<sup>60</sup> Ritchie et al, "Soybean Production, 1961-2021,".

<sup>61</sup> These include: Bayer S.A., Monsanto Argentina S.R.L., Bayer Crop Science S.A., CDM Mandiyu S.R.L., Renessen Argentina S.R.L., Biagro S.A., Orbia Argentina S.A.U. Bayer AG, „Anteilsbesitz Bayer AG und Bayer-Konzern zum 31.Dezember 2023," <https://www.bayer.com/sites/default/files/2024-03/bayer-anteilsbesitz-2023.pdf>. Further, Asgrow Seed Company Sucursal Argentina is a branch of the US-based Asgrow Seed Company LLC in which Bayer AG has at least 50% shareholding. Bayer AG, "Liste Der Aktiven Bayer Gesellschaften Mit Mindestens 50% Beteiligung," August 14, 2023, [https://www.bayer.com/sites/default/files/GDIS\\_Companies\\_DE.pdf](https://www.bayer.com/sites/default/files/GDIS_Companies_DE.pdf)

<sup>62</sup> "Bayer Sociedad Anonima (30-50381106-1)," CUIT Online, accessed April 11, 2024, <https://www.cuitonline.com/detalle/30503811061/bayer-sociedad-anonima.html>.

<sup>63</sup> "Bayer S.A. Perfil de Compañía - Argentina," EMIS, accessed April 11, 2024, [https://www.emis.com/php/company-profile/AR/Bayer\\_SA\\_es\\_1101319.html](https://www.emis.com/php/company-profile/AR/Bayer_SA_es_1101319.html).

<sup>64</sup> "Consulta Actividad Economica," Administración Federal de Ingresos Públicos, accessed April 21, 2024, <https://seti.afip.gob.ar/padron-puc-constancia-internet/ActivEconomicaAction.do?bar=1713698794672>.

<sup>65</sup> "Monsanto Argentina S.R.L. (30-50350872-5)," CUIT Online, accessed April 11, 2024, <https://www.cuitonline.com/detalle/30503508725/monsanto-argentina-srl.html>.



- The Fontezuela Experimental Station, located in Pergamino, Province of Buenos Aires, where the responding party conducts research and the development of corn and soybean hybrids. Juan Farinati, CEO of Bayer Cono Sur, said “Fontezuela is [...] 'the essential gear' in terms of research and development for Bayer in Argentina and the Southern Cone.”<sup>66</sup> The site “was the protagonist of great technological advances in agriculture for different technological events such as RR soybeans.”<sup>67</sup>
- The Zarate Plant, located in Zarate, Province of Buenos Aires, has two locations and produces different herbicides among them glyphosate-based herbicides, including Roundup MAX® and La Tijereta®.<sup>68</sup>
- The María Eugenia plant in Rojas, Province of Buenos Aires, is the largest seed plant in the world, where, among other things, the herbicide La Tijereta® is produced.<sup>69</sup>

**a. Bayer’s genetically modified soybean seeds in Argentina**

47. In 1996, the Secretariat of Agriculture, Livestock and Fisheries approved the use of a transgenic event for the first time. The 40-3-2 (MON-Ø4Ø32-6) soybean also known as “RR1,” recognized for being resistant to Monsanto’s herbicide Roundup, was created using biotechnology developed by Monsanto.<sup>70</sup> The “RR1” event rapidly spread in the soy seed market for different reasons. First, producers did not have to pay royalties while using it, as it was not patented with the Argentine authorities. Secondly, Argentine legislation allows producers to save seeds for later use.<sup>71</sup> Thirdly, the existence of an illegal seed market<sup>72</sup> made “RR1” seeds easily accessible to the farmers. Even in the absence of patent protection, Monsanto introduced licensing agreements to collect royalties for seed growers and multipliers who developed varieties with the RR1 event.<sup>73</sup>
48. In 2012, the Argentine authorities approved the second type of Monsanto GM biotechnology resistant to glyphosate for commercialization in the country, the soybean with INTACTA RR2 Pro technology.<sup>74</sup> Recently, Bayer's request for a new event, commonly known as “INTACTA 2 Xtend,” was approved in February 2024, although it was granted only for import purposes and not for sowing.<sup>75</sup> Bayer had a clear lead in 2023 in terms of approval of genetically modified seeds events in Argentina (Annex II – Table 1).<sup>76</sup> Out of eleven glyphosate-tolerant events approved for sowing

<sup>66</sup> “La Estación Fontezuela, de Bayer, cumple 75 años trabajando en innovación y desarrollo,” Diario La Opinión de Pergamino, November 6, 2022, <https://laopinionpergamino.com.ar/nota/10399/2022/11/la-estacion-fontezuela-de-bayer-cumple-75-antildeos-trabajando-en-innovacion-y-desarrollo>.

<sup>67</sup> Bayer AG, “Bayer Cono Sur – La Estación Fontezuela, de Bayer, cumple 75 años trabajando en innovación y desarrollo,” November 4, 2022, <https://www.conosur.bayer.com/es/la-estacion-fontezuela-de-bayer-cumple-75-anos-trabajando-en-innovacion-y-desarrollo>.

<sup>68</sup> Bayer AG, “Bayer Cono Sur – Plantas de Producción,” accessed April 19, 2024, <https://www.conosur.bayer.com/es/plantas-de-produccion>.

<sup>69</sup> Ibid.

<sup>70</sup> Although the event was developed by, and with technology from, Monsanto, in Argentina it was the company Nidera S.A. that submitted the application for marketing authorization. Nidera had acquired Asgrow Argentina, whose previous parent company, Asgrow International, had signed an agreement with Monsanto to introduce a glyphosate tolerance gene into its soybean cultivars.

<sup>71</sup> Ley de Semillas y Creaciones Fitogenéticas (Seeds and Phyto-genetic Creations Law) No. 20.247, art. 27.

<sup>72</sup> OECD, “Agricultural Policies in Argentina,” 2019, <https://doi.org/10.1787/9789264311695-en>, 99.

<sup>73</sup> Ibid, 100.

<sup>74</sup> Ministerio de Agricultura, Ganadería y Pesca, “Resolución 446,” August 10, 2012, [https://www.magyp.gob.ar/sitio/areas/biotecnologia/ogm/archivos/RES\\_446\\_2012.pdf](https://www.magyp.gob.ar/sitio/areas/biotecnologia/ogm/archivos/RES_446_2012.pdf).

<sup>75</sup> Subsecretaría de alimentos, Bioeconomía y Desarrollo Regional, “Disposición 3/2024,” February 7, 2024, <https://www.argentina.gob.ar/sites/default/files/disposicion-n-3-2024-soja-mon-87751-7-x-mon-877o1-2-x-mon-877o8-9-x-mon-89788-1.pdf>.

<sup>76</sup> Ministerio de Economía Subsecretaría de alimentos, Bioeconomía y Desarrollo Regional, “OGM vegetal: Eventos con autorización comercial,” September 6, 2021, <https://www.argentina.gob.ar/agricultura/alimentos-y-bioeconomia/ogm-vegetal-eventos-con-autorizacion-comercial>.

and commercialization,<sup>77</sup> Bayer/Monsanto developed the biotechnology for seven of them. Currently, it is estimated that genetically modified soy represents 99.9% of all cultivated soy in Argentina.<sup>78</sup>

49. According to the National Seed Register, Argentina has registered 1,223 seed varieties since 1996.<sup>79</sup> Out of these, 817 originated from events initially developed by Monsanto, and 87 varieties have been registered by Monsanto itself.<sup>80</sup> Of this 87 varieties, 53 refer to RR2 varieties and 34 to varieties with the RR1 trait.<sup>81</sup> A study by the National Seed Institute analyzed the registration of seed varieties between 1995/6 and 2015/6 and found that Monsanto was among the top three companies in GM soy seed varieties.<sup>82</sup>
50. In 2015, Monsanto instituted a specific business model for the INTACTA RR2 soy seeds. This model incorporated a royalty collection system known as "Extended Royalty," wherein purchasers entered into a licensing agreement with Bayer.<sup>83</sup> The agreement mandated the payment of a royalty as a counterpart for using the technology and for subsequent harvests (as safeguarded by Argentine law). Payments could be made either in advance or at the point of collection or export.<sup>84</sup> The system was managed by 12 authorized breeders as of December 2022, including Asgrow, a company Bayer owns.<sup>85</sup> In addition to the seed companies, 69 authorized businesses across the country<sup>86</sup> were involved in selling first-generation multiplication varieties of soybean seeds with INTACTA RR2 technology. These establishments also facilitated the advance payment of the "extended royalty" for licensed growers.<sup>87</sup> Under this structure, even seed companies which did not form part of Bayer's corporate structure were authorized to develop and commercialize new varieties using INTACTA RR2 technology.
51. Through this scheme, farmers could only deliver the soybeans to the grain collectors and exporters determined by Bayer/Monsanto, who were also allowed to conduct on-site inspections. Bayer/Monsanto utilized a system that enabled them to keep track of advance royalty payments, conduct genetic analysis of the delivered soybeans to detect the INTACTA RR2 trait, and demand

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<sup>77</sup> Varieties authorized for import or processing purposes only, such as the recently approved INTACTA 2 Xtend, are excluded from the analysis.

<sup>78</sup> Agbio Investor, "GM Monitor,".

<sup>79</sup> Instituto Nacional de Semillas (INASE), "Catálogo Nacional de Cultivares," accessed February 20, 2024, <https://gestion.inase.gob.ar/consultaGestion/gestiones>.

<sup>80</sup> Through different companies owned by Monsanto in Argentina and abroad, including: Monsanto Argentina S.R.L., Dekalb Argentina S.A., La Tijereta, Monsanto Argentina S.A.I.C., FN Semillas S.A., Monsanto Company (ARG/USA), Monsanto Technology LLC (USA/ARG/BRA), Hartz Seed A Unit of Monsanto (USA), D&PL Brasil Ltda (Brazil). INASE, "Catálogo Nacional de Cultivares,".

<sup>81</sup> Ibid.

<sup>82</sup> INASE, "The Global and National Seed Market," 2019, [https://www.argentina.gob.ar/sites/default/files/inase\\_mercado\\_mundias\\_de\\_semillas.pdf](https://www.argentina.gob.ar/sites/default/files/inase_mercado_mundias_de_semillas.pdf).

<sup>83</sup> Intacta RR2 Pro, "Condiciones Comerciales," accessed April 19, 2024,, <https://web.archive.org/web/20231204085250/https://www.intactarr2pro.com.ar/es-ar/quiero-intacta/condiciones-comerciales.html>.

<sup>84</sup> Clarín, "Cómo se concretará el pago de las regalías," Clarín, February 23, 2013, [https://www.clarin.com/rural/concretara-pago-regalias\\_0\\_r13PkpcSP7e.html](https://www.clarin.com/rural/concretara-pago-regalias_0_r13PkpcSP7e.html).

<sup>85</sup> Asgrow, "Red de Multiplicadores Asgrow," Internet Archive on June 16, 2021, <https://web.archive.org/web/20210616160943/https://www.asgrow.com.ar/es-ar/red-multiplicadores.html>; Intacta RR2 Pro, "Semilleros INTACTA," INTACTA RR2 PRO, Internet Archive on December 6, 2022, <https://web.archive.org/web/20221206065847/https://www.intactarr2pro.com.ar/es-ar/semilleros.html>. Royalties for the payment of these products were administered through the Asociación Argentina de Protección de las Obtenciones Vegetales APROV.

<sup>86</sup> The distribution by province was as follows: Buenos Aires (9), CABA (2), Chaco (6), Córdoba (33), Entre Ríos (2), Santiago del Estero (1), Salta (1), Santa Fé (12), La Pampa (2) and Tucumán (1). Intacta RR2 Pro, "Semilleros INTACTA,".

<sup>87</sup> Intacta RR2 Pro, "Comercios en Argentina," accessed April 19, 2024, <https://www.INTACTArr2pro.com.ar/es-ar/comercios.html#role%5B%5D=COMERCIO&state=Buenos%20Aires>.

payment from farmers if the trait was detected in the absence of any prior payment made.<sup>88</sup> Throughout the years, this collection system was subject to modifications. For example, genetic control of soybeans passed into the hands of the state, but the payment of royalties for the use of the technology to Bayer/Monsanto remained in place.<sup>89</sup>

52. In July 2021, Bayer/Monsanto announced “the suspension of its soybean seed and biotechnology business in Argentina” as of the 2021/2022 season.<sup>90</sup> As a result, the royalty payments were suspended, as the seed was no longer offered from 1 January 2023 onwards.<sup>91</sup> However, the license for the INTACTA RR2 technology remains valid until 2028. The legal framework (Law 20.247 on Seeds and Phylogenetic Creations) also allows those who have legally acquired the seed before that date to continue to use it.<sup>92</sup> Despite its exit on GM soy seeds, Bayer continues to sell other types of GM seeds, such as corn.<sup>93</sup>
53. The new Argentine government has expressed its intention to join the International Union for the Protection of New Varieties of Plants (UPOV 91),<sup>94</sup> which would likely entail advances in seed privatization and the undermining of the rights of farmers to use their seeds. This would generate more favorable conditions for companies and could be a stimulus for Bayer's re-entry into the GM soy seed market and the reintroduction of a similar system of control over its seeds. If this is to occur, it is thus important for Bayer's human rights and environmental due diligence to comply with the Guidelines in the terms that the complainants recommend below (see Bayer's Policies, Conduct and Omission to Act Violate the OECD Guidelines).
54. It can therefore be concluded that after the introduction of the “RR1” event in 1996, Bayer has played a leading role in the Argentine seed market, where its technology has been essential for the growth of soybean agribusiness. Furthermore, the marketing and inspection system for seeds based on the INTACTA RR2 technology also demonstrated the company's ability to ensure the traceability of these seeds. Bayer is involved in all stages of the soybean value chain, including multipliers, breeders, retailers, soybean producers, collection centers and export terminals. Therefore, the company wields strong leverage over all these actors.

#### ***b. Bayer's glyphosate-based pesticides in Argentina***

55. Bayer continues to maintain a strong presence in the Argentine market for glyphosate-based products even after exiting the GM soybean seed market. The use of glyphosate in the country increased significantly since its introduction in the market in 1977. By 2017, it was estimated that a total of 240 million kg/l of herbicides were being used in the country, a steep increase from the 35 million

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<sup>88</sup> Clarín, “Cómo se concretará el pago de las regalías,”.

<sup>89</sup> Instituto Nacional de Semillas (INASE), “Resolución 141/2021,” March 30, 2021, <https://www.boletinoficial.gob.ar/detalleAviso/primer/242519>.

<sup>90</sup> Bayer AG, “Bayer Cono Sur – Bayer reorientará sus inversiones en la Argentina hacia proyectos rentables e innovadores que promuevan una mayor competitividad a la agricultura,” July 30, 2021, <https://www.conosur.bayer.com/es/bayer-anuncia-reorientacion-de-inversiones-en-argentina>. Despite its exit on GM soy seeds, Bayer continues to sell other type of GM seeds, such as corn.

<sup>91</sup> Intacta RR2 Pro, “Suspensión del negocio de semillas y biotecnología de soja en la Argentina,” August 30, 2021, <https://www.INTACTArr2pro.com.ar/es-ar/novedades/bayer-reorientara-sus-inversiones-en-la-argentina-hacia-proyecto.html>.

<sup>92</sup> Ibid.

<sup>93</sup> Bayer AG, “Agro Bayer Argentina - Dekalb,” accessed April 18, 2024, <https://www.agro.bayer.com.ar/dekalb>.

<sup>94</sup> Gobierno Argentino, “Adherir a UPOV 91 significa el acceso a la mejor tecnología genética disponible para todos los productores,” January 19, 2024, <https://www.argentina.gob.ar/noticias/adherir-upov-91-significa-el-acceso-la-mejor-tecnologia-genetica-disponible-para-todos-0>.

kg/l used in 1997.<sup>95</sup> The average dose of glyphosate used in Argentina ranges between 12 and 15 liters per hectare on GM soybean crops, doubling the US average.<sup>96</sup>

56. There are currently 171 products formulated with glyphosate registered with the Argentine Register of Plant Therapeutics (SENASA).<sup>97</sup> 23 of these are registered under the name of Monsanto Argentina S.R.L. Additional products are registered under the brand Roundup, which have glyphosate as an active substance (Annex III – Table 1).<sup>98</sup> According to this register, the glyphosate brands marketed by Bayer include Roundup, La Tijereta, Sniper, Super Estrella, FG, and Sahara.<sup>99</sup>
57. At least three distribution channels market Bayer's products throughout Argentina, including herbicides and soybeans with INTACTA RR2 technology.<sup>100</sup> The "InnoBa Integrated Solutions Centers," through which Bayer's exclusive distributors offer a "premium portfolio" to agricultural producers (i.e. products that other distributors would not have access to, such as certain types of seeds like corn and formerly soybeans) or certain Roundup and La Tijereta herbicides.<sup>101</sup> There are a total of 125 InnoBa Integrated Solutions Centers functioning in Argentina.<sup>102</sup> Secondly, the "Selecta" distribution channel is used to market soybean as well as associated pesticides. There are different categories of distributors in this channel, namely "Selecta Plus," "Selecta Fresh" and "Selecta."<sup>103</sup> By the time INTACTA RR2 technology seeds were marketed,<sup>104</sup> at least 30 Selecta distributors were selling them.<sup>105</sup> Lastly, independent distributors trade Bayer products. From the publicly available information, it was not possible to determine how many independent distributors exist.
58. Additionally, although not a product distribution channel per se, Bayer has developed the "Impulso Bayer" program. This is a customer loyalty program, which provides benefits to agricultural producers through the accumulation of points for purchases of Bayer products, including Roundup and La Tijereta brand glyphosate products.<sup>106</sup> These purchases can be made directly from the company or through one of its distributors (including Innoba and Select). Growers participating in the program must register on the Orbia platform. By doing so, they agree to Bayer processing their personal data not only for marketing or program administration purposes but also for "supply chain and distribution chain improvement."<sup>107</sup> The data is stored in Bayer's registry or database.<sup>108</sup> This

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<sup>95</sup> Acción por la Biodiversidad, "Atlas del agronegocio," 32.

<sup>96</sup> Sudestada, "Editorial - Glifosato: en el mundo produce cáncer, en Argentina es inocuo," July 2, 2022, <https://www.editorialsudestada.com.ar/glifosato-en-el-mundo-produce-cancer-en-argentina-es-inocuo/>.

<sup>97</sup> SENASA is the body in charge of the approval and control of pesticides through registration in the National Register of Plant Therapeutics in accordance with the provisions of Decree N° 3489/58 and Decree N° 5769/59, under the terms of the Manual of Procedures, Criteria and Scope for the Registration of Plant Protection Products in the Argentine Republic, approved by Resolution Sagpya N° 350/99. SENASA, "Productos Formulados Registro Nacional de Terapéutica Vegetal," accessed April 19, 2024, <https://aps2.senasa.gov.ar/vademecum/app/publico/formulados>.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Intacta RR2 Pro, "Comercios en Argentina,".

<sup>101</sup> Nueva Huella SRL, "Se lanzó Innoba, el centro de soluciones integrales de Bayer," January 29, 2021, <http://nuevahuellaslrl.com.ar/index.php/2021/01/29/elementor-920/>.

<sup>102</sup> Bayer AG, "Agro Bayer Argentina - Centro de Soluciones InnoBa," accessed February 29, 2024, <https://www.agro.bayer.com.ar/donde-comprar/innoba>.

<sup>103</sup> Bayer S.A. and Monsanto Argentina S.R.L., "Términos y Condiciones Del Programa Impulso Bayer," May 5, 2023, <https://www.impulso.bayer.com.ar/img/tyc.pdf>.

<sup>104</sup> La Tijereta, "Lanzamos la nueva campaña de maíz junto a la red Selecta," accessed February 29, 2024, <https://qa.latijereta.com.ar/content/la-tijereta/es-ar/anuncios/lanzamos-la-nueva-campana-de-maiz-junto-a-la-red-selecta.html>.

<sup>105</sup> Intacta RR2 Pro, "Comercios en Argentina,".

<sup>106</sup> Bayer AG, "Bayer Cono Sur - Impulso Bayer," accessed April 19, 2024, <https://www.conosur.bayer.com/es/impulso-bayer>.

<sup>107</sup> Bayer S.A. and Monsanto Argentina S.R.L., "Términos y Condiciones Del Programa Impulso Bayer," May 5, 2023, <https://www.impulso.bayer.com.ar/img/tyc.pdf>.

<sup>108</sup> Bayer S.A. and Monsanto Argentina S.R.L.

information represents a relevant source of information for Bayer to monitor the use of its products and enhance its downstream value chain in terms of human rights and environmental due diligence.

### 3. Bayer and its Crop Science line in Bolivia

59. Bayer was present in Bolivia through two wholly owned subsidiaries: Bayer Boliviana Ltda and Monsanto Bolivia S.A until 2021, as of then consolidated into Bayer Boliviana Ltda.<sup>109</sup> Their business activity included the import and distribution of products sourced from other Bayer subsidiaries in the Southern Cone, mainly Argentina and Brazil.<sup>110</sup>
60. Although Monsanto made several applications to the Bolivian authorities to register the RR1 GM soybean event, it was not until 2005 that Monsanto finally received approval for its commercialization.<sup>111</sup> RR1 is so far the only GM soy seed approved for use and commercialization in Bolivia. However, in 2019 the authorities granted the patent for the INTACTA RR2 technology, which Bayer has identified as a prerequisite before applying for authorization of this GM event.<sup>112</sup>
61. Since the approval of the RR1 event, conventional soybean seeds have gradually ceased to be used in Bolivia. In 2010, a study revealed that 92% of the soybeans sown were genetically modified, while only 8% of them were of conventional origin.<sup>113</sup> It is now estimated that this figure has risen to 99%.<sup>114</sup>
62. Bayer is the leading importer of glyphosate-based agrochemicals at the national level in Bolivia. Between 2011 and 2022, with the authorization of the National Agricultural Health Service (SENASAG), it imported 25 million kilograms of glyphosate-based herbicides, equivalent to a 17% share of the market in question.<sup>115</sup> Bayer ranks first in the RR herbicide supplier market, followed by Dow AgroSciences (13%).<sup>116</sup> (See Annex III – Table 2)
63. Bayer's main glyphosate-based herbicides are Roundup Full II, Roundup Ultramax and La Tijereta Premium, which accounted for 77% of Bayer's imports of glyphosate herbicides between 2011 and 2022.<sup>117</sup> All imports came from Argentina and amounted to 25,444,093 million kilograms for the reference period (See Annex III – Table 3).<sup>118</sup>
64. In Bolivia, breeders and multipliers market and sell GM seeds. Don Mario Semillas, for example, offers five varieties of GM soybean seeds in the Bolivian market, four of which were developed from

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<sup>109</sup> Bayer AG, "Anteilsbesitz von Bayer AG und Bayer-Konzern zum 31. Dezember 2021," accessed April 19, 2024, <https://www.bayer.com/sites/default/files/Bayer-Anteilsbesitz-2021.pdf>; Bayer AG, "Anteilsbesitz von Anteilsbesitz von Bayer AG und Bayer-Konzern zum 31. Dezember 2023,"

<sup>110</sup> Servicio Nacional de Sanidad Agropecuaria (SENASAG), "Reporte de Importación de Insumos Agrícolas 2011-2022," accessed March 1, 2024, <https://paititi.senasag.gob.bo/egp/importacionAgroquimicos.html>.

<sup>111</sup> Bolivia, "Decreto Supremo N° 28225, 1 de Julio de 2005," accessed April 4, 2024, <https://www.lexivox.org/norms/BO-DS-28225.html>.

<sup>112</sup> Asociación Nacional de Productores de Oleaginosas y Trigo ANAPO, "Memoria Anual 2019," 2020, [https://anapobolivia.org/images/publicacion\\_documentos/Memoria2019oK.pdf](https://anapobolivia.org/images/publicacion_documentos/Memoria2019oK.pdf).

<sup>113</sup> "Estudio revela que el 92% de la soya producida en Bolivia es transgénica," *AméricaEconomía*, June 30, 2011, <http://www.americaeconomia.com/negocios-industrias/estudio-revela-que-el-92-de-la-soya-producida-en-bolivia-es-transgenica>.

<sup>114</sup> "Ley de la Madre Tierra preocupa a productores," *El Diario Economía*, November 6, 2012, [https://www.pub.eldiario.net/noticias/2012/2012\\_11/nt121106/economia.php?n=15&-ley-de-la-madre-tierra-preocupa-a-productores](https://www.pub.eldiario.net/noticias/2012/2012_11/nt121106/economia.php?n=15&-ley-de-la-madre-tierra-preocupa-a-productores); Alex Contreras Baspineiro, "En defensa de las semillas nativas: 99 por ciento de la soya es transgénica en Bolivia," *América Latina en movimiento*, April 13, 2014, <https://www.alainet.org/es/articulo/84770>.

<sup>115</sup> SENASAG, "Reporte de Importación de Insumos Agrícolas 2011-2022."

<sup>116</sup> Ibid.

<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

the RR1 event.<sup>119</sup> One of them, the DM 6.8i variety, was developed with Bayer's INTACTA RR2 technology, the commercialization of which is not yet authorized in Bolivia.<sup>120</sup> This is in line with reports on the alleged illegal use of seeds with INTACTA RR2 technology in the country, which have calculated that around 40% of the area planted with soybeans uses the INTACTA RR2 seeds.<sup>121</sup>

#### 4. Bayer and its Crop Science line in Brazil

65. Bayer S.A. (Brazil) is headquartered in São Paulo and fully owned by Bayer AG.<sup>122</sup> The company's focus in the country lies on the areas of health (Pharmaceuticals) and agribusiness (Crop Science).<sup>123</sup> The company "is present in more than 30 cities, with 6,500 professionals distributed from north to south."<sup>124</sup>
66. The Crop Science division in Brazil is organized through the "Integra Consortium," established with a 15-year term beginning in July 2021 between Monsanto do Brasil Ltda, D&PL Brasil Ltda, Bayer Crop Science Deutschland GMBH and Bayer Crop Science LP. The consortium's objective is to join forces to enhance the companies' reach in the agribusiness market, while maximizing the operations of each member.<sup>125</sup> As consortium leader, Bayer SA is in charge of "managing, controlling and distributing the cash generated by the activities originated by the consortium."<sup>126</sup> As per the division of further duties, Bayer SA and Monsanto do Brasil Ltda are involved in the production of crop protection products and genetically modified seeds, as well as the distribution and sale of these products. Bayer Crop Science LP (USA) and Bayer Crop Science Deutschland GmbH, on the other hand, own the intellectual property of technologies and product brands and are also involved in the manufacture of raw materials, such as active ingredients (in Germany). In terms of revenue, the Integra Consortium earned R\$27.6 billion in 2022. The Crop Science division, on the other hand, is mentioned to have reached record sales in 2022, largely due to the sale of herbicides.<sup>127</sup>

##### a. Bayer's genetically modified soybean seeds in Brazil

67. Brazil approved the first RR1 event (MON-Ø4032-6) in 1998.<sup>128</sup> In terms of soybean production, 95% of the soybean cultivated in Brazil is estimated to be genetically modified,<sup>129</sup> amounting to 43.6 million hectares in 2023.<sup>130</sup> The Brazilian soybean market is highly concentrated around Bayer. Information from industry associations identified Bayer as the leader of the Brazilian GM soy seed market, with a 90% market share during the 2019/2020 growing season.<sup>131</sup> For the 2020/2021 cycle, INTACTA RR2 soy reached an 80% share of the Brazilian soybean market, almost a "virtual

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<sup>119</sup> Don Mario Semillas, "Catálogo 2023 Bolivia," April 2023, <https://www.donmario.com/wp-content/uploads/2023/04/DonMario-CatalogoBolivia-2023-1.pdf>.

<sup>120</sup> Don Mario Semillas, "Condiciones General de Comercialización," <https://www.donmario.com/wp-content/uploads/2021/07/Oferta-publica-DM-SEPT.-ROBA-PAGINA-4X12-1990x2605-cm-1-1.pdf>; Fernando Rojas Moreno, "Pequeños productores admiten siembra de soja transgénica ilegal," *El Deber*, February 10, 2022, <https://eldeber.com.bo/edicion-impres/pequenos-productores-admiten-siembra-de-soja-transgenica-ilegal-266909>.

<sup>121</sup> Rojas Moreno, "Pequeños productores admiten siembra de soja transgénica ilegal."

<sup>122</sup> Bayer AG, „Anteilsbesitz Bayer AG und Bayer-Konzern zum 31.Dezember 2023“.

<sup>123</sup> Bayer S.A. (Brasil), "Financial report of the Bayer Group in Brazil 2022," accessed April 19, 2024, <https://www.bayer.com.br/pt/balancos-financeiros-do-grupo-bayer-brasil>.

<sup>124</sup> Bayer AG, "Bayer Brazil – Bayer celebra 60 anos," accessed April 19, 2024, <https://www.bayer.com.br/pt/midia/bayer-celebra-60-anos-paulinia-contribui-inovacoes-sustentaveis>.

<sup>125</sup> Bayer S.A. (Brasil), "Financial report of the Bayer Group in Brazil 2022,".

<sup>126</sup> Ibid.

<sup>127</sup> Ibid.

<sup>128</sup> UN FAO, "FAO GM Foods Platform," accessed April 19, 2024, <https://www.fao.org/food/food-safety-quality/gm-foods-platform/browse-information-by/oced-unique-identifier/oced-unique-identifier-details/en/?ui=169597>.

<sup>129</sup> CropLife Brasil, "Desmistificando a soja transgénica," accessed April 19, 2024, <https://croplifebrasil.org/conceitos/desmisticando-a-soja-transgenica/>.

<sup>130</sup> Agbio Investor, "GM Monitor," Brasil Soybeans.

<sup>131</sup> Gabriel Medina, Karim Thomé, "Transparency in Global Agribusiness: Transforming Brazil's Soybean Supply Chain Based on Companies' Accountability," *Logistics (5/3)*, 2021, <https://www.mdpi.com/2305-6290/5/3/58>, 58.

monopoly,” as confirmed by the company.<sup>132</sup> Today, Bayer uses INTACTA RR2 technology for seed production and licenses it to third-party companies. For the coming years, the company will rely on the patented INTACTA 2 Xtend technology to produce Roundup-resistant seeds.<sup>133</sup>

68. According to data from the National Biosafety Technical Commission, 18 genetically modified soybean seed varieties have been authorized for commercial cultivation, 6 of which are Monsanto's (currently Bayer's).<sup>134</sup> Table 2 in Annex II shows Bayer/Monsanto's registered soybean seeds varieties in Brazil.<sup>135</sup>
69. Following Bayer's business model in the region (see para. 38), Bayer also influences all stages of the production and distribution chain up to the sale to the customer in Brazil. Concerning seeds with technologies initially developed by Bayer/Monsanto, there are 571 cultivars with RR1 technology, 913 cultivar registrations with INTACTA RR2 technology, 297 cultivars with INTACTA 2 Xtend technology and 41 Xtend cultivars.<sup>136</sup> These cultivars are marketed by several companies not necessarily incorporated in Bayer's group structure. At the same time, Bayer produces its soybeans through the seed companies Agroeste and Monsoy.<sup>137</sup> According to current data on the Bayer website, there are 24 cultivars with INTACTA 2 Xtend technology and 9 with Xtend technology marketed by the two companies Agroeste and Monsoy.<sup>138</sup>

#### ***b. Bayer's glyphosate-based pesticides in Brazil***

70. There are several Bayer products with glyphosate as active ingredient allowed for use in soybean cultivation in Brazil.<sup>139</sup> Of the Roundup family, Bayer currently offers the following three brands: Roundup WG, Roundup Ultra and Roundup Transorb.<sup>140</sup>
71. From 2009 to 2022, glyphosate appears in first place among the most sold ingredients in the country, far ahead of all other ingredients.<sup>141</sup> Figure 1 in Annex III shows that glyphosate was the most sold active ingredient in Brazil in 2022, at 230,519 tons.<sup>142</sup> The use of glyphosate grew strongly in the country, more than tripling in volume between 2000 and 2010, from 39.5 thousand tons to 127.6 thousand tons<sup>143</sup> and, from 2010 to 2022, again more than doubled.<sup>144</sup> Due to this situation, the UN

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<sup>132</sup> Ana Mano, “Focus: Corteva faces slow start as it takes aim at Bayer's Brazil soy reign,” *Reuters*, October 8, 2021, <https://www.reuters.com/business/corteva-faces-slow-start-it-takes-aim-bayers-brazil-soy-reign-2021-10-08/>.

<sup>133</sup> Gabriel da Silva Medina, “Agribusiness economics in Brazil: Brazilian participation in the soybean production chain between 2015 and 2020,” *Novos Cadernos NAEA* (24/1), January – April 2021, 231-254, 236.

<sup>134</sup> Comissão Técnica Nacional de Biossegurança, “Resumo Geral de Plantas Geneticamente modificadas aprovadas para comercialização,” accessed April 19, 2024, <http://ctnbio.mctic.gov.br/documents/566529/1684467/Tabela+de+Plantas+Aprovadas+para+Comercializa%C3%A7%C3%A3o/e3087f9c-c719-476e-a9bd-bfe75def842f?version=1.13>.

<sup>135</sup> Comissão Técnica Nacional de Biossegurança, “Resumo Geral de Plantas Geneticamente modificadas aprovadas para comercialização,”.

<sup>136</sup> Ministério da Agricultura, Pecuária e Abastecimento, “Registro Nacional de Cultivares,” accessed and searched for each technology February 28, 2024, [https://sistemas.agricultura.gov.br/snpc/cultivarweb/cultivares\\_registradas.php](https://sistemas.agricultura.gov.br/snpc/cultivarweb/cultivares_registradas.php).

<sup>137</sup> Bayer AG, “Agro Bayer Brasil – Sementes,” accessed April 19, 2024, <https://www.agro.bayer.com.br/essenciais-do-campo/sementes>; Bayer AG, “Agro Bayer Brasil – Monsoy,” accessed April 19, 2024, <https://www.agro.bayer.com.br/marcas/monsoy>.

<sup>138</sup> Bayer AG, “Agro Bayer Brasil – Sementes,” Consultation carried out on February 28, 2024.

<sup>139</sup> See all registrations: Ministry of Agriculture, Livestock and Food Supply, “Agrofit,” accessed April 19, 2024, [https://agrofit.agricultura.gov.br/agrofit\\_cons/principal\\_agrofit\\_cons](https://agrofit.agricultura.gov.br/agrofit_cons/principal_agrofit_cons).

<sup>140</sup> Bayer AG, “Agro Bayer Brasil - Roundup,” accessed April 19, 2024, <https://www.agro.bayer.com.br/roundup>.

<sup>141</sup> Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais (IBAMA), “Painéis de informações de agrotóxicos,” accessed April 19, 2024, <https://www.gov.br/ibama/pt-br/assuntos/quimicos-e-biologicos/agrotoxicos/paineis-de-informacoes-de-agrotoxicos/paineis-de-informacoes-de-agrotoxicos#Painel-comercializacao>.

<sup>142</sup> *Ibid*, in the Excel document downloadable on the website the amount sold in 2022 is even higher at 266088,1245 tons.

<sup>143</sup> Thais Carranca, “Agrotóxico mais usado do Brasil está associado a 503 mortes infantis por ano, releva estudo,” *BBC News Brasil*, May 25, 2021, <https://www.bbc.com/portuguese/brasil-57209799>.

<sup>144</sup> IBAMA, “Painéis de informações de agrotóxicos,”.

Committee on Economic, Social and Cultural Rights recommended to the Brazilian state in its latest observation that Brazil should ban certain pesticides banned in other states, including pesticides based on the active ingredient glyphosate.<sup>145</sup> Regarding domestic production, according to the Roundup website, the manufacturing process takes place in Bayer's plants in São José dos Campos and Camaçari.<sup>146</sup> Producers can identify companies distributing Bayer's glyphosate pesticides on the same Bayer website.<sup>147</sup> Bayer's huge market share in GM soy seeds (see para. 67) is also the driving force for the use of glyphosate pesticides. In this market, Bayer/Monsanto has a share of about 16%, second only to Syngenta/Chem China.<sup>148</sup>

## 5. Bayer and its Crop Science line in Paraguay

72. Bayer is present in Paraguay through two wholly owned subsidiaries: Bayer S.A. Paraguay and Monsanto Paraguay S.A.<sup>149</sup> Their main business line is managing import and marketing operations of agribusiness inputs, including pesticides and transgenic seeds within the country. These products are supplied by Bayer's production plants in Argentina, specifically the "María Eugenia" and "Zárate" plants (n 46).<sup>150</sup>
73. Monsanto Paraguay S.A. acts primarily as importer of soybean seeds and pesticides from Argentina and Brazil.<sup>151</sup> It acts also as a legal representative<sup>152</sup> of different soybean seed breeders, such as D&PL Brasil Ltda for INTACTA 2 Xtend seeds,<sup>153</sup> Monsanto Argentina S.A.I.C. for RR1 soybeans<sup>154</sup> and Monsanto Technology LLC for INTACTA Pro-based soybeans.<sup>155</sup> Bayer is also a licensor of INTACTA RR2 PRO and receives the "INTACTA CANON," a royalty in return for using the INTACTA RR2 technology.<sup>156</sup>

### a. Bayer's genetically modified soybean seeds in Paraguay

74. The GM crops areas of the country are dominated by genetically modified soy, which in turn amount to more than 99% of the total volume of soy grown in the country.<sup>157</sup> According to World Bank figures, arable land in Paraguay in 2021 amounted to 4.7 million ha.<sup>158</sup> In the same year, 3.16 million ha were planted with GM soybeans,<sup>159</sup> which means that 67% of the total country's arable land in 2021 was destined for this crop. By the end of 2023, the area planted with GM crops in the country was estimated to reach 4.3 million ha, 3.6 million of which consisting of soybeans.<sup>160</sup> Soybean

<sup>145</sup> UN Committee on Economic Social and Cultural Rights (UNCESCR), Concluding Observations on the third periodic report of Brazil, UN Doc. E/C.12/BRA/CO/3\*, 15 November 2023, para.66.

<sup>146</sup> Bayer AG, "Agro Bayer Brasil - Roundup,".

<sup>147</sup> Bayer AG, "Agro Bayer Brasil – Onde comprar," accessed April 19, 2024, <https://www.agro.bayer.com.br/onde-comprar>.

<sup>148</sup> Gabriel Medina, Karim Thomé, "Transparency in Global Agribusiness,"

<sup>149</sup> Bayer AG, "Anteilsbesitz Bayer AG und Bayer-Konzern zum 31.Dezember 2023,".

<sup>150</sup> Bayer AG, "Bayer Cono Sur – Plantas de Producción," accessed April 19, 2024, <https://conosur.bayer.com/Acerca-de-Bayer/Nuestra-Regi%C3%B3n/Plantas-de-Producci%C3%B3n>.

<sup>151</sup> Leticia Arrúa et al, "Radiografía del agronegocio sojero - Análisis de la cadena productiva de la soja y su impacto socioeconómico en Paraguay," December 2022, [https://www.baseis.org.py/wp-content/uploads/2021/03/2020\\_Dic-Cadena-de-la-soja\\_compressed.pdf](https://www.baseis.org.py/wp-content/uploads/2021/03/2020_Dic-Cadena-de-la-soja_compressed.pdf), 51.

<sup>152</sup> As legal representative, Monsanto Paraguay S.A. is in charge of the whole process of authorization of transgenic varieties for breeders in Paraguay. Ministerio de Agricultura Paraguay, [Resolución Mag No. 276. Autorización de Liberación Comercial](#), 2019.

<sup>153</sup> Servicio Nacional de Calidad y Sanidad vegetal y de semillas (SENAVE), "Boletín Semillas," April 2024, <https://www.senave.gov.py/docs/semillas/boletines/Boletin-Abril-2024.pdf>, 115.

<sup>154</sup> Ibid, 127.

<sup>155</sup> Ibid.

<sup>156</sup> Intacta RR2 Pro, "Licencia de Uso,".

<sup>157</sup> Agbio Investor, "GM Monitor," Paraguay Soybean.

<sup>158</sup> World Bank, "Arable land (hectares) Paraguay," accessed April 19, 2024, <https://data.worldbank.org/indicator/AG.LND.ARBL.HA?locations=PY>.

<sup>159</sup> Agbio Investor, "GM Monitor," Paraguay Soybean.

<sup>160</sup> Ibid.



production is concentrated in the east of the country, in the departments of Alto Paraná, Itapúa, Canindeyú and San Pedro.<sup>161</sup>

75. Currently, Bayer owns four of the ten GM soybean events authorized for commercialization in Paraguay (see Annex II – Table 3).<sup>162</sup> Bayer's GM events are utilized by numerous breeding companies to create soybean varieties, which are distributed across the country (see para. 76). These varieties are then marketed by Monsanto Paraguay S.A. directly and by third parties whose products have received explicit approval from Monsanto Paraguay S.A.<sup>163</sup> For the INTACTA RR2 technology, around 80 soybean varieties from 15 breeders are authorized, whereas the number of shops authorized to sell INTACTA RR2 seeds across the country amounts to 136.<sup>164</sup> For the RR1 technology, 31 varieties are authorized.<sup>165</sup>
76. Bayer also develops its own soybean varieties using its genetic events. It then markets them under the commercial line Monsoy<sup>166</sup> through authorized distributors, such as Dekalpar S.A. and Agrofertil. In Paraguay, 15 soybean seed breeding companies offer, research, and develop varieties in the national market.<sup>167</sup> Three of them, Monsoy, Nidera and Don Mario (all of them INTACTA RR2 seed companies authorized by Monsanto Paraguay S.A.) own roughly 78% of the market.<sup>168</sup> To use INTACTA RR2 technology for planting seeds, farmers must first obtain a license from Bayer, regardless of whether the seeds were developed by a different company. This requirement applies to all soy farmers and is required to ensure compliance with the technology's licensing agreements. This contract grants Bayer the right to collect the INTACTA RR2 royalty for each harvest produced with this technology in the country.<sup>169</sup>
77. According to Carlos Pino, the Agronomist Engineer responsible for Monsoy Genetics Multiplication at Bayer Crop Science, 49% of Bayer's soybean sown [in the country] in 2021 was RR, while 51% was INTACTA RR2.<sup>170</sup> In 2022, the company's engineer stated that "Monsoy M6410 IPRO" seed (INTACTA RR2) "(...) is the most sown variety in Paraguay and the market leader for the second consecutive year."<sup>171</sup>

#### ***b. Glyphosate-based pesticides in Paraguay***

78. The massive use of agrochemicals in agriculture in Paraguay led the United Nations Food and Agriculture Organization (FAO) to include the country on the list of "countries of concern" already

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<sup>161</sup> Capeco - Paraguayan Grains and Oilseed Traders Association, "[Comparative area of Soybean harvest 2017-2019](#)", last accessed on April 5, 2024.

<sup>162</sup> SENAVE, "Listado de eventos con modificación genética liberados comercialmente en el país," accessed April 19, 2024, <http://web.senave.gov.py:8081/docs/Listado%20de%20eventos%20liberados%20comercialmente%20en%20el%20pais-2019.pdf>; Instituto de Biotecnología Agrícola, "Cultivos genéticamente modificados (GM) en la agricultura paraguaya," accessed April 19, 2024, [https://www.inbio.org.py/informes/publicaciones/OGMParaguay\\_2022.pdf](https://www.inbio.org.py/informes/publicaciones/OGMParaguay_2022.pdf).

<sup>163</sup> Intacta RR2 Pro, "Licencia de Uso,".

<sup>164</sup> Intacta RR2 Pro, "Semilleros Paraguay," accessed April 19, 2024, <https://www.intactarr2pro.com.py/es-py/semilleros.html#mdc-tab-1>.

<sup>165</sup> Campo Agropecuario, "Mejoramiento Genético, Gran Eslabón en la expansión de la soja," accessed April 19, 2024, [https://www.campoagropecuario.com.py/notas/2303/mejoramiento-genetico-gran-eslabon-en-la-expansion-de-la-soja?fbclid=IwAR2-RuG\\_ylnsmbpTELxs0ChYCFuwYd2fThcrGBA2Dqww56BlqqV-XfFDvjs](https://www.campoagropecuario.com.py/notas/2303/mejoramiento-genetico-gran-eslabon-en-la-expansion-de-la-soja?fbclid=IwAR2-RuG_ylnsmbpTELxs0ChYCFuwYd2fThcrGBA2Dqww56BlqqV-XfFDvjs).

<sup>166</sup> Monsoy is a line of the company Monsoy LTDA, of which Monsanto Paraguay S.A. is the legal representative, see Bayer AG, "Bayer Crop Science Paraguay – Encontrá tu variedad," accessed April 19, 2024, <https://www.cropscience.bayer.com.py/es-py/other-products/monsoy-detail-page/sobre-monsoy.html>.

<sup>167</sup> Campo Agropecuario, "Mejoramiento Genético, Gran Eslabón en la expansión de la soja,".

<sup>168</sup> Ibid.

<sup>169</sup> Intacta RR2 Pro, "Licencia de Uso,".

<sup>170</sup> Campo Agropecuario, "Mejoramiento Genético, Gran Eslabón en la expansión de la soja,".

<sup>171</sup> Productiva, "Soja: expansión en el Chaco impulsa búsqueda de nuevas variedades," accessed April 19, 2024, <https://www.productivacm.com/soja-expansion-en-el-chaco-impulsa-busqueda-de-nuevas-variedades/>.

in 2003.<sup>172</sup> The exponential increase in the import and use of pesticides in the country can be traced back to the authorization of the import of Monsanto's RR1 soy seeds in 2001.<sup>173</sup> By then, 10,583 tons of pesticides imported by Paraguay were registered, compared just the 3,507 tons registered a year earlier.<sup>174</sup>

79. According to the most recent data (2022), glyphosate remains the most imported pesticide in the country,<sup>175</sup> with Argentina and Brazil occupying the 3<sup>rd</sup> and 4<sup>th</sup> place as country of origin.<sup>176</sup> The steep increase in imported volumes of pesticides over the last decade is worrying. Between 2011 and 2021, imported herbicides grew by 375%, with glyphosate at the forefront.<sup>177</sup> In 2018, Bayer/Monsanto accounted for 54.78% of the production of pesticides imported into Paraguay, which came from its production plants in Argentina.<sup>178</sup> In September 2022, the United Nations Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes (hereinafter “UN Special Rapporteur on Toxics and Human Rights”) presented a report on his visit to Paraguay, where he specified that the average amount of pesticides dumped annually is 4.25 liters per hectare and has been increasing, which is even more worrying considering that one of the most imported pesticides in the country is the highly dangerous glyphosate.<sup>179</sup>
80. The herbicides offered by Bayer Crop Science Paraguay are Roundup® Control Max, Roundup® Full II, and Soberan® (see Annex III – Table 4). The companies Bayer S.A. and Monsanto Paraguay S.A. have authorized distributors and shops for the sale of their products throughout the national territory,<sup>180</sup> which provides a wide reach into all regions of Paraguay.

## **F. Environmental and Human Rights Impacts in the Southern Cone**

81. The complainants introduce in the following section the environmental and human rights impacts documented after their desk and field research in the four countries. As part of this, each country section includes a description of the selected area of interest, evidence on the sale and distribution of Bayer’s products in this area and on the concrete negative impacts on the environment and human rights. The section concludes by characterizing these impacts as human rights violations.

### **1. Argentina**

82. In Argentina, soybean crops currently occupy nearly half of the country's planted area. According to data from the latest agricultural census, soy was the main oilseed planted throughout the country

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<sup>172</sup> Ministerio de Salud Pública y Bienestar Social Paraguay, “Enfermedades de Notificación Obligatoria – Intoxicaciones agudas por plaguicidas,” accessed February 24, 2024, <https://dgv.msps.gov.py/enfermedades/intoxicaciones-agudas-por-plaguicidas/>.

<sup>173</sup> Centro de Estudios Heñóí, “Informe para el Relator Especial sobre Sustancias Tóxicas y Derechos Humanos de las Naciones Unidas Dr. Marcos Orellana”, 2022, <https://www.ohchr.org/en/calls-for-input/2022/call-inputs-visit-united-nations-special-rapporteur-toxics-and-human-rights>.

<sup>174</sup> Garcia, Liz and Avila, Claudia, [Atlas del Agronegocio en Paraguay](#) 2019

<sup>175</sup> BASE IS, “[Con la Soja al Cuello 2023](#)” at 28; SENAVE, “Database importación productos fitosanitarios 2023”, last accessed on March 12, 2024.

<sup>176</sup> SENAVE, “Database importación productos fitosanitarios 2023”, last accessed on March 12, 2024.

<sup>177</sup> Centro de Estudios Heñóí, “Informe para el Relator Especial.

<sup>178</sup> Liz García, Claudia Avila, “Atlas del Agronegocio en Paraguay,” 2019, [https://www.baseis.org.py/wp-content/uploads/2020/03/2019\\_Dic-ATLAS.pdf](https://www.baseis.org.py/wp-content/uploads/2020/03/2019_Dic-ATLAS.pdf), 58.

<sup>179</sup> UN Special Rapporteur on Toxics and Human Rights Marcos Orellana (UN Special Rapporteur on Toxics), “End of Mission Statement on his visit to Paraguay”, October 14, 2022, <https://www.ohchr.org/sites/default/files/documents/issues/toxicwaste/2022-10-14/EOM-Statement-SR-Toxics-Paraguay-14-Oct-2022-EN.pdf>.

<sup>180</sup> Bayer AG, “Red Agroservices – Distribuidores Autorizados,” accessed February 24, 2024, <https://paraguay.redagroservices.com/BRBPY/Unicorn>; Intacta RR2 Pro, “Semilleros Paraguay”.

between the years 2017 and 2018. The covered area amounted to 12,760,492.7 hectares, equivalent to 89% of the total area sown to oilseeds in the country.<sup>181</sup>

83. Soybean is mainly grown in the provinces of Buenos Aires (occupying an area of 3,899,005.0 hectares), Córdoba (3,483,583.3 hectares), Santa Fe (2,331,122.4 hectares) and Entre Ríos (998,930.4 hectares). The region between the north of the province of Buenos Aires and the center-south of the provinces of Santa Fe and Córdoba is known in Argentina as the “soybean core zone” (“núcleo sojero”), as it has the best conditions for soybean production. Inside that zone, the city of Pergamino, represents an exemplary case for the negative impacts on health and the environment associated with the cultivation of GM soy and the use of glyphosate-based pesticides. The existence of a criminal case against three soybean farmers in the Villa Alicia neighborhood of Pergamino (see Annex IV – Map 1)<sup>182</sup> evidences these negative impacts and assesses Bayer's role in them. The inhabitants of the neighborhood, which is adjacent to soybean fields, were directly exposed to contamination by the use of agrochemicals as a prerequisite for soy cultivation.

*a. Evidence of distribution of Bayer's products in the area*

84. In the province of Buenos Aires, nine businesses were granted authorization to market soybeans featuring INTACTA RR2 and manage the advance payment for technology's use until the year 2022.<sup>183</sup> In Pergamino, Terra Más SRL is the only Bayer Innova Integrated Solutions Centre and is the main authorized distributor of the company's products, selling them under an exclusivity agreement.<sup>184</sup> According to a Terra Más SRL employee interviewed, two stores in Pergamino sell to local producers.<sup>185</sup> One of these stores handles the distribution of seeds, while the other specializes in selling pesticides. There is also an independent distributor, AGRONASAJA SRL, which used to sell seeds with INTACTA RR2 technology.<sup>186</sup> Even after Bayer's decision to stop the sale of its GM soy seeds, it continues to sell Bayer's glyphosate-based pesticides and Don Mario's varieties, including those with the RR1 event.<sup>187</sup>

85. Due to the local regulations, in Pergamino producers have to buy pesticides with a so-called “agronomic prescription.”<sup>188</sup> The products sold contain indications on their labels on the quantities needed for their application. However, the distributors of Bayer's herbicides do not know how the producer or applicator handles the product, as they do not carry out after-sales follow-up activities.<sup>189</sup>

86. Given this information and the overall presence of Bayer products on the Argentine market (see Bayer and its Crop Science line in Argentina) for both seeds and glyphosate-based pesticides, Bayer GM soy seeds and pesticides are sold in the Pergamino area through its authorized distributors. Moreover, agronomic prescriptions obtained within the framework of the abovementioned criminal investigation revealed that in the soybean fields, products from Bayer's brand Roundup Full<sup>190</sup> were,

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<sup>181</sup> Instituto Nacional de Estadística y Censos, ed., *Censo Nacional Agropecuario 2018: resultados definitivos, April 2021*.

<sup>182</sup> Cortese, Fernando Esteban; Roces, Mario; Tiribo, Víctor Hugo s/ infracción Ley 24.051 (Art.55) y Art.200 del Código Penal, File FRO No. 70087/2018 (hereinafter, Cortese Case).

<sup>183</sup> Intacta RR2 Pro, “Comercios Intacta en Argentina,” accessed February 28, 2024, <https://www.INTACTArr2pro.com.ar/es-ar/comercios.html>.

<sup>184</sup> “Terra Mas SRL,” accessed February 29, 2024, <https://terramas.com.ar/#/-start/>; Dekalb, “InnoBa, Buenos Aires,” accessed February 29, 2024, <https://www.dekalb.com.ar/es-ar/centros-de-soluciones-innova/buenosaires.html>.

<sup>185</sup> Interview with Terra Mas S.R.L. employee, September 25, 2023.

<sup>186</sup> Intacta RR2 Pro, “Comercios Intacta en Argentina.”

<sup>187</sup> Interview with employees of Agronasaja S.R.L. September 25 2023; Intacta RR2 Pro, “Comercios Intacta en Argentina.”

<sup>188</sup> Interview with Terra Mas S.R.L. employee, September 25, 2023.

<sup>189</sup> *Ibid.*

<sup>190</sup> This trademark is registered with SENASA as a trademark of Monsanto Argentina SRL. SENASA, “Productos Formulados Registro Nacional de Terapéutica Vegetal.”

among others, applied at least in 2018 and 2019.<sup>191</sup> In addition, testimonies from workers in the fields pointed to Terra Mas as the place where the agrochemicals may have been purchased.<sup>192</sup>

***b. Description of the impacts of Bayer's products associated with large-scale cultivation of GM soybeans in the area of interest***

***i. Adverse health impacts***

87. Before 2019, soy producers were engaging in indiscriminate pesticide spraying in the soybean fields adjacent to the Villa Alicia neighborhood.<sup>193</sup> During sowing season, spraying was carried out daily by land (using backpacks or the agricultural spraying machines “mosquitoes”) or by air through aerial spraying. Spraying was also carried out at night. The statements of the neighbors in the area are consistent in referring to skin or eye irritations, damage to the skin or respiratory tract, and allergies after the spraying in the adjacent soy fields took place.<sup>194</sup> Soil and water analysis results, blood and urine tests, and medical reports – all evidence in this case – have exhibited glyphosate residues.<sup>195</sup>
88. As will be detailed below, the damages resulting from the continuous exposure to pesticides continue until today and include even reports of deaths of people exposed to spraying who developed cancer.
89. Sabrina Ortiz, María Florencia Morales, Paola Daniela Díaz and their families lived in Villa Alicia. Their cases show the severe health impacts suffered by them and their families after fumigation with pesticides. First, Sabrina Ortiz suffered from severe poisoning and lost a pregnancy after aerial spraying in 2011, after which she had two strokes, one in 2014 and the second in 2015.<sup>196</sup> As part of the aforementioned ongoing court case, urine studies were conducted in 2018, which found high percentages of glyphosate in Sabrina and her two children, with values of 4.10 ug/L (ppb), 9.20 ug/L (ppb) and 10.20 ug/L (ppb) respectively.<sup>197</sup> High percentages of aminomethylphosphonic acid “AMPA,” glyphosate’s main degradation product, were also found in the children’s urine (2.40 ug/L (ppb) and 1.90 ug/L (ppb)).<sup>198</sup> By 2019, her daughter had to undergo four operations for the removal

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<sup>191</sup> Agronomic Prescription of application of 1/8/2018; Agronomic Prescription of 21/12/2018, Agronomic Prescription 4/6/2019 in: Cortese case pp. 2916-2927, 1750-1753.

<sup>192</sup> Cortese case, p. 633 and following.

<sup>193</sup> In 2019, Federal Court No. 2 of San Nicolás ordered an injunction to set a restrictive and exclusion limit of 1095 meters for ground applications and 3000 meters for aerial applications in the entire city of Pergamino. The measure was issued in the Cortese case and is available at this link: <https://www.fiscales.gob.ar/wp-content/uploads/2019/09/RESUELVE-AMPLIACION.pdf>. The first instance decision was confirmed by the Federal Chamber of Rosario in 2020 and, as of 16 November 2023, is still in force. Information is available at: <https://www.fiscales.gob.ar/fiscalias/agrotoxicos-confirmaron-la-prohibicion-de-fumigar-en-pergamino-y-zonas-urbanas/>. Before this measure was issued, the limits for spraying were established in the municipal ordinance 8126/2014 which sets the exclusion zone in the first 100 meters from the urban area boundary and in which any type of spraying was prohibited. In addition, it regulates the buffer zone consisting of the 500 meters following the exclusion zone.

<sup>194</sup> Indictment by the Matías Felipe di Lello, Federal Prosecutor at the Federal Court No. 2 of San Nicolás, in the Cortese case, 1 November 2022 (Cortese indictment) citing several testimony the Cortese case: Statement of F.E.G.P (pp. 7, 50), statement of S.O. (pp. 351-354), statement of P.O. (pp. 503-505), statement of I.C.M. (pp. 507-508), statement of L.A.M. (pp. 513-514), statement of A.M.G. (pp. 564-566), statement of P.D. (pp. 574-576), statement of E.D. (pp. 578-579), statement of A.S.V. (pp. 668-668), statement of H.O.S. (pp. 670-673), statement of S.A.M. (pp. 781-783), statement of H.O.C. (pp. 804-805).

<sup>195</sup> INTA BALCARCE Dr. Aparicio, “Resultados analíticos de plaguicidas en agua y suelo. Breve caracterización de la zona de Pergamino y ciclos de cultivo” in Cortese case, pp. 2997-3008; Report signed by Dr. Merdado Ávila of the University Network for Health and Environment and Doctors of Sprayed Towns in Cortese case, pp. 1088-1090; Statement of Dr. Merdado Avila in Cortese case, pp. 1082-1087; FARES TAIE Analysis Institute, 16.07.2018 in Cortese case, pp. 379-380, 382, section 2.

<sup>196</sup> Agustín Gulman, “‘Fue como huir de la muerte’: la argentina que se hizo abogada para luchar contra los agrotóxicos,” *El País América*, February 27, 2023, <https://elpais.com/america-futura/2023-02-27/fue-como-huir-de-la-muerte-la-argentina-que-se-hizo-abogada-para-luchar-contr-los-agrotoxicos.html>.

<sup>197</sup> The studies were carried out by the FARES TAIE Analysis Institute, 16.07.2018 in Cortese case, pp. 379-380, 382, section 2.

<sup>198</sup> Cortese case, pp. 379-380, section 2.

of cysts in her bones, and her son suffered from lymphoproliferation and had enlarged lymph nodes in his intestines and neck.<sup>199</sup> He underwent chemotherapy, experienced urinary bleeding, and manifested symptoms of undiagnosed illnesses.<sup>200</sup> Sabrina's partner suffered from allergies and respiratory conditions.<sup>201</sup> The studies and medical opinions provided in this case established the genetic damage associated with pollutant components – including glyphosate – suffered by the family members, along with an increased risk to adverse health impacts.<sup>202</sup> Sabrina Díaz and her family had to move houses on medical advice. To this day, she and her family still suffer from health problems, which require constant medical check-ups.

90. Other neighbors have suffered severe health impacts following sprayings in the area. For instance, María Florencia Morales, who lived in the Villa Alicia neighborhood between 2011 and 2016, died in May 2023 after suffering from breast cancer following exposure to the spraying.<sup>203</sup> Paola Daniela Díaz and her family, including her sister, her youngest son and her grandson have also experienced several health issues, ranging from severe headaches, thyroid and bone issues.<sup>204</sup> In 2014, one of her daughters died of leukemia at the age of 11.<sup>205</sup>
91. The health impacts on the people in the neighborhood of Villa Alicia are emblematic and provide a clear example of the negative impacts on people living in the surroundings of soy plantations. Several studies have reported on the impacts of glyphosate use on health and the environment, in the province of Buenos Aires and throughout Argentina.<sup>206</sup> In addition, a report by the Argentine Society of Paediatrics in 2021 brought together the main effects on children's health due to the use of agrochemicals such as glyphosate, including a) effects on neurodevelopment such as attention deficits, hyperactivity, learning disorders, autism; b) neurodegenerative diseases such as Alzheimer's and Parkinson's disease; c) childhood solid tumors, e.g. a high rate of kidney cancer was associated with parental exposure to pesticides in farming; d) hematological cancers: lymphoma, Hodgkin's and leukemia; e) genotoxicity, immunotoxicity and genetic susceptibility. The report concluded that products used in Argentina's fields, such as glyphosate, cause a high level of harm to children's health.<sup>207</sup>

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<sup>199</sup> Fernando Soriano, "Asma, problemas en la piel, tiroides y cáncer: cómo se vive el drama cotidiano en un 'barrio fumigado' en Pergamino," *infobae*, April 24, 2019, <https://www.infobae.com/sociedad/2019/04/24/asma-problemas-en-la-piel-tiroides-y-cancer-como-se-vive-el-drama-cotidiano-en-un-barrio-fumigado-en-pergamino/>.

<sup>200</sup> Fernando Soriano, "Asma, problemas en la piel, tiroides y cáncer".

<sup>201</sup> Statement by Sabrina Ortiz in Cortese case, pp. 351-387.

<sup>202</sup> Study by Dr. Delia E. Aiassa, Universidad de Río Cuarto in Cortese case, pp. 878-908, 2044-2049 and 2152-2166; Study by Dr. Flavia Alejandra Vidal, Cuerpo Médico Forense in Cortese indictment, pp. 87-89.

<sup>203</sup> La Vaca, "Murió Florencia Morales, una de las vecinas de Pergamino enferma de cáncer que denunciaba los agrotóxicos," May 5, 2023, <https://lavaca.org/notas/pergamino-cancer-agrotoxicos-florencia-morales-muerte/>.

<sup>204</sup> Statement by Paola Daniela Díaz in Cortese case, pp. 574-576; Statement by E.A.D. in Cortese case, pp. 578-579.

<sup>205</sup> Fernando Soriano, "Asma, problemas en la piel, tiroides y cáncer".

<sup>206</sup> Martín Graziano et al., "Reversibility of Glyphosate Sorption in Pampean Loess-Derived Soil Profiles of Central Argentina," *Chemosphere* 312, January 2023, <https://doi.org/10.1016/j.chemosphere.2022.137143>; Damián Verzeñassi and Alejandro Vallini, "Transformaciones En Los Modos de Enfermar y Morir En La Región Agroindustrial de Argentina," 2019, [https://www.researchgate.net/publication/337566832\\_Transformaciones\\_en\\_los\\_modos\\_de\\_enfermar\\_y\\_morir\\_en\\_la\\_region\\_agroindustrial\\_de\\_Argentina](https://www.researchgate.net/publication/337566832_Transformaciones_en_los_modos_de_enfermar_y_morir_en_la_region_agroindustrial_de_Argentina); A. E. Ronco et al, "Water Quality of the Main Tributaries of the Paraná Basin: Glyphosate and AMPA in Surface Water and Bottom Sediments," *Environmental Monitoring and Assessment* 188, July 9, 2016, <https://doi.org/10.1007/s10661-016-5467-0>, 458; María Inés Aiuto, "Pueblos Fumigados: Informe sobre la problemática del uso de plaguicidas en las principales provincias sojeras de la Argentina," January 2009, [https://prensarural.org/spip/IMG/pdf/Pueblos\\_Fumigados.pdf](https://prensarural.org/spip/IMG/pdf/Pueblos_Fumigados.pdf); Medardo Avila Vazquer and Carlos Nota, "Informe 1º Encuentro Nacional de Médicos de Pueblos Fumigados," August 2010, <https://reduas.com.ar/wp-content/uploads/2011/04/informe-medicos-pueblos-fumigados.pdf>.

<sup>207</sup> Sociedad Argentina de Pediatría, "Efecto de Los Agrotóxicos En La Salud Infantil," June 2021, [https://www.sap.org.ar/uploads/archivos/general/files\\_efectos-agrotoxicos-07-21\\_1625686827.pdf](https://www.sap.org.ar/uploads/archivos/general/files_efectos-agrotoxicos-07-21_1625686827.pdf).

92. Other scientific studies show the presence of glyphosate in the bodies of people living in different cities in the core soybean-growing area. In the town of La Matanza, Buenos Aires Province, the toxicology department of the Ricardo Gutiérrez Children's Hospital conducted a study on a local activist and her family affected by the use of agrochemicals. It showed alarming levels of glyphosate in the bodies of two members of the family group, while the rest of the family showed signs of exposure to other pesticides.<sup>208</sup> As a result of the legal action brought by those living in the Nicole neighborhood in La Matanza, additional studies were carried out. The results revealed glyphosate residues in the water well of one of the families in the neighborhood, as well as in the urine of several children.<sup>209</sup> Consequently, the Federal Chamber of San Martín, in application of the precautionary principle to protect the right to access to drinking water, ordered a precautionary injunction for the local authorities to provide this affected family with drinking water.<sup>210</sup>
93. In Baradero, also in the province of Buenos Aires, urine tests carried out in 2022 by a specialized laboratory in Mar del Plata showed that three out of eight samples, corresponding to two six-year-old girls and a teacher, tested (40 percent) positive for the presence of glyphosate, while one sample tested positive for the metabolite AMPA.<sup>211</sup>
- ii. *Impacts on the environment and water*
94. In 2018 and 2019, as part of the aforementioned court case, water, soil and vegetation samples in the soy fields and in the Villa Alicia neighborhood were collected and taken for analysis to the National Institute of Agricultural Technology in Balcarce.<sup>212</sup> Regarding the water samples, the analysis by the National institute detected the presence of glyphosate, AMPA and several other molecules of pesticides.<sup>213</sup> Residues of glyphosate and AMPA other pesticides were also found in Pergamino's soil samples.<sup>214</sup> Overall, the study concluded that there is a risk of groundwater pollution due to several factors, including the high load of pollutants such as pesticide residues.<sup>215</sup> Expert opinions included in the criminal investigation all concluded that based on the water samples, the water in the area is not fit for human consumption.<sup>216</sup> These statements on water pollution coincide with the testimony of one inhabitant of Pergamino, who recently stated that the water cannot even be used for bathing.<sup>217</sup>
95. The Federal Court No. 2 of San Nicolás considered the risk of water pollution so high that on 3 April 2019, it ordered provisional measures for the local government to distribute sufficient drinking water to affected people, including the inhabitants of Villa Alicia.<sup>218</sup>

<sup>208</sup> Cecilia Gárgano, "La soja transgénica y los agrotóxicos también castigan a La Matanza," *Agencia de Noticias Tierra Viva*, January 5, 2022, <https://agenciaterraviva.com.ar/la-soja-transgenica-y-los-agrotoxicos-tambien-castigan-a-la-matanza/>.

<sup>209</sup> Cámara Federal de San Martín Sala I, Case N° FSM 28022/2022/1/CA1 "Incidente N° 1 - Actor: Gebel, Erika Edith y otros demandados: Servicio Nacional De Sanidad Y Calidad Agroalimentaria (Senasa) Y Otros S/Inc Apelacion" – Juzgado Federal de Morón, Secretaría Ambiental - CFASM, SALA I, SEC. CIVIL N° I – SENTENCIA, 29 de diciembre de 2023, pp. 27-28.

<sup>210</sup> Cámara Federal de San Martín Sala I, Case N° FSM 28022/2022/1/CA1, pp. 31-32.

<sup>211</sup> Nahuel Lag, "Niñas de una escuela rural de Baradero con glifosato en el cuerpo y fumigaciones sin control," *Agencia de Noticias Tierra Viva*, June 24, 2022, <https://agenciaterraviva.com.ar/ninas-de-una-escuela-rural-de-baradero-con-glifosato-en-el-cuerpo-y-fumigaciones-sin-control/>.

<sup>212</sup> INTA BALCARCE Dr. Aparicio, "Resultados analíticos de plaguicidas en agua y suelo. Breve caracterización de la zona de Pergamino y ciclos de cultivo" in Cortese case, pp. 2997-3008.

<sup>213</sup> INTA BALCARCE Dr. Aparicio in Corte case, pp. 2997.

<sup>214</sup> INTA BALCARCE Dr. Aparicio in Corte case, pp. 2998-2999, 3003

<sup>215</sup> INTA BALCARCE Dr. Aparicio in Corte case, pp. 2999.

<sup>216</sup> Cortese indictment, p. 60 citing Dr. Aparicio Expert Opinion in Cortese case, pp. 928-929, Dr. Damian Marino Expert Opinion in Cortese Case, pp. 848-852, Statement of Dr. Merdado Avila in Cortese case, pp. 1082-187.

<sup>217</sup> Interview with Person 1, December 20, 2023.

<sup>218</sup> Decisions of the Federal Court No. 2 of San Nicolás of 3 April 2019 and 11 June 2019 in the Cortese Case.

96. Similar impacts have been documented in Pergamino. Research conducted by the University of Buenos Aires on the water of the Pergamino stream established water pollution from toxic substances, including glyphosate and AMPA.<sup>219</sup>

97. On the national level, similar impacts have been documented, and a regional study showed that raindrops in the city of La Plata (Buenos Aires province) contain glyphosate and other herbicides.<sup>220</sup> Glyphosate residues were found in the Paraná-Paraguay river basin in Argentina, the most important source of water supply for human consumption and reservoir for productive activities in the country. In this basin, the herbicide is present mainly in the lower middle section of the area from the province of Santa Fe to the city of Luján in the province of Buenos Aires.<sup>221</sup> In the southeast Pampas of Argentina, Glyphosate and AMPA residues were found in samples of soil, stream sediments, surface water and groundwater.<sup>222</sup>

### *c. Preliminary conclusion*

98. The case of the Villa Alicia neighborhood in Pergamino demonstrates the link between the use of glyphosate-based pesticides produced by Bayer and the adverse health and environmental impacts suffered by its inhabitants. As Argentina is one of the world's leading soybean producers, the risks and impacts of using glyphosate-based pesticides and GM seeds are widespread.

## **2. Bolivia**

99. Fifty percent of the total area cultivated in the country corresponds to soy.<sup>223</sup> The area of interest for this complaint in Bolivia is the Department of Santa Cruz de la Sierra (see Annex IV – Map 2), where 99% of the country's soybean cultivation takes place.<sup>224</sup> Santa Cruz is also home to large agro-industrial companies. In 2010, Bayer opened its first office in Santa Cruz, while Monsanto has had its Santa Cruz Regional Seed Office since 2005.

### *a. Evidence of distribution of Bayer's products in the area*

100. The investigations conducted for this complaint revealed that Bayer commercializes glyphosate-based herbicides in Santa Cruz de la Sierra through three main channels. The first is comprised of at least eight distribution companies with which it jointly imports glyphosate-based pesticides from Argentina.<sup>225</sup> These companies operate from the city of Santa Cruz de la Sierra and have different distribution points throughout the department, near the areas where the complainants conducted group interviews.<sup>226</sup>

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<sup>219</sup> Araceli Clavijo et al., "Water Quality and Toxicological Impact Assessment Using the Nematode *Caenorhabditis Elegans* Bioassay in a Long-Term Intensive Agricultural Area," *Water, Air, & Soil Pollution* 228, August 17, 2017, <https://doi.org/10.1007/s11270-017-3512-4>.

<sup>220</sup> Universidad Nacional de la Plata, "Científicos de La UNLP Advierten Que El Glifosato Está En Todos Lados," accessed April 2, 2024, <https://investiga.unlp.edu.ar/cienciaenaccion/cientificos-de-la-unlp-advierten-que-el-glifosato-esta-en-todos-lados-10058>.

<sup>221</sup> A. E. Ronco et al, "Water Quality of the Main Tributaries of the Paraná, 458.

<sup>222</sup> Elena Okada et al., "Non-Point Source Pollution of Glyphosate and AMPA in a Rural Basin from the Southeast Pampas, Argentina," *Environmental Science and Pollution Research* 25, May 1, 2018, <https://doi.org/10.1007/s11356-018-1734-7>, 32.

<sup>223</sup> Gonzalo Colque, Luis Eyzaguirre, and Efraín Tinta, "Cambio Climático En Santa Cruz. Nexos Entre Clima, Agricultura y Deforestación," August 2023, <https://ftierra.org/index.php/publicacion/documentos-de-trabajo/attachment/245/52>.

<sup>224</sup> Julio Calzada et al, "Estado de situación del complejo soja en Bolivia y agenda actual del sector," Bolsa de Comercio de Rosario, July 15, 2021, <http://www.bcr.com.ar/es/mercados/investigacion-y-desarrollo/informativo-semanal/noticias-informativo-semanal/estado-de-1>.

<sup>225</sup> These companies include: CIAGRO S.A., Agrocentro S.A., Agroterra S.R.L., Distribuidora De Insumos Y Maquinarias Total Agro S.A., AP Agricultura Protegida S.R.L., Agroindu Group S.R.L., Mega Agro Ltda, Nutrifertil S.R.L.. See: SENASAG, "Reporte de Importación de Insumos Agrícolas 2011-2022."

<sup>226</sup> For instance, CIAGRO S.A. is a national distributor of Bayer in Bolivia (see <https://www.facebook.com/ciagrobolivia/videos/bayer-ciagro/403248548173724/>) and has a branch office in the municipality of San Julian, near the "Brecha Casarabe" region included in this complaint.

101. Secondly, as local press records confirm, Bayer works jointly with local partners, such as Biocontrol.<sup>227</sup> Bayer also attends annual fairs, such as “EXPOSOYA,” or regional fairs in soybean-growing municipalities, such as Cuatro Cañadas, San Julián and San Pedro. There, it advertises its products and, thus, comes in contact with new potential customers.<sup>228</sup> Thirdly, and to a lesser extent, Bayer subcontracts local technicians through whom it directly advertises its products, as evidenced in interviews with inhabitants of the area.<sup>229</sup> Reports have pointed out that Bayer primarily targets medium- and large-scale producers who own crops that cover an area of more than 100 hectares – which account for approximately 78%<sup>230</sup> of the cultivated land in the Santa Cruz department – thus creating difficulties for small producers to access credit lines to purchase Bayer's products.<sup>231</sup>

***b. Description of the impacts of Bayer's products associated with large-scale cultivation of GM soybeans in the area of interest***

*i. Impacts on the environment*

102. The department of Santa Cruz de la Sierra has been recently experiencing high deforestation rates. By 2022, Bolivia had the third highest rate of primary forest loss in the world, exceeded only by Brazil and the Democratic Republic of Congo.<sup>232</sup> Since the late 1990, Santa Cruz has been characterized by the accelerated expansion of cultivated land and the clearing of primary forests for agricultural and livestock purposes. Between 2011 and 2022, the country's area under soybean cultivation increased by 486,234 hectares, from 1,020,635 to 1,506,869 hectares.<sup>233</sup> In the same period, deforestation in Santa Cruz increased by 2.4 million hectares. The total deforested area accumulated by 2011 was 4 million hectares, which increased to 6.4 million hectares by 2022 (Annex V – Table 1), while the annual rate of forest loss in the region was roughly 200,000 hectares.<sup>234</sup> These figures indicate major transformations in the region with a highly concerning impact on deforestation.
103. Already in 2010, Santa Cruz accounted for 82% of the cumulative deforestation in the country.<sup>235</sup> By 2022, 85% of the agro-industrial area of the department was deforested.<sup>236</sup>
104. The municipalities of Santa Cruz de la Sierra with the highest levels of deforestation linked to soy cultivation in 2021 include San José de Chiquitos, Pailón, San Ignacio de Velasco, Cuatro Cañadas, San Julián, El Puente and San Miguel de Velasco.<sup>237</sup> Forest loss was mainly concentrated in the dry forests of the Chiquitania, the humid forests of the Amboró area of influence in the western zone,

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<sup>227</sup> Santa Cruz Agropecuario, “Facebook Post,” May 8, 2018, <https://www.facebook.com/santacruz.agropecuario/posts/bayer-bolivia-y-su-distribuidor-en-la-zona-los-valles-bio-control-estuvieron-pre/809912819197474/>.

<sup>228</sup> “Bayer showed its technological solutions for agriculture at Exposoya 2023,” *RC Noticias de Bolivia*, March 8, 2023, <https://rcbolivia.com/bayer-mostro-sus-soluciones-tecnologicas-para-el-agro-en-la-exposoya-2023/>.

<sup>229</sup> Interview with Person 2, Santa Cruz, May 2023; Interview with Person 3, agronomist, Montero, Santa Cruz, April 2023.

<sup>230</sup> Fundación Tierra, “Estudio de Caso Bolivia: Responsabilidades Socio-Ambientales de Bayer/Monsanto En La Agricultura de Soya En Santa Cruz-Bolivia” (TIERRA, Forthcoming, on file with the complainants).

<sup>231</sup> Interview with Person 4, from the Cámara Agropecuaria de Pequeños Productores del Oriente - CAPPO. May 2023, Santa Cruz.

<sup>232</sup> Stanislaw Czaplicki Cabezas, “The Hidden Crisis of Deforestation in Bolivia,” *Trase*, August 23, 2023, <https://insights.trase.earth/insights/the-hidden-crisis-of-deforestation-in-bolivia/>.

<sup>233</sup> Instituto Nacional de Estadística (INE), “Cuadros Estadísticos Bolivia - Superficie cultivada por departamento 2013-2022,” accessed March 1, 2024, <https://www.ine.gob.bo/index.php/estadisticas-economicas/agropecuaria/agricultura-cuadros-estadisticos/>.

<sup>234</sup> Fundación Tierra, “Estudio de Caso Bolivia”.

<sup>235</sup> Andrea Urioste, “Deforestation in Bolivia, A Major Threat to Climate Change,” *Friedrich Ebert Foundation Forum on Development and Democracy*, September 2010, <https://library.fes.de/pdf-files/bueros/bolivien/07570.pdf>.

<sup>236</sup> Gonzalo Colque, “Deforestation 2016-2021. El pragmatismo irresponsable de la 'Agenda Patriótica 2025',” June 2022, <https://ftierra.org/index.php/publicacion/documentos-de-trabajo/237-deforestacion-2016-2021-el-pragmatismo-irresponsable-de-la-agenda-patriotica-2025>.

<sup>237</sup> Stanislaw Czaplicki Cabezas, “The Hidden Crisis of Deforestation in Bolivia”.



and the tropical forests in the transition zone between the Santa Cruz and Beni Amazonia.<sup>238</sup> Recent estimates link at least 19% of the deforestation in the Chiquitania forests to the expansion of soybean cultivation.<sup>239</sup>

105. Deforestation is also severe with regards to its links to greenhouse gas emissions. In Bolivia, 58% of emissions originate from land use change and forestry and 22% from agriculture.<sup>240</sup> Considering that the department of Santa Cruz has a 67% share of all deforestation in Bolivia, the region is undoubtedly the main source of this type of emissions.<sup>241</sup>
106. Moreover, 62% of tree cover loss between 2001 and 2022 in Bolivia was associated with the deforestation necessary for commodity crops.<sup>242</sup> Among these crops, GM soy plays a major role, as 49% of the department's land is currently devoted to its cultivation.<sup>243</sup>
107. Against this background, Bayer participated decisively and actively in the emergence and expansion of the agricultural model centered on Roundup-Resistant (RR) soy.<sup>244</sup> Despite deforestation already happening in Bolivia, forest loss continued to increase with the approval of RR soy in 2005, due to the expansion of RR soy cultivation.<sup>245</sup> Between 2001 and 2021, 49% of the growth of RR soybean crops occurred in areas deforested during the same period.<sup>246</sup>
108. Seventy-seven percent of new soybean cultivation areas were deforested between 2011 and 2022.<sup>247</sup> This implies that the expansion of soy production in recent years has had a more significant environmental impact since it has required the clearing of forested regions. As soy production has led to a change in the use of forested land, this impact has been higher than in previous years. Previously, there was an overlap with traditional crops, i.e. soy in its first stage displaced other crops on land already being cultivated.

ii. Impacts on health, access to food, water and land

109. Two hundred and fifty-six human settlements with a population of 239,491 consisting mostly of peasant families, rural migrants and indigenous peoples, live in the Santa Cruz soybean area (Annex IV – Map 3). Their houses are surrounded by soybean fields at a distance of 500 meters or less (Annex V – Table 2) from the perimeter of the human settlements, making diversified family agriculture impossible in this context.<sup>248</sup> This situation affects their food security and sovereignty, mainly by causing the disappearance of traditional indigenous agricultural systems.<sup>249</sup> Due to the

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<sup>238</sup> Gonzalo Colque, "Deforestación 2016-2021. El pragmatismo irresponsable de la 'Agenda Patriótica 2025'",

<sup>239</sup> Xiao-Peng Song et al., "Massive Soybean Expansion in South America since 2000 and Implications for Conservation," *Nature Sustainability*, 2021, <https://doi.org/10.1038/s41893-021-00729-z>.

<sup>240</sup> Climate Watch, "Bolivia, Historical Greenhouse Gas (GHG) Emissions," accessed January 24, 2024, <https://www.climatewatchdata.org/>.

<sup>241</sup> Global Forest Watch, "Bolivia Deforestation Rates & Statistics," accessed January 16, 2024, <https://www.globalforestwatch.org/dashboards/country/BOL>.

<sup>242</sup> Global Forest Watch, "Bolivia Deforestation Rates & Statistics,"

<sup>243</sup> INE, "Cuadros Estadísticos Bolivia - Superficie cultivada por departamento 2013-2022".

<sup>244</sup> Fundación Tierra, "Estudio de Caso Bolivia".

<sup>245</sup> Ibid.

<sup>246</sup> Ibid.

<sup>247</sup> Own elaboration based on the analysis of data from the Global Land Analysis & Discovery (GLAD) of the University of Maryland, the National Institute of Statistics (INE), the National Association of Oilseed Producers (ANAPO) and Landsat satellite images.

<sup>248</sup> Fundación Tierra, "Estudio de Caso Bolivia".

<sup>249</sup> Fundación Tierra, "Despojo de tierras de comunidades por el agronegocio boliviano," May 2021, <https://ftierra.org/index.php/publicacion/documentos-de-trabajo/220-despojo-de-tierras-de-comunidades-por-el-agronegocio-boliviano>.

expansion of GM soy cultivation, they are permanently exposed to land dispossession and deforestation and, due to the use of pesticides, they report air, soil and water pollution.<sup>250</sup>

110. Complainant organization Fundación Tierra conducted group interviews in 2022 and 2023 with indigenous communities in the municipality of San José de Chiquitos and small soy producers in the municipalities of San Julián and Cuatro Cañadas which confirmed these impacts.<sup>251</sup> These municipalities are also among the most affected by deforestation in the department.
111. Field research in the area demonstrated that in San José de Chiquitos, soybean crops surround the indigenous Chiquitano communities of Portoncito and San Antonio. They reported increased deforestation related to these crops during the last 10 years. In one indigenous community in Portoncito, the inhabitants reported wildlife impacts in the last two to five years, sometimes posing a threat to the community's crops and domestic animals.<sup>252</sup> The communities also described how aerial spraying carried out on neighboring soybean crops has contributed to the destruction of the community's plants and self-subsistence crops.<sup>253</sup>
112. Some of the male community members of Portoncito who had been hired as fumigators explained that they were not provided with safety equipment.<sup>254</sup> They further reported that during the last two years, they have experienced adverse health impacts, such as headaches and diarrhea, after fumigation of dry plants during the winter and summer agricultural work seasons.<sup>255</sup> In another example, the community of San Antonio has been heavily affected by flooding since one of the companies from the adjoining soy fields diverted the natural course of the river in the area.<sup>256</sup> When it rains, the contaminated water from the soy crops floods their homes and leads to the loss of their crops.<sup>257</sup>
113. The adverse effects reported in the peasant settlement area of “Brecha Casarabe” in the San Julián municipality refer mainly to impacts on health and the management of empty agrochemical containers.<sup>258</sup> The small-scale soybean producers described how companies that commercialize the products lack specific protocols for the management of the recycling of empty containers, which in many cases, are left abandoned in the soy fields.<sup>259</sup> This issue has been linked to the contamination of drinking water sources, as the rainy season exposes the cans to rain and river water.<sup>260</sup>
114. Despite being the main agrochemical importer in Bolivia, Bayer does not have its own specific agrochemical waste management program. A farmer in the area reported that Bayer does not provide

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<sup>250</sup> Ibid, 9, 75.

<sup>251</sup> Group interview in Portoncito Indigenous Community, San José de Chiquitos, 15 May 2023; Group interview in San Antonio Indigenous Community, San José de Chiquitos, 15 May 2023; Group Interview in Peasant Community Brecha Casarabe, San Julián, September 2022 and May 2023; Group interview with female soy producers in Community Naciones Unidas, Cuatro Cañadas, September 16, 2022; Group interview with small soy producers, San Pedro, May 12, 2023; Group interview in Chiquitos-Turubó Indigenous Community, San José de Chiquitos, May 15, 2023.

<sup>252</sup> Group interview in Portoncito Indigenous Community, San José de Chiquitos, May 15, 2023.

<sup>253</sup> In this regard, aerial spraying is not prohibited in Bolivia and national regulations are very lax in authorising its operation. For example, SENASAG's Administrative Resolution (No. 04/2022) eliminated the environmental assessment prepared by an authorised professional that had been in force until then.

<sup>254</sup> Group interview in Portoncito Indigenous Community, San José de Chiquitos, May 15, 2023.

<sup>255</sup> Ibid.

<sup>256</sup> Group interview in San Antonio Indigenous Community, San José de Chiquitos, May 15, 2023.

<sup>257</sup> Ibid.

<sup>258</sup> Group Interview in Peasant Community Brecha Casarabe, San Julián, September 2022 and May 2023.

<sup>259</sup> Ibid.

<sup>260</sup> Ibid.

training or information directly to the farmers.<sup>261</sup> While Bayer has publicly stated that it does provide training on the correct use of its products,<sup>262</sup> it is unclear how the training is made accessible to smallholders, for whom access to the internet, as well as protective equipment and equipment for washing and disposal of containers may be difficult or costly to obtain. This is of crucial importance in an area where the population is composed simultaneously of small producers and fumigators of soy crops, as is the case in Brecha Casarabe.

115. Interviews conducted at the Health Center in San Julián exhibit that there is an increase in cases of intoxication with agrochemicals during the sowing season, with reports of diarrhea, vomiting and body itching.<sup>263</sup> Unsurprisingly, there is a lack of protective measures for sprayers in the region for handling these products, as the companies that market them do not provide effective advice or preventive safety guidelines. As with the indigenous communities described above, there is also concern about water pollution by chemical waste from the fumigated soy fields, which floods the community during the rainy season.<sup>264</sup>
116. Finally, small producers described changes in land tenure and distribution associated with the expansion of soybean crops. The Brecha Casarabe area in the San Julián municipality is a clear example of the land concentration dynamics that is turning peasant and indigenous land into soy farms. Peasant families face increasing pressure to sell or lease their land under the agribusiness model, thus abandoning family agriculture. A study by Fundación Tierra found that land dispossession is a risk faced by hundreds of peasant and indigenous communities in soy-growing areas, especially those in the soy “core zone” (Annex IV – Map 3).<sup>265</sup>

### *c. Preliminary conclusion*

117. From the information provided above, it is evident that Bayer has a strong presence in the soy agribusiness, especially in the market for glyphosate-based pesticides, in the department of Santa Cruz de la Sierra, where the vast majority of GM soy cultivation is concentrated. On the other hand, the relationship between GM soy cultivation and direct deforestation in the department is manifest. Deforestation levels are high and severe in terms of their contribution to climate change and to adverse impacts on the rights of indigenous and rural communities. The examples conveyed by the communities interviewed illustrate the severe impacts that GM soy cultivation has on health and access to water, food and land of indigenous and rural communities living near these crops.

## **3. Brazil**

### *a. The area of interest*

118. The area of interest in Brazil is located in the state of Paraná, particularly in three indigenous communities in the southwestern area of the state near the border with Paraguay. In Paraná, grain production oscillates between corn and soy as rotating crops. Paraná is the second largest soybean-

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<sup>261</sup> Interview with Person 4, from the Cámara Agropecuaria de Pequeños Productores del Oriente - CAPPO. May 2023, Santa Cruz

<sup>262</sup> Publiagro, "Bayer Bolivia capacita a agricultores para el buen uso de sus productos," *Publiagro*, February 13, 2019, <https://publiagro.com.bo/2019/02/capacitacion-bayer-bolivia/>; Group interview with female soy producers in Community Naciones Unidas, Cuatro Cañadas, September 16, 2022.

<sup>263</sup> Interview with Person 5, from the Centro de Salud Núcleo 23, Brecha Casarabe, Municipality of San Julián, May 13, 2023.

<sup>264</sup> *Ibid.*

<sup>265</sup> Fundación Tierra, "Despojo de tierras de comunidades por el agronegocio boliviano".

producing state in Brazil,<sup>266</sup> in which glyphosate is the most sold active ingredient. In 2022 alone, 31,270 tons were sold.<sup>267</sup>

119. There are two large indigenous territories or “Indigenous Lands” (IL) in the western region of Paraná, the Tekoha Guasu Guavirá and the Tekoha Guasu Okoy Jakutinga. Two communities from the first IL and one community from the second IL provided information for this complaint on the use of transgenic seeds and pesticides and the impact they have on human rights and the environment.
120. The Pohã Renda Village (Annex IV – Map 4) and Y’Hovy Village (Annex IV – Map 5) are both located in the Guasu Guavirá IL. The former is located in the Terra Roxa and the latter in the Guaíra municipality. The Tekoha Ocoy village (Annex IV – Map 6) is located in the São Miguel do Iguaçu municipality of the IL Guasu Okoy Jakutinga.
121. According to statistical data from the three municipalities, corn and soybean are the predominant crops in these municipalities and occupy the vast majority of the agricultural areas.<sup>268</sup> The three communities are surrounded to a great extent by soybean fields – in some cases, without even observing the minimum distances to avoid cross-pollination or damage from pesticide spraying. In this regard, the three communities are not exceptional but indicative of the general situation. All communities belonging to the Tekoha Guasu Guavirá Indigenous Lands are surrounded by soy plantations, sometimes with less than two meters distance, except for three urban communities.<sup>269</sup> Interviews with residents of the three communities adjacent to agribusiness fields confirmed this information, in which they stated that pesticide spraying occurs just a couple of meters away from their homes.<sup>270</sup> United Nations institutions confirmed that failure to respect legally required buffer zones is a widespread issue in Brazil.<sup>271</sup>

*i. Evidence of distribution of Bayer’s products in the area*

122. The INTACTA website provides lists of all multipliers and distributors in Brazil selling and licensing INTACTA RR2 and INTACTA 2 Xtend. The list shows the presence of thirty-nine INTACTA RR2 and thirty-five INTACTA 2 Xtend multipliers in the Paraná state.<sup>272</sup> Replies from the Rural Development Institute of Paraná (IDR-Paraná) and the “Cooperativa Agroindustrial Copagril” showed that Bayer’s Monsoy 6410 and 5957 soybean seeds are frequently used.<sup>273</sup> Bayer also acknowledged the use of Monsoy seeds in Paraná.<sup>274</sup> In 2020, according to data from the

<sup>266</sup> Companhia Nacional de Abastecimento (CONAB), “Portal de Informações Agropecuárias,” accessed April 19, 2024, <https://portaldeinformacoes.conab.gov.br/produtos-360.html>.

<sup>267</sup> IBAMA, “Painéis de informações de agrotóxicos”.

<sup>268</sup> Instituto Paranaense de Desenvolvimento Econômico e Social (IPARDES), “Caderno Estatístico – Município de Guaíra – PR,” 2023, <http://www.ipardes.gov.br/cadernos/MontaCadPdf1.php?Municipio=85980:caderno>; IPARDES, “Caderno Estatístico – Município de Terra Roxa,” <http://www.ipardes.gov.br/cadernos/MontaCadPdf1.php?Municipio=85990>; IPARDES, “Caderno Estatístico – Município de São Miguel do Iguaçu,” 2023, <http://www.ipardes.gov.br/cadernos/MontaCadPdf1.php?Municipio=85877>.

<sup>269</sup> Comisión Guarani Yvyrupa (CGY), “Impactos da Producao de commodities agrícolas às comunidades Avá-Guarani,” 2023, <https://www.yvyrupa.org.br/project/impactos-da-producao-de-commodities-agricolas-as-comunidades-ava-guarani-2023-comissao-guarani-yvyrupa/>, 36.

<sup>270</sup> Interview with Person 6, September 15, 2023.

<sup>271</sup> Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, UN Doc. A/HRC/45/12/Add2, September 17, 2020, para. 24.

<sup>272</sup> Plataforma Intacta 2 Xtend, “Multiplicadores e PODs i2x,” accessed April 12, 2024, <http://pod.sojai2x.com.br/>; Intacta RR2 Pro, “Multiplicadores e PODs IPRO,” accessed April 12, 2024, <https://podINTACTArr2pro.sojai2x.com.br/>.

<sup>273</sup> Consultancy by Terra de Direitos; Conversations with employees of the Rural Development Institute of Paraná, November 2023 and COPAGRIL, on file with complainants.

<sup>274</sup> Bayer AG, Bayer Crops Science Sustainability Progress Report, October 27, 2023, <https://www.bayer.com/sites/default/files/October%2026%202023%20Sustainability%20Progress%20Report%20Compressed%2025MB.pdf>, 20.

Municipal Agricultural Survey of the Brazilian Statistics Institute, 60% of the total area of Guaíra and almost 70% of the total area of Terra Roxa is dedicated to the cultivation of soy.<sup>275</sup>

123. In the case of pesticides, the most recent available data from the agricultural census shows a high degree of use in the municipalities in the area of interest. Of the 661 farms in Guairá, 509 reported using pesticides; in Terra Roxa, out of 1,209 farms, 921 used pesticides.<sup>276</sup> On average, the three municipalities consumed more than 500 tons between 2013 and 2017, thus placing them in the highest category of analysis in the entire state of Paraná.<sup>277</sup> Agricultural inputs are mainly distributed by cooperatives.<sup>278</sup> The most important cooperatives in each municipality are listed as distributors of Bayer's products.<sup>279</sup> Moreover, technicians of the IDR of the Terra Roxa and Guaíra municipalities confirmed that Bayer's Roundup is one of the chemicals commonly used to treat crops.<sup>280</sup> In the case of Guaíra, Roundup was even reported to be the most used product in the 2022/2023 soybean harvest.<sup>281</sup>
124. Regarding the use of pesticides in the municipality of Sao Miguel do Iguacu, both IDR technicians and the companies refused to provide information concerning the most used products. Glyphosate's presence was further confirmed by water and soil tests taken in the communities. A total of 14 water and soil samples were collected in the indigenous villages Y'Hovy, Pohã Renda and Ocoy on 27 and 30 July 2023, which then underwent spectrophotometric analysis by the Laboratório de Investigação Biológica (LINBIO Biological Research Laboratory). Laboratory results corroborated the presence of the active ingredient glyphosate and AMPA in the water sources in the Pohã Renda community (Annex VI).
125. It's worth noting that the samples showed the presence of glyphosate even when they were collected during the fallow season in Brazil. During this time, it is prohibited by law to grow or maintain any living plants of certain particular species, as a measure to reduce contamination by diseases or pests. In other words, no pesticides are used during this period. It is therefore highly likely that residues of both glyphosate and AMPA are much greater during the cultivation and spraying periods.

***b. Description of the impacts of Bayer's products associated with large-scale cultivation of GM soybeans in the area of interest***

***i. Impacts on human health***

126. Several studies confirm a very high rate of pesticide poisoning in Brazil.<sup>282</sup> Researcher Larissa Bombardi documented poisonings in the state and municipality of Paraná, where 3723 cases of poisoning were documented between 2007 and 2014.<sup>283</sup> A subsequent study concluded that:

<sup>275</sup> CGY, "Impactos da Producao de commodities agrícolas," 17.

<sup>276</sup> Instituto Brasileiro de Geografia e Estatística (IBGE), Agricultural Census, 2017, <https://mapasinterativos.ibge.gov.br/agrocompara/>.

<sup>277</sup> Observatório da Questão Agrária no Paraná, "Atlas da questão agrária no Paraná," 2021, [file:///C:/Users/schliemann/Downloads/Atlas%20da%20Quest%C3%A3o%20Agr%C3%A1ria%20no%20Paran%C3%A1\\_E-Book.pdf](file:///C:/Users/schliemann/Downloads/Atlas%20da%20Quest%C3%A3o%20Agr%C3%A1ria%20no%20Paran%C3%A1_E-Book.pdf), 223.

<sup>278</sup> In Guaíra: Cooperativa Agroindustrial Copagrill; Cooperativa Agroindustrial Integrada; Cooperativa Agroindustrial C.Vale. In Terra Roxa: Cooperativa Agroindustrial C. Vale; I. Granos y suministros Riedi; Disam. In São Miguel do Iguacu: Cooperativa Agroindustrial Lar; AB Agrobrazil. Consultancy by Terra de Direitos, Conversations with employees of the Rural Development Institute of Paraná, November 2023.

<sup>279</sup> Bayer AG, "Agro Bayer Brasil – Onde comprar".

<sup>280</sup> Consultancy by Terra de Direitos, Conversations with employees of the Rural Development Institute of Paraná (on file with complainants) November 2023.

<sup>281</sup> Ibid.

<sup>282</sup> UN Special Rapporteur on Toxics, UN Doc. A/HRC/45/12/Add2, para. 27; Joint letter of several UN Special Rapporteurs, UN Doc. OL BRA 5/2018, June 13, 2018, <https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gId=27311>, 2.

<sup>283</sup> Larissa Mies Bombardi, Geografia do Uso de Agrotóxicos no Brasil e Conexões com a União Europeia, 2017, 138.

“proportionally, indigenous people suffer the most from the consequences of agricultural chemicals in Brazil,” mostly affecting members of ethnic groups located in Santa Catarina, Paraná and Mato Grosso do Sul, where between 2010 and 2019,<sup>284</sup> the Ministry of Health recorded 52, 23 and 19 poisoning cases of indigenous people, respectively. These figures are undoubtedly under-reported, given that indigenous people have reported difficulty in obtaining good health care for poisonings and the lack of systematic collection of poisoning data.<sup>285</sup>

127. In terms of concrete consequences for members of indigenous communities, a 2023 study lists many impacts on the health of Ava-Guarani communities.<sup>286</sup> One person from the community of Ocoy reported the following impacts immediately after fumigation, which continued for up to three days: “headache, discomfort, dizziness, because when the wind blows, it brings everything, so the smell traps everything in the environment and one begins to inhale the poison and begins to feel headache, dizziness, often stomach ache.” He declared that the smell enters into his house, located on the indigenous land, where the neighboring plantations extend into the territory without keeping the proper distance.<sup>287</sup>
128. Several other testimonies collected on indigenous lands confirmed the health impacts. In Pohã Renda, many flu-like symptoms are mentioned, such as sore throats, but also vomiting and diarrhea.<sup>288</sup> Another inhabitant of this community, reports that after fumigation: “you smell it and you react immediately, especially headache and stomach ache, and you try to vomit, it is a very fast reaction.”<sup>289</sup> In the Y'Hovy community, interviewees experienced symptoms of stomach ache and headache after a recent spraying at the outer edge of the community.<sup>290</sup> Other Y'Hovy villagers confirmed similar symptoms, as well as coughing, after pesticide application.<sup>291</sup>

ii. *Deforestation and biodiversity loss*

129. Deforestation in the areas of interest took place throughout the 20th century, with a very high intensity in the 1960s and 1970s that continues to the present day.<sup>292</sup> Although in the ‘60s and ‘70s, genetically modified seeds were not available, soybean cultivation has nonetheless been one of the main reasons for the clearing of forests.<sup>293</sup> This led to a strong concentration of agricultural land in the hands of increasingly large soy farmers.<sup>294</sup> Currently, only 9.6% of the area of the municipalities of Guaíra and Terra Roxa has forest remains.<sup>295</sup> “These transformations have had a profound impact on the cultural basis and reproduction of the native peoples living in the region, who have witnessed the intense devastation of their traditional territory.”<sup>296</sup> Deforestation and lack of sufficient space also resulted in the disappearance of animal and plant species. A recent study has shown that “paradoxically, the Avá-Guarani community, even with their strong conservation practices and knowledge are most vulnerable to losing their agrobiodiversity.”<sup>297</sup> One inhabitant from the Pohã

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<sup>284</sup> WWF Brasil, “Uso de agrotóxicos no Brasil dobrou entre 2010 e 2021,” October 9, 2023, <https://www.wwf.org.br/?86981/Uso-de-agrotoxicos-no-Brasil-dobrou-entre-2010-e-2021>.

<sup>285</sup> UN Special Rapporteur on Toxics, UN Doc. A/HRC/45/12/Add2, para. 27.

<sup>286</sup> CGY, “Impactos da Producao de commodities agrícolas,” 36 et seq.

<sup>287</sup> Interview with Person 6, September 15, 2023.

<sup>288</sup> Interview with Person 7, September 13, 2023.

<sup>289</sup> Interview with Person 8, September, 13, 2023.

<sup>290</sup> Interview with Persons 9 and 10, September 15, 2023.

<sup>291</sup> Interview with Persons 11 and 12, September 14, 2023.

<sup>292</sup> See the maps of the study as well as a new map of 2016 in: Observatório da Questão Agrária no Paraná, “Atlas da questão agrária no Paraná,” 204.

<sup>293</sup> CGY, “Impactos da Producao de commodities agrícolas,” 15.

<sup>294</sup> Ibid.

<sup>295</sup> Ibid, 17, 28-29.

<sup>296</sup> Ibid, 17.

<sup>297</sup> Ibid, 35.

Renda village stated: “another impact that we see through our eyes is the planting, especially of food such as cassava, corn, seedlings, then they end up dying, even if it rains sometimes, then that planting ends up yellowing and dying, sometimes we do.... it's not drought, it's not plenty of rain that ends up spoiling it, but we think it's because of the poison because everything turns yellow. It fails to produce, all the flowers and the fruits fall off, and many times those trees die.”<sup>298</sup> Because of the expansion of the agribusiness model, which has happened even in recent years, only 1.13% of indigenous lands are home to indigenous homes and gardens.<sup>299</sup> This makes proper cultivation and management of biodiverse backyards by the Avá-Guarani unfeasible.

130. In addition, members of the Y'Hovy community have stated that soy cultivation has also had an impact on the wildlife in their territory. This includes the decline of fish and the disappearance of species that used to live in the region's forests. They also report that their animals fall ill and die during periods when pesticides are sprayed on crops.<sup>300</sup>

131. To sum up, while deforestation has not been a direct outcome of industrial agriculture in recent years, the continuous presence of agribusiness in the area makes it impossible to recognize the boundaries of and protect indigenous territories, which in turn hinders reforestation and the restoration of biodiversity. Moreover, the few remaining areas that belong to the communities are under threat by soy farmers and biodiversity loss is increasing. An inhabitant of the Y'Hovy community reports that trees are still being cut down near their fields and territories.<sup>301</sup>

iii. *Lack of land and inability to grow crops for self-consumption*

132. The lack of sufficient land, as neighboring farms increasingly encroach on their territory, and the constant spraying of pesticides close to the homes of all three communities contribute to the impossibility of growing crops for their own consumption. An inhabitant of the Y'Hovy community declared that he lost many of his products because the plants “wither a lot, sometimes the banana leaves also turn yellow.”<sup>302</sup> He added that his neighbors regularly use pesticides, regardless of the weather or if it is windy.<sup>303</sup> In the same community, other inhabitants reported that the green barriers they planted always die with spraying. Thus, their farm is now further away from the soybean field. Generally, they say that they need more land to provide subsistence for all the families, and as they cannot plant near the edges of the fields, the situation is even more delicate.<sup>304</sup> Another villager stated that they often end up buying fruits and vegetables when their crops die after pesticide contamination from their neighbors.<sup>305</sup> Additionally, there have been reports of animals dying after pesticides were sprayed in the fields next to the community.<sup>306</sup> The situation is similar in the two other communities. In Pohã Renda, for example, a community member report the difficulty of producing food. For example, when they try to plant cassava, corn or other seedlings, their crops often die, turn yellow and the leaves fall off.<sup>307</sup> A member of the Okoy community, which has a legally recognized territory, reported that they had tried to establish green barriers (an obligation that would fall on neighboring producers using pesticides) to ensure respect for indigenous land

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<sup>298</sup> Interview with Person 8, September 13, 2023.

<sup>299</sup> CGY, “Impactos da Producao de commodities agrícolas,” 42.

<sup>300</sup> Nakamura Rafael, “Encontro ava guarani fortalece variedades tradicionais contra a monocultura da soja,” August 8, 2023, <https://www.vvyrupa.org.br/2023/08/08/encontro-ava-guarani-fortalece-variedades-tradicionais-contra-a-monocultura-da-soja/>

<sup>301</sup> Interview with Person 14, September 14, 2023.

<sup>302</sup> Ibid.

<sup>303</sup> Ibid.

<sup>304</sup> Interview with Persons 9 and 10, September 15, 2023.

<sup>305</sup> Interview with Person 13, September 14, 2023.

<sup>306</sup> Interview with Persons 9 and 10, September 15, 2023.

<sup>307</sup> Interview with Person 8, September 13, 2023.

boundaries and minimize contamination, but even these barriers were destroyed by the intensive use of pesticides by rural producers in complete disregard of national legislation on minimum application distances.<sup>308</sup> Pesticides are also sometimes used as actual chemical weapons of intimidation and violence against indigenous peoples, traditional communities and peasants in land conflicts.<sup>309</sup> In Okoy, the above mentioned impacts on community food production were also confirmed as well as the fact that they fail to produce fruit for self-consumption because they never grow. The leaves always dry up when the plant is small and then die.<sup>310</sup> The general decrease in available land minimizes opportunities for hunting or collecting other products in the forests or the rivers. The living conditions generated by soy agribusiness result in hunger and poverty for a large part of the indigenous populations.<sup>311</sup>

iv. *Environmental pollution*

133. A major problem throughout the country is the contamination of water sources due to the misuse of pesticides in large-scale industrial agriculture.<sup>312</sup> In the state of Paraná, the problem is even more acute. A study published in 2022 analyzing drinking water in 127 municipalities of the state concluded that in 100% of the municipalities, the levels of glyphosate/AMPA detected were above the limits allowed in Brazil,<sup>313</sup> even though such limits are already much higher than in other countries.<sup>314</sup> Pollution was also confirmed at the community level. One inhabitant from the Okoy community described how, during the rainy season, all the water from the plantation contaminated with pesticides after spraying runs through the grounds of his house down to the lake in the middle of the community.<sup>315</sup> The lake is frequented by several members of the community for fishing. During the summer season, children even swim in it.<sup>316</sup> Another villager recounts an episode in the Pohã Renda village where after the rain, the poison sprayed drained into the river: “After the poison was sprayed and it rained, everything fell into the water because the water is always below, right? Some people drank the water from the river and the children also went swimming. Then people got sick.”<sup>317</sup> After the contamination of the river, he reported stomach pain, vomiting and diarrhea, as well as children suffering from diarrhea and itching.<sup>318</sup> In the third community, another villager also confirmed that fish were dying after fumigation, which is why he does not fish anymore.<sup>319</sup> Other neighbors of the same community declared that after bathing in the river, people also reported health problems. Children had infections and began scratching themselves, causing sores, itching and fever.<sup>320</sup>
134. Empty pesticide canisters dumped in the vicinity of the communities are a recurring problem reported by the communities. One villager from the Pohã Renda confirmed having found pesticide

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<sup>308</sup> Interview with Person 6, September 15, 2023.

<sup>309</sup> Conselho Indigenista Missionário, “Lançamento: Soja, milho e pecuária dominam 60% de território do povo Avá-Guarani (PR), revela estudo,” May 2, 2023, <https://cimi.org.br/2023/05/lançamento-soja-milho-e-pecuaria-dominam-60-de-territorio-do-povo-ava-guarani-pr-revela-estudo/>.

<sup>310</sup> Ibid.

<sup>311</sup> CGY, “Impactos da Produção de commodities agrícolas,” 42.

<sup>312</sup> UN Special Rapporteur on Toxics, UN Doc. A/HRC/45/12/Add2, para. 23; UNCESCR, Concluding Observations on the third periodic report of Brazil, para. 51.

<sup>313</sup> Carolina Panis et al, “Widespread pesticide contamination of drinking water and impact on cancer risk in Brazil,” *Environment Journal* 165, 2022.

<sup>314</sup> Joint letter of several UN Special Rapporteurs, UN Doc. OL BRA 5/2018, p. 2-3.

<sup>315</sup> Interview with Person 6, September 15, 2023.

<sup>316</sup> Ibid.

<sup>317</sup> Interview with Person 7, September 13, 2023.

<sup>318</sup> Ibid.

<sup>319</sup> Interview with Person 13, September 14, 2023.

<sup>320</sup> Interview with Persons 11 and 12, September 14, 2023.



containers by the side of the road.<sup>321</sup> These cans are sometimes collected and even used by people from the community to store water, posing a significant risk also to human health.

### *c. Preliminary conclusion*

135. The indigenous communities find themselves situated in the middle of large tracts of agricultural lands dedicated to the production of soy. Relationships with the soy farmers are marked by tension and outright conflict, including violence and criminalization, while the avenues available to the communities to defend their rights are already limited from the outset.
136. In addition to their vulnerable overall situation, the communities suffer from a variety of negative impacts, including severe degradation of the environment and natural resources in and around their traditional territories. Food crops and indigenous fruit trees within the territory are destroyed by pesticide drift, while waterways are polluted and, as a result, unsafe for drinking or bathing. The size of territories is also diminished due to the constant encroachment of neighboring soy producers. Thus, they can no longer rely on their own territories to provide the food needed to sustain all members of the community. The health of community members is directly affected by pesticide applications happening right next to their homes without respect for any minimum distancing requirements or green barriers.
137. In sum, the communities and their members are unable to live a dignified life in the face of such constant pressure and continuous pollution of their territories.

## **4. Paraguay**

### *a. The areas of interest*

138. The areas of interest for the purposes of this complaint are located in eastern Paraguay, where most of the country's soybean crops are concentrated, in the departments of San Pedro (319,701 ha under soybean cultivation), Canindeyú (640,331 ha) and Caaguazú (427,338 ha).<sup>322</sup> These regions are home to the Atlantic Forest, one of the richest biodiversity zones in the world,<sup>323</sup> whose existence has been severely and irreparably threatened by soybean cultivation in Paraguay and Brazil.<sup>324</sup>
139. The arrival of Monsanto's RR1 soybeans in these departments in 1999/2000 led to an exponential increase in the use of glyphosate.<sup>325</sup> The Paraguayan Ministry of Public Health and Social Welfare reports that there is a tangible risk of acute pesticide poisoning and other possible adverse health effects to the exposed population, which extends throughout the national territory, with a higher risk in 11 departments, including San Pedro, Canindeyú and Caaguazú.<sup>326</sup>
140. The accelerated expansion of soybean cultivation in the country has mainly happened on indigenous, peasant and family farming lands. This has resulted in the incremental expulsion of these

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<sup>321</sup> Interview with Person 7, September 13, 2023.

<sup>322</sup> Cámara Paraguaya de Exportadores y Comercializadores de Cereales y Oleaginosas (Capeco), "Estudio Satelital Paraguay", 2019, <https://capeco.org.py/soja-satelital-es>.

<sup>323</sup> World Wildlife Fund WWF, "The Atlantic Forest", 2024, <https://www.worldwildlife.org/places/atlantic-forest>.

<sup>324</sup> Global Forest Watch, "The Commodity Report: Soy Production's Impact on Forests in South America", December 2021, <https://www.globalforestwatch.org/blog/insights/soy-production-forests-south-america/>; Maria Tildesley, "Soy deforestation risk in Paraguay continues despite decline", *Trase*, June 2021, <https://trase.earth/insights/soy-deforestation-risk-in-paraguay-continues-despite-decline>; Liz Kimbrough, "Soy and cattle team up to drive deforestation in South America: Study", *News Mongabay*, July 12, 2021, <https://news.mongabay.com/2021/07/study-shows-how-soy-cattle-team-up-to-drive-deforestation-in-south-america/>.

<sup>325</sup> Centro de Estudios Heñói, "Informe para el Relator Especial".

<sup>326</sup> Ministerio de Salud Pública y Bienestar Social Paraguay, "Enfermedades de Notificación Obligatoria.

populations from their territories.<sup>327</sup> For this complaint, the cases of the peasant colonies Yeruti Ñu and Yvypé were documented, located on the border between Canindeyú and Caaguazú and the department of San Pedro, respectively. The inhabitants of the two communities are peasant families, small farmers, engage in family agriculture and raising small animals.

141. The case of these two communities is representative of the current situation in the majority of colonies in eastern Paraguay.<sup>328</sup> As described below, the testimonies of the residents provide information about the use of Bayer products that are marketed by the main silos and agricultural input distributors in the area, as well as the adverse impacts resulting from soy cultivation close to their territories, including cultivation involving products of the Responding Party.

*i. Yeruti Ñu Colony (Colonia Yeruti Ñu)*

142. Colonia Yeruti is located in the district of Curuguaty, on the border between the departments of Canindeyú and Caaguazú. This is one of the areas with the greatest agribusiness expansion, surrounded by old cattle ranches that since around 2005, have been dedicated to the extensive and mechanized monoculture of genetically modified soya seeds.<sup>329</sup>

143. It was officially created in 1991 by resolution of the Institute for Rural Wellbeing (IBR) on a surface of 1,225 hectares.<sup>330</sup> The hectares were parceled into 93 lots with an average area of 10 hectares per lot, in addition to a communal land reserve of 90 hectares. Out of the 93 families that initially inhabited the area, roughly six of them still plant crops for their own consumption, while the rest rent the land to soybean plantations.<sup>331</sup> Most of the land is currently in the hands of businessmen, primarily foreigners.<sup>332</sup>

*ii. Yvypé Colony (Colonia Yvypé)*

144. The Yvypé Colony is located in the district of Lima, department of San Pedro. In 1975, it was officially habilitated by IBR's resolution on an area of 3,889 hectares. The zone was divided into 190 agricultural plots of 20 hectares for peasant farmers appointed as beneficiaries of the agrarian reform.<sup>333</sup> The interviews were carried out in Manzana XI of the colony known as Sexta Línea, an area with the greatest presence of industrialized crop cultivation.

145. The villagers interviewed are engaged in peasant family farming, mainly for self-subsistence and raising small animals, such as chickens, ducks, pigs and dairy cows.<sup>334</sup> However, most villagers no longer farm for their own consumption but, instead, rent their land for soy cultivation. Due to the expansion of soybean cultivation, this is the only livelihood option, as family farming fields, soil and crops are being destroyed due to excessive pesticide spraying.<sup>335</sup> In 2017, residents of the Colonia created the “Comisión Vecinal Sin Tierra de Sexta Línea Yvypé” (CVST). The purpose of this commission is to resist the advance of agribusiness and recover the lands that belong to them according to the agrarian reform law.

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<sup>327</sup> Leticia Arrúa et al, “Radiografía del agronegocio sojero,” 63.

<sup>328</sup> Luis Rojas Villagra, “Las colonias campesinas en el Paraguay”, December 2017, [https://www.baseis.org.py/wp-content/uploads/2018/03/2017Dic\\_Las-Colonias-del-Indert.pdf](https://www.baseis.org.py/wp-content/uploads/2018/03/2017Dic_Las-Colonias-del-Indert.pdf).

<sup>329</sup> UN Human Rights Committee, Communication No. 2751/2016, *Norma Portillo Cáceres et al v. Paraguay*.

<sup>330</sup> Instituto de Bienestar Rural (IBR), Resolución 508/1994, [https://informacionpublica.paraguay.gov.py/public/2584796-RP\\_N508\\_94pdf-RP\\_N508\\_94.pdf](https://informacionpublica.paraguay.gov.py/public/2584796-RP_N508_94pdf-RP_N508_94.pdf).

<sup>331</sup> Interview with Norma Portillo, September 19, 2023, Paraguay.

<sup>332</sup> Ibid.

<sup>333</sup> Noelia Díaz Esquivel, “Soberana Colonia Yvype”, *Revista Emancipa*, February 2022, <https://revistaemancipa.org/2022/02/03/soberana/>.

<sup>334</sup> Group interview, Colonia Yvype on September 20, 2023.

<sup>335</sup> Abel Areco, Abel Irala, “Colonia Yvypé Sexta Línea – Entre la agonía y la esperanza, October 2018, [https://www.baseis.org.py/wp-content/uploads/2018/11/2018\\_InformeN20-Oct.pdf](https://www.baseis.org.py/wp-content/uploads/2018/11/2018_InformeN20-Oct.pdf).

*b. Evidence of distribution of Bayer's products in the area*

146. Based on the information provided on the INTACTA RR2 seeds' website, the complainants could conclude that 34.35% of the shops authorized in the country to sell this seeds are located in the Departments of Canindeyú, Caaguazú and San Pedro. Out of those, 49% are sold in shops in Canindeyú, while 27% and 24% are sold in the departments of Caaguazú and San Pedro, respectively.<sup>336</sup>
147. Bayer ensures its strong presence in the region through distribution chains and storage silos, operating in the vicinity of the rural areas of Colonia Yerutí and Colonia Yvypé. AGROFERTIL S.A., a distributor of Bayer/Monsanto soybean seeds and herbicides, has five silos and sales points in the Department of Canindeyú.<sup>337</sup> AGRO SILO SANTA CATALINA, a silo and grain operator authorized by Monsanto Paraguay S.A., is located in the vicinity of Colonia Yeruti.<sup>338</sup> In addition, COMPAÑÍA DEKALPAR S.A., an official representative of Bayer Paraguay and Monsanto Paraguay S.A., is part of the Bayer Paraguay distributor network (“AgroServices Network”) for the sale of herbicides, including Roundup. It is located 97 kilometers away from Colonia Yerutí.<sup>339</sup> As is generally the case in Paraguay, pesticides are available for purchase without any kind of prescription.
148. The authorized retailer of Bayer's INTACTA RR2 seeds, SEAGRI LIBERACIÓN S.A., is located only 22.3 km away from Colonia Yvypé. The colony's inhabitants report that it supplies inputs to soy producers in and around the colony.<sup>340</sup> Concerning the soy producer responsible for the eviction of the colony's farming families, a recent Global Witness report on the situation in Colonia Yvypé claims that: “Gerardo Lezcano and his family sell soy to a nearby silo called Seagri.”<sup>341</sup>
149. Moreover, the owner of the soybean fields adjacent to the CVST farms, Matthies Derksen, belongs to a cooperative called Friesland and supplies soybeans to both a silo operated by the cooperative and, apparently, to a second silo nearby owned by a similar cooperative called “Volendam.”<sup>342</sup> Both cooperatives are grain operators authorized by Monsanto Paraguay S.A. for the INTACTA RR2 varieties.<sup>343</sup>
150. According to one of the villagers, “apart from us, only two people plant the rest of the land in the Ademir and Matthies colony. George Matthies is a relative and associate of the Mennonite colony Friesland and has about 380 hectares of soybeans in Yvypé (...) Seagri gives credit to producers like Ademir who also work the land here. To Matthies, it is the Mennonite cooperative that probably provides both seeds and pesticides.”<sup>344</sup>
151. During the interviews carried out as part of the fieldwork in the Yeruti and Yvypé colonies, the inhabitants identified Roundup as one of the brands of pesticides used on the plots bordering their crops and Bayer as the manufacturer: a resident of the colony, said “...and then Roundup is the most

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<sup>336</sup> Semilleros Intacta en Paraguay, <https://www.INTACTArr2pro.com.py/es-py/semilleros.html>.

<sup>337</sup> [Agrofertil Paraguay, “Products - Herbicidas”, https://www.agrofertil.com.py/productos/herbicidas/](https://www.agrofertil.com.py/productos/herbicidas/)

<sup>338</sup> [Socios para entrega de grano Intacta en Paraguay, https://www.INTACTArr2pro.com.py/es-py/modelo-de-negocios/entrega-grano.html](https://www.INTACTArr2pro.com.py/es-py/modelo-de-negocios/entrega-grano.html)

<sup>339</sup> Bayer AG, “Red Agroservices – Distribuidores Autorizados”.

<sup>340</sup> Intacta RR2 Pro, “Semilleros Paraguay”.

<sup>341</sup> Global Witness, “Comidas Contaminadas”, November 2022, <https://www.globalwitness.org/es/toxic-takeaways-es/>.

<sup>342</sup> Ibid.

<sup>343</sup> Intacta RR2 Pro, “Cómo debe entregarse el grano,” accessed April 19, 2024, <https://www.intactarr2pro.com.py/es-py/modelo-de-negocios/entrega-grano.html>.

<sup>344</sup> Interview with Person 18, September 20, 2023.

common 'matatodo' [Spanish for 'kill all']. It is available in liquid and grain form.” Another community member added, “Yes the one from Bayer is usually in grain form.”<sup>345</sup>

152. In the Yeruti colony, the interviewee Norma Portillo said: “I usually see them throw away bottles of their poisons, the one-liter bottle, and I saw that the bottle said Bayer on it, on the bottle they use. I don't know exactly what poison it is, but they threw a bottle on my picket line, and I threw it back to them on their plot because I didn't want it to stay on my picket line.”<sup>346</sup>

*c. Description of the impacts of Bayer's products associated with large-scale cultivation of GM soybeans in the area of interest*

*i. Socio-territorial conflicts*

153. The accelerated expansion of soy cultivation in these departments has happened in traditional peasant and family farming territories.<sup>347</sup> This dynamic resulted in the progressive expulsion of peasant communities from lands rightfully granted to them under agrarian reform laws, or that legally belong to them but the ownership of which has not yet been formalized.<sup>348</sup>

154. Economic pressure, violence, criminalization and agrochemicals, including glyphosate, are used to intimidate peasant communities who have actively tried to resist the advance of soy by denouncing the severe damages to their health, crops and animals.<sup>349</sup>

155. In the case of Colonia Yvypé, after CVST members moved onto state land irregularly occupied by soy producers, they were subjected to a series of violent evictions, in which both police and armed civilians repeatedly destroyed homes and crops.<sup>350</sup> Inhabitants report that this was the result of a criminalization strategy by soy producer Matthies Derksen, in which at least three members of the community were imprisoned for approximately 15 days.<sup>351</sup> Person 17, one of the villagers, said that “other women in the colony are also being criminally prosecuted and they don't even know why. For example, a friend of mine was denounced for trespassing, even though she already had her title. In the last eviction in May 2018, their houses and crops were burnt down.”<sup>352</sup>

156. Another villager, Person 18, reported that “with each spraying, the soy growers move their crops forward by one or two meters and take land from the families. The soy farmers have also destroyed the crops with their tractors.”<sup>353</sup> Because the settlers have nowhere else to go, they simply rebuild their house elsewhere in the colony and live in fear of losing their home again. The last eviction took place in July 2020, resulting in six homeless families.<sup>354</sup> Both Mr. Derksen and the soy producer who evicted several colony members have business relationships with silos and cooperatives that are associated with Bayer/Monsanto Paraguay.<sup>355</sup>

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<sup>345</sup> Extract from Person 15 and Person 16's statements in verbatim transcript of interview in Colonia Yvype, July 2022.

<sup>346</sup> Extract from witness statement in verbatim transcript of interview in Colonia Yeruti, Julio 2022.

<sup>347</sup> Leticia Arrúa et al, “Radiografía del agronegocio sojero,” 63.

<sup>348</sup> Ibid. 228

<sup>349</sup> Global Witness, “Comidas Contaminadas”.

<sup>350</sup> Global Witness, “Comidas Contaminadas”.

<sup>351</sup> Group interview, Colonia Yvype on 20 September 2023; Global Witness, “Comidas Contaminadas”.

<sup>352</sup> Interview with Person 17, September 20, 2023.

<sup>353</sup> Interview with Person 18, September 20, 2023.

<sup>354</sup> Ibid.

<sup>355</sup> According to the results of an investigation carried out in 2022 by Global Witness, the cooperative "Friesland," to which Mr. Matthies Derksen belongs, supplies part of the soy it owns to a nearby silo owned by a cooperative called "Volendam." According to information provided by Bayer/Monsanto in their "list of participating grain traders," COOPERATIVA DE PRODUCCION CONSUMO Y SERVICIOS VOLEDAM LTDA, ADM PARAGUAY S.R.L. and CARGILL AGROPECUARIA S.A.C.I. have commercial agreements with Bayer/Monsanto. In the case of Cargill, the company is also registered as an authorized dealer for the distribution of INTACTA RR2 Pro seeds. Bayer AG, “Red Agroservices –

ii. Adverse health impacts

157. Paraguayan legislation requires a buffer zone of at least 100 meters between spraying and human settlements.<sup>356</sup> According to information provided by the colony inhabitants, the soy farmers do not comply with this rule in the affected communities. The soybean fields adjacent to the villagers' land are constantly being fumigated, regardless of the time of day or wind direction, causing them health issues.<sup>357</sup> “There are no buffer zones for crops in the colony. This is one of the most serious problems because when they spray everything reaches people's houses and crops. The spraying is done at any time of the day and without regard for wind conditions,” says Person 16, a member of the CVST.<sup>358</sup>
158. Several villagers reported that “...after fumigations, people experience headaches, itchy nose, diarrhea and vomiting, as the wind carries the pesticides for long distances.”<sup>359</sup> However, many choose not to go to the doctor because they are afraid of being arrested.<sup>360</sup>
159. In Yeruti, Norma Portillo and Isabel Bordón stated that the soybean crops surrounding their farms do not have a green barrier, as required by law, so all the pesticides applied reach their homes, killing their crops and causing serious health problems<sup>361</sup> – including the poisoning and death of their brother and husband, Rubén Portillo which led the UN Human Rights Committee to attribute responsibility to the Paraguayan state in 2019 (see para. 168).
160. As part of field visits in September 2023, the complainants could verify that in both colonies, soybean crops reached the edges of public roads, in violation of the internal regulations that establish that crops bordering populated neighboring roads must have live protective barriers. This was also corroborated by the UN Special Rapporteur on Toxics and Human Rights, who specified in his final report: “I have seen with my own eyes the blatant non-compliance with this law in the absence of buffer strips, resulting in the drift of pesticides over the bodies, homes and crops of the surrounding communities.”<sup>362</sup>
161. The inhabitants of these rural communities have lodged several complaints with the corresponding state bodies regarding the damage caused by mechanized agro-industrial production. This includes illegal deforestation, food crop damage due to the drift of herbicides used in the soy fields, and noncompliance and/or violations of norms regulating the use of pesticides.<sup>363</sup>

iii. Deforestation, loss of biodiversity and degradation of natural ecosystems due to pollution

162. Soybean growers and fumigation companies mismanage used chemical containers by dumping empty containers on neighboring plots of land. The villagers in Yvypé Colony reported that the well

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Distribuidores Autorizados”; Intacta RR2 Pro, “Semilleros Paraguay.” The Global Witness report also identifies a soy producer as responsible for the eviction of some of the colony's inhabitants. He sells soybeans to a nearby silo called Seagri, which in turn has a supply relationship with Cargill. According to the same sources, Seagri is also on Bayer/Monsanto's list of participating grain traders as well as on the list of shops authorized to market INTACTA RR2 Pro.

<sup>356</sup> Art. 68, Law N° 3742/09 On Control of Phytosanitary Products for Agricultural Use.

<sup>357</sup> Group interview Colonia Yvype, September 20, 2023; End of Mission Statement by the UN Special Rapporteur on Toxics.

<sup>358</sup> Interview with CVST member, September 20, 2023, Interview with Person 16, September 20, 2023.

<sup>359</sup> Group interview Colonia Yvype, September 20, 2023

<sup>360</sup> Ibid.

<sup>361</sup> Group interview, Colonia Yeruti, September 19, 2023.

<sup>362</sup> UN Special Rapporteur on Toxics, “End of Mission Statement on his visit to Paraguay”.

<sup>363</sup> Complaints to the Ministry of Environment and Sustainable Development-MADES (ex SEAM): i) File n°. sgdme - 2729/2020, complaint about clearing of land near a stream in the district of Curuguaty; ii) File sgdme-6347/2022 "complaint filed for irregular spraying with pesticides in the district of Curuguaty "; iii) File sgdme-11937/2019 "environmental complaint-fumigations with agrochemicals occurred in Colonia Yvype," complaint to the national service for quality, plant health and seeds (senave); File number 8261/2022 CODEHUPY, complaints to the Public Prosecutor's Office (Public Prosecutor's Office) Entry No. 301, November 10, 2022.

supplying water to the community is being used by soy producers for loading their fumigators and mixing pesticides: “We use the well for the community, but Matthies uses it for the preparation of fumigations (...) when they carry out the fumigation, they use large quantities of water. When they do that, we run out of water here.”<sup>364</sup>

163. The contamination generated by soybean production in the area was also confirmed in a recent investigation in which significant levels of glyphosate were found in the drainage waters of soybean plots in Campo Agua’ẽ (Canindeyú) and the source of the Ñequita stream in Luz Bella (San Pedro).<sup>365</sup> The latter is a crucial recharge area of the Guaraní aquifer, one of the world’s largest and most important groundwater reservoirs.<sup>366</sup>

164. Villagers interviewed in the communities of Colonia Yeruti and Colonia Yvypé reported that, at the time of the establishment of the colonies, the areas were largely forested.<sup>367</sup> With the advent of industrial agriculture, however, deforestation increased exponentially. According to Global Forest Watch, Paraguay lost 33% of its total area of primary rainforest from 2002 to 2022. Between 2001 and 2021, Paraguay experienced a loss of more than six and a half million hectares of forest.<sup>368</sup> It is estimated that 93% of this decline is connected to the cultivation of commodity crops and the expansion of the agricultural frontier.<sup>369</sup> Paraguay’s soybean plantations are mostly located in the heavily deforested Atlantic Forest. By 2019, an estimated 75,000 ha of this forest had been deforested in Paraguay.<sup>370</sup> By 2021, only 13% of the vegetation of this biome would remain. This region, where most of the country’s exported soya is produced – including the departments of San Pedro, Amambay, Canindeyú, Caaguazú, Alto Paraná, Caazupá and Itapúa – continues to be at risk of illegal deforestation.<sup>371</sup> During 2019 alone, estimates indicate that the five main importers of Paraguayan soybeans (Argentina, the European Union, Russia, Chile and Peru) were exposed to the risk of the illegal deforestation of 5,700 ha in the Atlantic Forest through their imports.<sup>372</sup> Furthermore, there is currently no national mechanism in place in Paraguay to trace soy back to the production regions that can guarantee deforestation-free soy to traders. Merely 1% of the soy exported by the country was certified as deforestation-free by the Round Table on Responsible Soy.<sup>373</sup>

iv. *Impacts on food sovereignty*

165. In Yeruti, the few peasant families who still live in the colony report problems growing their food because of the fumigation and the low productivity of the soil. Isabel Bordon, a member of the colony, said: “At the moment I have not been able to plant my vegetable garden because I am waiting for the next fumigation to pass. I’m afraid to plant now and the spraying will kill everything. When the herbicide reaches my crops, they are no longer useful as seed either.”<sup>374</sup>

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<sup>364</sup> Interview with Person 18, September 20, 2023.

<sup>365</sup> Rosas Villarrubia, Ingrid Yanina, “Análisis del sistema de producción agro biotecnológico del cultivo de soja en Argentina y Paraguay”, *Revista sobre Estudios e Investigaciones del Saber Académico*, 2018.

<sup>366</sup> The aquifer also provides freshwater to supply millions of people in the region, and many communities depend directly on it for drinking water supply, agricultural irrigation and industrial activities.

<sup>367</sup> Group and individual interviews conducted between June 2022 and September 2023.

<sup>368</sup> Global Forest Watch, “Paraguay Deforestation Rates”, accessed April 19, 2024, <https://www.globalforestwatch.org/dashboards/country/PRY/?location=WyJjb3VudHJ5IiwUFJZII0%3D>

<sup>369</sup> BASE IS, “¿De la “Soja Maradona” al “Trigo Messi”?”, May 2022, <https://www.baseis.org.py/de-la-soja-maradona-al-trigo-messi>.

<sup>370</sup> Maria Tildesley, “Soy deforestation risk in Paraguay”.

<sup>371</sup> Ibid.

<sup>372</sup> Ibid.

<sup>373</sup> Ibid.

<sup>374</sup> Interview with Isabel Bordon, September 19, 2023.

166. In Yvypé, villagers have declared that “when they use the poison, they burn all our plantations and after a few days the whole plant rots.”<sup>375</sup>

167. The last update in food security and nutrition reported that the prevalence of undernourishment in Paraguay in 2019–2021 averaged 8.7%, compared to the 2013–2015 average of 7.1%.<sup>376</sup> The prevalence of moderate food insecurity in 2019–2021 averaged 23.3%, compared to the 2014–2016 average of 8.3%. The highest incidence was in rural areas.<sup>377</sup> One of the main causes of the country's declining food security is linked to its dependence on food imports, as traditional cereal crops for the national diet are declining: in 2023, maize, pichingá (maiz) and locro will have more than 60% less cultivated area than in 2008, with peanuts at 61% less and beans at 60% less.<sup>378</sup>

168. As part of the investigation into the death of Ruben Portillo, a resident of Colonia Yeruti who died in 2011 from severe poisoning and the intoxication of 20 other members of the colony including his family, investigators determined that the mismanagement of chemical containers dumped on the ground caused chemical waste to leak into the community's water sources.<sup>379</sup> Two companies, “Hermanos Galhera” and “Condor Agrícola,” which grew soybeans near the home of Portillo and his family, utilized the water for washing their spraying equipment in the streams used by the community.<sup>380</sup> In 2019, the Paraguayan state was condemned by the United Nations Human Rights Committee in the case *Portillo Cáceres and Others v. Paraguay*,<sup>381</sup> becoming the first country in the world to be condemned by the Human Rights Committee for the death of a person from pesticide poisoning. “Hermanos Galhera,” supplies soybeans to ADM, which has a silo 10 km from Yeruti. It is worth mentioning that ADM and Bayer have commercial agreements.<sup>382</sup>

#### *d. Preliminary conclusion*

169. The impact on rural communities is severe and permeates all aspects of their lives. Today, populations are still increasingly surrounded by GM soy crops, which use large amounts of glyphosate, including Bayer AG's Roundup (Annex IV – Maps 7 and 8).<sup>383</sup>

170. The presence of authorized distributors, shops and grain operators offering Bayer/Monsanto soybean seeds and pesticides in the areas of interest as described in this section, together with the testimonies of residents, leads to the conclusion that the company's agricultural inputs are being distributed and used in the departments of interest and specifically in the Yeruti and Yvypé colonies.

### **5. Cross-cutting adverse human rights and environmental impacts**

171. The research conducted in the four countries revealed patterns concerning the potential and actual adverse impacts experienced by the rural, indigenous and peri-urban communities living in the areas

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<sup>375</sup> Group interview Colonia Yvype, September 20, 2023.

<sup>376</sup> International Fund for Agricultural Developments, IFAD, “Paraguay County Strategy Note 2024”, January 2024, <https://ioe.ifad.org/documents/38711624/39485439/Paraguay+County+Strategy+Note+2024.pdf/8fcc091e-1651-2f7f-54f3-ef80a19c3604?t=1705660773971>.

<sup>377</sup> Ibidem.

<sup>378</sup> BASE IS, ‘[Con la Soja al Cuello 2023](#)’

<sup>379</sup> Global Witness, “Comidas Contaminadas”.

<sup>380</sup> Ibidem.

<sup>381</sup> OHCHR, “Paraguay Responsible for Human Rights Violations in Context of Massive Agrochemical Fumigations,” accessed April 2, 2024, <https://www.ohchr.org/en/press-releases/2019/08/paraguay-responsible-human-rights-violations-context-massive-agrochemical>.

<sup>382</sup> According to information provided by Bayer/Monsanto in their “list of participating grain traders”, ADM PARAGUAY S.R.L. has signed commercial agreements with Bayer/Monsanto. Intacta RR2 Pro, “Cómo debe entregarse el grano.”

<sup>383</sup> Yamil Esbir Vázquez, “Las empresas transnacionales del complejo agroindustrial: su actuación en el Paraguay,” 2019, <https://dspace.unila.edu.br/bitstream/handle/123456789/5501/TCC%20YAMIL%20%281%29%20%281%29.pdf?sequence=1&isAllowed=y>.

of interest and more broadly in the "núcleos sojeros" in each of the four countries. The regional dimension of these adverse impacts requires a structural approach to risk management by Bayer. The complainant organizations identified four areas where potential and actual adverse impacts are particularly pressing in all of the four countries. These are: i.) socio-territorial conflicts; ii.) deforestation, ecosystems degradation – including biodiversity loss – and other adverse impacts on the environment; iii.) poverty and reduction of food sovereignty; and iv.) negative health impacts. These areas correspond to the breach of several human rights protected by international treaties.

***a. Socio-territorial conflicts and violations of the right to land and the right to food as essential elements of the right to an adequate standard of living***

172. Areas with high intensity of soy production in the four countries are characterized by the presence of socio-territorial conflicts where land tenure rights are disputed.<sup>384</sup> In this context, rural communities, including those living in the areas of interest, are suffering from illegal evictions, poisoning caused by illegal fumigations, and criminalization by soybean producers (see paras. 116 and 153).<sup>385</sup> This situation is deeply concerning, given the vulnerability of these populations, and is exacerbated by the fact that their profound traditional and spiritual connection to their land and territory presupposes access to territories of sufficient size to feed the entire population and maintain that relationship with their land – an expression of their right to life and self-determination.
173. Faced with this situation, peasant and indigenous organizations have initiated complaints and processes to claim their territorial rights, against irregular land ownership by large soybean farms, many of them business partners of agrochemical multinationals operating in the area, such as Bayer.<sup>386</sup> For instance, in Brazil, the Avá Guaraní have even witnessed the use of fumigation as a chemical weapon, i.e. the intentional spraying of villages to reach houses, fields, and the indigenous people themselves.<sup>387</sup> In the Yvypé colony in Paraguay, soybean producers from the fields nearby and bordering the community have brought legal actions against peasant community members for the crime of “land invasion.” In these proceedings – many of them still to be resolved – community members face sentences of up to 10 years in prison.<sup>388</sup>
174. As a result, socio-territorial conflicts have prevented communities from living in security, peace, and dignity in the territories to which they are legally entitled. Communities have no viable alternatives: they must either sell or lease their land, or stay and endure the impacts of fumigations and the degradation of their land, which they cannot properly enjoy in accordance with their traditions. Finally, the dispossession of indigenous peoples and other communities with a traditional and spiritual relationship with their territory has serious and, in some situations, irreparable, repercussions on their right to life and self-determination. The experiences of the communities, who provided information on their situations in the country chapters, are emblematic of the situation of many other indigenous communities in these countries, as reports and decisions of international bodies and civil society organizations confirm.<sup>389</sup>

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<sup>384</sup> Mabel Manzanal, “Territorio, poder y sojización en el Cono Sur latinoamericano: el caso argentino.” *Mundo agrario* 18(37), 2017.

<sup>385</sup> Global Witness, “Comidas Contaminadas”.

<sup>386</sup> Jago Wadley, Toby Hill, “Toxic Takeaways,” December 7, 2022, <https://www.globalwitness.org/en/campaigns/environmental-activists/toxic-takeaways/>.

<sup>387</sup> Conselho Indigenista Missionário, “Lancamento: Soja, milho e pecuária dominam 60% de território do povo Avá-Guarani,” May 2, 2023, <https://cimi.org.br/2023/05/lancamento-soja-milho-e-pecuaria-dominam-60-de-territorio-do-povo-ava-guarani-pr-revela-estudo/>.

<sup>388</sup> Jago Wadley, Toby Hill, “Toxic Takeaways”.

<sup>389</sup> See for Argentina underlying issues in the *Lhaka Honhat v. Argentina* judgment of the IACtHR and further cases mentioned therein related to other Latin American countries, *Case of the Indigenous Communities of the Lhaka Honhat (our land)*



175. Furthermore, the facts presented in the complaint demonstrate that the agribusiness model, directly supported by Bayer GM soy seeds and glyphosate-based pesticides in the four countries, has severe and adverse impacts on access to adequate food, affecting rural, indigenous, and peasant communities on a large scale whose livelihoods depend on the territories they inhabit. On the one hand, glyphosate-based products are used indiscriminately and are the cause of the loss in subsistence crops and dead farm animals in communities living next to soy plantations in the areas of interest (see paras. 132 and 165). This practice is reducing their food sovereignty and severely limiting the availability and accessibility of food for present and future generations. Community members increasingly rely on food products sold on the market, which are often more difficult or expensive to acquire, instead of their own produce (132). On the other hand, the crops that are not destroyed by the glyphosate spraying contain pesticide residues and, as such, diminish the quality of the food available to the communities. In addition, the large increase in land dedicated to soy cultivation implies a decrease in the availability and quantity of food, given the reduced space available for subsistence farming (see paras. 109, 132 and 165). The impacts exemplified in the case studies are also confirmed by additional reports, including UN bodies.<sup>390</sup>

176. The abovementioned impacts constitute a violation of the right to land and the right to food in connection to the right to an adequate standard of living, as recognized by the Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR).<sup>391</sup> According to Art. 11 of the ICESCR, the States parties recognize the right to an adequate standard of living including adequate food, clothing and housing.<sup>392</sup> In addition to the rights explicitly included – such as food and housing – the right to land must also be understood as an essential element of the right to an adequate standard of living. The right to land is necessary for the effective realization of other recognized human rights, such as the right to food.<sup>393</sup> Furthermore, this right is particularly relevant when it comes to indigenous peoples, peasants and people working in rural areas, where land constitutes the basis of their economic livelihood, autonomy and cultural identity.<sup>394</sup> The right to food has been recognized at the international level, inter alia, by the Universal Declaration of Human Rights<sup>395</sup> and at the regional level, by the Inter-American Court of Human Rights (IACtHR).<sup>396</sup> At the national level, the four countries of interest have incorporated it in their

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association v. Argentina, Judgment of February 6, 2020; UN Special Rapporteur on Toxics, UN Doc. A/HRC/45/12/Add2; Fundación Tierra, “Despojo de tierras de comunidades por el agronegocio boliviano”.

<sup>390</sup> E.g. UN Human Rights Committee, Communication No. 2751/2016, *Norma Portillo Cáceres et al v. Paraguay*; UN Special Rapporteur on Toxics, UN Doc. A/HRC/45/12/Add2, para. 24.

<sup>391</sup> UDHR Article 25, p.1. “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”

<sup>392</sup> International Covenant on Economic, Social and Cultural Rights (ICESCR), December 16, 1966, UNGA Res. 2200A XXI, Article 11.

<sup>393</sup> Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 12 on Art. 11 ICESCR, UN Doc. E/C.12/1999/5 (1999); Article 16 of the United Nations Declaration on the Rights of Peasants (UNDROP).

<sup>394</sup> CESCR, General Comment No. 26 on Land and Economic, Social and Cultural Rights, UN Doc. E/C.12/GC/26 (2022), para. 18; CESCR, General Comment No. 12 to Article 11 ICESCR, 13; Arts. 17 and 18 UNDROP; Arts. 10, 25 ff., United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); Human Rights Council, “Right to Land under the United Nations Declaration on the Rights of Indigenous Peoples: a human rights focus,” July 15 2020, UN Doc. A/HRC/45/38, para. 5 ff.

<sup>395</sup> Universal Declaration of Human Rights, Art. 25 (1): “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...”. Further implemented through ICESCR under the fundamental right to be free from hunger and under the right to adequate food Article 11 (2) and Article 11 (1), respectively. UNDROP, Article 15 (1): ‘Peasants and other people working in rural areas have the right to adequate food and the fundamental right to be free from hunger’.

<sup>396</sup> Article 26 American Convention; Article 12 Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (“right to nutrition”).

constitutions.<sup>397</sup> The enjoyment of this right includes "[t]he availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals (...), free from adverse substances and acceptable within a given culture"<sup>398</sup> and "[t]he accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights."<sup>399</sup> The full realization of the right to food also includes the exercise of food sovereignty, which entails the possibility for communities to freely determine which food systems to depend on.<sup>400</sup>

***b. Environmental impacts and violation of the right to a healthy, clean and sustainable environment***

177. Deforestation represents one of the greatest impacts of large-scale cultivation of glyphosate-resistant GM soybeans, which is the second largest cause of tropical deforestation in the world.<sup>401</sup> The Carbon Disclosure Project (CDP) – a global disclosure system for companies, cities, states and regions to manage their environmental impacts – has designated soy as a “forest risk commodity.”<sup>402</sup> The issue is particularly severe in South America, where 97% of global deforestation linked to soybean cultivation occurred between 2001 and 2015.<sup>403</sup> In this same period, soybeans directly transformed 3.9 million hectares of forest (direct deforestation) and had a delayed impact on the remaining 4.0 million hectares (indirect deforestation) in the Southern Cone.<sup>404</sup>
178. The Cerrado, the Amazon and the Atlantic Forest, located in the four countries, are some of the places with the greatest biodiversity on Earth, containing enormous carbon reserves that are of global importance given the essential role they play in the prevention of climate change.<sup>405</sup> Agricultural expansion, particularly large-scale livestock farming and soybean production seriously endanger these and other ecosystems. Although the rate of forest substitution for soybeans has decreased since 2004 – mainly due to forest protection measures in the Brazilian Amazon and the Paraguayan

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<sup>397</sup> Article 6 Brazilian Constitution; Article 16 Bolivian Constitution. In the Paraguayan Constitution, the right to food is explicitly enshrined for children and the elderly in Articles 53, 54 and 57. For society as a whole, the right to food is indirectly enshrined in Articles 137 and 141, which establish the obligatory application in Paraguay of international treaties signed and ratified by the country. Article 75, paragraph 22 Argentine Constitution recognizes the right to food implicitly, by giving the Universal Declaration of Human Rights, the American Convention on Human Rights and the Covenant on Economic, Social and Cultural Rights constitutional hierarchy.

<sup>398</sup> CESCR, General Comment No. 12 to Article 11 ICESCR, 8.

<sup>399</sup> Ibid.

<sup>400</sup> Geneva Academy, “Research brief: The Rights to Food Sovereignty and to Free, Prior and Informed Consent”, March 2018, <https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGPLeasants/Session5/GenevaAcademyResearch.pdf>.

<sup>401</sup> Friends of the Earth, “Forests and Forest Risk Commodities,” accessed February 22, 2024, <https://foe.org/forests-and-forest-risk-commodities/>.

<sup>402</sup> CDP Disclosure Insight Action, “CDP Research highlights deforestation risk in consumer goods supply chains,” October 28, 2020, <https://www.cdp.net/en/articles/media/cdp-research-highlights-deforestation-risk-in-consumer-goods-supply-chains>.

<sup>403</sup> World Resources Institute, “Deforestation Linked to Agriculture,” accessed April 19, 2024, <https://research.wri.org/gfr/forest-extent-indicators/deforestation-agriculture>.

<sup>404</sup> Soybeans can have a direct impact on forests when land is cleared and immediately converted to soybean production. Direct deforestation corresponds to any forest loss that occurred three years before the establishment of soybeans. Likewise, soybeans can have a delayed impact when forests are cleared and used for other purposes for several years (three or more years) before soybean establishment. <https://www.globalforestwatch.org/blog/commodities/soy-production-forests-south-america/>; Martina Schneider et al, “Soy Production’s Impact on Forests in South America,” December 3, 2021. <https://www.globalforestwatch.org/blog/commodities/soy-production-forests-south-america>; James Henderson et al, “The Paraguayan Chaco at a Crossroads: Drivers of an Emerging Soybean Frontier.” *Regional Environmental Change* 21 (3), <https://doi.org/10.1007/s10113-021-01804-z>, 72.

<sup>405</sup> Global Forest Watch, “Soy Production’s Impact on Forests in South America,” , December 3, 2021, <https://www.globalforestwatch.org/blog/insights/soy-production-forests-south-america>; WWF, “Risking-the-Amazon,” November 2022, <https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Amazonas/WWF-UK-Technical-Briefing-Risking-the-amazon.pdf>, 12; GIZ, “Biodiversity Conservation of the Atlantic Forest and Climate Change Adaptation Go Hand in Hand,” accessed 18 April 2024, <https://www.giz.de/en/worldwide/23672.html>. Accessed.

Atlantic Forest – soybeans continue to contribute directly and indirectly to large areas of deforestation in the Southern Cone.<sup>406</sup> Either protection measures are ineffective – for instance, the Paraguayan Atlantic Forest remains exposed to the risk of illegal deforestation<sup>407</sup> – or deforestation has moved to other areas.<sup>408</sup> Recent studies also observe that soybean crops, and with them the risk of deforestation, have moved to other natural ecosystems, in particular the Brazilian savanna of the Cerrado and the Gran Chaco in Argentina, Paraguay and Bolivia (see para. 34).<sup>409</sup>

179. Furthermore, the direct and excessive use of pesticides, the lack of respect for legal fumigation limits and the poor management of pesticide canisters contribute to increasing pesticide residues in the soil and water wells for community use. Thus, pesticide residues contaminate soil and water, remain on crops and, eventually, enter the food chain. Such problems are cross-cutting for all the localities that are the subject of this complaint. Traces of glyphosate have been found in watercourses of the Pergamino stream, where the water is no longer suitable for human consumption. Similar findings exist on the water sources of the Brazilian villages of Y'Hovy, Pohã Renda and Ocoy and in drainage waters and water courses in the areas of Canindeyú and San Pedro in Paraguay. Pesticide residues also affect rainfall. In Brazil, Bolivia and Argentina, it has been confirmed that raindrops containing traces of glyphosate and other associated herbicides, penetrate into lakes and rivers in communities, causing poisoning and loss of crops (see paras. 97, 112, and 133).
180. The use of pesticides in fields adjacent to community lands, including their own farms for personal consumption, as well as the remaining small areas of forests, has resulted in the destruction of plants, reduced biodiversity, and adversely affected the health of local wildlife. Thus, butterflies, domestic and wild animals, and fish in the ecosystem of the regions have been severely affected.
181. These impacts constitute a breach of the right to a clean, healthy and sustainable environment as enshrined in the constitutions of the countries subject to this complaint, which Bayer should respect.<sup>410</sup> Internationally, the UN General Assembly (UNGA)<sup>411</sup> and regionally, the IACtHR have also recognized this right.<sup>412</sup> UNGA Resolution 76/300 recognizes the indivisible nature of the right to a healthy, clean and sustainable environment by stating that “environmental damage has negative implications, both direct and indirect, for the effective enjoyment of all human rights.”<sup>413</sup> This was already confirmed earlier by the IACtHR, in its Advisory Opinion 23/17 of 2017, through which it determined the autonomous character of this right in both its individual and collective dimension.<sup>414</sup> The IACtHR established five criteria for the full enjoyment of the right to a healthy, clean and

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<sup>406</sup> Maria Tildesley, “Soy deforestation risk in Paraguay continues despite decline”.

<sup>407</sup> Ibid; Benitez, Aldo. 2021. “El Comienzo del Fin Del Bosque Atlántico.” Mongabay Environmental News, November 11, 2021, sec. Environmental news. <https://es.mongabay.com/2021/11/el-comienzo-del-fin-del-bosque-atlantico/>.

<sup>408</sup> Schneider et al, “Soy Production's Impact on Forests in South America”; Maria Tildesley, “Soy deforestation risk in Paraguay continues despite decline”.

<sup>409</sup> Xiao-Peng Song et al., “Massive Soybean Expansion in South America since 2000 and Implications for Conservation,” *Nature Sustainability*, 2021, <https://doi.org/10.1038/s41893-021-00729-z>, Verena Fehlenberg et al., “The Role of Soybean Production”.

<sup>410</sup> In Argentina, Article 41 of the Constitution establishes “All inhabitants have the right to a healthy, balanced environment, suitable for human development and for productive activities to meet the needs of the present without compromising those of future generations (...).” In Brazil, Article 225 of the Constitution mandates “(...) Everyone has the right to an ecologically environment, a common use good for the people and essential to a healthy quality of life.” In Paraguay, Article 7 of the Constitution, recognizes the right of individuals to “(...) live in a healthy and ecologically balanced environment.” In Bolivia, Article 33 of the Constitution acknowledges the “(...) right to a healthy, protected and balanced environment.”

<sup>411</sup> UN General Assembly, Resolution 76/300, The human rights to a clean, healthy and sustainable environment, July 28, 2022, UN Doc. A/RES//&/300.

<sup>412</sup> Corte Interamericana de Derechos Humanos, Opinión Consultativa OC-23/17, Medio Ambiente y Derechos Humanos, November 15, 2017, [https://www.corteidh.or.cr/docs/opiniones/seriea\\_23\\_esp.pdf](https://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf).

<sup>413</sup> UN General Assembly, Resolution 76/300.

<sup>414</sup> Corte Interamericana de Derechos Humanos, Opinión Consultativa OC-23/17.

sustainable environment, namely availability, accessibility, sustainability, quality [acceptability] and adaptability.<sup>415</sup> According to the UN Special Rapporteur on human rights and the environment, the substantive elements of the enjoyment of the right to a healthy, clean and sustainable environment include, among others, clean air, access to safe drinking water supply, food produced in a healthy and sustainable manner; non-toxic environments in which to live, work, study and play; and healthy biodiversity and ecosystems.<sup>416</sup>

***c. Health impacts and violation of the right to health***

182. As already highlighted by the United Nations Committee on Economic, Social and Cultural Rights in a decision related to Paraguay, “pesticide fumigation poses a foreseeable threat to the health of individuals, having contaminated the rivers where they fish and bathe, the well water they drink, the fruit trees, the crops and the farm animals that are their food source.”<sup>417</sup> This statement summarizes well the regional situation of communities neighboring soybean fields and echoes the results of our research not only in Paraguay but in all four countries.
183. Noncompliance with regulations on the application of pesticides in the four countries has aggravated this already severe problem, generating serious consequences for the health of communities neighboring soybean fields in both rural and semi-rural settings (see paras. 87, 109, 121, 159 and 160). Poisoning has also led to serious chronic illnesses that have considerably affected the physical and mental health of the inhabitants, even causing death (see para. 90). Particularly in the case of Pergamino, local soy producers used Bayer’s Roundup products in such a way that has resulted in severe and irreparable impacts on the health of the people of Barrio Villa Alicia. In Brazil, due to the overall situation, suicide rates are very high in indigenous communities.<sup>418</sup> In the Yvypé colony in Paraguay, criminalization, including imprisonments, and violent evictions (see para. 158154) has also had an impact on the health of the community members concerned.
184. These impacts constitute a violation of the right to physical and mental health, as recognized by Art. 12 of the ICESCR.<sup>419</sup> The right to health is inclusive and encompasses a broad set of factors that can contribute to a healthy life, including safe drinking water, adequate sanitation, safe food and healthy working conditions.<sup>420</sup> At the Inter-American level, the right to health is enshrined in the Protocol of San Salvador (Art. 10). It is also enshrined in the constitutions of the four countries to which this complaint refers.<sup>421</sup>

**PART III. LEGAL ASSESSMENT**

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<sup>415</sup> Ibid.

<sup>416</sup> UN Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, “Good Practices on the right to a safe, clean, healthy and sustainable environment,” UN Doc. A/HRC/43/53, December 30, 2019, <https://www.ohchr.org/es/documents/thematic-reports/ahrc4353-good-practices-right-safe-clean-healthy-and-sustainable>.

<sup>417</sup> UN Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, “Human Rights Obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment,” UN Doc. A/76/179, July 19, 2021, para. 35.

<sup>418</sup> Paiva de Araujo JA et al, “Suicide among Indigenous Peoples in Brazil from 2000 to 2020: a descriptive study,” *The Lancet Regional Health – Americas*, September 2023.

<sup>419</sup> Article 12 (1) ICESCR.

<sup>420</sup> CESCR, General Comment No. 14, the right to the highest attainable standard of health, UN Doc. E/C.12/2000/4, 4.

<sup>421</sup> Articles 42 and 75 Argentine Constitution; Articles 196 Brazilian Constitution, Article 68 Paraguayan Constitution; Article 18 Bolivian Constitution.

## **G. Bayer's Policies, Conduct and Omission to Act Violate the OECD Guidelines**

185. The following chapter gives a detailed account on how Bayer fails to meet the Guidelines' Human Rights and Environmental Due Diligence Framework. In order to analyze Bayer's policies and activities against the applicable legal framework, the complainant organizations rely on the Guidelines, complemented by the United Nations Guiding Principles on Business and Human Rights (UNGPs), where applicable. In addition, supplementary documents developed by the OECD to guide companies in practically implementing the provisions of the Guidelines will be referred to, such as the OECD Due Diligence Guidance for Responsible Business Conduct (OECD Due Diligence Guidance).<sup>422</sup> Finally, the complainants relied on sector guidance, such as the OECD-FAO Guidance and the OECD-FAO Handbook on Deforestation, as they are designed to help enterprises "observe existing standards for RBC [responsible business conduct]" and guide NCPs "in their efforts to promote the OECD Guidelines and in clarifying existing standards in the agricultural sector."<sup>423</sup>

186. In this respect, the OECD Due Diligence Guidance sets out a six-step framework:<sup>424</sup> (1) to embed RBC into the enterprise's policies and management systems; to undertake due diligence by (2) identifying actual or potential adverse impacts on RBC issues, (3) ceasing, preventing or mitigating them, (4) tracking implementation and results, (5) communicating how impacts are addressed; and (6) to enable remediation when appropriate. The Submitting Organizations argue that Bayer falls short of the responsibilities under the Guidelines in all six steps when it comes to GM soy seeds and pesticides business in the four countries. As a result, Bayer is violating provisions 2, 11-13 of Chapter II. General Policies; provisions 1, 2 b, h, 3a, b, d of Chapter III. Disclosure; provisions 1-3, 5-6 of Chapter IV. Human Rights, as well as provisions 1 a-b, d-e, 2, 5 b-c of Chapter VI. Environment of the OECD Guidelines.

### **1. Failure to embed downstream risks and actual adverse impacts of its soy seeds and pesticides business into enterprise policies**

187. According to the OECD Due Diligence Guidance, the first step of the Human Rights and Environmental Due Diligence Framework is to embed responsible business conduct into policies and management systems. More specifically, companies should "develop specific policies on the enterprise's most significant risks, building on findings from its assessment of risks, in order to provide guidance on the enterprise's specific approach to addressing those risks."<sup>425</sup>

188. While Bayer has designed and integrated several policies related to the protection of human rights and the environment into its company structure,<sup>426</sup> the content of such policies fails to address sufficiently the risks and actual adverse impacts of its soy seed and related pesticides business in the four countries. This is mainly because the company does not engage in proper risk identification and assessment, as well as due to the lack of the corresponding responsibility to cease, prevent and mitigate actual impacts, as explained in the following sections.

### **2. Bayer's failure to adequately identify and assess human rights and environmental risks and actual impacts**

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<sup>422</sup> OECD Due Diligence Guidance for Responsible Business Conduct, 2018, <https://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>.

<sup>423</sup> OECD-FAO Guidance, 15.

<sup>424</sup> OECD Due Diligence Guidance, 21. Similarly, the OECD FAO Guidance adopted earlier, but complementary to the Guidelines, establishes a five-step framework for risk-based due diligence. OECD-FAO Guidance, 19.

<sup>425</sup> OECD Due Diligence Guidance, 22.

<sup>426</sup> E.g. Bayer AG, "Human Rights Policy"; Bayer AG, "HSE Key Requirements," March 2018, <https://www.bayer.com/sites/default/files/20180329-bayer-hse-brochure-de.pdf>; Bayer AG, "Sustainability Policy," October 1, 2022, [https://www.bayer.com/sites/default/files/VDS%20Sustainability%20Policy%20Update\\_EN.pdf](https://www.bayer.com/sites/default/files/VDS%20Sustainability%20Policy%20Update_EN.pdf).

189. According to provision 11, Chapter II. General Policies, companies should "conduct risk-based due diligence (...) to identify (...) actual and potential adverse impacts."<sup>427</sup> This expectation is reiterated in Provision 1, Chapter IV, Human Rights, which requires that companies "should address adverse human rights impacts with which they are involved," including taking adequate measures for their identification.<sup>428</sup> Additionally, pursuant to provision 1 a), Chapter VI. Environment, companies should carry out risk-based due diligence for adverse environmental impacts, "including through identifying and assessing adverse environmental impacts associated with an enterprise's operations, products or services."<sup>429</sup> The nature and scope of due diligence should be appropriate to the context of a company's operations, the size of the company, its position in supply chains, its involvement with an adverse impact, and the nature of its products and services.<sup>430</sup>

190. In addition, according to the OECD-FAO Guidance companies should then carry out initial assessments for the identified risks. Such assessments should identify, among others, any "red flags" which would warrant enhanced due diligence.<sup>431</sup> These assessments can focus on the context in which companies operate to "categorize sourcing regions and countries as low, medium or high risk for specific risk areas by assessing the regulatory framework, political context, civil liberties and socio-economic environment."<sup>432</sup> For the downstream side of agricultural value chains, the OECD-FAO Guidance specifies that "consumer-facing enterprises (...) should systematically work towards a complete picture of their business relationships."<sup>433</sup>

191. While Bayer's current policies describe its overall due diligence process broadly in accordance with the language of the OECD Guidelines,<sup>434</sup> the company nevertheless fails to properly identify and prioritize actual and potential adverse impacts as required by the Guidelines.

*a. Lack of sectoral and geographical analysis in scoping exercise*

192. According to the OECD Due Diligence Guidance, risk identification as a first step of due diligence requires companies to "carry out a broad scoping exercise to identify, all areas of the business, across its operations and relationships (...) where risks are most likely to be present and most significant. Relevant elements include, among others, information about sectoral, geographic, product and enterprises risk factors, including known risks the enterprise has faced or is likely to face."<sup>435</sup>

193. The OECD Due Diligence Guidance describes sectoral risks as "risks that are prevalent within a sector globally as a result of the characteristics of the sector, its activities, its products and production processes."<sup>436</sup>

194. While Bayer generally distinguishes its corporate activities according to company divisions in agricultural solutions and health products, the description of its general as well as its human rights related risk identification processes do not reflect a sector-specific analysis.<sup>437</sup> The company states

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<sup>427</sup> OECD Guidelines, Chapter II. General policies, para. 11.

<sup>428</sup> Ibid, Chapter IV, Human Rights, provision 1 and commentary para. 46.

<sup>429</sup> Ibid, Chapter VI. Environment, provision 1 a), 33.

<sup>430</sup> Ibid, Chapter II. General policies, para. 19.

<sup>431</sup> OECD-FAO Guidance, 34.

<sup>432</sup> Ibid.

<sup>433</sup> Ibid, 33.

<sup>434</sup> Bayer AG, "Transparency in Supply Chains Act Statement 2022," [https://www.bayer.com/sites/default/files/2022%20-%20MSAStatement\\_CA\\_Upload.pdf](https://www.bayer.com/sites/default/files/2022%20-%20MSAStatement_CA_Upload.pdf), 7.

<sup>435</sup> OECD Due Diligence Guidance, 25.

<sup>436</sup> Ibid, 62.

<sup>437</sup> Bayer AG, "Transparency in Supply Chains Act Statement 2022"; Bayer AG, "Sustainability Report 2023," <https://www.bayer.com/sites/default/files/2024-03/bayer-sustainability-report-2023.pdf>, 2.10 (p. 36), 5 (pp.103-108)

in this regard: “Risks are identified and assessed at a superordinate level in a two-process: the first step is to identify potential human rights risks that we could encounter either through our business activities, products and services or in our value chain.”<sup>438</sup> The company’s Transparency in Supply Chains Act Statement adds a few methodological characteristics of the scoping: “To determine potentially adverse effects of our operations on human rights, we use our Group-wide integrated risk management system. (...) The risk analysis was conducted together with external business and human rights experts. Alongside the involvement of internal experts, civil society organizations were also consulted by way of interviews.”<sup>439</sup> A sectoral analysis for actual and potential adverse impacts for its agricultural sector managed in its Crop Science line of business is, however, lacking entirely. This shortcoming is particularly serious given that, as the previous section showed, negative human rights and environmental impacts in the four countries are widespread and severe (see Cross-cutting adverse human rights and environmental impacts) and should be known to the company (see para. 246). Furthermore, these impacts are consistent with those that the OECD-FAO Guidance explicitly identifies as risks to the agricultural sector, including: health impacts due to pesticide intoxication, land tenure risks, food security threats due to large-scale use of land for agricultural production, and negative impacts on the environment, including land degradation, water resource depletion and biodiversity loss.<sup>440</sup>

195. Moreover, for the purpose of this scoping exercise the OECD-FAO Guidance provides that enterprises should identify: “i) relevant rights holders and stakeholders, particularly women, likely to be affected by the operations on an ongoing basis; ii) any business partner that risks not undertaking proper due diligence; iii) any ‘red flags’ (...); iv) any reasonable inconsistency between the factual circumstances of the operations and the enterprise policy for RBC.”<sup>441</sup>

196. An area constitutes a “red flag location” when operations are planned in or agricultural products originate from areas affected by conflict or considered high-risk areas,<sup>442</sup> where tenure rights are poorly defined or disputed, where human rights violations have been reported, or where communities face food insecurity or water scarcity and are affected by environmental degradation. Similarly, according to the OECD Due Diligence Guidance, “geographic risk factors can generally be classified as those related to the regulatory framework (e.g. alignment with international conventions), governance (e.g. strength of inspectorates, rule of law, level of corruption), socio-economic context (e.g. poverty and education rates, vulnerability and discrimination of specific populations) and political context (e.g. presence of conflict).”<sup>443</sup>

197. For none of the four countries are specific human rights or environmental policies available that would indicate the prior identification of potentially affected rights-holders, especially the communities living in the soybean plantation areas in the four countries, nor of particular geographical risks or red flag locations. Instead, country websites of Argentina, Paraguay and Bolivia are part of Bayer’s Cono Sur webpage, which merely includes references to the group-wide policies of the headquarters.<sup>444</sup> On Bayer’s Brazil website, no public document defines a specific human rights

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<sup>438</sup> Bayer AG, “Sustainability Report 2023,” 5.2 (p.105)

<sup>439</sup> Bayer AG, “Transparency in Supply Chains Act Statement 2022,” III. Risk Identification and Assessment, 8.

<sup>440</sup> OECD-FAO Guidance, Annex A.

<sup>441</sup> Ibid, 33.

<sup>442</sup> Conflict-affected and high-risk areas are identified by the presence of armed conflict, widespread violence or other risks of harm to people. High-risk areas may include areas of political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure, and widespread violence. These areas are often characterized by widespread human rights abuses and violations of national or international law. OECD-FAO Guidance, step 2, section 2.2, p. 35.

<sup>443</sup> OECD Due Diligence Guidance, 63.

<sup>444</sup> E.g. “Nuestra estrategia de sustentabilidad,” Bayer Cono Sur website, April 19, 2022, <https://www.conosur.bayer.com/es/estrategia-de-sustentabilidad>.

or general environmental policy for the Brazilian context. Instead, only the global policies of the company are summarized, without any indication of a prior risk identification reflective of the geographical context and the particularities of the Brazilian market.<sup>445</sup>

198. Based on Bayer’s description of its due diligence process in documents prepared by the headquarters for the entire group, the geographical context of its operations is also not included as an analytical factor in its scoping exercise. Only after the company has identified its six human rights priority risk areas, are these reviewed by taking into account geographical particularities – however, only for its upstream value chain.<sup>446</sup> At this level of analysis, Bayer also mentions its upstream seed supply chain, however only in relation to the risk of child labor, for which the company identifies particular high-risk countries<sup>447</sup>

199. As a result, Bayer fails to take into account the particular geographic context of the four countries and to identify “red flag locations” as recommended by the relevant sectorial Guidance. This is especially concerning, given that the socioeconomic context (poverty, vulnerability and discrimination), the prevalence of local land conflicts, a lax regulatory regime and lack of enforcement (non-respect for minimum spraying distances), as well as the concerning environmental degradation all constitute red flags and point to the necessity of subsequently prioritizing risks of certain adverse impacts or certain locations. By neither carrying out a sectoral nor a geographic scoping exercise, risks of adverse impacts connected to its soy seed and pesticides business in certain countries are excluded from the outset and are therefore absent from subsequent assessment and prioritization.

***b. Risk identification for the downstream sector of Bayer’s business fails to meet the requirements of the Guidelines.***

200. According to the Guidelines, risk identification as part of due diligence should be carried out for all the company’s “business relationships.” This includes, among others, relationships with business partners, subcontractors, franchisees, customers and joint venture partners, or business partners that receive, license, purchase or use products or services of the company, and any other non-state or state entity directly linked to its operations, products or services.<sup>448</sup> This means that the scope of a company's responsibility to respect human rights under the Guidelines covers impacts across its entire value chain, including downstream business relationships.<sup>449</sup>

201. In this regard, the OECD-FAO Guidance provides that enterprises should identify “red flag business partners,” namely partners who are known not to adhere to the standards contained in the Guidelines or who supply agricultural products from or operate in red flag locations.<sup>450</sup> Despite the fact that several business partners in the four countries operate in red flag zones, as indicated above, there is no evidence that Bayer has identified “red flag business partners.”<sup>451</sup>

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<sup>445</sup> Bayer AG, “Bayer Brazil – Direitos Humanos,” accessed April 19, 2024, <https://www.bayer.com.br/pt/sustentabilidade/direitos-humanos>.

<sup>446</sup> Bayer AG, “Transparency in Supply Chains Act Statement 2022,” 9.

<sup>447</sup> Bayer AG, “Sustainability Report 2023,” 5.3, pp.103-107.

<sup>448</sup> OECD Guidelines, Chapter II. General policies, para. 17.

<sup>449</sup> OHCHR, Office of the United Nations High Commissioner for Human Rights. 2022. “Mandating Downstream Human Rights Due Diligence.” <https://www.ohchr.org/sites/default/files/documents/issues/business/2022-09-13/mandating-downstream-hrdd.pdf>.

<sup>450</sup> OECD-FAO Guidance, Step 2, Section 2.2, p. 35.

<sup>451</sup> Ibid, 34.



202. Although Bayer generally claims that its Human Rights Policy (HRP) extends to both its upstream and downstream value chain,<sup>452</sup> the description of Bayer's risk assessment focuses exclusively on upstream suppliers. Bayer's prioritized risk areas confirm this approach since five of the six priorities address core labor issues at upstream suppliers (n 227). In addition, the company explains that it carries out annually an in-depth analysis of its direct suppliers that includes a specific country perspective and internationally recognized country risk classifications.<sup>453</sup> Such additional risk analysis is, however, only done for the upstream supply base. While these efforts demonstrate the feasibility of a country- and risk-specific assessment for the upstream side of its business, a similar analysis does not exist for its direct and major downstream business relationships, falling short of the expectations of the OECD Guidelines already at the early and very essential level of risk identification.

*c. Risk of misuse of product is insufficiently addressed*

203. Adverse impacts can also be connected to products or services. The Guidelines state in this regard that "risk-based due diligence in relation to a company's products or services must take into account known or reasonably foreseeable circumstances relating to the use of the product or service in accordance with its intended purpose, or under conditions of reasonably foreseeable improper use or misuse, which may give rise to adverse impacts."<sup>454</sup>

204. In this regard, the OECD-FAO Guidance, stipulates, that as part of the risk identification process, enterprises should identify "red flag products." These are agricultural products that are "known to have an adverse environmental, social or human rights impact in certain contexts."<sup>455</sup> In this regard, the OCED-FAO Handbook states that soybean production is often linked to deforestation or forest degradation, and therefore, soybeans are classified as a red flag product.<sup>456</sup> Along these lines, Bayer's GM soybeans, along with their glyphosate-based pesticide solutions, should be considered red flag products in the context of the soybean-producing regions of the four countries. This is supported by the information provided on the specific cases highlighted in this complaint, along with reports documenting the environmental degradation and human rights violations linked to the large-scale cultivation of genetically modified soybeans and the widespread and indiscriminate use of glyphosate-based products in the four countries (see Environmental and Human Rights Impacts in the Southern Cone).

205. Although Bayer has developed a Product Stewardship Policy that will be analyzed in more detail below, the foreseeable improper use or misuse of its products leading to adverse impacts on the rights of local communities living in soybean production areas is currently not mentioned as part of Bayer's scoping exercise to identify prevalent actual and potential adverse impacts. Bayer is relying on its general approach that its products are safe, when used according to labels. However, as the case studies in the current complaint show, there is a high risk that Bayer's customers will use its products without complying with national regulations on minimum distances for the application of pesticides or the construction of green barriers, a common practice in the areas of interest (see paras, 121, 132, 157, 159 and 160). Furthermore, as exemplified by the cases of the Ava Guaraní communities (Brazil) and Colonias Yeruti e Yvypé (Paraguay), pesticides are routinely sprayed directly on the homes and subsistence crops of peasant and indigenous communities (see para 132 and 158). This alarming tactic even functions as a form of intimidation and violence in the context of land conflicts

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<sup>452</sup> Bayer AG, "Human Rights Policy 2023", Objective 2.1.

<sup>453</sup> Bayer AG, "Transparency in Supply Chains Act Statement 2022," 9.

<sup>454</sup> OECD Guidelines, Chapter II. General policies para. 20.

<sup>455</sup> OECD-FAO Guidance, Step 2, Section 2.2, p. 35.

<sup>456</sup> OECD-FAO Handbook, p.15 and p. 19.

between large grain producers and local communities (see para 173). Similarly, in the case of Argentina, urban residents surrounded by large soybean fields that directly border their homes report noncompliance with the regulations on minimum distance (see para. 87).

206. In its current approach, Bayer's due diligence does not mention the risk of foreseeable misuse of its products as an element of its scoping exercise, despite explicit mention of this factor in the OECD Guidelines. Similarly, Bayer fails to identify its GM seeds and glyphosate-based pesticides as red flag products, as required by the OECD-FAO Guidance and the OECD-FAO Handbook.<sup>457</sup>

***d. Failure to meaningfully engage with potentially affected right holders during the risk identification process***

207. According to the Guidelines, when identifying human rights and environmental risks, companies should pay particular attention to potential adverse impacts on individuals within groups or populations that may be at higher risk of vulnerability or marginalization.<sup>458</sup> This includes, for example, human rights defenders, individually or as members of certain groups or populations, including Indigenous Peoples, who may be at greater risk due to their marginalization, vulnerability or other circumstances.<sup>459</sup> In the environmental chapter, the Guidelines also mentions that adverse environmental impacts are often closely interrelated with other issues covered by the Guidelines, including impacts on communities, access to livelihoods or land tenure rights.<sup>460</sup> The OECD-FAO Guidance makes clear in this regard that rights-holders are not only those with officially recognized tenure rights but also communities with collective, indigenous and customary tenure rights.<sup>461</sup>

208. Once significant areas of human rights risk have been identified, companies should thus consult and engage with affected and potentially affected rights-holders to gather information on negative impacts and risks.<sup>462</sup> This engagement with stakeholders should include local communities, individuals or groups – with special consideration given to indigenous peoples, groups in situations of vulnerability or marginalization, or legitimate tenure rights – when they are or may be affected by adverse environmental impacts related to their products.<sup>463</sup> Within the context of this engagement, enterprises should “refrain from and take steps to prevent the use of reprisals, including by entities with which the enterprise has a business relationship, against any persons or groups that may seek to or do investigate or raise concerns regarding actual or potential adverse impacts associated with the enterprise’s operations, products or services. This includes promoting an environment in which individuals and groups feel safe to raise concerns and, where relevant, contributing to the remediation of adverse impacts of reprisals when they occur.”<sup>464</sup>

209. Bayer claims to be "constantly alert" regarding the specific needs of indigenous peoples and disadvantaged or vulnerable groups throughout its value chain, as well as to respect their rights.<sup>465</sup> However, the actual and potential human rights risks linked to Bayer’s products in relation to these groups are not addressed in any of the company's public documents. Similarly, there are no details on how exactly this translates into processes and actions to prevent or mitigate potential adverse impacts.

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<sup>457</sup> OECD-FAO Guidance, Step 2, Section 2.2, p. 35; OECD-FAO Handbook, p.15 and p. 19.

<sup>458</sup> OECD Due Diligence Guidance, 27; OECD Guidelines, Chapter IV. Human rights, para. 45.

<sup>459</sup> OECD Guidelines, Chapter IV. Human right, para. (45).

<sup>460</sup> Ibid, Chapter VI. Environment, para. 70.

<sup>461</sup> OECD-FAO Guidance, 57.

<sup>462</sup> OECD Due Diligence Guidance, 27.

<sup>463</sup> OECD Guidelines, Chapter VI. Environment, para. 72.

<sup>464</sup> OECD Guidelines, Chapter II. General policies, para. 10.

<sup>465</sup> Bayer AG, “Human Rights Policy,” 9.

210. On the most abstract level, Bayer’s globalized principles and values include talking to affected stakeholders and civil society organizations (e.g. BASE principles). ). Neither its human rights policy nor its latest sustainability report mention any explicit consultation with affected stakeholders. Only its “Transparency in Supply Chains Act Statement” states that Bayer’s risk analysis was conducted together with external business and human rights experts, alongside internal experts, while civil society organizations were also consulted by way of interviews.<sup>466</sup> However, the company does not mention to what extent consultations have been carried out with representatives of indigenous or peasant communities to identify and assess prevalent risks.

211. In sum, there is no evidence that Bayer has engaged meaningfully with relevant rights-holders, such as indigenous and peasant communities living adjacent to soybean plantations overall, and particularly not with those who are part of the specific cases presented in this complaint.

*e. Environmental adverse impacts are not systematically identified*

212. Pursuant to Chapter VI of the Guidelines (environment), enterprises should carry out risk-based due diligence, “including through identifying and assessing adverse environmental impacts associated with an enterprise’s operations, products or services, including through collection and evaluation of adequate and timely information.”<sup>467</sup> Furthermore, the environmental impacts a company should include in this risk identification include climate change, loss of biodiversity, deforestation, degradation and/or contamination of land and water, and poor management of waste and hazardous substances.<sup>468</sup>

213. Bayer claims that its risk management system also takes into account any potential adverse effects on people and/or the environment.<sup>469</sup> Bayer also recognizes that agriculture is one of the fundamental causes of the decline of biodiversity, due to the expansion of cropland in natural habitats (change in land use), the homogenization of the landscape (increased size of fields, fewer structural elements, closer crop rotations) and the intensification of land use (use of phytosanitary products).<sup>470</sup> The company has developed a separate management process for environmental risks, which ultimately answers to the CEO and is assisted by the same Public Affairs, Science, Sustainability & HSE Enabling Function that also supports Human Rights management.<sup>471</sup>

214. Bayer explains its environmental risk management system in its Sustainability Report 2023. The system differs completely from its human rights risk management practices. It does not mention a scoping exercise related to risks of actual and potential adverse environmental impacts linked to its business relationships whatsoever. Instead, Bayer’s HSE key requirements operationalize environmental risk identification and further management processes, but focus only on Bayer sites and workplaces<sup>472</sup> and do not cover its entire value chain as required by the OECD Guidelines. For these Bayer sites, the environment management system prioritizes three areas for environmental protection, without providing any reasons why these areas are prioritized: the environment management system prioritizes three areas for environmental protection: avoiding waste/emissions; recycling in all cases where it is feasible to do so by reasonable means; and minimizing

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<sup>466</sup> Bayer AG, “Transparency in Supply Chains Act,” 8.

<sup>467</sup> OECD Guidelines, Chapter VI. Environment, 33.

<sup>468</sup> Ibid.

<sup>469</sup> Bayer AG, “Sustainability Report 2023,” 36.

<sup>470</sup> Ibid, 78.

<sup>471</sup> Ibid, 36.

<sup>472</sup> Bayer AG, “HSE Key Requirements,”.

waste/emissions that cannot be avoided or recycled.<sup>473</sup> Deforestation, loss of biodiversity and pollution of water sources, for which the Guidelines also require risk identification are not covered.<sup>474</sup>

215. In sum, a systematic scoping exercise that would cover its entire value chain and include the adverse environmental impacts a company should address according to Chapter VI of the OECD Guidelines including deforestation, loss of biodiversity and water pollution is nonexistent. A country or sector specific analysis is lacking as well.

*f. Identification of deforestation risks does not take into account sector-specific guidance*

216. The OECD-FAO Guidance is supplemented by the OECD-FAO Handbook, which has identified the soybean sector as one of the commodities often linked to deforestation or forest degradation.<sup>475</sup> According to the manual, deforestation risk should be mapped by starting with a high-level overview of company products, services and suppliers. “The extent of information collected on suppliers and business partners depends on the severity of the deforestation risk.”<sup>476</sup> Moreover, at this stage, mapping includes “the source of the commodities or products derived from these commodities, including the country of production, source area and, where appropriate, the plot of land production.”<sup>477</sup> Enterprises should then carry out due diligence in locations with particular features, for which the OECD-FAO Handbook also uses the term “red flags.” Three different categories of red flags exist according to the Handbook: locations, sectors or products and business partners. The Handbook defines each of them in turn. Red flag locations are those that feature one or a combination of the following characteristics:

- “Areas defined or known as protected areas, collectively managed areas (under tenure rights of local communities or (Indigenous Peoples), high conservation value areas, or high carbon stock areas
- Areas with high levels of rural poverty and a reliance on agriculture as a main form of income.
- Areas where local communities and Indigenous Peoples are present
- Areas which are considered as at high risk of conflict
- Weak protection of human rights, Indigenous Peoples’ rights or poorly defined or contested land tenure rights
- Weak governance and implementation of the rule of law, and corruption
- Weak levels of forest protection by national or local governments”<sup>478</sup>

217. Similarly, the Handbook defines red flag sectors or products as “commodities known often to be linked to deforestation or forest degradation” and lists certain characteristics that turn business partners into red flag business partners. These include:

- “Suppliers known to trade in commodities or source from forests
- Suppliers:
  - Known to have a poor track record vis-à-vis deforestation
  - Known to have sourced commodities from red flag locations
  - Known to operate in red flag locations
  - Known not to have observed internationally agreed standards such as those contained the OECD-FAO Guidance”<sup>479</sup>

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<sup>473</sup> Bayer AG, “Sustainability Report 2023,” 136.

<sup>474</sup> OECD Guidelines, Chapter VI. Environment, 33.

<sup>475</sup> OECD-FAO Handbook, 15, 19.

<sup>476</sup> Ibid, 30.

<sup>477</sup> Ibid.

<sup>478</sup> Ibid.

<sup>479</sup> Ibid, 31.

218. Comparing Bayer’s policies and processes with the above expectations, the company falls short of integrating any of the relevant concepts into its risk identification processes concerning deforestation. While Bayer recognizes that agriculture has historically been among the major drivers of deforestation,<sup>480</sup> its Position on Deforestation does not include a mapping of deforestation risks along its value chain. Neither do the environmental risk management processes described in its sustainability report. Bayer does not analyze locations, products or business partners at all at the level of structural value chain mapping and risk analysis.
219. The areas of interest described in this complaint are marked by several of the characteristics the manual uses to identify red flags: high levels of rural poverty, dependence on agriculture as the main form of income, presence of local communities and indigenous peoples, contestation about land tenure, weak levels of forest protection by national or local governments, and finally, weak governance and implementation of rule of law.
220. In addition, the fact that with on average more than 50% of arable land in Argentina, Paraguay, Brazil and Bolivia currently cultivated with glyphosate-resistant soybeans (see para. 44), predominantly using Bayer technology, the extent and irremediability of the potential and actual environmental impacts linked to Bayer products is exponential. These impacts arise not only from the use of Bayer's glyphosate and other agrochemicals but also, importantly, from the considerable increase in land needed for soy cultivation in the region.
221. This reality is coupled with massive deforestation and the loss of biodiversity and the degradation of ecosystems in these four countries. Important ecosystems such as the Atlantic Forest in Paraguay, the Cerrado in Brazil, the Chaco in Argentina and the Chiquitania in Bolivia, where Bayer markets its products, have been or are being deforested for the expansion of soybean cultivation (see para. 178).
222. As a result, the soybean cultivation areas in the countries would also require enhanced due diligence by the Bayer company just for deforestation risks. Yet, Bayer's current policies do not systematically identify the risk of deforestation within its soy value chain, particularly through the lack of country- and sector-specific risks and omitting to use the red flag concepts established by the OECD-FAO Guidance and the OECD-FAO Handbook.

***g. Insufficient assessment and prioritization of adverse human rights and environmental impacts***

223. According to the Guidelines, “an enterprise should prioritize the order in which it takes action based on the severity and likelihood of the adverse impact,”<sup>481</sup> particularly when it is not feasible to address all identified impacts at once. Prioritization for addressing the risk of the most significant adverse impacts first involves an assessment of the scope, scale and irremediability of the identified adverse impacts. The OECD Due Diligence Guidance asserts: “Enterprises may prioritize operations or business relationships for assessment where the risk of adverse impacts is most significant.”<sup>482</sup> The concept of significance is thus a cross-cutting element that applies to all steps of due diligence including prioritization. Moreover, it applies not only to human rights but also to adverse

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<sup>480</sup> Bayer AG, “Position on Deforestation and Forest Degradation,” December 11, 2023, <https://www.bayer.com/en/sustainability/position-on-deforestation-and-forest-degradation>.

<sup>481</sup> OECD Guidelines, Chapter II. General policies, para. 19.

<sup>482</sup> OECD Due Diligence Guidance, 66.

environmental impacts, as the chapter on Environment refers to the due diligence concept enshrined in the General policies of the OECD Guidelines.<sup>483</sup>

224. According to the OECD Due Diligence Guidance, “significance of an adverse impact is understood as a function of its likelihood and severity. Severity of impacts will be judged by their scale, scope and irremediable character.”<sup>484</sup> The Guidance further explains: “scale refers to the gravity of the adverse impact. Scope concerns the reach of the impact, for example the number of individuals that are or will be affected or the extent of environmental damage. Irremediable character means any limits on the ability to restore the individuals or environment affected to a situation equivalent to their situation before the adverse impact.”<sup>485</sup> These concepts are not absolute, but the OECD provides examples of indicators.<sup>486</sup>
225. Against the background of the facts described in this complaint, the actual and potential adverse impacts connected to Bayer’s soy and pesticides business in the four countries should be considered significant, including in comparison to some other risks currently prioritized by the company. Communities near soy plantations report a situation of high vulnerability stripped of basic freedoms, including reduced access to food, insufficient living space, poverty and negative impacts on their homes – in essence the impossibility of a dignified life (see Cross-cutting adverse human rights and environmental impacts). In addition, such impacts are widespread given that a very high percentage of arable land in all four countries is dedicated to soy cultivation (see para. 44), which multiplies the experiences found in the case studies in terms of magnitude when considered as countrywide phenomena. Health impacts are often non-remediable and long-term, as was spelled out in more detail, for example, in relation to the area of interest in Argentina (see Adverse health impacts).
226. For the environmental context, the Guidance provides the following examples: for scale, the extent of impact on human health, extent of changes in species composition, water use intensity and degree of waste; for scope, the geographic reach of the impact and number of species impacted; and, for irremediability, the degree to which rehabilitation of the natural site is possible or practical and the length of time remediation would take.<sup>487</sup> The facts presented in the areas of interest point to a significant loss of biodiversity in and around soy plantations affecting the livelihood of local communities. Glyphosate residues are found in water and soil, which also have an impact on human health for those cultivating food crops on these lands and using water for consumption or bathing. As in the case of human rights, such environmental impacts are scalable to larger portions of the rural population and therefore highly relevant in terms of scope as well.
227. According to the company’s sustainability report, six priority topics were identified: the right to health; the responsible use of natural resources; protection against child labor; the right to freedom from slavery, servitude or forced labor; the right to fair and favorable working conditions; and the right to freedom of association.<sup>488</sup> In its Human Rights Policy, the company also lists priorities that are similar to but not entirely aligned with the statements in its sustainability report or its Transparency in Supply Chain Acts Statement.<sup>489</sup> The priorities identified there are: child labor; forced labor; freedom of association; working time, wages and benefits; discrimination and

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<sup>483</sup> OECD Guidelines, Chapter VI. Environment, provision 1 (p. 33).

<sup>484</sup> OECD Due Diligence Guidance, 42.

<sup>485</sup> Ibid, 42.

<sup>486</sup> OECD Due Diligence Guidance, 43-44.

<sup>487</sup> OECD Due Diligence Guidance, 43.

<sup>488</sup> Bayer AG, “Sustainability Report 2023,” 85.

<sup>489</sup> Bayer AG, “Human Rights Policy 2023,” 4 Human Rights Priorities, 105.

harassment; inclusion and diversity; health and safety; patient safety; environment; and finally, security.<sup>490</sup>

228. The complainants argue that these prioritization results show a complete disregard for the risks identified in this complaint. The risks of – as well as already existing – adverse impacts on human rights and the environment identified in the complaint are significant, given their severity, widespread character and irremediability. In addition, reports about negative impacts related to soy cultivation were published by various governmental and international institutions. Many impacts are already present and further impacts are thus likely. Yet, although Bayer nominally mentions the underlying elements of the significance concept used by the OECD Guidelines, further information on how they were applied to its prioritization efforts of both risks and actual adverse impacts of its downstream seed and pesticides business in the region is lacking and the results of the prioritization effort do not mention any adverse impacts of its downstream business at all.

#### *h. Interim Conclusion*

229. Bayer fails to carry out a proper risk identification and assessment as part of its due diligence efforts in violation of Chapters II and IV of the OECD Guidelines. This is mainly due to several shortcomings in its scoping exercise, in particular due to the disregard of sector-specific guidance, the lack of systematic identification of environmental risks, most prominently deforestation risks, and finally, an insufficient prioritization of the risks for further assessment. To live up to its responsibility under the Guidelines in this regard, the complainants make recommendations for the improvement of company conduct in the last section of this complaint (see Summary of demands).

### **3. Bayer's failure to cease and mitigate actual impacts and prevent potential impacts**

230. According to the commentary on the General Policies of the Guidelines, “where an enterprise contributes or may contribute to an adverse impact, it should take the necessary steps to cease or prevent its contribution and use its leverage to mitigate any remaining impact to the greatest extent possible.”<sup>491</sup> Prevention refers to activities that are intended to avoid potential impacts, that is, to reduce the risk of an adverse impact occurring; whereas mitigation refers to the activities that reduce an impact that has already occurred.<sup>492</sup> Leverage is considered to exist where the enterprise has the ability to effect change in the wrongful practices of the entity that causes the harm.<sup>493</sup>

231. According to complainants, as Bayer fails to make an appropriate in-depth assessment of its risks using the sectoral guidance provided by the OECD-FAO Guidance and Handbook on the agricultural sector, it therefore fails to design appropriate prevention measures. Further, the company is currently contributing to actual adverse human rights impacts and fails to undertake appropriate mitigation measures for such actual impacts.

#### *a. Bayer fails to incorporate red flags concepts in its in-depth assessment to enable appropriate prevention measures*

232. The OECD Guidelines operate with the concept of high-risk business relationships<sup>494</sup> also for in-depth risk assessments after prioritization. According to the OECD Due Diligence Guidance, enterprises are then encouraged to carry out assessments of high-risk business relationships (geographies, products, or sectors that have been identified as presenting high risks of adverse

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<sup>490</sup> Ibid.

<sup>491</sup> OECD Guidelines, Chapter II, General Policies, para. 22.

<sup>492</sup> OECD Due Diligence Guidance, Q32, 74.

<sup>493</sup> OECD Guidelines, Chapter II, General Policies, para. 22.

<sup>494</sup> OECD Due Diligence Guidance, 68.

impacts). Even more clearly, the OECD-FAO Guidance states that in red-flag situations, heightened due diligence may be needed and, therefore, an enhanced risk assessment should be applied to all business partners operating in medium and high risk contexts.<sup>495</sup>

233. Such risk assessments can draw on a number of measures recommended by both the OECD Due Diligence Guidance and the OECD-FAO Guidance such as: supplier self-assessments, on-site inspections and audits, stakeholder consultations, and monitoring by a third party, for example civil society organizations.<sup>496</sup> The standards further explain that site-level risk assessments aim to understand the factual circumstances of the operations of business partners in order to assess the scope, severity and likelihood of the risks at the site level.<sup>497</sup>

234. As far as can be seen from publicly available company documents, Bayer is not carrying out any type of context assessment to prioritize red flag or medium- and high-risk areas in its downstream GM soy seed and glyphosate-based pesticide value chain as a prerequisite for in-depth assessment of certain business relationship. Enhanced assessments for particular red flag zones or business partners are therefore also entirely lacking.

***b. Bayer contributes to several actual adverse human rights and environmental impacts***

235. According to Chapter II. General Policies and Chapter IV. Human Rights of the Guidelines, enterprises should “avoid causing or contributing to adverse human rights impacts”<sup>498</sup> in the context of its activities. Moreover, according to Chapter VI of the Guidelines “enterprises should conduct their activities in a manner that ... avoids and addresses adverse environmental impacts.”<sup>499</sup>

236. Contrary to the above, Bayer’s actions and omissions in its GM soy seed and related glyphosate-based pesticide business result in the infringement of several human rights and negative environmental impacts. More specifically:

- Through its actions and omissions, Bayer contributes to the infringement of the right to health, to a healthy, clean and sustainable environment, and to the rights to food and land as part of the overarching right to an adequate standard of living
- Through its actions and omissions, Bayer does not avoid or address adverse environmental impacts.

237. In the following subsections, the complainants will provide detail on how Bayer’s actions and omissions in its GM soy and glyphosate-based pesticides value chain in the four countries are related to the adverse human rights and environmental impacts.

***i. Bayer’s relationship to the infringement of several human rights***

238. According to the Guidelines, a contribution to an adverse impact arises when: (a) a company’s activities in combination with the activities of others cause the adverse impact;<sup>500</sup> or (b) there is a “substantial contribution, meaning an activity that causes, facilitates or incentivizes another entity to cause an adverse impact and does not include minor or trivial contributions.”<sup>501</sup> In the downstream sector, this can occur, for example, via acts or omissions in product design, sales or marketing of products and services.<sup>502</sup> Even when a company does not cause or contribute, an adverse impact can

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<sup>495</sup> Ibid, 30.

<sup>496</sup> Ibid, 30-32; OECD Due Diligence Guidance, 66-69.

<sup>497</sup> OECD-FAO Guidance, 30.

<sup>498</sup> OECD, Chapter IV. Human Rights, para. 2, Chapter II. General Policies, para. 11.

<sup>499</sup> OECD Guidelines, Chapter VI, Environment, 33.

<sup>500</sup> OECD Due Diligence Guidance, 70

<sup>501</sup> OECD Guidelines, Chapter II. General Policies Commentary, para. 16.

<sup>502</sup> OHCHR, “Mandating downstream Human Rights Due Diligence,” 2.



nevertheless be directly linked to their operations, products or services through a business relationship.<sup>503</sup> Business relationships include relationships beyond contractual, “first-tier” or immediate relationships.<sup>504</sup>

239. The complainants argue that Bayer is at least linked to all adverse human rights impacts identified above. First, Bayer is present through company-owned or -licensed distributors and retailers for its GM soy seeds and related glyphosate-based pesticides in all areas of interest examined for this complaint (see paras. 84, 86, 100, 122, 123, 146 and 147 for each country). In addition, local sources (interviewees, administrative authorities, distributors, and further documents) confirm the use particularly of Bayer’s soy seed varieties in all four areas (see paras. 84, 101, 122, 146 for each country). Glyphosate residues have been found in water sources in at least two of the areas studied (areas of interest in Brazil and Argentina) and interviewees in the area have reported the use of Bayer’s glyphosate-based pesticides (see para. 151 for Paraguay). Thus, Bayer’s products are directly relevant to the activities of soy producers in the various locations with the described negative impact as a result.

240. The complainants further argue that Bayer’s role **is even more prominent and the company is contributing to the infringement of the abovementioned rights.**

241. To distinguish between being directly linked and contributing, the Guidelines and supplementary guidance have identified a non-exhaustive list of additional factors:

- “The extent to which an enterprise may encourage or motivate an adverse impact by another entity.”<sup>505</sup> This can also be understood as a company’s power and independence over its business relationships that allow it to establish (or prevent) conditions that increase the risk of an adverse impact. The power of a company may be direct, relative or exerted over socio-environmental conditions.<sup>506</sup>
- The degree of foreseeability of the harm, that is, to which extent a company knows or should have known about an existing adverse impact.<sup>507</sup> This includes knowledge of the severity – including its irremediability – and the scope of the adverse impact, i.e. how many people or communities are affected by it.
- The actual mitigation measures taken (or the lack thereof) by the company to address the negative impact.<sup>508</sup>

242. The Submitting Organizations will address each of the factors in turn for the documented human rights impacts to demonstrate Bayer’s contribution to the infringement.

ii. *Bayer’s strong market power and incentivizing business scheme*

243. Bayer maintains a dominant market position in the transgenic soy seed sector in the four countries and a relevant market share of glyphosate-based pesticides (see Bayer AG in the Southern Cone). For almost 30 years, Bayer has been at the core of the soy seed production scheme in the Southern Cone thanks to its GM seed technology. Additionally, it is involved in every step of the production and distribution scheme through its ownership of breeding companies (for example, Monsoy in Brazil) or by commercial licensing agreements entered into with breeding companies (see para. 38). Finally, Bayer maintains contractual relationships with multipliers, distributors and commercial users

<sup>503</sup> OECD Guidelines, Chapter II. General Policies, para. 13.

<sup>504</sup> Ibid, Chapter II. General Policies Commentary, para. 17.

<sup>505</sup> OECD Due Diligence Guidance, 70.

<sup>506</sup> Tara Van Ho, “Defining the Relationships: ‘Cause, Contribute, and Directly Linked to’ in the UN Guiding Principles on Business and Human Rights,” *Human Rights Quarterly* 43/4, 2021, 625–58.

<sup>507</sup> OECD Due Diligence Guidance, 70.

<sup>508</sup> Ibid, 70.

of its seeds. Depending on each national context, such agreements on the use of its technology and products based on this technology enable the company to collect royalties for the use of the seeds, establish predefined distributors for the sale and collection of payments and conduct on-site visits (see para. 50, 60, 67 and 73). Considering the widespread use of seeds with Bayer technology in each country, the company is present through its subsidiaries and the abovementioned commercial relationships in all soy-producing regions of the four countries.

244. Bayer's sale of GM soy seeds does not only incentivize but, rather, requires the use of glyphosate-based pesticides, since it is the active ingredient to which the transgenic soy is resistant. The text of the commercial license that farmers who want to use the INTACTA technology have to sign explicitly establishes that "in order to make proper and responsible use of the INTACTA technology, the farmer must comply with the provisions for insect and weed resistance management as detailed on the website and as further informed by Monsanto in the future."<sup>509</sup> Said provisions establish that farmers should use the "Roundup Ready Plus program," which is based on the application of Bayer's Roundup glyphosate.<sup>510</sup> Glyphosate-based pesticides are produced by the company in Argentina and Brazil, supplying the national markets and providing for exports, including to Paraguay and Bolivia. The necessity of applying glyphosate-based pesticides during the cultivation of soy seeds is further incentivized by benefit programs for distributors, establishing annual bonuses, and purchase targets requiring promotional activities, such as the Impulso program (see para. 58).

245. In sum, Bayer's strong market position and the design of its business operations make it a very powerful actor in the downstream production and distribution value chain that strongly encourages and fosters the widespread cultivation of its transgenic soy seeds including the necessary treatment of plants with glyphosate-based products.

*iii. Impacts were foreseeable and Bayer is aware*

246. The adverse human rights and environmental impacts connected to large-scale soy cultivation have been documented by various sources in the four countries over the past years, including by UN bodies, scientists, affected communities, and civil society organizations (see Cross-cutting adverse human rights and environmental impacts). Such reports are part of the sources a company is supposed to take into account within its overall due diligence efforts.<sup>511</sup> Through its subsidiaries and commercial relationships, Bayer also has a presence in virtually all soy-producing regions in the four countries, enabling the company to collect information about local impacts.

*iv. Lack of and inadequacy of Bayer's mitigation measures*

247. An additional element to consider when establishing the relationship between a company's business and adverse impacts is the mitigation measures the company has or has not taken to address the impacts. According to the OECD Due Diligence Guidance "mitigation refers to activities that reduce the impact when an adverse impact does occur."<sup>512</sup> The Guidance offers several categories of mitigation measures that a company should adopt to reduce negative impacts. They include: adaptation or modification of its operations, products or services; new or additional policies; training on relevant conduct; red flag systems; and addressing systemic issues.<sup>513</sup>

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<sup>509</sup> The license is available for Paraguay: Intacta RR2 Pro, "Licencia de Uso", accessed April 19, 2024, <https://www.intactarr2pro.com.py/es-py/modelo-de-negocios/licencia-de-uso.html>. Similar information for Brazil is available here <https://www.intactarr2pro.com.br/>.

<sup>510</sup> Bayer, „Intacta RR2 PRO Paraguay”, 2024, <https://www.intactarr2pro.com.py/es-py/practicas-de-manejo/manejo-de-malezas.html>

<sup>511</sup> OECD Due Diligence Guidance, 63.

<sup>512</sup> Ibid, 70.

<sup>513</sup> Ibid, 75.

248. When assessing Bayer’s mitigation measures, it again becomes apparent that the company has a notable market power in the region when it comes to GM soy seeds and glyphosate-based products, particularly when taking into account the control it has over the production and distribution chain. Even if Bayer’s ability to reduce impacts is interdependent with other actors along its downstream value chain, the company’s power places it in a position to ensure or at least exercise critical leverage over those other actors so that they meet their responsibilities.

249. The complainants argue that Bayer’s current policies and processes to mitigate human rights and environmental adverse impacts neither reflect Bayer’s market position nor do they use the options available to the company in this regard. In sum, they are inadequate to the task of reducing the significant impacts, as the following analysis for each negative human rights impacts demonstrate.

(1) The right to a healthy, clean and sustainable environment

250. The negative impacts on the right to a healthy, clean and sustainable environment analyzed in this complaint consist mainly of pollution of waterways and soil, loss of biodiversity, deforestation and ecosystems degradation (see Cross-cutting adverse human rights and environmental impacts). Bayer has not put in place adequate mitigation measures for any of these adverse environmental impacts.

251. Water pollution as a widespread problem resulting from glyphosate-based pesticide use in and around soy cultivation areas is not sufficiently mitigated by Bayer’s current group policies and implementation schemes. As is evident from its Position on Water and its 2023 Sustainability Report, Bayer’s efforts primarily pertain to responsible water usage and waste management on its production sites or by its suppliers.<sup>514</sup> Water pollution in its downstream value chain is addressed only through two measures, namely training for customers and disposal schemes for empty pesticide containers.

252. Customer training for appropriate pesticide use is envisaged in its Product Stewardship Policy. According to identified key requirements, training programs will emphasize the proper use of Bayer products including clean-up of product spills, correct cleaning of empty containers, correct disposal of waste products and empty/cleaned containers, as well as measures to protect the environment and water sources.<sup>515</sup> Training modules are offered through the CuidAgro program, maintained by CropLife of which Bayer is a member for the Latin American context.<sup>516</sup> Such training modules are also available online in Spanish and Portuguese and encourage farmers to respect the environment, including water streams.<sup>517</sup> Similarly, in Argentina within the framework of the so-called “Good Agricultural Practices” (Buenas Prácticas Agrícolas “BPA”), Bayer offers training programs to producers for the responsible management of agricultural pesticides, for example, through the program “Yo Aplico Responsablemente,” which encourages soybean producers to obtain a certificate of sustainability for their production.<sup>518</sup> Similar programs at the national level in the three other countries could not be identified. In addition, while the protection of water and environmental sources is part of the key requirements in the stewardship policy and present in some manuals,

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<sup>514</sup> Bayer AG, “Bayer Water Position,” December 8, 2023, <https://www.bayer.com/en/sustainability/bayer-water-position>; Bayer AG, “Sustainability Report 2023”.

<sup>515</sup> Bayer AG, “Product Stewardship, Commitment, Principles and Key Requirement,” April 2022, [file:///C:/Users/schliemann/Downloads/RZ\\_Stewardship\\_221108\\_0.pdf](file:///C:/Users/schliemann/Downloads/RZ_Stewardship_221108_0.pdf), Key Requirement 6.3.

<sup>516</sup> CropLife, “CuidAgro Programa de Manejo Responsable,” accessed April 13, 2024, <https://www.croplifela.org/en/?id=27>.

<sup>517</sup> CropLife, “Uso responsable de plaguicidas,” accessed April 13, 2024, [https://www.croplifela.org/images/ES/Afiches/Actualizados\\_Branding\\_CLLA/Uso\\_Responsable\\_Plaguicidas\\_2.pdf](https://www.croplifela.org/images/ES/Afiches/Actualizados_Branding_CLLA/Uso_Responsable_Plaguicidas_2.pdf).

<sup>518</sup> Bayer AG, “Bayer signed an agreement with IRAM for the certification of safe applications for producers under the 14.130 standard of Good Agricultural Practices,” November 5, 2021, <https://www.conosur.bayer.com/es/en-el-marco-del-programa-yo-aplico-responsablemente>.

training programs are mostly focused on the health of customers.<sup>519</sup> Systemic problems such as lack of respect for minimum distances and the impacts on the human rights of communities living adjacent to medium- and large-scale soy plantations are also not explicitly addressed. In addition, such trainings are not compulsory for customers and may therefore not reach a critical percentage of the overall number of customers.

253. Schemes for the correct disposal of pesticide containers, in order to minimize another source of water pollution, are present in all four countries through the CampoLimpio program of CropLife Latin America, which aims to establish container collection centers in agricultural areas.<sup>520</sup>
254. The complainants argue that in addition to the shortcomings in the training manuals concerning the protection of the water sources in and around plantations, training and disposal schemes have not proved sufficient in mitigating the impacts and fall short of the measures recommended in the Due Diligence Guidance.
255. First, to this date, as the cases in Pergamino and La Matanza in Argentina demonstrate, several communities are no longer able to drink tap water and the state has been ordered to provide bottled water (see para. 92). Communities in Paraguay and Brazil are exposed to pesticide residues in their water streams, which cannot be used anymore for bathing or consumption. The Due Diligence Guidance explicitly suggests the “installation of water treatment processes” to mitigate water pollution impacts by decreasing the level of effluents in the water.<sup>521</sup>
256. Secondly, further measures suggested by the Due Diligence Guidance, including the modification of its operations or products, the adoption of new or additional policies, red flag systems and addressing systemic issues, are not considered with regard to the widespread and severe water pollution problem.<sup>522</sup>
257. Bayer is currently tackling negative impacts on biodiversity and deforestation at a general level, in its Position on Deforestation and Forest Degradation<sup>523</sup> and its Position on Conservation and Restoration of Biodiversity in Agriculture and Forestry.<sup>524</sup> Bayer's position on deforestation includes a commitment to reduce the environmental impact of its customers' farms by 30% by 2030. To put this commitment into practice, Bayer is currently developing its plan to reduce the environmental impact of the protection of crops<sup>525</sup> based on technological innovations. Additionally, Bayer aims for zero net deforestation in its supply chain, including supporting 100% compliance with the Brazilian Forest Code in its production fields.<sup>526</sup>
258. As these efforts show, deforestation is not consistently addressed within its downstream operations in any of its policies or sustainability reports. The claim of net-zero deforestation specifically refers only to its upstream supply chain, while support for restoration is not related to Bayer's own business

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<sup>519</sup> CropLife, “CuidAgro Programa de Manejo Responsable.”

<sup>520</sup> CropLife Latin America, “Campo Limpio”, accessed April 6, 2024, <https://www.croplifela.org/es/sostenibilidad-y-desarrollo/campolimpio/campolimpio>.

<sup>521</sup> OECD Due Diligence Guidance, 74.

<sup>522</sup> Ibid, 75.

<sup>523</sup> Bayer AG, “Position on Deforestation and Forest Degradation”, accessed April 19, 2024, <https://www.bayer.com/en/sustainability/position-on-deforestation-and-forest-degradation>.

<sup>524</sup> Bayer AG, “Position on Conservation and Restoration of Biodiversity in Agriculture and Forestry,” accessed April 19, 2024, <https://www.bayer.com/en/sustainability/position-biodiversity>.

<sup>525</sup> Bayer AG, “Protecting Crops, Reducing Crop Protection's Environmental Impact, accessed April 19, 2024, <https://www.bayer.com/en/agriculture/reducing-agricultures-impact-environment>

<sup>526</sup> Bayer AG, “Position on Deforestation”.

lines. Similarly, as a member of the LEAF coalition,<sup>527</sup> Bayer contributes to financing the conservation of natural forests,<sup>528</sup> but not as a means of structurally addressing the direct impacts of its downstream value chain. The same approach is followed when it comes to soybeans in particular.

259. The company's participation in the Responsible Soy Roundtable is limited to its upstream supply chain.<sup>529</sup> Activities to promote reforestation or the preservation of native vegetation as a means of carbon capture are mainly aimed at clients as part of a new business model (ProCarbono initiative active in Brazil and Argentina).<sup>530</sup> In one particular instance, mentioned in the Carbon Disclosure Project Forest questionnaire, as part of the ProCarbono initiative, soy seeds produced by third parties using Bayer seeds were also audited concerning the non-expansion of cultivation in indigenous territories and the Brazilian Forest Code.<sup>531</sup>
260. Despite the documented impacts of deforestation linked to the production of GM soy in the four countries, Bayer's reforestation approach is mostly focused on the Brazilian context. However, as shown in the complaint, the deforestation risks in the other countries are also critical.
261. In sum, Bayer does not appear to have put in place any mitigation measures directly concerned with deforestation, ecosystems degradation and biodiversity loss, as a result of its soy seed and related glyphosate-based pesticides business line. Current measures focus almost exclusively on its upstream value chain, while the downstream side is ignored. Additional initiatives for reforestation and biodiversity conservation are disconnected from Bayer's own activities. While Brazil receives a certain level of attention in its sustainability reports and policies, the other three countries are not addressed.
262. When seen against the background of mitigation measures recommended by the OECD Guidelines, Bayer again fails to develop adequate responses to reduce actual impacts. Measures suggested by the Due Diligence Guidance (n 247) are not considered in relation to the widespread and severe deforestation impacts, ecosystems degradation and biodiversity loss. This is even more concerning, given that the Guidelines further explain: consistent with scientific and technical understanding of risks, where there is a threat of serious or irreversible damage to the environment, also taking into account human health and safety, companies will not use the lack of complete scientific certainty or of course of action as a reason to postpone the adoption of cost-effective measures to prevent or minimize such harm.<sup>532</sup>

## (2) The right to food

263. The complainants are not aware of any mitigation measures that Bayer undertakes to reduce the adverse impacts on the right to food. System measures to address reduction of food quality and accessibility are lacking at the group level of the company, as well as in all four countries. Instead, recognition of the needs of local communities only comes as part of isolated and individual Corporate Social Responsibility (CSR) activities. By way of example, in Paraguay, the annual progress report (COP) on the implementation of the principles of the Global Compact by the Paraguayan subsidiary in the year 2020 describes the "Seedbed of the Future" program, through which it sought to raise

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<sup>527</sup> "LEAF Coalition," accessed April 13, 2024, <https://www.leafcoalition.org/es/corporations>.

<sup>528</sup> <https://www.leafcoalition.org/es/corporations>

<sup>529</sup> Bayer AG, "CDP Forests Questionnaire 2023," accessed April 19, 2024, <https://www.bayer.com/sites/default/files/bayer-ag-cdp-forest-2023.pdf>, 6-7.

<sup>530</sup> Ibid, 6-7.

<sup>531</sup> Ibid, 49. Bayer AG, "Bayer Joins Coalitions to Conquer Deforestation and Preserve Biodiversity," August 9, 2023, <https://www.bayer.com/en/news-stories/bayer-joins-coalitions-to-conquer-deforestation-and-preserve-biodiversity>

<sup>532</sup> OECD, Chapter VI. Environment, 34.

awareness among rural families in the lower Paraguayan Chaco, “so that they can increase the consumption of nutrients, value and produce on their land, thus escaping poverty and improving their quality of life.”<sup>533</sup> Such CSR activities are, however, not a substitute for targeted mitigation measures. They are not structural, not concerned with the impact of Bayer’s business operations, and not sustainable. In sum, they do not reduce the impact on the right to food.

### (3) The right to health

264. Bayer has identified the right to health as one of its six priority issues (see para 227), which includes respect and care for the health and well-being of employees, contractors, visitors and neighbors around the world.<sup>534</sup> This also includes the health and safety of everyone who uses the company’s products, as outlined in its Product Stewardship standards.<sup>535</sup>
265. Bayer’s Product Stewardship Policy describes under principle 6 how the company intends to ensure the responsible use of its products. It explains that problems arising from the use of products will be actively monitored to identify the need for changes, including product availability.<sup>536</sup> Training programs are part of its efforts to educate users on its products and “as appropriate and relevant, include information on minimizing exposure and risk to people and animals.”<sup>537</sup> More information about such training can be gathered from Bayer’s training and education program CuidAgro.<sup>538</sup> Bayer claims in its Product Stewardship Policy that business partners who handle Bayer products and services will be contractually required to implement product stewardship in accordance with Bayer’s internal standards. The same applies to business partners who license Bayer technologies.<sup>539</sup>
266. Safeguarding the health of local communities and neighbors of soy plantations is, however, not part of these manuals.<sup>540</sup> Further initiatives mentioned by Bayer in this regard, such as Bay G.A.P.,<sup>541</sup> aimed at establishing good agricultural practices, or its Forward Farming program,<sup>542</sup> which is intended to contribute to more sustainable agriculture, also do not deal with the health impacts on local and neighboring communities but, rather, are promotional activities facilitating access to products and market connections, including through certifications.
267. Concerning the glyphosate-based herbicide Roundup,<sup>543</sup> the company limits itself to actively promoting the product in the four countries and claiming its safety when handled according to label instructions, without explicitly addressing the potentially adverse effects on consumers, neighboring communities and the environment. Foreseeable misuse of its pesticides, through indiscriminate, excessive, continuous and widespread application in rural areas, often without respecting minimum distances and, at times, even as a form of physical intimidation are not mentioned at all by the company, despite being generalized practices in the countries.

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<sup>533</sup> Bayer Paraguay, “Comunicación de Progreso COP”, 2020, [https://ungc-production.s3.us-west-2.amazonaws.com/attachments/cop\\_2020/483205/original/COMUNICACION%20DE%20PROGRESO%20BAYER%20PY%202019.pdf?1581708736](https://ungc-production.s3.us-west-2.amazonaws.com/attachments/cop_2020/483205/original/COMUNICACION%20DE%20PROGRESO%20BAYER%20PY%202019.pdf?1581708736).

<sup>534</sup> Bayer AG, “Human Rights Policy,” 4.1.7 Health and Safety.

<sup>535</sup> Ibid.

<sup>536</sup> Bayer AG, “Product Stewardship, Commitment, Principles and Key Requirements”, KR 6.1.

<sup>537</sup> Ibid, KR 6.3.

<sup>538</sup> CropLife, “CuidAgro Programa de Manejo Responsable”.

<sup>539</sup> Bayer AG, “Product Stewardship, Commitment, Principles and Key Requirements”, KR 4.26 and KR 4.30.

<sup>540</sup> CropLife, “Uso responsable de plaguicidas”.

<sup>541</sup> Bayer AG, “Bayer Global – BayG.A.P.,” accessed April 19, 2024, <https://www.bayer.com/en/agriculture/baygap>.

<sup>542</sup> Bayer AG, “One Step Ahead with Sustainable Agriculture – Bayer Forward Farming,” accessed April 19, 2024, [https://www.bayer.com/sites/default/files/BFF\\_Global\\_Brochure\\_2020.pdf](https://www.bayer.com/sites/default/files/BFF_Global_Brochure_2020.pdf).

<sup>543</sup> See for example: Bayer AG, “Agro Bayer Brasil – Roundup,” accessed April 13, 2024, <https://www.roundup.com.br/roundup>.

268. Bayer thus fails to develop adequate responses to reduce actual impacts on the right to health. Measures suggested by the Due Diligence Guidance (n 247) are not considered concerning the widespread and severe health impacts.

(4) The right to land

269. Within the publicly available documents published by Bayer that were reviewed, the complainants could not find any mention of negative impacts on the right to land of rural or indigenous groups as a result of large-scale soy cultivation with Bayer's products. Also, the intimidation and criminalization of local inhabitants fighting for the recognition of their land rights against soy-producing farmers is not at all addressed by Bayer in its current policies or programs addressing human rights impacts, as required by the Guidelines (see para 208)200.

*c. Interim Conclusion*

270. Against this background, the complainants argue that Bayer failed to cease, prevent and mitigate potential and actual adverse human rights and environmental impacts. First, the company fails to properly carry out in-depth assessments to design adequate prevention measures. Secondly, its products are linked to adverse impacts on the right to health, the right to a healthy, clean and sustainable environment, as well as the right to food and the right to land as elements of the overarching right to an adequate standard of living. However, as these impacts are foreseeable, the company has the possibility to influence actors in its value chain and has so far omitted to take available mitigation measures, the relationship to these adverse impacts need to be qualified as that of a contribution according to the standards established by the OECD Guidelines and supplementary guidance.<sup>544</sup> The complainants argue as a result that Bayer contributes to all the adverse impacts documented in connection with its soy and glyphosate-based pesticides business in the four countries and fails to properly address them through adequate mitigation measures. Should the actions and omissions of Bayer here described be considered only as directly linked to some of the abovementioned impacts, the lack of implementation of adequate mitigation measures by the company provides the basis for developing Bayer's relationship to those impacts into a contribution, as provided for in the Guidelines.<sup>545</sup> To bring its business activities in line with the Guidelines, the complainants make recommendations for the improvement of company conduct in the last section of this complaint (see Summary of demands).

**4. Failure to track implementation and results**

271. According to the OECD Due Diligence guidance companies are expected to track the implementation and effectiveness of the enterprise's due diligence activities including its measures to identify, prevent and mitigate adverse impacts.<sup>546</sup> Since Bayer has so far failed to properly address the risks to and actual adverse impacts on human rights and the environment connected to its soy seed and pesticides business in the four countries, it cannot appropriately track implementation of such measures and their results.

**5. Lack of appropriate communication about due diligence efforts**

272. Finally, according to the Guidelines, companies should communicate externally "relevant information on due diligence policies, processes, activities conducted to identify and address actual or potential adverse impacts, including the findings and outcomes of those activities."<sup>547</sup> This also

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<sup>544</sup> OECD Due Diligence Guidance at 70-71; OHCHR (2017) UNOHCHR response to request from BankTrack for advice regarding the application of the UN Guiding Principles on Business and Human Rights in the context of the banking sector. pp. 6-7.

<sup>545</sup> OECD Due Diligence Guidance, 71.

<sup>546</sup> OECD Due Diligence, Guidance, 32.

<sup>547</sup> Ibid, 33.

applies to adverse environmental impacts, for which enterprises should provide the public and other relevant stakeholders with adequate, measurable, verifiable and timely information when they are associated with their operations, products and services.<sup>548</sup> The Guidelines chapter on Disclosure adds that enterprises should disclose regular, timely, reliable, clear, complete, accurate and comparable information in sufficient detail on all material matters.<sup>549</sup> This includes communicating information about responsible business conduct, such as "identified areas of significant business impacts or risks, identified, prioritized and evaluated adverse impacts or risks, as well as prioritization criteria."<sup>550</sup> For human rights impacts that the enterprise contributes to, it should be prepared to communicate with impacted or potentially impacted rights-holders in a timely, culturally sensitive and accessible manner concerning the above information that is specifically relevant to them.<sup>551</sup>

273. The complainants consider that both the information Bayer shared publicly about its risk identification process, as well as the results of the company's risk assessment and prioritization efforts, is insufficient when compared to the above standards. The company does not provide clear, complete and comparable information at a sufficient level of detail on the methodology applied. In particular, more information is required for each of the four countries, as well as for the actual and potential adverse impacts that take into account the regional dimension of the issues identified. It is also unclear whether Bayer has actually taken into account sectoral guidance for agricultural value chains and used the concepts of red flags in its risk identification and prioritization efforts. The company's efforts regarding potential and actual adverse impacts for its downstream value chain are also lacking.

274. Moreover, concerning those potential and actual adverse impacts Bayer contributes to according to the present complaint, there is no public reporting at all. Therefore, no information is available on whether Bayer attempted to communicate such potential and actual impacts specifically to affected rights-holders in a timely and culturally sensitive manner.

## **6. Failure to provide a remedy for the actual impacts**

275. When an enterprise identifies that it has contributed to actual adverse impacts, it should address such impacts by providing for or cooperating in their remediation.<sup>552</sup>

276. The complainants argue that for the negative impacts on the rights to a healthy, clean and sustainable environment, food, health, and land, Bayer has not carried out any activity to remediate these impacts alone or in cooperation with other actors.

## **H. Summary of demands**

288. On the basis of the prior sections, the complainants conclude with a summary of their expectations regarding Bayer's policies and actions, as well as regarding the specific instance process.

289. Recommendations for the improvement of Bayer's policies and business activities:

### **Risk identification and initial assessment:**

- Bayer should apply the OECD-FAO Guidance for agricultural value chains and the OECD-FAO Handbook as part of its risk identification and initial assessment. This requires a

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<sup>548</sup> OECD Guidelines, Chapter VI, Environment, 34.

<sup>549</sup> OECD Guidelines, Chapter III. Disclosure 1.

<sup>550</sup> Ibid, Chapter III. Disclosure 3.d.

<sup>551</sup> OECD Due Diligence Guidance, 33.

<sup>552</sup> OECD Guidelines, Chapter IV. Human Rights, para. 51, Due Diligence Guidance, 6.1., p. 34.



systematic analysis of the risk of adverse impacts for its agribusiness sector. Such analysis will necessarily have to integrate the concepts of red flag products, red flag locations and red flag business partners.

- Bayer should carry out a systematic risk identification for its downstream value chain. The company can draw on positive elements developed for its upstream value chain.
- Bayer should integrate foreseeable misuse of its products into its risk identification methodology, as the Guidelines explicitly highlight the importance of doing so.
- Bayer should take into account the geographical context of its business activities. A contextualized risk identification is warranted for each of the four countries as well as the regional dimension of its soy seed and related pesticides business in the Southern Cone.
- Bayer should identify relevant stakeholders in medium- and high-risk locations to identify and assess potential risks linked to its operations. These rights-holders should not only include holders of official tenure rights but also of collective and indigenous customary tenure rights, and consultations with them should be conducted in a culturally sensitive manner.
- Bayer should drastically improve its environmental risk identification processes. The company should apply a systematic risk identification process to adverse environmental impacts, particularly for the risk of deforestation, adverse impacts on biodiversity, as well as water and soil pollution. It can draw on positive elements already developed for its human rights risk identification process, taking into account the additional recommendations made above.
- Bayer should acknowledge the significant nature of the risks of adverse impacts on human rights and the environment resulting from its soy seed and related pesticides business and include this topic as a priority in its due diligence processes.

**Cease and mitigate actual adverse impacts and prevent potential adverse impacts:**

- Bayer should carry out enhanced due diligence, including in-depth risk assessment for medium- and high-risk locations and business partners identified as a result of proper risk identification using the red flag concepts.
- Bayer should adopt a corporate policy on deforestation and biodiversity degradation based on a proper risk assessment as required by the Guidelines, particularly for the risks of adverse environmental impacts connected to its downstream value chain.
- Bayer should integrate human rights and environmental risks for communities/ neighborhoods near cultivation of GM soy seeds and use of related glyphosate-based pesticides in its human rights policy.
- Bayer should establish a monitoring and traceability system for its downstream value chain for soy seeds and related glyphosate-based pesticides that provides for the following:
  - The identification of major downstream business partners
  - The identification and degree of respect for corporate policies by business partners identified as prone to risks of negative impacts, specifically for those operating in red flag zones
  - Potentially the elaboration of a Supplier Code of Conduct for its downstream business partners, which includes the possibility of on-site visits of major business partners
- Bayer should conduct after-sales follow-up measures, based on the baseline assessment and with improvement targets, to ensure that major and risky business partners utilize the company's soy seed and related glyphosate-based pesticides adequately, focusing in particular on:

- Respect for minimum distances of spraying activities in accordance with domestic laws and, in the absence of such laws, with best practices that avoid exposure of local inhabitants to spray drift
- Repeated disregard for recommended quantities
- Instances of criminalization of local communities and their members who defend their rights
- Disrespect for land rights of indigenous and peasant communities
- Reports about environmental pollution in the area of the downstream business partners' area of activity.
- Bayer should revise its training materials to incorporate in particular the rights of (peasant, indigenous and peri-urban) communities that live next to soy plantations.
- Bayer should ensure on its own or through business partners that communities and its members receive unambiguous and transparent information regarding the possible negative impacts of its products on human rights and the environment, particularly when not used according to label instructions.
- Bayer should adopt any further risk mitigation suggested in Annex 1 of the OECD-FAO Guidance on agricultural supply chains, where appropriate for the circumstances and conducive to effective change.

#### **Track implementation and results**

- Bayer should track the implementation and results of the new measures it designs for risk identification, risk assessment, prevention and mitigation of potential and actual adverse human rights and environmental impacts connected to its downstream GM soy seed and related pesticides business activities.

#### **Reporting:**

- The complainants request Bayer's improvement in its reporting to the public and affected rights-holders on the methodology used for both risk identification and prioritization, as well as the potential and actual adverse impacts it has contributed to.

#### **Remediation:**

- Bayer should consult and engage with impacted rights-holders and their representatives in the four areas of interest in the determination of the remedy.
- Bayer should seek to restore water quality alone or in cooperation with others in the areas of interest

290. The complainants respectfully formulate the following expectations for the specific instance process.

#### **To the National Contact Point:**

- That it accepts the complaint to contribute to the improvement of the policies and activities of Bayer AG for its downstream GM soy seeds and glyphosate-based pesticides value chain with special emphasis on the rights of locally affected populations and the protection of the environment.
- That it establishes a fair, transparent and predictable procedure and offers its good offices to conduct a mediation between the complainants and Bayer AG, including where appropriate the translation of oral and written communication to Spanish.

- That in the event that mediation is unsuccessful, the NCP indicates whether the company has violated the OECD Guidelines and makes recommendations to improve implementation.

**To Bayer AG:**

- That it takes the documented facts seriously and participates in good faith in the specific instance procedure including a mediation conducted under the good offices of the NCP.