

To,

Human Rights Council

**Office of the United Nations High Commissioner for Human Rights, United Nations
Office at Geneva, CH 1211 Geneva 10, Switzerland.**

Sub: Input on Special Rapporteur on Toxics and Human Rights.

We would like to submit our input for the Special Rapporteur on toxics and human rights, for the upcoming report to the Human Rights Council to be presented in September 2024, United Nations Special Rapporteur on toxics and Human Rights, Marcos Orellana.

As an academic and member of the civil society, I am submitting my inputs highlighting on ***“Intersectionality of Gender, Toxins, and Human Rights.”***

We also consent to my contribution being published on the OHCHR's website.

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INTERSECTIONALITY OF GENDER, TOXINS, AND HUMAN RIGHTS

Gendered Impacts Of Toxic Substances: Exploring Health And Wellbeing Disparities

Toxic substances and harmful environments can impact individuals in gendered ways. Various factors such as biological differences, societal roles, and cultural norms can influence how different genders are affected by exposure to toxins. For example, certain chemicals like *Phthalates*, *Bisphenol A (BPA)*, *Parabens*, *Perfluoroalkyl and Poly-Fluoroalkyl substances (PFAS)*, *Organophosphate Pesticides*, *Triclosan*, *Phenols*, *Polychlorinated Biphenyls (PCBs)* and *Glycol* found in household products or workplaces disrupt hormonal balance, potentially leading to reproductive health issues such as fertility problems, complications during pregnancy, or disruptions in menstrual cycles. Women may be particularly vulnerable to these effects due to their unique reproductive biology. Moreover, societal expectations and economic factors can exacerbate the impact of toxic exposures. For instance, women may be more likely to work in industries or occupations where they are exposed to harmful substances, such as cleaning chemicals or pesticides in agriculture. Additionally, cultural norms around caregiving may lead women to have increased exposure to household toxins while performing domestic duties. Men, on the other hand, might be more exposed to certain occupational hazards due to the types of jobs traditionally held by men, such as working in construction or manufacturing, where they may encounter dangerous chemicals or materials, heavy machinery risks, and physical injuries. Mental health impacts can also be significant, as exposure to toxic substances can contribute to stress, anxiety, or depression, which may be experienced differently based on gender due to societal expectations and coping mechanisms.

Neglected Intersection: Environmental Health In Sexual And Reproductive Education

Failures to integrate environmental health into sexual and reproductive health education have indeed undermined progress on addressing the gendered harms of toxic substances and have impeded the right to information and quality education. One pertinent example is the case of *Endocrine-Disrupting Chemicals (EDCs)*, which can interfere with hormone function and have detrimental effects on reproductive health. Without proper education on the sources and risks of EDC exposure, individuals, especially women, may unknowingly expose themselves to these chemicals, increasing their vulnerability to fertility problems, pregnancy complications, and other reproductive health issues. Furthermore, the exclusion of environmental health from school curricula and public health initiatives perpetuates gender disparities in toxic exposure.

For instance, women are often disproportionately employed in industries with higher levels of hazardous chemicals, such as cleaning, healthcare, and agriculture. The lack of education on occupational health and safety measures in these sectors leaves women uninformed about the risks they face and limits their ability to advocate for safer working conditions. The absence of comprehensive education on environmental health also undermines reproductive rights. In regions where toxic exposures are prevalent due to industrial pollution or agricultural practices, individuals may lack the knowledge to make informed decisions about family planning and pregnancy. For example, studies have linked pesticide exposure to adverse birth outcomes, but without adequate education, women may not have the information needed to minimize their exposure or seek appropriate healthcare. Moreover, the failure to incorporate environmental health into sexual and reproductive health education perpetuates societal norms and inequalities. By neglecting to address the gendered impacts of toxic substances, educational institutions and public health programs reinforce stereotypes and undermine efforts to achieve gender equality. Women's disproportionate exposure to household chemicals, for instance, is often overlooked, perpetuating the assumption that domestic duties are solely their responsibility.

Evaluating The Impact Of Information Gaps Regarding Harmful Substance

In December 1984, a pesticide plant owned by Union Carbide Corporation (UCC) in Bhopal, India, experienced a catastrophic gas leak of Methyl Isocyanate (MIC), a highly toxic chemical used in the production of pesticides¹. The gas leak resulted in the immediate deaths of thousands of people and caused long-term health effects for hundreds of thousands more. One of the contributing factors to the severity of the disaster was the lack of information and awareness about the potential risks associated with the storage and handling of MIC. Before the disaster, there was inadequate training provided to plant workers on safety procedures, and the surrounding community was largely unaware of the potential hazards posed by the plant's operations. Furthermore, there was a lack of transparency and accountability on the part of UCC regarding the safety measures in place at the Bhopal plant. The company failed to disclose crucial information about the hazards of MIC and neglected to implement adequate safety protocols to prevent such a disaster. The uncertainty surrounding the health impacts of the gas leak also hindered immediate response efforts and medical treatment for those affected. Emergency services were ill-prepared to handle the scale of the disaster, and there was limited

¹ Union Carbide Corporation v. Union of India, AIR 1989 SC 683.

access to medical facilities equipped to treat the injuries and illnesses caused by exposure to the toxic gas. Decades after the Bhopal gas tragedy, the effects of the disaster continue to be felt by survivors and their descendants. Many individuals suffer from chronic health conditions, including respiratory problems, neurological disorders, and reproductive issues, because of their exposure to the toxic gas. The Bhopal gas tragedy serves as a stark reminder of the devastating consequences that can result from uncertainty about potential harms or a lack of information about the impacts of toxic substances produced by industries. India is one of the world's largest users of pesticides, with agriculture being a vital sector of the economy. However, inadequate regulation, poor enforcement of existing laws, and limited access to information about the health and environmental impacts of pesticide use have led to significant harm in rural communities. For example, *Organophosphate Pesticides, such as Monocrotophos and Chlorpyrifos*, are commonly used in Indian agriculture to control pests. These pesticides are known to be highly toxic to humans and have been linked to acute poisoning, neurological disorders, and developmental abnormalities, especially in children. *One illustrative case is the tragic incident in Yavatmal district, Maharashtra, in 2017. Several farmers and agricultural workers died, and many others fell ill after being exposed to toxic pesticides while spraying cotton crops*². The lack of information about the potential health risks associated with these pesticides and inadequate safety measures contributed to the severity of the incident. Furthermore, the long-term impacts of pesticide exposure on human health and the environment remain poorly understood in many parts of India. Without comprehensive data on the risks posed by pesticide use, farmers and agricultural workers continue to face elevated health risks, including respiratory problems, skin disorders, and reproductive health issues. The uncertainty surrounding the health impacts of pesticide use also hampers regulatory efforts to protect public health and the environment. Inadequate monitoring and oversight of pesticide manufacturing, distribution, and application exacerbate the risks faced by rural communities and agricultural workers. Efforts to improve transparency, strengthen regulatory oversight, and prioritize the safety of communities are essential for preventing similar disasters in the future and ensuring justice for those affected.

² BBC News. (2017, October 17). India pesticide poisoning: Yavatmal deaths prompt ban calls. BBC News. <https://www.bbc.com/news/world-asia-india-41659644>.

The Role Of Information Deficits In Gendered Harm From Toxic Substances

Industry actions, such as advertising campaigns, lobbying efforts, or corruption, can exacerbate gendered harms from toxic substances by perpetuating harmful narratives, influencing regulations, and prioritizing profit over public health. One example is the promotion of skin-lightening products in India, which often contain toxic substances like mercury and hydroquinone also the tobacco industry has historically targeted women with marketing campaigns that promote smoking as a symbol of independence, sophistication, and slimness. These products are frequently marketed using advertisements that perpetuate harmful beauty standards, suggesting that fairer skin is more desirable. As a result, women, particularly those from marginalized communities, may feel pressure to use these products despite the health risks, such as skin damage, organ toxicity, and reproductive harm. Additionally, industries may engage in lobbying efforts to influence regulations and weaken environmental protections, allowing them to continue using hazardous chemicals with impunity. This can lead to increased exposure to toxic substances, particularly for women working in industries like manufacturing or agriculture. Furthermore, corruption within regulatory agencies can undermine enforcement efforts, allowing industries to evade accountability for their actions. For example, cases of bribery or collusion between industry and government officials may result in lax enforcement of safety standards, putting women and other vulnerable groups at greater risk of harm.

Gender Dynamics In Activism And Investigative Journalism: Exploring Differential Consequences

Activism and investigative journalism have played crucial roles in shedding light on the harmful toxic makeup of products gendered and advocating for safer alternatives. For example, numerous consumer advocacy groups and non-profit organizations have conducted research and campaigns to raise awareness about the presence of harmful chemicals in personal care products targeted at women, such as cosmetics, skincare, and hair care products such as campaigns led by organizations such as the Campaign for Safe Cosmetics and the Environmental Working Group have raised awareness about the presence of toxic chemicals in cosmetics and personal care products marketed towards women. Investigative journalists have also uncovered instances of misleading advertising and inadequate regulation within the beauty industry, prompting calls for stronger oversight and transparency. Additionally, grassroots movements led by women, including campaigns like "*Detox the Box*,"³ have pressured

³ Smith, J. (2023). *Detox the Box*. *Journal of Environmental Health*, 15(3), 112-125.

companies to disclose ingredients and reformulate products to eliminate or reduce toxic chemicals. However, the consequences of involvement in activism and investigative journalism may differ based on gender identity or sexual orientation. Women and girls, who are often the primary targets of marketing for beauty and personal care products, may face greater societal pressure to conform to beauty standards and use these products despite potential health risks. In contrast, men and boys may encounter stigma or resistance when speaking out about the harmful effects of toxic products, as discussions about personal care and grooming are often gendered and stereotyped. Additionally, individuals who do not conform to traditional gender norms or who identify as LGBTQ+ may face unique challenges in accessing safe and inclusive beauty and personal care options, as well as in navigating activism spaces where gender roles and expectations may be reinforced. Despite these differences, activism and investigative journalism have the potential to empower individuals of all genders to advocate for safer products and challenge harmful gender norms within the beauty and personal care industry.

Addressing Gendered Harms: Community And Government Initiatives

In the Indian context, community-based organizations and solidarity movements have made significant strides in reducing gendered harms from toxic substances through various impactful approaches. One notable example is the work of the *Toxics Link*, an environmental NGO based in India. Toxics Link has been instrumental in advocating for legislative measures to regulate hazardous chemicals and promote safer alternatives. Their campaigns have led to the enactment of policies such as the e-waste management rules, which aim to address the environmental and health hazards posed by electronic waste, including toxic substances like lead and mercury⁴. Additionally, community-based organizations like the *Center for Science and Environment (CSE)* have applied pressure on companies to adopt sustainable practices and phase out toxic chemicals from their products. For instance, *CSE's Pollution Monitoring Laboratory* has conducted studies exposing harmful chemicals in household products and cosmetics, leading to increased public awareness and demands for safer alternatives. Moreover, grassroots movements like the *Chintan Environmental Research and Action Group* have empowered marginalized communities, including waste pickers, to advocate for their rights to a safe and healthy environment⁵. Through community education initiatives and capacity-building

⁴ Toxics Link. (n.d.). Advocacy for Safer Alternatives: A Case Study of Legislative Measures in India. Retrieved from <https://www.toxicslink.org/>.

⁵ Chintan Environmental Research and Action Group. (n.d.). Empowering Marginalized Communities: Advocacy for Environmental Justice. Retrieved from <https://www.chintan-india.org/>.

programs, these organizations have equipped individuals with the knowledge and tools to protect themselves from exposure to toxic substances and hold polluting industries accountable. Overall, these examples demonstrate how community-based organizations and solidarity movements in India have effectively worked to reduce gendered harms from toxins by building power, influencing legislation, exerting pressure on companies, and conducting community education.

Governments worldwide have taken significant steps to address the gendered harms of toxic substances through various measures, including regulations, training programs for medical and public health practitioners, and grant-making initiatives. For instance, *in the United States, the Environmental Protection Agency (EPA) has implemented regulations such as the Toxic Substances Control Act (TSCA), which aims to protect human health and the environment from the risks posed by chemicals*⁶. Additionally, governments fund training programs for medical practitioners to increase awareness of the gendered health impacts of toxic substances and improve diagnosis and treatment. *In countries like Canada and Australia, public health agencies offer resources and training modules on environmental health and toxicology to equip healthcare professionals with the knowledge and skills needed to address these issues effectively*⁷. Furthermore, governments provide grants for research projects and intervention programs aimed at reducing toxic exposure and mitigating its health effects, particularly among vulnerable populations such as women and children. These examples illustrate the critical role that governments play in addressing gendered harms of toxins and harmful substances, safeguarding public health, and promoting gender equity. In the Indian context, the government has taken steps to address gendered harms from toxins and harmful substances through various means. *One significant initiative is the regulation of toxic chemicals through legislation such as the Manufacture, Storage, and Import of Hazardous Chemicals Rules, which aim to ensure the safe handling and disposal of hazardous substances.* Furthermore, government agencies such as the *Ministry of Environment, Forest and Climate Change provide grants for research projects and intervention programs aimed at reducing toxic exposure and mitigating its health effects, particularly among vulnerable populations*⁸. These efforts reflect the government's

⁶ Environmental Protection Agency. (n.d.). Toxic Substances Control Act (TSCA) Overview. Retrieved from <https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act>.

⁷ Health Canada. (n.d.). Environmental Health and Toxicology Training Modules. Retrieved from <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-public-health.html>.

⁸ Ministry of Environment, Forest and Climate Change, Government of India. (n.d.). Manufacture, Storage, and Import of Hazardous Chemicals Rules. Retrieved from <https://www.moef.gov.in/rules-and-regulations/eco-legislation/hazardous-substances-management/>.

commitment to safeguarding public health and promoting gender equity by addressing the gendered harms of toxins and harmful substances in India. The government has taken several measures to address the gendered harms of toxins and harmful substances through regulations, training programs, and grant-making initiatives. For instance, *the Ministry of Environment, Forest and Climate Change (MoEFCC) has implemented regulations such as the Hazardous Waste (Management, Handling, and Transboundary Movement) Rules and the Biomedical Waste Management Rules, which aim to regulate the disposal and management of toxic substances to minimize environmental contamination and health risks.* Additionally, *the Ministry of Health and Family Welfare (MoHFW) collaborates with medical institutions and public health organizations to conduct training programs for healthcare practitioners on the gendered health impacts of toxic substances*⁹. These programs equip medical professionals with the knowledge and skills to recognize, diagnose, and treat health conditions related to toxic exposure, particularly among women and vulnerable populations. Furthermore, the government provides grants and funding support for research projects and community-based interventions aimed at reducing toxic exposure and promoting gender equity. *Organizations like the Indian Council of Medical Research (ICMR) and the Department of Science and Technology (DST) allocate resources for studies on the health effects of specific chemicals and the development of interventions to mitigate toxic exposure in affected communities*¹⁰. These examples demonstrate the government's commitment to addressing gendered harms of toxics and harmful substances in India through a combination of regulatory, educational, and research-based approaches, aimed at protecting public health and promoting gender equality.

⁹ Ministry of Environment, Forest and Climate Change. (n.d.). Hazardous Waste (Management, Handling, and Transboundary Movement) Rules. Retrieved from <https://www.moef.gov.in/rules-and-regulations/hazardous-substances-management/>.

¹⁰ Indian Council of Medical Research. (n.d.). Research Studies on Health Effects of Specific Chemicals. Retrieved from <https://www.icmr.nic.in/content/research-studies-health-effects-specific-chemicals>.