



Written Submission

Call for inputs – Gender and Toxics

To inform the Special Rapporteur's 2024 thematic report to the United Nations General Assembly.

Children and Youth Major Group to United Nations Environment Programme (CYMG) is the mandated official, formal and self-organized space for children and youth to contribute to and engage in intergovernmental and allied policy processes at UNEP and relevant environmental governance and conservation processes in the broader UN system. CYMG has the role of the official youth engagement mechanism to UNEP. The process of preparing this submission was led by the Chemicals, Waste and Pollution Working Group that entailed several weeks of consultations, written inputs complemented by an online consultations on 24th of March 2024. We appreciate the voluntary contributions of individuals and member organizations within the youth constituency to UNEP to participate in the submission process.

The disproportionate impact of the increase in the production, distribution and consumption of toxins on children and youth should be an important consideration in tackling the environmental crisis. Since the younger generations are exposed to chemicals since conception, the hazardous impacts due to the higher exposure levels are many. Moreover, gender can contribute to increased exposure or vulnerability to toxic or harmful substances, potentially due to gender-specific factors that limit access to protections. These factors may include unequal political power, limited regulatory support, unsafe working conditions, and restricted access to education and information among others. For instance, gender inequalities such as forced or early marriage can hinder access to education, limiting women's knowledge about harmful substances and their rights. Additionally, societal norms and restrictions may limit women's ability to advocate for safer working conditions or access to regulatory protections. As a result, women and girls may rather face greater risks from exposure to toxins or harmful substances compared to men.

This submission addresses gender-specific impacts of toxins and harmful substances, explores uncertainty and information gaps regarding the impacts of industries producing such substances, discusses the role of industry practices in exacerbating gendered harms, examines retrogression on the rights of women, girls, and LGBTIQ+ people, and its impact on gendered harms from toxins. Additionally, it presents examples of best practices in addressing these issues.

1) Gender-Specific Impact due to Toxins and Harmful Substances:

Toxins and harmful substances can have significant and gender-specific impacts on the health and well-being of women, girls, men, boys, and people of diverse gender identities differently the following examples highlights some of these impacts:

- Fertility and Pregnancy Health:

Exposure to certain toxins and harmful substances can affect fertility rates and pose risks during pregnancy. Women may be more vulnerable to reproductive health issues such as **infertility, miscarriages, and birth defects** due to exposure to chemicals like *pesticides, heavy metals, and endocrine disruptors*.

- Timing of Menarche and Menopause

Environmental factors, including exposure to **unregulated pharmaceutical and personal care products**, have been linked to alterations in the timing of puberty in girls (menarche) and women (menopause). Early onset of puberty in girls may lead to various health challenges and social implications, increasing the probability of child marriage and teenage pregnancy.

- **Reproductive Health Conditions:**

Substances like **phthalates and bisphenol A (BPA)** have been associated with reproductive health issues such as **polycystic ovary syndrome (PCOS), endometriosis, and fibroids**, which disproportionately affect women and can impact their quality of life and fertility. Men may also experience impacts on reproductive health, including reduced **sperm quality and fertility**, due to exposure to environmental toxins such as pesticides, heavy metals, and industrial chemicals.

- **Mental Health:**

The presence of certain toxins and pollutants has been associated with mental health conditions including **depression, anxiety, and cognitive decline**. For instance, women and girls may experience heightened levels of stress due to societal norms, caregiving duties, and hormonal changes.

- **Obesity and Metabolic Disorders:**

Endocrine-disrupting chemicals (EDCs) found in some plastics, pesticides, and personal care products have been implicated in obesity and metabolic disorders. Women and girls may be particularly susceptible to these effects due to hormonal influences on metabolism and adipose tissue distribution.

- **Cancer:**

Exposure to carcinogenic substances in the environment, such as air pollutants, industrial chemicals, and certain pesticides, can increase the risk of developing various types of cancer. Some cancers, such as **breast and ovarian cancer**, have gender-specific risk factors and impacts. While the exposure of hazardous chemicals causes severe health impact including cancers on all genders and different age levels.

2) **Addressing Uncertainty and Information Gaps in the Impacts of Industries Producing Toxins and Harmful Substances:**

The lack of information regarding the potential harms produced by a particular industry or producer is certainly harmful to the people and environment. When major industries are situated by riversides without adequate waste management systems, they often discharge toxic waste and chemicals directly into the water. This practice endangers public health and the well-being of aquatic ecosystems. The pollution of water sources can lead to the contamination of drinking water, which may result in harm to human organs and the digestive system.

The proper handling and recycling of industrial waste are crucial to mitigating these risks. However, even when laws are in place to address these issues, the enforcement often lacks the

necessary rigour, and due diligence is not observed. As a result, harmful practices continue until significant penalties are imposed. For instance, heavy fines can be levied against violators, but this is typically only after the damage has been done and proven, which is a reactive rather than proactive approach to environmental protection.

Furthermore, **the absence of comprehensive data on the gender-specific** effects of hazardous substances hampers effective healthcare interventions. This gap in knowledge prevents the development of targeted strategies to address the unique health challenges faced by different genders when exposed to toxic substances.

An illustrative case occurred last year when an ethanol-producing company was found to be discharging effluents into the River Niger in Nigeria. The incident was brought to light by young climate advocates, leading to a campaign against the company's practices. The government responded by suspending the company's licence until they rectified the situation. This example highlights the **power of informed advocacy and the need for stringent oversight to prevent environmental harm.**

In the agricultural sector, for instance, the widespread use of pesticides is a prime example. Farmers often depend on these chemicals to safeguard their crops from pests and diseases. However, there is a concerning **gap in knowledge regarding the long-term effects** of these pesticides on soil health. The chemicals not only degrade the quality of the soil, making it less fertile over time, but they also have the potential to wash away into nearby water bodies. This runoff leads to the pollution of rivers and lakes, which are crucial components of our natural ecosystems. The consequences of such pollution are far-reaching, affecting not just the aquatic life but also the animals and humans who rely on these water sources.

Organic farming is promoted as a sustainable alternative because it avoids the use of synthetic pesticides and fertilisers. By doing so, it ensures that the farm produce remains safe for consumption while preserving the natural state of the soil. This method of farming supports the retention of organic minerals and nutrients in the soil, which are essential for the growth of healthy crops. Moreover, organic farming practices contribute to maintaining biodiversity, as they do not involve harmful chemicals that could lead to a loss of species within the ecosystem.

The issue extends beyond agriculture to manufacturing and processing industries as well. These industries are known to produce toxic waste and chemical substances as byproducts of their operations. Often, due to inadequate regulations or enforcement, these hazardous materials are disposed of in rivers, leading to contamination of larger water bodies. Over time,

the accumulation of these substances can result in chemical reactions that create even more complex and dangerous toxins. The environmental impact is profound, with the potential to disrupt entire ecosystems and cause a cascade of ecological problems. This includes the alteration of habitats, the poisoning of wildlife, and the introduction of health hazards to populations living in proximity to these polluted areas.

3) The Role of Industry Practices in Exacerbating Gendered Harms from Toxics and Harmful Substances:

Industry actions such as **advertising campaigns, lobbying, and manipulation of scientific data** can exacerbate gendered harms from toxic substances. Advertising campaigns often target women and girls with products that may contain harmful chemicals, particularly in the realm of cleaning products. These campaigns can minimise the perceived risks, leading to increased exposure and potential health issues for women who use these products frequently. Lobbying efforts by industries can significantly impact the creation and enforcement of regulations concerning toxic substances. By influencing policy decisions, industries can delay or weaken protective measures that would otherwise shield populations in vulnerable situations, including women who may be more exposed due to certain occupations or biological susceptibilities.

Furthermore, when industries fund scientific research, there is **a risk that the results may be biased**. Companies may selectively fund studies that support their interests or manipulate data to downplay the risks associated with their products. This can mislead the public and policymakers, obstructing the advancement of safer alternatives and perpetuating the use of hazardous substances. An example of this can be seen in the beauty industry, where make-up products marketed in Kenya were found to contain harmful toxins. **False advertising** not only misrepresented the safety of these products but also potentially led to increased health risks for women who used them, trusting in the misleading information provided. Such industry actions not only undermine efforts to protect public health but also disproportionately affect women, highlighting the need for more stringent regulations and transparent, unbiased scientific research to mitigate these gendered harms.

4) Retrogression on the Rights of Women and Girls and the Rights of LGBTIQ+ People and its Impact of the Gendered Harms from Toxics:

The retrogression of rights for women, girls, and LGBTIQ+ individuals has a profound impact on the gendered consequences of toxic exposure. Biologically, women and children are more susceptible to the adverse effects of toxins, necessitating their prioritisation in protective measures. The insidious nature of these toxins can lead to **alterations at the genetic level, potentially disrupting child development over the long term.**

In Kenya, for instance, the **predominance of women in the workforce of flower farms** places them and by extension, their accompanying infants at greater risk of toxin exposure. Despite regulations like those in Tunisia aimed at safeguarding women, the lack of effective implementation underscores the need for heightened awareness and enforcement of women's rights from the grassroots to the national level.

Additionally, the practice of planting arrowroots and trees on sewage treatment areas to absorb toxins inadvertently leads to these **contaminants entering the food chain.** Women, often being the primary decision-makers for household meals, may unknowingly introduce these toxins to their families, affecting both their own health and that of their children. This issue is compounded by the fact that men may eat outside the home, reducing their exposure, while women and children who consume the home-cooked meals bear the brunt of the toxic burden.

The issue is further compounded for **children labouring in mines**, where exposure to hazardous chemicals in purification processes poses severe health risks. Similarly, in Uganda, the recruitment of women and children in environments with poor air quality, often without adequate health protections, highlights the urgent need for action to mitigate these risks. Moreover, in Kenya, women's reliance on agriculture makes them particularly vulnerable to environmental degradation, such as deforestation, which exacerbates their exposure to harmful substances.

Moreover, the societal pressure on women to conform to **certain beauty standards often leads them to use skin-lightening products**, which may contain harmful chemicals. These products can cause severe skin diseases and are a direct result of the gendered expectations placed upon women. Furthermore, the lack of protective equipment for female peasant farmers in parts of Africa exposes them to agrochemicals, which can have long-term health consequences.

5) Examples of Best Practices:

There are some best practices highlighted:

1. One notable case study of addressing gendered harms of toxics is **Sweden's regulation of phthalates in toys**. In 1995, Sweden banned certain phthalates from toys due to their endocrine-disrupting properties, particularly affecting reproductive health. This regulation aimed to protect children, recognizing gendered risks as boys and girls might be exposed differently to these substances through toy use. Additionally, Sweden has funded research and public awareness campaigns on gendered impacts of toxic exposure, informing medical practitioners and the public alike. Such measures illustrate a holistic approach to addressing gender-specific vulnerabilities to harmful substances through regulation, education, and research initiatives.
2. **The EU has developed a comprehensive framework for the identification and regulation of substances that may be classified as endocrine disruptors**. These regulations play an important role in reducing/preventing chemicals that are especially harmful for women, from being consumed.
3. **The State of Washington, in 2023, passed the Toxic Free Chemicals Act**, which aims to restrict the manufacture, distribution and sale of cosmetic products containing certain chemicals, within the state. Considering women are the major consumers of cosmetic products, regulating the chemicals used in cosmetics is also a necessity.
4. **In Kenya, the National Environment Management Authority conducts monthly audits on emissions from flower farms and companies**. The Water Resources Authority performs similar assessments. The release of toxic materials is punishable by law, and non-compliant entities may face trade suspension until they meet the required standards. Furthermore, the National Environmental Trust Fund (NETFUND) provides grants to empower women through community-based projects that tackle environmental challenges, especially for those in vulnerable groups.
5. However, there are **notable disparities in progress between developed and developing countries**, which underscores the importance of support from developed nations in the creation of action plans for the latter. In Nigeria, the lack of governmental attention to regulations, often due to conflicting interests and corruption, results in a failure to adhere to these rules, leading to a reliance on the United Nations for resolution.

6) Additional Inputs:

- **Climate crisis** is worsening gendered harms from toxics and harmful substances. As one of the effects of the climate crisis is increasing heat in some areas of the world, it amplifies or worsens pre-existing medical conditions for vulnerable groups, especially women. Glucide et. al. (2021) mentioned that heat (from climate crisis) strengthens the effect of air pollution in harming women during pregnancy and the baby. Furthermore, the baby has the highest risk to experience septal heart defects, by 65% in 2035 in some areas in the USA, and cataracts. Furthermore, fossil fuel derivatives and utilisation is the source of both climate crisis and some of the toxic chemicals.
- **Standards for evaluating chemicals** that disproportionately impact women's health are largely informed by scientific research. Meanwhile, the enhancements in pollution management systems can mitigate toxin exposure at its source, yet the degree to which this alleviates gender disparities in toxicity exposure remains unclear. Therefore, we should decide on which strategy is more crucial for achieving the Sustainable Development Goals (SDGs) within the given timeframe to alleviate gender inequality in toxic exposure: increasing funding for field research projects in environmental toxicology or implementing engineering projects.

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