

INOPOL

INDIA-NORWAY
COOPERATION PROJECT ON
CAPACITY BUILDING FOR
REDUCING PLASTIC AND
CHEMICAL POLLUTION IN
INDIA (INOPOL)

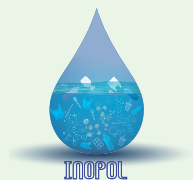
GENDER RESPONSIVE ACTIONS AND RECOMMENDATIONS FOR TACKLING MARINE PLASTIC AND POPS POLLUTION IN INDIA



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Background

Gender equality is a fundamental human right and is crucial for achieving sustainable development, as reiterated by the United Nations Sustainable Development Goal 5 (SDG 5) that is aimed to “Achieve gender equality and empower all women and girls”. Women have a vital role in environmental management and development and their full participation is therefore essential to achieve sustainable development (Rio Declaration Principle 20).

Both globally and in India, the negative impacts caused by marine plastic-related pollution, and POP (Persistent Organic Pollutants) pollution, are considerable for vulnerable groups, such as the informal waste management sector or coastal communities, who are affected in a variety of ways depending on their gender, culture, income, consumption patterns, social norms, and behavior. Marine plastic/POPs pollution is directly linked to waste management on land. Women are part of the large informal economy of waste pickers in India that is central to waste management in the

Women are highly vulnerable to exposure from hazardous, **persistent chemicals** that have detrimental health impacts on reproductive and pregnancy outcomes, even long after exposure.

country. The most impoverished workers are not absorbed into formal systems of employment. Keeping this in mind, during the implementation of Project INOPOL (India-Norway cooperation project on capacity building for reducing plastic and chemical pollution in India), the project partners have ensured gender inclusiveness, and have taken into consideration gender responsive actions. An account of such observations, ideas and actions is presented below.

Impacts of plastic/POPs pollution on vulnerable stakeholder groups including women

In India, women are under-represented in decision-making levels in plastic-related industries, and regulatory bodies. In the plastics value chain, women face greater negative economic and health impacts than men. Right from the production to consumption to disposal of plastics, the gender-specific impacts are witnessed at every stage of the life cycle of a plastic product. At the disposal phase, women waste workers are involved informally in the plastic recycling process, often working alongside

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While the plastic waste management sector revealed insights into the social and economic challenges that women face in the sector, the chemical pollution sector throws light on the acute health-related challenges that women are facing. In nutshell, women are disproportionately impacted and silently endure it.

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their children under insanitary conditions. Further, the participation of women in plastic related industries is mostly limited to working as daily wage workers, and therefore women on an average earn significantly less than men in the sector. Most of the times, these women lack proof of identity, a bank account, access to social welfare and government insurance schemes, and labor-regulated rights.

Effects on the health and well-being of women

Plastics and plastic additives negatively impact the health of women working in plastics and plastics-related industries as well as that of women consumers. Research has shown that hazardous materials (especially EDCs - endocrine disruptor chemicals like BPA, vinyl chloride, styrene, acrylonitrile, and phthalates) during the production and research processes, have negative health impacts on women workers handling these materials. Health problems in women related to EDCs include infertility, abortions, adverse birth outcomes, and cancers.

Gender related insights from INOPOL sub-study: Plastic Waste Management (PWM) during COVID-19

The ongoing COVID-19 pandemic poses a challenge in achieving many of the SDG targets including the gender equality targets. Underprivileged women have become more vulnerable due to reduced access to key resources including essential health services. The impact of COVID-19 has compounded economic impacts for women of the informal sector involved with plastic waste management. Such vulnerabilities include having insecure jobs, uncertainties, and health impacts. Research conducted during March-August 2020 on plastic waste management in Delhi and Surat under Project INOPOL has revealed a few key

The women informal plastic waste collectors are reported to have insecure jobs, and experience uncertainties, especially during the COVID-19 pandemic, when their wages witnessed a sharp decline. The low value of plastic waste may keep informal women waste collectors, with little or no social and economic protection, trapped in a cycle of poverty. They often do not have government-issued identification cards and are hence often denied support from NGOs or other agencies. It is important to be mindful of these gender-related inequities and provide the informal women waste workers with the required resources— necessary wages, safe working conditions, and social protection.

facts on gender disparity in the informal waste management sector.

- Gender distribution of surveyed waste pickers in South Delhi and East Delhi showed that there were more men involved in the business than women. About 48% of them were involved in the waste trade along with their families and showed that women were not necessarily directly engaged with waste collection, but were involved at the back end. All women respondents stated that their families were involved in waste picking.
- Reportedly, there is a sharp decline (50-70%) in the income of waste collectors. A woman waste picker had shared that her income before the COVID-19 lockdown was around 12000 Indian Rupees, which had dropped to only 6000 Indian Rupees, pushing her to economic hardship.
- While women waste workers have contributed during the pandemic, they have also faced the vulnerabilities related to complete lockdown and adopting extremely difficult means to survive in cities. It was extremely hard for them to feed their families or find shelter during



complete lockdown, and were therefore forced to walk back to their hometowns or villages that was hundreds of kilometers away. Some who chose to stay back had to somehow survive in the city by finding some waste to handle and earn a basic livelihood.

- ➔ Majority of the interviewed waste pickers (including women) during Project INOPOL had some sort of government identifications like *Aadhar* card (unique identity number obtained voluntarily by Indian residents/passport holders) or ration card, and few of them had *Jandhan* account of the “*Pradhan Mantri Jan Dhan*” Yojana through which they could open bank accounts offering both debit card and life insurance cover.

Gender Responsive Actions and Observations made under Project INOPOL

The INOPOL project (2019-2022) aims to address the highly interlinked challenges regarding marine litter, microplastics and POPs in India. The project is led by Norwegian Institute for Water Research (NIVA), and Mu Gamma Consultants Pvt Ltd (MGC). The project implementation partners are SRM Institute of Science & Technology (SRM), Central Institute of Petrochemicals Engineering & Technology (CIPET), Toxics Link (TL), and The Energy and Resources Institute (TERI). Throughout the project, gender implications have been considered, and the existing knowledge has been built to gain better understanding on the issue.

The observations made related to gender implications during the implementation of the project are:

- ➔ Based on gendered consumption patterns, both women and men are consumers of a range of plastic products. Such patterns related to plastic value chains and marine pollution have been analyzed, and suitable policy measures have been recommended.
- ➔ Gender-specific roles and attitudes shape waste management practices. Women are

Project INOPOL Team

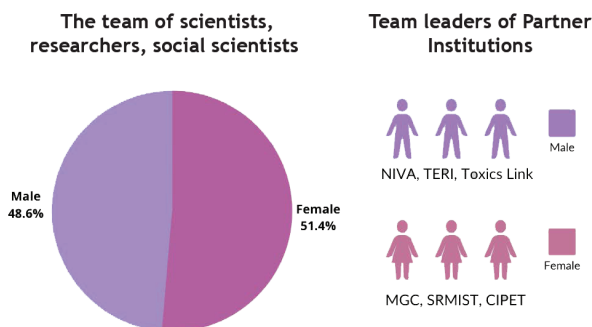


Figure 1: Gender balance in Project INOPOL Team

the prime consumers of cosmetics/personal care products that include microplastics and microbeads.

- ➔ Household duties are largely taken up by women, and they are generators of plastic packaging waste, and therefore needs to be sensitized.
- ➔ Women are the most vulnerable urban poor, and as informal waste pickers, they are



Figure 2: Gender distribution amongst Project Stakeholders (Consultations)

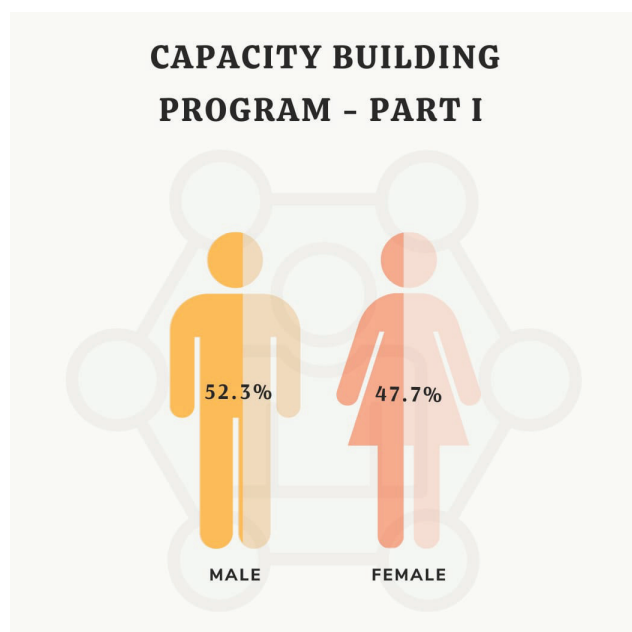


Figure 3: Gender distribution among participants of Capacity Building Program

exposed to health hazards and social stigma while consistently earning less than male counterpart who are often included in the formal employment sector.

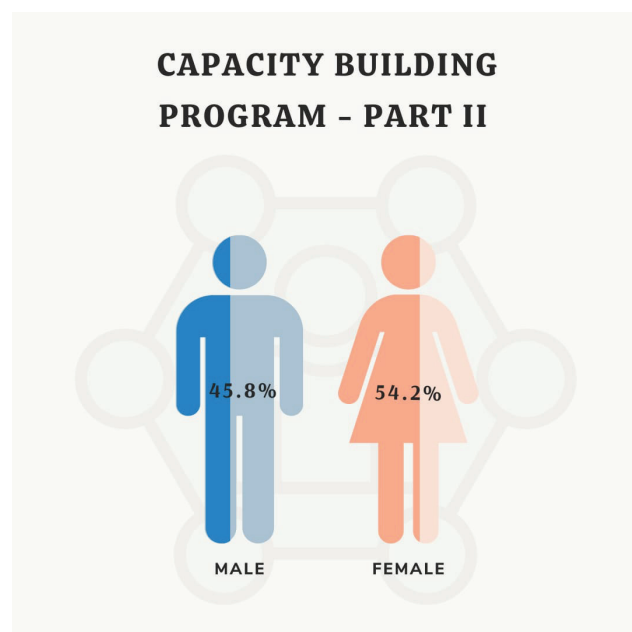


Figure 4: Gender distribution among participants of Capacity Building Program II

The **emerging policy issues** need to address the adverse impact of chemicals on women.

There is ample evidence on the human health impact of highly hazardous pesticides, Endocrine-disrupting chemicals (EDCs), Persistent Organic Pollutants (POPs), Pharmaceutical pollutants, and Perfluorinated chemicals. These health impacts are more pronounced in the case of women and are passed on to offsprings.

- ➔ The project team has continuously made efforts to consider gender diversity, equity, and inclusion. The INOPOL project had ensured participation of women as researchers, policy scientists, project team members and key stakeholders.
- ➔ The gender disaggregated data of the different aspects and activities of Project INOPOL is presented below.
 - The team of scientists, researchers, social scientists have a healthy gender balance with 17 women and 18 men in the implementation of the project. Out of six project partner institutions, three are being led by women (**Figure 1**).
 - The stakeholder consultation workshop had a good gender mix with women heading some of the organizations. A total of 9 out of 26 participants were women (**Figure 2**).
 - The two capacity-building programs under the project were gender-responsive. There were 50 women and 55 men in the first training program, and 26 women and 22 men in the second training program (**Figure 3 & Figure 4**).
 - Field sampling training were conducted by a team that consisted of Research Associates, Masters' and Ph.D students from the partner organizations (SRMIST, CIPET, MGC, TERI), and had a gender ratio of 7 men and 5 women (**Figure 5**).

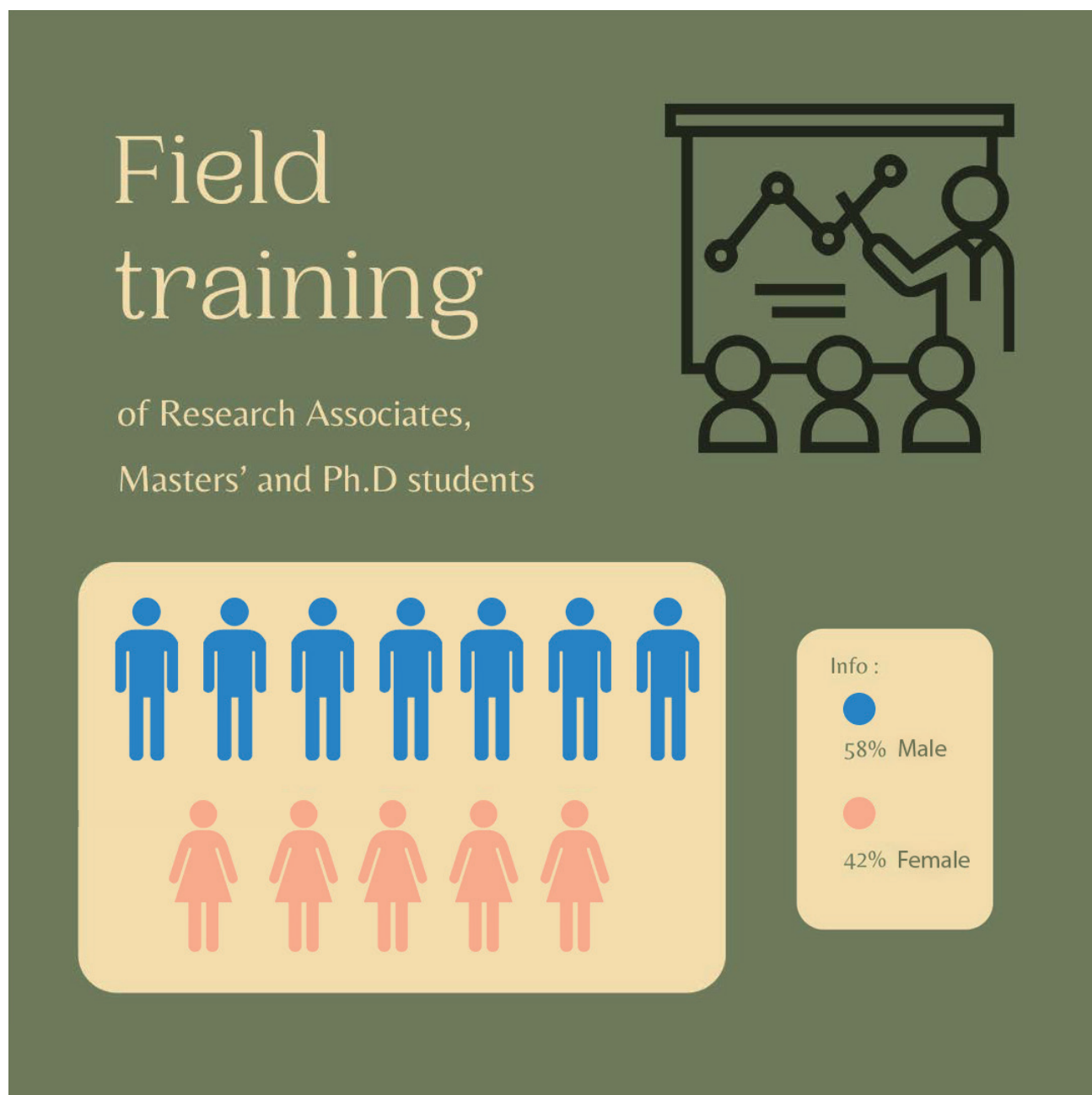
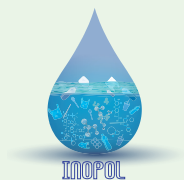


Figure 5: Field sample training conducted under Project INOPOL

It is imperative to promote **equal participation of women** in decision-making at all levels and in all sectors related to chemicals – POPs and plastics. This includes policy-making at local, national, regional, and international levels.



Way forward

It is crucial to collect gender-disaggregated data related to the plastic value chain. This will help to identify roles, needs and challenges of all genders, and make suitable and culturally appropriate policy recommendations. In general, there is currently very little research on the interlinkages between marine plastics/POPs pollution and gender, and this needs to be explored further. The government may join hands with the private and public sectors and support formalizing the informal sector in plastic recycling value chain. The capacity of women stakeholders for their meaningful participation in decision-making, interventions, and consultations, should be built through training and capacity building programs, awareness raising campaigns, etc.

Gender mainstreaming has been addressed at every stage of the INOPOL project to ensure that women and men benefit equally from managing actions on marine pollution and to offer solutions for women to create a level playing field in terms of access to finance, technology, and other resources, and therefore to contribute effectively to solutions for plastic/POPs waste management.

A successful and well-balanced circular economy may play a key role in addressing the existing gender inequalities. The importance of empowering women in the informal waste management sector and raising awareness about their role in the waste management needs to be acknowledged. As we are in the cusp of developing a Plastic Convention (as expressed in the United Nations Environment Assembly (UNEA-5.2), it will be important to understand the gender perspective in all related programs and projects, and efforts must be made to organize women for recycling and pave their way to contribute to circular economy.

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