

**ENVIRONMENT AND SOCIAL
DEVELOPMENT ORGANIZATION – ESDO**

Profile 2026



36 Years of Advocacy for Toxin-
Free and Resilient Bangladesh



Nurturing a future where communities and nature flourish side by side.

MR. SYED MARGHUB MURSHED
CHAIRMAN



For more than three decades, ESDO has been guided by the vision of shaping a future where humanity and nature flourish in harmony. Rooted in science, community engagement, and policy advocacy, our journey reflects an unwavering commitment to protect public health, safeguard ecosystems, and promote sustainable livelihoods across Bangladesh.

As environmental challenges grow more complex, we remain dedicated to transforming knowledge into action advancing zero-waste practices, preventing toxic exposures, and strengthening climate resilience. Together with our partners and communities, we continue to build a just and sustainable future for generations to come.

We inspire communities to live sustainably and
build resilience for a changing environment.

DR. SHAHRIAR HOASSAIN
SECRETARY GENERAL

ESDO has been driven by the belief that environmental protection and human wellbeing are inseparable. Guided by science and grounded in community action, we work to shape a future where people and nature thrive together. Our initiatives from pollution prevention to safe chemicals management and zero-waste practices reflect a steadfast commitment to safeguarding public health and ecological balance in Bangladesh.

We inspire communities to embrace sustainable lifestyles and strengthen resilience to environmental challenges. Through partnership, advocacy, and innovation, ESDO continues to transform awareness into meaningful action, ensuring cleaner environments, safer livelihoods, and a healthier future for generations to come.



Our dedication is to safeguard the Earth,
fostering a sustainable and greener tomorrow
for all.

SIDDIKA SULTANA
EXECUTIVE DIRECTOR



ESDO is committed to protecting the environment and promoting sustainable development in Bangladesh. Guided by science, community engagement, and policy advocacy, our work reflects a vision where people and nature coexist in harmony, and where future generations can thrive in a cleaner, healthier world.

We are dedicated to safeguarding our planet's future, working alongside communities, policymakers, and partners to advance sustainable lifestyles, reduce pollution, and build resilience against environmental challenges. Through collective action and innovative solutions, ESDO continues to turn awareness into impact, ensuring a greener and more sustainable world for all.

Overview



The Environment and Social Development Organization (ESDO) has concluded another impactful year in 2026, reaffirming its dedication to environmental conservation and social development. With a focus on strategic initiatives, ESDO made significant strides toward its mission. ESDO conducted critical studies supported by international partners. With the European Environmental Bureau (EEB), it unveiled high mercury levels in skin-lightening creams in Bangladesh.

Another study, in collaboration with the Wonjin Institute of Occupational and Environmental Health (WIOEH), highlighted excessive parabens in toothpaste and handwash. Partnering with UNICEF, ESDO launched the “Addressing Children’s Environmental Health” initiative to tackle lead poisoning and promote green practices.

In collaboration with FEMNET, ESDO implemented the “Multi-actor Partnership for Improved Due Diligence in the Textile Sector” project in Ashulia and Savar, focusing on labor practices and sustainability. Internationally, ESDO participated in pivotal events such as the COP 30, emphasizing methane emission reduction through zero-waste strategies.

ESDO also contributed to the Intergovernmental Negotiating Committee (INC-5.3) of the Global Plastic Treaty, challenging myths about plastic recycling and bioplastics. ESDO expresses deep gratitude to its global partners, whose support has been vital to the success of its initiatives. As 2027 approaches, ESDO remains determined to advance its mission, fueled by renewed energy and a vision for a sustainable future for communities worldwide.

Table of Contents

1. Issues we address.....6	11. Strengthening Due Diligence.....21
2. Executive committee.....7	12. Reducing Uses and Releases of Chemicals of Concern.....22
3. Mission,Vision,Values.....8	13. Plastic Reduction23
4. Our Profile.....9	14. Quick Assessment on Methane24
5. Major Partners & Donors.....10	15. Mercury25
6. Major Achievements.....11	16. PFAS in Water and Textile in Bangladesh27
7. Our Major Projects.....15	17. Major Activities.....30
8. Legislation to Combat.....16	18. International Interventions31
9. Zero waste.....17	19. Major Publications.....37
10. Lead Poisoning.....19	

ISSUES

WE ADDRESS



ENVIRONMENTAL HEALTH



ENVIRONMENTAL JUSTICE AND GOVERNANCE



ENVIRONMENTAL POLICY AUDIT AND RESEARCH



ENVIRONMENTAL EDUCATION



TOXIC FREE WORLD

EXECUTIVE COMMITTEE



MR. SYED MARGHUB MURSHED
PRESIDENT



PROF. DR. AINUN NISHAT
VICE PRESIDENT



DR. SHAHRIAR HOASSAIN
SECRETARY GENERAL



SIDDIKA SULTANA
EXECUTIVE DIRECTOR



PROF. DR. ABUL HASHEM
EXECUTIVE MEMBER



DR. MAHFUZA PARVEEN
EXECUTIVE MEMBER



MS. RAISA SULTANA
EXECUTIVE MEMBER

ADVISORY COUNCIL



DR. HASNAT M ALAMGIR
TECHNICAL ADVISOR



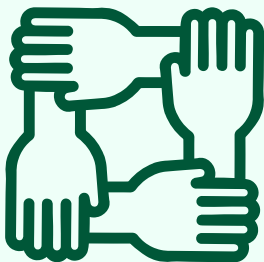
PROF. DR. ABU JAFAR MAHMUD
ADVISOR & HEAD OF ESDO TECHNICAL COMMITTEE



DR. MOHAMMAD ENAYET HOSSAIN
TECHNICAL ADVISOR

Mission

Our mission is to encourage and promote an environmental movement involving diverse social groups through a participatory democratic structure while offering them ideas, information, and leadership for addressing the triple planetary crisis of climate change, biodiversity loss, and pollution (particularly plastic pollution), as well as promoting a secure, environmentally friendly, and toxic-free world



Values

Peace & Harmony
Integrity & Commitment
Equity & Justice
Transparency & Justice



Vision

Our vision is to see Bangladesh, along with every developing nation in Asia, Africa, and Latin America, achieve the Sustainable Development Goals by working to protect and conserve nature and life from toxic and plastic pollution; reduce poverty; increase literacy and education; empower women in rural communities, improve health services through sustainable environmental livelihood; ensure environmental health; enhance climate resilience; and promote Through these various initiatives, ESDO aims to create a better and more sustainable future for communities around the world.



Our Profile

Type of NGO: Environmental and Sustainable Development
Based Years of Association: 36 years *[Since 6, June, 1990]*

Certification

Registration Authority	Reg. No	Date
Social Service Department	Dha-02831	16.11.92
NGO Affairs Bureau	962	12.08.95
Europe Aid (Pador) Registration	BD-2011-ESS-0903019783	2012

Our Office

Head Office

8/1, Block # C, Lalmatia, Dhaka- 1207, Bangladesh.
Phone: +880 1726053420,
Fax: +880-2-9130017 E-mail:
info@esdo.org Website: www.esdo.org

Project Office

Eco-Village, Betgari, Gongachora,
Rangpur, Bangladesh

Partners & Joint Project Office

CEPHED, Nayabasti, Imadol 5, Lalitpur,
Kathmandu, Nepal.
Tel:+977-1-5201786, Fax: +977-1-501786

Orissa State Volunteers and Social Workers Association
Plot No. 502/1, Lane- 9 Mallick Complex, Jagamara,
Bhubaneswar- 7510 Odisha, India.
Phone & Fax: +91-674-2350384, E-mail: info@osvswa.org

Major Partners & Donors



From the bottom of our hearts, Thank you!

Major Achievements

National Environment Award 2020 Winner

ESDO was awarded the National Environment Award 2020 in recognition of our work to protect Bangladesh's environment.

Since our founding in 1990, we have been dedicatedly advocating to conserving biodiversity. We pioneered the anti-polythene campaign that led to a nationwide ban on plastic shopping bags in 2002. Since then, we've continued advocating for a complete ban on single-use plastics.



From Pioneering Campaigns to National Recognition!

More recently, our focus has been on banning single-use plastics throughout Bangladesh. Our efforts have yielded significant results, including a court order requiring a phase-out of single-use plastics in coastal areas by the end of 2022.

Polythene Bags Ban in 2002

ESDO's Decades – Long Campaign: Pioneering Research and Grassroots Advocacy.



ESDO was the first organization to conduct comprehensive research into the adverse effects of the production and use of polythene in Bangladesh. From a grassroots initiative to a nationwide campaign— our Anti-polythene Movement garnered support from people from various professions rapidly. Activities, such as door-to-door campaigns, small group meetups, and rallies, made the general public aware of the adverse effects of polythene, especially its effects on the environment and paved the path to expanding the Anti-polythene movement.

Our unwavering commitment to advocacy proved instrumental in compelling governmental action on the issue of polythene bags. After 13 years of campaigning, Bangladesh made history in 2002 by becoming the first country to enforce a total ban on polythene bags.

High Court's Ruling on ban single use plastic products in coastal areas of Bangladesh

ESDO's advocacy resulted High Court's Ruling on ban single use plastic products in coastal areas of Bangladesh. In accordance with that The Ministry of Environment Forest & Climate Change have published a gazette ordering the Department of Environment to phase out Single -use plastic from 12 exposed coastal districts of Bangladesh by 2023.



ESDO'S INITIATIVE LED TO THE BAN ON MERCURY AMALGAM IN 2018

Since 2013, ESDO has actively supported Bangladesh's ratification and implementation of the Minamata Convention on Mercury. As part of this commitment, we've advocated for safer alternatives to dental amalgam and provided crucial information at COP4.

Collaborating with the Bangladesh Dental Society (BDS) in 2018, we declared that mercury dental amalgam should not be used in treating pregnant women, nursing mothers, and children. Together, we called upon dental surgeons nationwide to end its use in these cases, aligning with Bangladesh's pledge to the Minamata Convention.



This declaration reinforces our dedication to phasing out mercury use to protect human health and the environment.

ESDO's Initiative: Strengthening Mercury Regulation and Phasing Out Skin-Lightening Creams in Bangladesh

ESDO's continued advocacy has contributed to strengthening national action on mercury in cosmetics in Bangladesh, including alignment with the Minamata Convention through BSTI's establishment of a 1 ppm maximum mercury limit in skincare products under the BDS 1382 standard. Building on this regulatory framework, BSTI has taken enforcement actions against non-compliant products, including banning 8 skin-lightening cream brands in 2020, 17 products in 2022, and 19 products (18 creams and 1 lotion) in 2023 due to excessive mercury and hydroquinone levels.



Reduced Lead In Paint in 2018

Since 2008 we have been persistently working to ban lead-based paint countrywide. As a result of ESDO's continuous policy advocacy, in 2018, Bangladesh Standards and Testing Institution (BSTI) has imposed a standard for the paint manufacturing industry with a maximum 90 ppm (parts per million) limit for household paint which make Bangladesh the only country with a mandatory standard on Lead Paint in South – East Asia.



Our Major Projects

Plastic Free Campus (PFC) Project



Considering the burning global issue due to plastics, Environment and Social Development Organization – ESDO in association with the Mutual Trust Bank Limited – MTBL, Bangladesh; Plastic Solution Funds (PSF); and Break Free From Plastic (BFFP) have designed the “Plastic Free Campus (PFC)” project to help school children to combat single-use plastic pollution in Bangladesh. Through this project, ESDO and partners are planning to include ten schools in five divisions in Bangladesh, namely Dhaka, Rajshahi, Khulna, Sylhet, and Rangpur.

This projects goals are to develop a second generation of environmental leaders, inform the younger generation about plastic pollution, and train them to reject single-use plastics. Additionally, this project would provide guidelines for living a waste-free lifestyle from home to school along with the creation of plastic-free campus.



Legislation to Combat Single-use Plastic Pollution in Bangladesh

The aim of this project is to achieve legislation to ban single-use plastic and restriction on other problematic plastic packaging.



To fulfill the above goal, ESDO will implement a step-by-step strategy that will target all stakeholders. This robust strategy includes a policy audit, in-depth data analysis, alliance, and partnership building, a holistic communications strategy that will create public awareness and policy advocacy, and most importantly we will build case studies that promote alternatives to single-use plastic items. This work will form the foundation and an ecosystem for negotiations with the government and policymakers with whom we hope to continue consulting for drafting enforceable legislation. We will continue to build a movement for optimal enforcement of the legislation after it is passed such that there are real-world changes.

Zero Waste

In 2026, the Environment and Social Development Organization (ESDO) led transformative initiatives in Bangladesh, promoting sustainability, waste management, and environmental education.

A key achievement was the development of Zero Waste Villages in Shahpara and Pramanicpara, where innovative solutions like twin-pit composting and biogas plants effectively managed waste while supporting organic farming. These efforts significantly reduced methane emissions, demonstrating both environmental and economic benefits. To expand awareness, ESDO hosted the Zero Waste Village Documentary Showcasing in Tushvandar, engaging 50 participants in discussions on sustainable living.

Community consultations and capacity-building workshops in Betgari and Rangpur further strengthened waste segregation, composting, and green job creation, with 450 individuals committing to a zero-waste lifestyle. Additionally, the Plastic-Free Village initiative in Shahpara and Pramanicpara reduced reliance on single-use plastics by providing eco-friendly alternatives and promoting a circular economy. Collaborations with government officials, NGOs, and community-based organizations (CBOs) amplified these efforts.



Through grassroots engagement, innovative waste management, and strategic partnerships, ESDO's initiatives in 2026 drove behavioral change, reinforcing Bangladesh's commitment to sustainability and advancing SDG targets on waste management, climate action, and sustainable development.

Zero Waste & Sustainable Practices for Madrasa Youth' workshop held on April 8–9, 2026, students gained hands-on experience in various waste management techniques. Organized in collaboration with the UM Fund and GAIA, this initiative is part of ESDO's ongoing efforts toward building a cleaner and greener future.



'Key Highlights:

- **Waste Identification & Management Training:** Learning how to identify and manage different types of waste.
- **Source-Segregation & Household Waste Management:** Practicing waste separation at the source and managing domestic waste effectively.
- **Composting & Organic Waste Reuse:** Understanding composting methods and how to recycle organic waste.
- **Engaging Activities:** Fun and interactive sessions like the 'Detect the Bin Challenge' and 'True or False' quizzes.
- **Awareness Documentary Screening:** Visual learning through documentary films on environmental sustainability.

Women Entrepreneurship Development



The Zero Waste initiative of Betgari Union extends far beyond mere waste management; it has evolved into a unique model for women's empowerment, employment generation, and sustainable development. By integrating organic farming, biogas production, composting, and the manufacturing of eco-friendly products, the initiative is creating diverse new economic opportunities.

Through tailoring and entrepreneurship training, 30 women are now building their own futures, opening doors to sell their products in both domestic and international markets.



ESDO empowered 20 rural women (11 in Pramanikpara, 9 in Sahapara) through skill-based training in bag sewing, kantha stitching, embroidery, and paper bag making. The program fosters eco-friendly livelihoods, builds income opportunities, and strengthens women's role in community waste reduction.



Lead Poisoning in Bangladesh



ESDO's work on lead paint and lead poisoning in Bangladesh began in 2008, starting with awareness raising, evidence generation, and policy advocacy for banning lead in paint. Through studies conducted in 2013 and 2015 with support from IPEN and other partners, ESDO helped bring national attention to the harmful presence of lead in paints and its serious health impacts, especially on children. These efforts contributed to major regulatory progress when the Bangladesh Standards and Testing Institution (BSTI) finalized a mandatory standard in 2018, limiting lead content in household paint to a maximum of 90 ppm. Since then, ESDO has continued to observe International Lead Poisoning Prevention Week, engage youth and civil society, mobilize media, and advocate for stronger enforcement and a complete transition to lead-safe products.

Building on this long-term work, ESDO and UNICEF Bangladesh jointly implemented the project "Addressing Children's Environmental Health with a Particular Focus on Lead Poisoning in Bangladesh" from December 2023 to December 2025. The project focused on generating national evidence, analyzing existing policies and standards, identifying regulatory and enforcement gaps, and strengthening stakeholder engagement. It included desk reviews, key informant interviews, focus group discussions, consultation workshops, media engagement, youth mobilization, and policy dialogues. Major areas of work included VAT and tax reform for lead-containing products, landscape analysis of lead-related legislation, industrial paint standards, occupational safety in formal used lead-acid battery recycling, and pathways to address informal recycling.

Beyond paint, ESDO's lead-related work increasingly addresses multiple sources of exposure, including used lead-acid battery recycling, industrial processes, contaminated consumer products, cookware, toys, ceramics, cosmetics, adulterated food items, soil, water, and air pollution. ESDO's broader approach combines research, policy advocacy, private sector engagement, youth mobilization, media sensitization, and community awareness. Through partnerships with government, UNICEF, IPEN, Instiglio, LEEP, Pure Earth, BSTI, DoE, health institutions, industry associations, and civil society, ESDO remains committed to reducing lead exposure, protecting children and workers, and advancing a safer, healthier, and lead-free Bangladesh.

Lead Poisoning in Bangladesh

In 2025–2026, ESDO further expanded its lead paint work through collaboration with Instiglio and the Lead Exposure Elimination Project (LEEP) under the initiative “Strengthening Enforcement and Supporting Market Transition to Lead-Free Paint in Bangladesh.” This project builds on a comprehensive paint market study that assessed compliance with Bangladesh’s 90 ppm lead standard. The study collected paint samples from major markets in Dhaka and Chattogram and found that 42% of tested paints exceeded the national limit, with non-compliance concentrated mainly among smaller, informal, and certain imported products. The project now focuses on two major workstreams: strengthening BSTI’s enforcement capacity through technical support, diagnostics, laboratory, and surveillance improvements; and engaging non-compliant manufacturers to support reformulation, compliance, and the transition to lead-free production.

Alongside these initiatives, ESDO is actively contributing to the National Strategy and Multilayer Action Plan for a Lead-Free Bangladesh (2025–2035) under the leadership of the Ministry of Environment, Forest and Climate Change. Building on UNICEF and ESDO’s evidence and advocacy, MoEFCC formed a multisectoral working group involving government agencies, UNICEF, ESDO, Pure Earth, and other stakeholders to draft the strategy. MoEFCC, with technical support from UNICEF, ESDO, and Pure Earth, convened a national validation workshop where representatives from ministries, regulatory agencies, academia, civil society, and development partners reviewed and refined the draft. The strategy addresses major exposure sources, strengthens enforcement and surveillance, improves laboratory capacity, and promotes coordinated national action. With final inputs incorporated, we expect to launch the plan soon as a major milestone toward a lead-free Bangladesh by 2035.



Strengthening Due Diligence Implementation in the Textile Sector in Bangladesh



The Strengthening Due Diligence Implementation in the Textile Sector in Bangladesh project, a collaborative initiative by the Environment and Social Development Organization - ESDO, the Bangladesh Institute of Labour Studies (BILS), and Germany-based FEMNET, aims to improve working conditions for Ready-Made Garment (RMG) workers and mitigate environmental hazards caused by the textile industry. Launched in 2023, this three-year project addresses human rights risks and environmental pollution in Ashulia, home to 1,100 textile factories. Inadequate wastewater treatment and the discharge of toxic chemicals, including heavy metals and microplastics from dyeing and finishing processes, pose severe threats to worker health and local communities.

To combat these issues, the project employs Worker-Based Monitoring (WBM) and Community-Based Monitoring (CBM) to document environmental pollution and health risks. Ensuring continuous engagement from government representatives, trade unions, and community leaders is vital to strengthening due diligence mechanisms, safeguarding worker health, and ensuring the long-term sustainability of the RMG sector. The project has introduced several capacity-building initiatives, including an Inception Workshop to align stakeholders with project goals and a series of webinars that covered compliance with the EU Corporate Sustainability Due Diligence Directive and the German Supply Chain Act. The Community Environmental Monitoring (CEM) approach, previously tested in India, has been adapted to empower local communities in Bangladesh to document and report pollution more effectively. Another significant achievement is the establishment of the Container Group, a multi-stakeholder platform comprising unions, government bodies, and community representatives, which is working to reinforce due diligence standards in Ashulia's RMG sector.



Free Medical Camp Empowers Ghosbag and Kathgora Communities

On 28 April and 8 May, ESDO and AGROHO Society jointly organized a medical camp in Ghosbag and Kathgora, providing free consultations, health guidance, and medicines. Residents, including children, women, the elderly, and garment workers, actively participated and appreciated the initiative addressing urgent health and environmental challenges.

Safe Drinking Water Initiative

ESDO and AGROHO Society are working to install water filtration systems to provide free and safe drinking water for the communities. The planning and coordination process is ongoing, with continuous collaboration between the organizations and residents to move forward with the installation and operation of the filtration systems.



Reducing Uses and Releases of Chemicals of Concern, Including POPs, in the Textiles Sector

Bangladesh's textile and garment sector is a global leader and a cornerstone of the national economy, providing substantial employment and export revenue. However, the sector is also a significant source of chemical pollution. Hazardous substances used in dyeing, washing, printing, and finishing processes release Persistent Organic Pollutants (POPs) and Chemicals of Concern (CoCs), posing serious risks to human health and the environment.



To tackle these challenges, the regional project "Reducing Uses and Releases of Chemicals of Concern, including POPs, in the Textile Sector" was launched under the Basel and Stockholm Conventions Regional Centre for South-East Asia (BSCRC-SEA), funded by GEF/UNEP. The project is implemented in Bangladesh by the Environment and Social Development Organization -ESDO in collaboration with the Department of Environment (DoE), MoEFCC, with technical support from NRDC, USA. It focuses on strengthening chemical management through policy reforms, stakeholder engagement, promotion of safer chemical alternatives, and adoption of sustainable production practices. The project aims to achieve measurable outcomes, including reduced use of COCs and POPs in textile processes, lower environmental releases of harmful chemicals, decreased exposure for workers and communities, and documented evidence of chemical risk reduction, ultimately contributing to a safer, healthier, and more sustainable textile sector.



Stakeholder Coordination and Policy Alignment

September 2025, activities focused on institutional consolidation, strengthening coordination mechanisms, and integrating factory mapping into national policy frameworks. ESDO and DoE held a high-level coordination meeting at DoE Headquarters to finalize the 2025 Work Plan and Budget, agree on timelines for mapping verification, supplier engagement, stakeholder workshops, pilot site identification, and baseline data validation.



Resumption and National Workshop Implementation



Policy and Technical Support



Factory Mapping

Plastic Reduction Initiative in Sundarbans Transboundary International Natural Ecosystems (PRISTINE)

The Sundarbans, a UNESCO World Heritage site shared by India and Bangladesh, is a vital mangrove ecosystem home to endangered species like the Bengal tiger. While it protects against coastal erosion and storm surges, rising tourism and single-use plastic waste threaten its delicate balance.

A project titled “Plastic Reduction Initiative in Sundarbans Transboundary International Natural Ecosystems (PRISTINE)” is being implemented by the Environment and Social Development Organization - ESDO and the Arannayk Foundation (AF), with support from the United Nations Office for Project Services (UNOPS), to address the issue. This project is designed to address transboundary plastic pollution in the Sundarbans by piloting innovative solutions.



ESDO Conducts Waste Audit at Karamjol to Strengthen Policy Advocacy for Plastic Waste Management

On February 11, 2025, ESDO, in collaboration with the Arannayk Foundation and Recycle Jar Ecosystems, conducted a comprehensive waste audit at the Karamjol Eco-Tourism Site in the Sundarbans, under the PRISTINE Initiative.

This audit, aimed at assessing plastic waste generation and management practices, was a crucial step in ESDO's ongoing policy advocacy to push for stronger waste management regulations in eco-tourism zones.

Project Objectives:

To create improved recycling management system and industry standard through innovation.

-To intercept plastic waste at the upstream of the Sundarbans before entering the sea.

-To avoid and intercept single use plastics (SUP) in tourist hotspots of the Sundarbans.

Project Outcomes: Baseline information regarding relevant stakeholder, plastic waste amount and management system acquired.



Implementation of innovative mechanisms and improved plastic recycling market chain to intercept plastic waste and operationalize circular plastic economy in Rupsa - Pasur River System at Mongla Sub-district-Reduced single-use-plastic (SUP) usage at tourist hotspots at Sundarbans to control transboundary pollution.

Methane Emission Reduction from Organic Waste Initiative

ESDO and GAIA Study Highlights Urgent Need for Methane Reduction from Dhaka's Landfills

The Environment and Social Development Organization (ESDO), in collaboration with the Global Alliance for Incinerator Alternatives (GAIA), conducted a groundbreaking study titled Quick Assessment on Methane from Landfills in Dhaka and Recommendations for Integrating Lowering Organic Waste Methane in NDC. This study addresses the alarming methane emissions from Dhaka's two largest landfills, Matuail and Amin Bazar, emphasizing the need for urgent action to mitigate climate impacts.



Methane, a potent greenhouse gas, is a significant contributor to global warming. The study found that approximately 70% of Bangladesh's waste is organic. Due to inadequate segregation and improper disposal, organic waste in landfills decomposes anaerobically, generating substantial methane emissions. Field assessments and data analysis provided a detailed understanding of the waste composition and management practices in these landfills. Additionally, consultations with waste workers, policymakers, and local authorities identified critical operational and policy gaps that hinder effective methane mitigation.

City-Level Roundtable Discussion on Low-M (Methane) Initiative



The study underscores the transformative potential of sustainable waste management practices, particularly zero-waste approaches. It highlights how community participation, policy reforms, and technological innovations can drive measurable environmental progress. By advocating for methane reduction strategies, ESDO has positioned itself as a key player in promoting low-carbon waste management solutions.

This initiative serves as a roadmap for reducing methane emissions while fostering a more sustainable urban waste management system. By implementing the study's recommendations, Bangladesh can enhance its climate commitments, reduce environmental hazards, and contribute significantly to global climate action.



Mercury-Free Dentistry for Environmental Health

Mercury-Free Dentistry for Environmental Health" project, implemented by the Environment and Social Development Organization in collaboration with World Alliance for Mercury-Free Dentistry and Asian Centre for Environmental Health, aims to phase out the use of mercury dental amalgam in Bangladesh.



This project works towards achieving this goal by focusing on the following objectives

To promote mercury-free dental practices by encouraging dental surgeons and dental institutions to adopt safe alternatives. Support the phase-out of mercury-containing dental amalgam through revisions to dental education curricula aligned with the Minamata Convention.

- Raise awareness about the health and environmental risks of mercury and strengthen partnerships with healthcare professionals.
- Engage policymakers to develop and implement policies supporting mercury-free dentistry.
- To engage policymakers to formulate and implement a national policy to phase out mercury in dental care.



Policy Dialogue on Mercury-Free Dentistry

As part of the project, ESDO has organized seminars, workshops, policy dialogues, and international engagements to advance mercury-free dentistry and curriculum reform, involving government officials, academics, media, and the public.

Launch of the ACEH Website and Reception Honoring Attorney Charles G. Brown

The Asian Center for Environmental Health (ACEH) launched its website, inaugurated by Attorney Charles G. Brown, President of the World Alliance for Mercury-Free Dentistry, followed by a reception hosted by ESDO and ACEH to advance environmental health collaboration and mercury-free dentistry in Bangladesh.



Minamata Convention on Mercury – Sixth Conference of the Parties (COP-6)

The Sixth Conference of the Parties (COP-6) to the Minamata Convention on Mercury was held from 3–7 November 2025 in Geneva, Switzerland, where nations agreed to a landmark global phase-out of dental amalgam by 2034.

The Bangladesh delegation included Dr. Fahmida Khanom, Focal Point and Additional Secretary, MoEFCC, and Ms. Siddika Sultana, Executive Director of ESDO. Dr. Shahriar Hossain of ESDO and Dr. Mosharraf Hossain Khandker of the Asian Centre for Environmental Health participated as observers



Assisting in the Implementation and Enforcement of the Minamata Convention on Mercury in Bangladesh

To address the growing threat of mercury-containing cosmetics, particularly skin-lightening products (SLPs), the Environment and Social Development Organization (ESDO), in collaboration with the European Environmental Bureau (EEB) and the Zero Mercury Working Group, is implementing a comprehensive initiative to protect public health and the environment while supporting Bangladesh's compliance with the Minamata Convention on Mercury. The project focuses on reducing mercury exposure, raising consumer awareness, and promoting safer alternatives through market monitoring, laboratory testing, and policy advocacy.



Through ESDO's advocacy efforts, Bangladesh has strengthened action against mercury-containing cosmetics, including the enforcement of a 1 ppm mercury limit for skincare products and the 2023 BSTI ban on 19 skin-whitening products due to excessive mercury and hydroquinone levels. Building on these achievements, ESDO continues to promote stronger enforcement, public awareness, and a mercury-free future in Bangladesh.

Market Surveillance on Mercury-Containing Skin-Lightening Products (SLPs) to Assess Usage and Awareness

ESDO conducted market surveillance across physical and online markets in Bangladesh to assess the availability of mercury-containing skin-lightening products, including banned brands. The findings revealed continued circulation of hazardous products, misleading labeling, and regulatory gaps, highlighting the need for stronger enforcement and targeted interventions.



Follow-Up Research: Assessment of Mercury Concentration in Skin-Lightening Products (SLPs)

ESDO, in collaboration with EEB, Zero Mercury Working Group, and Ban Toxics, conducted follow-up research to assess mercury concentration in skin-lightening products (SLPs). Ban Toxics tested all samples, and 24 exceeded the 1 ppm mercury limit, highlighting enforcement gaps and ongoing risks. The findings emphasize the need for stronger regulation, market surveillance, and public awareness, supported by collaboration among partners to ensure reliable testing and protect public health.



Media Briefing: “Toxic Glow: Mercury in Skin Lightening Products in Bangladesh”



On 19 June 2025, ESDO, EEB, and BAN Toxics revealed alarming findings: 22 of 26 tested skin-lightening creams contained mercury far exceeding the 1 ppm safety limit; one sample had 24,800 ppm. The study, conducted using XRF technology, highlights a severe public health threat.

PFAS in Water and Textile in Bangladesh

ESDO, in partnership with IPEN, conducted a research on analyzing PFAS in water and textile. 31 samples from surface water and 5 textile samples were collected for the analysis.



PFAS, or per- and polyfluoroalkyl substances, are a group of human-made chemicals known for their durability and resistance to water, oil, and heat. Since the 1940s, PFAS have been used in a wide range of consumer products and industrial applications, including non-stick cookware, water- and stain-resistant fabrics, food packaging, firefighting foams, cosmetics, and various industrial processes. Their widespread use is due to their unique properties that provide water and stain resistance, heat resistance, and chemical stability. However, PFAS are environmentally persistent, do not break down easily, and can accumulate in living organisms, posing significant health risks such as liver damage, thyroid disease, decreased fertility, high cholesterol, obesity, hormone suppression, and increased risk of certain cancers. Consequently, there are growing regulatory efforts to limit PFAS use, find safer alternatives, and remediate contaminated sites.

PFAS are associated with numerous health risks, including negative impacts on fertility, fetal development, and thyroid hormone function. Chronic exposure to PFAS has been linked to elevated blood cholesterol levels, lipid imbalances related to cardiovascular disease, slightly lowered birth weight, and reduced antibody response to certain vaccines and infections. Specifically, PFOS exposure can cause liver damage, while PFOA is considered a likely carcinogen.

EDC (Endocrine Disrupting Chemicals) Free Asia Project

ESDO, in partnership with the Wonjin Institute of Occupational and Environmental Health (WIOEH), is working on a project titled “EDC-free Asia” with the goal of identifying the products in Asian marketplaces that contain endocrine-disrupting chemicals.

Under this project, ESDO and Wonjin have conducted different studies, which include BPA in cash receipts in 2021, along with its follow-up study in 2022, Phthalates in Erasers in 2022, and Toxic chemicals in Toys in 2023. This year, ESDO partnered with the WIOEH to analyze the concentration of endocrine-disrupting chemicals (EDC), specifically parabens, in personal care products.



Parabens are widely used as preservatives, antibiotics and antibacterial agents. Thirty samples of products were collected from the markets in Bangladesh and sent to the WIOEH laboratory for testing EDC by HPLC. Among the samples, high concentrations of parabens were found in several toothpastes and handwashes.

Phthalates and Bisphenols country situation in Bangladesh

The Toxics-Free Communities: Phthalates and Bisphenols Project was implemented by the Environment and Social Development Organization (ESDO) in collaboration with IPEN as part of a global initiative across 19 countries. The project aimed to generate evidence and raise awareness on the use, exposure pathways, health impacts, and regulatory gaps associated with phthalates and bisphenols in Bangladesh. Key findings revealed Bangladesh's heavy dependence on imported chemical additives, widespread exposure through consumer products and the food chain, high levels of BPA in thermal receipts, and significant regulatory and monitoring gaps.



The project aimed to identify policy gaps, encourage multi-sectoral engagement, and support future actions related to research, monitoring, and regulatory development. Through research, advocacy, stakeholder engagement, and public outreach, the project contributed to advancing the broader goal of promoting toxic-free plastics and healthier communities in Bangladesh.

Other Projects

RDF (Refused
Derived Fuel)
and Cement
Kilns



National Strategy
of Environmentally
Sound
Management of
Used Lead Acid
Battery



Action Research
on E-waste
Management in
Bangladesh

Community Based
Eco Tourism



Dhaka Green
Restoration
Project:
Youth-Led
Rooftop Initiative

Major Activities

Brand Audit

Since 2018, every year this Brand Audit has been carried out by the Environment and Social Development Organization – ESDO as a part of an attempt to identify the plastic polluters in Bangladesh.



ESDO conducts this yearly activity in collaboration with *Break Free from Plastic* focusing on raising public awareness and providing producers with vital information for safeguarding the environment against the harmful impacts of single-use plastics.

International Lead Poisoning Prevention Week – ILPPW



ESDO has been working since 2008 from awareness-raising activities to policy advocacy on the issue of 'Ban Lead Paint' in Bangladesh. To celebrate

International Interventions

Global Plastic Treaty

The global plastic pollution treaty was adopted by 175 countries at an annual conference held by the United Nations Environment Program (UNEP). The treaty aims to tackle the entire life-cycle of plastic, with the primary goal of developing circular economies that break the reign of single-use plastics.



On behalf of ESDO Dr. Shahriar Hossain, Secretary General of ESDO and Siddika Sultana, Executive Director of ESDO actively participating and representing Bangladesh in the Intergovernmental Negotiation Committee (INC) sessions to phase out single use plastic pollution globally. Their participation underscores the commitment of Bangladesh and other nations to address the urgent and multifaceted challenges posed by plastic pollution.

The second segment of the fifth session of the Intergovernmental Negotiating Committee (INC-5.2), held in Geneva, concluded without an agreement on the highly anticipated Global Plastics Treaty.



The Inter-Governmental Negotiating Committee (INC-5.2) on Plastic Pollution

Despite progress in technical negotiations, deep political divides over the scope, ambition, and financing of the treaty stalled an outcome due to a lack of consensus.

COP28



COP28, the 28th Conference of the Parties to the UN climate change convention, was a major international summit held in Dubai in late 2023. This record-breaking conference brought together nearly 200 countries to focus on implementing the Paris Agreement and accelerating global efforts to combat climate change.

COP29



At COP29, ESDO, in collaboration with GAIA, orchestrated a compelling Side Event titled “Mitigating Methane Emission Towards Environmental Justice.” This event examined the causes of methane emissions from the farm and municipal solid waste sectors, presenting first-hand accounts from those pioneers who are leading the way in finding ways to lower methane emissions from Bangladesh’s waste sector.

COP 30

COP30 was held from 10–22 November 2025 in Belém under the United Nations Framework Convention on Climate Change. The conference took place during record-breaking global warming (1.55°C in 2024) and delays in countries submitting updated climate plans.



Minamata Convention

The Minamata Convention on Mercury, a global agreement to prevent exposure to mercury and its compounds for both human health and the environment, was established in 2013.



The Asia-Pacific Regional Preparatory Meeting for the Sixth Conference of the Parties (COP-6) to the Minamata Convention on Mercury was held on 23–24 September 2025 in Bangkok, Thailand. The meeting gathered government delegates, civil society organizations, technical experts, and international organizations from the region to prepare for COP-6 negotiations and strengthen cooperation on mercury reduction efforts.



On behalf of ESDO, Dr. Shahriar Hossain, Secretary General, ESDO, and Siddika Sultana, Executive Director, ESDO, actively participated in the meeting and intervened on dental amalgam during the discussions.

BRS Conventions

The BRS Conventions, also known as the Basel, Rotterdam, and Stockholm Conventions, are a group of international treaties that focus on protecting human health and the environment from hazardous chemicals and waste.

Empowering Environmental Sustainability: ESDO's Role in Basel, Rotterdam, and Stockholm Conventions (BRS COPs)

The 2025 COPs for the Basel, Rotterdam, and Stockholm Conventions, themed “Make visible the invisible: sound management of chemicals and wastes,” will take place from 28 April to 9 May in Geneva, Switzerland. The high-level segment will gather ministers and stakeholders to address chemical and hazardous waste challenges, focusing on strengthening waste management, improving chemical safety, phasing out harmful chemicals, preventing illegal transboundary waste movement, and fostering collaboration among governments, industries, and civil society.



Advancing Sustainable Textiles- Addressing Hazardous Chemicals and Protecting Communities at BRS COPs 2025

On May 4, 2025, ESDO Bangladesh hosted a BRS COPs side event in Geneva on hazardous chemicals in textiles. Experts, including Dr. Shahriar Hossain and Dr. Farhina Ahmed, urged stricter regulations, EPR schemes, and global cooperation to eliminate toxic chemicals and promote sustainable, accountable textile production.



SAICM

SAICM, the Strategic Approach to International Chemicals Management, represents a global policy framework designed to advance chemical safety worldwide. Its fundamental mission is to ensure the prudent management of chemicals throughout their entire life cycle, with the overarching aim of mitigating their adverse effects on human health and the environment.

In 2023, the fifth International Conference on Chemicals Management (ICCM5) convened in Bonn, Germany. This conference played a pivotal role in transitioning beyond SAICM by adopting the new "The Beyond 2020 global chemical and waste framework."



Dr. Shahriar Hossain, the Secretary General of ESDO, and Siddika Sultana, the Executive Director of ESDO, participated in the conference on behalf of their organization. They intervened in the Strategic Objectives and Targets section concerning the timeline for Sound Management of Chemicals.

The ad hoc open-ended working group (OEWG)

The ad hoc open-ended working group (OEWG) on a science-policy panel was established by the United Nations Environment Assembly (UNEA) to develop proposals for a new panel focused on chemicals, waste, and pollution prevention.



The resumed first session of the ad hoc open-ended working group (OEWG) on a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution is currently taking place in Bangkok, from 30 January to 3 February 2023.

On behalf of ESDO and as a participant organization of IPEN, Executive Director of ESDO Siddika Sultana intervened in the first session, which took place in Bangkok in 2023. During the session, ESDO focused on an integrated technique that would concentrate on the pollutants associated with chemicals at all stages of their lifecycle

INC – 4

The fourth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC-4), took place from 23 to 29 April 2024 at the Shaw Center in Ottawa, Canada.



On behalf of ESDO and as a participant organization of IPEN, Executive Director of ESDO Siddika Sultana intervened in the welcoming session. ESDO focused on complete lifecycle of plastic.

INC – 5

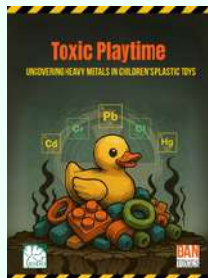
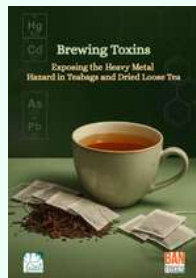
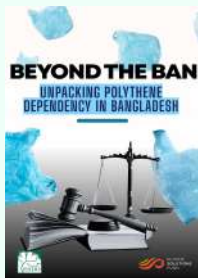
The Global Plastic Treaty aims to combat plastic pollution through a legally binding framework addressing plastics' entire life cycle. At INC-5 in Busan, 170+ nations advanced negotiations on the 'Chair's Text.' Representing ESDO, Shahrar Hossain and Siddika Sultana advocated for waste-pickers, and robust financial mechanisms for developing countries.

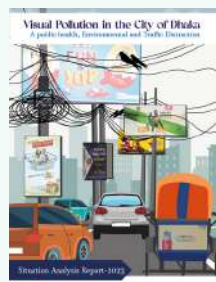
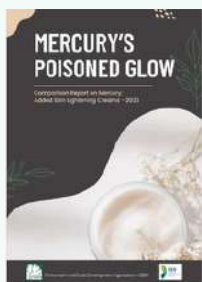
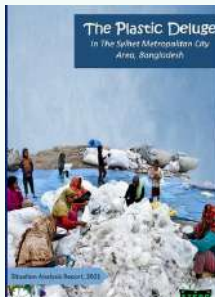
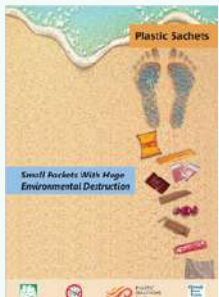
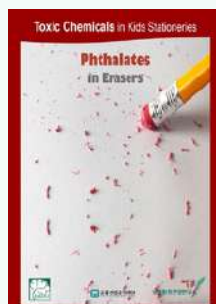
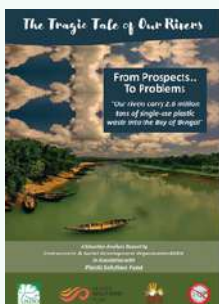
Esdo's active participation highlights its commitment to ambition, inclusive measures that promote sustainability, protect ecosystems, and foster a plastic-free future.

The second segment of the fifth session of the Intergovernmental Negotiating Committee (**INC-5.2**), held in Geneva, concluded without an agreement on the highly anticipated Global Plastics Treaty. With INC-6 approaching, the treaty process remains uncertain but crucial. Global South leadership, including Bangladesh, will be vital in ensuring a binding and ambitious agreement.



Major Publications







Environment & Social Development Organization – ESDO



<http://esdo.org/>



[/esdo_official/](https://www.instagram.com/esdo_official/)



info@esdo.org



+880 1726-053420



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House # 8/1, Level # 5, Block # C, Lalmatia Dhaka 1207, Bangladesh

