



# Annual Report 2019

Environment and Social Development Organization- ESDO



## Executive Summary

Environment and Social Development Organization (ESDO) has delivered on a number of campaign and advocacy activities following key themes within its mandate for 2019. Various specific tasks were achieved within a wider umbrella of mandated issues.

These issues included combating pollution threats from micro plastic litter to saving marine health in the Bay of Bengal, achieving a ban on the importing and manufacturing of toiletries containing micro-beads, initiating a ban on sales of micro-beads, attending the fourth session of the United Nations Environment Assembly (UNEA-4), urging rich and developed countries to stop dumping plastic waste in accordance to a call from BRS COP, attending a high level policy meeting with the Dhaka South City corporation, implementing projects in accordance with the Minamata Convention on Mercury to phase out mercury added products in Bangladesh which would include the Lead Elimination Project, and works done on Mercury Free Dentistry.

At a glance, different tasks achieved for the mandates above included local and national level workshops, open forums, consultations with stakeholder participation, market assessments, surveys and research, campaign and policy advocacy and other related activities.

ESDO thanks all its partners around the world, including financial donors and partners who contributed to the making and funding of its myriad projects and initiatives.

This report is a tally of all our activities for 2019. ESDO looks forward to the upcoming year of 2020 with renewed zeal, ambition and hope.

Siddika Sultana  
Executive Director  
ESDO



## **Introduction**

ESDO is a leading Bangladeshi organization in policy advocacy, environmental capacity building and policy intervention. Since its inception in 1990, ESDO has helped more than 1 million people in Bangladesh to achieve a sustainable and self-reliant lifestyle and live in harmony with their immediate environment. ESDO has also been influential in guiding national policy, the organization's most significant achievement being the banning of plastic (polythene) bags throughout the country.

## **ESDO's Dedication**

ESDO is dedicated to advocating for awareness of environmental conservation amongst schools and youth, urban and rural communities in Bangladesh, building community capacity; conducting research to advocate for policy change and conserving indigenous knowledge in the name of environmental protection.

In addressing lifestyle practices of the poorer population of Bangladesh –where the poor do not have a choice as to how they utilize resources to survive and thrive-how is environmental conservation including this basic need - ESDO is continuing to empower communities by building individual and collective capacities inspiring people in the field of environmental management and conservation. Through encouraging participatory involvement through our holistic approach, ESDO therefore works to build the capacity of our beneficiaries to enhance their ability to: - take leadership in promoting a safe and sustainable environment, improve the socioeconomic situation of their communities, and be more in control of their own future. Our major capacity building activities include: education (literacy and environmental), alternative income generation, awareness-raising (conservation and community health), sanitation, Information Technology training, and organic farming.

## **Our Philosophy**

ESDO is a Bangladeshi organization working to spread the message about the need for environmental conservation – to ensure the protection of biological diversity and ecological balance. Since the official formation of ESDO in 1990, we have focused on generating knowledge amongst the wider community about how human activity can negatively impact on the environment of Bangladesh. As a service oriented, non-profit, non-government organization, ESDO strives to improve livelihoods, socio-economic statuses and provision of environmental education of some of the most vulnerable communities in Bangladesh. ESDO invests in people to care for the environment through providing essential inputs and capacity building. Environmental and Social Development Organization wants to ensure self-reliant rural communities who live in harmony with their environment.








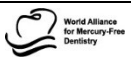



## Our Mission and Vision

The mission of ESDO is to promote and encourage an environmental movement through a participatory democratic framework involving diverse social groups and to assist them with ideas, information, and leadership for promoting a safe, sustainable and toxic free world.

The vision of ESDO is to see Bangladesh as well as all developing nations in Asia, Africa and Latin America achieve the Sustainable Development Goals. Working towards Protecting and conserving nature and life from toxic and plastic pollution; reducing poverty; increasing literacy and education; empowering women in rural communities, and improving sanitation and health services through sustainable environmental livelihoods.

## Major International Project Partners

	Asian Center for Environmental Health
	Global Alliance for Incinerator Alternatives (GAIA)
	International Pollutants Elimination Network (IPEN)
	International Union for Conservation Nature (IUCN)
	The Swedish Society for Nature Conservation (SSNC)
	Toxic Links
	United Nations Environmental Program (UNEP)
	World Alliance for Mercury Free Dentistry
	Zero Mercury Working Group



# Project

**“Combating the Pollution Threat from micro  
PLASTIC litter to save marine health in the Bay of  
Bengal”**



## Introduction:

In Bangladesh, 1.086 million metric tons plastic waste is generated every year from different sources of randomly discarded plastic products. Seventy three (73) thousand tons of plastic waste ends up in the sea through our mighty rivers: the Brahmaputra, the Meghna and the Ganges. In Bangladesh, only 5% of all plastic waste produced is recycled. About 9% of it is incinerated, while 86% is accumulated in landfills, dump sites and ultimately end up in the natural environment. Lack of knowledge, understanding and public awareness regarding marine pollution and the role of micro plastic litter is the main reason for this pollution.

In this context, Environment and Social Development Organization, ESDO has initiated the project entitled "Combating the Pollution Threat from Micro-plastic Litter to Save Marine Health in the Bay of Bengal. The ultimate aim of the project is to reduce and stop use of Microbeads and single-use plastics (in the form of sachets and single use plastic packaging) therefore, stopping their flow into the Bay of Bengal. ESDO has successfully completed the first two years of the three year project duration with remarkable achievements. The objectives for the third year of the project includes: research coordination/conduction, raising mass awareness, dialogue initiation with government and non-government bodies on single use plastic ban issues, secure government regulation to stop Microbeads and single use plastic (SUP) pollution, and building coordinated networks with CSOs in countries bordering the Bay of Bengal.

### 1. **High level policy meeting with south city corporation Dhaka**

A high level policy meeting with South City Corporation Dhaka was held at 20th January, 2019 at Nagar Bhaban from 11.00 am - 12.00 pm. to notify ministries and introduce project objectives and expected results of mercury and plastic projects. The purpose of this meeting was to discuss and share our current work on mercury added products. Participants of the meeting were Dhaka South City Corporation and ESDO. Mostafizur Rahman, Additional Secretary of Dhaka South City Corporation, Md. Golam Kibria, Additional Secretary of Ministry of Defense, Tanvir Hasnine, Program Associate of ESDO and Samia Haque, Program Associate of ESDO were present at the meeting.





2.

## Awareness campaign at Daffodil University

Environment and Social Development Organization-ESDO and Dept. of Environmental Science and Disaster Management (ESDM), Daffodil International University have organized an awareness campaign on Single Use Plastic pollution in Bangladesh. The campaign was held on 3rd February, 2019 at Banquet Hall of their university premises, Dhaka. This awareness program encouraged people to reduce their use of single-use plastics and provided for using alternatives of SUP such as metal water bottles or cotton totes placing a reduced burden on the environment and causing it less harm. A relevant media coverage covered this awareness raising campaign with a high number of people



having been informed about the negative effects of SUP in Bangladesh. Building off the awareness campaign, young people committed to work for stop single use plastic in Bangladesh and the academicians of DIU were also committed to do new research about new alternatives of SUP to create a sustainable environment in Bangladesh. Professor and Pro-Vice

Chancellor of Daffodil International University Dr. S.M. Mahbub-ul-Haque Majumder, Prof. Md. Abul Hashem, Chairman of chemical division (BSTI), Head of ESDM, DIU Dr. A.B.M. Kamal Pasha, ESDO executive director Siddika Sultana gave their speech at this program. A brief presentation was given to students and teachers on Single Use Plastic (SUP) Pollution in Bangladesh. A questionnaire on SUP was also conducted among students to see their level of awareness. At the end of the program, a certificate was given to students as motivation for future work and certifies their participation at the campaign event.

3.

## Mobile awareness campaign

To raise awareness of the impacts of SUP and for sustainable alternatives of single-use plastic products, ESDO have done a mobile campaign on 02<sup>nd</sup> March 2019 in various locations of Dhaka (TSC, Parliament area, DNCC Market). The campaign focuses on the impact that different kinds of single-use plastics cause, highlighting sustainable, available and affordable alternatives that form the key to tackling the problem. The campaign shines a spotlight on different categories of single-use plastics items, including plastic cutleries, cotton buds, carrier bags, coffee cups, straws, lollipop sticks and sweet



wrappers, and plastic bottles. From the mobile campaign on single use plastic pollution in Bangladesh people came to know about the harmful effects of plastic health-wise and when found in the environment. The campaign became successful promoting sustainable alternatives to single-use plastics, invited participants to take action and change their relationship with plastics. Successful awareness was ensured among people through the activities coordinated and people shared those awareness activities on their social media pages and in their communities.



#### 4- Fourth Session of the UN Environment Assembly (UNEA-4)

The fourth session of the UN Environment Assembly (UNEA-4) started on 11th March, UNEP headquarters, Nairobi, Kenya. Agreements were reached on the following:

- I. Resolutions respective to marine litter and microplastics and single-use plastics.
- II. The role UNEP can play in these related issues.
- III. Conclusion of negotiations on arrangements for UNEA-5, settings in place for an intercessional process and preparation of an action plan to implement all



provisions of the Rio+20 outcome on strengthening the role of UNEP (paragraph 88), including progressive consolidation of headquarters functions in Nairobi (sub-paragraph g); and IV. UN Environment Assembly president Siim Kissler urging governments to increase the reusing of products and recycle waste to beat the 2030 deadline set to reduce the use of plastic products. Alongside Member

States, several representatives of Major Groups and other UN agencies were there. ESDO Secretary-General, Dr. Shahriar Hossain also took the floor.





5.

## Plastic Monster Campaign

Break Free from Plastic is undertaking a movement worldwide of #PlasticMonster on social media from 17 April – 16 May, 2019. As part of the monthly campaigns, ESDO made a plastic monster and arranged an awareness campaign on 18<sup>th</sup> April, 2019 from Lalmatia to Manik Mia Avenue, in front of the National Parliament. We published our campaign-related information and pictorials on different social media platforms as like Facebook, Twitter, Instagram etc. Break Free from Plastic also re-published our pictures from May 3<sup>rd</sup> on their social media page. Our caption on social media was #Stop\_growing\_plastic\_monsters - Nestlé and Unilever should stop using single-use plastics



6.

**GAIA and Break Free from Plastic members are calling on governments to support the Norwegian Amendment at the BRS COPs to stop the flow of plastic waste from rich countries to developing countries.**

At Geneva, Switzerland, delegates to the 2019 meetings of the Conferences of the Parties (COP) to the Basel, Rotterdam and Stockholm (BRS) Conventions discussed issues including, inter alia, financial resources and mechanisms, compliance, programs of work and overall budgets within two sessions. Delegates considered SC compliance, perfluorooctane sulfonic acid, its salts, and perfluorooctane sulfonyl fluoride (PFOS salts, and PFOF). Siddika Sultana, Executive director of ESDO attended this Conference. This conference will continue from 30<sup>th</sup> April to 10<sup>th</sup> May 2019.





## 7. ESDO Urged Developed Countries to Stop Dumping Plastic Waste

ESDO alongside CSOs urged developed countries to stop dumping plastic waste in developing nations and ban single-use plastic globally on 5<sup>th</sup> May, 2019 in Dhaka. On behalf of CSOs, Siddika Sultana, Executive Director, ESDO & Director of Asian Center for Environmental Health made an intervention at BRS COP in Geneva. The 2019 meetings of the Conferences of the Parties (COP) to the Basel, Rotterdam, and Stockholm (BRS) Conventions from 29 April to 10 May at Geneva, Switzerland wrapped up the first week with discussions of several waste issues, with extensive time both in plenary and contact groups devoted to work on marine plastic litter and microplastics. In its plenary session, Siddika Sultana said, — “Plastic is literally choking our oceans. Everywhere we look we see the carnage — dead cows, whales washing up with stomachs full of plastic, seabirds suffocating, turtles drowning in plastic nets. And most of the plastic enters the sea in developing countries without strong recycling systems.”



## 8. **Attended in a conference on sustainable chemistry of plastic building material and resilience organized by ISC<sub>3</sub> in Developing**

Siddika Sultana, Executive Director of Environment and Social Development Organization- ESDO attended a conference on Green and Sustainable Chemistry at the first Stakeholder Forum of the International Sustainable Chemistry Collaborative Centre (ISC<sub>3</sub>) in Bonn, Germany on 21-22 June 2019. It was a new platform for us to collaborate with more than 110 experts from Africa, Asia, Europe, North and South America and to discuss emerging concepts of sustainable chemistry, engaging in transformative activities of the ISC<sub>3</sub>. Its mission was to raise awareness and foster a new sustainability-oriented mindset in chemical sciences and beyond; education, capacity building and international collaborative partnerships were also included.



## 9. **Sachet Measurement**

On 16th June 2019 for its research activities under the provision of the plastic project, ESDO research officials measured sachets of various products using a standard weighing machine to know the difference between actual and given weights of the products. 12 products were measured in total. The findings were recorded in log sheet and were analyzed using standard methods. The research work was done at ESDO head office.





10.

### Survey on Plastic Recycling in Dhaka

From the 17th- to the 18th June 2019, questionnaire surveys were conducted on plastic recycling by ESDO research officials. Respondents from 51 plastic recycling factories in Dhaka were surveyed in this regard. The objective of the survey was to extensively study and evaluate baseline scenarios of plastic recycling in Bangladesh. Primary inquiries included – (1) amount of recycled plastic, (2) type of recycled materials, (3) wastage from plastic recycling and their management, (4) health and environmental impacts associated with plastic recycling etc.



11.

### Beach Sampling of plastic litter, pellets and fragments in Cox's Bazaar

In the very first week of the month August (5th-6th August 2019), beach sampling of plastic litter, pellets and fragments were conducted by ESDO. The purpose of this sampling was to collect plastic waste, plastic pellets and fragments from standard trashes along the high tide line on sandy beaches. Later on, these samples were to be sent overseas for laboratory test purposes. Considering the research purpose, two prime locations along the Cox's Bazar shoreline was identified to be potentially suitable for the execution of the activity – Cox's Bazar Sea Beach & Inani Sea Beach. Samples were collected from 6 points under these two major locations. After collection, the samples were sorted, arranged as per standard protocol and sent to designated authority for laboratory testing.





12.

## School Awareness Campaign

On the 29th of August 2019, ESDO organized an environmental awareness campaign entitled — “The Environmental Education and Awareness Program” at Uzampur Government Primary School, Uttar Khan, Dhaka. A total number of 60 students participated in this program along with 7 teachers and a few members from the local development committee. The campaign was launched at about 11 am and lasted for the next 4 consecutive hours. At the beginning of the campaign, an introductory session was conducted through which a short description about ESDO and its activities was delivered to the students. The introductory session was followed by a presentation and question-answer session. At the end of the educative session, two competitions were held – poster presentations and short messages for Facebook. The students spontaneously took part in both competitions and exhibited tremendously satisfactory performances. At the end of the campaign, the students expressed their solidarity with ESDO to work towards establishing toxic free sustainable green Bangladesh.





13.

## International Workshop on Chemical Pollution: Plastics, Mercury and PFAS

An international workshop was held on Chemical Pollution: Plastic, Mercury & PFAS from August 11<sup>th</sup> to 13<sup>th</sup> 2019, at an ancient village called Xixi, south town of Huizhon District of Huangshan city of Anhun province organized by Toxic Free China, BFFP China. 51 NGOs and local government people participated in a two day workshop on the dental amalgam issue. The participant had a huge interest in amalgam and a positive intent to phase out amalgams for children and women and to support phase out amalgam in the future. On August 15<sup>th</sup> Toxic Free China in Association with ACEF organizes a day long discussion on Mercury-Amalgam: Impact to Environment and Health at the ACEF conference hall. Dr. Shahriar Hossain, Secretary General of Environmental and Social Development Organization (ESDO) also participated as an international expert both at the workshop and meeting.

Prof. Zing, Ms. Xiynz of the Ministry of Environment, NGOs, Lawyers, journalists etc., participated in the workshop. Prof. Zing has a presentation on Amalgams focusing its impact and need based policy decisions from phase down to phase out date. He highlights the need of stopping amalgam for children and women with a total phase out as soon as possible. Prof. Zing also supports deadline. He said this deadline is good enough for any country.

Mr. Jingwei Zhao, a lawyer proposed to prosecute dental clinics and dentists who are still using amalgam in China. Mr. Zhao said, “I can take initiatives to do PILC (Public Interest Litigation Court) cases on this issue to create awareness amongst dentists and the public. I believe this will help to formulate a national policy to ban amalgam in China. These are really encouraging.”



14.

## BFFP Brand Audit of Single Use Plastic 2019

A Brand Audit of Single Use Plastic was conducted as part of Break Free from Plastic (BFFP) Global Brand Audit on the 25<sup>th</sup> of September, 2019 at Begum Rokeya University Campus, Rangpur. The event was jointly funded by ESDO and Begum Rokeya University. ESDO received a micro grant of 300USD from the BFFP authority in this regard. The audit activity included collection of Single Use Plastic waste from designated audit areas, identifying and recording their respective brands and eventually developing an inventory. The aim was to identify from audit records, top corporations that are responsible for producing the greatest amounts of single use plastic waste in respective areas. A team of a total 105 volunteers comprising of university students actively participated in the event. The teams were deployed in five major focal points within campus territories and were continuously monitored and supervised by the ESDO team. Aside from volunteers, a total number of 60 participants including teachers, officials and civilians directly or indirectly took part in the movement.



15.

## Single Use Plastic Survey in City Markets and Rural Markets, 2019

As part of ESDO's second annual survey on single use plastic use, questionnaire surveys were carried out in different areas in and around Dhaka from 30<sup>th</sup> September up to 2nd October 2019. 800 respondents from different stakeholder groups (300 consumers, 250 retailers and 250 producers) have been surveyed in this regard. Primary questions were about what types of plastic they can use, where these plastic items come from, and how these items are disposed of. In Dhaka, single use plastic producers, retailers and consumers from 4 different areas including -Mirpur, Uttara, Old Dhaka and Mohammadpur have been surveyed to derive information on urban usage. Surveys have



also been conducted along the outskirts of Dhaka City to have an insight into rural waste generation scenario. Respondents from Savar, Amin Bazaar, Nabinagar and Dhamrai along the capital city have been extensively surveyed in this regard. The surveys were carried out for 4 consecutive days from 30<sup>th</sup> October up to 2<sup>nd</sup> November 2019. The survey team consisted of 9 surveyors including 2 members from the ESDO Team and 7 volunteers from Daffodil International University.



16.

**BDS-NORAD Project “Marine litter and microplastics: promoting the environmentally sound management of plastic wastes and achieving the prevention and minimization of the generation of plastic wastes”**

Plastic waste and especially marine plastic litter is an environmental problem occurring on a global scale today. The ubiquitous trans boundary movement of plastic wastes and microplastics is becoming a major concern as their property of durability makes their particles remain for long periods of time. On this issue, on September 18-19 2019, a project launching event was organized by BRS-NORAD and SR-Asia on: (1) Marine litter and microplastics; (2) promoting the environmentally sound management of plastic wastes and (3) Achieving the prevention and minimization of generation of plastic wastes. The objective of the project is to strengthen the capacity in Bangladesh and Ghana to control the Transboundary movements of plastic waste, to ensure the environmentally sound management of plastic waste, and prevent and minimize the generation of plastic waste. ESDO as a pioneer organization for plastic bag banning in Bangladesh sent a representative to the program.





## 17. **Press Briefing and Study report Launching of Single Use Plastic**

To share the findings of ESDO's single use plastic research and to launch the summary report of the study, a press briefing was arranged on the 21<sup>st</sup> of October 2019 at ESDO Head Office in Dhaka. The press briefing was entitled as "Single Use Plastic: Hidden costs of Health and Environment in Bangladesh" and was mainly organized to reveal the initial findings of ESDO's SUP study. The target groups for this particular event were media representatives from various print and electronic media. The event was marked with the presence of journalists from print and electronic sources. It aimed at sharing ESDO's initial research findings on SUP waste generation in Bangladesh with the media and initiated discussions on the same. A brief presentation was given in front of the media personnel and then the subject issue was discussed by honorable guests. Media representatives were also provided with a summary report of the respective study along with other relevant IEC materials. A particular Question-Answer session was held at the end with a goal to responding to queries of media representatives.



## 18. **3rd Meeting of the Intersessional Process Considering the Strategic Approach and the Sound Management of Chemicals and Waste Beyond 2020 (IP3)**

The 3<sup>rd</sup> Meeting of the Intersessional Process Considering the Strategic Approach and the Sound Management of Chemicals and Waste Beyond 2020 (IP3) was held from 30th September to 4th October, 2019. At this meeting, Siddika Sultana, Executive Director and Greg Howard, Senior Research Fellow of Environment and Social Development Organization- ESDO participated and shared their vision and expertise.





## 19. **Workshop on “Single Use Plastic: Hidden Costs of Health and Environment in Bangladesh”**

A workshop was arranged by ESDO on 3rd November, 2019 at Four Seasons Restaurant, Dhanmondi, Dhaka to share findings from ESDO’s study on Single Use Plastic waste generation in Bangladesh. About 80 people from different stakeholder groups attended the workshop including: ministry representatives, govt. and non govt. officials, development professionals, academicians, researchers, activists, medical professionals, media, students and the general public. The workshop was titled as —Single Use Plastic: Hidden Costs of Health and Environment in Bangladesh. A booklet with the same title was published and distributed among participants at this occasion. The workshop aimed at ensuring participation of different stakeholders in discussing the SUP ban issue and urged the government in regulating the production, use and import of single use plastic on an urgent basis.



## 20. **Human Chain to observe BFFP Global Week of Action 2019**

On the occasion of BFFP Global Week of Action (6th- 15th November 2019) , Environment and Social Development Organization (ESDO) organized a human chain in front of the National Press Club, Dhaka on the 14<sup>th</sup> of November, 2019. The objective of this activity





was to demonstrate against top global corporate plastic polluters who have been identified from the Global Brand Audit, 2019 and encourage them to adopt alternatives to single use plastics. About 80 people actively participated in the event including Girls'Guide volunteers, ESDO Team members and general public.



21. **Third meeting of United Nations Environment Assembly of the United Nations Environment Program on Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics**

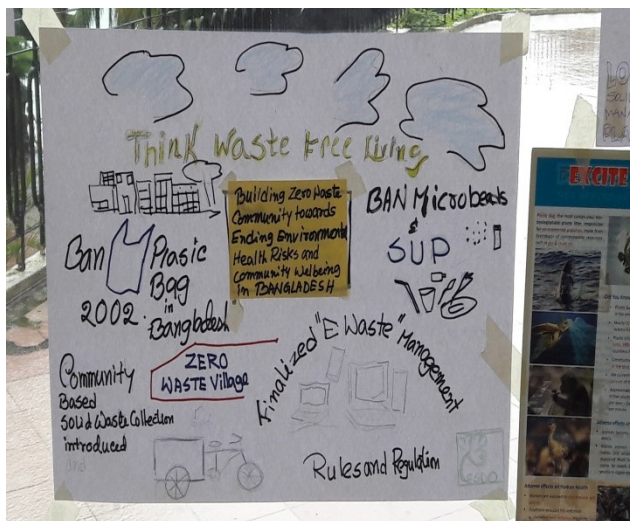
The Secretary General of ESDO, Dr. Shahriar Hossain participated in the third meeting of the Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics held at UNFCCC, in Bangkok from 18-22 November, 2019. The committee was formed on 17<sup>th</sup> October 2019 and first online meeting of the Scientific Advisory Committee on the Assessment on Marine Litter and Microplastics was held.



22.

## GAIA Asia Pacific Regional meeting 2019

On 18<sup>th</sup> October 2019, GAIA organized an Asia Pacific regional meeting in Penang, Malaysia. The meeting occurs between group of people working to #BreakFreeFromPlastic and #GoForZeroWaste. The 3-day GAIA Asia Pacific Regional Meeting consisted of longer list of tasks to accomplish and amazing stories were shared. The Executive Director of ESDO, Siddika Sultana attended the meeting and participated in the tasks and shared stories of ESDO.



# **Program**

**Contribution towards early ratification and  
Implementation of the Minamata convention on  
MERCURY and towards phasing out mercury  
added products in Bangladesh**

**And**

**Mercury Free Dentistry in Bangladesh and Asia  
Pacific**



## Introduction:

This part of the report gives a brief description of activities done by ESDO on mercury added products in 2019. As we know, there are many things that contain mercury which is really harmful to health, such as skin lightening creams bulbs, batteries, thermometer, mercury amalgam etc.

Many initiatives have been taken by ESDO with regards to mercury added products such as press briefings, workshops, international conferences, talk shows etc. Each and every event was attended by government officials, academicians, media personals and general people.

ESDO has always tried to put forth the negative effects of mercury added products by creating awareness among people as well as government officials. ESDO participated in many international conferences like COP3 where it showed its work so that people all around the world may know about the initiatives Bangladesh has taken to phase out mercury added products.

### 1. **Third meeting mercury coordination committee of mercury initial assessment (MIA) project**

A meeting with the Department of Environment-DoE under the Ministry of Environment, Forest and Climate Change of the Government of Bangladesh was held on 7th January,



2019 at the Department of Environment-DoE. The main objective of the meeting was to provide updates of the National Mercury Inventory Report for the MIA Project. Major areas of discussion include; (1) product inventories of mercury added products in Bangladesh. (2) priority areas of implementation and (3) legal and institutional gap identification to

implement convention at national levels. At the meeting, some recommendations were also made by experts. For instance, phasing out dental amalgams were considered high priority.





## 2. High level policy meeting with south city corporation Dhaka

A meeting with Dhaka South City Corporation was held on 20<sup>th</sup> January, 2019 at Nagar Bhaban from 11.00 am – 12.00 pm. The purpose of this meeting was to discuss and share our current work on mercury added products. Participants at the meeting included Dhaka South City Corporation and ESDO members. Mostafizur Rahman, Additional Secretary of Dhaka South City Corporation, Md. Golam Kibria, Additional Secretary of Ministry of Defense, Tanvir Hasnine, Program Associate of ESDO and Samia Haque, Program Associate of ESDO were also present at the meeting.



## 3. Recognition of mercury amalgam free dental chambers in Bangladesh



On 20<sup>th</sup> February 2019, an approach has been taken by ESDO, BDS and the Asian Center for Environmental Health which includes recognition of mercury amalgam free dental chambers in Bangladesh. After surveying certain numbers of dental chambers under this initiative, the principal dentists working under this initiative will be certified through a

ceremony. Such visits and recognition processes are done mainly to build up proper awareness about the harmful effects of using mercury amalgam in dentistry among dentists and common people. The ESDO team visited eight dental chambers at Uttara and recognized them as mercury free dental chambers through distributing stickers. This event was held with the presence of honorable Chairperson of ESDO, Syed Marghub Murshed, Dr. Humayun Kabir Bulbul, Secretary General of BDS, Siddika Sultana, Executive Director of ESDO.



#### 4. Inception on dental chamber phase down project

The Vietnamese Health Service Administration Department recommended stopping the use of dental amalgam to children under 15 years of age, pregnant women and lactating women by 1st April 2019. They also recommended developing a road map to stop amalgam use in dentistry by 1st January 2020. The Health Department organized a high level meeting on 6th March 2019 in the Department of Health, Ministry of Health, Hanoi, Vietnam. The World Alliance for Mercury Free Dentistry, Asian Center for Environmental Health and CCHIP was invited to represent their expert opinions. The President of World Alliance Mercury Free Dentistry, Attorney Charlie Brown, Executive Director of ESDO and Director of Asian Center for Environmental Health, Ms. Siddika Sultana attended the meeting.



#### 5. Press Briefing about Study report on Mercury added Products and Available Alternatives in Bangladesh

During press briefing, the following peoples were present: Syed Marghub Morshed, Former Secretary, the People's Republic of Bangladesh Govt. and Chairperson of ESDO, Prof. Dr. Abul Hashem, Chairman of Chemical Division, BSTI and Executive Board Member of ESDO; Dr. Shahriar Hossain, Secretary General of ESDO, Ms Siddika Sultana, Executive Director of ESDO and other team members of ESDO. It was held at the ESDO head office on the 19<sup>th</sup> of March, 2019. Syed Marghub Murshed said that, "we should create more awareness among people about the toxic effect of mercury and also go for the alternatives of mercury added products. We should also minimize the use of mercury added products and govt should also take the necessary steps." Prof. Dr. Abul Hashem,



Chairman of Chemical Division, BSTI said, “mercury can causes cancer. When mercury added products are released into the environment, they mix with the drainage water easily and add to the river and sea.” He also added that “when mercury is added to blood circulation, it damages blood cells.”

## 6. **Fourth meeting of the Mercury Coordination Committee of Mercury Initial Assessment (MIA) project**

The fourth meeting of the Mercury Coordination Committee of Mercury Initial Assessment (MIA) project was held on 10<sup>th</sup> of April, 2019. The main objective of the meeting was to present Information, Education and Communication materials (Stickers, Leaflets, Brochures and Newspaper Advertisements) of awareness raising programs of Mercury containing



products (particularly CFL bulb and dental amalgam) and have them assessed in terms of their efficient representation. Main areas of discussions include the opinions of the participants about IEC materials. Participants also made comments on amending some of its contents. From this meeting, recommendations were also made by experts, for example, pointing to the direct effects of mercury in CFL bulbs. The Director General of DoE agreed with proposed recommendations while also giving suggestions for CFL bulbs and dental amalgam stickers.

## 7. **Awareness and Consultation workshop on Mercury Pollution in Bangladesh: Effects on Health and Environment**



Awareness and Consultation workshops on Mercury Pollution in Bangladesh: Effects on Health and Environment was held in Krishibid Institute Bangladesh, Farmgate, Dhaka on 18<sup>th</sup> April, 2019. The main purpose of this workshop was to raise awareness among public decision-makers, media, CSOs, national and

international organizations, consumer associations, importers, producers, SMEs etc and



mobilization of mass people and community on mercury treaties and phasing out of mercury based products.

## 8. Mercury Analyzer RA-915+ (Lumex) for skin lightening cream

We have used lumex for analyzing skin lightening creams in Bangladesh India and Pakistan bought on 24<sup>th</sup> April 2019 from Genetic Plaza, Dhanmondi 27, Dhaka, at the ESDO head office Dhaka. About 1 gm of sample was analyzed for each sample with five samples analyzed in 28<sup>th</sup> April, 2019. The resulting analyses showed that Sanam (Pakistan) skin cream has the highest value of 36000-50000ng/m<sup>3</sup>. Garnier (India) skin cream showed a value of 71 ng/m<sup>3</sup>. A Bangladeshi skin lightening product, Modern showed a value of 150ng/m<sup>3</sup>. Analysis showed that among these products, the Pakistani product Sanam has the highest value of mercury added and is very harmful for the skin causing various skin problems.



## 9. Survey on mercury pollution in Manikgonj by Mercury Analyzer RA-915+



On 2<sup>nd</sup> May 2019, a team of three went to Manikgonj to survey mercury pollution with an Mercury Analyzer RA-915+. The objective of the study was to determine the level of mercury exposed to the environment during gold waste processing and determine associated human health effects. Mercury analyzer RA-915+ (Lumex) were used for detecting gaseous mercury levels on site detecting low levels of mercury (86-400 ng/m<sup>3</sup>). For approximately every 400kg of waste material, respondents use 150- 180kg of Lead, 80kg of Borax and collect 60gm of gold and 150gm of silver.



## 10. Project Support Group follow up meeting under MIA project

A project-support group follow-up meeting under MIA project was held at ESDO head office on 23<sup>rd</sup> of May, 2019. Participants of this meeting were from the Department of Environment, Ministry of Health and Family Welfare, Bangladesh University of Engineering and Technology (BUET), Bangladesh Dental Society (BDS) and ESDO. At this meeting, there was a discussion about national action plans and a timeline was drafted for phasing out mercury added products in Bangladesh. Participants at the meeting discussed current statuses of mercury use in measuring devices, batteries, skin lightening cream, dental amalgam, switches and relays, discussing their alternatives as well.



## 11. Minamata Convention on mercury regulation international conference

An international conference on the Minamata Convention organized to prevent health damage and environmental pollution caused by mercury on a global scale was held in Osaka, Japan on 27<sup>th</sup> of May, 2019. At this conference, about 40 Minamata mercury waste



experts gathered to exchange ideas and share thoughts/information together. About 40 Government officials and researchers from various countries signatory the Minamata Convention, including Japan, the United States, China and Indonesia joined in this conference. Dr. Shahriar Hossain, Secretary General of Environmental and Social Development Organization (ESDO)

also participated at the conference. The treaty includes the proper management of batteries, thermometers and fluorescent lamps that use mercury of a certain concentration or more when they become waste. Experts discussed proposed international rules for waste management, such as mercury concentration regulated by the Convention and concentration levels causing health defects. This rule is expected to



be formally decided at the conference of the Parties to the Convention, which will be held in Switzerland on November this year.

## 12. Round table meeting on Harmful effects of mercury containing products on health and environment

A round table meeting with media on “Harmful Effects of Mercury Containing Products on Health and Environment” was held on Saturday, at the National Press Club, Dhaka jointly organized by the Department of Environment (DoE) and Environment and Social Development Organization (ESDO). Harmful impacts of mercury in the environment and on human health were discussed at the meeting. Mercury is contained in many products, including: batteries, thermometers and barometers, electric switches and relays found within equipment, CFL bulbs, dental amalgam (for dental fillings), cosmetics, jewelry items, pharmaceuticals and so on.



## 13. Workshop on Environmentally sound management of Mercury containing lightening sources



A workshop was held on environmentally sound management of mercury containing light sources at 16<sup>th</sup> July, 2019 at the Department of Environment. The purpose of this workshop was to discuss and publish the Minamata Convention on Mercury Initial Assessment Report for Bangladesh and environmentally sound management of CFL light in

Bangladesh. Sayda Mehrabin Shejuti, Assistant Program Officer and Juthi Rani Mitra, Program Associate, ESDO attended the workshop as the representative of ESDO. The meeting showed a road map for ratification of Minamata Convention in Bangladesh.



Minamata Initial Assessment Report is an initiative to make the convention worthy for Bangladesh.

#### 14. **Awareness and consultation workshop on Harmful effects of mercury containing products on health and environment**

An awareness and consultation workshop on “Harmful effects of Mercury amalgam on health and environment” was jointly organized by the Department of Environment (DoE) and Environment and Social Development Organization-ESDO on the 30<sup>th</sup> of July 2019. ESDO demanded the ban of dental amalgams for the sake of public health and environmental protection on Tuesday at the auditorium, DoE, Paribesh Bhaban, Dhaka.



The workshop was organized in the line of creating public awareness and ratification of Minamata convention on Mercury in Bangladesh.

#### 15. **National Workshop on Harmful effects of mercury containing products on health and environment**

Mercury containing skin lightening creams have flooded Dhaka markets; these creams have the potential risk to health and environment. Considering the severe health threats posed by mercury, its manufacture and use of mercury in products, mercury related



procedures in dentistry and industrial manufacture should be strictly prohibited. Focusing on this issue, an awareness and consultation workshop entitled “Harmful effects of Mercury Added Products on health and Environment” was jointly organized by the Department of Environment (DoE) and Environmental and Social Development Organization (ESDO)

Thursday at National Press Club, Dhaka.





## 16. **Talk show with ABC Radio on Mercury added products**

This talk show was jointly organized by Environment and Social Development Organization - ESDO and the Department of Environment - DoE on Harmful Effects of Mercury Added Products on Health and the Environment on 24<sup>th</sup> September 2019 at ABC Radio Station. Radios are a major broadcast media platform in our country and our purpose was to inform general people about mercury added products.



The Secretary General of ESDO Dr. Shahriar Hossain, Executive Director of ESDO Siddika Sultana and the Director of Department of Environment Masud Iqbal Md. Shameem, PhD also attended the talk show.

## 17. **The Third meeting of Conference of the Parties (COP<sub>3</sub>) to the Minamata Convention on Mercury**



The Third meeting of the Conference of the Parties (COP<sub>3</sub>) to the Minamata Convention on Mercury took place from 25<sup>th</sup> – 29<sup>th</sup> of November, 2019 in Geneva, Switzerland. The Minamata Convention bans new mercury mines and advocates phasing out existing mercury mines contain

measures to control trade, release air emissions and regulate informal sectors of artisanal and small-scale gold mining. Like every year, the Secretary General Dr. Shahriar Hossain and Executive Director Siddika Sultana of ESDO attended the conference. This year, COP<sub>3</sub> has published a report on mercury levels in skin lightening creams and an enforcement report highlighting Bangladeshi environmental adaptation situations to mercury and national positive/negative regulations.



18.

## Press Briefing on Online selling of illegal mercury-laced skin lighteners

Skin lightening creams containing mercury – a heavy metal and dangerous neurotoxin – are still widely available to purchase in shops online and on, despite having been banned by governments. These are the findings of new research by a global alliance of NGOs working to eliminate mercury pollution. 12 December, Thursday 2019, at a press briefing organized by ESDO, this information was disclosed with media personals, BSTI personal, ESDO board members and its team members.



# Program

## **LEAD** Elimination Project





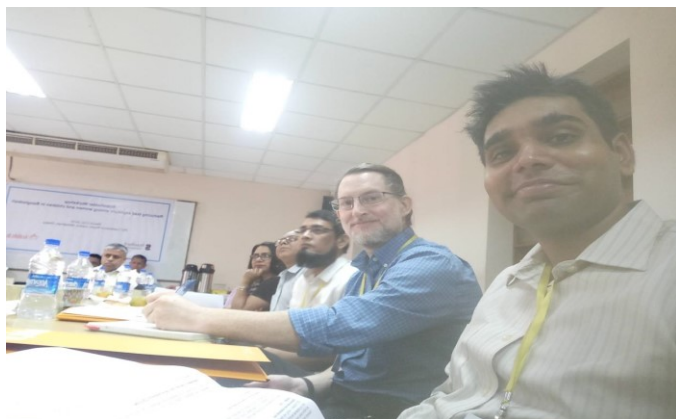
## Introduction:

Environment and Social Development Organization-ESDO is a pioneering organization, has been working on eliminating lead in paints and for specific regulation of lead free paint for nine years. ESDO has been focusing on raising awareness, public education and policy advocacy regarding lead paint elimination and conducted research in lead elimination since 2010. Since 2012, ESDO has been implementing the Lead Paint Elimination Project in association with International POP's Elimination Network with the support of the European Union. This year Ms Siddika Sultana, Executive Director, ESDO participated at Asia-Pacific regional workshop building support for phasing out lead in paint; this workshop was organized by GAELP, UNEP, WHO and SAICM on August 22, 2019. As a part of this project, ESDO has been observing an "International Lead Poisoning Prevention Week" in each year since 2012. The goal of the program is to build up awareness among mass people and concerned authorities.

To test lead in toys and child products, ESDO completed different samples of toys; ESDO completed work to identify different brands of paint-importing companies and to get information on other non-brand importing companies from India to Bangladesh.

1.

### Meeting at ICDDR,B on Turmeric contamination



On 21<sup>st</sup> March 2019, two representatives of ESDO; Greg Howard, Senior Research Fellow and Razeen Ashraf, Jr. Program Associate attended a meeting at ICDDR,B on Turmeric contamination. The main topic of the meeting was "Lead contamination situation in Bangladesh". Steve Luby, MD, Stanford University made a presentation in this respects. Md.

Mahbubur Rahman, Lead and Project Coordinator of ICDDR,B opened the meeting. Representatives from BSTI and Pure Earth were also present. At the meeting, a study report on turmeric contamination were disclosed and discussed which shows how much lead has been use in term of producing turmeric in Bangladesh.



2.

## Children Toys Sampling

On 19<sup>th</sup> May 2019, samples were collected from the cosmetics shops and general stores for lead testing. A log sheet listing the names of heavy metals (Lead, Chromium, Mercury, etc) in both childrens' products and candies were prepared. Some other samples were given for testing BPA in baby products. The main objective of the study was to identify heavy metals



like lead in toys and BPA in child products. Study location fell in Town Hall, Mohammadpur and New Market; Dhaka ESDO has collected child products and completed a log sheet to be sent to Laboratories.

3.

## Survey on Lead Paints in Local Market of Bangladesh

On 8<sup>th</sup> of July 2019, ESDO completed a survey on imported paint companies from India and Bangladesh at a local shop. The survey was mainly focused imported paint and paint companies from India to Bangladesh. The main objective of the study was to identify imported brand and paint companies from India to Bangladesh. Study locations were in Town Hall Mohammadpur, New Market and ChawkBazaar; Dhaka. The methodologies of the study were questionnaire surveys and secondary surveys. Though the study found many brands from online market but local market brands were not located. We have found different brand paints, such as: Decora Synthetic Enamel and Boss Expert Synthetic Enamel.



4.

## Workshop in Lead in Paint: Asia Pacific Region



On 22<sup>nd</sup> August 2019, the Global Alliance to Eliminate Lead in Paint- GAELP, UN Environment Programme (UNEP), World Health Organization (WHO) and the Strategic Approach to International Chemicals Management (SAICM) organized an Asia-Pacific regional workshop built-in support system for phasing out lead in paint, addressed the need for effective lead

paint laws, and raised awareness on the Lead in Paint Component of a Global Environment Facility (GEF)-supported project on Global Best Practices on Emerging Chemical Policy Issues of Concern Under the SAICM. Presentations also highlighted efforts to develop lead paint laws in the Philippines, Jordan and Bangladesh. Ms. Siddika Sultana were present the workshop. The workshop, which convened in Bangkok, Thailand, from 21-22<sup>nd</sup> August 2019, provided an overview of the Global Alliance to Eliminate Lead in Paint's recommended actions and advice to support the establishment of lead paint laws in the Asia-Pacific region. It sought to, inter alia, enable participants to exchange views regarding the most effective ways to eliminate lead paint in the region, and identify next steps towards lead paint elimination in specific countries.

5.

## School Awareness Campaign

On 29th August 2019, ESDO organized a school awareness campaign on Chemical Pollution like Lead pollution and impacts on Children Health in Ujampur Government Primary School, Uttar Khan, Dhaka. It was a wonderful afternoon with Ujampur Primary School students. Educating, learning and honing creative thinking on environmental pollution was a good exercise. Students also enjoyed activities and competitions while a few talented students won prizes for their performances.





## 6. Observation of International Lead Poisoning Prevention Week (ILPPW)-2019 (Human Chain)

On 26<sup>th</sup> October 2019, ESDO members with youths and civil people formed human chains with festoons, banners, and placards on 'Ban Lead Paint' demanding an immediate ban of lead paint in Bangladesh by 2019.

There were two locations surveyed:

- In front of the National Press Club (Location-1) at 10.00 am to 12 pm.
- In front of Teacher Students Centre (TSC), University of Dhaka (Location-2) at 1.00 pm.

The Human chains observed were about regulations on lead poisoning and its detrimental effects on human health due to child exposure and occupational exposure.



## 7. Observation of International Lead Poisoning Prevention Week (ILPPW)-2019 (Round table meeting)



ESDO arranged a round table meeting on 27<sup>th</sup> October, 2019 at ESDO Conference Room, ESDO, Lalmatia, Dhaka. A group of government representatives from the Ministry of Environment, Ministry of Health, Ministry of Industry, Ministry of Commerce, paint company agents like members of the Bangladesh Paint Manufacturer's Association (BPMA),

experts, scientists, environment activists, bureaucrats, youth groups, civil society



members, journalists, reporters and ESDO members were present at the round table meeting. The Chairperson of ESDO was present at the meeting and the open discussion session was moderated by Dr. Shahriar Hossain, Secretary General of ESDO.

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# Program

## CHEMICAL and Heavy Metals





1.

### Water sample collection for PFAS (Savar)



On 25<sup>th</sup> March 2019, waste water was collected by the ESDO team at Bank town, Savar as part of the study on heavy metals in water. Greg Howard, Senior Research Fellow of ESDO and Khalilur Rahman, Program associate went on the survey tour. The objective of this survey was to find out the amount of PFAS present in the river water. The samples were collected

from the upstream, middle stream and downstream of Karnatali River.

2.

### Water sample collection for PFAS (Ashulia)

On the 18<sup>th</sup> May 2019, an ESDO team of three went on a survey in Ashulia. They are: Greg Howard, Senior Research Fellow of ESDO and Khalilur Rahman, Program Associate and Juthi Rani Mitra, Program Associate. A Total of 7 samples of water were collected from Dhaka and the Gazipur district of Bangladesh to test PFAS concentrations in water samples.



Water samples were collected from the river, lake and pump.

3.

### Workshop on Environmentally Sound Management of Poly Chlorinated Bi- Phenyls (PCBs)

On 26<sup>th</sup> and 29<sup>th</sup> June 2019, ESDO participated in a meeting and an inception workshop on Environmentally Sound Management of Poly Chlorinated Bi- Phenyls (PCBs). At that meeting, they discussed awareness-raising campaign design and all other AR campaign activities. At the inception workshop, ESDO represented a presentation on ESDO's previous experiences on POPs, PCBs and other chemical-related activities.





#### 4. **International Workshop on “Chemical Pollution: Plastics, Mercury and PFAS”**



From the 11-13<sup>th</sup> August 2019, an international workshop was held on “Chemical Pollution: Plastic, Mercury & PFAS” at an Ancient village called Xixi in the south town of Huizhon District of Huangshan city of Anhun province, organize by Toxic Free China, BFFP China. 51 NGOs and local government peoples participated in a two days’ workshop with half of dental amalgam

issues. The participants had high interest on amalgam and had a positive outlook to phase out mercury for children and women in their phase out program. On August 15<sup>th</sup> 2019 Toxic Free China in Association with ACEF organizes a day long discussion on Mercury-Amalgam: Impact to Environment and Health at ACEF conference hall. Dr. Shahriar Hossain, Secretary General of Environmental and Social Development Organization (ESDO) also participated as an international expert both in the workshop and meeting.

#### 5. **3rd Meeting of the Intersessional Process Considering the Strategic Approach and the Sound Management of Chemicals and Waste Beyond 2020 (IP3)**

The 3rd Meeting of the Intersessional Process Considering the Strategic Approach and the Sound Management of Chemicals and Waste Beyond 2020 (IP3) was held from



30<sup>th</sup> September to 4<sup>th</sup> October, 2019. At this meeting, Siddika Sultana, Executive Director and Greg Howard, Senior Research Fellow of Environment and Social Development Organization- ESDO participated and share insights about Sound Management of Chemicals and Waste.





# Program

## Women Empowerment



## 1. APNN Meeting on Country report of Bangladesh, 2019

On 21<sup>st</sup> September 2019, Asia and Pacific Nations' Network (APNN) has organized a meeting on the country situation report of Bangladesh. ESDO Executive Director Siddika Sultana presented the country report of Bangladesh in the annual meeting of International Network of Women Engineers and Scientists at Kathmandu, Nepal. She has introduced the WiES Bangladesh and shared its mission. WiES Bangladesh has created a platform to become the voice of women in science, technology, engineering, entrepreneurship and mathematics. WiES Bangladesh works on the issues related to environmental health, gender and development, toxic free world, awareness raising, policy advocacy, capacity building of women etc.



## 2. 2019 International Young Woman Scientist (YWS) Camp & Smart Sister Workshop

2019 MAPWiST and YWS camp was held on 7th to 9th August, 2019 at Ewha Womens University, South Korea. The program was organized by the Association of Korean Woman Scientists and Engineers - KWSE. It was three day long program and the program includes: Natural History Museum, Research Institute Tour, One Minute Pitch (OMP) and Poster Presentation, Luncheon & Research Talks with National Geographic, Group Mentoring, Welcome Dinner, Opening Ceremony, Plenary Session, Networking



Luncheon, Policy Forum, Panel Discussion, Country Exhibition, Farewell dinner and Awards Giving Ceremony etc. As a representative of ESDO, Juthi Rani Mitra (Program Associate) joined the camp to present her research work and represent Bangladesh.



# Program

## In House Capacity Building Program





1.

### In house meeting on public health



An in house on Public health (Food safety) was arranged on 27 March, 2019 at ESDO. The meeting was hosted by Dr. Gregory Howard, a chemical expert from the USA. The focused topic in this meeting was lead in turmeric and its impact in human

health. Dr. Shahriar Hossain, Secretary General of ESDO and Siddika Sultana, Executive Director of ESDO were also present at the meeting.

2.

### In house meeting on public health

A 3 days orientation and workshop was held on 11, 16 and 20 April at ESDO office. On the first day the workshop covered the background of ESDO, introduction to each other's, story sharing on plastic, lead and other toxic chemicals, briefs ongoing projects of ESDO, interpersonal communication, role play on two different issues. The second day was started with the ice-breaking activity that is warm up our self, study planning, preparation of presentations, writing training on news and institutional reports, team building activities and report back. The last day of the workshop was mainly on the brainstorming project ideas and discussions. These three days were hosted by ESDO Secretary General Dr. Shahriar Hossain and Dr. Gregory Howard.



3.

### Team Orientation and Training

An orientation and training was held on 1<sup>st</sup> & 3<sup>rd</sup> August, 2019 at ESDO office. On the first day the workshop covered the background of ESDO, introduction to each other's, story sharing on plastic, lead and other toxic chemicals, briefs ongoing projects of ESDO, interpersonal



communication, role play on two different issues. The second day was started with the ice- breaking activity that is warm up our self, study planning, preparation of presentations, writing training on news and institutional reports, team building activities and report back. These two days were hosted by ESDO Secretary General Dr. Shahriar Hossain and Shahnaz Monir, Executive Committee Member, Director International Program.

4.

### Team Orientation and Yearly Planning



An orientation and training was held on the 30<sup>th</sup> & 31<sup>st</sup> December, 2019 and 1<sup>st</sup> January, 2020 at the ESDO office. On the first day this covered ESDO background, introduction, story sharing, ongoing projects of ESDO, interpersonal communication,

yearly plan, role play on two different issues. On its second day, participants prepared an action plan of all projects. On the third day different tasks were performed and discussed works and rules. These three days were hosted by ESDO Secretary General Dr. Shahriar Hossain and Shahnaz Monir, Executive Committee Member, Director International Program.





Let the clean  
environment  
shine upon us...



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