

Mercury added products: Country situation analysis in Bangladesh (Product inventory and emission source identification)





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Study Report On Mercury added products: Country situation analysis in Bangladesh (Product inventory and emission source identification)

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"While this publication has been produced with the assistance of the UNEP, the contents of the publication are the sole responsibility of ESDO together with UNEP. In addition, ESDO and UNEP entered into this SSFA with the overall objective of raising awareness as well as strengthening capacities to replace mercury-added products and ensure the environmentally sound management of end-of-life mercury-added products in Bangladesh. The views here in shall not necessarily be taken to reflect the official opinion of any of these organization."



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Environment and Social Development Organization-ESDO

ESDO is a non-governmental organization working on environmental and health issues with various stakeholders, to create a toxic free Bangladesh and sustainable living environment.

UNEP

The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations System and serves as an authoritative advocate for the global environment.

UNEP Global Mercury Partnership

Governments initiated partnership activities at Governing Council 23 and have subsequently specified the UNEP Global Mercury Partnership as one of the main mechanisms for the delivery of immediate actions on mercury during the negotiation of the global mercury convention. The overall goal of the UNEP Global Mercury Partnership is to protect human health and the global environment from the release of mercury and its compounds by minimizing and, where feasible, ultimately eliminating global, anthropogenic mercury releases to air, water and land. The Partnership works closely with stakeholders to assist in the timely ratification and effective implementation of the Minamata Convention on Mercury.

UNEP Chemicals

UNEP Chemicals is a division of UNEP technology, Industry and Economics which has established by UNEP in response to the Governing Council's request with the immediate objective to encourage all countries to adopt goals and take actions, as appropriate, for the identification of mercury-exposed populations, for the minimization of mercury exposure through outreach efforts and for the reduction of anthropogenic mercury releases.







Secretary Ministry of Environment and Forests Govt. of the People's Republic of Bangladesh Bangladesh Secretariat, Dhaka-1000

<u>Message</u>

On behalf of Ministry of Environment and Forest (MoEF), Government of the People's Republic of Bangladesh, I sincerely congratulate Environment and Social Development Organization- ESDO on their efforts for successful implementation of the project "Reduction of demand for Mercury in mercury containing products in Bangladesh"in association with United Nations Environment Program (UNEP). Special thanks for conducting a comprehensive inventory of mercury source, emission and impact assessment in Bangladesh. Just like ESDO, we are also having ongoing efforts to raise awareness as well as strengthening capacities to replace mercury-added products. We know that it is not an easy task. If we receive any constructive suggestions, we will certainly go ahead with this. We have already taken some initiatives and hope that we will be able to ratify the Minamata Convention soon.

We would also like to congratulate ESDO for coming up with this "Study Report". It is refreshing to know that ESDO shares a common goal with us in creating awareness and promoting environmentally sound management of end-of-life mercury-added products in Bangladesh. I believe this report will provide valuable inputs in the preparation of a national policy regulation on import and use of mercury added products. Thorough ESDO's research work stakeholders will be more aware of the mercury level in the products and industrial processes.

Congratulations once again and best wishes to ESDO for its endeavor towards betterment of the environment and people of Bangladesh.

09.15 21.

(Dr. Kamal Uddin Ahmed)

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Foreword

Mercury pollution is a global problem that requires global action because it moves with air and water, transcends political borders, and can be transported thousands of miles in the atmosphere.

Investigations of developed countries and some developing countries reveal that the production, consumption and disposal of mercury and mercury containing compounds, especially when used in industrial and commercial sectors, have an enormous impact on the atmosphere, biodiversity, soil, water, human health, etc. This impact will last, not merely on this generation, but also for future generations. The devastation that will result from these environmental impacts pose a great obstacle to socio-economic development. The Minamata Bay tragedy, where great numbers of children in Minamata, Japan, were born with severe birth defects as a result of systematic mercury contamination in the water source during the 1950s, made the international community acutely aware of the potentially lethal effects of mercury which is discharged into the environment without proper treatment.

The Minamata Convention calls on governments around the world to learn and apply the lessons from the Minamata tragedy for the control of emission and release of mercury and mercury compounds in the future. Bangladesh is one of the signatory to Minamata convention.

Mercury in wastes, containing this free element and its compounds, and in equipment containing mercury, continues to harm the environment of Bangladesh. And will also do so years after being disposed. In Bangladesh we have no specific guidelines regarding the management of mercury wastes, or how to safely manage the uses of either products or equipment that contain mercury or mercury compounds. Evaluating mercury emission is, therefore, is required to assess new, potential and existing sources, of the mercury contamination from mercury and mercury-containing products.

Through the measures enumerated in the Convention, phasing-out of mercury containing products has already begun. United Nations for Environmental Programme (UNEP) is supporting the efforts towards an early entry into force of the convention and towards the implementation of its provisions.

The international demand for the control of mercury emissions arose following the UNEP's Governing Council's 22nd session in February 2003. After considering the key findings of the Global Mercury Assessment Report, the governing Council decided that there was sufficient evidence of significant global adverse impacts from mercury to warrant further international action to reduce the risks to humans and wildlife from the release of mercury into to the environment.

This commitment to addressing the global adverse impacts of mercury pollution was reinforced by 27 Governments and regional economic integration organizations at the 23rd session of the Governing Council in February 2005. The Governing Council also requested UNEP, in cooperation and consultation with other relevant organizations, to facilitate and conduct technical assistance and capacity building activities to support the efforts of all countries to take action on mercury pollution. The Governing Council specified the UNEP Global Mercury Partnership as one of the main mechanisms for the delivery of immediate actions on mercury during the negotiations of the global mercury convention.

In response to the Governing Council's request, UNEP has established a mercury program within UNEP, with the immediate objective to encourage all countries to adopt goals and take actions, as appropriate, for the identification of mercury-exposed populations, for the minimization of mercury exposure through outreach efforts and for the reduction of anthropogenic mercury releases.

We, the Environment and Social Development Organization-ESDO, in collaboration with UNEP took an initiative to carry out a research and survey on the project titled "Reduction of Demand of Mercury in Mercury Containing Products in Bangladesh". This was the first, ever, in depth study on mercury added products in Bangladesh.

Under the guidance and dynamic leadership of Dr. Shahriar Hossain; the ESDO research team was able to come forward with a comprehensive inventory report on the status of mercury emission and health impact in Bangladesh.

It may, also, to be mentioned that with the cooperation of different stakeholders from both public and private sectors the inventory report on "Mercury added products: in country situation analysis in Bangladesh (Product inventory and emission source identification)" was developed. Representatives of the government agencies, the private sector and other stakeholders contributed valuable inputs in this effort.

This inventory report focuses on a preliminary inventory of mercury use and release in Bangladesh, a quantification of mercury emission and releases, identification of potential hotspots, possible alternatives and a regulatory framework on mercury added products and processes.

It provides basic information that may be useful to government agencies, the private sector and all other stakeholders for the management and use of mercury in an appropriate way.

A background document titled "UNEP Toolkit for identification and quantification of mercury releases, April 2013" is a base for preparation of the mercury inventory report of Bangladesh. Identification of the emission and release sources for mercury in Bangladesh based on UNEP Toolkit. In this regard, and while depending on UNEP Toolkit it has not been possible to accurately quantify all mercury release sources in Bangladesh.

Inventories on the release of hazardous substances constitute an important source of information for all concerned. Such inventories are often of vital importance to stakeholders, in the industry, trade, manufacturing sectors as well as consumers.

We, in ESDO, trust that the inventory report prepared by the ESDO research team that appears in the following pages will be of interest as well as useful to policy makers in the government to all those concerned ministries, in the scientific community and all other stakeholders.

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Bangladesh, Dated: 21/09/2015

Syed Marghub Murshed Chairperson ESDO

Acknowledgment

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This report was produced under the UNEP Global Mercury Partnership. The overall objective was to raise awareness as well as strengthening capacities to replace mercury-added products and ensure the environmentally sound management of end-of-life mercury-added products in Bangladesh.

We also acknowledge relevant stakeholders such as relevant line ministries, civil organizations, regional and international organizations, industrial trade bodies, the public, and the media for their continued support and effective participation.

Finally, this study report would not have been possible without continuous effort of ESDO team and volunteers.



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