

Compendium

SR Asia 2nd International Conference

on

**“Responsible Business Conduct to Safeguard the People’s Issues and Environment
by Managing Hazardous Waste”**



SR Asia 2nd International Conference

29 Nov - 30 Nov 2013

Venue: CIRDAP, Dhaka Bangladesh

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- Dr. Mahfuzul Rahman - Adjunct Faculty Dhaka University
- Mr. Md. Sabur Khan- DCCI President
- Ms. Tanuja Bhattacharjee, Senior Environmental Advisor – GIZ
- Mr. Ziaul Haque-Department of Environment
- Brig General M Mofizur Rahman -Chairman- R & G Group
- Ms. Kishwar Sayeed – HR &OD Advisor- Prothom Alo Media Star Ltd.
- Ms. Sumaya Rashid – Country Director SR Asia

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हरीश रावत
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Harish Rawat



जल संसाधन मंत्री
भारत सरकार
وزیر آبی وسائل
بھارت سرکار

MINISTER OF WATER RESOURCES
GOVERNMENT OF INDIA

MESSAGE

It gives me immense pleasure to note that SR Asia is organizing 2nd International Conference on Responsible Business Conduct to safeguard the people's Issues and Environment by Managing Hazardous waste during 29 and 30 November 2013 in Dhaka, Bangladesh. As the developing countries are facing challenges of human health, safety and security in relation to waste and its impact on productivity, the Compendium being prepared by the SR Asia compiling all research papers and studies received during the Conference, would be of great help to all the developing countries to find solution towards these challenges.

I extend my good wishes to the SR Asia and entire team who are putting their untiring efforts to make this Conference a great success.


(Harish Rawat)

जल संरक्षण वर्ष 2013
जल बचायें - जीवन बचायें



Water Conservation Year 2013
Save Water - Save Life



Mr. Shitangshu Kumar Sur Chowdhury
Deputy Governor, Bangladesh Bank

Message

I express my heartfelt delight on the eve of SR Asia 2nd International Conference on Responsible Business Conduct to Safeguard the People's Issues and Environment by Managing Hazardous waste.

Responsible business practice is one of the key features of corporate sustainability that is part of sustainable development of any country. Corporate Sustainability is a business approach that creates long-term consumer and employee value by not only creating a "green" strategy aimed towards the natural environment, but taking into consideration every dimension of how a business operates in the social, cultural, and economic environment. Mirroring the growth in corporate sustainability are the responsible investment and sustainable finance movements, whereby increasing numbers of long-term institutional investors are adopting principles of sustainability – with the means for unleashing the trillions of dollars in investment that will be required for innovation, infrastructure and service delivery to meet human needs. Thus, this international conference is expected to fulfill the crying need of contemporary era to build and disperse awareness among corporate and businesses for triggering a sound framework towards healthy environment for people through efficient waste management. I wish the event a grand success in all respects.

A handwritten signature in black ink, appearing to be 'SKS', with a horizontal line extending to the right.

Shitangshu Kumar Sur Chowdhury
Deputy Governor, Bangladesh Bank



Dr. Cecep Effendi
Director General, CIRDAP

Message

Bismillah hir-Rahman nir-Rahim

It is my great pleasure and privilege to provide this message as a co-organiser on the inauguration of “International Conference on Responsible Business Conduct to Safeguard the People's Issues and Environment by Managing Hazardous Waste”, 29-30 November 2013, at CIRDAP.

The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) is a regional, intergovernmental and autonomous organisation. From the original six members, CIRDAP has now grown up as a Centre of 15 member countries. The member-countries are Afghanistan, Bangladesh (Host State), Fiji, India, Indonesia, Iran, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam. CIRDAP as a regional centre promotes research and training on various aspects of IRD (integrated rural development) in the region, with emphasis on alternative approaches leading to more effective field action programmes.

Since, CIRDAP and SR-Bangladesh both are engaging in integrated development with marginalised people from various community groups/villagers, we may join hands to promote sustainable development by protecting environment and natural balance. Due to rapid industrial and population growth there are risk of hazards waste in this region of Asia and the Pacific. New policy framework is necessary to address this present challenge by encouraging green productivity. In this process, CIRDAP and SR-Bangladesh may also promote regional cooperation through public-private partnership for sharing the ‘best practices’ among the member counties. In fact, integrated waste management is considered a very important component of keeping the environment safe and useful. CIRDAP is mostly addressing agricultural wastes as it is related with farmers and food security, although there are much kind of solid wastages like industrial, pathological/ hospital and hardware etc.

I wish and pray all the best for a successful international workshop with reference to discussion and deliberations to address the challenges on hazardous waste and opportunities for green product with special focus to Bangladesh. Last, but not the least, I expect that this International workshop would create more opportunities to work together among development partners on the thematic areas. Thanks.



Dr. Cecep Effendi
Director General
CIRDAP



National Productivity Council
(Under Ministry of Commerce
& Industry, Govt. of India)
Lodhi Road,
New Delhi

Dr. S.K. Chakravorty
Deputy Director General

Message

It is a pleasure that SR Asia is organizing the 2nd International Conference on “Responsible Business Conduct to Safeguard the People’s Issues and Environment by Managing Hazardous Waste” from 29-30 November, 2013 at Dhaka, Bangladesh. This conference is a platform for sharing knowledge, information and experiences relevant to a developing country perspective towards managing hazardous wastes and its impact on the environment and human health. It also promises to bring to the discussion on technical, scientific and possible socio-economic aspects pertaining to the topical subject. The conference will also discuss various Green Productivity (GP) measures for minimizing hazardous waste generation in various industrial sectors and thus ushering of a green economy in the region.

SR Asia deserves rich compliments for the laudable initiative in organizing such a relevant event for all the stakeholders. I wish the event all success.

(Dr. S K Chakravorty)



Md. Sabur Khan
President
Dhaka Chamber of Commerce and Industry (DCCI)

Message

I am very delighted to know that SR Asia is going to organize 2nd International Conference on 'Responsible Business Conduct to Safeguard the People's Issues and Environment by Managing Hazardous'. On behalf of Dhaka Chamber of Commerce and Industry (DCCI) and on my own behalf I would like to extend my sincere gratitude to SR ASIA for organizing this international conference to address and develop solution for going green and attain zero waste management. As an industrial partner, DCCI has rendered all sorts of supports relating to the success of the conference. In the age of globalization, waste management system needs to be integrated into business strategy for sustainable products and consumer-driven branding strategy. All businesses can be benefitted from the effective business waste management, no matter how big or small the business is. Poor waste management practices costs more and also contributes to the problem of climate change.

I am also aware that the objectives of this conference are to address opportunities of green banking in Bangladesh, highlight responsible business conduct in various SME sectors including Multi National Companies on waste management, discuss health and safety of workers and citizens, promote the transformation of industries into green, develop strategy paper for green banking, manufacturing and municipalities.

I hope this international conference would act as catalyst in sharing the challenges and opportunities that developing country faces with specific context of Bangladesh. I wish the every success of the conference.

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P R E F A C E

SR Asia International conferences are annual events to engage stakeholders from across the board for participative approach building, brain storming for new ideas for responsible business conduct, information sharing and dissemination, inspiring stories for reflexive change management, local challenges, solutions and regional linkages. As business is no more local the global dimensions are imminent to consider.

The SR Asia 2nd international conference focused on one of the critical aspects of the business on which entire world has a concern today and that is waste generation, handling and disposal mechanism of the same. Waste not only becomes significant due to business competitiveness but from the emerging angle of sustainable development and sustainability. The role of corporate and business is significant in solving the societal problems by innovative products, processes and services keeping in mind sustainability as one of the principle of existence and motivation.

Waste management is becoming important in view of the depleting natural resources, market competitiveness; nuisance on public places and most important one is the human. Waste has severe and serious impact on health, safety and security of people as it pollutes air, water and land around us. The touch and inhaling of smell of some of the toxic waste is life threatening. Cobalt exposure to some labours while handling waste in New Delhi in 2011 is a live example of waste mismanagement which could have been prevented had there been procedure in place.

In today's business environment waste is directly linked to the cost factor for competitive pricing in domestic and global/ export market. The waste not only adds to the cost, but also negatively impacts the productivity. Waste generation eventually needs more resources for handling, storage and disposal which is again an extra cost added to the finished products or services and at the same time pollute to the environment, impact people and profit.

Waste generation is comparatively very high in developing countries due to poor technology and infrastructure, poor implementation, unskilled manpower, policy framework and dependable government priorities. Therefore new and innovative solutions are inevitable. Manufacturing and service sector put together produce more than 90% of solid waste. Banking sector for example consumes most of the precious resource like energies of all forms, paper, electronic machines and computers, lead acid batteries, Ink etc however focus on waste management can significantly alter approach to adopt green banking practices.

The amount of solid-waste generated in Asia has increased tremendously in the last few decades mainly due to population, the improvement of living standards, rapid economic growth, and industrialization. Therefore Green Productivity (GP) measures will be necessary to address to bring out new policies and framework to control waste right in the first place of generation rather than creating new facilities, research and development to manage it and so on.

This international conference has shared, discussed and deliberated on the challenges and opportunities today developing country faces and with specific context of Bangladesh. The discussion shall help in prioritizing human health, safety and security in relation to waste and its impact on productivity, export and maximize compliances. The deliberation has helped us to conclude steps and recommendation for the stakeholders.

Our partners, sponsors, supporters and audiences have asked us to repeat such events as frequently as possible to grow the awareness among all stakeholders so that eventually actions start rolling out and we see the positive results on the ground. We are encouraged with the feedback and participation from all and hence commit to organise such events annually to ensure to bring about the sustainable change management.

Sumaya Rashid
(Country Director)
SR Asia Bangladesh

Conference Agenda:

29th November 2013	
09:00 AM - 9:30 AM	REGISTRATION AND NETWORKING
Session -1 Inauguration	
9:30 AM - 9:35 AM	Welcome address by Ms. Sumaya Rashid - Country Director, SR Asia Bangladesh
9:36 AM - 9:45 AM	MoC of Inaugural Session, Mr. Birendra Raturi - International Director, SR Asia
9:46 AM – 9:56 AM	Address by Mr. Md. Sabur Khan, President – DCCI
9:57 AM – 10:07 AM	Address by Dr. Cecep Effendi – Director General, CIRDA
10:08 AM - 10:15AM	Address by Mr. Khondaker Mostan Hossain, Joint Secretary Ministry of Labour and Employment
10:16 AM - 10:25 AM	Inaugural Speech by Mr. S. K. Sur Chowdhury - Deputy Governor, Bangladesh Bank
10:25 AM – 10:49 AM	Tea /Coffee Break
Session-1 (10:50 AM – 12:45 PM)	
10:50 AM – 10:55 AM	<u>Green Banking- Bangladesh Bank's Initiatives & Promoting CSR, Environmental Aspect</u> Moderator – Mr. Md Abdul Awwal Sa rker General Manager Bangladesh Bank Training Academy
10:55 PM – 11:40 PM	Green Banking - Bangladesh Bank's Initiatives and Bank's Activities, Mr. Khondkar Morshed Millat, DGM, Green Banking & CSR-Bangladesh Bank
11:41 PM – 12:00 PM	Waste Management through green banking – Mr. A.K.M. Abdul Malek Chowdhury, Deputy Managing Director, Islami Bank Bangladesh Limited
12:01 PM – 12:30 PM	Integrating Green Banking and Sustainability Reporting – an international perspective –Mr. Sudipta Das, Advisory Partner Climate Change and Sustainability Leader (India) Ernst & Young
12:31 PM – 12:45 PM	Question & Answer
12:45 PM – 2:00 PM	LUNCH BREAK
Session-2 (2:01 PM - 3:40 PM)	
2:01 PM – 2:05 PM	<u>Legislative framework on hazardous waste management and linkage to responsible business conduct: Standardization Roadmap to support industry waste regulation</u> Moderator – Brig General M Mofizur Rahman, psc, P Eng (Retd), Chairman- R & G Group
2:06 PM – 3:20 PM	Expert: Dr. Md. Sohrab Ali, Deputy Director(Technical), Department of Environment, Govt of Bangladesh Ms. Tanuja Bhattacharjee, Senior Environmental Advisor, Promotion of Social & Environmental Standards (PSES) in the Industry – GIZ Mr. Nabil Haque, Environmental Advisor, GIZ Mr. Martin Dietschi, Project Manager-Swiss Foundation for Technical Cooperation
3:20 PM – 3:40 PM	Question & Answer
3:41 PM – 4:00 PM	Tea /Coffee Break
Session-3 (4:00 PM - 5:00 PM)	
4:00 PM - 4:10 PM	<u>Exporting to Europe by eliminating hazardous material and CSR focus</u> Moderator: Mr. Salahuddin Mahmud, Director General, Expert from Export Promotion Bureau
4:11 PM - 4:30 PM	Mr. Birendra Raturi, International Director-SR Asia
4:31 PM - 4:50 PM	Eco-label and REACH compliance, Mr. Sudipta Das, Advisory Partner Climate Change and Sustainability Leader (India) Ernst & Young
4:51 PM - 5:00 PM	Question & Answer

30th November 2013	
9.00AM-9.15 AM	Registration
Session-4 (9:15 AM - 11:00 AM)	
9.15 AM-9.35 AM	<u>Theory and practice in managing waste impacting environment ,people and profit</u> Moderator: Dr Mahfuzul Haque, Adjunct Faculty, Department of Development Studies, Dhaka University
9.36 AM – 10:50 AM	<u>Risks & Resolve of Solid Waste Management in Urban & Rural Areas of Bangladesh</u> Expert: Ms. Anne Matter, Project Manager- SWISSCONTACT Mr. Mohammad Imtiaz Sharif, Program Director - Jyoti Development Foundation Mr. Shafiqur Rahman, Assistant Programme Officer, CIRDAP
10:50 AM – 11:00 AM	Question & Answer
11.00 AM- 11.15 AM	Tea/Coffee Break
Session-5 (11.15AM -1.00 PM)	
11:15 AM – 11:25 AM	<u>Promotion of Public-Private-Community Partnerships in managing waste</u> Moderator- Brig General M Mofizur Rahman, psc, P Eng (Retd), Chairman- R & G Group
11:26 AM – 11:50 AM	Mr. Md. Ziaul Haque, Deputy Director - DOE
11:51 AM – 12:40 PM	Ms. Tanuja Bhattacharjee, Senior Environmental Advisor, Promotion of Social & Environmental Standards (PSES) in the Industry – GIZ
12:41 PM – 1:00 PM	Prof. Muzaherul Huq, Chairman - Public Health Foundation of Bangladesh
Question & Answer	
1:00 PM- 1.10PM	Vote of Thanks Ms. Sumaya Rashid, Country Director-SR Asia Bangladesh
Lunch (1.10 PM- 2.00PM)	



SUSTAINABILITY

Keywords:

- Climate Change
- Climate Change Adaptation
- Carbon Accounting
- Carbon Footprint
- Corporate Social Responsibility (CSR)
- Credit Risk Assessment (CRA)
- Decent Work
- Department of Environment (DOE)
- Dhaka Chamber of commerce (DCCI)
- Eco-Label
- Eco-Business
- Renewable Energy
- Environmental Risk Assessment (ERA)
- Environmental Risk Rating (ERR)
- Environmental Risk Management (ERM)
- Going Green
- Green Banking
- Green Building
- Green Business
- Green Credit
- Green City
- Green Financing
- Green Marketing
- Green Productivity
- Joint Secretary (JS)
- Hazard Analysis and Critical Control Point (HACCP)
- Hazardous Waste
- Integrated Solid Waste Management
- Municipal Solid Waste
- Occupational Health and Safety (OHS)
- Public-Private-Community Partnerships
- Responsible Business Conduct
- Risk Mitigation
- Social Risk Management (SRM)
- Solid Waste
- Standardization
- Treating Waste at the Source
- 3 Rs Principle: Recycling, Reduce, Reuse
- Zero Waste Generation

Speakers' Profile:

Inaugural Session	
 <p>Mr. S K Sur Chowdhury Deputy Governor Bangladesh Bank.</p>	<p>Mr. Shitangshu Kumar Sur Chowdhury has over 30 years career with Bangladesh Bank and currently in a key position as Deputy Governor. Mr. Chowdhury is also responsible as Trustee, Bangladesh Krishi Gobeshona Endowment Trust, Alternate Director of Asian Clearing Union (ACU), Vice Chairman of Asian pacific Rural and Agricultural Credit Association (APRACA) and Chairman of Sovereign Bond Transaction Execution Committee - Ministry of Finance, Bangladesh</p>
 <p>Dr. Cecep Effendi, Director General CIRDAP</p>	<p>Dr. Cecep Effendi, Director General CIRDAP carries high profile on decentralization. Before joining CIRDAP he served with many International agencies like UNDP and others. He was he also served Islamic University, Indonesia as President, Dean for the Faculty of Social and Political Sciences, and Head for the Department of Political Science, for a decade, from 1995 to 2003 He is master's in School of International Studies and Ph.D. in School of International Studies, Jawaharlal Nehru University, India.</p>
 <p>Mr. K. M. Hossain, Joint Secretary Min. of Labour & Emp.</p>	<p>Mr. Khondaker Mostan Hossain is a civil servant and currently joint secretary with Ministry for labor and employment. He has previously served with various ministry too. He has done a specialized course on Occupational, Health and Safety from Europe. He is responsible to deal with ILO and many other international organization related to labor practices. He also directly monitor the work of Chief Inspector of factories. He is working on policy framework on hazardous sectors, new labor laws and many other interventions.</p>
 <p>Mr. Md. Sabur Khan President (DCCI)</p>	<p>Mr. Md. Sabur Khan is the President of Dhaka Chamber of Commerce and Industry (DCCI), the pioneer and largest Chamber in the country. Mr. Khan is also the past president of Bangladesh Computer Samity (BCS), the pioneer IT Association in the country. Started as an IT Business man, he diversified himself in education ventures later on and initiated lot of educational concerns— Daffodil International University (DIU) is one of them.</p>
 <p>Mr. Birendra Raturi Int. Director, SR Asia</p>	<p>Birendra Raturi is International Director with SR Asia. He has over 18 years of industry exposure including 13 years as an entrepreneur and principal consultant to the company he founded. He specialised in international trade, CSR and Green Productivity. He is currently APO and CBI External Expert and CBI trained Master ECP Expert. He facilitates trade between Europe and Asian countries. He has trained companies under platforms of CII, FICCI, IEEMA, ELCINA aside of his own firm.</p>

 <p>Ms. Sumaya Rashid Director, SR Asia</p>	<p>Ms. Sumaya Rashid has extensive experience in diverse sector from 2006, of which 06 years in Consulting. Sumaya conducted International assignment as Advisor to develop HR Policy Manual and implementation support to an Automotive Component Giant in India. Since September 2011, Sumaya Rashid has taken responsibilities to represent SR (Social Responsibility) Asia Bangladesh. She is Masters in Business Administration (MBA) and PG diploma in Personnel Management besides certified by APO Japan.</p>
Session-1	
 <p>Md. Abdul Awwal Sarker GM, BBTA</p>	<p>Md. Abdul Awwal Sarker is General Manager, Research Department, Bangladesh Bank Training Academy (BBTA), leading the research team of the central bank.. He has also served as Director General of Dhaka regional office of IIBI, London and also served as Principal of Al-Baraka Bank Training Institute in Dhaka. He has around 25 research papers in his credit published in the reputed journals both at home and abroad.</p>
 <p>Mr. Khondkar M. Millat DGM, Bangladesh Bank</p>	<p>Khondkar Morshed Millat, Deputy General Manager, Bangladesh Bank (BB) has been serving for the last 21 years in the Central Bank of Bangladesh. He obtained MSS in Economics from Dhaka University and he is a Diplomaed Associate of Institute of Bankers Bangladesh (DAIBB). Mr. Millat is the leading author of the first ever annual report of Green Banking issued by Bangladesh Bank and has a passion for driving green banking and CSR.</p>
 <p>Mr. Sudipta Das Partner, E&Y</p>	<p>Mr. Sudipta is Partner of Ernst & Young LLP 's Advisory Services and is one of the Global Leaders for Climate Change & Sustainability Services competency. He joined the firm in 1994 and is based out of the Kolkata office. Mr. Sudipta is a Mechanical Engineer with MBA (Finance). He features regularly in important business publications in India on topics related to Climate Change. He is the Regional President of Indo American Chamber of Commerce and also a member of the important industry chambers and bodies like CII, FICCI and ASSOCHAM.</p>
 <p>Mr. A.K.M. Abdul Malek Chowdhury, DMD, Islami Bank Bangladesh Ltd.</p>	<p>Mr. A.K.M Abdul Malek Chowdhury started his Banking career on 01 January 1979 as Senior Officer (Economist) with Bangladesh Shilpa Bank. Mr. Chowdhury joined Islami Bank Bangladesh Limited in 1985. He served the Bank in different capacities and worked as Wing Head of Bank's Internal Control & Compliance Wing, as Divisional Head of Audit & Inspection Division, Branches Control Division, as Zonal Head of Chittagong & Dhaka North Zone. He is Masters of Science in Economics in 1977 from Jahangirnagar University. Janab Chowdhury gained wide range of professional and leadership exposure through participation in different National and International Training Programs, Seminars, Conferences and Workshops.</p>

Session-2



Mr. M Mofizur Rahman
Chairman, R&G Group

Brig General M Mofizur Rahman, psc, P Eng (Retd) of **R&G Group & AJA Bangladesh** is engaged as Lead Auditor, Consultant & Trainer on ISO Standards and Japanese Quality Management System. He is also engaged in activities related to Social Responsibility, GP, CDM etc. Past experience includes services in EPZ, Power Sector and Projects of GOB & Development Partners besides, three decades in the army.



Mr. Martin Dietschi
Swisscontact

Dietschi is currently managing a project for improving working conditions in the Ready-Made Garments sector for Swisscontact Bangladesh. He provides training on Social Standards Compliance, Productivity and Environmental Protection, among others. He was also involved in the start-up of Swisscontact's Household Solid Waste Recycling Project "Value for Waste". He has been based in Dhaka for over three years. He previously worked for Swisscontact at the Head Office in Zurich and in Peru. He holds an MSc in Chemistry from ETH Zurich



Mr. Nabil Haque
Env. Advisor, GIZ

Nabil Haque is currently working as an environmental advisor for the project - Promotion of Social & Environmental Standards in the Industry (PSES) - implemented by GIZ in Bangladesh. He has a bachelor's degree in Environmental Science and master's degree in Environmental Resource Policy from the George Washington University. He is interested in green industrial development and has recently completed a summer course on that topic organized by UNIDO.









Dr. Md. Sohrab Ali
Dy. Director, DOE

Dr. Md. Sohrab Ali is currently working as Deputy Director (Water & Bio.) In Department of Environment, ministry of environment and forests, government of Bangladesh. Dr. Ali is PhD in Agricultural Science from Kyoto University, Japan. He has more than 12 publications and research.



Ms. Tanuja Bhattacharjee
Sr. Env. Advisor GIZ

Tanuja Bhattacharjee is currently working as senior environmental advisor for the project - Promotion of Social & Environmental Standards in the Industry (PSES) - implemented by GIZ in Bangladesh. She obtained her B.Sc (Mechanical Engg) from Bangladesh University of Engineering and Technology (BUET) in 2005 and M.Engg (Energy) from Asian Institute of Technology (AIT) Thailand in 2008. Prior to GIZ, she has served both academic and corporate sector for last five years as an expert in the area of energy and emission. She has intense interest and work experience in green industrial development, energy efficiency, waste to energy and GHG mitigation.

Session-3	
 <p>Mr. Surojit Bose Director – E&Y</p>	<p>Surojit is a Director in the Climate Change and Advisory Services under Risk Advisory Practices of Ernst and Young focussing on Energy, Environment and Sustainability advisory services. He rejoined Ernst and Young in June 2012 in the Risk Advisory Practice after more than 10 years in PwC's Sustainability practice. Education/Background: Master of Science in Environment Engineering from LSU, USA, Bachelor of Technology in Civil Engineering from IIT Kharagpur</p>
 <p>Mr. Salahuddin Mahmud Director General- EPB</p>	<p>Mr. Salahuddin Mahmud is currently in a key position as Director General with Export Promotion Bureau, Bangladesh. He is a think tank on the policy matter related to export promotion and international trade. He play a role in advocating and enabling exports with rational export duty, licenses and networking with various stake holders with the country and outside.</p> <p>He has extensively travelled abroad to study and promote export business.</p>
Session-4	
 <p>Ms. Anne Matter Project Manager Swisscontact</p>	<p>Anne Matter is a Project Manager at Swisscontact, the Swiss Foundation for Technical Cooperation. The project which she is leading, Value for Waste, aims to reduce amounts of waste dumped while improving employment opportunities for actors in the recycling value chain. Anne Matter has completed her MA in International Relations at IHEID Geneva, and her MAS in Development and Cooperation at ETH Zurich. She is currently also working as a Research Officer with Eawag, the Swiss Federal Institute of Aquatic Science and Technology.</p>
 <p>Dr Mahfuzul Haque Adj Prof. Uni. of Dhaka</p>	<p>Dr Mahfuzul Haque, a retired Secretary of the Government of Bangladesh has been teaching for more than a decade in different public and private universities taking courses on environment and development; sustainable development; natural resource management; climate change; biodiversity conservation; natural disaster management; and environmental impact assessment.</p>
 <p>Mr. Mohammad I. Sharif Program Director JDF</p>	<p>Mr.Mohammad Imtiaz Sharif is Director – Environment & Social Development in Jyoti Development Foundation, and providing overall guidance for successful operation of the Solid Waste and Faecal Sludge Management Plant in Kushtia Municipality. He has been working with the development sector. He is Master in Urban Development from University of Dhaka</p>
 <p>Mr. Shafiqur Rahman, Asst. Prog. Officer CIRDAP</p>	<p>Mr. Shafiqur Rahman, Assistant Programme Officer is with CIRDAP since 1991 and has been working in the field of sustainable development and environment and related issues, with his active involvement in the multidisciplinary research/action research projects of the Centre. He has authored/co-authored a number of research articles and publications of the Centre.</p>

Session-4

Prof. Muzaherul Huq
Director PHF

Prof Muzaherul Huq is a medical graduate of Dhaka University (DU). He pursued his Post Graduate studies in London Hospital Medical College & Dundee University, UK and a Postgraduate Diploma holder on Planning & Development from Planning Academy. He is currently the Vice President of INPALMS (Indo Pacific Association of Law Medicine & Science) and Chairman of Public Health Foundation of Bangladesh (phfbd) & President of South East Asia Association of Health Ethics (SEAHE).



MD. ZIAUL HAQUE
Dy. Director DOE

Md. Ziaul Haque has been working in the department of environment since 1996 under several sections. Mr. Haque is master in management of natural resources from department of International Environment & Development Studies under Agricultural University of Norway, post graduate diploma in industrial pollution control engineering from Japan and international training certificate in Environmental Impact Assessment (EIA) from Thailand.



CONFERENCE PROCEEDINGS

Social Responsibility (SR) Asia organized the 2nd International Conference on “Responsible Business Conduct to Safeguard the People’s Issues and Environment by Managing Hazardous Waste” on 29-30 November 2013 at CIRDAP Dhaka, Bangladesh. It is the successive conference following the first conference held in New Delhi, India in October 2012. The conference was jointly organized by SR Asia, CIRDAP and Bangladesh Bank Training Academy with the support of valued partners including GIZ, National Productivity Council (NPC) – India, Swisscontact, IPLA, E&Y, Islami Bank Bangladesh Limited, Department of Development Studies – University of Dhaka, The Financial Express, Dhaka Chamber of Commerce & Industries . Asian Productivity Organization (APO)-Japan and National Productivity Organization (NPO)-Ministry of Industries, Bangladesh Govt supported as Mentor.

Day One:

29 November 2013

The conference took off beginning with the welcome address by **Ms Sumaya Rashid, Country Director, SR Asia Bangladesh**. She provided a run-down on the activities that are undertaken by SR Asia in the Asia-Pacific region in general and Bangladesh in particular. She drew attention of the participants on broad aims and objectives of the conference. “SR Asia 2nd International Conference is the platform to share, discuss and deliberate on the challenges and opportunities faced by the developing countries in general and Bangladesh in particular.” Ms. Rashid stated. She hoped that the discussion would help in prioritize human health, safety and security in relation to waste and its impact on productivity, export and compliances. She hoped the conference would be a landmark event and wished that it would engage all in a meaningful dialogue on the management of hazardous wastes.

Ms Rashid observed that the deliberations of the conference would provide a broad framework for going green in order to achieve the following objectives:

- To highlight solutions and motivations for going green and zero waste generation;
- To examine the state of green banking in Bangladesh;
- To address responsible business conduct in MNC and MSME sectors on waste management and export;
- To discuss health and safety of the workers and citizens, targeting recent accidents in garments sector;
- To highlight the waste management challenges with special focus on waste management solutions based on cost-benefit (e.g., landfill, incineration, resource recovery, waste to energy, e-solution, non-biodegradable waste), trends in legislation; and
- To discuss strategies and practices by different stakeholders to promote transformation of industries, cities towns into green.

Mr. Birendra Raturi, International Director, SR Asia in his speech, stated “SR Asia is a professional network of SR professionals in Asia with an aim to creating a bench mark and new standards in the field of Social Responsibility. SR Asia has launched an Asian Roadmap for establishing a sustainable and competitive enterprise.” He believed that the roadmap would help to integrate social

responsibility in all walks of life. The Asian Roadmap for Business includes key points like integrating SR across all sectors of business functions, preserving the environment, natural resource management and ensuring green business.

Mr. Md Sabur Khan, President, Dhaka Chambers of Commerce and Industries (DCCI) expressed his sincere thanks to SR Asia Bangladesh for organizing the 2nd International Conference in Bangladesh. He said that DCCI as a leading forum of business groups in the country has been trying to promote “green business” in Bangladesh. Developing a leather sector has been DCCI’s project since 2009. It has taken a number of initiatives to raise awareness among business personnel on several issues with the support from EU aiming to turn Dhaka into a “Green Dhaka.”

Dr. Cecep Effendi, Director General, CIRDAP in his address stated that it was his pleasure to welcome all the participants attending the conference at CIRDAP. He was very pleased to be one of the co-organizers of the conference. Referring to his organization, he stated “CIRDAP has been promoting research and pilot projects in the region and sharing research outcome with the member countries for the betterment of peoples’ livelihood.” “Both CIRDAP and SR Asia are engaged in integrated development programs,” Effendi added.

Mr. S K Sur Chowdhury, Deputy Governor, Bangladesh Bank in his inaugural address raised the issue of adverse effects of hazardous waste on the environment and human health. He emphasized the urgency of protecting human health and livelihood from hazardous waste by adopting sustainable waste management policies. He also discussed the role of the corporate world, banking sector and business sector in protecting the environment. He emphasized the growth of markets for the newly made or recycled products. “We need united, sustainable and pro-active support from the corporate, business and government sectors simultaneously to handle the hazardous waste and problems arise from it.” Mr. Chowdhury added. They will require the practice of ethical corporate functioning and the Banks will have to come forward with activities in line with their Corporate Social Responsibility (CSR). He further raised the following points:

- All banks should have dedicated funds for CSR;

- “Green Banking” introduced by Bangladesh Bank has become popular in the country, at the same time earned global fame and could be replicated;

- “Green Banking” ensures natural resource management and prevents environmental degradation;

- Waste and waste management would also be a part of “Green Credits” system;

- Bangladesh Bank offers the most well digitalized Banking system;

- Bangladesh Bank encourages all the banks to support and initiate programs on the protection of environment;

- In building a “Green Bangladesh,” all sectors and stakeholders are to come forward; and finally,

- Bangladesh Bank stimulates, promotes and patronizes sustainable and green banking in the country.

Following his speech as the chief guest, Mr SK Sur Chowdhury, Deputy Governor, Bangladesh Bank officially inaugurated the conference.

SESSION - 1

Session 1 was Moderated by **Mr Md Abdul Awwal Sarker, General Manager, Bangladesh Bank Training Academy**. The first session of the Conference dealt with the theme “Green Banking-Bangladesh Bank’s Initiatives and Promoting CSR and Environmental Aspect”. He discussed a number of initiatives undertaken by Bangladesh Bank to achieve Green Banking in Bangladesh. The Bank has Environmental Risk Management Guidelines, Policy Guidelines, Green Refinancing, Green Marketing, Green Research and Development and Capacity Building. In last two years, green products refinanced under Bangladesh Bank scheme are: Bio-gas plant; Solar Home System; Solar Irrigation Pump; Effluent Treatment Plant; HHK Technology in brick-kiln; and Solar Assembly Plants. Climate Risk Fund of Banks and financial Institutions covers their part of CSR activities as green events and green projects related to Climate Change Risk. Under active guidance and patronage of Bangladesh Bank, all Banks have utilized Tk 258 million in 2012 from their Climate Risk Fund so far, he said.

Bangladesh Bank Training Academy has been regularly providing training to Bank officials on Green Banking, Green Financing, Carbon Credit and Clean Development Mechanism (CDM). He stated that under the Green Banking scheme, efforts are on to convert 30-storied Bangladesh Bank building into a Green Building with rain water harvesting, waste water recycling and motion sensor energy efficient bulbs supported by window-based solar panels.

Mr. Khondkar Morshed Millat, DGM, Green Banking and CSR, Bangladesh Bank in his paper stated, “Green Banking-Bangladesh Bank’s initiatives and Bank’s Activities” said that “Green Banking” is concerned with both human made disaster and natural disaster due to climate change risk or global warming or any other factors related to environment. Environment and Social Risk Management (ESRM) Guidelines as part of Green Banking take care of business deal and projects by assessing Environmental and Social needs. He put emphasis on integrating environmental risk with credit risk. He discussed Environmental Risk Management (ERM) Guidelines adopted by Bangladesh Bank in 2011; Policy Guidelines for Green Banking 2011; and Bangladesh Bank Refinance Scheme in Renewable Energy and Green Finance. In line with the Environmental Conservation Act 1995 and Environmental Conservation Rules 1997, Bangladesh Bank has developed Environmental Due Diligence (EDD) checklists for 10 sectors and urged all Banks and Financial Institutions to follow them.

Mr AKM Abdul Malek Chowdhury, DMD, Islami Bank Bangladesh Limited in his paper stated, “Waste Management through Green Banking” discussed various initiatives and projects undertaken by Islami Bank Bangladesh targeting green banking using their CSR Fund. Besides, liberally using the CSR Fund on education, social activities and poverty alleviation, IBBL has been engaged financing development projects with an aim to ensuring waste management, environmental conservation and natural resource management. IBBL follows the ERM Guidelines and Policy Guidelines for establishing “Green Banking” as adopted by Bangladesh Bank.

Mr Sudipta Das, Advisory Partner, Ernst & Young in his paper stated, “Integrating Green Banking and Sustainability Reporting- an International Perspective”, observed that the growth in population and consumption is placing visible stress on access to natural resources and the growing challenges revolve round energy, water and food security. Sustainability risks possess significant potential to impact banks. He identified six growing trends in corporate sustainability in 2013 and they are:

- The “tone from the top” is key to heightened awareness and preparedness for sustainability risks.
- Governments and multilateral institutions are not playing a key role in corporate sustainability agendas.
- Sustainability concerns now include increased risk and proximity of natural- resource shortages.
- Corporate risk response is not well paired to the scale of sustainability challenges.

- Integrated reporting is slow to take hold.
- Inquiries from investors and shareholders are on the rise.

He gave a roadmap for Green Banking and sustainability through various phases. Green Banking challenges and opportunities are: rapid change in climate has had direct impact within the financial sector; Financial Institutions (FIs) as financial intermediary hold a unique position in an economic system that can affect production, business and other economic activities through their financing activities; Green FIs or environmentally responsible FIs do not only improve their own standards but also affect socially responsible behaviour of other business.

During the open discussion, participants sought clarification on the issue of “Green Banking” in Bangladesh. They observed that Bangladesh Bank, being a regulatory body has made tremendous strides in upholding the cause of environment. Environmental Risk Management (ERM) Guidelines, 2011 and Policy Guidelines for Green Banking 2011 adopted by Bangladesh Bank are most effective tools in ensuring a green Bangladesh, the general participants commented.

SESSION - 2

Moderated by **Brig. General M Mofizur Rahman (Retd), Chairman, R & G Group**, in the second session dealt with the theme “Legislative Framework on Hazardous Waste Management and Linkages to Responsible Business Conduct: Standardization Roadmap to support Industrial Waste Regulations”. In his introductory remarks, he stated that the management of hazardous wastes have become an emergent issue as demand for energy increases due to population increase. Entrepreneurs are to abide by environmental laws and regulations for environmental conservation and profit would follow in any case. The issue of Responsible Business or Green Business is being much talked about nationally and globally. Entrepreneurs are to abide by these regulations in order to make their products eco-friendly ones for safeguarding peoples’ health, which would eventually earn profit for them.

Dr Md Sohrab Ali, Deputy Director (Technical), Department of Environment in his paper stated, “Legislative Framework on Hazardous Waste Management”, dealt with some definitional issues, like “waste”, meaning any solid, liquid, gaseous, radioactive substance, the discharge, disposal and dumping of which may cause harmful change to the environment (ECA 1995). Hazardous wastes are explosive, corrosive, flammable, toxic, oxidizing, eco-toxic, poisonous, and infectious. Being a signatory to Basel Convention on Trans-boundary Movements of Hazardous Wastes & Their Disposal, 1989; and Stockholm Convention on the Control of Persistent Organic Pollutants (POPs), 2001, Bangladesh is committed to ban certain toxic and hazardous wastes detrimental to human health, he observed.

In last few years, he said that Bangladesh has adopted Medical Wastes (Management and Processing) Rules 2008; Hazardous Waste and Ship Breaking Waste Management Rules 2011; Guidelines on Environmental Management, Waste Treatment and Workers’ Occupational Health and Safety for Ship Breaking Yards in Bangladesh, 2011; National 3R Strategy for Waste Management, 2010 and Sludge Management Guidelines (draft). Department of Environment with its meagre manpower has been trying to enforce the environmental legislations with an aim to bring the industrialists under compliance, he said. In this daunting task, he sought cooperation of all the stakeholders in safeguarding the environment. He concluded that the conflict between environment and development still remained unresolved. Since, “environment has no boundary”, he sought cooperation of the regional countries for the conservation of environment, forest and biodiversity.

Ms. Tanuja Bhattacharjee, Senior Environmental Advisor, GIZ and **Mr. Nabil Haque**, Environmental Advisor, GIZ, presented on “Legislative Framework on Hazardous Waste Management and Linkage to Responsible Business Conduct” to highlight their work with the Department of Environment in developing Standards and Guidelines for managing sludge generated from Effluent Treatment Plants (ETP). Currently, about 950 tons of dry sludge is produced yearly by more than 700 operating ETPs. Sludge may contain different toxic compounds originating from production or treatment process.

Under this new Standards and Guidelines, sludge has been categorized into three. Category A is Municipal and comparable sludge; Category B is sludge from industry including sludge from Central Effluent Treatment Plants (CETP); and Category C sludge from industry including sludge from CETP belonging to the category of hazardous waste as identified under Basel Convention or production processes listed in guideline annexure. Treatment and disposal options have been specified after identifying the sludge category based on sludge testing or investigating production processes.

Options for sludge disposal have been identified in the guideline and applicability of these options depends on sludge characteristics. Land application is more beneficial for more organic sludge, but that must meet the criteria given for land application criteria under the guideline. Other options include use in construction material such as bricks which is common currently but should not apply to all categories of sludge. Landfill is an option for less organic sludge, and specifications of landfills for disposal of sludge are also included in the standards and guidelines. The experts also shared experiences of their pilot projects on sludge disposal such as co-processing with cement implemented by Lafarge Surma Ltd. and biogas generation from sludge currently being experimented in a laboratory setting by Islamic University of Technology (IUT).

The experts also suggested pursuing waste management in factories holistically. The PSES project implemented by GIZ is training factory management and workers on chemical management to improve chemical usage efficiency and reduce wastage & associated costs. They are also supporting certificate and diploma courses for wastewater treatment plant operators and managers to train them to effectively manage and maintain effluent treatment plants. Proper operation and management of wastewater treatment plants will only ensure reduced volume and good quality of sludge that may require less costly sludge disposal option.

In the open discussion, the participants reiterated the observation of reducing waste at the source. **Mr. Martin Deitschi** from Swisscontact highlighted the importance of waste reduction at early production stages since the cost of managing waste at later stages increases significantly. They hoped that the proposed “Sludge Management Guidelines” would be adopted soon and continued support for all stakeholders will be required for its enforcement.

As the enforcing agency, the Department of Environment (DoE) shared both successes and challenges in enforcing regulations related to waste. For waste management, DoE follows several laws and regulations including Medical Wastes (Management and Processing) Rules 2008; Hazardous Waste and Ship Breaking Waste Management Rules 2011; Workers’ Occupational Health and Safety for Ship Breaking Yards in Bangladesh, 2011; and the National 3R Strategy for Waste Management 2010. The new standards and guideline on sludge management will also be part of their mandate soon, and DoE officials are currently undergoing training to better interpret and enforce these rules & regulations.

SESSION - 3

Session 3 was moderated by Mr. Salahuddin Mahmud, Director General, Export Promotion Bureau. The third session dealt with the theme “Exporting to Europe by Eliminating Hazardous Material and CSR Focus”. **Mr Birendra Raturi, International Director, SR Asia**, in his paper deliberated on the EU Environment Policy on toxic and hazardous wastes. He said the substances restricted as hazardous substances in EU Countries are: Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated Biphenyl, and Polybrominated Biphenyl Ethers. While hunger and poverty continue to haunt the majority of the society, waste generation, handling and disposition looks like a crime. Business houses while can become more competitive by minimising waste also contribute to the betterment for environment, health and safety of people and **therefore** it not a choice to focus on this but shall be obvious. While accessing markets of the European countries, the developing countries are to follow certain environmental standards and guidelines, failing of which, they would face non-tariff restrictions. Some of the restrictions are voluntary in nature, although, they might turn into mandatory ones, once decided by the European countries. We are torn between choices: profit versus quality. Profit would automatically come, provided quality of the products is ensured. He impressed upon CSR aspect as must consider element of the business for fulfilling minimum criteria for market access in European and others countries and at the same time positively think of sustainability challenges. Responsible business conduct is imperative in today's world as society is facing multiple issues of basic fundamental rights and therefore business must operate to address and fulfil the aspirations of society it operates in.

Mr Sudipta Das, Advisory Partner, Climate Change and Sustainability leader, Ernst & Young in his paper, “Eco-label and REACH Compliance”, deliberated on the definition of “Eco-Label” which identifies overall environmental preference of a product or service within a specific product/service category based on life cycle considerations. Eco-Label is a voluntary environmental labelling under ISO 14020 (Guiding Principles for Environmental Labelling). It encouraged demand and supply of environmentally sound products and services and stimulates market-driven continuous environmental improvement. The term 'product carbon footprint' refers to the GHG emissions of a specific product across its life cycle, from procuring raw materials through manufacturing process, distribution, consumer use and disposal/recycling. Product carbon footprint is an important measure for sustainable packaging solution. Preference for products with lower carbon footprint is the future.

REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the Registration, Evaluation, Authorization and Restriction of Chemical (REACH) substances. The law entered into force on 1 June 2007. The main aims of REACH are to ensure a high level of protection of human health and the environment from the risks that can be posed by chemicals. REACH makes industry responsible for assessing and managing the risks posed by chemicals and providing appropriate safety information to their users. He discussed supply chain perspective related to textile industry and life cycle analysis concerning jute sector.

During the open discussion, the participants raised a number of issues. It was observed that “eco-label” might not remain as a voluntary requirement anymore. The developed countries may impose restrictions on our products in the face of stringent measures of the European countries. Various tariff and non-tariff measures apprehended to be imposed by the developed world would make products of the developing countries less attractive. Goods from developing countries following less stringent environmental standards may face difficulties in entering European market with different environmental guidelines.

S E S S I O N - 4

Session 4 was moderated by **Dr Mahfuzul Haque, Adjunct Faculty, Department of Development Studies, University of Dhaka**. The 4th session dealt with the theme, “Theory and Practice in Managing Waste Impacting Environment, People and Profit”. In his paper, he raised the existing dichotomy between the theory and its practices. Referring to three sectors in Bangladesh- ship breaking, tannery and textile, he deliberated on the pollution of these industries on the environment and its surrounding and exposed the existing gaps between legislations and their enforcement. He advocated for Decent Work, Occupational Health and Safety (OHS) of the workers and establishing Green Business. He suggested some measures targeting effective enforcement and compliance.

Raising the issue of “people and profit”, he said about 25,000 workers are directly involved while 2,00,000 people involved indirectly in ship-breaking industry. There are 325 re-rolling mills dependent on iron ore from existing 22 shipyards and 60% of the country’s demand for iron ore comes from the ship yards. Question is how much profit to earn at what cost? He suggested that the enforcement agencies are to be more proactive. An important development is that at the behest of the judiciary, the Government has developed Guidelines on Environmentally Sound Management (ESM) in the Ship Yards.

In the case of tannery industry, 270 industries continue to pollute the environment and water bodies with raw sewage. Labourers work bare footed and inhale toxic chemicals, like Sulfur Dioxide, Hydrogen Sulfide and Chlorine. Shifting of tannery industry to a faraway place from the capital has been in progress for last two decades. Area has been acquired, developed and process of setting up of a CETP in progress. However, tannery owners are reluctant to shift for various reasons: bank loan; mortgage of property, shifting expenses, modernization of industry, accommodation of labourers etc. It is understood that political commitment and direction are necessary to effect shifting, he said.

In the case of polluting textile sector, of late some drives were given by the enforcement team of the Dept of Environment, which is giving some dividends, he said. Industrialists are willing to comply with the laws, provided, the laws are made equally applicable for all. Some industrialist are found operating ETP during the day and discharging raw effluents at night. Some industrialists are flouting the laws and flex political muscle to bypass the laws. Political commitment and blessings are very important, he observed.

Mr Mohammad Imtiaz Sharif, Program Director, Jyoti Development Foundation in his paper on “Management of Faecal Sludge and Organic Municipal Solid Waste in Kushtia, Bangladesh” shared his experience in working with a solid waste management project at Kushtia town, on the south of the country. Under the project, faecal solid sludge and municipal solid waste are co-composted creating compost rich in moisture and nitrogen.

Under the pilot project of Bill and Melinda Gates Foundation and UNESCP, the produced co-compost and effluent are tested in the laboratory of Waste Concern. Lab test results depict that both co-compost and liquid effluent comply requirements. At the project, the dried sludge is co-composted with organic municipal solid waste. Faecal sludge has a high moisture and nitrogen content while bio-degradable solid waste is high in organic carbon and has good bulking properties (i.e. it allows air to flow and to circulate). The faecal sludge and municipal solid waste management facility established in Kushtia is still in pilot research scale, not on city wide scale. Success of the pilot researches show that solid waste and faecal sludge can be treated effectively through aerobic

degradation, while safeguarding the environment as well as making a profit making business. However, profit can be made by the entrepreneur only on the operational stage, after necessary infrastructure has been developed by someone else.

Mr M Imtiaz Sharif also read out the paper prepared by **Ms Anne Matter, Project Manager, SWISSCONTACT**. Ms Anne in her paper, "Value for Waste: Household Solid Waste Management Project" deliberated on urban solid waste management in Bangladesh. She discussed two projects being implemented by Swisscontact at Gulshan and the other one at Bhashantek and Bauniabandh Bastee, Mirpur. At Gulshan Thana, the residents of this area produce the largest per capita quantities of inorganic recyclables, which are currently being mixed with organic waste. Local residents' associations are well established and have already set up door-to-door waste collection systems which the project is expected to build upon. In Bhashantek and Bauniabandh Bastee, Mirpur, the residents are more directly affected by pollution from waste and are more sensitive to financial incentives from sale of recyclables.

The project would complement WASH initiatives which are currently being implemented by other NGO partners (Water and Life, Muslim Aid). The projects would help train the residents on segregation of wastes at source, recycling and composting, which would earn them a living.

Mr. Shafiqur Rahman, Assistant Program Officer, CIRDAP in his paper, "Solid Waste Management in Selected CIRDAP Member Countries" discussed Integrated Solid Waste Management (ISWM) systems being introduced in its member-countries. He observed that Integrated Approach to Solid Waste Management incorporates more environment and economy friendly concepts of source separation; recovery of waste; legitimization of the informal systems; partial privatization; and public participation. He suggested an integrated approach for dumpsite management. Steps are to be taken on the circumstances needed for improving open dumping system to a sustainable landfill system, he stated.

During the open discussion, one participant wanted to know the category of tannery industry under ECA 1995 and Rules 1997. Answer was given that it belonged to "Red" category meaning full-scale EIA to be conducted and ETP has to be set up for bringing the sector into compliance. Regarding effective legal enforcement, political blessing is a prerequisite. Arms twisting techniques of the buyers (importers) were found to be very effective in enforcement of legislation. The other techniques could be raising awareness among the general mass on the conservation of the environment, vocal role of the electronic and print media, proactive judiciary and establishment of a "Green Constituency", so that public representatives are not allowed to destroy the environment out of personal greed or patronize the polluters.

SESSION - 5

Session 5 was moderated by **Brig Gen M Mofizur Rahman (Retd), Chief-R & G Group**. The session dealt with the theme, "Promoting Public-Private-Community Partnerships in Managing Waste". In his introductory remarks, the Moderator put emphasis on increased public-private –community partnership in the management of hazardous waste. Under CSR, the industrialists have a role to play for improving the environment, polluted by them to run their business. Moreover, since "waste is a resource", because of its recycled value, he emphasized that private entrepreneurs would come forward to earn a profit from this non-traditional item. Putting stress on conservation of this only habitable planet, the Earth, he said, "we have not inherited this planet from our predecessors, rather, we borrowed it from our children and grand children". Based on the "Borrowed Earth Theory", we are to act accordingly for its conservation, he observed.

Mr Md Ziaul Haque, Deputy Director, Dept of Environment in his paper on management of hazardous wastes, discussed activities undertaken by the Dept of Environment in enforcing legislations related to toxic and hazardous wastes. Following promulgation of the Environmental Conservation Act 1995 and Conservation Rules 1997, the Dept of Environment has been taking all out efforts to bring the industrialists into compliance. During 2012-2013 period, the Dept of Environment fined Tk 100 crore (US\$ 12.5 million) against the non-compliant industries. Regular enforcement drives were found to be very useful. Some pilot projects undertaken by the Ministry of Environment and Forests with the help of some NGOs, like Prism Bangladesh and Waste Concern, could effectively contain and manage the hazardous pollution through public-private-community partnership. Medical Waste Processing and Management Rules 2008 has set up standards for incineration and also for autoclaving. Draft Rules on Municipal Solid Waste Management is being formulated. Once finalized, the Rule would go a long way in proper management of hospital and clinical wastes.

Mr Mohammad Zahin Rahman, Environmental Advisor, GIZ in his paper, “The Public Private Partnerships of PSES: An Overview” discussed activities/pilot projects undertaken by GIZ in involving the local community and private sector in managing hazardous wastes. He cited example of GIZ partnership with Lafarge Surma Cement Company in sludge co-processing. The pilot testing for co-processing dried sludge for cement clinker production has been completed. GIZ has been building cooperation in co-processing of dried sludge with new innovations and technology. Challenges are how to ensure the quality of the product, how to market, and how to comply with environmental standards and guidelines.

GIZ has also undertaken Bio-gas plants from Textile ETP Sludge with available co-feedstock in Bangladesh, like, animal waste, kitchen waste, and sewage waste. There is a technical potential of textile sludge as a co-feedstock for biogas generation by reducing sludge through anaerobic digestion as a disposal.

Prof Muzaherul Huq, Chairman, Public Health Foundation of Bangladesh in his paper, “Health Hazards of Urban Waste & It’s Management” discussed how to manage and overcome the challenges in public health sector faced by domestic waste; construction and demolition waste; biomedical waste; and industrial waste. He observed that domestic waste contain food waste, kitchen waste, household waste and sewerage waste. Construction and demolition debris contain insulation, electric ware, rubber, wood, concrete, brick, lead, asbestos, and hazardous materials like, gas/inflammable, corrosive/allergic and toxic.

Hospital waste contains clinical waste and laboratory waste, like, clinical waste, scientific waste and research waste. Industrial waste contains toxic effluent materials, chemical and gaseous substances.

Regarding environmental health impacts of these wastes, we see incidence and prevalence of diseases in respiratory system, cardio-vascular system; gastro liver system, kidney and urinary system, brain and neurological system, etc. he said. What is the way out? Regarding the management issues, avoid generating waste; use/reuse or recycle waste; and safe disposal of waste. He put a question before the audience, is poverty a Social Challenge?; 0.57 million people become poor every year for meeting their health care expenses. It’s a major contributory factor for poverty in our society, he said. Most beds in the public hospitals are occupied by rich and politically powerful people and the poor receive scanty or no treatment at all, he said. Question is how to make the health sector accessible to the poor?

In the open discussion, the participants observed that proper scientific management of hazardous wastes is of utmost importance for the safety of human health. All countries, no matter developing or least-developed, should act promptly with stringent environmental regulations for safeguarding

of the environment. Enforcing Agency has to be strengthened with required manpower, motivation and training. Officials are to enjoy full political blessings and support in bringing the polluting industries under compliance. Some participants said that Bangladesh could be proud of some success stories in health sector, like, introduction ORT, EPI program, maternal and child health care etc. We can build on these success stories in order to achieve Millennium Development Goals in 2015.

Concluding Session:

In the concluding session, **Ms Sumaya Rashid, Country Director, SR Asia Bangladesh offered the vote of thanks.** She expressed her gratitude to all the Sponsors, Co-organizers, Technical Partners, Academic Partners, Industry Partners, Media Partners and Mentors for helping SR Asia Bangladesh for successfully holding the second international conference in Dhaka, Bangladesh. Ms Sumaya Rashid thanked all the institutions for liberally contributing in the conference. She thanked CIRDAP for offering the venue and also thanked several other conference facilities. Finally, she thanked all the participants for attending and actively participating in the important two-day conference.

Recommendations:

On conclusion of the 2nd International Conference on “Responsible Business Conduct to Safeguard the People’s Issues and Environment by Managing Hazardous Waste” on 29-30 November 2013 at CIRDAP, Dhaka, following recommendations were taken:

1. The Conference urged upon all Banks and Financial Institutions (FIs) to have dedicated fund under their Corporate Social Responsibility (CSR) and also to develop fund disbursement modalities along with regular monitoring mechanism. Bangladesh Bank could play an important role in overseeing utilization of the CSR fund;
2. The Conference highly lauded Bangladesh Bank for adopting Environmental Risk Management (ERM) Guidelines 2011 and Policy Guidelines for Green Banking 2011 and Bangladesh Bank Refinance Scheme in Renewable Energy and Green Finance which are considered as landmark policies aiming at developing “Green Banking” in Bangladesh;
3. The Conference highlighted on the pioneering role of Bangladesh Bank for undertaking Refinance Scheme in Renewable Energy. It urged upon all Banks and FIs to follow Environmental Due Diligence (EDD) checklists for 10 sectors prepared by Bangladesh Bank in line with the Bangladesh Environmental Conservation Act 1995 and Bangladesh Environmental Conservation Rules 1997;
4. The Conference put emphasis on “Green Banking” guidelines, developed by Bangladesh Bank and urged all to ensure that waste and waste management be a part of “Green Credit” system;
5. The Conference put a great emphasis on regular training for officials of all Banks and FIs. It urged upon all Training Institutes including Bangladesh Bank Training Academy to cooperate and collaborate among each other in order to provide training on emerging issues like, Green Credit, Carbon Credit, Carbon Financing, Clean Development Mechanism (CDM), Certified Emission Reductions (CERs), Voluntary Emission Reductions (VERs), Green House Effects, Global Warming, Kyoto Protocol, Waste, Hazardous Waste, Hazardous Waste Management, Solid Waste Management, 3 Rs Principles, Recycling etc.
6. On “Green Business” and “Responsible Business Conduct”, the Conference urged upon all Business Chambers to establish “Workers’ Participation Fund” and “Workers’ Welfare Fund” from the profit they earn as per the Labour Act 2006;

7. Regarding enforcement of environmental legislation on Management of Hazardous Waste, the Conference urged upon the enforcing agencies to strengthen their manpower with required training and capabilities;
8. The Conference urged upon the authorities to adopt “Integrated Sludge Management Guidelines” prepared by GIZ along with the Dept of Environment. The Conference hoped that the proposed “National Standard and Guidelines on Sludge” and Draft “Rules on Municipal Solid Waste Management”, when finalized, would go a long way in establishing an integrated sludge and waste management in the country;
9. The Conference put emphasis on Decent Work, Occupational Health and Safety (OHS) of the workers and Green Business for the industries. It urged upon all concerned to enforce the Medical Wastes (Management and Processing) Rules 2008; Hazardous Waste and Ship Breaking Waste Management Rules 2011; Guidelines on Environmental Management, Waste Treatment and Workers’ Occupational Health and Safety for Ship Breaking Yards in Bangladesh, 2011; and National 3R Strategy for Waste Management, 2010;
10. The Conference urged upon all to promote “Public-Private-Community Partnerships in Waste Management” and suggested all to follow existing pilot projects. On “Management of Faecal Sludge and Organic Municipal Solid Waste”, the Conference urged upon all Municipalities to replicate the success stories; and
11. The Conference observed that proper scientific management of hazardous wastes was of utmost importance for the safety of the human being. All countries, no matter developing or least-developed, should act with stringent environmental regulations for safeguarding the environment. To achieve this, the enforcing agency has to be strengthened with required manpower, motivation and training.



Appendix-1: Regulation on Waste Management (DoE)

Introduction to DOE

MD. ZIAUL HAQUE

Deputy Director (env Law And International Convention)

Department Of Environment (doe), Ministry Of Environment And Forests,
Government Of Bangladesh

1.1 Background

United Nations Conference on Human Environment was held in Stockholm in 1972 as a result of continuous discussions on the degradation of environment in the international arena. Activities on the conservation of environment were initiated in Bangladesh soon after the UN Conference on environment and Water Pollution Control Ordinance, 1973 was promulgated. Then in 1977 Environment Pollution Control ordinance was promulgated and Environment Pollution Control Project was undertaken in consideration of the over all environment conservation of the country. Department of Environment Pollution Control was established in 1985 with a staff of seventy through unification of the Cell and the Project as per recommendation of Administrative Reformation Committee. With the creation of the Ministry of Environment and Forests in 1989 the Department was renamed and restructured as the Department of Environment (DOE) with its widened mandate and placed under the Ministry. Accordingly, the position of the head of the Department was upgraded from Director to Director General and the strength of the staff was increased to 173 from 70.

Subsequently, the Government expanded its institutional structure, manpower and network across the country. Now, the Department is discharging its responsibilities through one Head Office, six Divisional Offices (Dhaka, Chittagong, Khulna, Bogra for Rajshahi divisional office, Sylhet and Barisal), and 21 new Offices at District level. At the same time, the staff strength has been increased to 735.

Vision:

To help secure a clean and healthy environment toward achieving a high quality of life for the benefit of present and future generations.

Mission:

- To ensure environmental standards
- To conserve the environment and ecosystem
- To mitigate environmental pollution
- To keep harmony between development and environment to attain sustainability

- To promote green growth

1.2 Legal and Policy Framework for Environmental Protection and Management (which are under the direct jurisdiction of the Department of Environment)

- Citation of Environmental Right in the National Constitution with the inclusion of new Article 18(a): "The State shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild lives for the present and future citizens"
- Bangladesh Environment Policy 1992 and its implementation plan (Environment Policy 2013 is in final stage)
- Bangladesh Environment Conservation Act 1995 and its subsequent amendments
- Environment Conservation Rules 1997 and its subsequent amendments
- Environment Court Act 2010
- Brick Manufacture and Brick Kiln Act 2013
- Ozone Layer Depleting Substances (Control) Rules 2004
- Noise Pollution (Control) Rules 2006
- Medical Waste (Management and Processing) Rules 2008
- Hazardous Waste and Ship Breaking Waste Management Rules 2011
- Bio-safety Rules 2012

Final Drafts under consideration by the Ministry of Law

- Biodiversity Act 2013
- Solid Waste Management Rules
- E-Waste Management Rules
- Ecologically Critical Area (ECA) Management Rules

In fact, the mother law for environmental conservation, management and compliance is Bangladesh Environment Conservation Act (BECA) 1995. The key features of this important law are presented below:

- **Preamble:** Whereas it is necessary and expedient to provide for conservation of the environment, improvement of environmental standards, and control and mitigation of environmental pollution.
- **Section 4: Power and functions of the Director General of DOE-** Subject to the provisions of this Act, the Director General may take such measures as he considers necessary and expedient for the conservation of environment, and improvement and he may issue necessary directions in writing to any person for the discharge of his duties under this Act.
- **Section 5:** Declaration and management of Ecologically Critical Areas
- **Section 6:** a) Restrictions on manufacture, marketing, sale, etc. of articles injurious to environment (Polythene bag)
b) Restrictions on hill cutting or razing

- c) Control on production, import, storage, loading, transportation of hazardous waste
- d) Restrictions on ship cutting or breaking
- e) Restrictions on filling up water bodies
- **Section 6:** Restrictions regarding vehicles emitting smoke injurious to environment
- **Section 7:** Remedial Measures for injury to ecosystem (compensation for environmental damages)
- **Section 9:** Discharge of excessive environmental pollutants
- **Section 12** of Bangladesh Environment Conservation Act 1995 (amendment in 2010) says: “No industrial unit or project shall be established or undertaken without obtaining, in the manner prescribed by rules, an Environmental Clearance certificate from the Director General”
- **Section 20 (1)** of Bangladesh Environment Conservation Act provides rule framing power to the government (concerned Ministry) to fulfill the purpose of the BECA
- **Article 12(4)** of Bangladesh Environment Conservation (Amendment) Act 2010 says: The rules on environmental clearance will provide the description of, inter alia, Environment Impact Assessment Report, Preparation of Environmental Management Plan, Judging of Public Opinion, Public Access to information, Structure and Function of the Environment Clearance Committee, Minimum Necessary Conditions for Clearance, Appeal, etc.
- **Article 20 (j) says about:** Fixing the siting restrictions on setting up industries or running projects in different areas as well as other issues related to environmental management.
- **Article 20 (m) says about:** Determining the methodology of holding public hearing.

However, **Environment Conservation Rules 1997** prescribes detailed procedure of issuing Environmental Clearance Certificate to the proponents of particular industries/ projects, and makes the submission of EIA report mandatory for all industries/projects under Red category. Environmental Quality Standards (EQS) for Ambient Air, Water, Sound, Odor, Industrial Waste (Effluent/Emission), Vehicular Emission, etc.



Appendix -2: Responsible Business Conduct Survey Year 2013

Survey

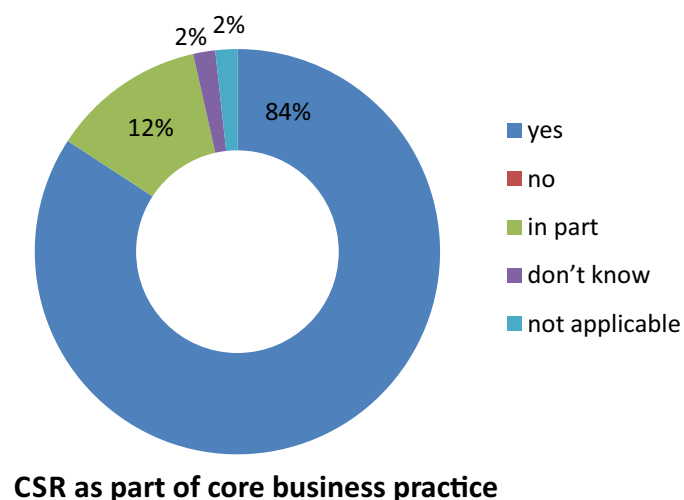
Responsible Business Conduct: Survey 2013

SR Asia 2nd International Conference on

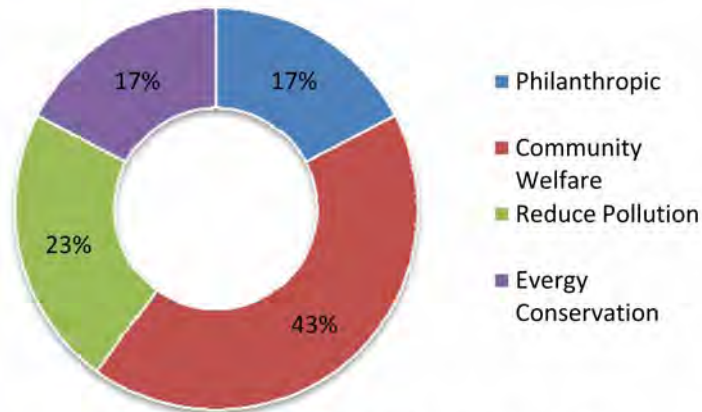
“Responsible Business Conduct to Safeguard People’s Issues and Environment by Managing Hazardous Waste”

The conference aimed to deliberate on global perspectives and trends on responsible business conduct. Focus has been on waste management systems and impacts in developing countries where holistic waste management is yet to develop due to low technology, poor or no infrastructure, lack of implementation, unskilled labor, policy framework etc. The conference attracted stakeholders from diverse sectors, but was mainly dominated by the financial/banking sector due to the support of Bangladesh Bank for the conference. Thus the survey result is a reflection of organizational trends that may be more relevant for service sectors in general.

The survey found that CSR is increasingly becoming a core business practice, and it can be attributed to a supportive policy framework outlined by the Bangladesh Bank to promote green banking. Ninety six percent of the respondents reported that CSR is more or less a core business practice.

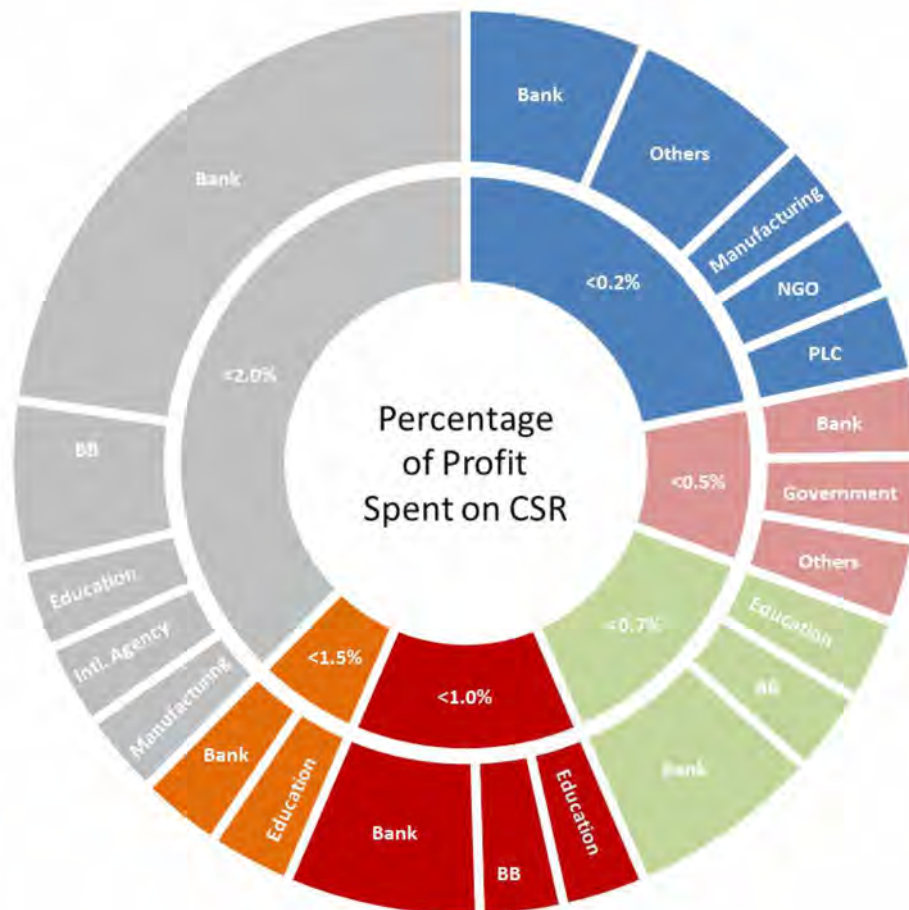


As the term “Corporate Social Responsibility” can vary in perception among organizations and individuals, the survey asked about CSR priorities for the organizations. It was found that 43% of the respondents identified community welfare activities as CSR priorities while pollution reduction came in second (23%) among the priority areas. The results for this question may be different if more sectors were represented equally in the survey, which currently is more dominated by the banking sector. However, a good portion of respondents finding energy conservation as a CSR priority is encouraging considering national context of energy security.



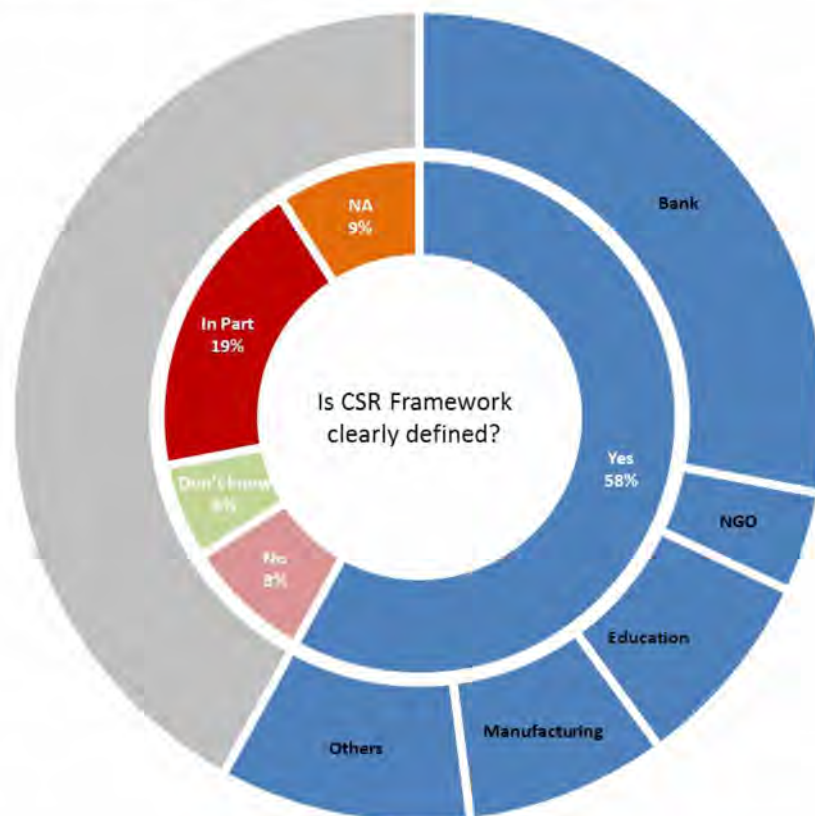
CSR Priority Areas for your organization

When asked about percentage of profits spent on CSR activities, the respondents were limited to options ranging from less than 0.2% to greater than 2%. Thirty eight percent respondents reported spending greater than 2% on CSR activities and banking sector is a major contributor in this group.



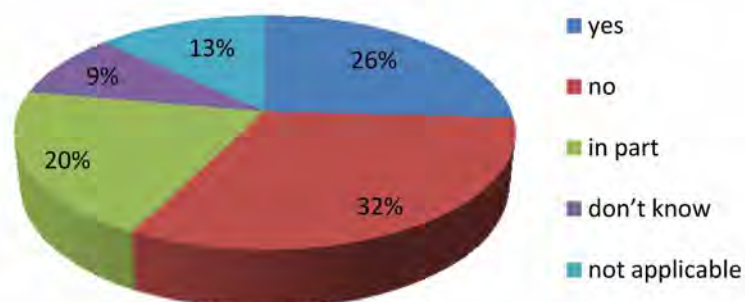
The variation was expected considering the diversity of sectors responding in the survey. As mentioned earlier CSR initiatives for the banking sector is more developed with the support of Bangladesh Bank, and they have also developed a periodic reporting structure for it. The emphasis

on CSR may vary in other sectors in the absence of policy and regulatory support. This was also reflected in the survey when asked about the clarity of CSR framework.

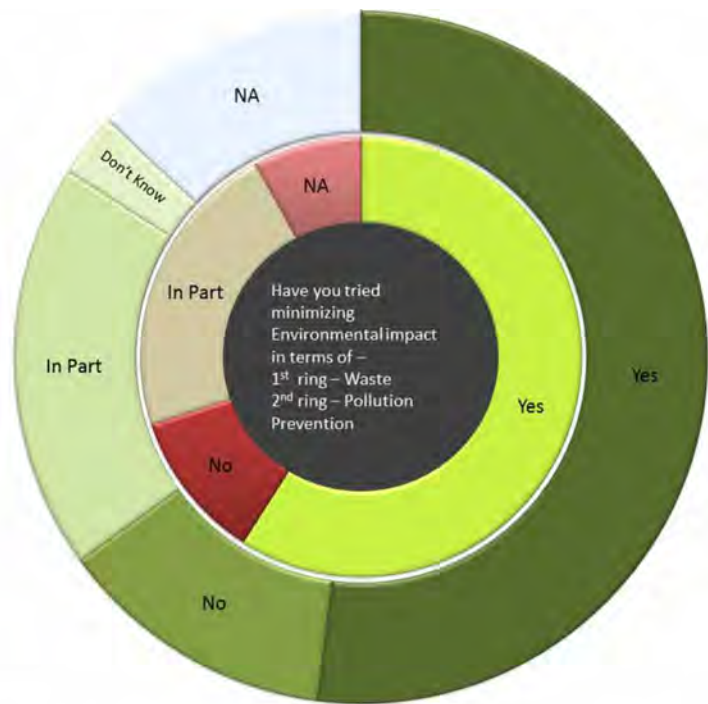
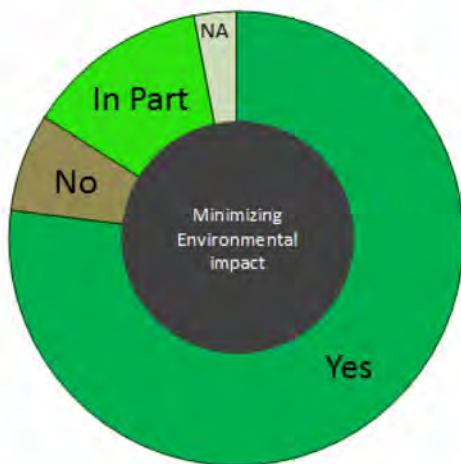


When asked if CSR Impact Assessment was conducted the results seem ambiguous, and signals the need for greater sensitization about the importance of conducting such assessments.

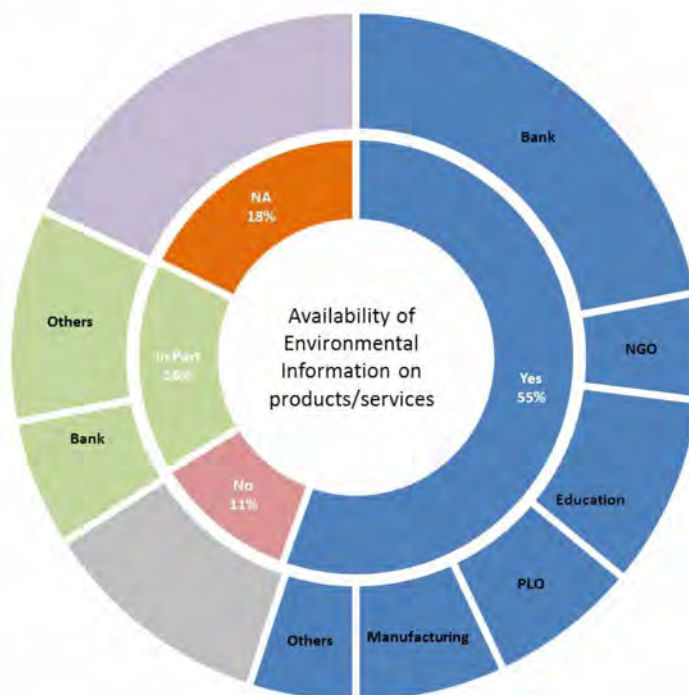
CSR Impact Assessment conducted



With the focus on hazardous waste management and environmental management in general, the survey asked respondents about the efforts in minimizing environmental damage, and the reported trend seems very encouraging.

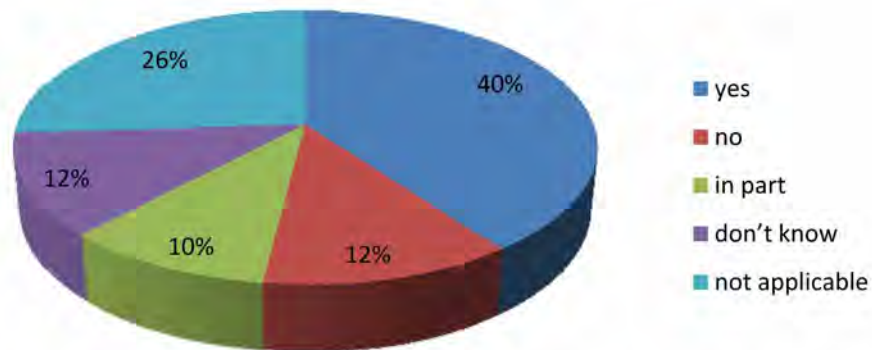


However, there is room for progress to be made in making environmental information on product and services available to consumers and other stakeholders.



The survey asked if waste is considered as a cost burden, and the response seems mixed. Mixed result can be attributed to lack of proper valuation or sustainability assessment that can actually bring out value for money.

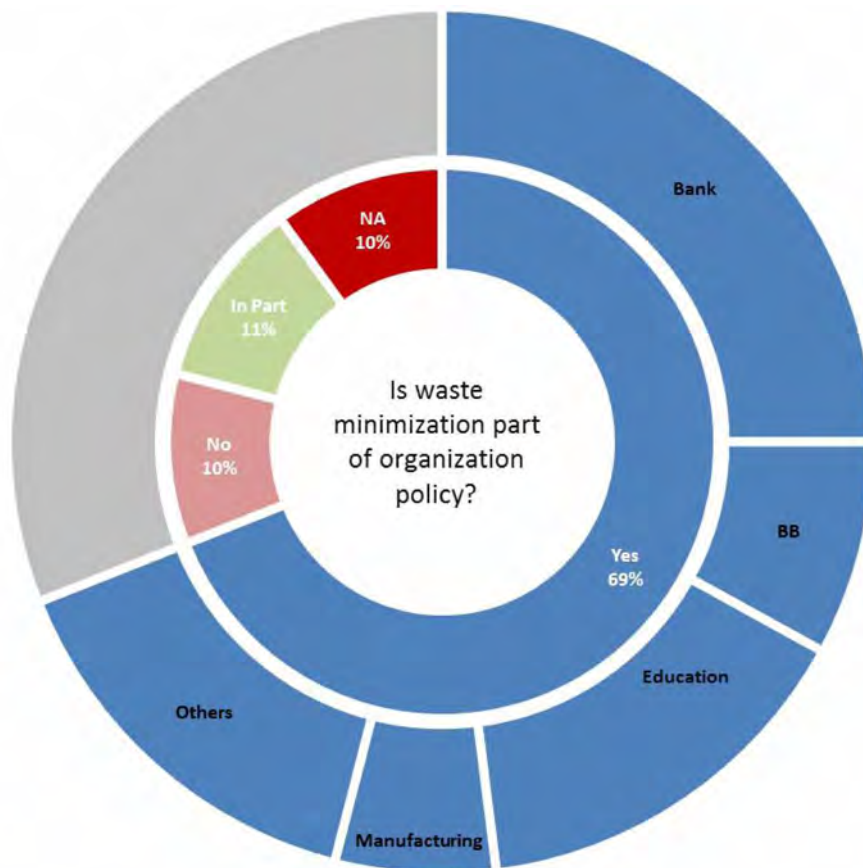
Do you consider waste as a cost?



The survey however found that majority of the respondents considers waste as an occupational health & safety hazard.



The survey respondents also reported that waste minimization is a part organization policy. It is expected that with a greater awareness and sustainability reporting aimed at calculating non-product/service outputs, waste minimization and management can scale up in all sectors.



Conclusion and Remarks:

The survey was conducted during the conference where in top executive across the sectors were present. This must be shared with the readers that 100% bankers and most of them top executive were participant of this survey. The survey questionnaire has twenty questions and the same is also attached in this report. Some questions and their feedback analysis is not part of this report as they are little distant from the waste management subject.

The survey results in the graphs are self explanatory and provides some insights as follows

1. Majority consider CSR is part of their core business practices though it may not be well defined
2. CSR priorities are more inclined towards community welfare than sustainability
3. Percentage of CSR spending is more from banking sector
4. CSR framework across sector is not well defined
5. In most cases the CSR practices are followed without formal impact assessment
6. There is focus on minimising environmental impact in general without quantification
7. Waste is cost for 40% respondents; it is a concern as majority don't care.
8. Most consider waste as a occupational, health and safety hazard and part of the organisational policy

It is evident from the survey that banks are leading on CSR subjects and we wonder why, but the answer is also simple and straight. The credit goes to Bangladesh Banks in leading by example besides pushing guidelines on Green banking and CSR. This can be replicated by other regulatory agencies like DOE and others in different sectors respectively. The concerned ministry in Bangladesh therefore need to study the existing international standards and framework on CSR and adapt or adopt the same for addressing the social, environmental and economic pillars of business and services.



Appendix -3: Pioneering “Green Banking” in Bangladesh

Pioneering “Green Banking” in Bangladesh



EY

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Climate change impacts in Bangladesh

World over, environmental risk is fast being evidenced either through natural, climatic changes or through anthropogenic effects. Climate change impacts such as floods, cyclones, earthquakes and displacement of people has increased considerably. The IPCC, in its fourth assessment report, indicated that by 2100, the world could experience temperature increase of around “1.8–4 degree centigrade.”¹The recent super typhoon “Haiyan”, in the Pacific Ocean, has crippled the economy of the Philippines displacing more than 600,000 people and resulting in a loss of more than 5% of the country’s GDP to climate change impacts².

The nature of problem within Bangladesh is no different; the country is recognized as one of the most vulnerable of countries to climate changes. The IPCC’s fourth assessment report predicts that monsoon rainfall within South Asia is bound to increase causing considerable rise in sea level and other related impacts.

The need to prepare and adapt the country for climate complex conditions is being seen as an imperative by Bangladesh. Bangladesh has already invested in more than US\$10 billion and has allocated US\$300 million every year under the Bangladesh Climate Change Trust Fund (BCCTF)

For an economy to prosper, critical infrastructural projects pertaining to security of basic natural resources such as energy, water availability, technology all play an important role in the industrialization of Bangladesh. At the same time, we must understand financing for such large scale projects often increases risk for the business and banks. In the following sections we shall understand the rapid emergence of green banking in Bangladesh along with its associated challenges for banks and the benefits toward banks and manufacturing industries.



Most vulnerable countries to floods and cyclones (Deaths/100000 people exposed to floods or cyclones)					
Floods			Tropical cyclones		
1	Venezuela	4.9	1	Bangladesh	32.1
2	Afghanistan	4.3	2	India	20.1
3	Pakistan	2.2	3	Philippines	8.3
4	China	1.4	4	Honduras	7.3
5	India	1.2	5	Vietnam	5.5
6	Bangladesh	1.1	6	China	2.8

¹ “Bangladesh Climate Change Strategy and Action Plan,” September 2009, p. 04.

² “World news,” Guardian website, <http://www.theguardian.com/commentisfree/2013/nov/08/typhoon-haiyan-rich-ignore-climate-change>, accessed 18 November 2013.

³ “Green Banking in Bangladesh Fostering Environmentally Sustainable Inclusive Growth Process,” 2011, p. 08.

² Pioneering “Green Banking” in Bangladesh

Green banking: a rhetoric or reality

The concept of green banking, although nascent, has been fast adopted by various banks in Bangladesh since the Central Bank has witnessed a movement toward engaging in more sustainable form of lending.

In 2011, the Bangladesh Bank spearheaded the release of a "Green Banking Guideline" and an "Environmental Risk Management Guideline" for use by various banks in the country. The guidelines are applicable to all operating banks and financial institutions that need to take effective measures in ensuring environment-friendly banking practices. This is a first of its kind initiative from a national bank of a developing nation. The green banking strategy of Bangladesh has two perspectives:

- a) Internal transformation: Changes pertaining to "greening" of routine internal practices at all banks. This could include paperless solutions, automation of banking activities and use of renewable energy where appropriate.
- b) Green financing: Encouraging financing for environmentally positive solutions such as solar energy, biogas solutions, effluent treatment plant etc. Moreover, the banks carry out environmental risk assessment on projects that are to be financed, thereby, reducing the overall risk for the bank.

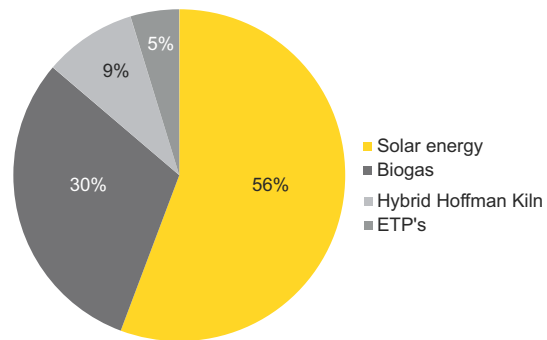
Till 2012, through the green financing initiative of the strategy, Bangladesh Bank set aside BDT2 billion out of which BDT838.4 million is being financed for solar energy, biogas solutions etc ⁴.

Hence, the reality of financing for climate positive business ventures within Bangladesh has increased over a period of time. Banks such as the Islamic Bank Bangladesh Limited, Dhaka Bank Limited and the Standard Chartered Bank of Bangladesh all have a green banking policy in place.

For example, in 2012, the Standard Chartered Bank in Bangladesh has used the environmental risk management system issued by Bangladesh Bank to assess risk of project financing and have thereby, granted loans for 151 projects with an ETP.

Therefore, Bangladesh's position toward the concept of green banking has taken a serious yet sustainable business proposition not only for bankers, but also for project developers as well.

Proportion of green financing till 2012



⁴ "Green Banking in Bangladesh Fostering Environmentally Sustainable Inclusive Growth Process," 2011, p. 10.

Challenges of exercising green banking norms

There are more than 47 banks within Bangladesh that have developed the Green Banking Policy at a board level. Yet, banks face several challenges in implementing and incorporating the Green Banking Guideline and the Environmental Risk Management (ERM) guideline. Some of the predominant challenges include:

- ▶ **Applicability of the risk assessment tool:** Not many banks are aware of the use of the ERM guideline and its applicability during the credit risk assessment process. Banks are less technically sound on the sustainability risks pertaining to various sectors. For example, Sonali Bank in Bangladesh has focused project financing toward businesses such as textile, garment washing, tanning and footwear manufacturing ⁵. However, we are unaware if during the ERM assessment process attributes such as:
 - Latest water recycling systems have been consistently understood by the team evaluating environmental risks for the project, since water availability may be a critical resource for any specific project.
 - The team considers acceptable global standards on technology, and minimum resource requirement.
 - Internal escalation and governance structure have been appropriately assessed for the project.
 - Power and source of power supply for the project have been assessed.
 - Human resource requirement and mapping of skill deficit gaps have been performed.
 - Impact to local community and stakeholders due to the project implementation has been assessed.

All these are possible environmental and social risks that may have been overlooked during the environmental risk assessment process by the bank and hence, pose a challenge to banks while evaluating sustainability risks.

- ▶ **Lack of trained manpower:** Before executing the Green Banking Policy, banks may not have assessed their internal capacities with respect to application of the ERM framework to various projects. For instance,
 - Interpreting ratings raised through the risk-rating process
 - Attaching responsibilities, roles and duties for different persons within the ERM assessment team
 - Treating ERM assessment as a separate exclusive exercise

- Making accurate technical assessment of credit risk team for risk assessment of large-scale projects
- Monitoring of green financing activities: Monitoring of the green banking information for strategic use by the management may be lacking, since banks either do not monitor the information consistently for analysis, or banks could treat the process as an academic exercise.

It is possible that there may be an exhaustive list of challenges banks could face; however, the most significant hindrances are mentioned herewith. Coupled with these challenges, the green banking initiative has also rendered several benefits to banks and project developers. In the following sections we shall cover the benefits of green banking towards banks and industries.



⁵ "Industrial Finance," Sonali Bank Limited website, <http://www.sonalibank.com.bd/#>, accessed 18 November 2013.

Benefits of green banking to banks

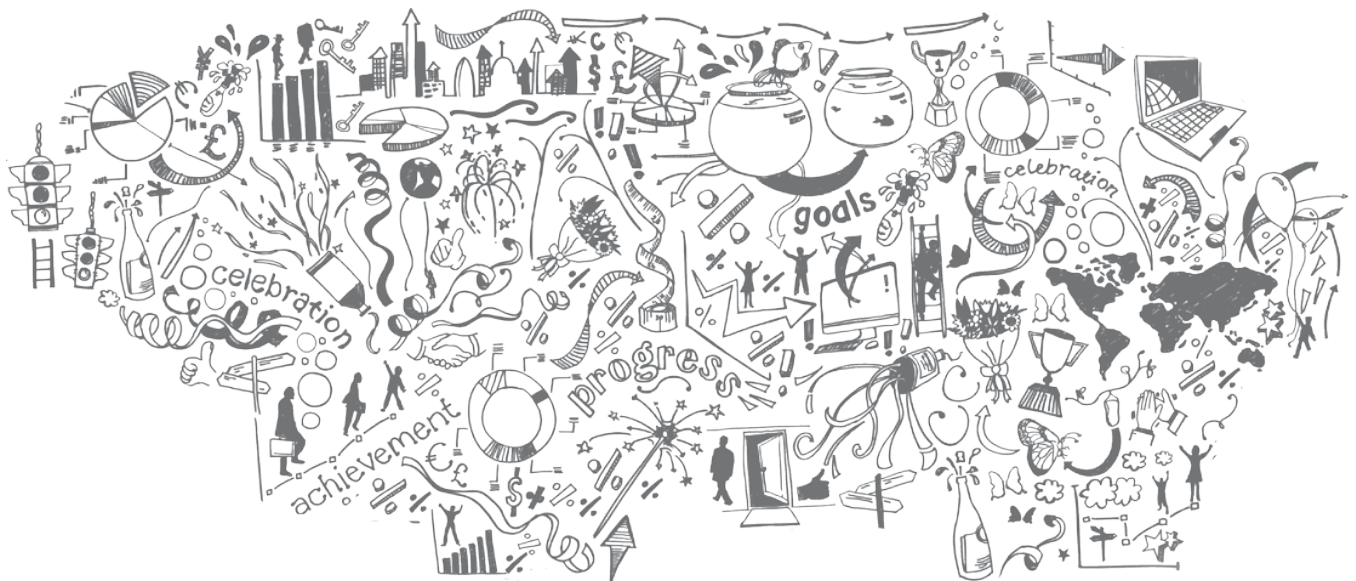
Dr Atiur Rahma¹, Governor of Bangladesh Bank, in his introduction to green banking in Bangladesh said, “The financial sector can play a catalytic role in speeding up the adoption of environmentally friendlier output practices in the real economy⁶.” The benefits of green banking are evident and most obvious for banks, they include:

- ▶ Reduced credit risk: Banks undertake credit and operational risk rating for all their potential projects prior to making a decision on financing. If, the process of ERM is coupled with the operation and credit risk assessment process, banks are likely to experience reduced risk of non-payment and hence, can attach covenants to the project proponent as necessary. This process shall ensure that banks have an opportunity to mitigate the much neglected environmental risks.
- ▶ Good banking practices: Incorporation of green banking practices within the bank, either in the form of internal transformation or green financing process allows for banks to institutionalize best practices and derive the most resource-efficient, sustainable, yet competitive banking practices.
- ▶ Part of a long-term strategy: As stated by the Governor of the Bangladesh Bank, financial institutions play a significant role in shaping the future of an economy. In a similar stance, Bangladesh has also developed its Climate Change Action Plan and Strategy in 2009 and, financing of the action plan is a key agenda of the Government of Bangladesh. Hence, loans toward environmentally forthcoming initiatives such as effluent treatment plants, energy-efficient technologies are encouraged by banks thereby, fulfilling the strategy of the Government.

- Paradigm change in banking practices: Banks have begun to identify eco-business opportunities through the green banking system and have developed innovative financial products and solutions for customers who may not have considered this possibility. For example, coal power accounts for nearly 50% of all electricity generated in the US. Coal is a carbon-intensive resource and hence, leads to large greenhouse gas emissions.

In such a case, leading banks such as Citibank, Bank of America, Wells Fargo, JP Morgan Chase, and Credit Suisse understood that this increased regulatory risk represents a tangible risk to project finance in coal-powered electricity generation. In response, each of these banks adopted the Carbon Principles, which is an enhanced due diligence process aimed at providing a consistent approach for banks and their US power clients to evaluate and address carbon risks in the financing of electric utility projects.

Therefore, banks too have become cautious about the way in which they are to lend toward project financing. This has helped banks reduced their own non-performing loans as well as explore opportunities in the area of sustainable finance. In the following section we shall enumerate the increased benefits of green banking toward industries.



6 “Green Banking in Bangladesh Fostering Environmentally Sustainable Inclusive Growth Process,” 2011, p. 01.

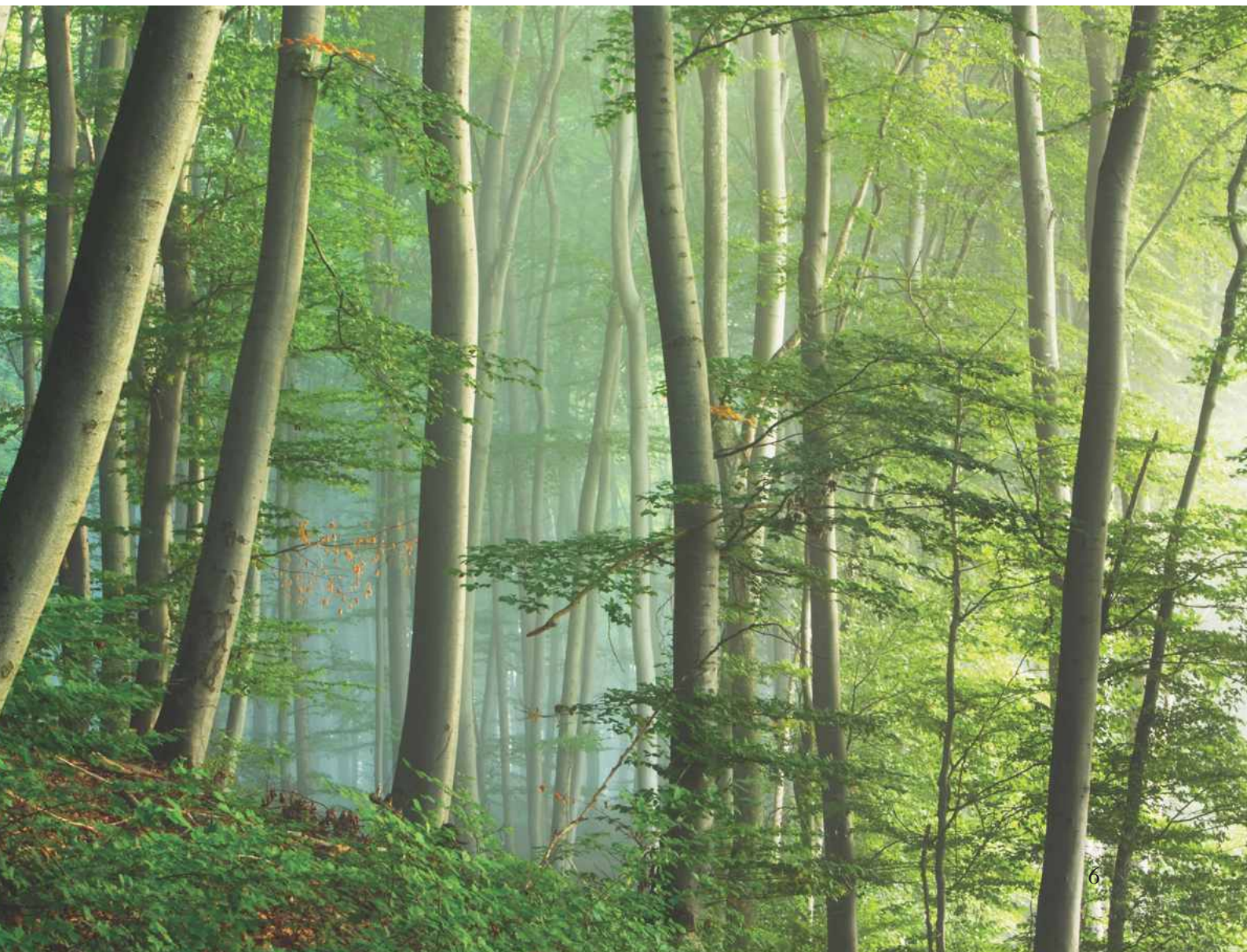
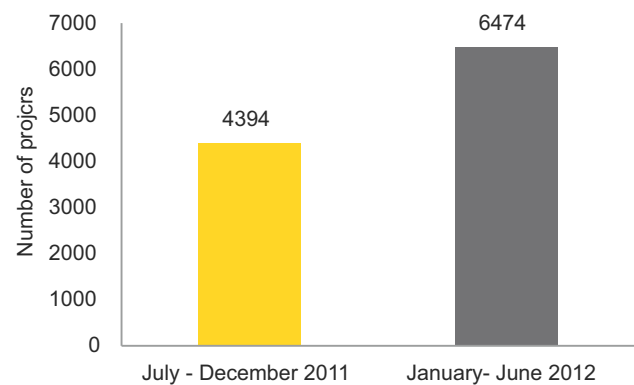
Benefits of green financing to industries and sectors:

Adapting and adopting good practices to suit financing requirements by banks has become an imperative for many business entities today in Bangladesh. Although, regulatory sanctions and compliance are primitive requirement for assessing environmental risks, the Environmental Risk Management guideline rates businesses based on their ability to synergize environmental protection with bottom line profits.

For example, if there is a proposal for financing within the cement sector, the due diligence checklist released by Bangladesh Bank requests information on:

- a) Air emissions
- b) Wastewater treatment and ETP
- c) Treatment of solid waste
- d) Noise control
- e) Monitoring of emissions

Environmental Risk Rating for projects between 2011 and 2012



The reason to seek such information is primarily to reduce the bank's credit risk; however, this process creates a multiplier effect thereby, benefitting business entities in return. The benefits for the business can be enumerated as follows:

- a) Early investment in safe technology: Sectors such as tanning, pulp and paper and cement are indirectly encouraged to invest in environmentally safe industry practices such as setting up ETPs, monitoring of emissions, treatment of waste water and sludge and solid waste management techniques etc. Investment in such technologies reduces the burden of an organization in the future, since they may be led by litigation and penalties.
- b) Sustainable business trajectory: A considerable portion of Bangladesh's output is for the purpose of export, especially sectors such as textile and tanning. In 2012, the textile sector alone quotes export revenue of US\$4.9 billion. In recent media news, pressure from international community on establishing good working conditions, appropriate payment of wages, fire exists, work place discrimination etc. have been the focus. This allows business to rethink their approach to the export market as well as satisfy the demands of local policy.
- c) Reduced dependency on resources: The green financing initiative of banks, allows for innovative techniques and systems to be internally harnessed, for example if a bank is aiming to finance a distillery, waste generated out of the process can be combusted to generate electricity and hence, increases resource efficiency of the plant. Therefore, the bank's due diligence can potentially act as a trigger to internalize several best practices.
- d) Naturally compliant with global standards: Once a bank beings to investigate a business via its due diligence system, the bank may suggest certain covenants that may be technological, legal or managerial. These covenants may allow businesses to comply with local standards, IFC performance standards and UN Global Compact thereby aligning business entities to international principles.
- e) Compliant with changing law of land: In a large developing country such as Bangladesh, environmental protection is fast becoming a norm of the day and hence, pressure to comply with changes within the law is evidenced. The Environmental Conservation Act has been the leading regulation for Bangladesh and business entities are requested to comply with the Act. The process of due diligence identifies this regulatory gap

- f) Avail subsidized funding and credits: Sustainable initiatives may attract green funding from the bank through the form of reduced interest rates or longer repayment period. Furthermore, the clean development mechanism (CDM) by the United Nations Framework Convention on Climate Change (UNFCCC) is an added incentive for businesses to avail Carbon Credits for trade.
- g) Development of a sustainability roadmap: Business entities may be able to internalize and arrive at cost savings due to triggers caused by an investigating bank. Establishment of energy efficiency system, investment in renewable energy, and pollution reduction opportunities can prompt businesses to look at innovative sustainable solutions that can add value to their business as well as generate goodwill. This process shall institutionalize a new way of doing business.
- h) Support from stakeholders: Large scale business usually run through the support of several stakeholders; suppliers, retailers, distributors etc.; investment in safe and best practices win support and encouragement from the stakeholder group, and this may in turn allow greening of the supply chain thereby, creating a snow bowling effect.

Therefore, these are some of the tangible benefits of manufacturing entities toward the green financing process. There will be several other intangible benefits and suggestions through the due diligence and financing process.

Hence, green banking can be viewed in positive light for banks and project developers.

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This image shows a full page of white paper with horizontal grey ruling lines. The lines are evenly spaced and run across the width of the page. At the top center, there is a header area containing the word "NOTES" in bold black capital letters. A solid black horizontal line separates the header from the main body of the page, which contains the rest of the ruled lines.

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