

Evidence-based Research Initiative to build
resilience in a mid-size urban city in
Bangladesh and Nepal - A project funded
by IDRC, Canada

Activity Report on SANDEE- IDRC Project

- Sylhet, Bangladesh

Asian Center for Development

Inception Workshop

The Project was officially launched in March 2017 with an inception workshop held in Bharatpur, Nepal. The inception workshop was designed to develop a common understanding of this multi-country project. This is because the project is conceived with many partners. Implementing partners are the two city corporations – Bharatpur, Nepal and Sylhet, Bangladesh. The research partners are: SANDEE for Nepal, Asian Center for Development for Bangladesh and the Institute of Water Modelling for developing hydrological models for understanding of waterlogging due to climate change.

Scholarship for University Students

After the inception workshop in Nepal, the Asian Center for Development issued scholarship announcement for students of Shahjalal University of Science and Technology (SUST) and the East West University to engage students in the Research. Ms Nabila Nuzhat Hye (MSS in Economic at SUST), Mr. Syed Fakhrul Islam (MSS Economic at SUST) and Mr Ashraf Mian (MSS Economics at EWU) received the scholarship grants. <http://acdonline.org/climate-smart-cities-research-action/climate-smart-cities-scholarships/>

Benchmark Survey on Waste Disposal in Sylhet

There was no official account of how much waste is disposed off every day by a household. In absence of this, it was difficult to plan for composting. As such in May-June 2017, ACD arranged a Waste Disposal Survey in 150 households in three localities (one affluent neighborhood, one middle income neighborhood and one relatively low income neighborhood) for 7 days. This Benchmark survey provided the first systematic account on waste disposal in Sylhet. Two aspects were important for the survey – a) amount of daily disposal, b) composition of compostable waste per day.

Meeting with the Mayor of Sylhet

ACD team arranged a meeting with the Mayor and informed him about the four wards and the clubs where the research will be conducted. The objective of the research was to

- Understand whether city dwellers are willing to participate in the Waste-to-Compost project and begin to separate their kitchen waste.

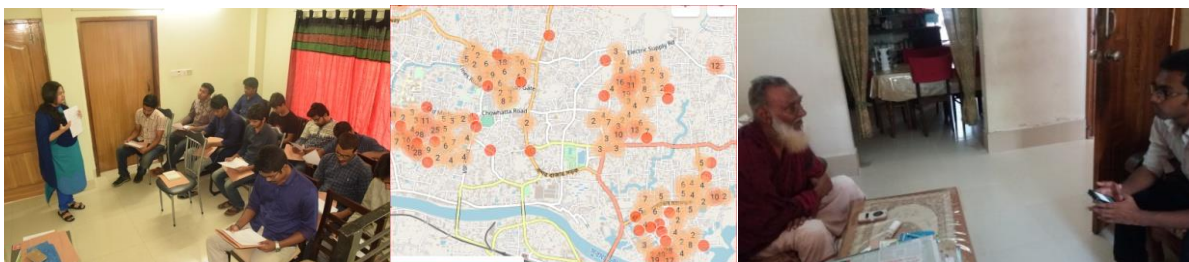
- To engage local CLUBs – a unit of the city corporation who manage daily household wastes in their locality – to agree to participate in the awareness building campaigns on waste separation
- To design an experiment to understand what type of incentives would work and what not for kitchen waste separation.

After listening to the research team, the Mayor instructed his offices to cooperate with us and also expressed his intention to help us and promote the idea of building a green and resilient city. He expressed his gratitude to SANDEE and IDRC for funding the research.



Baseline Survey of Households in Selected Wards

To keep an account of the current situation (pre-project state), ACD initiated a baseline survey in 4 Wards in the City. The Wards are 1, 11, 18 and 22. The survey provided the baseline behavior in terms of waste management at the household level in Sylhet City. Baseline results were used to develop the Awareness Campaign Materials for the experiment.



Awareness Campaigns in the Sylhet City

As a part of developing awareness to make the city green and to engage local people, ACD arranged several training-cum-awareness campaigns with the Ward Commissioners (elected city councilors), the Local Social Clubs (in all 27 Wards).

As a part of the awareness campaign materials – ACD developed

- Posters
- Stickers
- Composters
- App for citizen reporting – crowd-sourcing the campaign
- Door-to-Door Campaign in 3 selected Wards.



Training cum awareness seminars with City Councilors and Local Clubs

As a part of training, capacity, and awareness building exercise, ACD organized several workshops with City Councilors, City Corporation Engineering Units, and the Local Clubs. The Chief Engineer and the Mayor inaugurated several of these trainings.



Door-to-Door Awareness Campaign Separate Kitchen Waste

Door-to-door Campaign to pursue city dwellers to separate kitchen waste to promote composting were conducted by the ACD volunteers along with the local Club officials as a part of the research. There were two rounds of such campaigns.



Launching of CleanSylhet App for citizens

ACD also developed an Android mobile app to mobilize local residents to report illegal waste disposal so that the clubs can take action and clean up the area.



Beginning of the Experiment

At this stage ACD was ready to begin their experiments. There were several interventions – in Ward 11 – residents were given poly-bags to separate their kitchen wastes and give it to the waste collector daily for composting. In WARD 18, intervention was installation of composter only and trained waste collectors were asked to collect separate wastes for composting. Finally in WARD 22 – only awareness campaigns were carried out and trained waste collectors were asked to collect information on how many families followed the campaign. The process continued for 60 days.



End-line Survey

After completion of the experiments, enumerators from ACD visited to all the households and collected more information about their current practice of wastes.



Green Sylhet Award 2019

As a part of incentivizing the participants, several awards were announced among the participants. These are – Green Home AWARD – given to 5 households who fulfilled the criteria, Green Club AWARD – given to 3 clubs who participated were voted by the members to be the best clubs based on selected criteria and Clean Sylhet Award – given to waste collectors who participated in the research.

The Vice Chancellor of the Shahjalal University of Science and Technology and the Mayor gave the award. The Mayor further agreed to continue the effort of ACD, SANDEE and IDRC.



MOU between ACD and the Sylhet City Corporation for further research on commercial waste

Based on the events and the success of the campaigns through the research the City Mayor invited the Asian Center for Development to sign an MOU to do research on how to promote composting of wastes from city restaurants and the city vegetable markets.

The Mayor of Sylhet City Corporation Mr Ariful Haque Chowdhury and Dr. A.K. Enamul Haque signed an MOU between ACD and SCC to study strategies to manage restaurant, and vegetable market wastes and converting them into compost at the Parir Chowk, Lalmatia City Waste Dump Site of the Sylhet City Corporation. Dr. Bhim Adhikari (IDRC), Dr. Muntaha Rakib (ACD/SUST), Ms. Nabila Hye (ACD), Engr Nur Azizur Rahman (SCC), Engr Ali Akbar (SCC), Mr. Hanifur Rahman (SCC), S.M. Mahabubur Rahman (IWM), Mr. Humayun Karim (IWM), and Mr. Tanmay Chaki (IWM) witnessed the ceremony.



DISSEMINATIONS

Dr. Muntaka Rakib presents her initial findings from the Project in Copenhagen

Dr. Muntaha Rakib presented her findings from the research project in her paper on “Impact of interventions on households’ waste segregation behaviour: a randomized controlled trial experiment in Sylhet City Corporation, Bangladesh” at the Nordic Conference on Development Economics in Copenhagen on 18 June 2019.



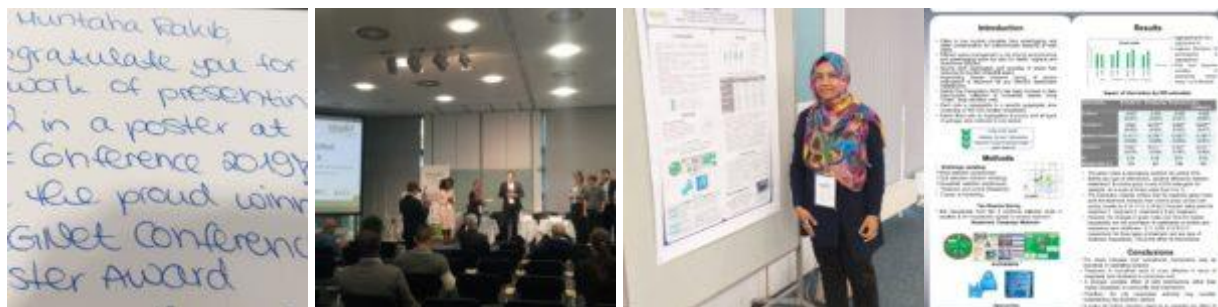
Dr. Muntaha Presents a paper on Factors Influencing Source Segregation behavior of urban households

Dr. Muntaha Rakib presented her findings on the research conducted under this project at the BER- Conference in Dhaka University on 26 June 2019. She presented her paper at the Session on Sustainable Development and Environment. The session was presided over by Dr. Q. K. Ahmad, Chairman, Palli Karma Shohayak Foundation, Dhaka. The title of the paper was “Factors influencing urban households source segregation behavior of solid waste”.



PEGNet Conference 2019 on “Promoting Social, Economic and Sociopolitical Development through Social Protection”

Dr. Muntaha Rakib presented a poster on “Impact of interventions on inducing households’ waste segregation behaviour: A randomized controlled trial experiment in Sylhet City Corporation, Bangladesh”. The poster was selected for the “Best Poster Award” in the conference. Dr. Muntaha also presented the same in a seminar at the Center for Development Research (ZEF) in the University of Bonn on 11 September 2019. The Poster presented by Dr. Muntaha Rakib on the IDRC project was among one of the three best posters in the conference.



Dr. Muntaha Rakib attended the Dissemination workshop in Bharatpur, Nepal

Dr. Muntaha Rakib, the Senior Fellow of the Asian Center for Development and Associate Professor of Economics, SUST, attended the final dissemination workshop of the research on Climate Resilient Cities in Bharatpur, Nepal. She presented the findings of her research in the Sylhet City Corporation and the success in terms of promoting effective waste separation strategy in Sylhet using RCT. She was later interviewed by local media to explain the findings for the general public.



Ref: <http://acdonline.org/climate-smart-cities-research-action/climate-smart-cities-events/>