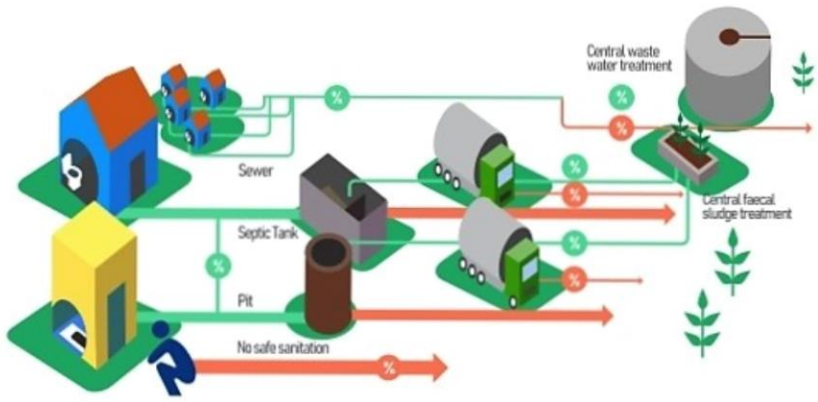
PROJECT REPORT

TECHNICAL WORKSHOP

SHIT FLOW DIAGRAM TOOL



DATE: 18 NOVEMBER 2018

PLACE: TAJ LANDS END, MUMBAI, INDIA

Organised by

Partners

Supported by

WORKSHOP OBJECTIVE

A shit flow diagram (SFD) is a schematic representation of the wastewater and faecal sludge management procedure that is implemented by a city or town. This visualization tool has been widely established and is universally recognized as an advocacy and decision making/support tool. This tool has a potential to encourage a monetary shift of focus towards inclusive urban sanitation and efficient investments, thereby improving the overall sanitation situation and contributing positively towards conservation of the environment. Objective of this workshop is to understand the development of SFD and its global applicability: sensitization and promotion of operative manuals and softwares that make SFD an open access tool which is globally used. To introduce the shit flow diagram tool for understanding the fate of excreta at city level, so that stakeholders can introduce relevant infrastructural changes.

ORGANISERS

Ecosan Services Foundation, the host and primary organizer of the workshop is a section-8 non-profit organization, providing sustainable sanitation and water management consultations, research & development projects and capacity building solutions pan-India. Established in 2006 in cooperation with GIZ, ESF is now empaneled as a national key resource centre by the Ministry of Drinking Water & Sanitation (MDWS).

Centre for Science and Environment (CSE) is a public interest research and advocacy organisation based in New Delhi. CSE researches into, lobbies for and communicates the urgency of development that is both sustainable and equitable. CSE are the implementing partners for this SFD Promotion initiative which is supported by the Bill & Melinda Gates Foundation & managed by GIZ (Deutsche Gesellschaft fur Internationale Zusammenarbeit GmbH) under the umbrella of Sustainable Sanitation Alliance (SuSanA).

Deutsche Institute fur Internationale Zusammenarbeit / German Institute for International cooperation (GIZ) is a service provider in the field of international cooperation for sustainable development and international education work, GIZ has over 50 years of experience in a wide variety of areas, including economic development and employment promotion, energy and the environment, and peace and security. It has contributed significantly towards the Shit Flow Diagram Tool.

SPEAKERS

Figure 1: Mr. Bhitush Luthra, Programme Manager, Centre for Science & Environment

Figure 2 : Mr. Shantanu Kumar, Programme Officer, Centre for Science & Environment

Figure 3 : Mr. Arne Panesar, Head of Program, GIZ

Figure 4 : Mr. Rahul Sharma, Technical Advisor, GIZ India

PARTICIPANTS

SR No	Name of the Participant	Organization
1	Antarin Chakraborty	GIZ
2	Arvind Thakkar	Ahmedabad Municipal Corporation
3	Avinash Yadav Kumar	CDD
4	Deepa Gupta	Institute of Rural Management Anand
5	Dr. Dhanalekshmy Sivani	Government of Kerala
6	Hiral Jariwala	Independent/Freelancer
7	Manasi Ranade	CEPT University
8	Mintje Beuerma	GIZ
9	Rahul Juware	Social Lab Environmental Solutions Pvt Ltd.
10	Rajesh Shah	Peer Water Exchange
11	Rucha Tavkar	CEPT University
12	Sahil Sasidharan	GIZ
13	Swapnil Desai	Navi Mumbai Municipal Corporation
14	Kannan B.	-
15	Kamal Kishor Parmar	-
16	Abhijit Aawari	Water Aid
17	Shobana Srinivasan	BORDA/GIZ
18	Manish Harle	WASH
19	Saahil Waslekar	Environmental Policy Consultant
20	Dipika Lele	Swachh Maharashtra Mission
21	Pallavi Thool	Swachh Maharashtra Mission
22	Sunil Dhapte	YASHDA
23	Prof. Jagdish Deshmukh	BSP, JSPM College
24	Abhidnya Sahni	Samhita
25	Kainar Irani	Jagran
26	Rucluiu	IRC
27	S K Patel	Shanti Patel & Associates
28	Shyamsunder Langote	TCE

The total no. of participants was 28. The participants who attended the workshop came from different kinds of work profiles which constituted Government organisations, Private organisations, Academicians, Social Organisations, etc.

AGENDA

TIME	DETAILS
09:30 – 09:45	Registration
09:45 – 10:00	Introduction to the training
10:00 – 10:30	What is an SFD?
10:30 – 11:15	How to read an SFD?
11:15 – 11:30	Coffee / Tea break
11:30 – 12:15	Methodology for data collection
12:15 – 12:45	Terms and variables used for SFD preparation
12:45 – 13:15	Introduction to Graphic Generator
13:15 – 14:00	Lunch (followed by group photograph)
14:00 – 15:30	Do it Yourself (DIY)
15:30 – 15:50	Presentation by participants
15:50 – 16:00	Feedback and Way forward

SESSION:1 INTRODUCTION TO THE TRAINING

The training workshop began by the introduction of Mr. Bhitush Luthra from CSE. Then Mr. Arne Panesar, Head of Program, GIZ gave a brief idea about the existing picture of Sanitation overall in this world & what challenges it possesses for the future generations to come. He then explained the journey of bringing in the Shit Flow Diagram tool from 2014 onwards & till now how the changes have been made accordingly to update & make this tool more efficient for the users. Mr. Arne mentioned that the World Bank Report was the triggering point for them to begin the work in this sector. And he ended his introductory note by this statement, "I hope this to be a happy workshop & let's take out something constructive from here."

After this brief introduction, all the participants gave their introduction by explaining their background of studies, current working profile, company & their expectations from the training program.

SESSION:2 WHAT IS SHIT FLOW DIAGRAM?

This session was conducted by Mr. Shantanu Kumar from CSE. He started by defining the SFD tool through a variety of definitions. Through those definitions, he explained the need for excreta management & how population is dependent on different types of sanitation systems. He also defined that, what is not a SFD. Further he explained & discussed the elements of SFD tool, different components of the SFD report and how should the assessment for the service delivery context needs to be done. Along with that Mr. Shantanu described the practical applications of the SFD tool which have been undertaken recently & till now how many SFD's have been prepared for different cities altogether.

The whole SFD tool journey was also shared with all the participants & how gradually over a period of time the SFD Graphic Generator has been updated. The session ended with question & answers.

Figure 5 : Mr. Shantanu Kumar addressing the participants

SESSION:3 HOW TO READ THE SFD TOOL?

This session was conducted by Mr. Bhitush Luthra. He explained the methods/steps of reading & understanding the SFD Graphic Generator. The whole service delivery chain for off-site sanitation system was discussed through this SFD tool & what challenges/difficulties one can face while preparing or reading the SFD tool. Simultaneously many questions were put forward by the participants as this session progressed. Every component in the SFD Graphic Generator gives different levels of information pertaining to the type of study undertaken. Mr. Arne also came forward to solve the questions/doubts which were asked by the participants. To create a standard methodology was the basic idea behind developing & reading the SFD Tool.

At the ending of this session, Mr. Arne stated," Let them make a diagram that they own." which really boosted the participants morale.

Figure 6 : Mr. Bhitush Luthra addressing the participants

SESSION:4 METHODOLOGY FOR DATA COLLECTION

This session was conducted by Mr. Shantanu Kumar. He gave a brief introduction at first about the usage of the SFD Tool. It was an interactive session between the participants & the speakers. Also Mr. Rahul Sharma from GIZ was involved in all of these sessions with his valuable inputs. Each & every possible outcome for the data required & it's possible sources were discussed with the participants for each stage of sanitation service delivery chain, i.e. containment, emptying, transportation, etc. Also what are the different types of sources for data collection & how it should be identified was also explained. The whole data interpretation task was also showcased to the participants through various examples.

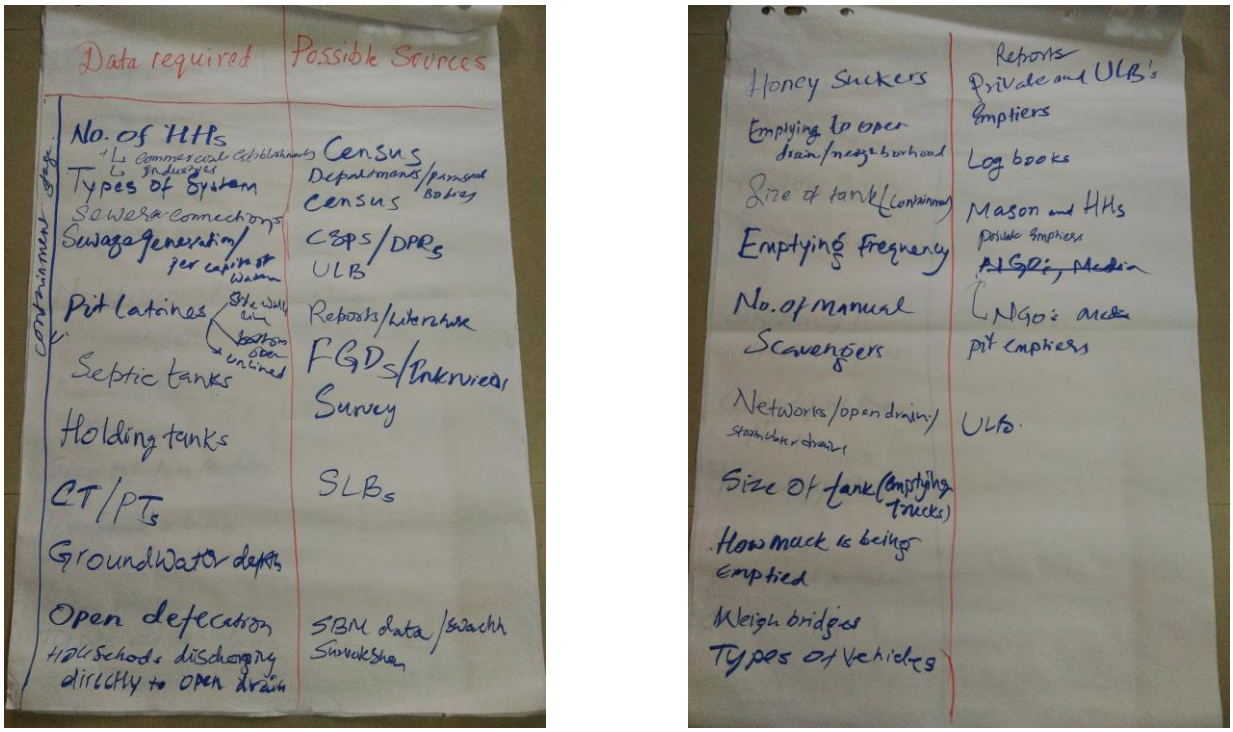


Figure 7: The data required & it's possible sources

SESSION: 5 TERMS & VARIABLES USED FOR SFD PREPARATION

This session was conducted by Mr. Bhitush Luthra. He brought to notice to all the participants that how helpful the SFD manual can be in correctly preparing our diagram. He explained the various terms & variables which are used for the SFD Tool which would help everyone to master the tool in a much more efficient way. The basic purpose of these Glossary terms & variables is to bring all the users around the globe on the same page & interpret the tool universally because many countries use different terminology for the same aspect of the SFD tool. He further explained it through various examples.

SESSION: 6 INTRODUCTION TO GRAPHIC GENERATOR

This session was conducted by Mr. Shantanu Kumar. He introduced the graphic generator with some case studies of the tool. He then explained the various kinds of SFD that can be generated based on the type of study needed. Also he described the components of the graphic generator & in what way the data needs to be inputted to the tool. The main focus of the session was to generate the data with transparent assumptions which would minimize the errors in the diagram generated.

SESSION:7 DO IT YOURSELF

This session was conducted by both Mr. Bhitush Luthra & Mr. Shantanu Kumar. After session-wise discussions, the participants were told to create the SFD tool of the given city all by themselves. Each participant was given a case study for the SFD Tool preparation which included total population, types of containment present in the given area, emptying & transportation facilities available & treatment processes being used if any. All the participants were actively involved in preparation of their respective SFD's under the guidance of Mr. Bhitush Luthra, Mr. Shantanu Kumar, Mr. Arne Panesar & Mr. Rahul Sharma.

During this session, Mr. Arne was also having a discussion with all the participants regarding the tasks which were given to them. He explained the idea of asking the right amount of questions which would help in preparing the correct SFD. And to be positive with this SFD tool which can help you to bring the correct measures for the cities with huge investments.

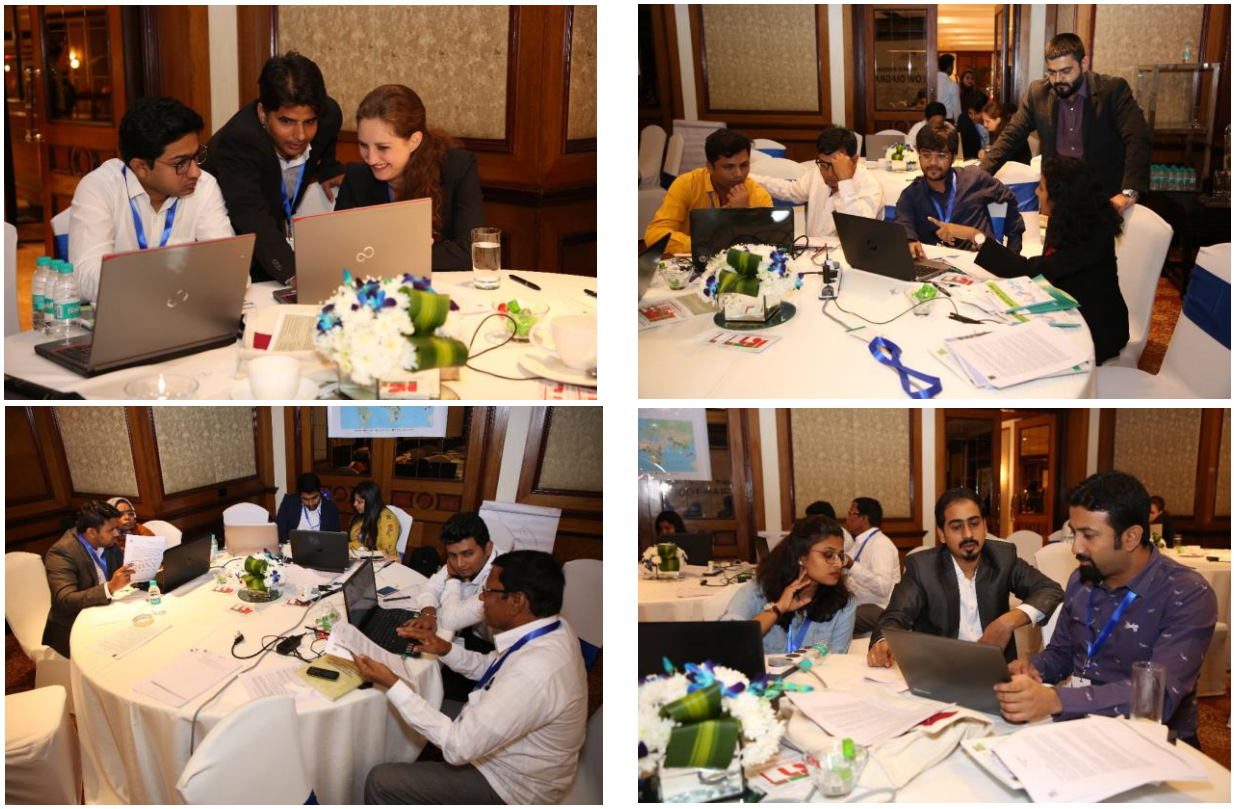


Figure 8 : Participants trying their hand at preparing the SFD with the help of the moderators.

SESSION:8 FEEDBACK & WAY FORWARD

The workshop was concluded by submitting the feedback forms for the training. All the participants did find the tool user-friendly provided the SFD diagram, report & data complement each other at various levels. Mr. Arne wished all the participants to develop their ideas at SFD thinking & stated in his concluding statement that," We don't want to do a mathematics exam for this SFD Tool; instead kickstart the right discussions for it. Also you have to make assumptions, but it should be with transparency."

All the moderators gave their best wishes to the participants for their further journey in developing the SFD & the training ended followed with a group photograph.

Figure 9 : Group Photograph