





National Policy Workshop Webinar Series On

Countermeasures for Riverine and Marine Plastic Litter in India

12 -22 May 2020

Session 2: Community Perceptions and behavioral aspects for plastic management and promotion of countermeasures to address

Sustaining the countermeasures initiative - Learning from behaviour change communication in Haridwar and Prayagraj



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Project cities: Relevance

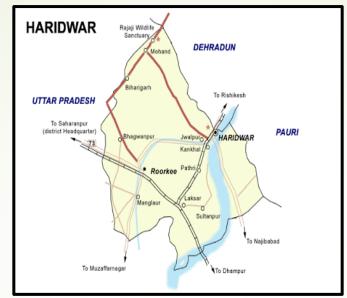
HARIDWAR

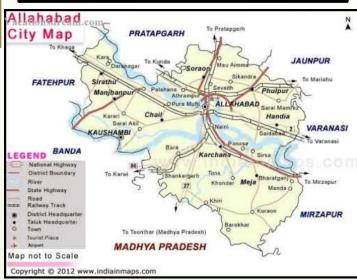
Ganga entering plains – major pilgrimage spot

Residential population of 2.29 lakhs with an area of 12.3 km sq.

Nearly 2 crore tourists every year. During Kumbh Mela – 10 million City generated 237 TDP of solid waste in 2015 – 8.5% plastic waste







PRAYAGRAJ

Confluence of three rivers – pilgrimage spot Residential population of 11.1 lakhs, with area of 82 km sq

High footfall during major melas/events like Magh Mela; 24 crore people during the last Kumbh

Many open
Iittering spots in the
city, near the
Sangam area





Ganga is one of the top 10 rivers that carry plastics to the ocean.

Findings from the Perception Survey

City		Perception
HARIDWAR	Ganga Sabha	'Plastic cans are still one of the major plastic item used by the visitors'. 'Apart from that clothes and plastic sheets are found in river waste'. Lack of strict penalization and fines.
	Nagar Nigam	'Need measures or alternatives to improve city waste disposal system- which currently end up on landfill sites'.
	School Children	'Forty-Four percent students perceive that they know little about plastic pollution, while 32 percent perceive that they know quite a lot'.

General awareness of the issue amongst all stakeholders we interacted with – All respondent groups indicated at specific problems to find solutions for!

		streets which eventually end up in the river'.
PRAYAGRAJ	Navik	'The plastic used for packaging of feed for Siberian crane is thrown by the visitors into the river during boat rides. 'Navik ka nadi se Sambandh hai Sukhne ya Pradushit hone pe arthvyavastha par prabhav padega'
	Kalpvasi	'Some perceive that burning is a solution to get rid of plastics, not aware of proper means of disposal of plastics'.
	School Children	'Ninety-six percent of students feel that the disposal of plastics should be taught'. Developer

Factors contributing to the marine litter problem

BEHAVIOURAL



Conflict between religious practices and the need to reduce plastic use

Understanding of the issue of plastic pollution only limited to polythene

INFRASTRUCTURAL



Lack of collection systems and infrastructure – 203 plastic litter hotspots in Prayagraj

Slums not on collection radar and **major leakage points** in Haridwar

Lack of affordable alternatives for pilgrims/small businesses/regular customers

SYSTEMIC



Lack of economic value chain for managing plastic waste

Huge influx of people during festivals/melas lack of capacity to deal with the waste

No effective evaluation of services provided by private contractors



Achievements

Stakeholder connect

Connected to more than 10 stakeholders from diverse background

Linked with faith based leaders

Recommendation letter from Municipal Corporation in Haridwar

Invitation by Ganga Sabha to carry out awareness generation activities during Kumbh Mela

Capacity building and awareness generation campaigns

In the form of BIG sessions and awareness generation activities. **Reached to 1500+ numbers**

Used creative means – street plays, magic shows, signature campaigns, rally etc. at the prime locations. Reached to 5000+ people. Eco clubs formed in school

Used **local volunteer groups** – Swachhagrahis and sanitation workers

Communication

Used traditional and social media Social media – 14 posts divided into issue- activity- call for action.

Traditional media – 35 posts in 2.5 months – 15lakh+ circulation copy

Designed leaflets in Hindi, brochures for stakeholders

Radio – 1.25 crore listeners

Outreach video – 50-52 LED screens in Prayagraj, main LED screen in Haridwar

Jingles – through radio and speakers at prime locations

Mega Event – Humara Sankalp Plastic Mukt Ganga

Organised at major location – Sangam and Har Ki Paudi

In Haridwar with support from Ganga Sabha

Participation by influential speakers – administration, Civil Society, Faith leaders, academia in both the cities

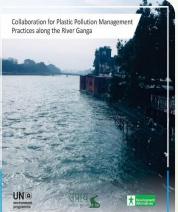
More than 2000 people attended and took pledge

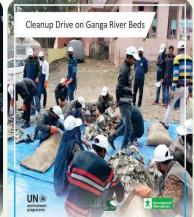
Organised signature campaign in Haridwar

In Prayagraja small demonstration – collection of 1500 PET bottles and handing to Nagar Nigam, with support from sanitation workers











CAMPAIGNS AND WORKSHOPS







Letter No .: 949 | PSCL | 2020

Date: 20/03/2028

M/s Larsen & Toubro Limited. Smart World and Communication BU, 215/02B Ground Floor, Ashok Nagar, Prayagraj - 211001

Subject: Regarding displaying video on harmful impacts of plastic pollution in Ganga on VMDs.

Dear Jignesh,

A short animation film on the harmful impacts of plastic pollution in Ganga River has been received in PSCL and is found useful for creating awareness among large masses. As per the approval given by CEO PSCL, a video of 1min 22 sec is shared with you on the mail id jdubey@Intecc.com which can be displayed on the VMDs. The Video clip should be run with greater frequency on VMDs located near Sangam area.

You are requested to display the video on all VMDs with above mentioned direction located at different locations. CEO has also directed to submit the content for reviewing on monthly basis.

Sanjeev Kumar Optalysigned by Sanjeev Kumar

MEGA EVENT









STAKEHOLDER CONNECT



अनाम दिनांस, 5/02/2020 की देवलेपीनर अल्टरनेटिक की टीम के द्वारा संयत राज्य पहिला रहत मे की दीम के द्वारा भवात दीकर पालत देकर पारतिस्त्र, भूगत नहीं के दिला के उपार प्रक. यात सेन्पित तिका अपा / विस्तेष 102 बन्ते में प्रतिभाग किया / अविदान के क्ने के की क्वार क्या अपते तिका जीवा। हम क्वी प्रतादित्व, पुस्त मंत्रा जीवी के दिला

सैंक लिप त है।









गंगा को प्लास्टिक प्रदूषण मुक्त 🛨 करने के लिए किया जागरूक

विष्णघाट से हरकी पैडी तक निकाली जागरूकता रैली

आफ द नेटिव नई दिल्ली और आदर्श यवा समिति ने गंगा को प्लास्टिक प्रदूषण से मुक्त करने को कार्यक्रम कर लोगों को जागरूक किया। इस संबंध में विष्णचाट से हरकी पैड़ी तक जागरूकता रैली भी निकाली गई। मुख्य अतिथि दक्षिण काली

मंदिर के पीठाधीस्वर महामंडलेस्वर कैलाशानंद ब्रह्मचारी ने कहा कि गंगा सबसे अधिक पावन नदी है। मोक्षदायिनी गंगा हमारी मां है। गंगा



जाती है। इसके सकारात्मक परिणाम मिश्र, यएनईपी की सलाहकार सलोनं भी सामने आ रहे हैं। स्पर्श गंगा गोयल ने कहा गंगा के जल को लेक आरुषि पोखरियाल निष्ठांक व प्रो. बीडी जीवनदायी गणों पर लगातार कई शोध जोशी ने कहा गंगा में प्लास्टिक कचरा व अभियान चल रहा है। इस दौरा-

नैनेजर जनरल राहल भारद्वज. आद गंगा का स्वच्छ रहना यवा समिति के अध्यक्ष लखबीर सिंह

Development Alternatives Group

Development Alternatives and the UN Environment Programme have collaborated to promote countermeasures against marine plastic into river

As part of this, various stakeholders are being mobilised to promote maintenance of the sanctity of the river, in association with the CSO partner, Adarsh Yuva Samiti (AYUS) in Haridwar.

#CleanOcean #CleanSea #CleanRiver #SDGs





जब नहीं रहेगी जीवन धारा...

प्लास्टिक के बढ़ते प्रयोग के कारण गंगा प्रदूषित हो चुकी है। गंगा को प्लास्टिक से होने वाले प्रदूषण से बचाने के लिए प्लास्टिक के इस्तेमाल पर पूर्ण रूप से रोक लगाने की आवश्यकता है। गंगा के तटों के आस-पास लोगों दारा भारी मात्रा में प्लास्टिक का इस्तेमाल होना और तरह-तरह औद्योगिक गतिविधियाँ प्रदुषण को बढावा दे

"गंगा को प्लास्टिक मुक्त" बनाने के लिए अभियान!

डेवलपमेंट ऑल्टरनेटिव्स और संयुक्त राष्ट्र पर्यावरण कार्यक्रम द्वारा गंगा को प्लारिटक मुक्त बनाने के लिए

इस अभियान के अन्तर्गत प्लास्टिक के इस्तेमाल के दुष्प्रभाव लेकर जन जागरूकता कार्यक्रम बड़े पैमाने पर चलाया जाएगा और प्लास्टिक के कचरे को जल्पन्न करने वाले प्रमुख व्यवसायिक और औद्योगिक गतिविधियों



क्या सोचा है आपने... कैसा होगा जीवन हमारा,

रही हैं। इसका हानिकारक प्रभाव लोगों के स्वास्थ एवं पर्यावरण दोनों पर ही काफी तेजी से हो रहा है

को समझकर के कचरे प्लास्टिक की रोकथाम के प्रयास किए जाएंगे



Promotion of Counter Measures Against Marine Plastic Litter in India: Haridwar and Prayagraj









3:51 ₩ @ △ Instagram



evelopmentalternatives Development Alternatives nd the @unep have collaborated to promote juntermeasures against marine plastic into river s part of this, various stakeholders are being obilised to promote maintenance of the sanctity of e river, in association with the CSO partner, Adarsh ıva Samiti (AYUS) in Haridwar



Major Ganga cleanliness drive in Naini

गंगा नदी भारत के पांच राज्यों से गुजरती है

ness drive was organised under the aegis of Plastic Free Ganga Project, below the new Yamuna Bridge in Arail area, Naini on Thursday. The drive was carried out as part of the joint efforts of Development Alternatives, New Delhi and United Nations Envi-

ronment Programme (UNEP). The National Productivity Council (NPC), an NGO, as technical partner and local NGO part. ner, Swarg, supported this initiative. The main objective of the campaign was to collect different eigh it and record its data on the prescribed format and use it for



The total gross weight of garhage collected was 342 kg. After waste, it was found to be 122 kg (35% of total waste collected) the form of polythene bags (less the form of polytrations (ategory), milk than 50 microns category), milk than 50 microns category, milk active health and the form of polytration and the form of polytrat

canes, plastic cement bags, etc. Polyethylene bags were found mostly in plastic waste. The col-

(उत्तराखंड, उत्तर प्रदेश, बिहार, झारखंड और पश्चिम बंगाल)

Research fellow Medha and

Ujjawal and project assistant Hemant from NPC. New Delhi and Swarg director Anil Yaday along with team members and 75 volunteers including ragpickers and 'swachchhata grahis' partici-

"Today, due to excessive use of plastic in our daily life, various plastic waste comes out of house and flows from houses to drain and then reaches rivers," Srivas

tiated a two-way process to achieve the goal of a plastic-free

reach activities, to reach out to num number of people and the adverse effects of plastic and how it contributes to river

गंगा को प्रदूषण मुक्त करने को रैली 'हमारा संकल्प, प्लास्टिक मुक्त गंगा

हरिद्रार | हमारे संवाददाता

हरकी पैडी पर सामाजिक संस्थाओं ने गंगा को प्लास्टिक प्रदुषण से मुक्त करने के उद्देश्य से एक जागरूकता रैली निकाली। रैली विष्णुघाट से शुरू होकर हरकी पैड़ी पहुंचकर समाप्त हुई। रैली का आयोजन डेवलेपमेंट ऑफ द नेटिल दिल्ली, श्रीगंगा सभा और आदर्श यवा समिति द्वारा किया गया था।

श्री गंगा सभा के अध्यक्ष प्रदीप झा व महामंत्री तन्मय वशिष्ट ने कहा कि गंगा के प्रति तीर्थ परोहित समाज या श्री गंगा सभा की अकेली जिम्मेदारी नहीं है।



हरिद्वार में मंगलवार को हरकी पैडी बाजार में गंगा को प्रदूषण मृक्त करने के उद्देश्य से जागरूकत

जन सहयोग के बिना गंगा की स्वच्छता सलोनी गोयल ने कहा कि गंगा जल के जोशी ने कहा कि गंगा में प्लास्टिक ब्रह्म केलिएकार्वकरनाकिसी चुनौती सेकम महत्वको लेकर संयुक्त राष्ट्र भी चिकत कचरा जाने से कैंसर जैसी जानलेवा राहुल अपर मेला अधिकारी लिलत नारायण है। उन्होंने बताया कि । साल में हम की और से अध्यक्ष प्रदीप नारावण मिश्र और वनिप की सलाहकार 📑 आरूषी पोखरियाल व प्रो. बीडी 🛮 का शुभारंभ महामंडलेश्वर कैलाशानंद 🛮 शार्खा, उराय जाए स्वामण अ

पोखरियाल ने कहा कि हमको मनष्य तन्मय विशष्ठ ने सभी

रुड़ की बद्री विशाल। हुआ। इस अवसर पर आरुषि निशंक वजन है। गंगा सभा

पर हरकी पौड़ी पर हुआ भव्य कार्यक्रम

नगरवासियों को प्लास्टिक के प्रति से प्रेम करना चाहिए प्लास्टिक से विकास विकास संस्था जागरूक किया एवं हरकी पौड़ी के नहीं। कैलाशानंद ने सभी को एवं अलग-अलग राज् का आयोजन हुआ जिसके मुख्य हुए बताया कि गंगा-गंगा पानी-पानी अल्टरनेटिव की ओर श्रीमती आरुषि निशंक पोखरियाल को किस प्रकार से प्रधावित कर रही सोहित विशाल तालिह मिश्रा की उपस्थिति में प्लास्टिक लोग इतना प्लास्टिक उत्पादन कर पॉंडित, सिद्धार्थ चक्रपाणि

उनकी जिम्मेदारी का ए हुए गंगा में प्लास्टिक आग्रह किया। इस अवस सोसाइटी प्रभात स्किल

पवित्रता के बारे में स

and the Quinen have collaborated to promote locations near the Ganga Ghats in Haridwar, with an सामने घंटाघर क्षेत्र में भव्य कार्यक्रम प्लास्टिक मुक्त गंगा की शपथ दिलाते अद्धालुओं ने प्रतिभाग किर area spanning 1200 sq.m. Total mixed waste of almost 250 kg was collected and segregated from both the locations. 60% of the total mixed waste was a plastic waste, a leading pollutant for the Ganga river, which absorbs more than a billion gallons of



Strategy and Approach – Research and Action

Each on-ground activity was informed by findings from the perception survey and interactions with city-level Govt., institutions, CSOs etc.

Perception Survey and stakeholder meetings



Two Clean-up drives



Groups of volunteers for conducting clean-up drives

Ten BIG sessions



Awareness on perils of plastic but lack of information on its negative impact on marine ecosystems – included components on life cycle of plastic waste, types of plastics commonly available, target groups identified

One Mega Event



Communication material designed

Stakeholder Workshop



Demonstrating a value chain for safe disposal or recycle of plastic



Based on the survey, potential stakeholders and sites – like shopkeepers for value chain demo were identified. One pilot on converting plastic packets into low-grade diesel planned.



Strategy and Approach - Process Chain

Perception
Survey with
different
stakeholders and
stakeholder
meetings



Identification of potential stakeholders for collaboration, local network building

Two Clean-up drives



Data for international database generated

Ten BIG sessions



Groups of volunteers for conducting clean-up drives

Informed stakeholder groups

One Mega Event



Involved religious institutions – Shri Ganga Sabha

Reached city-wide audience

Stakeholder Workshop



Data on plastic waste generated in the city, gaps in Municipality level systems identified

Demonstrating a value chain for safe disposal or recycle of plastic



Collaboration between partners explored to demonstrate a functional example in the cities



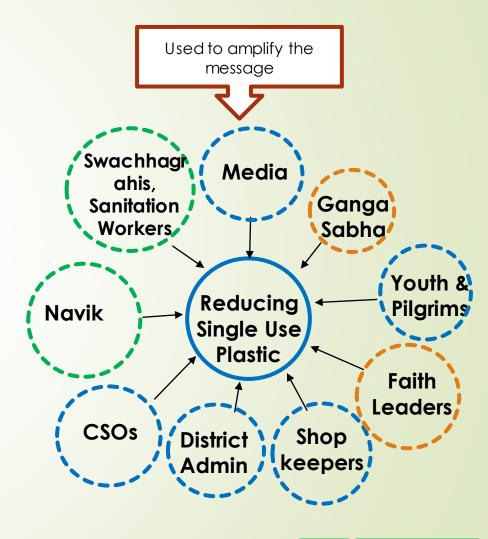
Our stakeholder connect

Haridwar – targeted Har Ki Paudi

- Ganga Sabha Connecting with other stakeholder groups, specially faith leaders.
 Associated to organise major campaigns and events at Har Ki Paudi, including the mega event
- District Administration –
 Understanding the problem,
 connecting with their contract
 companies, responsible for
 collection and management of
 waste
- **Pilgrims** Organised awareness campaigns
- Shopkeepers Associated for value chain demonstrations
- CSOs AYUS, SDC
- Indian Institute of Petroleum
- Youth Major volunteer group, Eco-clubs in school

Prayagraj – targeted effort in Magh Mela

- Faith Leaders 10 ashrams, reaching to thousands of followers
- Navik community Major stakeholder power to influence lakhs of pilgrims, held capacity building and awareness session
- Volunteer Group Sanitation workers and Swachhagrahis – created awareness and demonstration of a small value chain of PET bottle collection
- District Administration –
 Problem analysis, display of outreach video
- Shopkeepers Capacity building and awareness session
- Youth Volunteer group,
 Eco-clubs in school





Communication for behaviour change

Animated videos – importance, issue, individual steps that can be taken Contacted Municipal Corporation for displaying it on LED screens. Used the same in capacity building session.



One Way



Prepared 8 jingles-song on Ganga followed by a message Played through radio and speakers

Mapped what was locally acceptable Used local artists – modified the content Performed at major sites

Organised before the mega event to build momentum



Dates were selected through

I religious calendar Organised at prime locations Involved diverse stakeholders

Prepared jingles and video were played during the event













Connected with AIR FM

Used two channels - Primary and Vivid

30 min program - importance, issue, call for

Bharti channels for broadcasting



Communication for behaviour change

Two Way – BIG Sessions

- Prepared the module
- Incorporated learning from perception survey
- Used different methods of delivery with different target audience Naviks, schools, shopkeepers, sanitation workers, religious leaders, etc.







Learning by Doing - Clean up Drives Volunteer groups majorly from capacity building workshops







Media

- Orientation of media personnel at the initial stages
- Strategy for social media posts
- Designing of template for these posts
- 4 platforms Twitter, Intsagram, FB and LinkedIn



प्लास्टिक को गंगा में जाने से रोकने के लिए हुई बैठक

रुड़की बद्री विशाल। आयुष गंगा सभा के उपाध्यक्ष, बिग भागीरथी हरिद्वार डवलपर्मेट अल्टरनेटिव नई अध्यक्ष शेखर पालीवाल, डवलपर्मेट दिल्ली द्वारा यूएनईपी के सहयोग से अल्टरनेटिव से राहुल भारद्वाज, आरबी

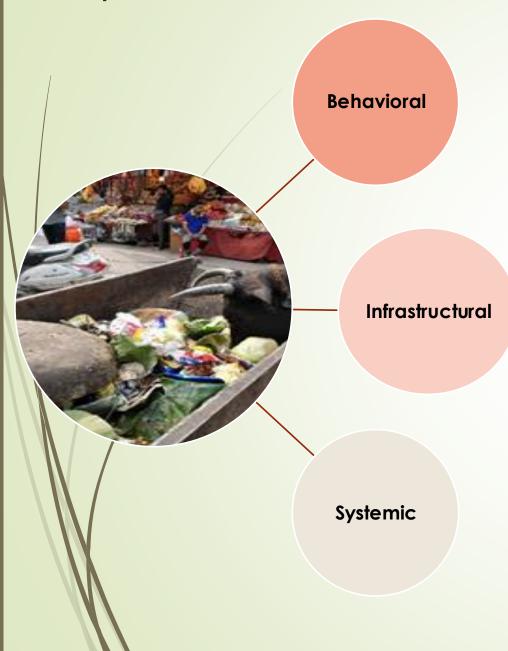
भयान सैनी एवं अन्य संस्थाओं के लोगों ने भाग विल्या। जिसमें सभी ने अपने विल्यार रखे। सभा की ओर से बताया गया कि गंगा पर जो भी आये, उसे लिटरेचर तैयार करके जाते समय दिया जाये। शंखार पालीवाल ने प्लास्टिक एवं करखें को अलग

प्लास्टिक एवं कपड़ों को अल प्रिद्धार नगर निगम सभागार करने के लिए एलस लगाने के लि प्राटडीए गेस्ट हाइन्स में कहा। यहुल भारद्धाल ने भी कर्यंख्र विभाग एवं संस्थाओं के की जानकारी दी तथा तीन महीने का आयोजन हुआ जिसमें गंगा में प्लास्टिक रोकने के हि सर सीडीओ, नगर निगम क्या कदम उठाये जा सकते तता हामां, यूएनारी सलानी, उत्तक बारे में या लगि इस मीके से सुभी, नगर निगम लख़बीर सिंह, अनुज, आस्कर उठ नगी, सीडी मिल्डेट हादियर. आवति मेथा आदि भोजर रहे।



Alternatives

Gaps



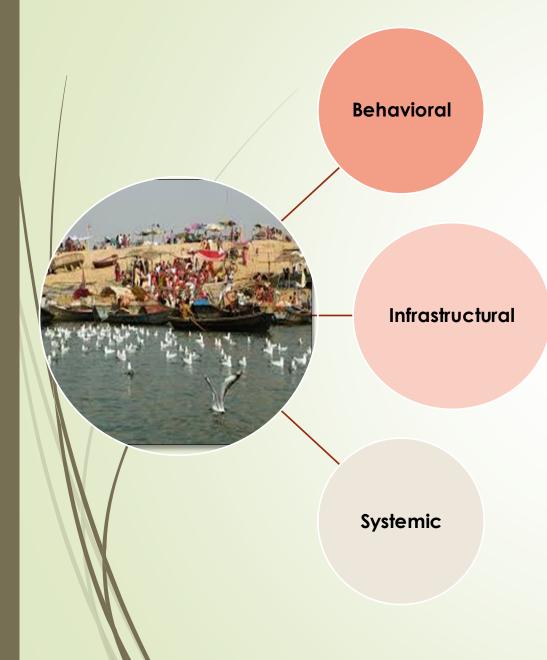
- 1. No strategy for promoting moral and environmental consciousness over religious identity
- 2. Limited knowledge life cycle of plastic and negative impacts of pollution not clear, understanding of plastics limited to polyethene
- 3. Absence of compulsory use of alternatives at institutional level

- 1. Absence of basic infrastructure such as dustbins in prime locations
- 2. Current fleet of collection **vehicles not built for segregated collection**
- 3. Slum along the main river or drains not included on the waste collection route of the Municipality major plastic leakage points

- Apart from some fraction of MLP that is sent to cement kiln, no other value chain for disposal/recycling of different categories of plastic
- No punishments/fines for littering/leakage from institutions along the river
- 3. Alternatives not available
- 4. Periodic awareness programmes and communication not prioritised
- 5. Critical evaluation of the effectiveness of services provided by private contractors and mandatory resource recovery



Recommendations and way forward



- 1. Continuous capacity building and awareness generation programs
- 2. Municipality+CSO led promotion of alternatives especially during major events
- 3. Using creative means to disseminate information
- 4. Working extensively with faith based leaders, using them to spread the message
- 1. Basic infrastructure upgrade dustbins installed at a 50m distance on prime locations. Frequent waste collection.
- 2. Informal waste collectors to be included in the system to recover maximum resources during collection
- Collection system to be connected to CSOs making products out of waste material
- 4. Slums to be included on the collection map
- 1. Pilot demonstration of some waste recycling/co-processing solutions such as SUP to IIPM, HDB into sheets. **Enhance entrepreneurship** around plastic recycling, technology and capacity development
- 2. Strengthening the partnership and network in cities especially with the city government and on ground stakeholders. Opportunities with other funding agencies like GIZ being explored.
- Govt schemes such as SBM, Namami Gange to be synergized with Municipal level waste management system and initiatives such as UNEP countermeasures.
- **4. Affordable alternatives** to be brought to **compulsory use** in govt. offices, Ganga Sabha establishments, Municipal institutions, main markets in the cities
- . **Higher fines** on littering and open dumping



THANK YOU