



#### **SUNYA: Towards Zero Waste in South Asia**

Sixth Regional 3R Forum in Asia and the Pacific Plenary Session 7

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#### **Project Partners:**

























#### Goals

- Promotion of zero-waste concept through implementation of 3R (Reduce, Reuse, Recycle) principles
- Strengthen citizens' participation through stakeholder consultations and involvement in waste management
- Capacity building on waste management for ULB officials, waste collectors, informal sector and NGOs
- Developing 3R action plans
- Knowledge & experience exchange between cities
- Implement scalable demonstrations of zero waste in project cities



### **Major Activities**



Analysis of Situation in Partner Cities

- Baseline data collection
- City visits
- Stakeholder group formation and consultation

Training of Trainers

- Training of Local Project Coordinators
- Introduction to principles of 3R, barriers and opportunities for involving informal sector and public private partnerships in waste management

Technical Visit to Partner Cities

- Technical support to cities for pilot project
- ARGE: Hetauda, Tansen and Phuentsholing
- VVSG: Dhaka and Matale
- Aiforia: Shimla and Coimbatore
- MuAN: Support to cities in Nepal and Phuentsholing
- ICLEI SA: Support to other cities and Phuentsholing

### Major Activities (contd.)



Implementation of Pilot Project

- Focus area identification
- Stakeholder involvement
- Soft Measures: IEC, Involvement with NGOs, community involvement
- Hard Measures: Infrastructural provision (bins, PPEs)

Implementation of Pilot Project

- Pilot area identification and analysis
- Soft Measures: Intensive awareness generation (IEC), Involvement with NGOs, community involvement
- Hard Measures: Infrastructure provision (compost plants, secondary storage, primary storage)
- Policy Measures: Ban on plastic
- Institutionalizations of informal sector (Shimla)

**Project Dissemination** 

- Partner cities demonstrate and disseminate their activities
- International dissemination workshop
- Visibility at the local and national level

## Highlights in Project Cities



#### Partner City 1: Coimbatore, India

- Public private partnership in segregation and recycling of waste.
- Community involvement in waste management
- Intensive Mass Awareness Generation Program
  - focus on door to door campaigning, info leaflets, posters, radio jingles
- Stakeholder participation
  - Officials from Solid Waste Management Department,
     Coimbatore City Municipal Corporation (CCMC)
  - Residence Awareness Association of Coimbatore, (RAAC)
  - ITC, Coimbatore
  - Hotels Association, Coimbatore
  - Hand in Hand (NGO), Coimbatore
  - Siruthuli (NGO), Coimbatore
  - Shree Swastika Trust, Coimbatore



#### Coimbatore, India



- Pilot Project
  - Ward No. 23
  - Collection of segregated waste from more than 2000 households and 750 shops
  - Collection of 130 tonnes of recyclables worth INR 3.97 lakhs
  - Collection of garden waste once a week
  - 4.36 tonnes of wet waste converted into compost
  - Strict penal provision for littering
  - Declared as Bin Free Ward
- Coimbatore City Championship for Guinness Book of World Records: Maximum people participating in litter collection in a cleanliness campaign
- Way forward
  - Replication in all wards in West Zone



#### Partner City 2: Shimla, India

- Addressing waste management in remote hilly terrain focus on collection and awareness generation
- Intensive campaign
  - Rally, leaflets, posters, annual calendars, radio jingles
- Pilot Project
  - Kachi Ghati area in Ward No. 7 decentralised waste management
  - Source segregation and collection from 250 HHs spread across 500 steps
  - 100% user fee collection
  - Sale of recyclables; additional income for sanitary workers
  - Ward level composting
- Integration of Informal Sector (SEHB Society)
  - Health camps; free vaccination (tetanus, anti-rabies)
  - Insurance of 500 rag pickers under Rashtriya Swasthya Bima
  - Distribution of PPEs





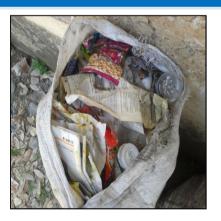
#### Shimla, India



- Final Local Event
  - Recognition of work done by sanitary workers for collection
  - Dissemination of experience of decentralised management in nearby cities.
- Skoch Order of Merit (2013) for Door to Door Garbage Collection Scheme in Shimla City With the People Participation
- Way Forward
  - Replication in 6 more wards
  - Installation of Organic Waste Converters (OWCs) instead of pit composting









#### Partner City 3: Hetauda, Nepal

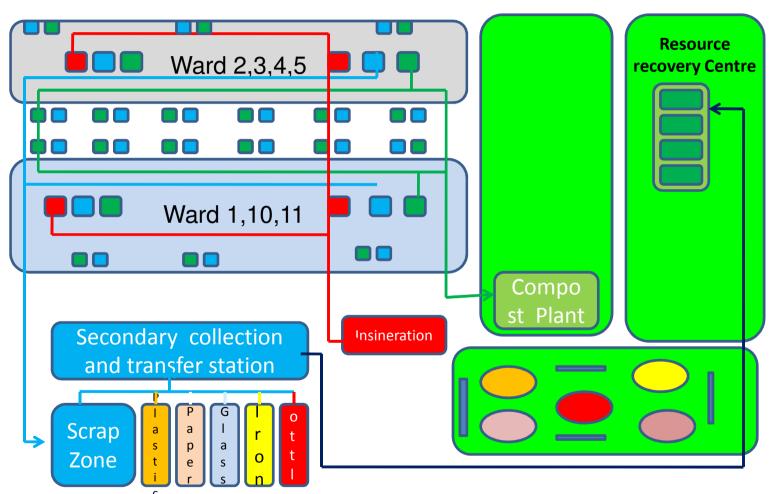
- Focus on behavioural change and integration of ragpickers
- Integrated & sustainable waste management scheme with green, blue and red channel
- Comprehensive Baseline Study on Involvement of Informal Sector (Recyclable Material Collectors) in Municipal Waste Management System in Hetauda
- Pilot Project
  - Ward No. 2
  - Source segregation and collection from 2000 HHs; Govt. offices
  - Separate biomedical waste collection
  - 80 % user fee collection
  - Sale of recyclables to supplement income for sanitary workers
  - Household level composting (Bin Composting)
  - 10 collection points for PET Bottles





#### Hetauda, Nepal





Green, Blue & Red Channels: Bio, Non bio & Hazardous/Medical waste

#### Partner City 4: Tansen, Nepal

- Involvement of entrepreneurs and private bodies in the waste business
- Focus on segregation
- Voluntary commitment to zero waste of citizens
- Pilot Project
  - Ward No. 4
  - Source segregation and collection from 350 HHs
  - Collection of domestic hazardous waste once in a month
  - Collection of 80% user fee
  - Household level composting
  - Sale of recyclables
  - Complete ban on plastic usage; promotion of jute/ cotton bags
- Integration of Informal Waste Collectors Comprehensive
  - Survey of Rag-pickers in Tansen
  - Provision of Identity cards for rag pickers





#### Tansen, Nepal



- Declaration to make Tansen as "Zero Waste City" by 2018
- Week long celebration of waste management, segregation, recycling.
- Massive awareness campaign for dissemination of success in pilot area.
- Way Forward
  - Replication to 2 more wards (Ward No. 8 & 15)
  - E waste collection centre







#### Partner City 5: Phuentsholing, Bhutan

- Development of city level action plan on zero waste
- Focus on segregation and awareness generation for community involvement in waste management
- Pilot Project: College for Science & Technology
  - 5 way segregation in the campus: recyclables, nonrecyclables, organics, biomedical waste & hazardous waste
  - Recyclables sold to scrap dealers and proceeds used for awareness campaign
  - Organics composted
  - Biomedical & hazardous waste incinerated
- First Initiative in the country to move towards zero waste





#### Phuentsholing, Bhutan



- Organic waste going to the landfill from pilot area has been reduced to zero
- Initiative has reduced waste from pilot area going to landfill from 75% to 32%
- Municipal funds to be used for replication of source segregation to reduce waste and promote recycling







#### Partner City 6: Matale, Sri Lanka

- Focus on 3R to reduce stress on landfill
- Intensive Awareness campaign for School Students, teachers and government officials to act as role models
- Pilot Project
  - 10 Schools and 20 Government Institutions
  - 2 bins for segregated waste
  - Training for practicing bin composting
  - Ban of plastics
  - Small steps like encouraging steel tiffins for lunch
  - Recyclables sold to scrap dealers
  - Organics composted
- Capacity building programme for students, teachers, sanitary workers, members of community development assistance





#### Matale, Sri Lanka

- Some schools declared as 'Zero Waste Schools'
- Schools and government institutions to serve as role models in segregation and 3R
- Final Local Event
  - Action plan of city for zero waste management
  - SWM planning for urban areas
- Way Forward
  - Replication to 22 more schools and all government institutions





# Partner City 7: Dhaka North City Corporation, Bangladesh



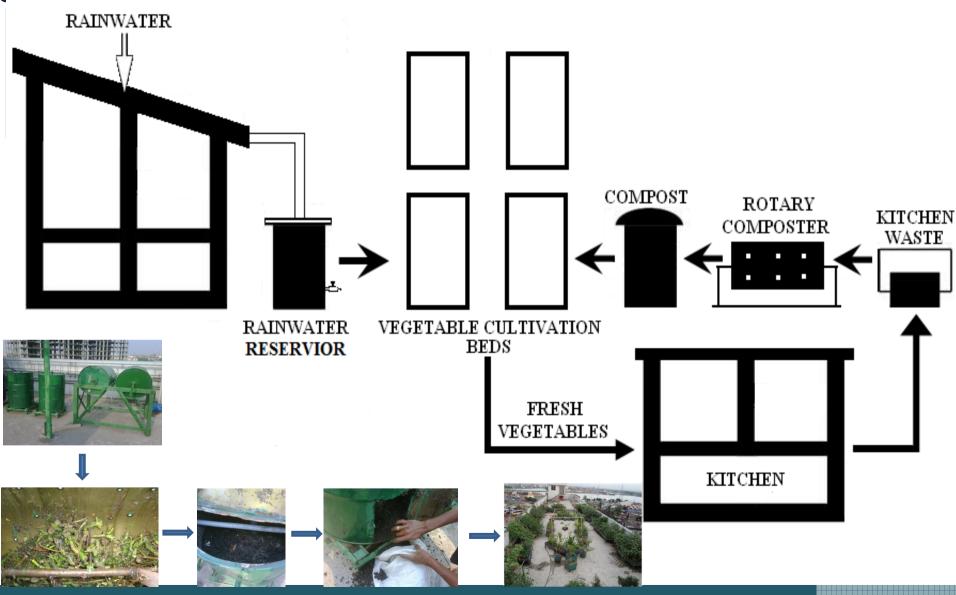
- Focus on segregation and behaviour change
- Intensive Mass Awareness Generation Program for sanitary workers, business owners, shop keepers
- Pilot Project
  - Banani Market Area (Primarily fruit, vegetable, fish and meta market)
  - Installation of street bins to reduce littering
  - Two bins for segregated wet and dry waste
  - Waste collection twice a day
  - Market and kitchen waste converted into compost
  - Rooftop composting





# Dhaka North City Corporation, Bangladesh





## Policy Linkage



Community support is vital – MSW policy at local government level must identify stakeholders and include a sustained IEC campaign for waste management

Segregation is a must for reducing, reusing and recycling waste. Successful waste treatment and processing is also dependent on efficacy of segregation

Pilot demonstrations indicate that solutions need to be city specific and in some cases locality specific; policy should allow local governments to identify solutions that fit local needs

Political support & policy directives are required to ensure tariff regulation to support O&M of MSWM systems

Policy support is needed to integrate informal sector and utilize their potential in waste segregation/recycling, thereby reducing the waste going to the landfill

## Way Forward



Preparation of Roll Out Strategy

Opportunity for more Indian Cities to move towards zero waste under the Swachch Bharat Mission

Opportunities of replication of zero waste initiatives in different cities of South Asia, with project cities acting as role models

Integration of zero waste management in municipal budgeting through action planning of SWM

Scaling up of pilot initiatives to cover entire cities through zero waste action plan implementation in the cities



## Thank You