



Training Module For Informal Sector Waste Recyclers

E-Waste

(2016)



*Empowered lives.
Resilient nations.*

CEE
Centre for Environment Education



Published by

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New Delhi, 2016

About Chintan Environmental Research and Action Group

We are a registered non-profit organization with a vision of inclusive, sustainable, and equitable growth for all. Our mission is to reduce ecological footprints and increase environmental justice through systemic change brought about through partnerships, capacity building at the grassroots, advocacy and research, and sustainable, scalable models on the ground.

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Introduction

This module is intended as a guide for people who work with informal wastepickers, waste recyclers and small junk dealers, commonly known as 'informal recycling sector'. It provides guidelines and creative training exercises for building wastepickers technical and functional skills so that they could lead an informed, dignified and confident life and use these skills to meet everyday challenges they face as wastepickers and efficiently perform their role in keeping cities clean.

Recycling in developing countries often takes place through a complex chain comprising a huge mass of workers involved in the informal sector. This sector includes waste pickers, small middlemen (kabarisi in India), itinerant waste collectors, and big waste traders. Their work includes picking out even the smallest scrap of recyclable waste, such as paper, cardboard, plastics and metals from the trash, and sell them to waste dealers who in turn sell them to big traders. Finally, they are sold to recycling factories.

They are not formally recognized and depend on recyclable waste mined out of the city's

dustbins, waste dumps, offices and other sources. Since they are not recognized, their work is virtually free for the municipality. Yet, at the levels of the wastepickers at least, many earn an equivalent of minimum wages or less. In India, there are approximately 15 lakh persons engaged in the job of wastepicking, amounting to 10% of the total wastepickers globally.

Hence, while recycling is carried out by the poor and offers them a livelihood, it is fraught with risk. The immediate burden of the toxic waste is borne by them since there are almost no satisfactory systems or designed facilities in place where work safety issues are addressed. Although waste pickers are the backbone of the waste collection process in, small traders are also important components of the chain. They buy the waste from waste pickers and sell it to big dealers who deal with specific items and materials, sorting, bailing and trading, playing the highs and lows of the market.

The informal sector of recycling works like a pyramid (Fig. 1). The first layer comprises several hundred thousand men, women and children in urban pockets who mine garbage heaps and bins for recyclable wastes like plastics, paper and metals. At the second layer come the small middlemen, often marginalized

in many ways themselves, who buy waste from the wastepickers or rag pickers. They in turn sell the waste to the third layer, comprising large buyers who own huge godowns.

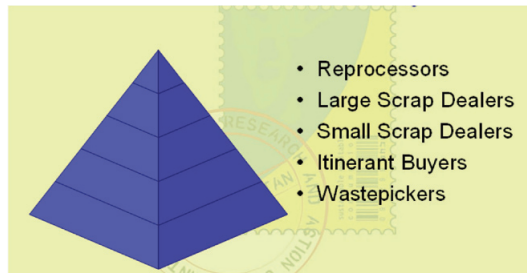


Figure 1: Structure of Informal Recycling Sector

For a comprehensive approach towards building sustainable, inclusive and equitable cities, informal recycling sector needs to have knowledge on legal aspects of their work, various legislations relates to waste sector, quality and safety at workplace along with work and life skills like work ethics, communication skills, health and hygiene and self confidence and self esteem. Figure 2 shows Chintan’s change model:

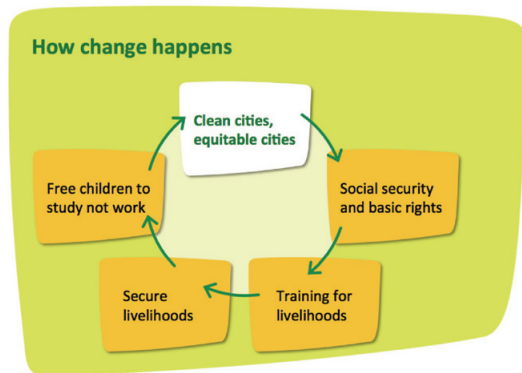


Figure 2: Chintan’s Change Model

The approach described is based upon evidences collected from various researches on waste recyclers traders and handlers as well as from Chintan’s first-hand experience with working with Safai Sena – an army

of cleaners – is a registered group of wastepickers, doorstep waste collectors, itinerant buyers, small junk dealers and other types of waste recycler.

Who can use this module?

We hope that those working with an interest in supporting informal sector waste recyclers will find this module useful. These might include:

- Program managers in agencies working on informal sector recycling programs and other informal sector programs
- Core members/group leaders of advocacy and support groups for informal sector waste recyclers
- National stakeholders, including the municipalities and the Department of Environment
- Informal recyclers’ collectives to train their members

The module may also be used as a reference for those wishing to design their own training program for other informal sector workers other than waste recyclers.

Structure of the Module

The main objective of this module is to gear up the informal sector recyclers to face the challenges they may face with the changing landscape of e-waste collection and management.



To inform participants about e-waste, its types and how it differentiates from the other types of wastes. To raise awareness about rules on e-waste.





To sensitize them about the risks of improper handling of e-waste and pollution caused by wrong handling. To appraise informal sector

waste workers about potential challenges that they may face with formalization of e-waste sector. To help participants prepare for the potential role they can play in the e-waste collection chain to augment their livelihoods.

Organization of the Modules

Each module is divided into session plans. The numbers of session plans differ for each module. Each session plan is in-turn divided into six content sections represented by an icon:

	Learning outcomes	This section specifies what learners will know or be able to do as a result of activities in the session.
	Set Induction	This includes ideas about getting the learners ready and inducing them into the right mind-set.

	<p>Materials</p>	<p>This section gives a list of materials that the facilitator should prepare before starting the session.</p>
	<p>Activity</p>	<p>This includes step-by-step activities to meet the learning outcomes planned for the session.</p>
	<p>Note for Facilitator</p>	<p>This provides specific advice for the session including suggested sequencing, timing, resources and questions to ask.</p>
	<p>Closure</p>	<p>This section provides a fitting conclusion and context for the participant learning that has taken place.</p>

Methodology

The activities in this module are based on principles of adult experiential learning. The underlying principle is that much of the content will come from the participants and that the module will serve as a framework for drawing out their experiences. Participants and facilitators commit themselves to engage in a process of mutual teaching and learning.

The activities in this module are designed for adult learners and are based upon following adult learning principles:

Principle of Active Learning: The activities involve active participation of learners through discussions, games, role-plays and feedback. Thus creating more learning than passive listening or reading.

Principle of Relevance: Every activity has been contextualized to the settings in which informal sector recyclers live. They aim at providing adults with guidance on solving problems and their pressing issues.

Principle of Previous Experience: New information has to be linked to previous knowledge and experience or it will not be remembered. The sessions designed in the module allow participants time to discuss with each other how the new information connects with what they already know. There are specific pointers for the facilitator to help the participants see the connections.

Principle of Self-Learning: Adult learners have some strong beliefs about how they learn. These beliefs, whether accurate or not, can interfere or enhance their learning.

Every session begins with set induction that explains why the audience should participate in specific activity and how the process as well as content benefits their learning.

Principle of Alignment: All the content covered in the module are aligned with the learning outcomes and activities. Learning outcomes are carefully decided and written and the activities are aligned to meet the outcomes.

Principle of Fun: Learning should be fun. The sessions and activities are designed to make the learning fun for the participants. The module is activity based and power point presentations are mostly used to summarize or reinforce the topic.

A great deal of thought has gone into the selection and writing of each activity. Each activity included in the module was chosen because it was felt that it best achieved the objectives for the session. They use a variety of tools to develop participants' knowledge including case studies, role-plays, small group work, brainstorming and other learning techniques. A range of methodologies has been used in this module that align with the principles of the experiential learning approach. With an emphasis on interactivity among participants, the course incorporates the following techniques and methodologies:

- ✓ Individual exercises and reflections
- ✓ Stories and scenarios
- ✓ Small and large group discussions
- ✓ Games and role-playing exercises
- ✓ Team projects and
- ✓ Presentations

Facilitator Prerequisites

Facilitate means 'to make easy'. Facilitation is the glue that holds a group together. It is

about empowering others. The role of the facilitator is not only to pass on information, but also to provide a learning environment in which participants can share their experiences and become comfortable with new ideas/information. Facilitated learning is based on the notion that people learn best in an atmosphere where they interact with others, are encouraged to ask questions, exchange ideas, and feel supported by the facilitator.

This module assumes that facilitators are comfortable with highly interactive techniques and that they have some expertise in classroom management, creating effective learning environments, and facilitation skills. While facilitating the sessions in this module, a facilitator's role is to:

- ✓ Explain the learning objectives
- ✓ Help the group set ground rules and keep them
- ✓ Encourage and guide participants to think critically
- ✓ Listen to participants' comments, questions and feedback
- ✓ Keep focus and keep things moving
- ✓ Help with observations and analysis
- ✓ Help participants arrive at appropriate conclusions
- ✓ Encourage participants to contribute to the discussion
- ✓ Help participants to reach an appropriate consensus
- ✓ Build trust
- ✓ Help identify opportunities and potentials
- ✓ Summarize the discussion or ask others to do so

Ice-Breakers

Icebreakers help to set the scene, relax the environment and engage the participants, as well as creating the first impression for the entire session. Successful use of icebreakers can grab the attention of trainees and assist them in full participation. They give participants the opportunity to find out a little more about each other thereby creating a degree of familiarity before starting on the main session objectives. By doing this, participants are more likely to be in a mindful state and open to learning.

Given below is a list of icebreakers that could be used to build create a relaxed atmosphere and encourage each participant to introduce aspects of himself/herself. Facilitators are encouraged to choose the icebreaker carefully considering the environment and group dynamics.

1. Names and Actions

Gather the participants in a circle. Each participant announces their name and a corresponding action. The action called must begin with the same letter as the first letter of each name. E.g. Mera naam Nazeer hai aur mujhe naachna accha lagta hai. The person calling this action must actually do the action.

Variation:

The game can be used to Help participants remember each others' names. Continue the game by asking participants to announce So that members of the group remember each other's names, the game can be continued by asking members to announce someone else's name and the corresponding action. This will take place when you have gone around the group at least once. So for example: "Mera naam Nazeer hai aur mujhe naachna accha lagta hai. Mujhe Rashid se milkar accha laga. Rashid ko rassi koodna accha lagta hai". Allow members to randomly choose anyone in the

group, but make sure that everyone chooses someone different each time.

2. Action Chain

Instruct the participants to stand in a line, all facing one direction, looking at the person's back in front of them. Begin the game by going to the back of the line and tapping the last participant on the shoulder. Only that participant would turn and watch you perform an action. Once he/she has witnessed the action, he/she must tap the next person on the shoulder who will then watch the action as exactly as possible. Continue the process until all participants have shown the action to the participant in front. The final participant should demonstrate what they saw to the entire group, as well as say what they think the action is. The person who began the action should re-enact the initial action to show what has changed.

Ideas for the actions are:

- Washing a car
- Cleaning an elephant
- Throwing a ball
- Chopping vegetables

3. Name Catch

Gather the group in a circle. Throw a ball at a participant who tells his/ her name and where they have come from. Moving clockwise, all participants take turns to tell the same to the whole group. After a round of introductions, pass the ball again to a different participant. The participant must say their own name first, and then as they throw the ball, call out the person's name to which they are throwing the ball.

E.g. 'Mera naam Mansoor hai. Main ball Rehaana ko doonga.' Then Rehaana would continue by saying 'shukriya Mansoor, Mera naam Rehaana hai aur main ball Nizam to doongi'.

Ensure that everyone is fully included in this game, and that the group knows each other by the end of the game. Control the speed of the game, and increase the pace by making sure that participants don't pause before saying someone's name.

4. Animal Name

Create sheets of paper with names of different animals and birds. The number of sheets should be equal to the number of participants. Attach one sheet of paper to every person's back without allowing him/her to see the sheet. Ask the participants to go around the room and ask questions to figure out what their 'animal name' is. Questions may only be answered with 'Yes' or 'No'. Once the participant correctly guesses their animal name, they may sit down. Ensure that chosen animals are very well known in order to make the game plausible.

5. Sweet Talk

Assemble the participants in a circle. Pass a bag of sweets around the group. Tell them that they make take as many sweets as they like, but they are not to eat them. Once everyone has taken some sweets, tell participants that they must now tell the whole group one thing about themselves for every sweet they have taken. This can be anything from where they live to their favorite food. Go around the circle, allowing each member his or her turn to talk. Once they have finished, allow them to eat their sweet.

6. Name pictures

Ask the participants to draw a picture for their name e.g. for Pushpa they could draw a flower. Ask them to write their names on the portrait. Fold these name pictures and put them in a container. Ask the participants to pick any picture from the container and guess the name. The person who drew the card would

verify the name and ask the other participant's name. Ask the participants to display the name pictures on a wall (board) in the room. If possible stick the photographs next to each name picture. Also write each participant's name clearly in Hindi. Give the participants time to move around and have a look at the picture.

7. Suddenly

Start a story with a sentence that ends in SUDDENLY. Ask the next person then to add to the story with his own sentence that ends in SUDDENLY. Continue the story until everyone has contributed. Record it and play it back. For example; 'Yesterday I went to the zoo and was passing the elephant enclosure when SUDDENLY....'

8. Word link

This is a word association game. Ask the group to sit in a circle. The first person starts with any word they wish i.e. red. The next person repeats the first word and adds another word which links to the first i.e. tomato. The next person repeats the previous word and add another word link i.e. soup, and so on. To keep this moving, only allow five seconds for each word link.

9. One minute please!

The aim of the game is to talk for one minute on a given subject. Announce the topic and a member of the group is randomly selected to speak for one minute. Use a pack of cards to randomly select i.e. person who draws the lowest number. Choose subjects to stimulate the imagination and which may be amusing. Put a stopwatch on each person to see how long they last before drying up! Subjects might include, my earliest memories, my favourite computer game, why beans are good for you, 10 things you can do with potatoes, Alligator wrestling, pre-millennialism (no, not really!)

Sharing Expectations

It is always a good idea to move from introductions to reasons why everyone has come to the training programme. The following exercise is very useful for getting to know the different reasons participants have for attending the training programme. It also gives the facilitator information about the special abilities and knowledge present in the group. Understanding expectations will give facilitator the opportunity to reassure participants that the trainers will strive to meet expectations, and to clarify any misconceptions about the training.

1. Divide a chart paper in two sections.
2. On left side write, "Why I am here?" Ask each participant to think of two reasons why they have come for the training.
3. Write them on the chart and read out each statement. Explain which of those expectations would be fulfilled through the program and which of those are beyond the scope of work of the current training.
4. On the other section write "fears and concerns". Ask participants - What fears did you have about coming to this training?; What concerns do you have about this training.

This exercise provides excellent opportunities to empathize with trainees' needs, and give reassurance by sharing how the training does/ does not relate to their concerns or how the training might help them overcome their fears and concerns. Be prepared to deal with issues such as:

- Will others laugh at me if I ask silly questions?
- Will I really learn about the things I want to know?
- What will the trainers be like?
- Will the food be to my liking?

Ask the participants for solutions/response. Ask the participants what you could do to reduce their concerns or fears.

Establishing Group Norms

Ground rules (also called group norms) are guidelines developed by the participants to be used within the workshop setting. Ground rules help create a safe environment and enable tasks to be accomplished efficiently. They serve as a tool for detecting and correcting unhealthy group interactions and evolving toward productive and healthy interactions. Ground rules should be specific, visible to everyone (posted in the room), derived with group input and then agreed to by all group members, and malleable (in other words, adaptable as needed throughout the workshop). Ground rules should follow some basic principles regarding their creation and use.

Process of setting Group Rules:

1. Explain to the group that this is their time together and that it is useful for everyone to agree to some ground rules. You may make some suggestions such as punctuality, being non-judgmental or giving everyone a chance to participate and to speak. Explain them that these rules are essential to ensure that the sessions happen smoothly and everyone works better as a team.
2. Explain them that during our sessions we would only focus on positive behaviours and therefore the rules will be about what we must do instead of what we must not.
3. If the participants are having difficulty thinking of rules, prompt them by using scenarios such as the example below: "In a session Hina and Pooja talked about a personal problem. After the session, Pooja heard Hina giggling with other friends about the session and telling them about

the things Pooja had said. She is very upset.”

4. Record all responses on a flip chart. When the group has listed all of its ideas, ask, “Can we agree on these ground rules?” If any ideas are not agreed on, the group needs to discuss them until it reaches agreement or decides to eliminate one or more of the ideas.
5. Once the group norms have been decided, post them. You can refer to them as needed if the group slips into behaviours that do not support effective teamwork.

Recommended Ground Rules

- Respect: Everyone should pay attention to the person who speaks and respect her/his ideas.
- One at a time: Only one person should speak at a time.
- Confidentiality: What is shared in the group shall remain in the group.
- Openness: Everyone will try and be as open and honest as possible without discussing personal and private issues or lives. Everyone will avoid using names and places while sharing their experiences.
- Non-judgmental approach: No one will put down, make fun of or tease another person about her/his beliefs and ideas.
- Keep time: Stick to the time schedule set for the course

Energizers

Energizers, as the name suggests, are used to revitalize and awaken trainees. Ideally they can be integrated into training after a large amount of information has been delivered, or after a meal when participants

may be feeling sluggish and tired. Energizers are also a fantastic way to switch attention from one topic to a completely different one.

Following are examples of some energizers that could be used with the participants:

I. My Spot

Ask participants to walk around the room, identify a particular ‘spot’ that is ‘theirs’ and stand there. Ask participants to move around the room while you give instructions like “Say hello to someone wearing yellow”; “clap twice”, “skip thrice”, “jump and clap” and so on. Participants have to complete the commands and on “stop” command go back to their ‘spot’ as soon as possible. Continue this energizer for no longer than 5 minutes.

II. Laughter therapy

This energizer is useful after a stressful discussion or if the discussions or activities lead to tensions among the group members. Tell the participants that they will go through a special therapy called the ‘Laughter therapy’. Start by saying ‘Ha!’ and get the next person to repeat your ‘Ha’ adding one of his or her own. Participants repeat what their neighbor says and add another ‘Ha!’ In this way, people are ‘made’ to laugh and very quickly everyone will be laughing.

III. Touch blue

Clear the room of any obstacles and ask the group to stand in a circle. As you say “Touch blue!”, participants are to rush and touch one thing blue. Change the command to ‘touch red’ and repeat the activity for 5 minutes with different colors.

IV. Wake up in the jungle

Ask participants to silently think and select a jungle animal. Ask them to think: what action do you think it makes when it wakes up?

What sound does it make? Select a participant to start the game. The participant starts by performing waking action of the a selected animal and makes its sound while waking up another animal (participant) in the jungle. The two go making their own sounds and wake up the next participant and so on. Explain that this activity is a go-round called waking up in the jungle. Continue until all animals in the jungle wake up.

V. Snake, dog, cat

Divide the participants into two groups and ask them to stand at opposite sides of the room. Give action and sounds for snake, cat and dog. Let participants practice these sounds for a minute. Ask what would happen if a snake met a cat (the cat would kill the snake). What would happen if a snake met a dog (the snake would kill the dog). What would happen if a dog caught a cat (the dog would kill the cat). Ask both groups to decide what they are on the count of 5. Then on being said go, they do the action and sound. Keep scores and continue the game for 5 minutes.

VI. Barkha rani

Tell the group that they will make rain. Explain that through a traditional set of actions, they would create the sounds of rain hoping for a plentiful crop and future growth. Ask the group to do five action sequence:

“Rub your hands together
Half of the group snap fingers slowly
Other half snap their fingers quickly
Lightly slap their thighs
Clap thrice”

Ask participants to repeat the action together.

Splitting groups

The way the trainer splits the main group into smaller working groups can be done in a variety of ways.

I. Picture Cards:

Hand out cards with images on such as plastics, glass, cardboard, electronic waste. Ask participants to find someone with the card that goes with their card. Have two of the same cards, if it is a paired activity, three for groups of three and so on. This could be conducted with any category – fruits, animals, cars etc.

II. Numbering

Simply ‘count off’ the participants into small groups, i.e. 1, 2, 3, (or 4 if 4 groups will be required.) if the groups do not need to be balanced in any way. People call out or are assigned numbers in sequence, up to the number of groups needed (e.g. for four groups, 1, 2, 3, 4; 1, 2, 3, 4, etc.). Then all the 1s form one group, the 2s another, and so on. Alternatively, use letters of the SESSION alphabet or names of fruit. Be clear after you have split the groups where each group should work.

III. Sinking ship

Clear a large space, climb onto a chair and explain that you are the captain of a ship and the ship is sinking. Ask everyone to clap and repeat after you ‘The ship is sinking, the ship is sinking’. Explain that the only way for people to save themselves is to jump into a lifeboat containing a precise number of people – you will call out the number required. Start the chorus and then yell out a number e.g. eight. Everybody should now rush to find seven other people to form a lifeboat. This should provoke much noise and laughter. Repeat a few times with different numbers until you feel the group is ready to stop, and then yell out the number you want for small group work.

IV. Sorting Hat

Give each team a name, put the names on slips of paper and put them into a hat. Have each

participant pull a team name from a hat. They join the teams whose names they pulled.

V. Pairs

For making pairs, put a slip on each participant's back with one of a famous pair: cricket bat and ball, football and boots, cup and saucer, etc. Ask participant to find the other of the pair.

Giving instructions

Each session has step-by-step instructions on how to conduct the listed activities. To successfully conducting these activities, it is important to provide the instructions to the

participants clearly. Following are some tips on how to give instructions well:

- Signal that you are going to give instructions.
- Say the instructions a minimum of three times.
- Get participants to explain back to you what they have to do.
- Give step-by-step instructions to the participants and allow them to complete each step before giving instruction for the next step.
- Practice giving instructions before the session.

Module: E-waste



Overview

Electronic waste (e-waste) is an emergent category of waste worldwide and has become a cause for concern globally. In India in particular, consumption of electronics has fueled e-waste generation, and with this, several dilemmas. The first is how to handle so many highly toxic elements found in e-waste? The second is how to integrate the informal sector, currently key actors in trading, dismantling and extracting elements from e-waste, into a new handling system, so they don't lose their livelihoods? The third is who will pay for the cost of improved handling?

Chintan has been part of this debate since 2006, when we first began to explore the issue from the perspective of the informal recycling sector. At that point, much of the discussion was related to imports of e-waste. It was easy to find imported computers strewn across peri-urban and urban India, waiting to be dismantled, and copper, gold and plastics extracted. But that debate has changed. The problem of e-waste is now clearly from within India. In the last 7 years, domestically e-waste production has grown by almost 8 times¹. India has to face the underbelly of its own consumption. Most often, the environmental and health costs of such consumption are internalized by the informal recycling sector, who breathe in the hazardous fumes and dust from the handling process. This is not the work of an external agent sending toxic trash to India. It is what India is doing to its own recyclers and the poor. E-waste is not a concern for India alone. Across the world, e-waste and e-waste recyclers in the informal

sector are receiving increased attention. As the issue becomes mainstream, more cities, organizations, agencies will seek solutions.






This module is meant for the trainers who want to train informal e-waste handlers i.e. kabadiwalas, e-waste traders, itinerant buyers etc about the harmful effects of e-waste, e-waste rules and way forward. This module also talks about the growing role of informal sector recyclers in the E-waste handling chain and ways in which they should adapt in order to cope with these changes.

Learning Outcomes





At the end of this module participants will be able to:


- Define E-waste
- List different types of e-waste
- Differentiate between e-waste and other types of waste
- Understand the health hazards related to unsafe handling of e-waste
- Discuss e-waste rules and regulations in the country.
- Analyse the changing landscape of e-waste recycling and how it impacts their livelihoods
- Gain insights on livelihood augmentation avenues available to them in the e-waste sector.
- Discuss issues they may face while working in the e-waste recycling chain and ways to address those issues.

SESSION 1: E-WASTE AND ITS TYPES





	<p>At the end of this session participants will be able to:</p> <ul style="list-style-type: none"> ✓ Understand the meaning of e-waste ✓ List different types of e-waste 	
	<p>MOD10/PPT Section: Introduction to E-waste, old magazines, scissors</p>	
	<p>Ask participants to replace their surname with the electronic items starting with any letter of their surname e.g. Ravina Tandon = Ravina Toaster.</p> <p>This activity will increase their knowledge about e-waste items. In addition to this some may replace their surnames with the electronic items which are not considered as e-waste i.e. Bulb, tube light, battery, medical devices, CD/DVD, which is an opportunity for the facilitator to build on this information while talking about what is e-waste.</p>	<p>10 min</p>
	<p>Divide participants into 5 groups. Give each group some magazines and scissors and ask them to cut out pictures of items they think are e-waste.</p> <p>Ask each group to share their pictures with the whole group and brainstorm if the item would be categorized under e-waste or not.</p> <p>Show pictures from MOD10/PPT Section: Introduction to E-waste. Point at each picture and ask if the item is e-waste or not.</p> <p>Using remaining slides from MOD10/PPT Section: Introduction to E-waste, explain what e-waste is and why it is important to learn about e-waste.</p>	<p>20 min</p> <p>30 min</p> <p>5 min</p> <p>15 min</p>
	<p>Ask the group if there is anyone in the group who works with e-waste. (If there is no one, ask them to think about someone they know). Ask them to reflect if they know of companies who should be helping them collect e-waste. Explain how as per government regulations, which they will learn about in the next session, the companies must recognize waste collector's role in e-waste recycling and help them collect e-waste</p>	<p>10 min</p>

SESSION 2: E-WASTE RULES AND REGULATIONS

	<p>At the end of this session participants will be able to:</p> <ul style="list-style-type: none"> ✓ Discuss government’s regulations on E-waste ✓ Critically evaluate the changing role of waste collectors in the e-waste handling chain ✓ Identify opportunities of working in e-waste sector. 	
	<p>MOD10/PPT Section: E-waste regulations, Chart Paper, Cue Cards, Board Pins, Board, Nylon rope bundle</p>	
	<p>Ask the participants to arrange themselves in anyway they think correct. Allow participants to arrange themselves. Ask them the criteria they used (height/age/gender). Tell them to arrange in a different manner by giving a rule e.g. Arrange as per age.</p> <p>Ask them what took longer- a time when they had to think of criteria, arrive at consensus and arrange the group or when they were given a rule.</p> <p>Explain that the e-waste rules and regulations took years for experts to think about the best practices while handling waste. Tell them that they will learn about some of these rules today.</p>	<p>15 min</p>
	<p>Show MOD10/PPT Section: E-waste regulations and explain the e-waste rules.</p> <p>Activity:</p> <p>Take cue cards and write down some common e-waste disposing ways. Place these cue cards on chart paper and write a defined score beneath each cue card (on chart paper) as per its effect on the environment.</p> <p>Now ask participant to come and select what they actually do with their e-waste and what would they like to do with it.</p> <p>Ask them to take the cue card of their choice pasted on chart paper with the help of board pin. Each time they select and take the cue card they find scores both negative and positive. The scores will tell them the environment friendly way of disposing there e-waste.</p> <p>After completion of the exercise, explain e-waste chain pre and post e-waste rules by. Show MOD10/PPT Section: Changing landscape.</p> <p>Game:</p> <p>Hold one end of the rope and pass rest of the rope round to some other person randomly. Repeat the activity until a network of rope has formed. Hold the network for a while and leave the end you are holding without informing anyone.</p>	<p>15 min</p> <p>20 min</p> <p>15 min</p> <p>15 min</p>

	<p>Debrief: This activity explains the importance of network in any system. Let's assume this network as the e-waste chain system after the rules and we all as the various components of this chain. If anyone of us leave the end of rope the whole system got collapsed which can be understand as if any of the component don't work legally the whole system could collapse. This activity shows the need of commitment and trust in the system.</p> <p>After the activity explain them about Chintan which has been authorized by the Delhi Pollution Control Committee to collect the e-waste in Delhi. Inform them about the Chintan's collection centre located at GT Karnal Road industrial area.</p>	
	<p>In the end, invite them to join with Chintan. Highlight that to be a part of this chain in a legal manner it is important for them to obtain Chintan IDs, attend trainings on how to get e-waste from training generators.</p>	<p>10 min</p>

SESSION 3: SUMMARISING

	<p>At the end of this session participants will be able to:</p> <ul style="list-style-type: none"> ✓ Demonstrate an understanding of e-waste handling chain. 	
	<p>Divide the participants into 4 groups and ask them to prepare a roleplay keeping in mind new e-waste rules. Assign the following characters to all groups: Household, Organization, cycle kabari, MCD officer, Pollution Control board, Recycler, Collection centre</p>	<p>25 min</p>
	<p>Ask each group to present their role plays. Facilitate correct understanding at the end of each role play</p>	<p>60 min</p>
	<p>Congratulate them on understanding the correct e-waste handling chain and encourage them to think of e-waste as a means to augment their livelihood by joining Chintan.</p>	<p>5 min</p>

Annexure

Slide 1:



Slide 2:

ई-वेस्ट क्या है?



- ई-वेस्ट (प्रबंधन) नियम, 2016 के अनुसार "बिजली और इलेक्ट्रॉनिक उपकरण के पूरे या उनके हिस्से जो उपभोक्ता या थोक उपभोक्ता द्वारा कचरे के रूप में खारिज कर दिए गए हों या फिर निर्माण, नवीकरण और मरम्मत की प्रक्रिया के दौरान खारिज कर दिए गए हो"



Slide 3:

क्या ये ई-वेस्ट हैं?



The image displays several common household electronic waste items: four Duracell batteries (two AA and two AAA), a Sony boombox, a Cuisinart toaster, an iPhone, and two Havells compact fluorescent light (CFL) bulbs. The items are arranged on a light green background with a faint recycling symbol and a hand holding a flame. The text 'क्या ये ई-वेस्ट हैं?' (Are these e-waste?) is written in Hindi at the top.



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Slide 4:

ई-वेस्ट एक समस्या क्यों है?

तेजी से बदलती तकनीकें

उपभोक्ताओं द्वारा इलेक्ट्रॉनिक उत्पादों की खरीदी में वृद्धि

अधिक ई-वेस्ट

भराव वाले स्थानों पर अधिक खतरनाक सामग्री

मानव स्वास्थ्य को बढ़ता खतरा

ई-वेस्ट है:

- विषाक्त और खतरनाक
- तेजी से बढ़ रहे हैं
- मानव स्वास्थ्य के लिए हानिकारक



Slide 5:

जब हम "खतरनाक" कहते हैं तो इसका क्या मतलब होता है?



तोड़कर: लेड का मुक्त होना



जलाने से: विषाक्त पदार्थों का मुक्त होना



धातु निष्कर्षण: सायनाइड और एसिड के प्रयोग से

Slide 6:

ई-वेस्ट विषाक्तता

ई-विषाक्त पदार्थ

Dangers Of Toxic Deposits In Your Body

- Blurred Vision
- Memory Loss
- Acid Reflux & Gird
- Central Nervous System Disorders
- Increased Risk Of Breast Cancer
- Unexplained Weight Gain
- Back Pain
- Low Testosterone In Men
- Irritable Bowel Syndrome (IBS)
- Joint Inflammation And Stiffness
- Increased Risk Of Colon Cancer

पकाना

धूल

त्वचा से संपर्क

मिट्टी

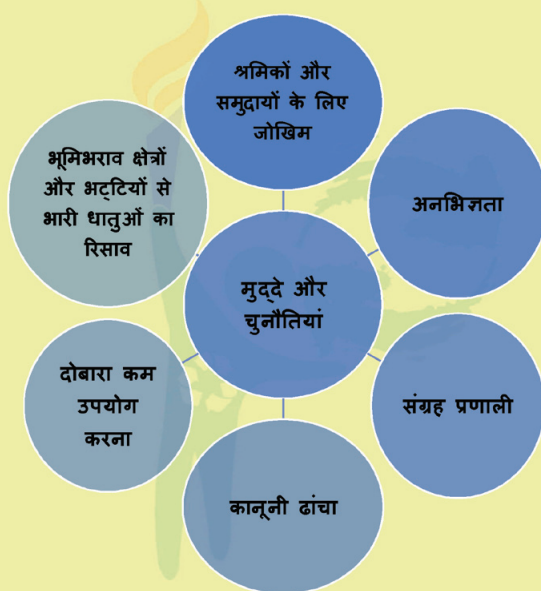
पानी

जलाना

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Slide 7:

ई-वेस्ट: मुद्दे और चुनौतियां



Slide 8:

ई-वेस्ट को उपचारित करने के उपाय

-
- रिसाव समस्या
 - मृदा एवं जल स्रोतों का संदूषण
 - जलाने से जहरीला धुआं उठना
 - भारी धातुओं की वायुमंडल में उठती भभक
 - मूल्यवान ट्रेस तत्वों की हानि।
 - डाइआक्सिन का निर्माण
 - मूल्यवान सामग्री वापिस प्राप्त करना
 - आसपास के वातावरण को सुरक्षित रखें
 - भूमिभराव क्षेत्र का संरक्षण करें

Slide 9:

ई-वेस्ट: नियम और अधिनियम



- पर्यावरण और वन मंत्रालय (MoEF) द्वारा जारी किए गए ई-अपशिष्ट (प्रबंधन) नियम, 2016, 1 मई, 2011 के बाद से प्रभावी हैं।
- इन नियमों को ई-वेस्ट (प्रबंधन) 2016 नियम के अंतर्गत संशोधित किया गया है।
- ये नियम एक अक्टूबर 2016 से लागू हुए।

Slide 10:

पुराने और नए नियम में क्या अंतर है?

2011 के नियम

- निर्माता की जिम्मेदारी को बढ़ाया गया (EPR)
- अनाथ उत्पादों
- खतरनाक पदार्थों के उपयोग में कमी
- संग्रह केंद्र
- अनौपचारिक क्षेत्र में शामिल किया जाना (परोक्ष रूप से)
- जुर्माना और कारावास

2016 के नियम

- निर्माता, व्यापारी, नवीकरण करने वाले और निर्माता जिम्मेदारी संगठन (प्रो) तक की प्रासंगिकता को बढ़ाया गया।
- खतरनाक पदार्थों के उपयोग में कमी
- कॉम्पैक्ट फ्लोरोसेंट लैंप (सीएफएल) और पारा युक्त दायरे में अन्य लैंपों को इसके दायरे में लाया गया
- संग्रह उत्पादकों की जिम्मेदारी है। इसके लिए अलग से प्राधिकरण की आवश्यकता नहीं है।
- नियम के उल्लंघन के लिए वित्तीय दंड।



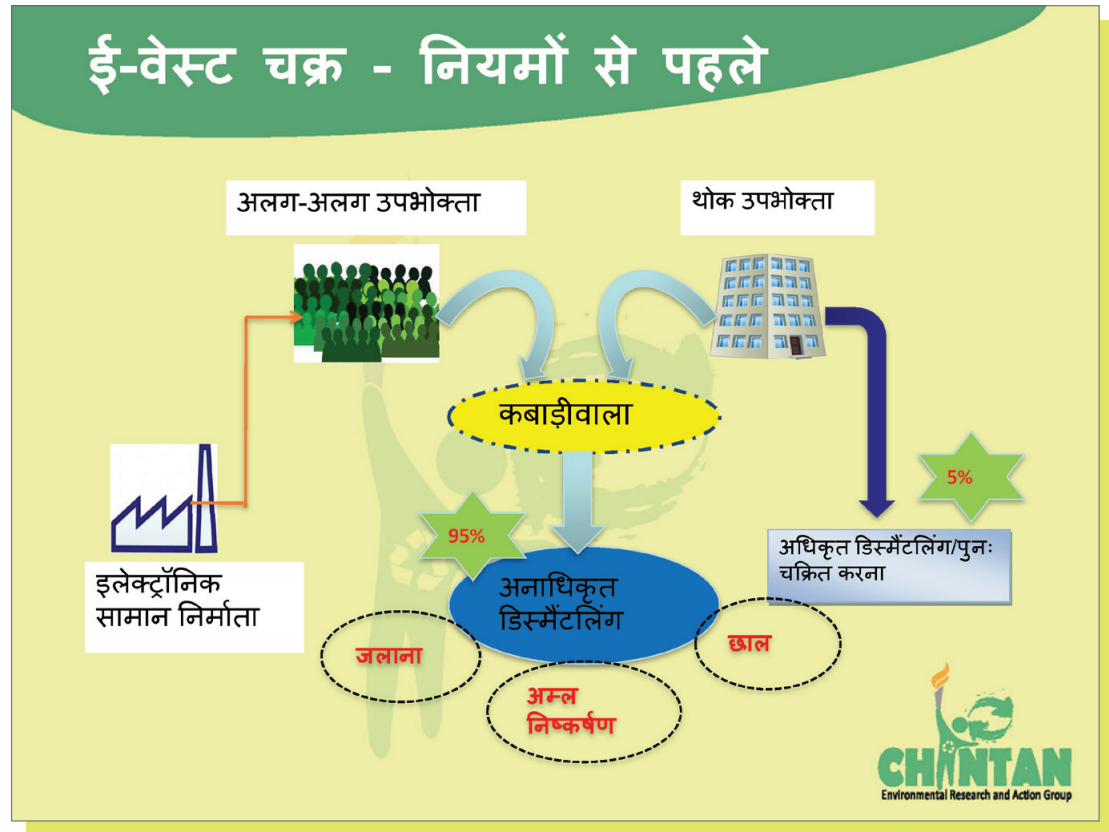
Slide 11:



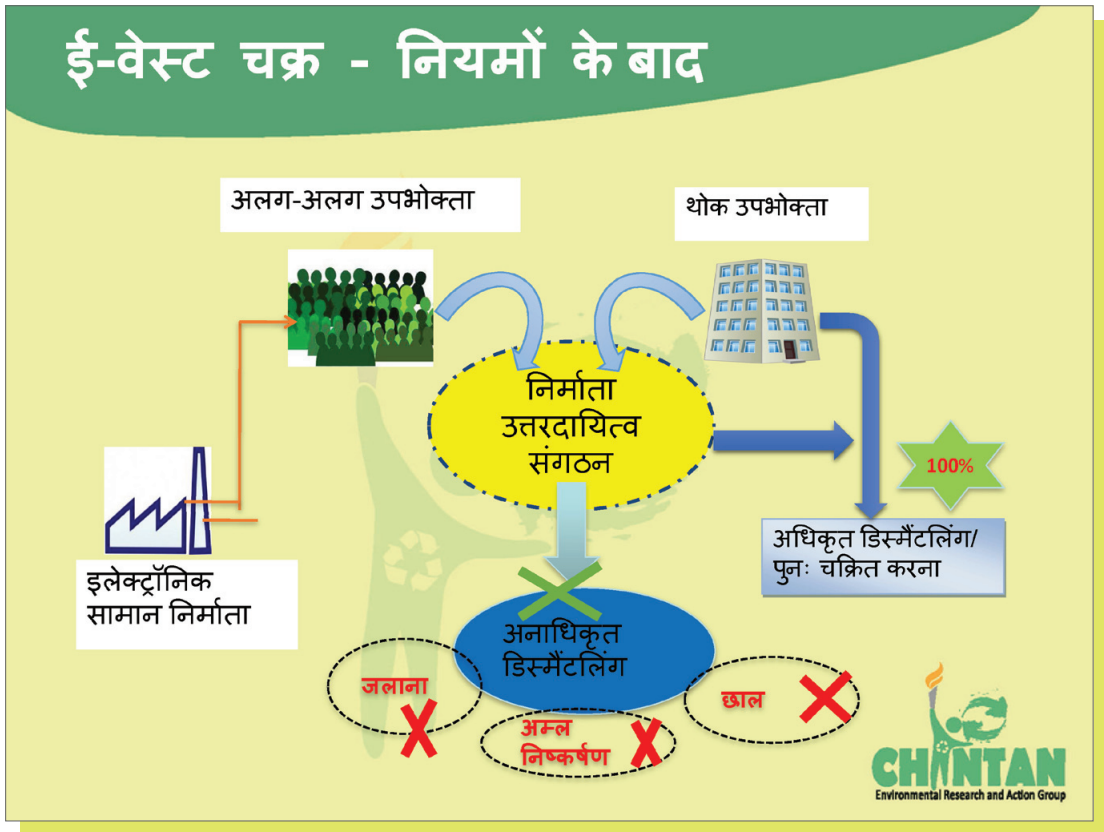
नियमों से पहले और बाद में
ई-वेस्ट श्रृंखला

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Slide 12:



Slide 13:



Slide 14:

आगे क्या?

- वैधता प्राप्त करना

1. लंबी प्रक्रिया
2. निवेश

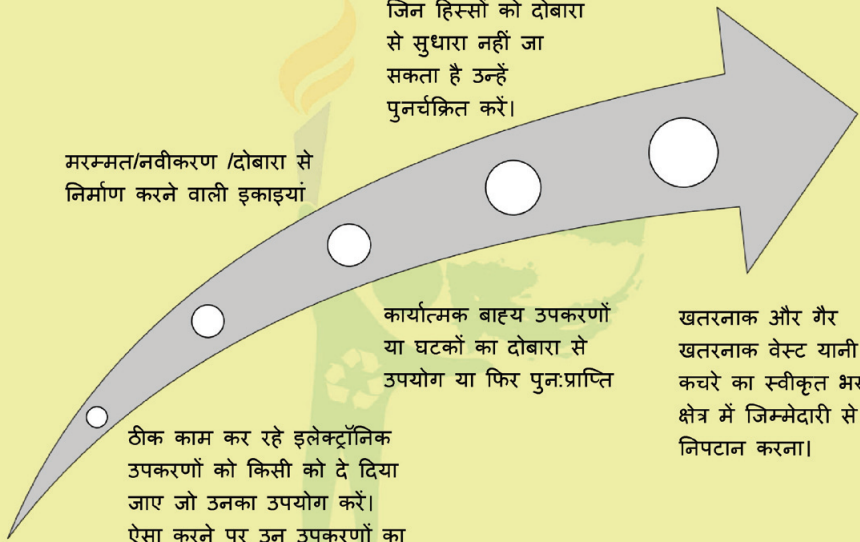
- वैध लोगों के साथ जुड़ें

1. विश्वास
2. विश्वसनीयता
3. प्रतिबद्धता



Slide 15:

ई-वेस्ट सतत प्रबंधन पदानुक्रम




मरम्मत/नवीकरण /दोबारा से निर्माण करने वाली इकाइयां

जिन हिस्सों को दोबारा से सुधारा नहीं जा सकता है उन्हें पुनर्चक्रित करें।

कार्यात्मक बाह्य उपकरणों या घटकों का दोबारा से उपयोग या फिर पुनःप्राप्ति

ठीक काम कर रहे इलेक्ट्रॉनिक उपकरणों को किसी को दे दिया जाए जो उनका उपयोग करें। ऐसा करने पर उन उपकरणों का दोबारा उपयोग संभव होगा।

खतरनाक और गैर खतरनाक वेस्ट यानी कचरे का स्वीकृत भराव क्षेत्र में जिम्मेदारी से निपटान करना।



Slide 16:





*Empowered lives.
Resilient nations.*

CEE
Centre for Environment Education

