

A  
**GUIDE**  
TO EMPOWER  
**INFORMAL WASTE PICKERS**



HAND IN HAND INDIA





# A GUIDE TO EMPOWER INFORMAL WASTE PICKERS



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*Published by*

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## Co-Founder's Message



Dear Supporters,

At Hand in Hand India, we are committed to fostering dignity and respect for all individuals, especially those who play a crucial role in maintaining our environment. It is with great pride that we announce a new nomenclature for informal waste pickers. From now on, we will refer to them as **"Recycle Guardians."**

Why 'Recycle Guardians'?

The term "Recycle Guardians" highlights the essential role these individuals play in our society. They are not just waste pickers; they are protectors of our environment, tirelessly working to recycle materials and reduce waste. This new name acknowledges their critical contributions and underscores their importance in promoting sustainability and environmental health.

Hand in Hand India is dedicated to empowering our Recycle Guardians through comprehensive engagement activities, training programs, health and safety education, financial literacy, entrepreneurship and vocational skills development. We aim to provide them with the tools and knowledge needed to lead safer, healthier, and more economically secure lives.

We invite you to join us in embracing this new nomenclature and recognizing the invaluable work of our Recycle Guardians. Together, we can cultivate a culture of respect and appreciation for those who significantly contribute to environmental sustainability.

Thank you for your continued support and partnership in our mission to create a more inclusive and sustainable future for everyone.

Warm regards,



**Dr. Kalpana Sankar**  
**Co-Founder & Chairperson**  
**Hand in Hand India**



# Foreword Message



Dear Supporters,

I hope this message finds you well.

I am pleased to share with you our latest initiative to empower informal waste pickers, now proudly referred to as "Recycle Guardians." As part of our commitment to enhancing their skills, safety, and economic opportunities, we have developed a comprehensive guide tailored specifically to their needs.

The guide includes basic literacy, numeracy, financial literacy, environmental impact of waste picking and promotion of sustainable waste management practices, behavioural change with focus on eliminating child labour, regular practice on water, sanitation, and hygiene (WASH), gender inclusion, basic rights, occupational health and safety practices associated with waste picking at work, recyclable waste value chain, materials sorting skills, eco-friendly waste management techniques and the importance of recycling and the use of digital tools.

We believe that through education and empowerment, our Recycle Guardians can continue to play a vital role in environmental sustainability and marine ecosystem while achieving a better quality of life for themselves and their families.

Thank you for your continued support in our mission to create a more inclusive and sustainable future.

Warm regards,



**Krishnan. N.**  
**Managing Trustee**  
**Hand in Hand India**



# Foreword Message



Dear Supporters,

I had the pleasure of going through the excellent publication prepared by Hand in Hand India titled "A Guide to Empower Informal Waste Pickers." I find this guide to be a wonderful compilation of all the aspects relevant to the well-being of informal waste pickers. I am amazed at the numerous considerations related to informal waste pickers that this publication addresses. These considerations perfectly illustrate the dire needs of this marginalized community. The depth with which each of these issues is dealt with in the publication is fantastic, and it addresses the needs of informal waste pickers in a very easy-to-understand language, supported by excellent pictorial illustrations!

I would like to propose that every stakeholder associated with the activities of informal waste pickers should go through this guide and utilize the relevant propositions to achieve the desired level of upliftment for this community.

I heartily congratulate the management of Hand in Hand India for doing this wonderful service for informal waste pickers.

Warm regards,



**Ulhas Parlikar**  
**Global Consultant and Director**  
**Material Recycling Association of India**

# Foreword Message



Dear Supporters,

I would like to express my heartfelt appreciation and gratitude to the team at Hand in Hand India for bringing out the publication, "A Guide to Empower Informal Waste Pickers."

The term "waste pickers" now needs to be seen in totality. We, the people of India and the world create the waste and the waste pickers are the warriors of waste. Waste management has become a global concern, and these waste warriors are the backbone of cleanliness and the guardians of the system.

In India, we have between 1.5 million to 3 million of these waste guardians, who are aptly called "Recycle Guardians" and form the first chain of recycling. The recycling industry is undergoing change worldwide, but it is incomplete without including this community.

We have witnessed their commendable work during the COVID-19 pandemic. While we were locked down, our waste was not, and these waste warriors were among the essential services at that time.

The Global Plastic Treaty, which is currently under discussion and will soon take shape, emphasizes the importance of waste warriors. Efforts are being made to formalize these communities, enhance their livelihoods, and include them in the social fabric.

Nothing is waste until it is wasted; it can be recycled or upcycled. This community needs to be included in the circular economy, and the first step is to respect them, accept them, and do what we can for them to create a future that is more exciting and brilliant than our past.

This publication is an important step in this direction, covering both the issues and the solutions holistically.

Warm regards,



**Dr Sameer Joshi**  
**Vice Chairman, Governing Council**  
**Indian Plastics Institute**

# Foreword Message



Dear Supporters,

As we strive for a cleaner, greener, and more sustainable urban environment, the vital contributions of informal waste pickers—our “Recycle Guardians”—cannot be overlooked. Their efforts in collecting, sorting, and processing waste are pivotal to achieving Sustainable Development Goal 12 (Responsible Consumption and Production).

This guide, developed by Hand in Hand India, is designed to empower Recycle Guardians with the skills and support needed to enhance their livelihoods and promote sustainable waste management. These practices contribute to SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action) by fostering resilient urban spaces and mitigating climate change.

By addressing challenges like social exclusion, economic insecurity, and environmental degradation, the guide also aligns with SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities).

I commend Hand in Hand India for this initiative, which will not only strengthen our waste management system but also create a cleaner and more inclusive city for all.

This effort underscores our commitment to the UN's Sustainable Development Goals, paving the way for a greener future.

Warm regards,



**Alagappan Ramanathan**  
**Development Goals Specialist - Sustainable**  
**Transport & Mobility**  
**United Nations Development Program**



# Foreword Message



Dear Supporters,

As we embark on our mission to create a cleaner, greener, and more sustainable environment, the vital role of informal waste pickers cannot be overstated. Their tireless efforts are the backbone of our waste management system.

This comprehensive guide is pivotal for empowering informal waste pickers and promotes sustainable waste management practices that seamlessly align with our municipality's goals.

Together, we can anticipate the profound positive impact this guide will have on our city's waste management ecosystem for creating a more sustainable future for our community. I wholeheartedly extend my best wishes to Hand in Hand India!

Warm regards,



**Mr. S Balachandher, IAS**  
**Corporation Commissioner**  
**Tambaram City Municipal Corporation**

# Foreword Message



Dear Supporters,

Useful manual labour, intelligently performed is the means par excellence for developing the intellect. – Mahatma Gandhi.

This handbook, prepared by Hand in Hand India, is a commendable effort to address Gandhi's desire to enhance the skills of the downtrodden and their social and economic upliftment. Rather than dwelling on shortcomings, this initiative emphasizes empowerment. It recognizes the potential of informal waste pickers to become integral contributors to the circular economy. An empathetic and practical guide aimed at training in entrepreneurship, and fostering awareness about legal rights and entitlements, this handbook paves the way for greater inclusion and equity in the waste management ecosystem.

The focus on upskilling waste pickers through training in health and safety, financial literacy, efficient waste segregation, and sustainable waste management practices is both timely and impactful. I hope this handbook serves as a valuable tool for empowering waste pickers while inspiring broader efforts to create a more just, sustainable, and inclusive society.

Rag pickers are to the society, like the mighty earthworms are to the soil. We need them more than they need us. They are at the grassroots of the waste economy, play an indispensable role ensuring that recyclable materials find their way back into the economy. Together, we can honor the contributions of these often-overlooked individuals by providing them with the opportunities and the respect they deserve. I wish these best practices are implemented countrywide to create equitable societies.

Warm regards,

**Dr. Indumathi M Nambi**

**Professor, Indian Institute of Technology Madras  
Faculty Associate- School of Sustainability,  
IIT Madras**

**UBA subject expert - Sanitation and Solid  
Waste Management**

# Foreword Message



Dear Supporters,

The Solid Waste Management Rules (2016) has recognised the role of informal sector in helping to manage municipal solid waste and made it mandatory that the Urban Local Bodies formulate guidelines regarding integration of the informal waste sector into the formal waste management system.

Hand in Hand India, a public charitable trust dedicated to alleviating poverty through integrated community development, as part of its work on 'Coastal Circularity', aimed at improving the livelihoods and social status of informal waste pickers, has developed a "Guide to Empower Informal Waste Pickers". This Guide with 11 detailed chapters include essential topics focusing on basic literacy and numeracy training, skills associated with waste recycling, healthcare, gender inclusion, occupational safety, financial literacy, and entrepreneurship etc. It is expected to support informal sector in livelihood opportunities through efficient and environmentally sound waste management.

Congratulations to the Hand in Hand India Team on this initiative and wish all success in this endeavour. Hope the Guide will be also being made available in local language including relevant best practices to improve its utility.

Warm regards,



**Dr. Kurian Joseph**  
**Professor of Environmental Engineering & Director**  
**Centre for Climate Change and Disaster**  
**Management**  
**Anna University**



# Foreword Message



Dear Supporters,

Informal waste pickers are the unsung guardians of recycling. Their efforts prevent drains from being clogged, mitigate the spread of pollution from contaminated rainwater, and protect ecosystems from destruction. The challenges posed by unmanaged litter are immense. Contaminated rainwater flows into natural water bodies, damaging ecosystems and disrupting livelihoods.

Through their dedication, informal waste pickers play a crucial role in mitigating these cascading effects. This guide, developed by Hand in Hand India, is an essential resource to educate and empower these vital contributors to environmental sustainability. By recognizing their efforts and providing the necessary support, we can build more resilient and sustainable communities.

I extend my best wishes to Hand in Hand India for this remarkable initiative!

Warm regards,



**Dr. S.R Ramanan**  
**Former Director-Area Cyclone Warning Centre**  
**Regional Meteorological Centre Chennai**  
**India Meteorological Department**



## DEDICATION

This guide is dedicated to the tireless and often unrecognized efforts of informal waste pickers namely “Recycle Guardian” around the world. Your commitment to environmental sustainability and resource recovery is invaluable. We honor your resilience, hard work, and dedication to making our communities cleaner and more sustainable.

May this guide empower you with the knowledge and skills to improve your livelihoods, enhance your safety, and elevate your vital role in sustainable waste management. Thank you for being the unsung heroes of our environment.

With gratitude and respect,  
**Team Sustainable Waste Management**  
**Hand in Hand India**



## About Us

Hand in Hand India is a public charitable trust that works to alleviate poverty through a unique integrated community development approach. Registered in 2002, the organisation implements projects in the areas of women empowerment & job creation, skill development, child labour elimination & education, health and environment

## Our Approach

Our business model is what makes us different. We believe that we are catalysts of change, bridging the gaps in the system. We are an organization that believes in the productive and positive utilization of resources to provide the best services to the community. Our success lies in the simple fact that we customize our programmes according to the needs of the community, creating awareness among them and with their active participation. The tripartite model of Government – NGO – Community has been a win-win, setting us apart.

## Partners

We partner with various Corporates, Government agencies, Educational Institutions and Multilateral Organisations

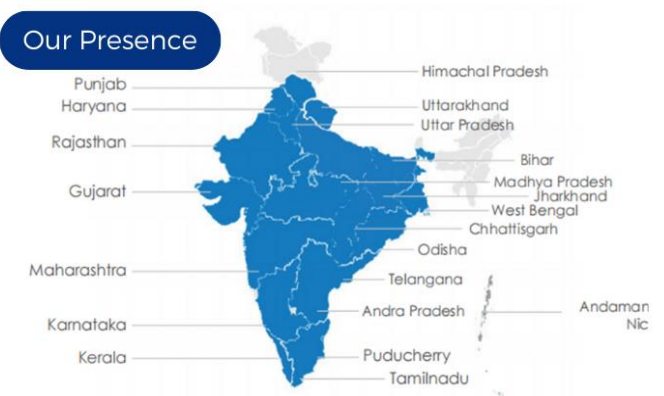
<b>Child Labour Elimination &amp; Education</b>	Education and learning facilitated through Residential Special Training Centres and Transit Schools <b>372,999 children mainstreamed in government schools</b>
<b>Skill Development &amp; Technology Centres</b>	Fostering need based skill training to rural women and youth to employability <b>200,970 women and youth skill Trained</b>
<b>Women Empowerment &amp; Job Creation</b>	Job creation through capacity building, financial literacy, microfinance and enterprise creation <b>9,692,168 jobs created</b>
<b>Health &amp; Hygiene</b>	Healthy communities through preventive healthcare, water supply, sanitation and medical camps <b>11,772 medical camp</b>
<b>Environment</b>	<b>Creating clean communities</b> 665,046 households covered under Solid Waste Management 141,529 hectares covered under Natural Resource Management 33,574 farmers trained under Natural Resource Management
<b>Village Upliftment Programme</b>	An integrated community development programme to create self-reliant sustainable communities <b>22 active villages 509 villages uplifted</b>

\*DATA AS ON AUGUST 1, 2024

## Scale & Professionalism

Our model has been successfully replicated in Afghanistan, South Africa, Kenya, Brazil, Sri Lanka and Cambodia. The Hand in Hand India team has drawn experts from various fields like agriculture, rural development, microfinance, education, business management and research professionals. Hand in Hand India has committed workforce of 489 employees and as Group Entities we have 12,860 Strong people (as on 1st August 2024). On top of this we have 58,505 Community Level Volunteers are led by professionally trained and experienced management team that ensure our passion and vision remain focused. Hand in Hand India is officially registered under the FCRA (Foreign Contribution Regulation Act) and operates with a high level of professionalism, that adheres to global standards.

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# THANK YOU



**for supporting the project**



# Objectives

- Offer basic literacy and numeracy training, enabling informal waste pickers to engage with formal systems and enhance their daily life skills.
- Provide training in various skills associated with recyclable waste to help informal waste pickers find safer and sustainable employment opportunities.
- Educate informal waste pickers on health and safety practices to reduce the risks associated with their work, including injury prevention and protection from hazardous materials.
- Teach financial management skills, including budgeting, saving, and accessing financial services, to improve their economic stability and independence.
- Train informal waste pickers in efficient segregation, recycling, and sustainable waste management practices, promoting environmental conservation and enhancing their role in the waste management ecosystem.
- Raise awareness about legal rights and provide knowledge on how to access social services and entitlements, empowering informal waste pickers to advocate for themselves and improve their living conditions.
- Offer soft skills training such as communication, negotiation, and problem-solving, to boost self-confidence, social integration, and personal development.
- Provide education on personal hygiene, sanitation, and preventive healthcare, leading to better health outcomes and reduced healthcare costs.
- Encourage and support entrepreneurship by providing training and resources to start small businesses, fostering economic self-sufficiency.
- Promote community-building activities and establish support networks to foster solidarity, mutual support, and collective bargaining power among rag pickers.
- Increase awareness of environmental conservation and the role of informal waste pickers in sustainable waste management, encouraging practices that benefit both the community and the environment.

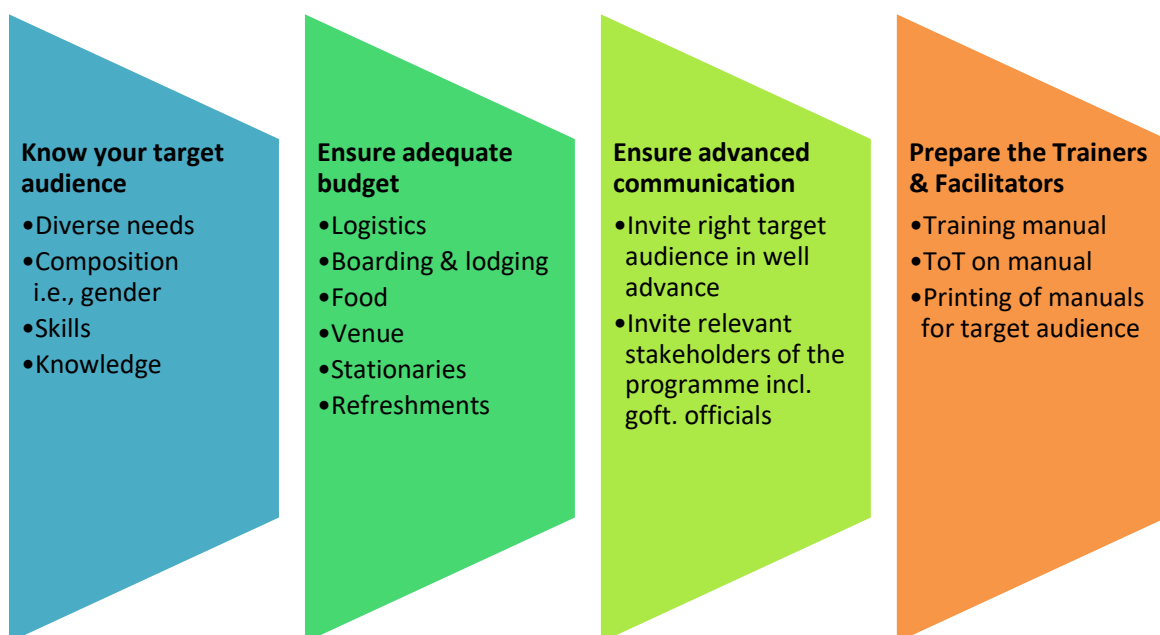
# Methodology of Training/ Workshop

## Right(s) Way Forward (RWF)

The Right(s) Way Forward (RWF) is a community-based, interactive tool that seeks to empower community members to improve their capacity to formulate, advocate and claim their rights for sustainable development. The tool which is based on the Rights Based Approach (RBA) emphasises the equal control over, and distribution of resources between women and men, and their participation on equal terms. The overall theme of the material encompasses issues related to Environment (Sustainable use of Resources), Gender Equality, Do No Harm, Democracy and Rights. It aims at creating space for dialogue between rights holders and duty bearers to address different community concerns in a collaborative manner.

The material offers suggested process guidelines for identifying, assessing and engaging relevant partner organisations for the first time or deepening already existing relationships.

## Planning and Getting Prepared for Training / Workshop





## Developing Training Agenda

- Selecting appropriate/relevant exercises to be used during the training sessions based on the detailed understanding of the nature of participants as explained above.
- Dividing the tasks and responsibilities between the master trainer and facilitators.
- Prepare the training materials and any necessary printouts.
- Prepare the training agenda containing following elements;
  - ⊕ The title of each session
  - ⊕ The time of each session
  - ⊕ Objective of each session
  - ⊕ The resources and learning aids
  - ⊕ The name of the master trainer or trainer of each training session
  - ⊕ Recap sessions at the beginning of a new training day
  - ⊕ Revision of the agenda at the beginning of a new training day
  - ⊕ Fun activity to recharge the energy of the trainees/participants

## Do's and Don'ts for Master Trainers/ Facilitators

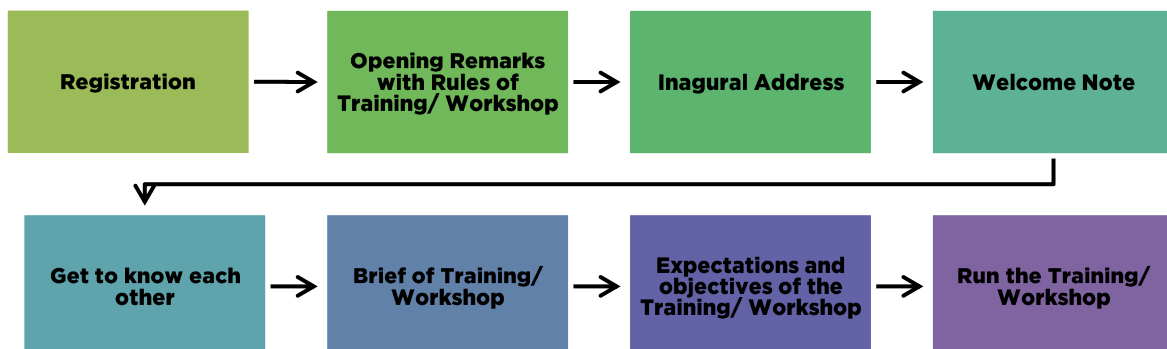
DO'S	DON'TS
Do prepare the agenda, the venue, the materials and the contents of the training in advance.	Don't arrive to the training unprepared. It is a sign of disrespect and bad professionalism
Do ask the trainees/participants for their feedback on the agenda during day one of the training. Give the participants time to understand the agenda. Make sure the participants understand what is expected from them during training.	Don't impose the agenda on the participants.
Do delegate roles and responsibilities to the participants. Proper delegation is a sign of good management and it fosters participatory learning process.	Don't take all the tasks by yourself. You will not have enough energy and time to fulfill everything on your own.
Do use participative approaches but be firm once the agenda is set. The success of the training requires the efforts of all participants.	Don't allow participants to ignore the agreed upon timetable and agenda. Waiting for people and frequent changes of the agenda may cause delays and frustration.
Do establish rules and clarify what is expected from the participants during the	Don't use disrespectful language or aggressive behaviours towards the

DO'S	DON'TS
training. This will help to keep time and support learning.	participants.
Do reflect on your training practice. Are you bias? Are you taking in consideration the point of view of the participants when addressing issues? Do you have your gender lens on? Are you aware of the specific needs of different categories of participants?	Don't assume that the training process is neutral. As people with values and beliefs, trainers always transmit something related to them when training process happens.
Do ensure everyone gets the chance to participate and voice their opinions; find a good technique to get their thoughts across.	Don't force people to speak if they do not want.

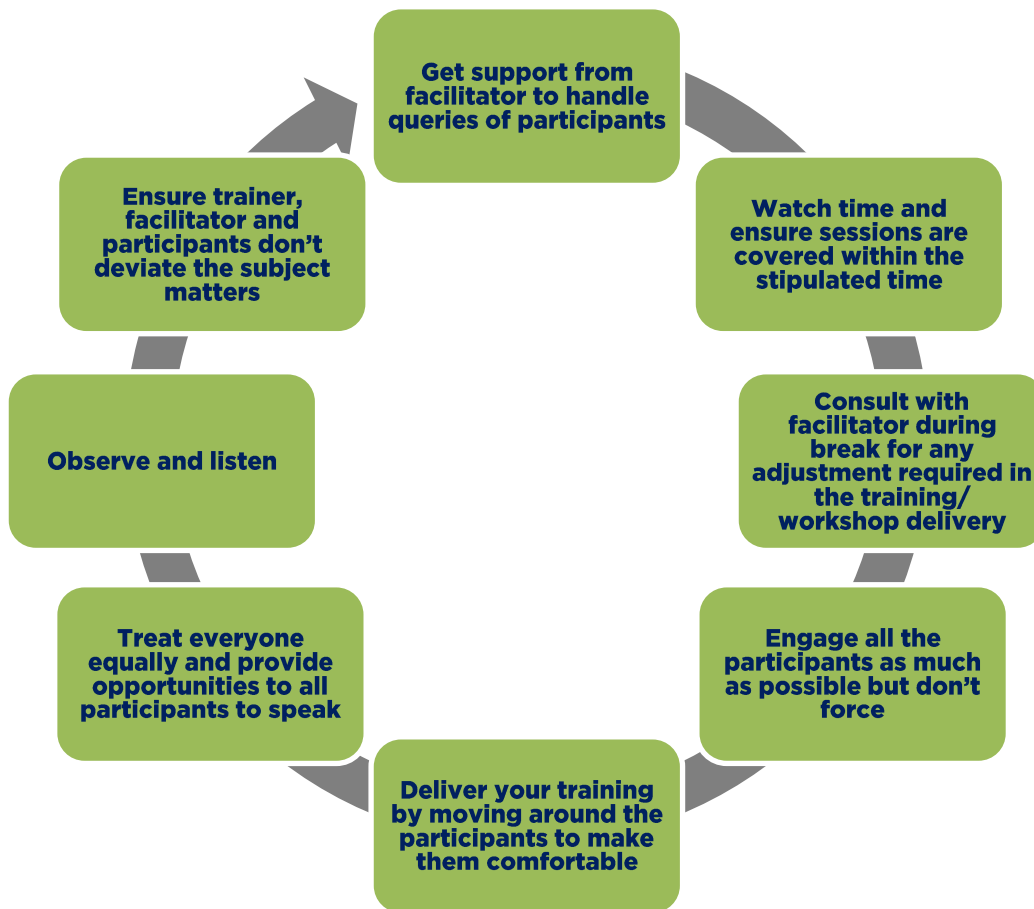
## List of Training Resources

Trainers Manual	Participants Manual	Registration Forms	Evaluation Forms	Certificates for Participants
Chart	Notepads, Pens, Pencils	Whiteboard	Marker pens	Scissors
A4 paper	Sticky notes	Name tags for each participant and for trainers	Projector	Camera
Tablet	Laptop	Slide Pointer	Files	Other locally available resources

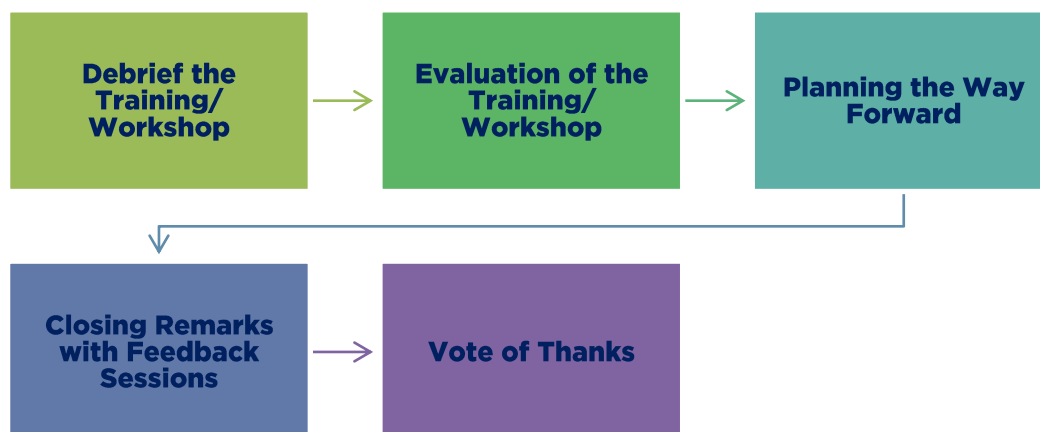
## Set the Ground to Start Training/ Workshop



## During the Training/ Workshop



## After the Training/ Workshop



## General Guidelines for maximum effectiveness of Training

- ✓ Proper planning and preparations which includes preparing training materials.
- ✓ Using locally available resources for materials production.
- ✓ Activating each participant in group work and other engaging activities such as role plays.
- ✓ Giving enough time for practice and participants preparations.
- ✓ Spending time for reflections and adjusting the training based on the reviews.
- ✓ Avoid giving long speeches with too much theory and too few learning activities.
- ✓ Differences of opinion that arise during the training should be taken as an opportunity to dig further into the issue and not to create differences among participants. In the discussion process, the questions that are put forward may allow everyone to see the situation under review from new angles.
- ✓ Answers to the questions raised can stimulate fresh discussion and lead to new conclusions.
- ✓ You as trainer/facilitator can raise other questions to dig deeper into the subject.
- ✓ Set up appropriate sitting arrangement which allows everyone to see each other and that do not create inequality.
- ✓ Speak clearly and slowly enough for all to hear.
- ✓ Use visual aids when you can.
- ✓ Be concerned, attentive, interested.
- ✓ Provide guidance and support during group work.
- ✓ Make the training dynamic and participatory.
- ✓ Use appropriate vocabulary and make efforts as much as possible to speak the same language as the listener.
- ✓ Respond to wrong answers in a positive manner without making the participant feel embarrassed, rejected or discouraged from sharing again in the future. You can for instance respond as follow: “Interesting ... it is not exactly what I was looking for, but can you please say more?” This can be a good response especially when the question was looking for a particular answer or set of answers. Likewise, you are not advised to accept every response as equally valid because doing so will confuse participants.

## Sample Evaluation Questions

**Please provide your honest feedback so that the training/workshop can be improved. (Feedback can be received in writing or verbal)**

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**Which sessions did you think were best and why?**

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**Which sessions need to be improved? How can they be improved?**

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**In your opinion, what are the most important things you learned during the training?**

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**What do you think was not covered enough? What do you want to learn more about?**

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**What did you learn that will be the most useful to you in your work?**

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# Chapter 1

# Basic literacy & Numeracy



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# Chapter 1: Basic Literacy and Numeracy

**“Basic literacy and numeracy skills for informal waste pickers involve teaching fundamental reading, writing, and arithmetic to individuals who collect and sell recyclable materials from waste. These skills are crucial for improving their quality of life and economic opportunities”**



## Reading:

- » Recognizing and understanding simple words and sentences.
- » Reading signs, labels, and basic instructions.
- » Understanding safety signs and warnings.



## Writing:

- » Writing their name, address, and basic information.
- » Filling out simple forms.
- » Writing basic sentences or messages.



## Comprehension:

- » Understanding spoken and written instructions.
- » Following simple directions.
- » Basic communication skills to interact with others.

## Basic Literacy and Numeracy Skills for Recycle Guardians includes:



### Language

- ✓ Understanding the alphabets, Phonetics
- ✓ Recognize the Alphabets with objects



### Calendar

- ✓ Understanding the date, week, months
- ✓ Weekdays, Tamil and English months



### Seasons

- ✓ Understanding type of seasons
- ✓ Recognize the Tamil and English names and time of monsoons



### Basic Literacy and Numeracy Skills for Recycle Guardians includes:



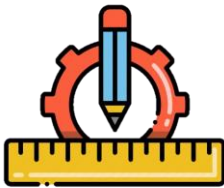
#### Counting:

- ✓ Counting items, money, and other quantities.
- ✓ Basic addition and subtraction.



#### Time

- ✓ Reading a clock or watch.
- ✓ Understanding basic time-related concepts (hours, minutes, days).



#### Measurement:

- ✓ Understanding and using basic units of measurement (weight, length, volume).
- ✓ Using simple measuring tools.



#### Money / Currency:

- ✓ Recognizing currency notes and coins.
- ✓ Making simple calculations for buying and selling.
- ✓ Budgeting basic daily expenses.



#### Public Literacy

- ✓ Understanding of traffic signs, public transport colour coding, health care, helpline number, application form

## 1.1 Language

### Languages

“Language is fundamental for communication, cultural identity, education, and social integration. It allows us to express thoughts, share knowledge, and connect with others. Language shapes our perceptions, fosters community and belonging, and is essential for personal and professional development. It also preserves history and traditions, contributing to the diversity and richness of human culture.”

## Basic Tamil

### உயிர் எழுத்துக்கள்



### மெய் எழுத்துக்கள்



### வட மொழி எழுத்துக்கள்



## Basic English

<b>A</b> ஏ	<b>B</b> பீ	<b>C</b> சி	<b>D</b> டீ	<b>E</b> ஈ
<b>F</b> ஈப்	<b>G</b> ஜீ	<b>H</b> எச்	<b>I</b> ஐ	<b>J</b> ஜெ
<b>K</b> கே	<b>L</b> எல்	<b>M</b> எம்	<b>N</b> என்	<b>O</b> ஓ
<b>P</b> பி	<b>Q</b> க்யூ	<b>R</b> ஆர்	<b>S</b> எஸ்	<b>T</b> டி
<b>U</b> யூ	<b>V</b> வி	<b>W</b> டபிள்யூ	<b>X</b> எக்ஸ்	<b>Y</b> ஓய்
<b>Z</b> இஸ்ட்				

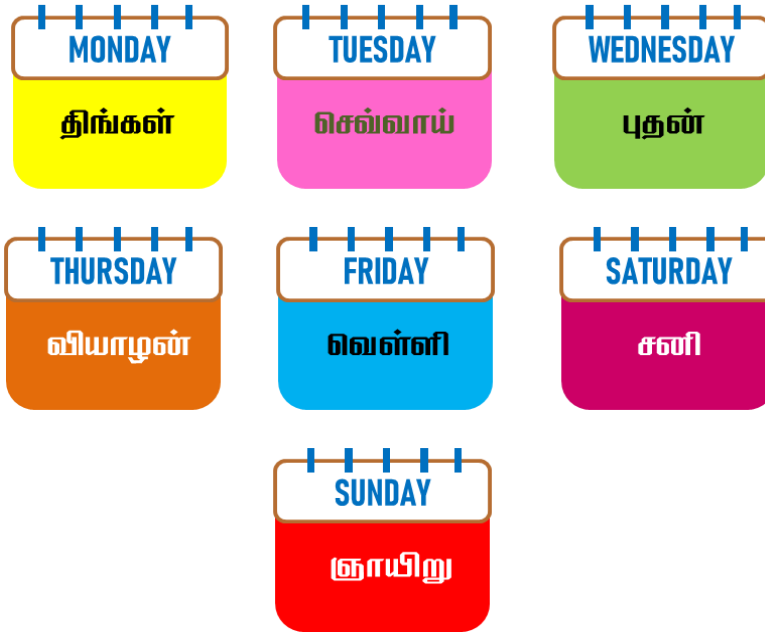
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<b>Hh</b> 8	<b>Ii</b> 9	<b>Jj</b> 10	<b>Kk</b> 11	<b>Ll</b> 12	<b>Mm</b> 13	<b>Nn</b> 14
<b>Oo</b> 15	<b>Pp</b> 16	<b>Qq</b> 17	<b>Rr</b> 18	<b>Ss</b> 19	<b>Tt</b> 20	<b>Uu</b> 21
<b>Vv</b> 22	<b>Ww</b> 23	<b>Xx</b> 24	<b>Yy</b> 25	<b>Zz</b> 26		

# 1.2 Calendar

## Calendar

“A basic calendar is important because it helps us organize our daily lives. It shows the days, weeks, and months, making it easier to plan events, appointments, and tasks. With a calendar, we can remember important dates like birthdays, holidays, and deadlines, and manage our time more effectively”

## வார நாட்கள்



# 1.1.2024

சங்கு இலை துவையல் சாப்பிட்டு வர ஆஸ்திரேலிய நாடு குணமாகும்.

**ஸ்ரீசோபிசூது மார்கழி 16** **ஜனவரி திங்கள்** **ஐமாதிலாளி 18** **இராசிபலன்**

பஞ்சமி 19.4 (P.M. 2.8) மலம் 5.14 (A.M. 8.36) தியாழ் 27.20 மரண 5.14 மெல் சித்தபோகம். திருத்தணி ஸ்ரீமூலகம் பெருமான்கு பால் அளிப்பேகம். ஆங்கிலப்பத்தாளன். அகல விடுமுறை திங்கள் பூயருடத் திருநாள்.

நல்ல நேரம் காலம்: 6.30 - 7.30 மாலை: 4.30 - 5.00	மொரி நல்ல நேரம் காலம்: 9.30 - 10.30 மாலை: 7.30 - 8.30	கூலம் : கிழக்கு மீனா : நயிர் காணம்: 9.00-10.30	சாந வி சனி பித்து-பு	சத்திராஷ்டமம் திருவோணம்
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ஆங்கில வருடப்பிறப்பு ↓  
திதி: அகிதி

Calendar - Daily sheet



**ஜனவரி 2024 JANUARY**

SUN சூன்யம்	7	14	21	28
MON திங்கள்	1	8	15	22
TUE செவ்வாய்	2	9	16	23
WED புதன்	3	10	17	24
THU வியாழன்	4	11	18	25
FRI சனி	5	12	19	26
SAT	6	13	20	27

Calendar – monthly sheet



தமிழ் மாதங்கள்	ஆங்கில மாதங்கள் (English months)
சித்திரை	ஜனவரி (January)
வைகாசி	பிப்ரவரி (February)
ஆனி	மார்ச் (March)
ஆடி	ஏப்ரல் (April)
ஆவணி	மே (May)
புரட்டாசி	ஜூன் (June)
ஐப்பசி	ஜூலை (July)
கார்த்திகை	ஆகஸ்ட் (August)
மார்கழி	செப்டம்பர் (September)
தை	அக்டோபர் (October)
மாசி	நவம்பர் (November)
பங்குனி	டிசம்பர் (December)

## 1.3 Seasons

### Seasons

“Understanding basic seasons is important because they help us plan our activities and prepare for weather changes. Each season brings different temperatures and conditions, affecting what we wear, eat, and do. Recognizing the seasons helps us enjoy outdoor activities, grow crops, and stay safe in varying weather”

காலங்கள்	Seasons
இளவேனிற்காலம் (வசந்தகாலம்)	SPRING
முதுவேனிற்காலம் (கோடைக்காலம்)	SUMMER
கார்காலம் (மழைக்காலம்)	MONSOON
கூதிர்காலம் (குளிர்காலம்)	AUTUMN
முன்பனிக்காலம்	WINTER
பின்பனிக்காலம்	PREVERNAL

இளவேனிற்காலம்



வசந்தகாலம்  
SPRING  
15 April to  
14 June

சித்திரை – வைகாசி

முதுவேனிற்காலம்



கோடைக்காலம்  
SUMMER  
15 June to  
14 August

ஆனி – ஆடி

கார்காலம்



மழைக்காலம்  
MONSOON  
15 August to  
14 October

ஆவணி – புரட்டாசி

கூதிர்காலம்



குளிர்காலம்  
AUTUMN  
15 October to  
14 December

ஐப்பசி – கார்த்திகை

முன்பனிக்காலம்



முன்பனிக்காலம்  
WINTER  
15 December to  
14 February

மார்கழி – தை

பின்பனிக்காலம்



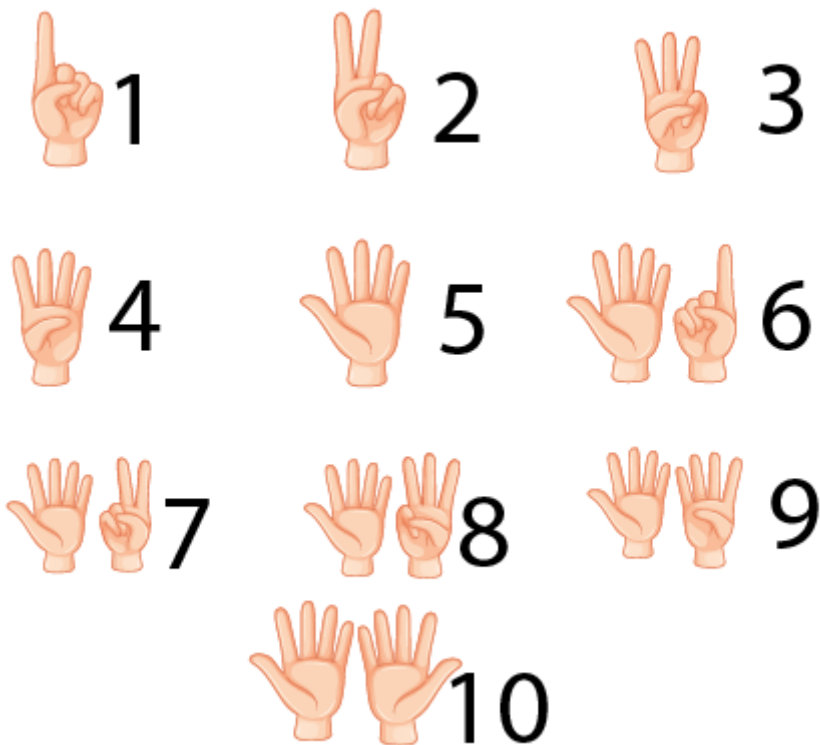
பின்பனிக்காலம்  
PREVERNAL  
15 February to  
14 April

மாசி – பங்குனி

# 1.4 Basic Numeracy

## Basic Numeracy

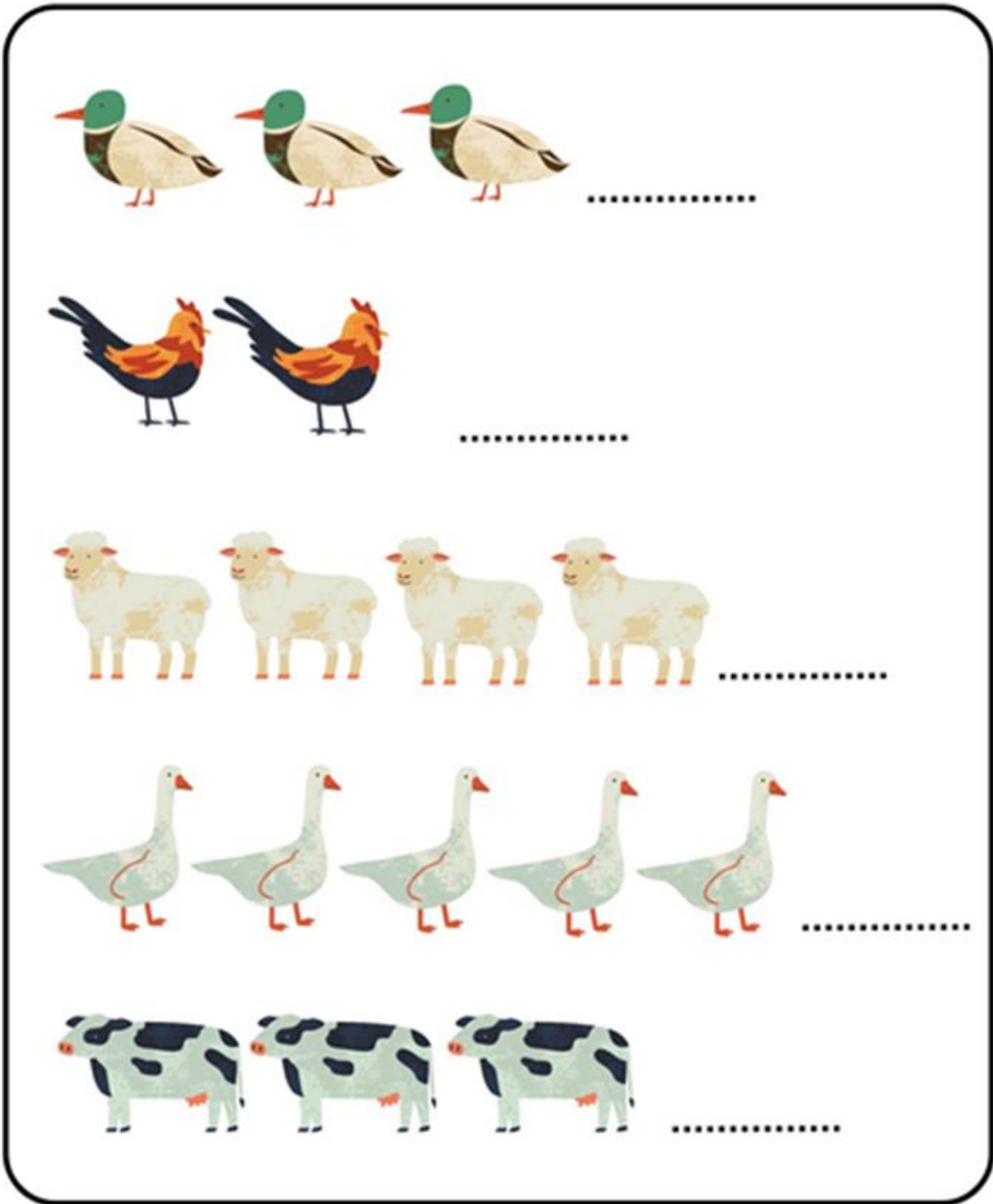
“Basic numeracy is essential because it helps us handle everyday tasks like counting, measuring, and managing money. With basic math skills, we can budget, shop, and understand time. Numeracy also supports problem-solving and decision-making, making it easier to navigate daily life and work more effectively.”



# Numbers 1 ~ 100

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
















# Basic Addition, Subtraction and Fraction

Name: \_\_\_\_\_


**Addition**  
Add the numbers shown on the hands and write the answer in the space provided.













	+		=	<input type="text"/>
	+		=	<input type="text"/>
	+		=	<input type="text"/>
	+		=	<input type="text"/>
	+		=	<input type="text"/>

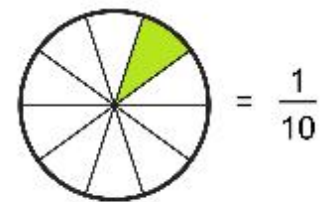
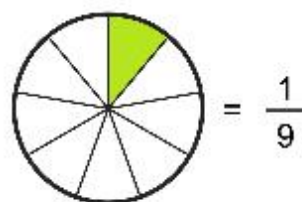
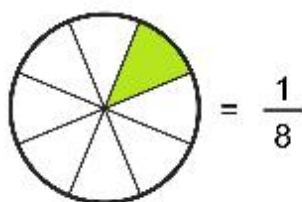
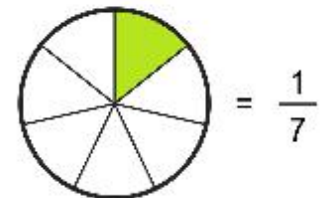
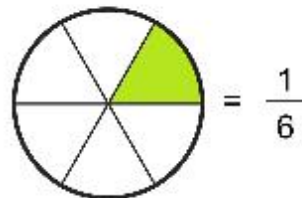
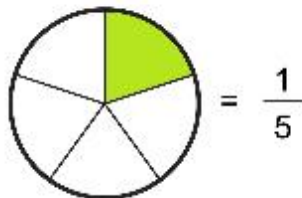
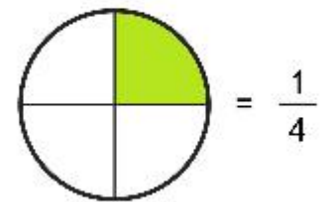
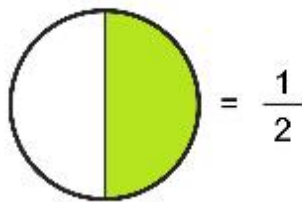
Name: \_\_\_\_\_

**SUBTRACTION**  
Complete the equation shown on the hands and write the answer in the space provided.



	-		=	<input type="text"/>
	-		=	<input type="text"/>
	-		=	<input type="text"/>
	-		=	<input type="text"/>
	-		=	<input type="text"/>

## Fraction

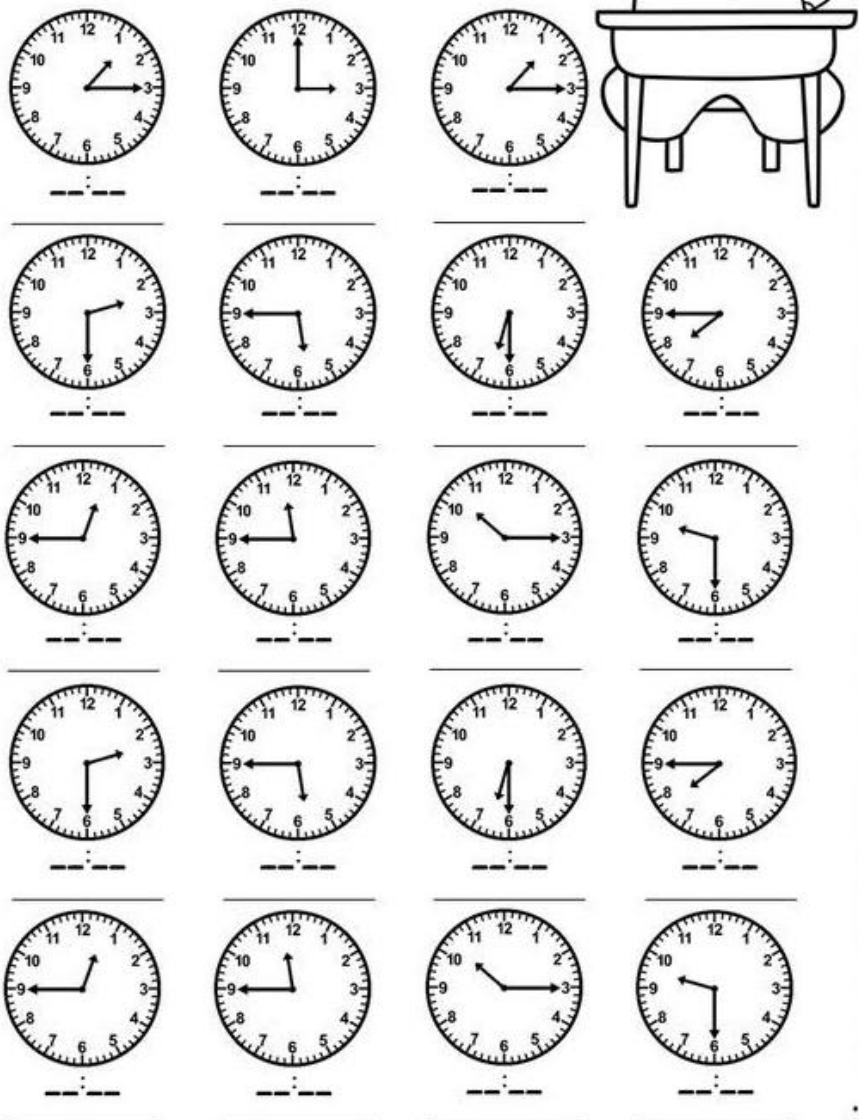


# 1.5 Time

## Time

“Basic time literacy is crucial because it helps us manage our day-to-day activities. Knowing how to read a clock, understand time intervals, and follow schedules allows us to be punctual, meet deadlines, and plan our day efficiently. Time literacy helps us stay organized and make the most of our time.”

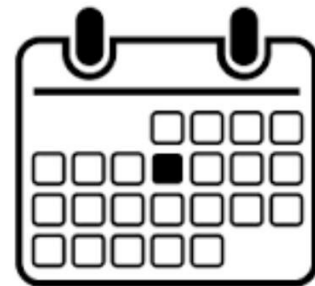
The time is.



The image shows a grid of 20 analog clocks arranged in 5 rows and 4 columns. Each clock has a face with numbers 1 through 12 and two hands (hour and minute). Below each clock is a dashed line for writing the time. To the right of the grid is a cartoon character with a large smile, sitting at a desk and holding a pencil. The character has large eyes and a friendly expression.

## Time Conversion

60 seconds	1 minute
60 minutes	1 hour
24 hours	1 day
7 days	1 week
52 weeks	1 year
12 months	1 year
365 days	1 year
10 years	1 decade
100 years	1 century

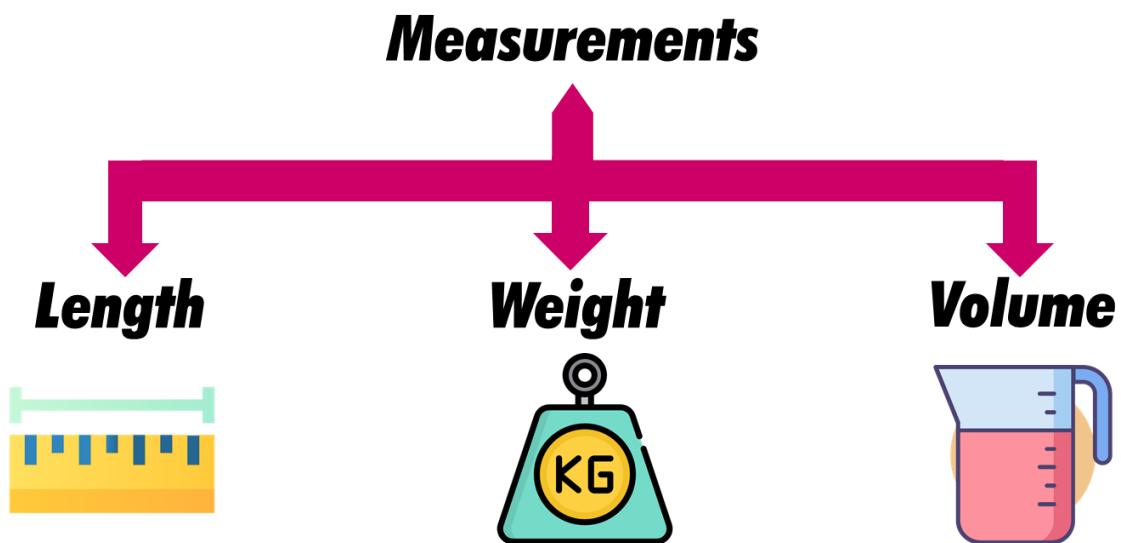




# 1.6 Measurements

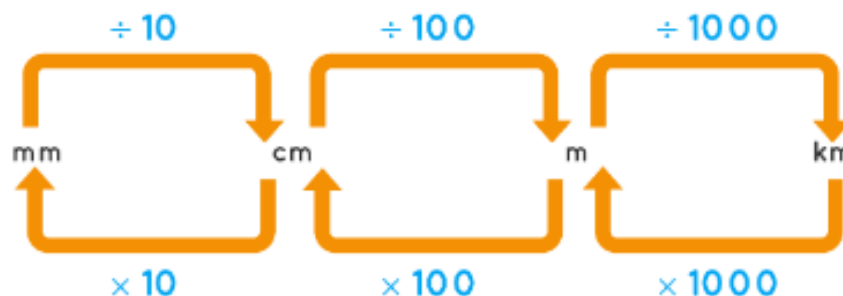
## Measurements

“Basic unit measurement is important because it helps us accurately measure and compare objects in everyday life. Whether it’s measuring ingredients in cooking, determining distance, or checking the weight of an item, understanding units like meters, litres, and kilograms ensures precision. It’s essential for daily tasks, work, and education”

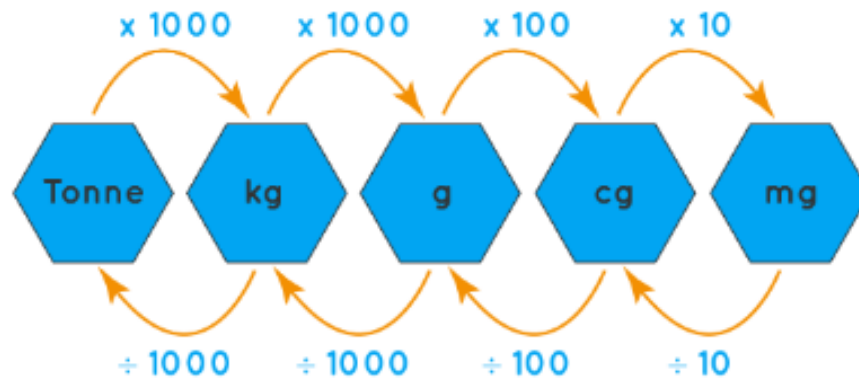


## Units Conversion

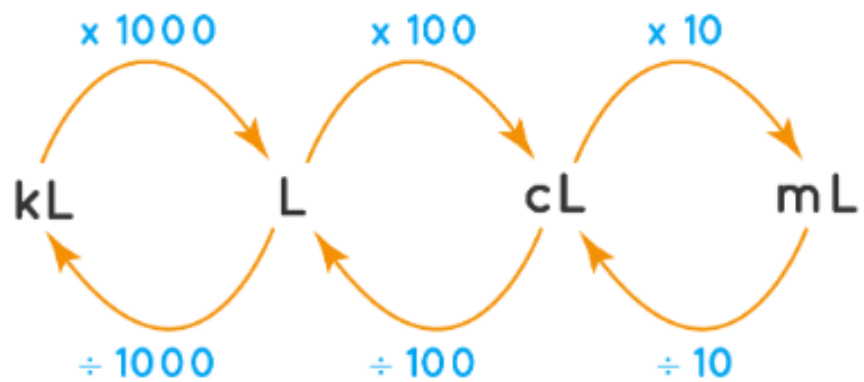
### Metric Conversion of Length



### Metric Conversion of Weight



### Metric Conversion of Capacity



## Liters and Milliliters

1. Match.

The image shows a matching exercise. On the left, there are five measuring jugs with the following liquid levels: 300 ml, 900 ml, 500 ml, 700 ml, and 800 ml. In the center, there are ten labels: 1 L, 100 ml, 300 ml, 600 ml, 800 ml, 200 ml, 400 ml, 900 ml, 500 ml, and 700 ml. On the right, there are five more measuring jugs with the following liquid levels: 300 ml, 700 ml, 300 ml, 600 ml, and 800 ml. A line connects the first jug on the left (300 ml) to the '1 L' label.

# Weight Measurement

## Weight Stone



## Digital Weighing Scale





## Volume and Price



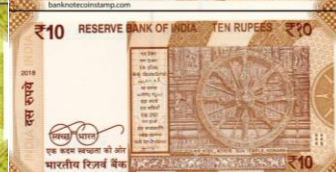
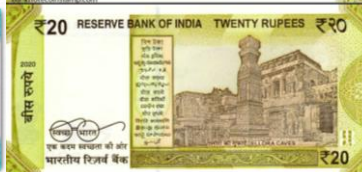
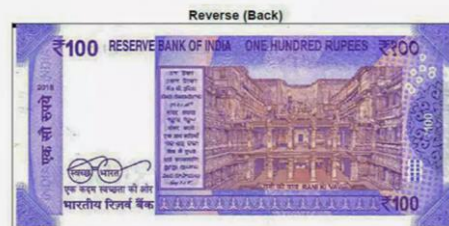
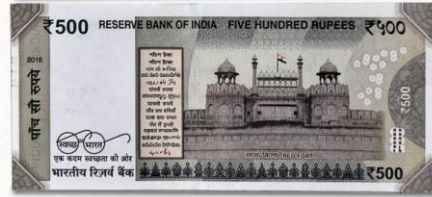
## 1.7 Money / Currencies

### Money / Currencies

“Understanding basic money concepts are essential for managing everyday life. It helps us make informed decisions when buying goods, saving, or budgeting. Knowing how to count, spend, and save money ensures we can meet our needs, plan for the future, and avoid financial difficulties. It’s a crucial life skill”

## Indian Currencies and Coins





# 1.8 Public Literacy

## Public Literacy

Basic public literacy, like understanding traffic signs, helpline numbers, healthcare centres, and transportation, is essential for daily life. It helps people navigate safely, access emergency services, seek medical help, and use public resources effectively. This knowledge supports independence and improves overall community safety and well-being.

## Buses in the State of Tamil Nadu

### Mofussil Bus

1

Inter-city



Non- AC Bus

AC Bus

2

Urban-Rural



Non- AC Bus

### Town Bus

3

Urban



Non- AC Bus

Small bus

AC Bus

4

Urban - Women free bus



5

Rural - Women free bus



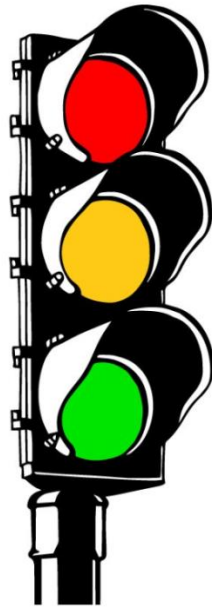
6

Rural - mini bus





# Traffic Signs



**STOP!**

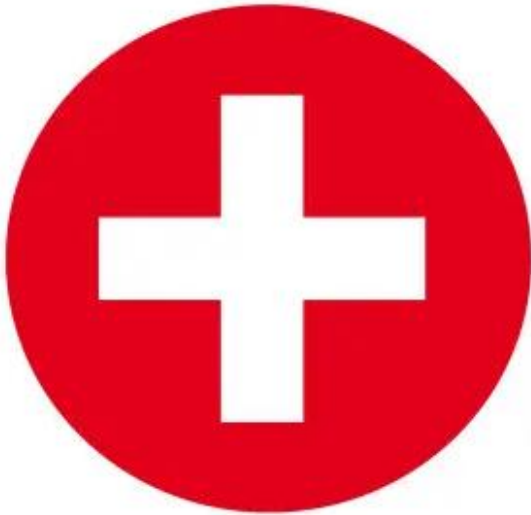
**WAIT!**

**GO!**

STOP	NO ENTRY	GIVE WAY	ONE-WAY TRAFFIC	NO STRAIGHT AHEAD	NO VEHICLES IN BOTH DIRECTIONS
ALL MOTOR VEHICLES PROHIBITED	NO MOTORCYCLES	NO BICYCLES	NO PEDESTRIANS	NO HEAVY VEHICLES	NO LEFT TURN
NO RIGHT TURN	NO U-TURN	NO OVERTAKING	SPEED LIMIT	WEIGHT LIMIT	LENGTH LIMIT
HEIGHT LIMIT	NO PARKING	HORN PROHIBITED	NO BULLOCK CARTS	LEFT CURVE	RIGHT CURVE
ROUNDABOUT AHEAD	TRAFFIC SIGNALS AHEAD	LEVEL CROSSING WITH BARRIER AHEAD	LEVEL CROSSING WITHOUT BARRIER AHEAD	UNEVEN ROAD	NARROW BRIDGE



## Healthcare Points



## Helpline Numbers



## POLICE 100



## FIRE 101



# AMBULANCE **102, 108**



## **Disaster Management Services**

**1077**

**Women Helpline**

**181, 1091**

**Senior Citizen Helpline**

**14567**

**Child Helpline**

**1098**

**LPG Leak Helpline**

**1906**

## Forms



भारतीय विशिष्ट पहचान प्राधिकरण  
भारत सरकार

**THIS FORM IS AVAILABLE FREE OF COST**  
**AADHAAR ENROLMENT FORM ( नॉदणी फॉर्म )**

Branch Code/Enrolment Form No / नॉदणी फॉर्म क्र.



1207

Fields marked with * are mandatory requirement		For Office use/ फक्त कार्यालयाचा वापर करिता	
* निशाणी केलेली भाग भरणे अनिवार्य आहे *Date / दिनांक :		Aadhaar /Enrolment Number/आधार/नॉदणी क्रमांक:	
<b>PART A1 Primary details for Aadhaar / (भाग क) प्रथमिक माहिती</b>			
1	*Name / *नाव		
2	*Gender/ *लिंग:	Male ( ) पुरुष	Female ( ) स्त्री
		Transgender ( ) अन्य	
		*Date of birth जन्म तारीख	DD/MM/YYYY
		Age/ वय	
3	Residential Address: / घरचा पता:		
	C/o: (S/o, W/o, D/o) / द्वारा (बाबा पुत्र, बाबा पत्नी, बाबा मलगी	(First Name / प्रथम नाव ) (Middle Name/वडिलांचे/ पतीचे/ मातेचे )	(Last Name /आड नाव )
	*House No / घर क्र.		
4	Street/Road/Lane/ गल्ली /रस्ता / मार्ग		
	Landmark/छळक ओळख		
	*Village/Town/City / *पेठे / शहर / महानगर		
	* District / जिला	State/ राज्य:	पिन कोड
5	<b>PART A2 Other details for Aadhaar</b>		
	Tel टेलीफोन:	(Res) निवासीय	(M)मोबाईल
	Email ई-मेल		
	Religion धर्म	Nationality राष्ट्रीयता	
	Occupation गतिविधि	Caste जाति	SC/ST/OBC/Others / अजा/अजला/अपिजा/अन्य
	Income(per month) आमदनी	<input type="checkbox"/> Below 5000	<input type="checkbox"/> 5000-10,000 <input type="checkbox"/> Above 10,000
<b>PART B Relation Details (compulsory for children below 5 years of age)</b> नातेवाईकांची माहिती (5 वर्षांपेक्षा कमी वय असणाऱ्या मुला-मुलींसाठी अनिवार्य आहे)			
5	* Relationship\ नाते:	आई ( )	वडिल ( )
		पालक ( )	पती ( )
		पत्नी ( )	
6	नाते नाव :	First Name प्रथम नाव	Middle Name वडिलांचे/ पतीचे/ मातेचे नाव
	Aadhaar / Enrolment number:	आधार/ नॉदणी क्रमांक	Last Name आड नाव
<b>PART C Financial Information : (भाग घ) आर्थिक माहिती</b>			
*Information Sharing Consent \ *सुचनेची परवानगी.....			
7	Do you want UIDAI to open a bank account \ युसायडीला बँक खाता खोलावची परवानगी		हो ( ) नाही ( )
	If no, Link my existing bank A/c to AADHAAR/ जर नाही बँक खाते आधार सोबत जोडावे:		हो ( ) नाही ( )

### CERTIFICATE FOR AADHAAR ENROLMENT/ UPDATE

*Instructions: All details to be filled in Block Letters*

*(To be valid for 3 months from date of issue)*

*To be printed on plain A4 paper size;*

*Not required to print on letter head;*

D	D	M	M	Y	Y	Y	Y
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#### Resident's Details

Resident     
  Non-Resident Indian (NRI)     
  New Enrolment     
  Update Request

**Aadhaar Number:**  
(For update only)

**Full Name:**


**C/o:**

**House No./ Bldg./ Apt:**

**Street/ Road/ Lane:**

**Landmark:**

**Area/ Locality/ Sector:**

**Village/ Town/ City:**

**Post Office:**

**District:**

**State:**




Resident's Recent  
Colour Photograph  
**3.5cm x 4.5 cm**

Cross Signed and  
Cross Stamped  
by the Certifier.



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 2

# Financial Literacy



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# Chapter 2: Financial Literacy

**“Financial literacy for informal waste pickers involves teaching fundamental of income, expenditure, savings, and reduction of debt. Day to day money handling to individuals who collect and sell recyclable materials from waste, necessary and unnecessary expenditure leads to improve the savings. These skills are crucial for improving their quality of life and economic status.”**

## Finance Literacy Skills for Recycle Guardian includes :



### Income :

- ✓ Understanding the Income source
- ✓ Type of income sources



### Expenditure:

- ✓ Understanding the expenditure from income
- ✓ Necessary expenditure
- ✓ Unnecessary expenditure



### Saving:

- ✓ Understanding the savings
- ✓ Ways to save money



### Debt:

- ✓ Understanding of Debt
- ✓ Control mechanism



### Financial planning

- ✓ Understanding the financial Management
- ✓ Budget management
- ✓ How to save money
- ✓ Savings with bank
- ✓ Borrowings/ loans
- ✓ Borrowing capacity
- ✓ Difference between borrowings from a bank and a money lender



## 2.1 Income

### Income

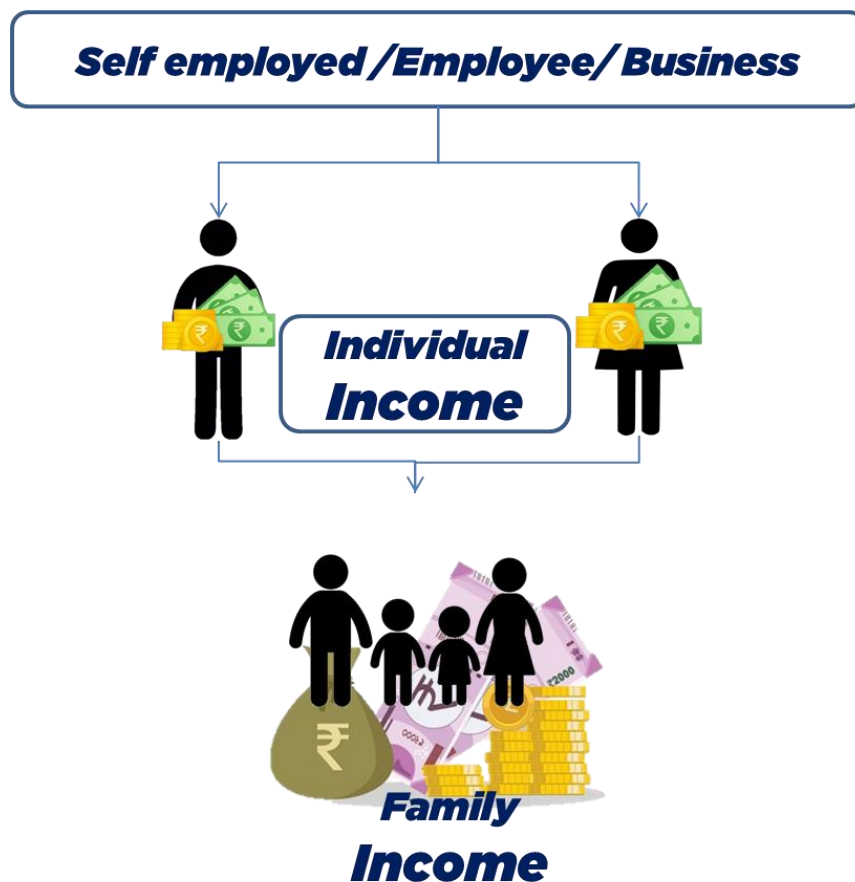
"Income literacy is crucial as it helps individuals manage their finances wisely. Understanding income helps with budgeting, saving, and making informed financial decisions, leading to greater financial security and independence."

### Individual Income

**Individual Income:** "Income is the money earned as a salary or from engaging in activities based on the commitments of an individual, company, or business."

### Family Income

"**Family income** is the total earnings from all members of a household, including wages, salaries, and other sources of income."



## Type of Family Income

### Single source family income:

- Income that comes from only one source within a family, such as a sole breadwinner earning a salary or wages from a single job.

### Multi-source family income:

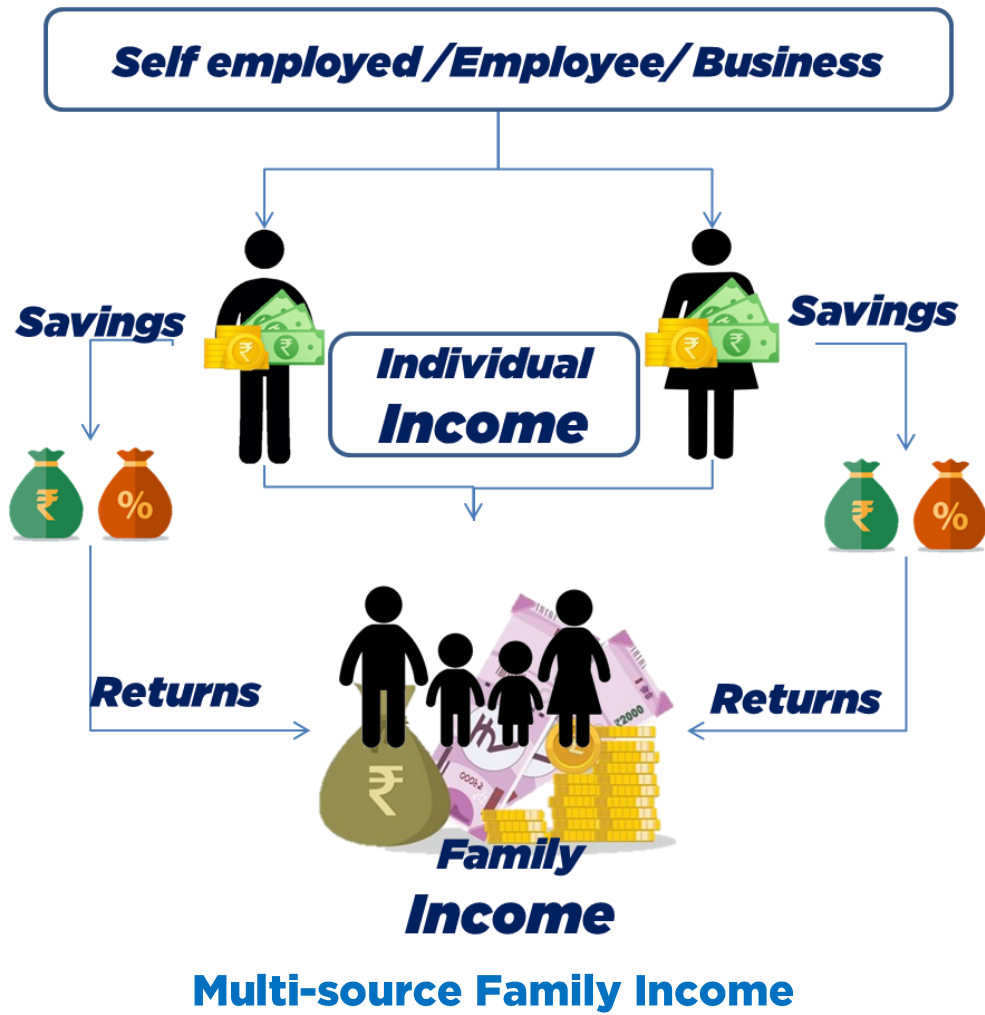
- Income that is derived from multiple sources within a family, such as combined earnings from various jobs, investments, and other income-generating activities.

***Self employed /Employee/ Business***



***Family  
Income***

**Single Source Family Income**



**Example Source 1**



## Source 2

Recycle Guardians



Cleans the beach area

Daily wages



Rs.250/300/400



## Total Income

Selling plastic bottles



Rs.250

Cleaning the beach area



Rs.300

Income



Rs.550



Income refers to money received by an individual or a household, typically on a regular basis, through work, investments, or other sources. It includes wages, salaries, profits, interest, and dividends, among other forms of earnings.

For example: If a recycling guardian earns Rs. 250 from selling plastic bottles and Rs. 300 from cleaning the beach area, then his income for the day would be  $250+300=$  Rs. 550



## 2.2 Expenditure

### Expenditure

“Expenditure literacy is key for effective money management. It helps individuals track and control their spending, avoid unnecessary debt, and allocate funds wisely. By understanding and planning expenditures, people can maintain financial stability, save for future goals, and make informed choices about their resources.”

Expenditure simply means spending money. It's when you use your money to buy things or pay for services. When you go to the store and buy groceries, or pay your rent or bills, those are examples of expenditure. Basically, it's the money you give away to get something in return.

## EXPENDITURE



Some example of expenses: Food, shelter, clothing, education, health, gambling, alcohol, entertainment and others.

## Necessary and Unnecessary Expenditure

**Some of the Necessary Expenditure:** Food, education, health, groceries, shelter, basic clothing

**Some of the Unnecessary Expenditure:** Going out, Alcohol, drugs, tobacco, entertainment, buying kids whatever they want, gambling etc.

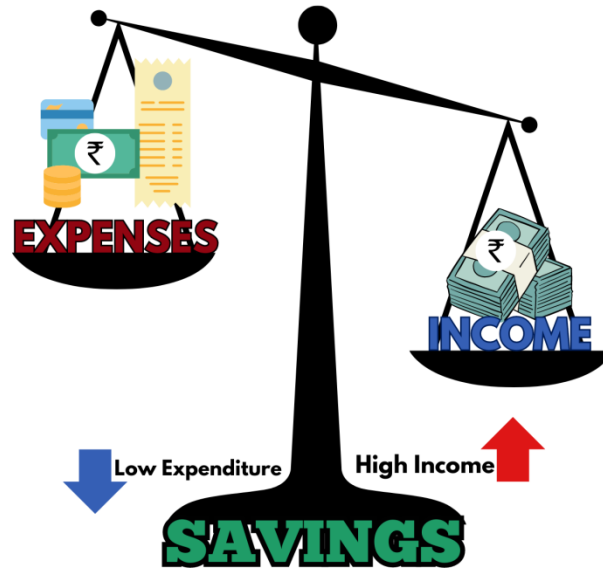


## 2.3 Savings

### Savings

**“Savings are vital for financial security and future stability. They provide a safety net for emergencies, help achieve long-term goals, and reduce financial stress. Regular saving fosters discipline, ensures readiness for unexpected expenses, and allows for planned investments, contributing to overall economic well-being and peace of mind.**

Savings, in simple terms, means setting aside a portion of your income or money instead of spending it all. It's like putting money aside for future needs or unexpected expenses rather than using it immediately. People save money in bank accounts, investment accounts, or even at home in a safe place. It's about being prepared and planning for the future by not spending everything you earn right away. Savings can be done when income is more than expenses.



## Ways to Save Money

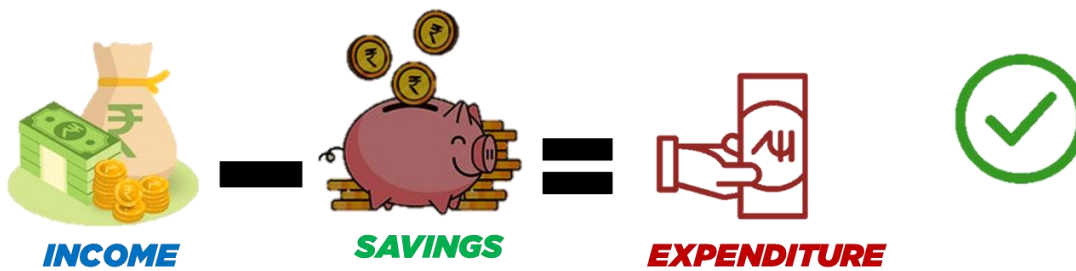
*Interact: Introduce the concept of necessary and unnecessary expenses. Differentiate between wants and needs.*

**Necessities:** The expenditure that needs to be incur, irrespective of our level of income. These are unavoidable expenses that we have to incur of the fact that whether we are rich or poor.

**Unnecessary:** The expenses that we cannot afford based on our level of income. Some examples are below:



**OLD FORMULA**

**NEW FORMULA**


Allocate a portion of your income, even if it's a small amount, towards savings. Cultivate the habit of saving a portion of what you earn.

## 2.4 Debt

### Debt

**“Debt literacy is crucial for understanding and managing borrowed money. It helps individuals make informed decisions about taking on debt, avoid high-interest loans, and repay obligations responsibly. With good debt literacy, people can prevent financial problems, maintain credit health, and achieve long-term financial goals”**

Debt in simple terms means you've borrowed money from someone or an institution like a bank, and now you're obligated to repay that money over time. When you borrow money, you agree to pay back the amount you borrowed (called the principal) plus an additional amount as a fee or interest for borrowing the money. Debt can be used responsibly to achieve goals like buying a house, starting a business, or for any immediate needs in the family but it's important to manage it carefully to avoid financial difficulties.





## 2.5 Financial Planning

### Debt

“Financial planning is crucial for managing your money effectively. It involves budget management, saving money, using bank savings accounts, understanding borrowings and loans, and assessing borrowing capacity. Knowing the difference between borrowing from banks and money lenders helps make informed decisions, ensuring financial stability and reducing debt risks”

### Budget Management

#### Explain how to accurately estimate income and expenses

- Write a sample monthly budget with a pen and paper. List total income and break expenses up into categories
- Show them that income and expenses can fluctuate month to month, so tracking them over time is important.

Make the sample budget relevant for the informal waste pickers

- For instance, discuss with the informal waste pickers about their family’s income and expense patterns from the last month to make it more relevant for them.

# Monthly Budget Planner

Month & Year:

Monthly Income	Amount
Salary	
Side Gig	
<b>Total Income</b>	



Fixed Expenses	Amount
Rent	
Electricity/Water	
Others	
<b>Total Fixed Expenses</b>	

Variable Expenses	Amount
Groceries	
Education	
Transportation	
Miscellaneous	
<b>Total Variable Expenses</b>	

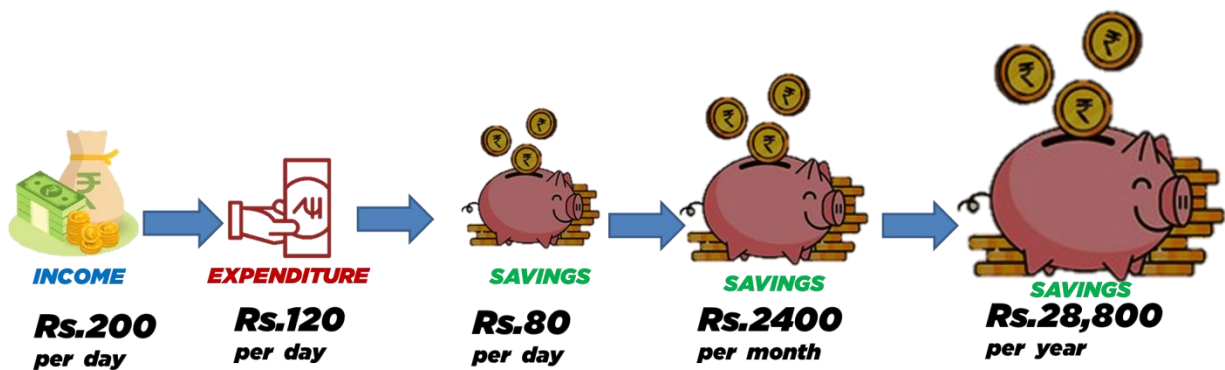
Notes:

(An example of a monthly budget sheet)

## How to Save Money

Saving money is crucial for everyone, including informal waste pickers. Despite their humble earnings, saving even a small portion of their income can provide stability and a safety net. For informal waste pickers, who often face unpredictable income and living conditions, saving money can help smooth out financial hardships during lean periods. It also offers them the opportunity to invest in tools or equipment that could improve their efficiency or expand their work opportunities. Additionally, saving allows informal waste pickers to plan for their children's education or healthcare needs, breaking the cycle of poverty and offering a path towards a more secure future. Thus, saving money, no matter how little, empowers informal waste pickers to build resilience and improve their quality of life over time.

Income per day	Rs. 200
Expenses per day	Rs. 120
Savings per day	Rs. 80
Savings in a month	Rs. 80 x 30= 2400
Savings in a year	Rs. 2400 x 12= 28800



## Savings with Bank

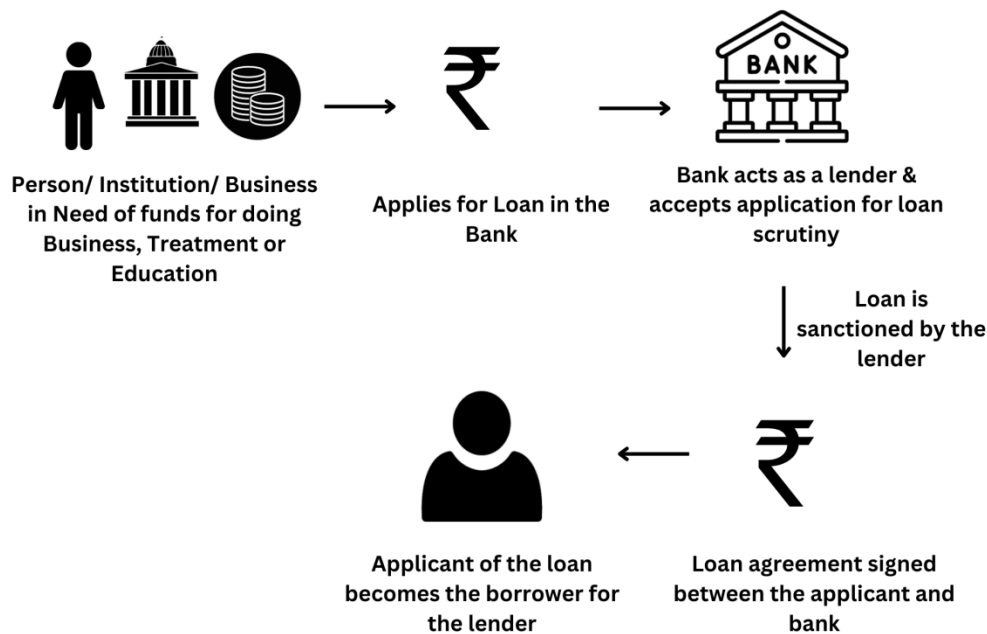
Money held in a bank is secure due to stringent regulations and contributes to national development by pooling savings. Beyond its safety, banks do not levy fees for depositing money. Additionally, they offer interest on deposits, allowing our funds to grow. Depositing money in a bank ensures accessibility whenever needed, with transparent transaction processes. Banks provide a wide array of beneficial services and facilitate easy access to loans and remittance services at fair rates. Moreover, we can nominate a beneficiary who can claim the funds in case of our demise.

Income per day	Rs. 200
Expenses per day	Rs. 120
Savings per day	Rs. 80
Savings in a month	Rs. 80 x 30= 2400
Savings in a year	Rs. 2400 x 12= 28800
Interest @ 8% per annum	Rs. 2304
Total Saved amount	Rs. 28800+ 2304= 31104



## Borrowings/ Loans

Borrowings from banks or money lenders in simple terms mean taking money from them with a promise to pay it back later, usually with interest. People or businesses often borrow money from banks to fund projects, buy homes, or cover expenses. The borrowed money needs to be repaid according to agreed-upon terms, which typically include paying back the principal amount borrowed plus an additional fee called interest. Banks and money lenders provide these funds as loans, helping individuals and businesses manage their finances and achieve their goals.



## Borrowing Capacity

It's crucial to consider that when informal waste pickers take loans, they must eventually repay the borrowed amount along with interest. Therefore, before borrowing, they should carefully evaluate their ability to repay. When recycling guardians borrow money to invest in their recycling activities, it can potentially increase their earnings. For instance, if they borrow ₹1000 to purchase additional recycling equipment, which enables them to collect recyclables worth ₹5000 more over time, they can easily repay the loan of ₹1100 (₹1000 principal + ₹100 interest). This leaves them with ₹3900 as additional income

after settling the loan, which enhances their financial stability and ability to reinvest in their work.

***“BORROW ONLY FOR YOUR NEEDS AND NOT FOR YOUR WANTS”***



***BORROWINGS SHOULD ALWAYS BE DEPENDANT ON HOW MUCH INCOME YOU EARN AND IT DOESN'T MEAN YOU CAN BORROW EQUAL TO YOUR INCOME***



***DO NOT BORROW MORE THAN YOUR CAPACITY***

# Difference between Borrowings from a Bank and a Money Lender

## 1. Source of Funds

**Bank:** Banks are financial institutions that collect deposits from customers and use those funds to provide loans. They are regulated and supervised by government authorities.



**Nationalised Banks**



**Private Banks**



**Money Lender:** Money lenders are typically individuals or private entities that provide loans from their own funds or from other private investors. They are not always subject to the same regulatory oversight as banks.



## 2. Terms and Conditions





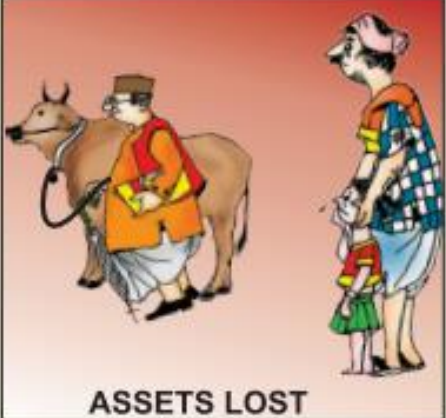
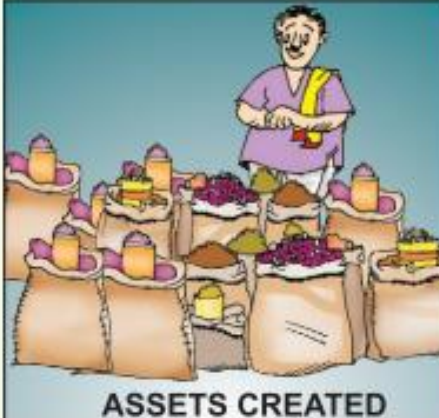
**Bank:** Banks usually offer loans with structured terms and conditions, including fixed or variable interest rates, repayment schedules, and may require collateral depending on the type of loan.

**Money Lender:** Money lenders may offer more flexible terms and conditions, but their loans often come with higher interest rates compared to banks. They may also require different types of collateral or personal guarantees.

## 3. Regulation and Protection

**Bank:** Banks are regulated by banking laws and regulations to ensure fair lending practices and consumer protection. Borrowers have certain rights and recourse mechanisms through regulatory bodies.

**Money Lender:** Money lenders may operate with fewer regulations, which can sometimes lead to higher risks for borrowers, such as predatory lending practices or unclear terms. Borrowers may have limited recourse in case of disputes.

<b>MONEY LENDER</b>	<b>BANK</b>
 <p data-bbox="427 696 683 730"><b>NO AGREEMENT</b></p>	 <p data-bbox="900 696 1187 730"><b>WITH AGREEMENT</b></p>
 <p data-bbox="357 1128 740 1162"><b>INTEREST = PER MONTH</b></p>	 <p data-bbox="874 1128 1235 1162"><b>INTEREST = PER YEAR</b></p>
 <p data-bbox="405 1563 628 1597"><b>ASSETS LOST</b></p>	 <p data-bbox="932 1563 1219 1597"><b>ASSETS CREATED</b></p>

(Picture Source: RBI Financial Literacy document)



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 3

# Digital Literacy



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# Chapter 3: Digital Literacy

**“Digital literacy is the knowledge and skill used in a broad range of digital devices such as desktop computers, laptops and smartphones. Digital Literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations. Simply it is the ability to access the computer/mobile/tablet/internet for our day-to-day activities and being connected with others through the internet.”**

## Digital Literacy for Recycle Guardian includes:



### Digital device

- ✓ Understanding the Digital device
- ✓ Recognize the usage digital device application
- ✓ Importance of Digital literacy



### Social Platform

- ✓ Understanding Social platform
- ✓ Importance of Social platform
- ✓ Effective communication through Social media
- ✓ Social media benefit of day to day life such as online money transfer, ticket booking etc.,



### Govt. Digital Platform

- ✓ Understanding Govt.digital platform
- ✓ Recognize the online application, government schemes, RTI, benefits of government funds

## 3.1. Digital Devices and Its Applications

### Digital Literacy

**“Digital literacy is crucial as it enables people to effectively use technology in their daily lives. Understanding how to operate various digital devices helps with communication, work, learning, and entertainment. It also allows individuals to navigate the digital world safely and efficiently”**

## Types of Digital Equipment and Their Applications:

- **Laptop:** Used for work, online learning, browsing the internet, and running various software applications.
- **Smart phone:** Essential for communication, social media, mobile apps, and quick access to information.
- **Smart watch:** Tracks health and fitness, manages notifications, and offers quick access to essential apps.
- **Camera:** Captures photos and videos for personal or professional use.
- **Printer:** Prints documents, photos, and other materials.
- **Scanner:** Converts physical documents into digital formats for easy storage and sharing.
- **VR (Virtual Reality):** Used for immersive gaming, virtual tours, and training simulations.

These devices make it easier to stay connected, work efficiently, and enjoy various digital experiences.

**Desktop**



**Laptop**



**Smartphone**



**Tablet**



**Smartwatch**



**Fitness Tracker**



**VR Headset**



**Smart TV**



**Others (DSRL Camera, Printer, Scanner, etc.)**





## Importance of Digital Literacy

**Empowerment in Democratic Participation:** Digital literacy training equips recycle guardians to engage actively in the democratic process, enhancing opportunities for their livelihood.

**Access to Information and Knowledge:** They will gain the ability to access information and acquire new skills using digital devices, particularly mobile phones.

**Government Services Accessibility:** With internet access, they can easily retrieve information on government schemes and services.

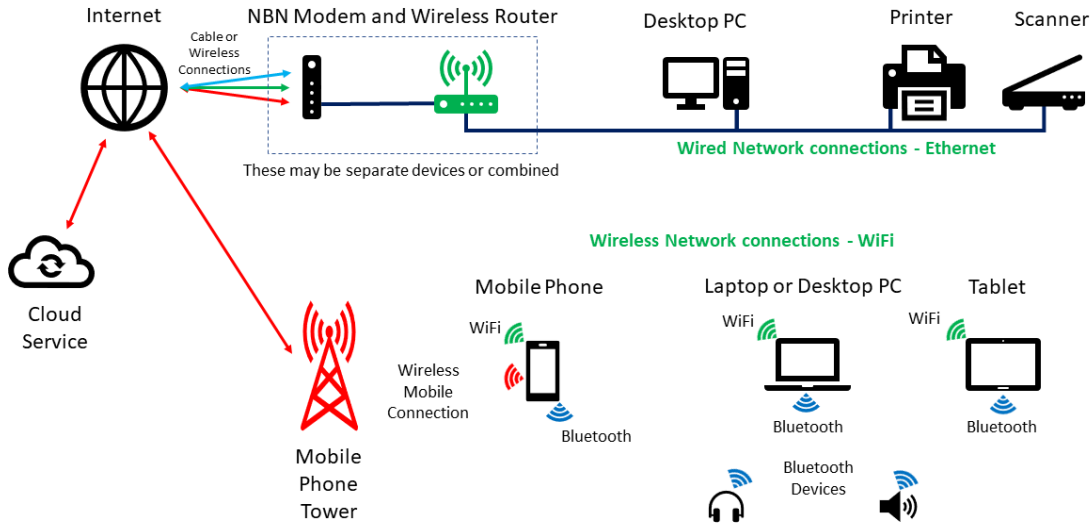
**Independence in Daily Life:** Proficiency in using mobile and internet applications enables the recycle guardians to function independently, fostering their personal and community development as self-sufficient individuals.

### Introduction to the Internet

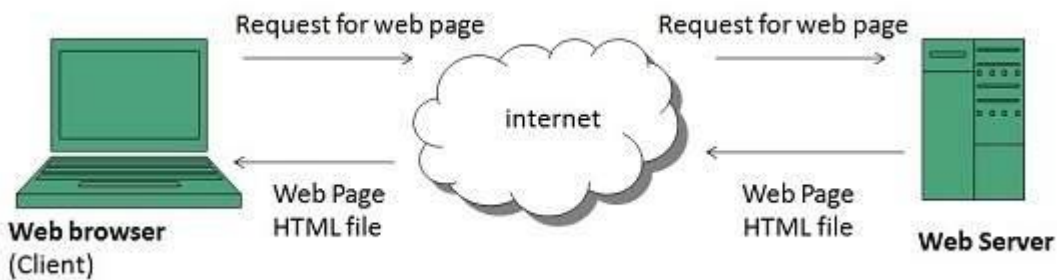
Module Name		Learning Objectives
	Connecting to the Internet	Explain various ways of connecting to the Internet
	World Wide Web	Explain world wide web
	Web Browsers	Use web browsers for accessing the Internet
	Search Engines	Demonstrate the use of search engines
	Surfing the Web	Identify information of interest

# Connecting to Internet

## Internet and Device Connection



# How World Wide Web (www) Works?



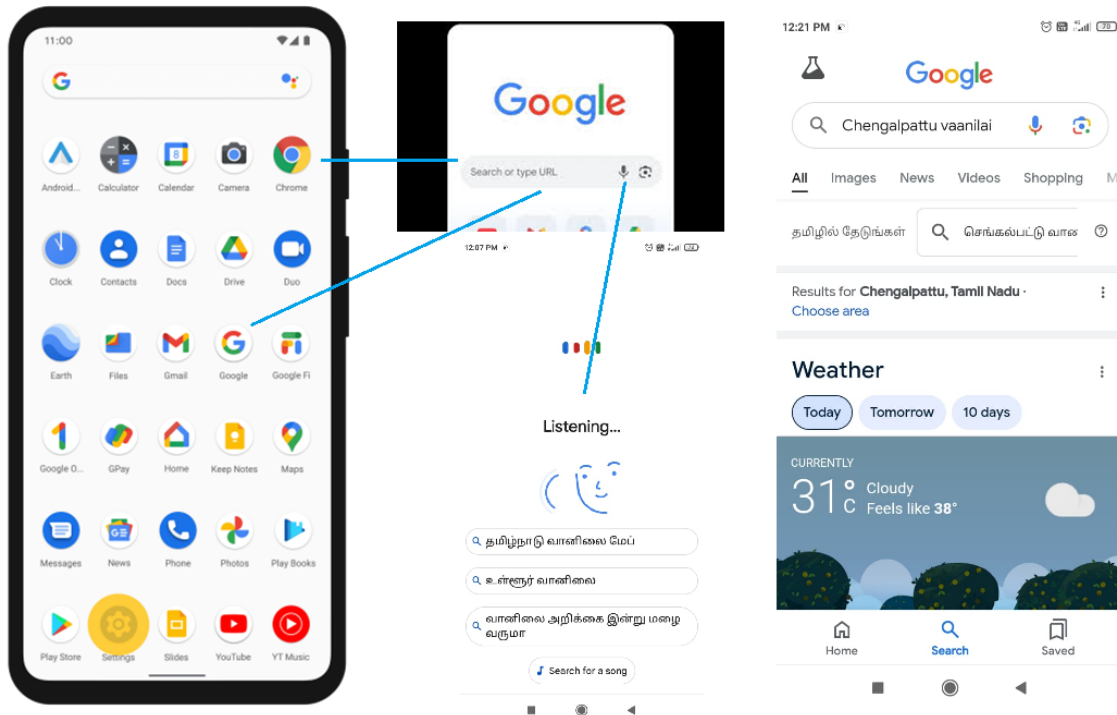
# Web Browser and Search Engine

**SEARCH ENGINES**





Google YAHOO!  
Yandex AOL. Ask.com  
Baidu 百度 Bing

**BROWSERS**

# Surfing the Web



## Communications using the Internet

Module Name	Learning Objectives
 <p>Basics of E-mail</p>	<p>Explain the importance of e-Mail</p>
 <p>Using E-mail Features</p>	<p>Create an e-Mail id and access the various features of e-Mail</p>
 <p>Instant Messaging and Collaborating using Voice over Internet Protocol (VoIP)</p>	<p>Use VoIP for instant messaging – Skype and Hangout</p>
 <p>Using Social Media, Information Tools and Messaging Services</p>	<p>Use Facebook, Youtube, Twitter, Wikipedia, WhatsApp, etc.</p>

## Application of the Internet

(includes Citizen centric services and use of mobiles for undertaking cashless transactions)

### Module Name

### Learning Objectives

	Access Information related to Livelihood such as Education, Agriculture and Health	<ul style="list-style-type: none"> <li>Search for education, career and job related information; Search for weather forecast, fishing zone, market price; Search for health-related information</li> </ul>
	Make Utility Bill Payments	<ul style="list-style-type: none"> <li>Make utility bill payment online (electricity, mobile bills, etc)</li> </ul>
	Book Train and Bus Tickets	<ul style="list-style-type: none"> <li>Book train and bus tickets online</li> </ul>
	Locate Government Scheme Information	<ul style="list-style-type: none"> <li>Explain the process of accessing various Government Schemes. Carry out at least 5 cashless transactions using digital financial tools (USSD/ UPI/ eWallet/ AEPS/ Card/ PoS). Promote Digital Payments. Use Digital Locker. Use online citizen centric services. Appreciate the role of digital technology in everyday life, in social life and at work.</li> </ul>
	Cyber Security	<ul style="list-style-type: none"> <li>What is Cyber Security Why Cyber Security is Important Do's and Don'ts for Cyber Security</li> </ul>

## Opening Gmail Account

The process of opening a Gmail account involves the following steps:

- Sign in page:** The user is prompted to sign in with their Google Account. The 'Create account' button is highlighted.
- Create your Google Account:** The user provides their first name (Elena) and last name (Casarosa). They then enter an email address (ecasarosa3@gmail.com) and create a password. The 'Next' button is highlighted.
- Privacy and Terms:** The user reviews the Privacy and Terms of Service. The 'I agree' button is highlighted.
- Account Setup:** The user's account is created, and they are shown their profile picture and account details. The 'Next' button is highlighted.

## 3.2 Social Platform

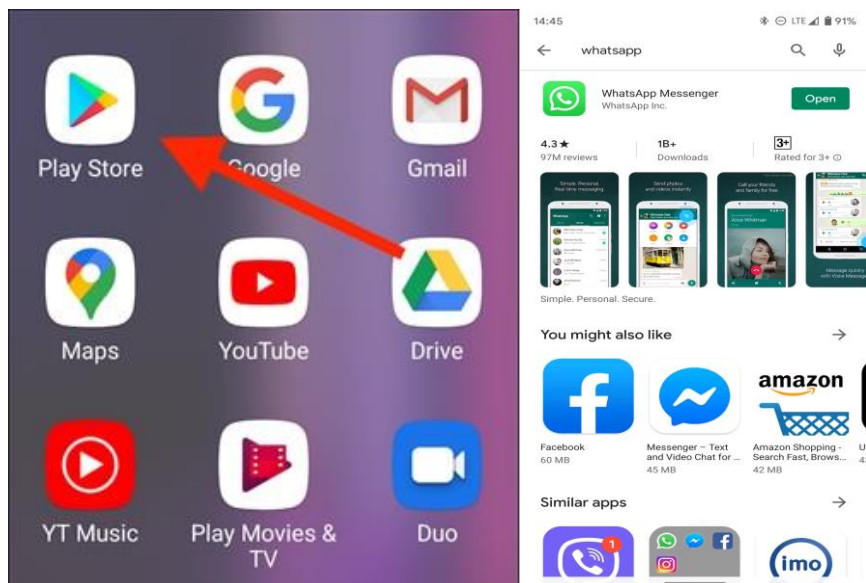
### Social Platform Literacy

“Social media platforms are important because they connect people globally, allowing them to share ideas, experiences, and information instantly. They help individuals stay informed, build relationships, and express themselves creatively. Social media also supports businesses by providing a platform for marketing and customer engagement, making it a valuable tool in modern communication”

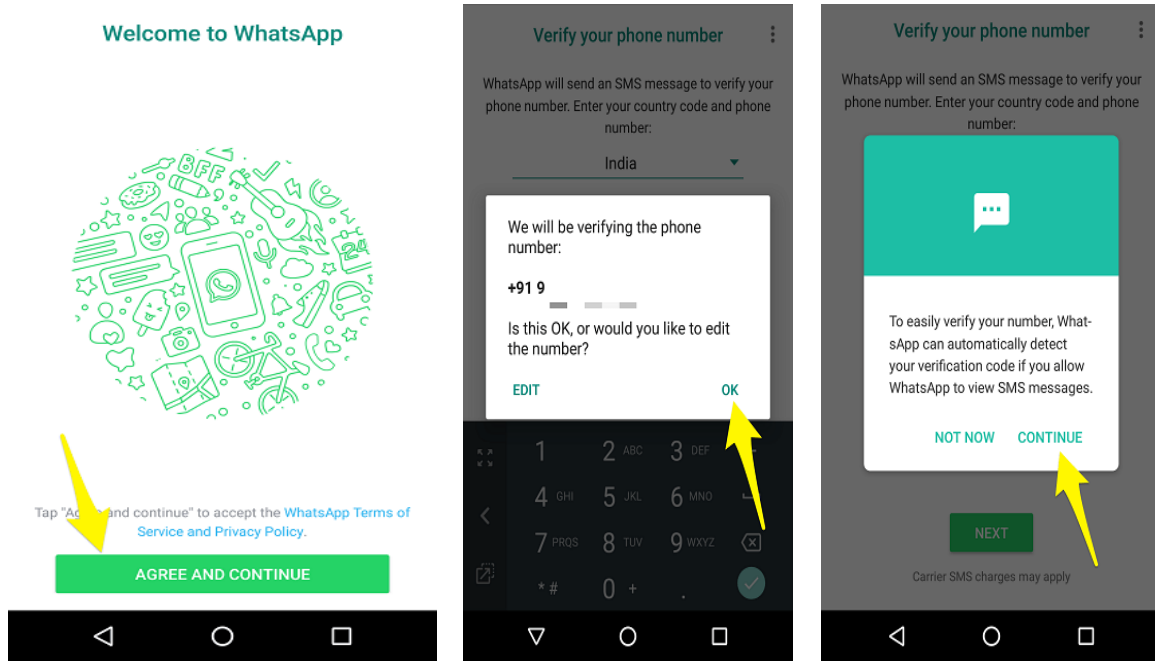
## Using Social Media, Information Tool and Messaging Services

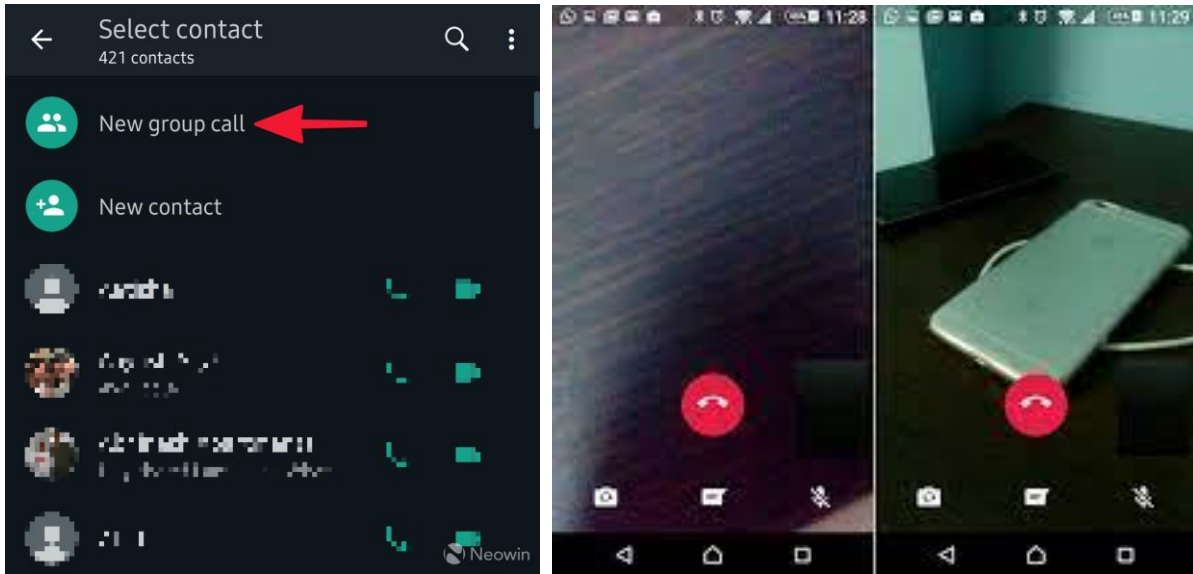
### WhatsApp

WhatsApp is a messaging app for instant text, voice, and video chats. It offers group messaging, file sharing and secure, encrypted conversations, making it great for personal and business use.



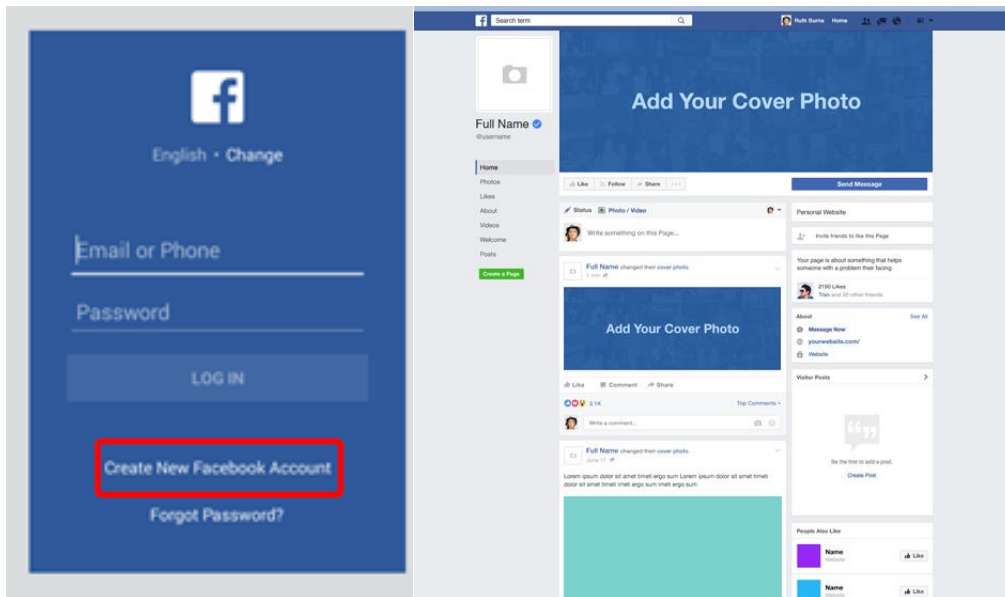






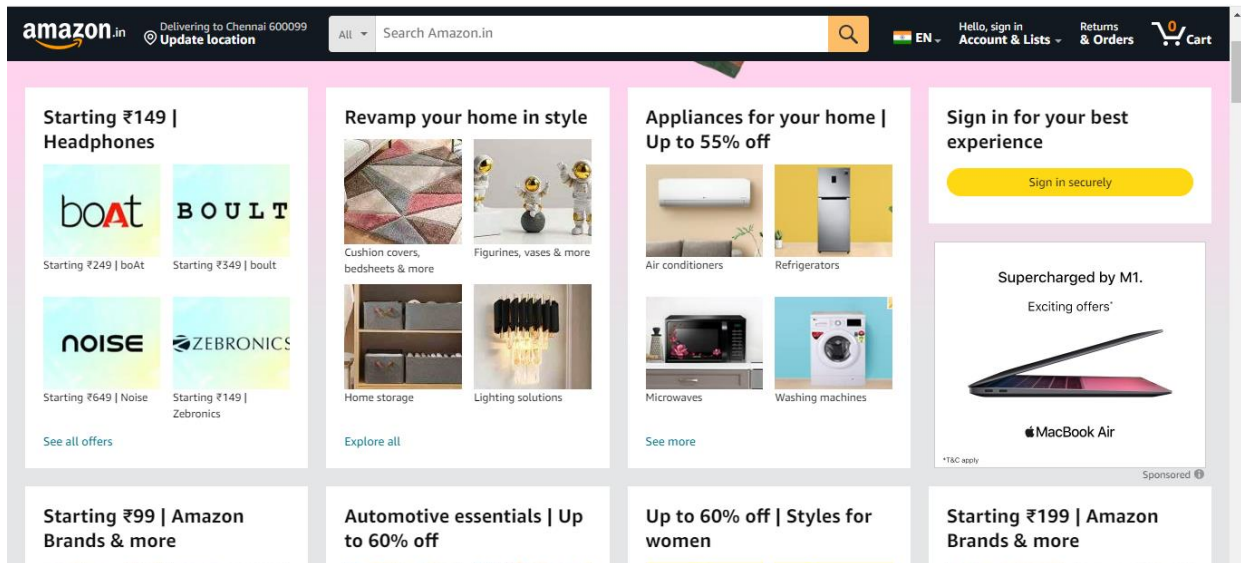
## Facebook

Facebook is a social media app for connecting with friends, sharing updates, photos, and videos, joining groups, and discovering events. It's also used for business promotion and networking opportunities.



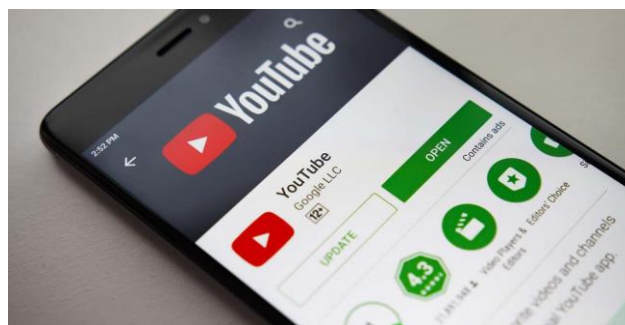
## Amazon and Flipkart

The Amazon / Flipkart app allows you to shop for a wide variety of products, track deliveries, read reviews, and access deals. It also offers features like wish lists and personalized recommendations.

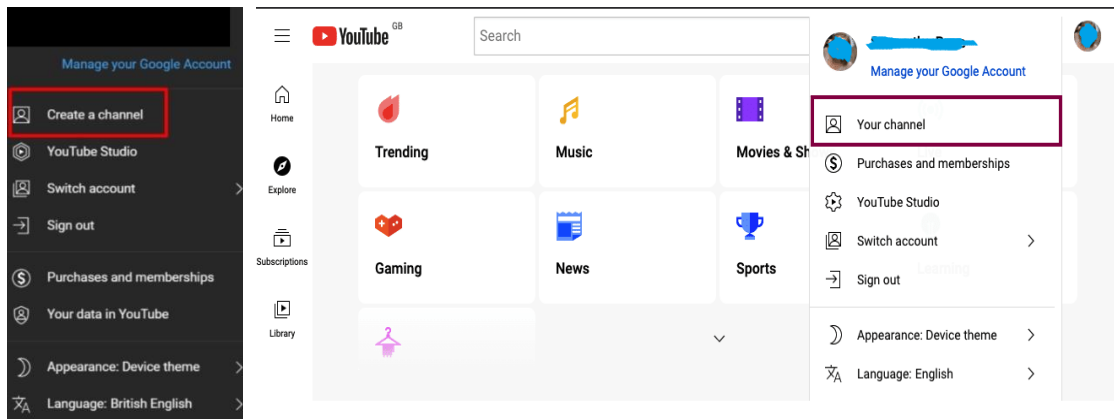


## YouTube

YouTube is a video-sharing app for watching, uploading, and sharing videos. It offers a wide range of content from tutorials and music to vlogs and documentaries, with options for live streaming

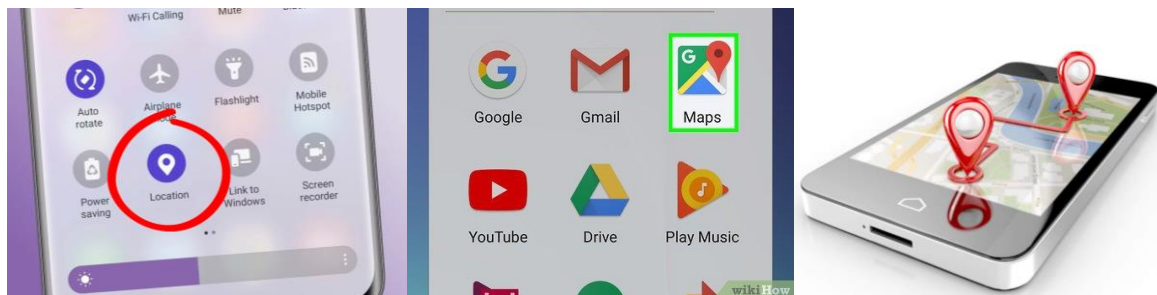


## Create your YouTube Channel



## Google Map

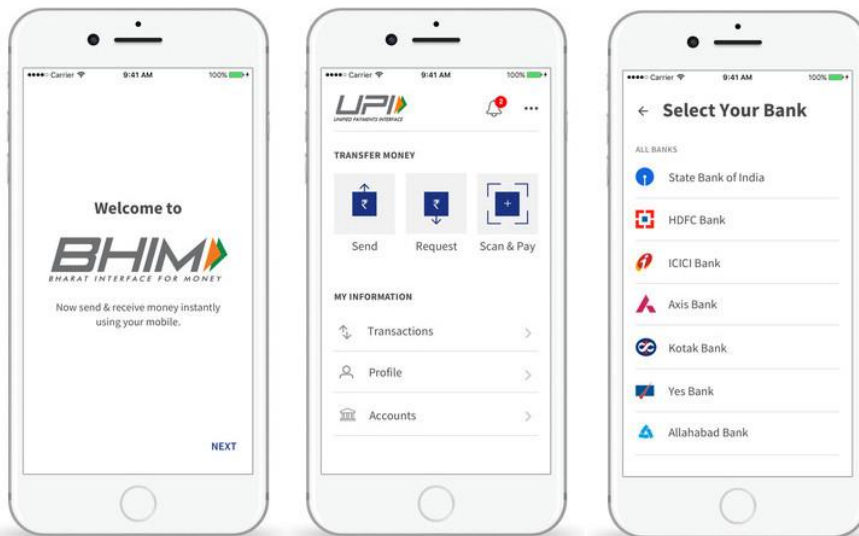
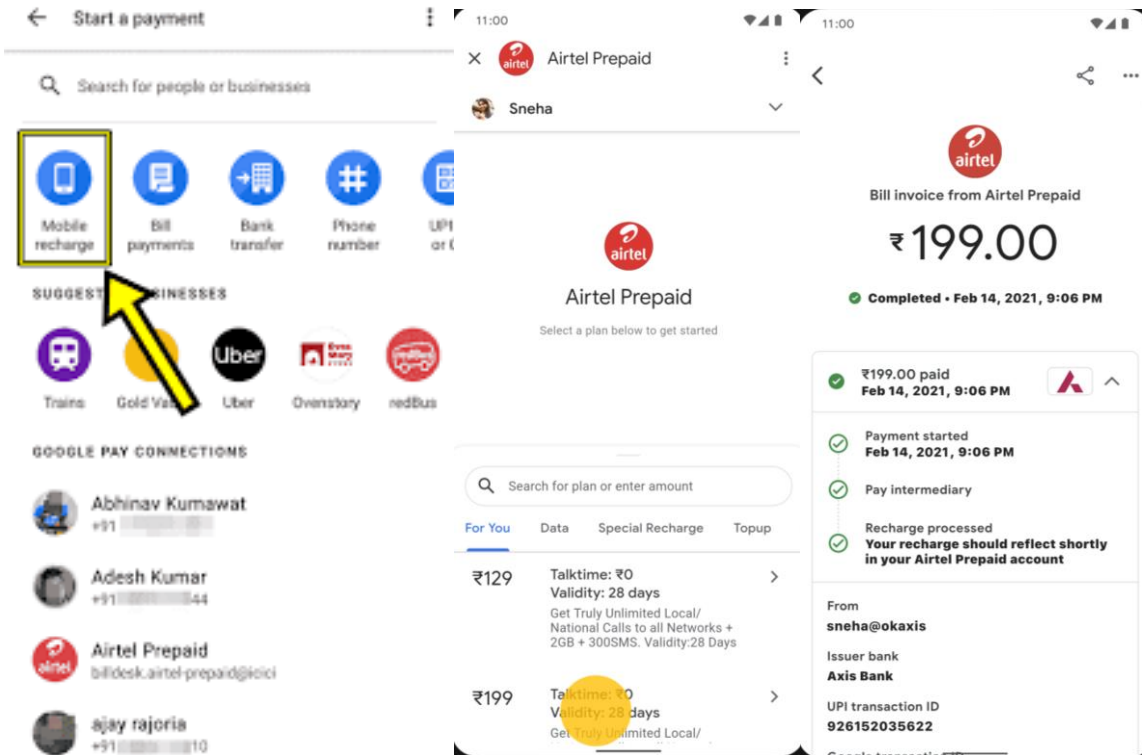
Google Maps helps with navigation, traffic updates, and route planning. It lets you find nearby businesses, view street-level images, and explore areas with user reviews and ratings for better local insights.



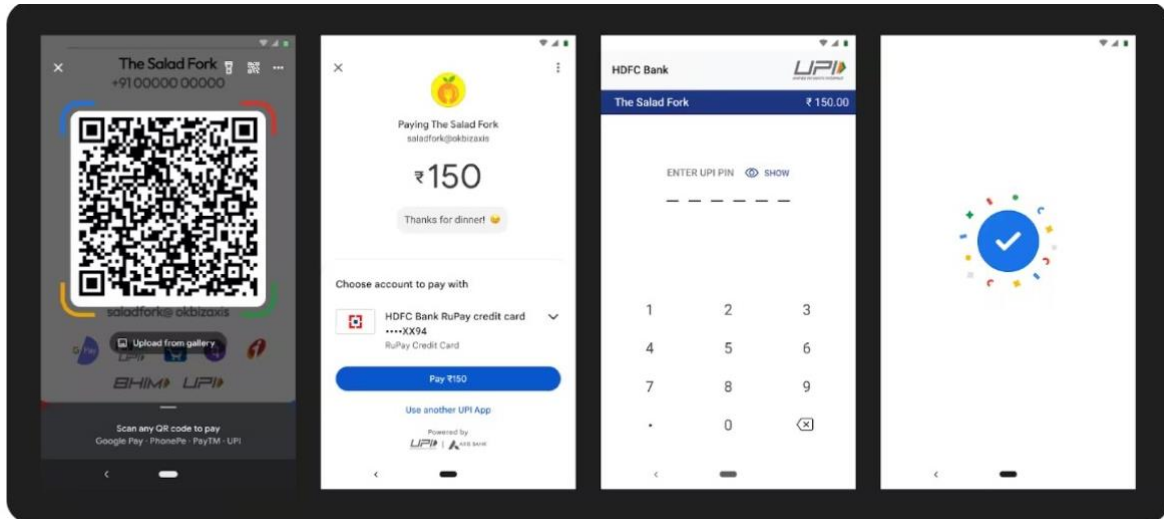
## Bill Payment

Online payment apps are important because they make transactions fast, convenient, and secure. With these apps, people can pay bills, transfer money, and shop online from anywhere, anytime. They reduce the need for cash and checks, making payments easier and more efficient. This also helps businesses by streamlining payment processes.



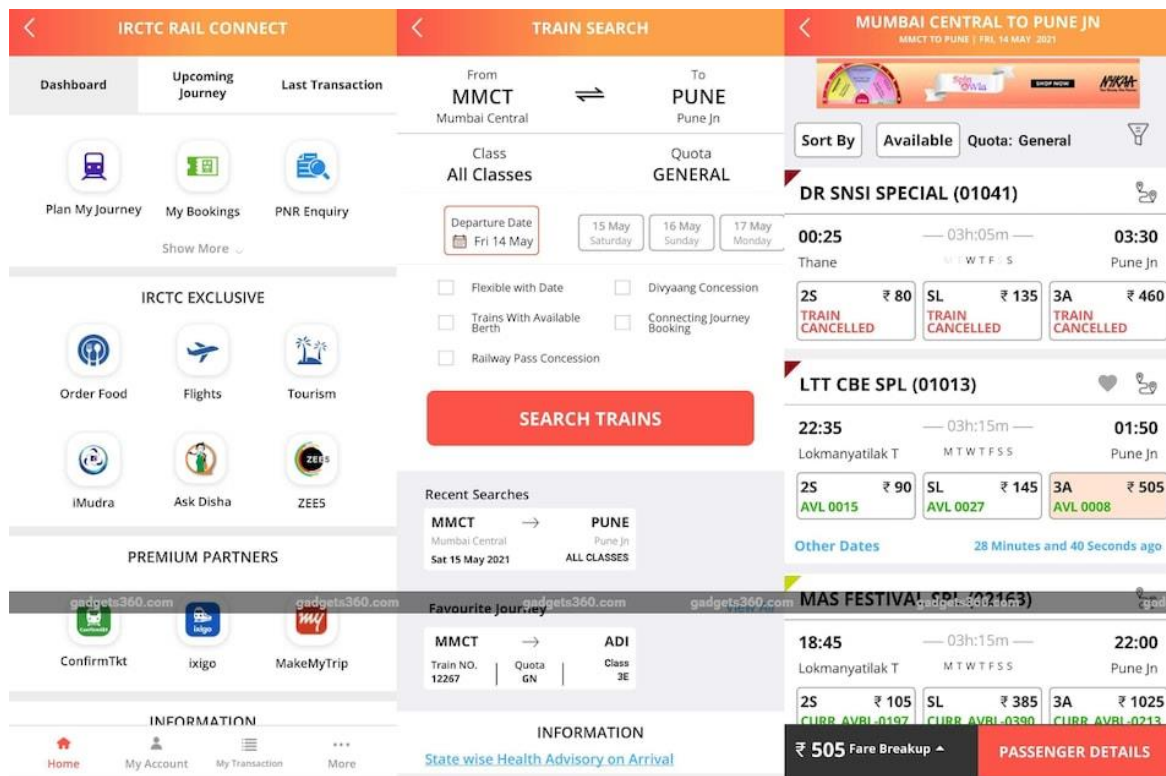






## Ticket Booking

Online bus and train ticket apps are important because they make travel planning easy and convenient. You can book tickets anytime, check schedules, and choose your seats without standing in long lines. These apps also offer digital tickets, saving paper and reducing the risk of losing your ticket, making travel hassle-free



Online Reservation Toll Free Number: 08066006572 / 9513948001

Bank Queries-Billedesk / Helpdesk: 044-49076316 / 49076326

Bank Queries-Basispay / Helpdesk: 7305068045

Available on the App Store

GET IT ON Google Play

English | தமிழ்



தமிழ்நாடு அரசு போக்குவரத்துக் கழகம்  
Tamil Nadu State Transport Corporation Ltd.  
(A Government of Tamilnadu Undertaking)



Home | About Us | Types of Services | Terms & Conditions | Hire a Bus | Gallery | Contact Us | Cancel Ticket | View Ticket | Ticket Status | Refund / Transaction Status | Operator Login | E-Ticket Login

"SETC has introduced"

**Search And Book Tickets**

From:

To:

Onward Journey Date:  Time:

Return Journey Date:  Time:

Adult :  Male/s  Female/s

Children :  Male/s  Female/s

Service Class:

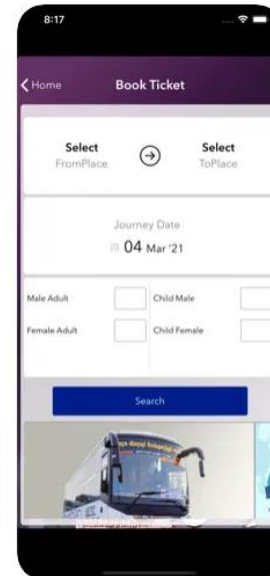
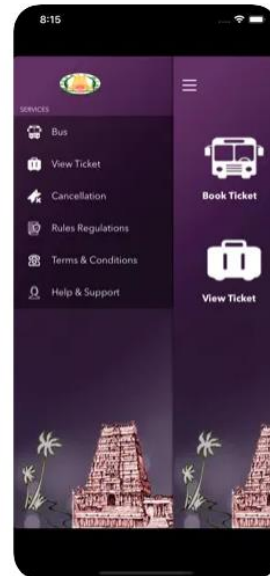
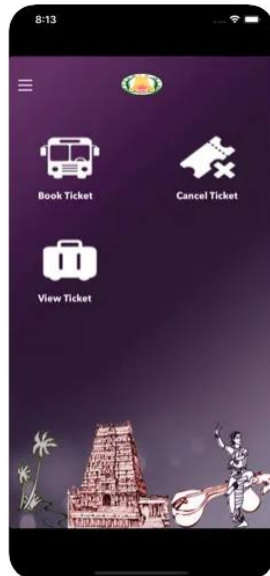
**SEARCH**

**Fail Transaction & Ticket Cancellation Refunds:**

Customers kindly check Bank account statement which is used for Booking. If you used any UPI mode payments like GPAY, PhonePe, Paytm or any other UPI/ QR payments kindly verify your Bank Statement for credit of Refund amount, In case of failed transaction or Cancellation refunds.

**Top Destinations**

- Chennai - Madurai
- Chennai - Hosur
- Coimbatore - Bengaluru
- Dindigul - Chennai



தமிழ்நாடு அரசு போக்குவரத்துக் கழகம்  
Tamil Nadu State Transport Corporation Ltd.  
(A GOVERNMENT OF TAMIL NADU UNDERTAKING)



Welcome : Guest

AdvanceBooking >> Search Place>> Search for Services >> Availability--

**Available Services**

**CHENNAI-PT DR. M.G.R. BS to MADURAI - Journey date 05/12/2023**

Trip Code	Class of Service	Via Route	Route No	Dept. Time (at Passenger Start Point) 24 HH:MM	Service Start Point	Origin	Destination	Adult Fare	Child Fare	Corporation	Seat Count	Select Service
2015CHEMAD	ULTRA DELUXE	MADURAVOYAL, TRICHY	137UD	20:15	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	459	230	SETC	28	Book
2030CHEMADAB	AC SLEEPER SEATER	TRICHY (MALLIGAI)	137AB	20:30	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	505/828 600/920	253/415 300/460	SETC	31	Book
2035CHEUSI	ULTRA DELUXE	TRICHY	157UD	20:35	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	USILAMPATTI	459	230	SETC	23	Book
2100CHEMADNS	NON AC SLEEPER SEATER	MADURAVOYAL (MALLIGAI)	137NS	21:00	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	459/620 459/710	230/310 230/355	SETC	18	Book
2115CHEMADAS	AC SLEEPER	VILLUPURAM	137AS	21:15	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	828 920	414 460	SETC	29	Book
2130CHEMADAB	AC SLEEPER SEATER	TRICHY (MALLIGAI)	137AB	21:30	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	505/828 600/920	253/415 300/460	SETC	36	Book
2200CHEMADAB	AC SLEEPER SEATER	TRICHY	137AB	22:00	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	505/828 600/920	255/414 300/460	SETC	41	Book
2215CHEMADAS	AC SLEEPER	VILLUPURAM	137AS	22:15	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	828 920	414 460	SETC	29	Book
2230CHEMADNS	NON AC SLEEPER SEATER	MADURAVOYAL, TRICHY	137NS	22:30	CHENNAI-PT Dr.M.G.R. BS	CHENNAI-PT Dr. M.G.R. BS	MADURAI	459/620 459/710	230/310 230/355	SETC	35	Book

\* Click on Trip Code link to view Fare, Seat Availability & Pickup Points.  
\* Distance and Journey hours are approximate.  
\* Concessions and Levies are applicable as per rules.

## 3.3 Government Digital Platform

### Access Information Related to Livelihood, Education, Schemes and Others

**My Aadhaar**  
mGovernance Team

★★★★★ FREE


Through this mobile application *AADHAAR* applicants can directly download the *AADHAAR* card.

---

**AADHAAR Linking**

This application allows citizens to register request for linking 12 digit unique *AADHAAR* number to their personal identification documents or benefit cards such as:

- Scholarships
- Pension ID
- MGNREGA Job Card
- LPG Consumer ID



**AADHAAR Linking**  
mGovernance Team

★★★★★ FREE

**Process of linking AADHAR to Personal IDs**



```

graph TD
    A[Enter location details (Location details - State and District name)] --> B[Select the benefit type & details to be linked with AADHAR number]
    B --> C[Enter 12-digit AADHAR number & contact details]
    C --> D[Enter the OTP (One Time Password), sent to the mobile and the security code displayed and Submit]
    D --> E[Request Registered]
          
```

## Mobile Banking

Banking can also be done by using mobile applications of the banks.

### Mobile Banking Services

Account Information	Transaction	Support
<ul style="list-style-type: none"> <li>• Mini-statements and checking of account history</li> <li>• Alerts on account activity</li> <li>• Monitoring of term deposits</li> <li>• Access to loan statements</li> <li>• Access to card statements</li> <li>• Mutual funds / equity statements</li> <li>• Insurance policy management</li> </ul>	<ul style="list-style-type: none"> <li>• Mini-Funds transfers between the customer's linked accounts</li> <li>• Paying third parties, including bill payments and third party fund transfers</li> </ul>	<ul style="list-style-type: none"> <li>• Mini-Status of requests for credit, including mortgage approval and insurance coverage</li> <li>• Check (cheque) book and card requests</li> <li>• Exchange of data messages and email, including complaint submission and tracking</li> <li>• ATM locator</li> </ul>

## Right to Information (RTI)

As per RTI every citizen has freedom of speech and expression and has the right to know how the government works, what role does it play, what are its functions and so on.

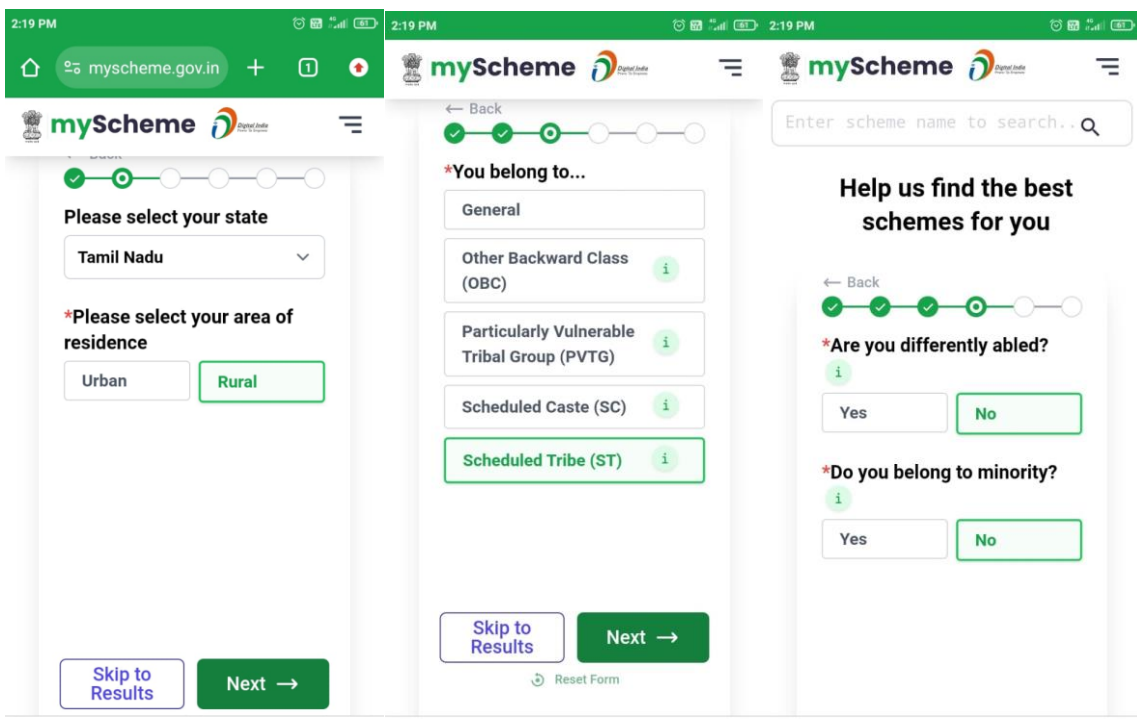
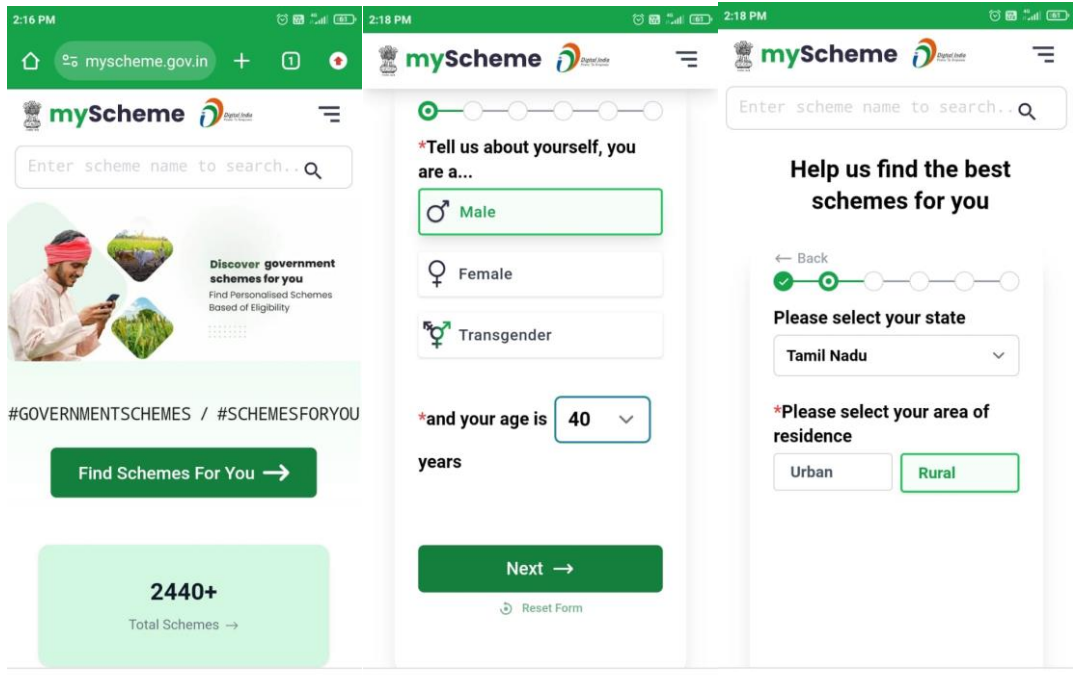
### Online Application Process for Right to Information

Fill the form and attach required document at [http://rti.india.gov.in/rti\\_direct\\_complaint\\_lodging.php](http://rti.india.gov.in/rti_direct_complaint_lodging.php)

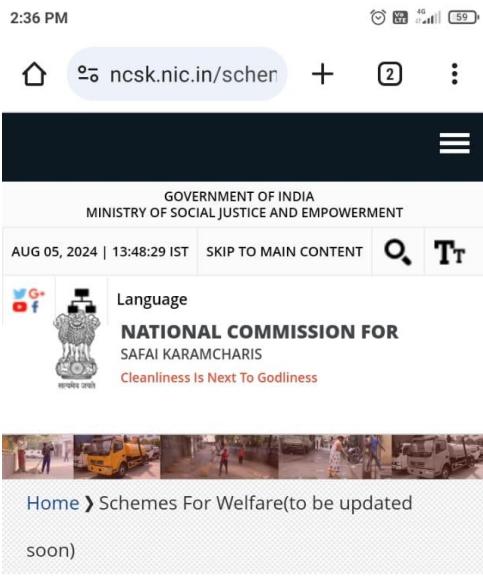
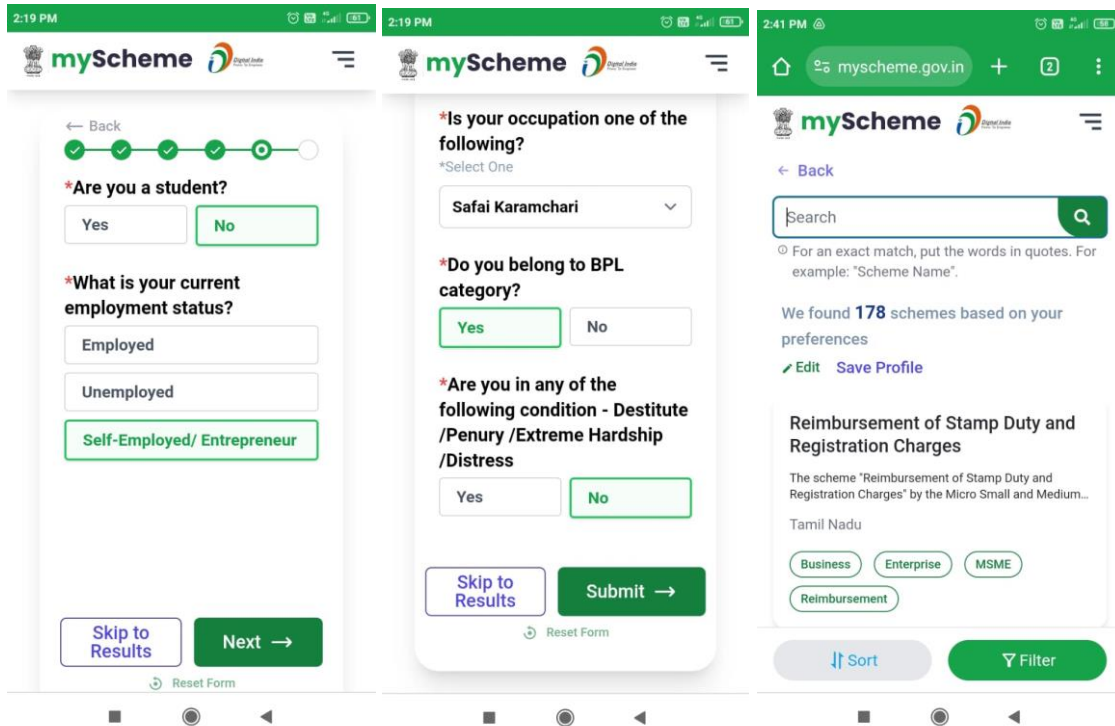
Click on "Save as Draft/Submit", once the form is saved, a unique complaint ID is provided

After submitting the application one can also check the status of application using unique complaint ID on [http://rti.india.gov.in/rti\\_check\\_request\\_status.php?cat=compl](http://rti.india.gov.in/rti_check_request_status.php?cat=compl)









## Schemes For Welfare(to be updated soon)

Swipe to view →

Implemented By Ministry of Social Justice and Empowerment



**Various schemes of NSKFC**

**Background:**  
National Safai Karamcharis Finance & Development Corporation (NSKFC) is a wholly owned Govt. of India Undertaking under the Ministry of Social Justice & Empowerment, set up on 24<sup>th</sup> January 1997 as a Company 'Not for Profit' under Section 8 of the Companies Act, 2013. It is in operation since October, 1997, as an Apex Corporation for the all round socio-economic upliftment of the Safai Karamcharis (including wastepickers), Manual Scavengers and their dependants across the Country through its various loan and non-loan based schemes. The loan schemes are implemented through State Channelizing Agencies (SCAs) nominated by the State Govts./UTs & Partner Banks. Skill Development Training Programmes (SDTP) are implemented through Govt. Sector Training Institutions and Sector Skill Councils (SSCs) across the Country.

S. No.	Name of the scheme	Maximum Limit (upto)	Channel Agency	Rate of interest to Beneficiaries	Repayment period (upto)
1	General Term Loan (GTL)	Rs.15.00 lacs	2% p.a.	4% p.a.	10 years**
2	Mania Adhikari Yojana (MAY)	Rs.2.00 lacs	2% p.a.	5% p.a.	5 years**
3	Mania Samrothi Yojana (MSY)	Rs.1.00 lac	1% p.a.	4% p.a.	3 years**
4	Micro Credit Finance (MCF)	Rs.1.00 lac	2% p.a.	5% p.a.	2 years**
5	Education loan (EL) -For study in India -For study abroad [The interest on Education Loan (for study in India) is reimbursable under the scheme of the Ministry of Education, Govt. of India to the beneficiaries whose family annual income is upto Rs.4.50 lac per annum]	Rs.10.00 lacs Rs.20.00 lacs	1% p.a.	4% p.a. (0.5% rebate for women in case of study in India)	5 years or termination of course with moratorium period of one year.
6	Sanitary Mats (SM)	Rs.15.00 lacs Upto Rs.7.50 lacs	2% p.a.	4% p.a. @ 4% p.a. (to women)	10 years**
7	Green Business (GB)	Above Rs.7.50 lacs & upto Rs.15.00 lacs Above Rs.15.00 lacs & upto Rs.20.00 lacs	3% p.a. 4% p.a.	5% p.a. 6% p.a. (1% rebate for women)	10 years**
8	Scheme for 'Play & Use' community toilets Swachhita Udayami Yojana (SUF) - Swachhita se Samparmita Ki Aur	Rs.25.00 lacs	2% p.a. @ 4% p.a. @	4% p.a. @ 4% p.a. @	10 years**
9	(Scheme for procurement of sanitation related equipments/vehicles)	a) Individual/SHG/JRC/Cooperative Rs.15.00 lacs (individual) Rs.50.00 lacs (SHG/JRC/Cooperative) b) Municipal Corporation /Jal Boards /Public Health & Engineering Departments/ Cantonment Boards, Railways etc. Rs.50.00 lacs per unit (no. of unit could be more than 1) c) Private agencies/contractors engaged by the UTs/States including Municipal Corporation/ Municipalities/Jal Boards/Public Health & Engineering Department/Cantonment Board/ Railways etc.	2% p.a. @ 4% p.a. @ 4% p.a. @	4% p.a. (1% rebate for timely repayment) 6% p.a. (1% rebate for timely repayment)	7 years**
10	Skill Development Training Programmes (SDTP)	NSKFC provides Employment Linked Skill Development Training to its target group in various courses alongwith stipend @ Rs.1500/- per month per person in case of Safai Karamcharis/dependants and @ Rs.3000/- per month per person in case of Manual Scavengers/dependant during the training period.			

\*\* After implementation period of 120 days and moratorium of 180 days.  
\*\*\* Including a moratorium period of 180 days.  
\* After implementation period of 90 days and moratorium of 90 days.  
@ 1% rebate for women beneficiaries and 0.5% rebate for timely repayment.  
# Municipal Corporation/Jal Boards, Public Health & Engineering Departments, Cantonment Boards, Railways etc. can also avail direct finance assistance from NSKFC @ 4% p.a. by providing Bank guarantee equivalent to the total project cost.

### Revised Self Employment Scheme of Rehabilitation of Manual Scavengers (SRMS):

Eligibility: Manual Scavengers identified during the survey conducted in States/UTs as per MS Act-2013.

- One Time Cash Assistance (OTCA) of Rs.40,000/- (one person in a family).
- Capital Subsidy for beneficiaries from the category of Manual Scavengers.

Capital subsidy for Manual Scavengers upto Rs.5.00 lakh for Self Employment projects upto Rs.15.00 lakh as per below slabs:-

- Project cost of upto Rs.5 lakh : 50% of the project cost
- Between Rs.5 lakh to Rs.15 lakh : Rs.2.5 lakh and 25% of the Project cost between Rs.5-15 lakh

#### For Group Projects Admissible Capital Subsidy

**Project Cost Limit**  
Maximum Project Cost limit Rs. 50.00 lakh for group As admissible to individuals with maximum capital @ maximum Rs. 10.00 lakh for each member of the group. Subsidy of Rs.3.75 lakh per member of the group.

**Capital subsidy to Manual Scavengers, Sanitation workers and their dependants for procurement of Sewer/Septic tank cleaning equipments/vehicles:** Same as above



← → ↻ samagra.education.gov.in/features.html ☆ 🌐

🏠 ↓ Skip to main content ↓ Skip to navigation 🗣️ Screen Reader Access Text Size: A- A A+ 🗂️

**Samagra Shiksha**  
Department of School Education & Literacy  
Ministry of Education, Government of India

समग्र शिक्षा

About Samagra Shiksha Features Framework Documents & Reports Aspirational Districts Infographics PRABANDH

## Major Features

**Holistic approach to education**

- ⊙ Treat school education holistically as a continuum from Pre-school to Class 12
- ⊙ Inclusion of senior secondary levels and pre-school levels in support for School education for the first time

**Administrative reform**

- ⊙ Single and unified administrative structure leading to harmonized implementation
- ⊙ Flexibility to States to prioritise their interventions under the Scheme
- ⊙ An integrated administration looking at 'school' as a continuum

**Focus on Quality of Education**

- ⊙ Enhanced focus on improving quality of education by focus on the two Ts: Teachers and Technology

← → ↻ repository.education.gov.in/wp-content/uploads/2017/07/special-training-case-studies-2016-17.pdf ☆ 🌐

☰ special-training-case-studies-2016-17.pdf 1 / 47 - 100% + 🗂️

## TAMIL NADU STATE MISSION OF EDUCATION FOR ALL

### Special Training Intervention for Out of School Children

1

2



## TAHDCO

Tamil Nadu Adi Dravidar Housing & Development Corporation Ltd.  
ISO 9001: 2015 Certified Company

Tamil English A<sup>-</sup> A A<sup>+</sup>



- HOME
- ABOUT US
- DEVELOPMENT ACTIVITIES
- TECHNICAL WING
- TENDER
- DOCUMENTS
- RECRUITMENT

MEDIA CORNER



DISTRICT ACTION PLAN

SCHEMES

LAND PURCHASE SCHEME

TRAINING

FINANCIAL ASSISTANCE FOR INDIVIDUALS

NATIONAL SCHEMES

SELF HELP GROUP SCHEMES

HOW TO AVAIL ASSISTANCE

COLLECTOR'S DISCRETIONARY FUND SCHEME

SELF EMPLOYMENT PROGRAMME FOR YOUTH

SPECIAL ECONOMIC PROJECTS

## OVERVIEW

Tamil Nadu Adi Dravidar Housing and Development Corporation was established in 1974 under the Companies Act, 1956. The Government of Tamil Nadu and the Government of India contribute to the Share Capital of the Corporation. At present the Authorized Share Capital of the Corporation is Rs. 100 Cr and paid up share capital is Rs.95.12 Cr. The State Govt. and the Central Govt. contribute the share capital in the ratio of 51:49.

Though the Corporation was initially started as a Construction Company in 1974, the activities of the Corporation was extended to enable it to undertake a wide spectrum of economic development schemes for income generation, skill development training for Scheduled caste and Scheduled Tribes in the State.



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MEDIA CORNER



DISTRICT ACTION PLAN

SCHEMES

TRAINING

FREE VOCATIONAL TRAINING

NATIONAL SCHEMES

EMPLOYABILITY ENHANCEMENT TRAINING

HOW TO AVAIL ASSISTANCE

TRAINING COURSES ORGANIZED IN GOI

HOW TO JOIN TAHDCO TRAINING

VOCATIONAL TRAINING 2004-2005

VOCATIONAL TRAINING 2005-2006

## NATIONAL SCHEMES

## DEVELOPMENT CORPORATION (NSFDC)

Coming soon...

https://ieitahdco.com/nsfdc.html#



## TAHDCO

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ISO 9001: 2015 Certified Company

Tamil English A<sup>-</sup> A A<sup>+</sup>



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- RECRUITMENT

MEDIA CORNER

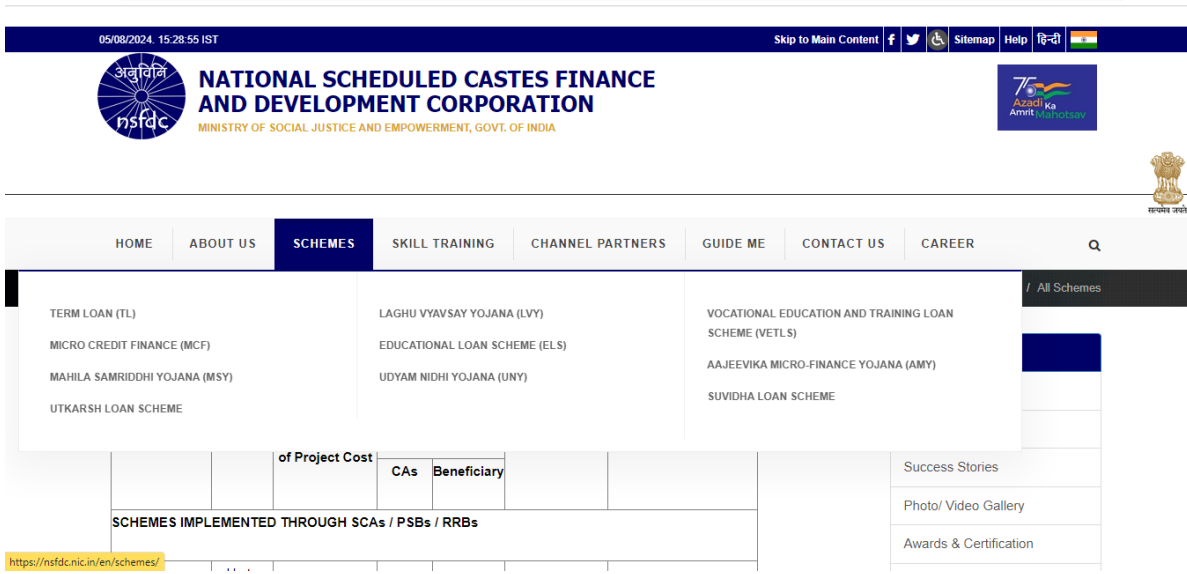
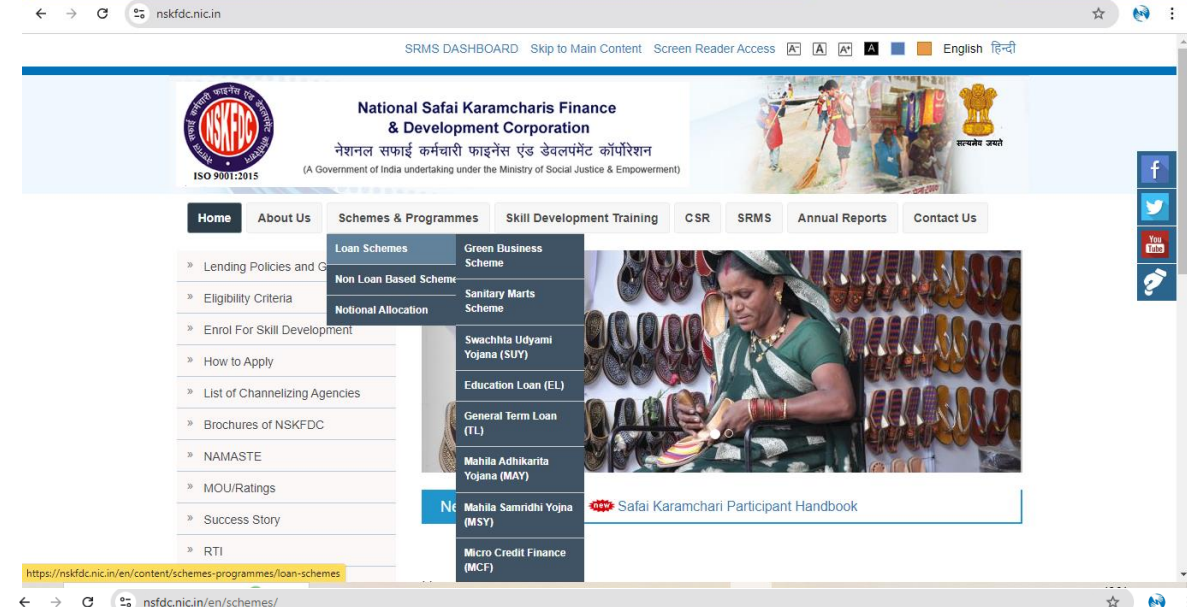
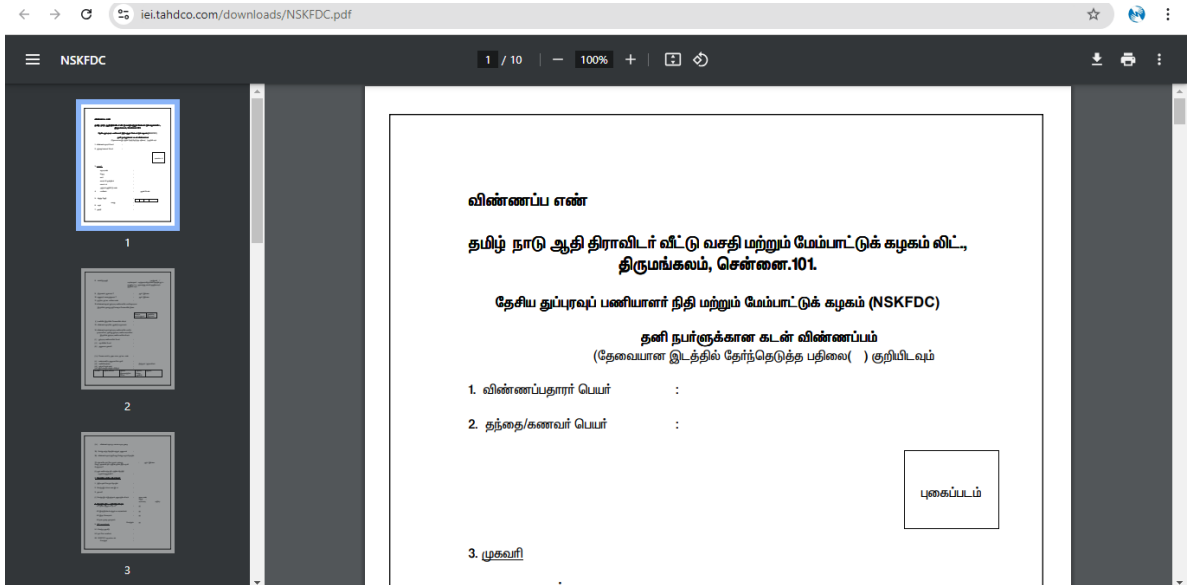


REGISTER

## HOW TO AVAIL ASSISTANCE

Coming soon...







## 3.4 Cyber Security



**Cyber Bullying**



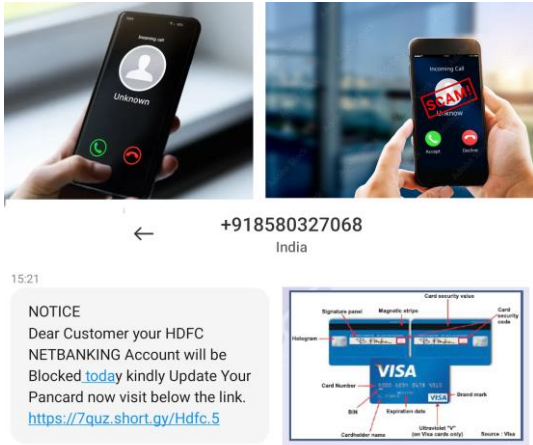
**Cyber Grooming**



**Online Gaming**

### Cyber Security Tips

- ✓ Inform your family member/ elder immediately
- ✓ Identify the bully/ groomer
- ✓ Block the bully/ groomer
- ✓ Never respond to a bully/ groomer
- ✓ Don't accept friend request from unknown people on social media platforms
- ✓ Don't share your personal information
- ✓ Be cautious when you chat
- ✓ Avoid talking to people who asks you questions related your physical and sexual experiences
- ✓ Do not talk to people who ask you to share your sexually explicit photographs/ vidoes
- ✓ Do not go to meet a person whom you met online alone
- ✓ Never install unwanted software and apps like dating app, online games, etc. from unknown sources.
- ✓ Don't share your personal information and important credentials
- ✓ Never share your credit/ debit card details i.e., PIN, Card No., CVV No., PIN, OTP, etc.



## ***Fraud***

- ✓ Never install games downloaded from free online gaming websites
- ✓ Always install good antivirus software in your device
- ✓ Never share your password with anyone
- ✓ Develop habit of playing outdoor games and stop playing online games
- ✓ Pls don't respond if you receive SMS/ WhatsApp/ Email message if you receive an email about lottery winning, blocking bank account, etc.
- ✓ Be watchful and change passwords / PINs frequently
- ✓ Report to Cyber Dost if you face any of the above said problems.

## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 4

# Rights





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# Chapter 4: Rights

**Understanding human rights and the basic rights of waste pickers is crucial for ensuring dignity, safety, and fair treatment. Waste pickers often face poor working conditions and discrimination. By knowing their rights, they can demand fair wages, safe working environments, and access to essential services, helping to improve their quality of life.**

## Rights for Recycle Guardian includes:



Human Rights

### Human Rights

- ✓ Understanding the life, liberty, equality and dignity
- ✓ Importance of Human rights literacy



### Rights of the Recycle Guardian

- ✓ Understanding Basic rights
- ✓ Understanding about Waste pickers' rights includes identity cards, training, waste access, and representation in solid waste management.



### Social Entitlements

- ✓ Understanding Social rights

## 4.1 Human Rights

### What are International Human Rights?

Human Rights are the Rights that all people have by virtue of Human Beings

### Definition of Human Rights in India

According to the National Human Right Commission of India, Human Rights as the rights relating to **LIFE, LIBERTY, EQUALITY AND DIGNITY** of the individual guaranteed by the Constitution or embodied in the International Covenants and enforceable by courts in India.

# THE UNIVERSAL DECLARATION OF HUMAN RIGHTS

## 1 Equality

Everyone is born free and equal in dignity and with rights.



## 2 Freedom from Discrimination

You should never be discriminated against for any reason.



## 3 Life, Liberty and Security

Everyone has the right to life, liberty and personal security.



## 4 Freedom from Slavery

No-one shall be held in slavery or servitude.



## 5 Freedom from Torture

No-one shall be subjected to torture or to cruel or degrading treatment.



## 6 Recognition as Person Before Law

You have the right to be treated as a person in the eyes of the law.



## 7 Equality Before the Law

You have the right to be treated by the law in the same way as everyone else.



## 8 Remedy by Tribunal

You have the right to remedy by competent tribunal.



## 9 Freedom from arbitrary arrest

No-one shall be subject to arbitrary arrest, detention or exile.



## 10 Fair Public Hearing

You have the right to a fair public hearing.



## 11 Innocent until Proven Guilty

You have the right to be considered innocent until proven guilty.



## 12 Privacy

No-one has the right to interfere with your privacy, family, or home.



## 13 Freedom of Movement

You have the right to freedom of movement in and out of the country.



## 14 Asylum

You have the right to seek asylum in other countries from persecution.



## 15 Nationality

You have the right to a nationality.



## 16 Marriage and Family

You have the right to marriage and to raise a family.



## 17 Property

You have the right to own property.



## 18 Freedom of Belief

You have the right to freedom of belief and religion.



## 19 Freedom of Opinion

You have the right to freedom of opinion and expression.



## 20 Freedom of Assembly

You have the right to freedom of peaceful assembly and association.



## 21 Take Part in Government

You have the right to take part in the government of your country.



## 22 Social Security

You have the right to social security.



## 23 Work

You have the right to desirable work and to join trade unions.



## 24 Rest and Leisure

You have the right to rest and leisure.



## 25 Adequate Living Standard

You have the right to a decent life, including food, clothing, housing, and medical care.



## 26 Education

You have the right to education.



## 27 Participate in Cultural Life

You have the right to Participate in the Cultural Life of Community.



## 28 Social Order

You have the Right to a Social Order that Articulates this Document.



## 29 Mutual Responsibility

We all have a responsibility to the people around us and should protect their rights and freedoms.



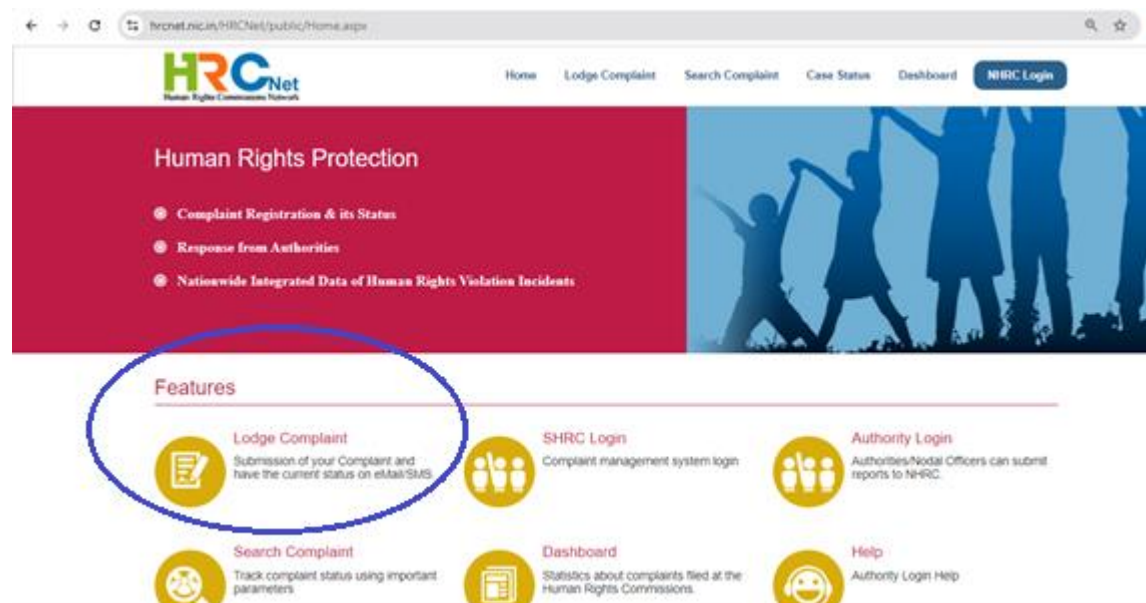
## 30 Freedom from State or Personal Interference

There is nothing in this declaration that justifies any person or country taking away the rights to which we are all entitled.

## 7 Basic Human Rights

1. **The Right to Life:** Every individual has the right to live and be protected from harm.
2. **The Right to Liberty and Personal Security:** Everyone has the right to freedom and safety without fear of unjust detention or harm.
3. **The Right to Equal Treatment before the Law:** All individuals are entitled to fair and equal treatment under the law, without discrimination.
4. **The Right to Privacy:** Everyone has the right to a private life, free from unwarranted intrusion or surveillance.
5. **The Right to Freedom of Thought, Religion, Opinion, and Expression:** Individuals have the right to think freely, practice any religion, hold opinions, and express themselves.
6. **The Right to Education:** Every person has the right to access to education and acquire knowledge.
7. **The Right to Freedom from Discrimination:** All individuals have the right to live free from discrimination based on race, gender, ethnicity, or other characteristics.

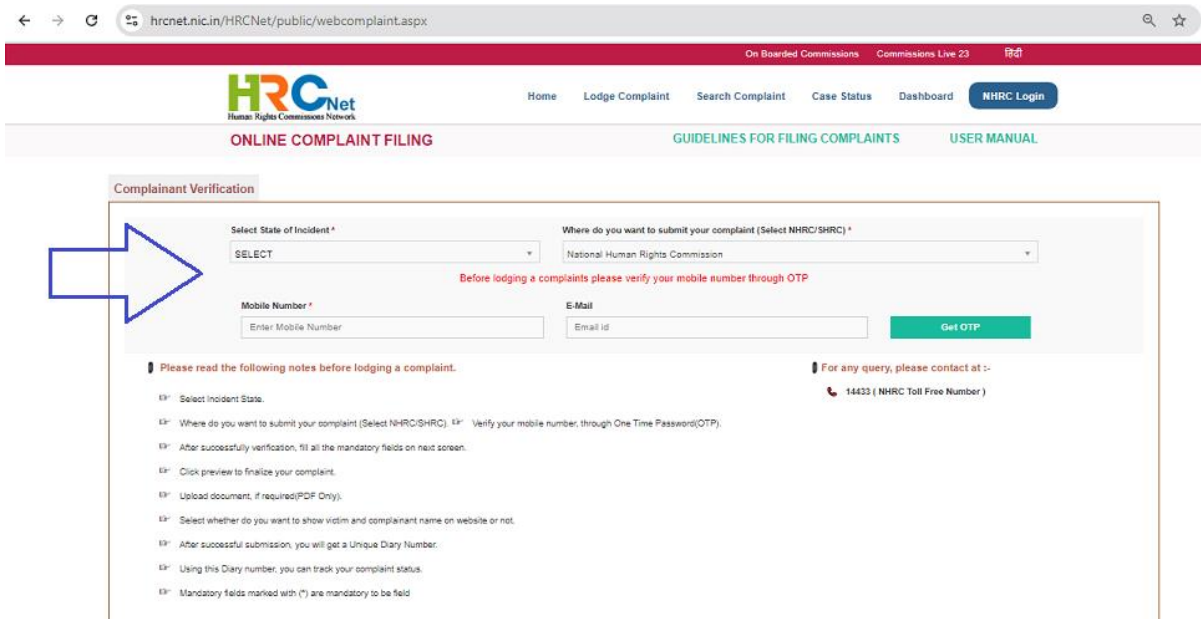
## How to Lodge a Complaint in Human Rights Commission?



The screenshot shows the HRCNet website interface. The main navigation bar includes 'Home', 'Lodge Complaint', 'Search Complaint', 'Case Status', 'Dashboard', and 'NHRC Login'. The 'Lodge Complaint' link is highlighted with a blue circle. Below the navigation bar, there is a section titled 'Human Rights Protection' with three bullet points: 'Complaint Registration & its Status', 'Response from Authorities', and 'Nationwide Integrated Data of Human Rights Violation Incidents'. To the right of this section is a blue banner with silhouettes of people raising their hands. Below the banner is a 'Features' section with six icons and descriptions:

- Lodge Complaint:** Submission of your Complaint and have the current status on eMail/SMS.
- SHRC Login:** Complaint management system login.
- Authority Login:** Authorities/Nodal Officers can submit reports to NHRC.
- Search Complaint:** Track complaint status using important parameters.
- Dashboard:** Statistics about complaints filed at the Human Rights Commissions.
- Help:** Authority Login Help.





**Complainant Verification**

Select State of Incident \*  
SELECT

Where do you want to submit your complaint (Select NHRC/SHRC) \*  
National Human Rights Commission

Before lodging a complaints please verify your mobile number through OTP

Mobile Number \*  
Enter Mobile Number

E-Mail  
Email Id

Get OTP

Please read the following notes before lodging a complaint.

- Select Incident State.
- Where do you want to submit your complaint (Select NHRC/SHRC). Verify your mobile number, through One Time Password(OTP).
- After successful verification, fill all the mandatory fields on next screen.
- Click preview to finalize your complaint.
- Upload document, if required(PDF Only).
- Select whether do you want to show victim and complainant name on website or not.
- After successful submission, you will get a Unique Diary Number.
- Using this Diary number, you can track your complaint status.
- Mandatory fields marked with (\*) are mandatory to be field

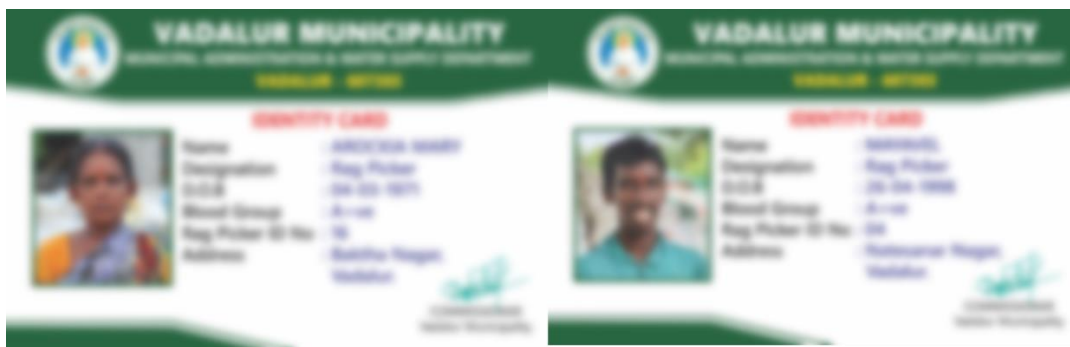
For any query, please contact at :-  
14433 ( NHRC Toll Free Number )

## 4.2 Rights of the Recycle Guardian

- ✓ Right to register and be issued occupational identity card.
- ✓ Right to access waste and retrieve recyclables.
- ✓ Right to sorting space and involvement in MRF/DWCC
- ✓ Right to form self-help groups for bettering livelihood opportunities
- ✓ Right to training for skill upgradation.
- ✓ Right to be involved in door to door collection of waste.
- ✓ Right to representation in the advisory committee on solid waste management.
- ✓ Entitlement of scholarships for their children, low rate of interest credit for work.

## Right to Register and be Issued Occupational Identity Card

The "Right to register and be issued occupational identity card to Recycle guardians " refers to the recognition and formalization of the occupation of recyclable picking within the regulatory framework of a and empower them to assert their rights as essential members of the recycling ecosystem.



*(An example of an occupational identity card)*

## Right to Access Waste and Retrieve Recyclables

It underscores the importance of ensuring equitable access to recyclable materials for those engaged in informal waste picking activities. Recycle guardians often rely on collecting recyclables such as paper, plastics, and metals from waste streams to earn a livelihood and contribute to recycling efforts. Recognizing and formalizing this right involves policies that enable Recycle guardians to access waste materials legally, without harassment or discrimination, thereby supporting their livelihoods and promoting environmental sustainability. This right not only acknowledges the valuable role of Recycle guardians in waste management but also aims to protect their working conditions, provide opportunities for formalization within waste management systems, and enhance their integration into broader recycling initiatives.



## Right to Sorting Space and Involvement in MRF/DWCC

This advocates for providing designated areas or facilities within Material Recovery Facilities (MRFs) or Dry Waste Collection Centres (DWCCs) where Recycle guardians can sort and segregate recyclable materials. This right recognizes the expertise of Recycle guardians in identifying and separating valuable recyclables from waste streams. By ensuring access to sorting spaces within formal waste management infrastructure, Recycle guardians can work more efficiently and safely, reducing their exposure to health risks associated with informal waste picking. Additionally, involving Recycle guardians in MRFs or DWCCs promotes their integration into structured waste management systems, offering opportunities for training, capacity building, and fair compensation. This approach not only supports sustainable waste management practices but also respects the rights and dignity of Recycle guardians as essential contributors to recycling efforts.



## Right to Form Self-help Groups for Bettering Livelihood Opportunities

This emphasizes the importance of collective action and community empowerment among women Recycle guardians. By forming self-help groups, they can pool resources, share knowledge, and advocate for their rights more effectively. These groups enable members to access financial support, skills training, and market opportunities that may otherwise be unavailable to individuals working alone. Moreover, self-help groups foster solidarity and cooperation among Recycle guardians, promoting mutual support and resilience in the face of economic challenges. By organizing themselves, women Recycle guardians can negotiate better terms with buyers, improve working conditions, and participate more actively in decision-making processes that affect their livelihoods. Overall, the right to form self-help groups empowers women Recycle guardians to enhance their socioeconomic status, strengthen their communities, and pursue sustainable development goals.





## Right to be involved in Door to Door Collection of Waste

It asserts their inclusion in formal waste management systems by recognizing their role in collecting recyclables directly from households. This right ensures that Recycle guardians have equitable access to waste streams, allowing them to retrieve valuable materials for recycling while contributing to environmental sustainability. Involving Recycle guardians in door-to-door collection not only enhances the efficiency of waste management but also provides them with steady access to recyclables, which are essential for their livelihoods. Additionally, it promotes their integration into municipal waste management plans, offering opportunities for training, health benefits, and improved working conditions. This approach not only supports the informal sector but also strengthens collaboration between Recycle guardians and formal waste management authorities, fostering a more inclusive and effective waste management system overall.



## Right to Training for Skill Up-gradation

It refers to the entitlement of individuals engaged in informal waste collection to receive education and training aimed at improving their skills and livelihood opportunities. Recycle guardians often work in challenging conditions, collecting recyclable materials from waste to earn a living. Providing training can enhance their efficiency, safety awareness, and knowledge of recycling processes, thereby increasing their earning potential and overall well-being. This right acknowledges their contribution to waste management and aims to empower them with skills that lead to better economic prospects and improved quality of life. It emphasizes their inclusion in sustainable development efforts and promotes dignity and respect for their essential role in environmental conservation.

## Right to Representation in the Advisory Committee on Solid Waste Management

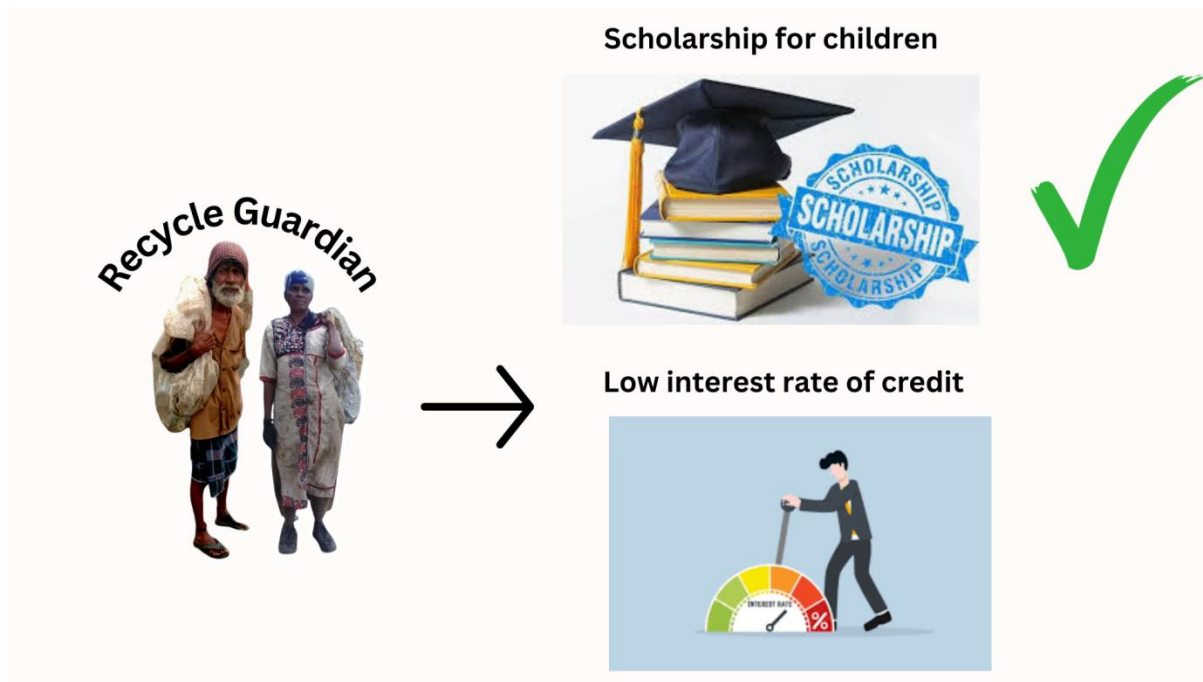
This ensures their voices are heard and their perspectives considered in decision-making processes concerning waste management policies and practices. This representation allows Recycle guardians, who often work informally and face marginalization, to participate in discussions that directly impact their work and living conditions. By including them in advisory

committees, policymakers can gain valuable insights into the challenges faced by Recycle guardians and develop more inclusive and effective strategies for waste management. This right aims to empower Recycle guardians, recognize their expertise in waste recycling, and promote their integration into formal systems, ultimately contributing to more sustainable and equitable urban environments.



## Entitlement of Scholarships for Their Children, Low Rate of Interest Credit for Work

Providing entitlements such as scholarships for the children of Recycle guardians and offering low-interest credit for their work is a crucial step towards socioeconomic empowerment. By granting scholarships, we ensure that even the most marginalized children have access to education, breaking the cycle of poverty and offering them a pathway to a better future. Simultaneously, offering low-interest credit for their work enables Recycle guardians to invest in tools, expand their operations, and improve their livelihoods. These initiatives not only support individual families but also uplift entire communities by fostering education, economic stability, and dignity among those traditionally overlooked by mainstream opportunities.



## 4.3 Social Entitlements

### Low Rate of Interest Credit for Waste Pickers to Better Their Livelihoods by NSKFDC

The National Safai Karamcharis Finance and Development Corporation (NSKFDC) offer low-interest credit to waste pickers as part of its initiative to improve their livelihoods. Waste pickers, often marginalized and economically vulnerable, play a crucial role in recycling and waste management in urban areas. By providing affordable credit, NSKFDC enables waste pickers to invest in equipment, training, or expanding their operations, thereby enhancing their productivity and income. This support not only empowers waste pickers economically but also contributes to sustainable waste management practices and the overall well-being of these essential workers in our communities.



**National Safai Karamcharis Finance  
& Development Corporation**  
 नेशनल सफाई कर्मचारी फाइनेंस एंड डेवलपमेंट कॉर्पोरेशन  
 (A Government of India undertaking under the Ministry of Social Justice & Empowerment)



## Enrolment in Ayushman Bharat Yojna

Enrolling Recycle guardians in the Ayushman Bharat Yojana is crucial for ensuring they have access to essential healthcare services. Recycle guardians, often among the most economically disadvantaged groups, play a vital role in waste management but face numerous health risks due to their work environment. By enrolling in Ayushman Bharat, Recycle guardians and their families can benefit from health insurance coverage up to Rs. 5 lakh per year, covering hospitalization expenses for various medical treatments. This initiative not only addresses their immediate healthcare needs but also supports their socio-economic well-being by reducing out-of-pocket expenses and ensuring timely medical care, ultimately improving their quality of life.



**Ayushman Bharat**  
**Yojana**

## Health Camps for Waste Pickers and Informal Waste Collectors

Health camps for waste pickers and informal waste collectors are essential initiatives aimed at addressing the unique health challenges faced by these vulnerable groups. Often working in hazardous environments without adequate protective gear, waste pickers are exposed to a variety of health risks, including respiratory ailments, skin infections, and injuries. These camps provide them with access to basic healthcare services such as medical check-ups, vaccinations, and treatment for common illnesses. Moreover, they serve as platforms for health education, raising awareness about hygiene practices, occupational safety measures, and the importance of regular medical screenings. By improving the health and well-being of waste pickers and informal waste collectors, these camps contribute to enhancing their overall

quality of life and productivity, ensuring a safer and healthier working environment.



## Provisioning Occupational Safety Gear

Provisioning occupational safety gear for Recycle guardians is crucial to mitigate the risks associated with their work in collecting recyclable materials from waste. These workers often encounter hazardous materials such as sharp objects, chemicals, and biological waste, exposing them to injuries and health hazards. By providing them with appropriate safety gear such as gloves, masks, sturdy footwear, and protective clothing, we can significantly reduce their vulnerability to injuries and illnesses. This initiative not only safeguards their health but also enhances their confidence and efficiency in performing their essential role in waste management and recycling processes.



## National Urban Livelihood Mission

The National Urban Livelihood Mission (NULM) plays a vital role in supporting Recycle guardians through various initiatives aimed at improving their livelihoods and socio-economic conditions. Under NULM, Recycle guardians receive recognition as informal workers and are provided with opportunities for skill development, training, and access to financial services. The mission also promotes the formation of self-help groups and cooperatives among Recycle guardians, empowering them to collectively negotiate better working conditions and market their services effectively. Additionally, NULM focuses on integrating Recycle guardians into the formal waste management sector, ensuring they receive fair wages and access to social security benefits. By addressing these aspects, NULM aims to enhance the dignity, income stability, and overall quality of life for Recycle guardians across urban areas in India.



## National Social & Financial Safety Schemes



**PRADHAN MANTRI AWAS YOJANA**  
**Housing support to eligible urban poor families**  
Visit : <https://pmaymis.gov.in/>



**PRADHAN MANTRI UJJWALA YOJANA**  
**LPG connections in the name of woman in BPL (Below Poverty Level) households**  
Visit : <https://pmuy.gov.in/>



**Saubhagya**  
Pradhanmantri Sahaj Bijli Har Ghar Yojana  
**Electricity connections to all remaining un-electrified households**  
Visit : <https://saubhagya.gov.in/>



**PRADHAN MANTRI JEEVAN JYOTI BHIMA YOJANA**  
**Access to financial service - Banking / savings & deposits account, remittance credits, insurance and pension for all**  
Visit : [www.pmjay.gov.in](http://www.pmjay.gov.in)







**Monthly pensions to subscribers open to all bank account holder**

Visit : <https://www.jansuraksha.gov.in/Forms-APY.aspx>



**PRADHAN MANTRI SURAKSHA BHIMA YOJANA**

**Accidental Insurance covers at a premium of just Rs.12 per year**

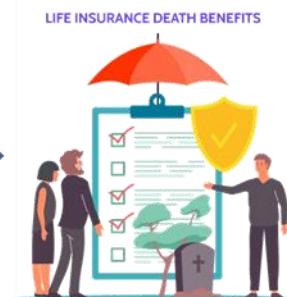
Visit : <https://www.jansuraksha.gov.in/>



**PRADHAN MANTRI JEEVAN JYOTI BHIMA YOJANA**

**One Year life insurance scheme for death due to any reason**

Visit : <https://www.jansuraksha.gov.in/>



**PRADHAN MANTRI JAN AROGYA YOJANA**

**Health insurance covers up to Rs.5 Lakhs per family per year for secondary and tertiary hospitalization**

Visit : <https://www.jansuraksha.gov.in/>



## Individual Exercise

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## Group Exercise

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## Assessment

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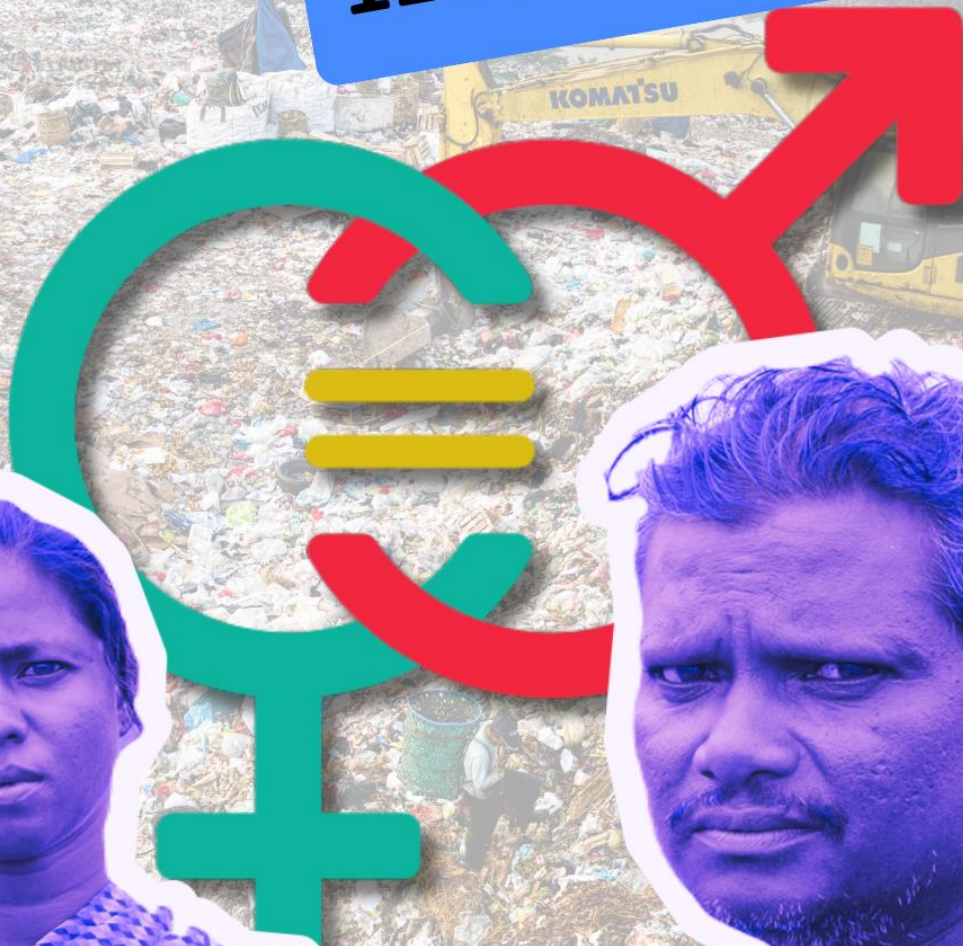
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# Chapter 5

Gender

Inclusion





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# Chapter 5: Gender Inclusion

**Gender inclusion is important because it promotes equality and fairness by educating people about the value of including all genders in every aspect of life. It helps break down stereotypes, reduces discrimination, and ensures that everyone, regardless of gender, has equal opportunities and rights. This leads to a more just and balanced society.**

## Gender Inclusion for Recycle Guardian includes:



### Sex and Gender

- ✓ Understanding sex as a biological phenomenon
- ✓ Understanding gender as a social construct



### Gender Division of Labour

- ✓ Understanding the unequal distribution of work and roles performed by men and women



### Access and Control

- ✓ Understanding the influence of gender norms over assets and resources



### Gender and Mobility

- ✓ Understanding the current situation by recognizing the barriers to women's mobility



### Gender Sensitization

- ✓ Understanding and sensitizing about gender inequalities and biases to promote respectful and inclusive environment



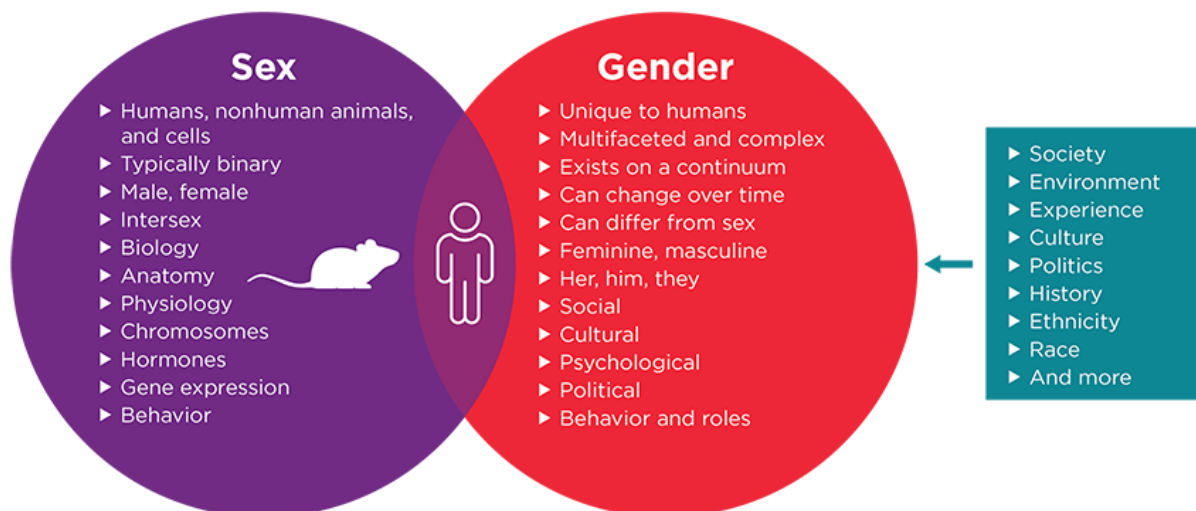
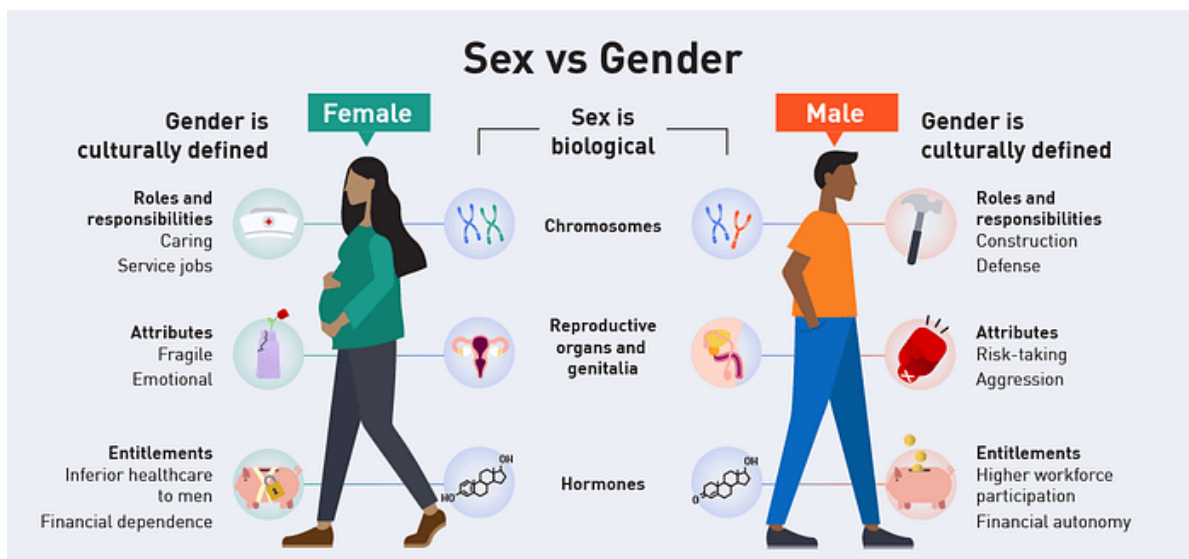
### Gender Mainstreaming

- ✓ Achieving gender equality by making gender an integral part of decision making processes.

# 5.1 Sex and Gender

## Objective

Term 'sex' is a biological difference between people with physiological attributes they are born with and remains unchanged (unless through surgical intervention). Term 'gender' is socially and culturally constructed and varies across cultures and time which can be challenged for change.



## Facilitator Note

Gender Terminology	Definition
<b>Sex</b>	Sex refers to the biological characteristics that define humans as female or male.
<b>Gender</b>	The economic, political, and cultural attributes and opportunities associated with being male or female. The social definitions of what it means to be male or female vary among cultures and change over time. Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviors, values, and relative power and influence that society ascribes to the two sexes on a differential basis. Gender is an acquired identity that is learned, changes over time, and varies widely within and across cultures. Gender is relational and refers not simply to women or men but to the relationship between them.
<b>Gender Roles</b>	Communities and societies create social norms of behavior, values, and attitudes that are deemed appropriate for men and women and the relations between them. These roles are assigned by social criteria rather than biological. For example, childbearing is a female sex role because men cannot bear children. Although both men and women can rear children, these duties are socially assigned.
<b>Gender Relations</b>	A term that emphasizes the relationship between men and women as demonstrated by their respective roles in power sharing, decision making, the division of labor, returns to labor, both within the household and in the society at large.

## 5.2 Gender Division of Labor

### Objective

To prompt reflection and discussion on traditional gender roles and societal perceptions.

1. Enable participants to comprehend gender roles and their impact on the division of labour.
2. Foster understanding of how gender roles contribute to the division of labour.
3. Facilitate comprehension of gender discrimination stemming from stereotypes associated with males and females.



### Activity: Reflecting on Gender Roles






1. Ask participants, both men and women, to stand up and form teams of two.
2. Show each team pictures depicting various daily activities such as cooking, cleaning, farming, babysitting, driving, leadership roles, etc.
3. Instruct the teams to discuss which activities are commonly associated with men and which with women.
4. Facilitate a discussion by asking:







- a. Do these commonly noticeable activities define ideal roles for men and women in society?
  - b. Is it possible to reverse these roles? Would there be acceptance or resistance from families or the community?
5. Explain to participants that societal norms are evolving, and so are the roles and status of women and men. Emphasize that both men and women are individuals with unique capacities and limitations.

This activity aims to foster awareness of gender stereotypes and stimulate dialogue on the fluidity and diversity of roles in society.

Activity	Ideal for Women	Ideal for Men
 <p style="text-align: center;">COOKING</p>		
 <p style="text-align: center;">CLEANING</p>		
 <p style="text-align: center;">WASHING CLOTHES</p>		

Activity	Ideal for Women	Ideal for Men
 <p data-bbox="403 562 555 589">PLOUGHING</p>		
 <p data-bbox="419 965 539 992">FARMING</p>		
 <p data-bbox="427 1317 539 1344">CYCLING</p>		
 <p data-bbox="371 1662 587 1688">FETCHING WATER</p>		
 <p data-bbox="427 1962 539 1989">DRIVING</p>		

Activity	Ideal for Women	Ideal for Men
 <p data-bbox="336 712 619 743">CLIMBING MOUNTAINS</p>		
 <p data-bbox="336 1167 619 1198">ATTENDING MEETINGS</p>		
 <p data-bbox="336 1545 619 1576">GOING TO THE MARKET</p>		
 <p data-bbox="373 1899 584 1930">GOING TO WORK</p>		

## Questions for Discussion

1. Who does more household chores in the family?
2. Who wakes up early in the morning?
3. Who gets time for leisure?
4. Whose decision is considered the most important in the family?
5. Who gets involved a lot in meetings with government officials?
6. Who has a bank account and in whose account does all the money get credited?
7. How do you perceive the roles of men and women within your community when it comes to informal waste picking?
8. Have you noticed any differences in opportunities or treatment based on gender in your work environment?
9. What are some challenges that women face compared to men in the informal waste picking profession?
10. Have you witnessed instances of gender-based discrimination or harassment in your workplace?

## Facilitator Note

The facilitator can proceed to explain how patriarchy controls women's mobility, economic opportunities, and sexuality. Patriarchy is a social system where men primarily hold power in political leadership, enjoy social privileges, and control property. Consequently, women are relegated to secondary roles.

Despite the fact that women often perform extensive labor, particularly in unpaid and reproductive roles such as caregiving, domestic chores, and childcare, their contributions are frequently undervalued and overlooked because these tasks do not generate income for the family. Women's income is often considered secondary, reinforcing the perception that men are the primary breadwinners.

This societal structure extends to political and cultural domains, which are predominantly occupied by men, leaving women with less visible roles and limiting their participation and influence in these spheres. This marginalization underscores the persistent barriers women face in achieving equality and recognition in broader societal contexts.



## 5.3 Access and Control

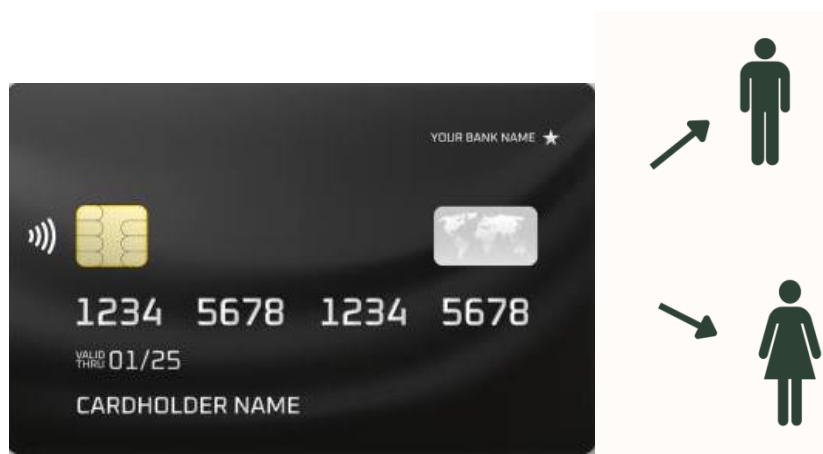


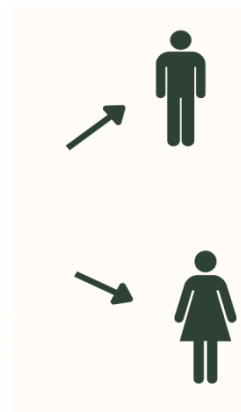
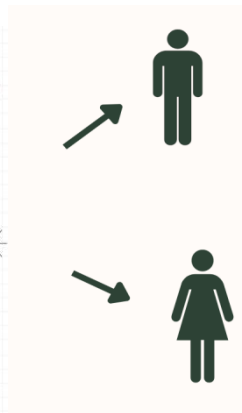
### Objectives

1. Enhance understanding of access and control over assets and resources.
2. Analyse how gender intersects with caste, class, religion, ethnicity, creating barriers to accessing and controlling assets and resources.

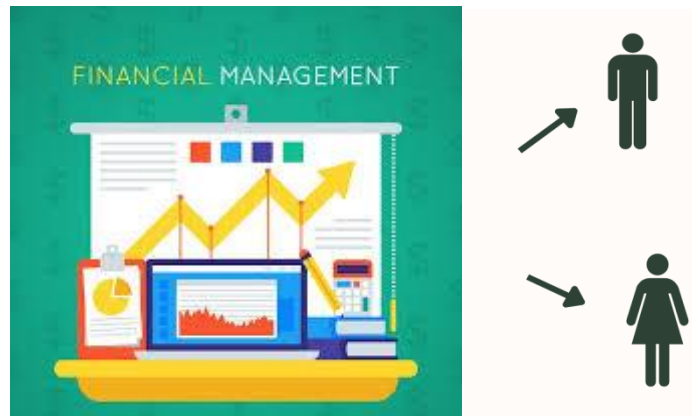
### Activity: Mapping Out

Ask the participants, who will be given the access to the following if given – ATM cards, money, mobile phones, education, assets like housing, decisions on financial management, family issues etc. and ask them to circle the answer





## GOVERNMENT OFFICE



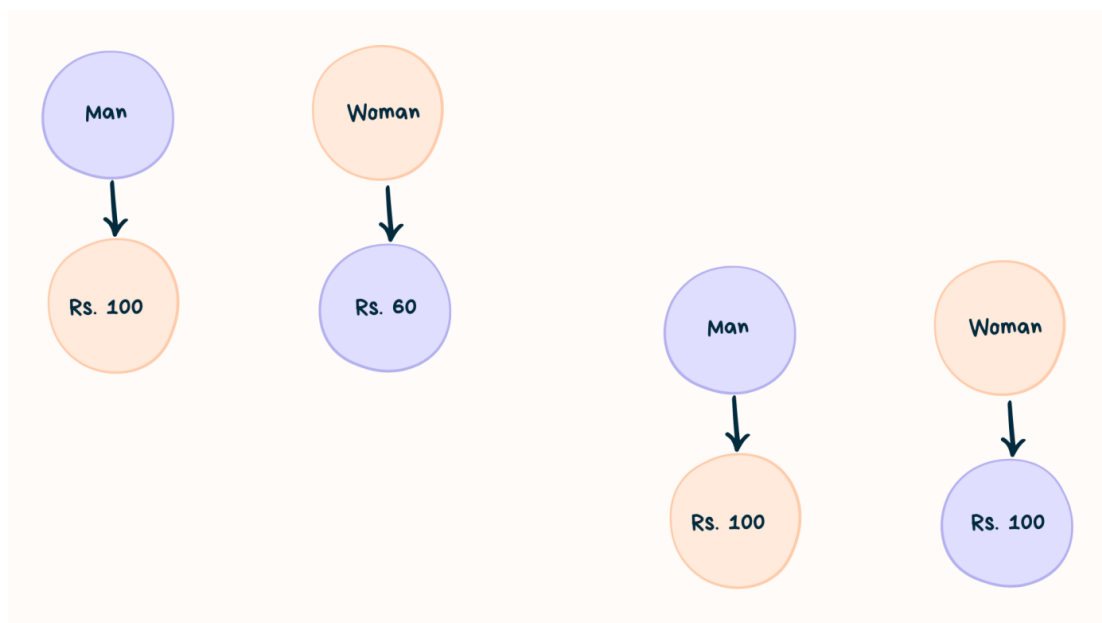
## Questions for Discussion

1. Do women have equal access to education, health and employment?
2. Do women have control over resources and decision making of resources?

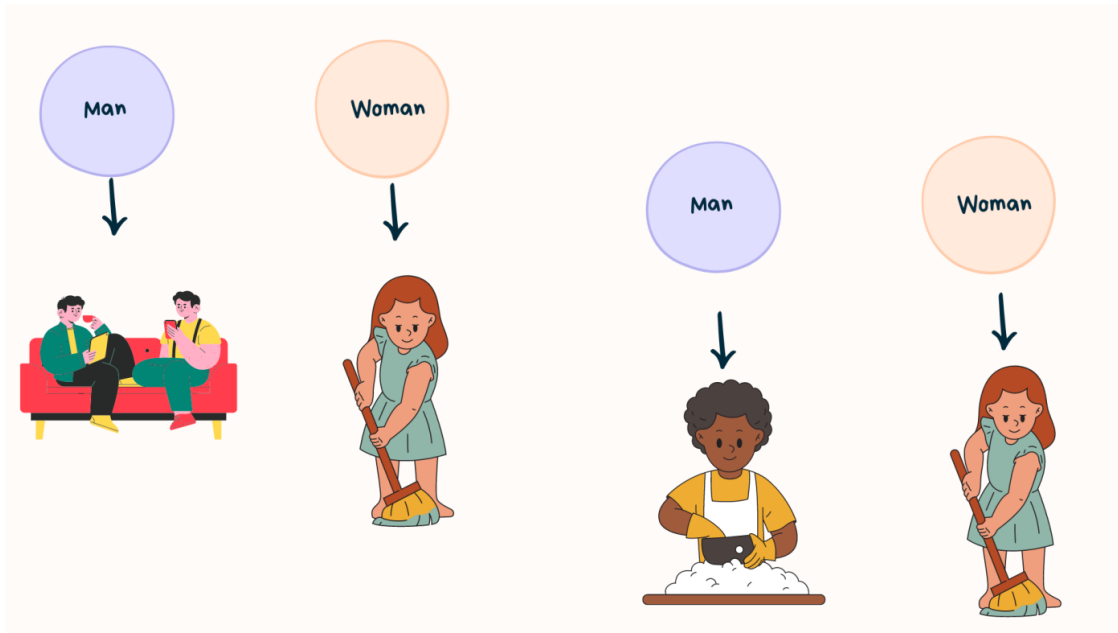
## Activity: Right or Wrong

Ask the participant to tick which one is right and wrong according to them

### 1. The wages of a man and a woman doing the same job



2. A man at leisure and a woman doing household chores/ Both sharing household chores together

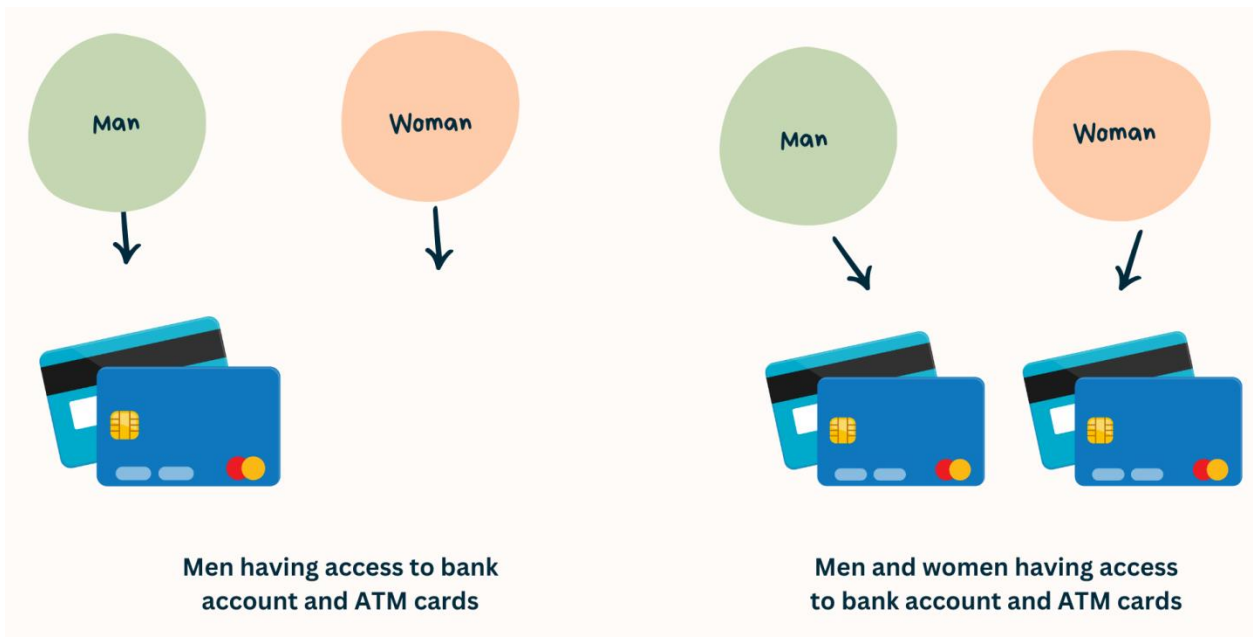


3. Who should be a part of attending meeting with government officials?





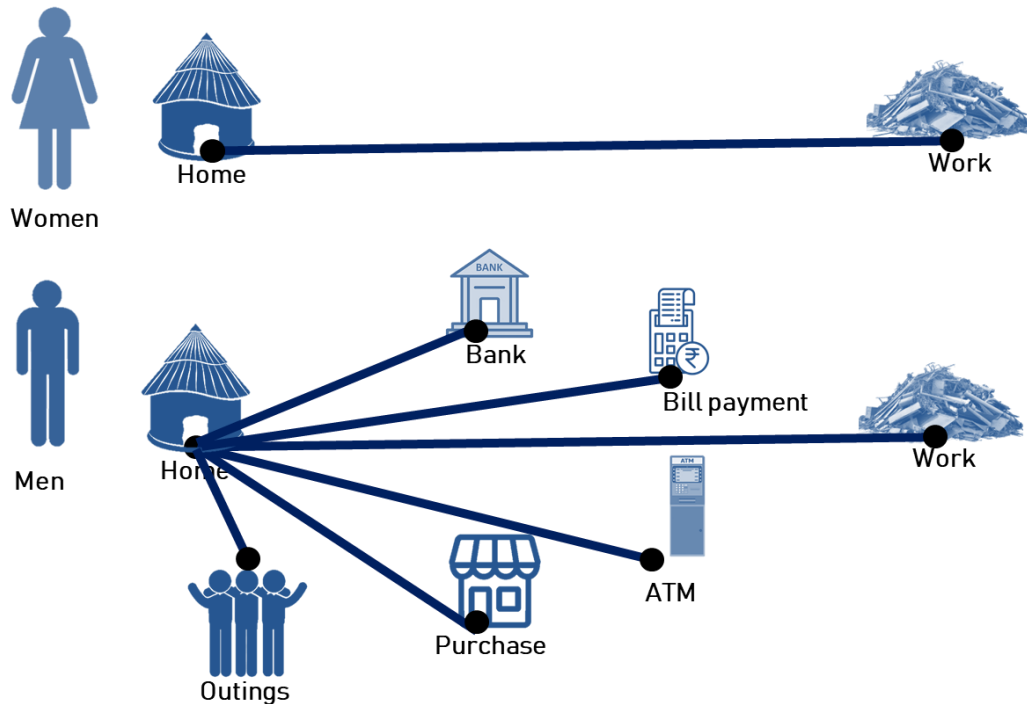
#### 4. Who has access to bank account and ATM cards:



### Facilitator Note

Ensuring women's equal access to and control over economic and financial resources is crucial for achieving gender equality and empowering women. It also fosters fair and sustainable economic growth and development. Gender parity in the distribution of economic resources yields multiple positive outcomes, such as reducing poverty and improving children's welfare. Enhanced access for women contributes to both micro-level benefits like increased household productivity and macro-level advantages such as synergistic effects between gender equality indicators and economic growth. Moreover, empowering women economically is vital as they often serve as the last line of support during economic downturns.

## 5.4 Gender and Mobility



### Objectives

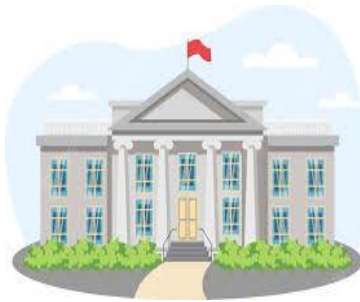
1. Participants will grasp and internalize the concept of equal rights to mobility for men and women.
2. Participants will comprehend the current situation and recognize barriers to women's mobility.
3. Participants will articulate the internal and external factors that impede women's mobility, highlighting the significance of mobility for women's empowerment and personal growth.

### Activity (for Women): Social Mapping of Women to Nearby Institutions

Women will be asked to map their present mobility to different places as well as places where they have been restricted mobility and reasons for this.



Community /Public Health centre



Collector office



Police station



Bank



Gram sabha Meeting



Bus stand



Scrap dealer shop

## Questions for Discussion

- Why have you not gone to some of the places?
- What were the barriers/ restrictions?
- How did you manage to go to the places which you have marked?

## Activity: Case Study

In the outskirts of a bustling town, Deepa grew up with a natural flair for leadership and community service. From a young age, she thrived in her village's Self-Help Groups (SHGs), organizing skill-building workshops and advocating for women's financial empowerment. Despite her zeal for

education, her aspirations were curtailed after completing only 8th grade, as her family prioritized her elder brother's academic pursuits in engineering.

When Deepa's marriage was arranged without her consent, her vibrant community involvement took a backseat. Her in-laws frowned upon her active role in social initiatives, viewing such engagements as unsuitable for a respectable daughter-in-law. This newfound scrutiny severely restricted her movements and stifled her ambitions.

Adapting to married life meant shouldering numerous responsibilities. Deepa bore the weight of managing a growing household, compounded by the pressures of bearing children. Despite medical advice recommending birth control for health reasons, societal expectations compelled her to continue having children until she bore a son, leading to health complications during her pregnancies.

Managing household chores and agricultural responsibilities became her daily routine. With a small plot of land, a few goats, and poultry, Deepa juggled farming duties alongside her domestic obligations. Despite her efforts, she faced unequal treatment in terms of wages and recognition, her physical strain and health concerns often dismissed.

Deepa's marriage brought with it a dowry of gold jewellery and a motorbike, symbols of her family's status but no real empowerment. Landownership and financial decision-making remained in the hands of her husband, leaving her marginalized despite her contributions.

## Questions

1. Have you ever seen anyone like Deepa?
2. Have you experienced this?
3. Do you think there is something wrong with the way Deepa's life turned out?
4. Could Deepa take decisions on her education, marriage, job or having children?
5. Even if she decided to study, would it have been possible without her parents' or husband's support?



## 5.5 Gender Sensitization



These are quick exercises for gender sensitization which can be adapted by the trainer (in a preferable language)

1 a). Sometimes I'm glad, I'm a man/woman because..... (List as many advantages as you can)

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1 b). Sometimes I wish I was a man/woman because..... (List as many reasons as possible)

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## Activity: List down the Following:

<p>Work/activities done by women in the lesiure time</p>	VS	<p>Work/activities done by men in the lesiure time</p>
<p>Types of decisions made by women</p>	VS	<p>Types of decisions made by men</p>

## The Facilitator will Facilitate the Discussion

1. Which area will they go for collecting plastic every day?
2. Who will negotiate with the dealers?
3. What food should be made every day?
4. How will the income be utilized?
5. Who will go to the market?
6. Have you ever had medical emergency? If so, did your husband/ any men in the family acknowledge it?

## 5.6 Gender Mainstreaming

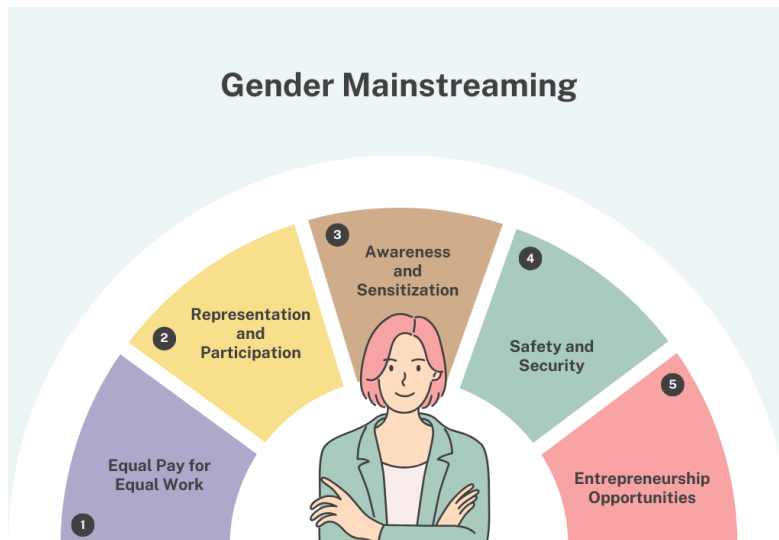


### Questions to be Asked

1. How many of you got married before the age of 18 years (for men, 21 years)?
2. Did you know what the legal age of marriage is?
3. Did you stop/drop out of education to get married?
4. Did you make an informed decision?
5. If you had not married (so early), what do you think would have happened?
6. Do you think forcing children into marriage is justifiable in certain situations?
7. Do you think it is a tradition which your community strongly believes in that should not be questioned?
8. What would you do if you come to know about a child marriage in your area?

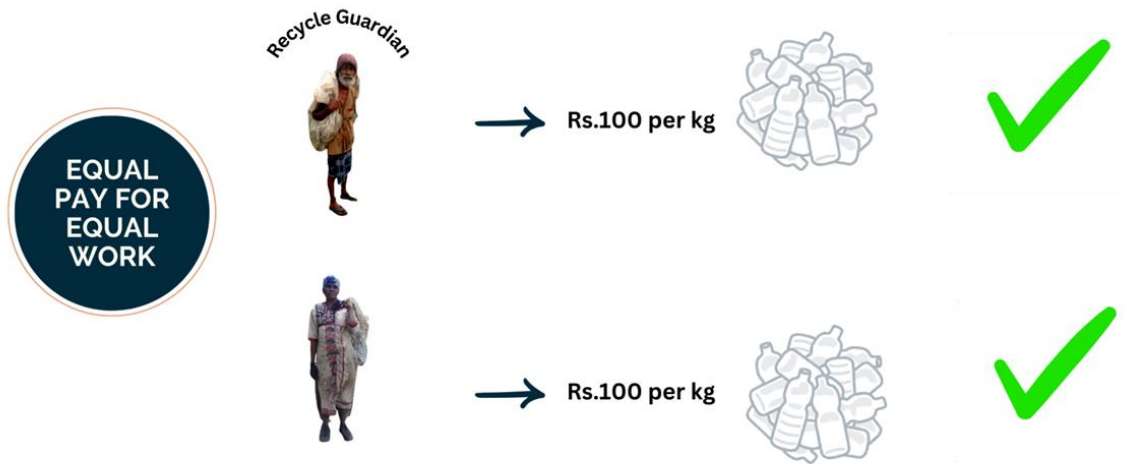
**Some of the gender mainstreaming ideas for the community: (Facilitator should ensure that everyone gets an idea of all the points mentioned below)**

Gender mainstreaming in the context of informal waste pickers involves integrating a gender perspective into all aspects of policies, programs, and practices to ensure that both men and women are equally considered and benefit equitably.



### 1. Equal Pay for Equal Work:

Achieving equal pay for equal work is critical in promoting fairness and gender equality within the informal waste picking community. This entails implementing transparent wage structures that do not discriminate based on gender, ensuring that men and women receive equal compensation for similar tasks and productivity levels. By establishing clear guidelines and standards for wage determination, communities can eliminate disparities where women typically earn less than their male counterparts for performing the same work. It is essential to quantify and recognize efforts based on objective criteria such as the quantity or quality of waste collected, rather than gender. Moreover, fostering awareness and advocacy around equal pay encourages a culture of respect and equity, where all workers feel valued and fairly compensated for their contributions. This approach not only enhances economic security for women in informal waste picking but also strengthens community cohesion and productivity by promoting a more inclusive and just work environment. By championing equal pay practices, communities can pave the way for sustainable development and empower women to achieve greater economic independence and social recognition.



## 2. Representation and Participation

Encouraging equal participation of men and women in decision-making within community contexts such as cooperatives or associations related to activities like informal waste picking is crucial for fostering inclusive and sustainable development. This initiative involves overcoming barriers that traditionally hinder women's involvement, including cultural norms, lack of access to education, and stereotypical gender roles. By promoting representation and training opportunities for women, addressing discriminatory practices, and advocating for inclusive policies, communities can empower women to take on leadership roles confidently. Diverse representation ensures that a broader range of perspectives and priorities are considered, leading to more effective and equitable decision-making processes that benefit the entire community's well-being and development.






Participation of only men in meetings



Participation of both men and women in meetings



### 3. Awareness and Sensitization:

Spreading gender sensitization and awareness among informal waste pickers is pivotal for challenging stereotypes, fostering mutual respect, and advancing gender equality within this community. This effort involves educating informal waste pickers, both men and women, about the importance of gender equality, dismantling harmful stereotypes that perpetuate discrimination, and promoting a culture of mutual respect and inclusivity. Gender sensitization sessions can address issues such as unequal division of labor, biases in income distribution, and barriers faced by women in accessing resources or leadership roles. By enhancing awareness, these sessions empower informal waste pickers to recognize and challenge gender-based discrimination in their daily interactions and decision-making processes. Moreover, promoting understanding and solidarity around gender equality issues cultivates a supportive environment where all individuals can contribute effectively and thrive. This approach not only benefits informal waste pickers individually but also strengthens the community as a whole by fostering a more equitable and inclusive social fabric.



#### 4. Safety and Security:

Addressing safety concerns specific to gender is essential for ensuring a secure and supportive environment within workplaces like those of informal waste pickers. This initiative involves implementing measures to create safe and conducive workspaces where both men and women feel protected from gender-based violence or harassment. It includes establishing clear protocols and mechanisms for reporting incidents promptly and effectively addressing cases of harassment or violence. Training sessions can educate informal waste pickers about their rights, how to recognize and respond to gender-based violence, and the importance of immediate reporting. Encouraging a culture where individuals feel empowered to speak up against such incidents is crucial for fostering a workplace that values respect and dignity for all. Furthermore, ensuring good lighting, proper sanitation facilities, and secure storage areas also contributes to enhancing safety and comfort for informal waste pickers. By prioritizing safety concerns specific to gender, communities can create environments where all individuals can work with confidence and focus on their livelihoods without fear of discrimination or harm.



5.

## 5. Entrepreneurship Opportunities

Supporting women in accessing microfinance and small business support programs can significantly empower them economically within the informal waste picking community. These initiatives aim to overcome financial barriers that often limit women's ability to start or expand their businesses. Microfinance provides access to small loans and financial services tailored to the needs of low-income entrepreneurs, enabling women to invest in equipment, materials, or training necessary for their businesses. Additionally, small business support programs offer mentorship, training workshops, and networking opportunities, equipping women with essential skills in business management and marketing. By fostering entrepreneurship among women in informal waste picking, these programs not only enhance their economic independence but also contribute to community development by creating employment opportunities and improving livelihoods. Empowered women entrepreneurs can play a pivotal role in transforming their communities, driving innovation, and promoting sustainable practices in waste management and recycling. Therefore, investing in women's entrepreneurship not only boosts economic growth but also advances gender equality and social inclusion within the informal waste picking sector and beyond.



## Activity: Role Play

Group A consists of women who regularly collect plastic bottle waste, which they sell to nearby recyclers for a fair income. They manage their earnings wisely, coordinating with their families to meet daily needs. The men in their families support them without question, recognizing their efficiency. Additionally, these women actively participate in Self-Help Group (SHG) activities.

Group B comprises women who conform to societal expectations without question. They are primarily engaged in household chores and have little knowledge of their family's activities. Lacking assertiveness, they perpetuate traditional gender roles, leaving them vulnerable. Many are married to abusive, alcoholic men and are unaware of their family's financial situation.

## Questions for Discussion

1. What was lacking in Group B and how is Group A different and why?
2. Note the point about Group A on one chart and about Group B on the other.
3. At the conclusion, the facilitator guides a discussion on the systemic challenges that hinder women's advancement and discourage them from asserting themselves. They address barriers such as societal norms and discrimination that obstruct women's development. They also explore factors that empower women, facilitating their social, economic, and leadership progress.

## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 6

# Water, Sanitation & Hygiene (WASH)



**WASH**

**Water, Sanitation and Hygiene**





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# Chapter 6: Water Sanitation and Hygiene (WASH)

**Water, Sanitation, and Hygiene (WASH) are crucial for maintaining health and well-being. Access to clean water prevents diseases, proper sanitation facilities reduce the spread of infections, and good hygiene practices, like hand washing, protect us from illness. WASH is essential for creating a healthy and safe environment for everyone**

## Water Sanitation and Hygiene Literacy for Recycle Guardians includes:



### Water

- ✓ Essential liquid for survival of human, animals and plants. It includes:-
- ✓ Access and availability of safe drinking water
- ✓ Access to adequate water supply



### Sanitation:

Conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage. Clean toilets

- ✓ Access and practice of basic latrines and techniques to distinct human waste from interaction with people
- ✓ Management of water and waste material
- ✓ Clean household/environment
- ✓ One key area of works for sanitation is to finish the exercise of “open defecation,” and enable community-led resourcefulness to construct, uphold and practice basic toilets



### Hygiene

Hygiene is vital to avoid disease and health of the children.

Personal hygiene

- ✓ Hand washing with soap
- ✓ Menstrual hygiene
- ✓ Food hygiene

## 6.1 About WASH

*All people have the right to safe water and sanitation. Billions of people around the world still lack access to safe drinking water, basic toilets and good hygiene. For children - more susceptible to infectious disease than adults - the consequences can be fatal.*



The health and socio-economic benefits of safely managed water can only be fully realized alongside safely managed sanitation and good hygiene practices. Without water, sanitation and hygiene (WASH), people's wellbeing, dignity and opportunities are severely compromised, particularly women and girls'. Access to water and sanitation are human rights. Hygiene knowledge and facilities are life-saving, highly cost-effective health interventions.

**Water, Sanitation, and Hygiene (WASH)** interventions are designed to provide life-saving, long-term and sustainable access to safe water and sanitation, whilst promoting good hygiene practices that reduce the risk of water-related disease transmission.

### What is WASH?

**WASH** stands for



## Lifestyle during COVID-19 Pandemic



**WEAR A MASK**



**WASH YOUR HANDS  
FREQUENTLY**



**COUGH ETIQUETTE**  
Cover Your Mouth  
With Sleeve Or Elbow



**DON'T TOUCH EYES,  
NOSE OR MOUTH  
WITH UNWASHED HANDS**



**AVOID CONTACT WITH  
SICK PEOPLE**



**CLEAN AND  
DISINFECT**

***People Become More Hygienic - A Positive Impact of Covid-19 pandemic***

Regardless of the COVID-19 pandemic, being hygienic is crucial for good health and wellness. After the outbreak of COVID-19, people have maintained better personal hygiene habits, including frequent hand washing, wearing masks, as well as cleaning and disinfecting their personal and public spaces more often.



**“FOLLOW THE  
GOOD PRACTICES  
LEARNT DURING  
COVID-19  
PANDEMIC”**



## 6.2 Water

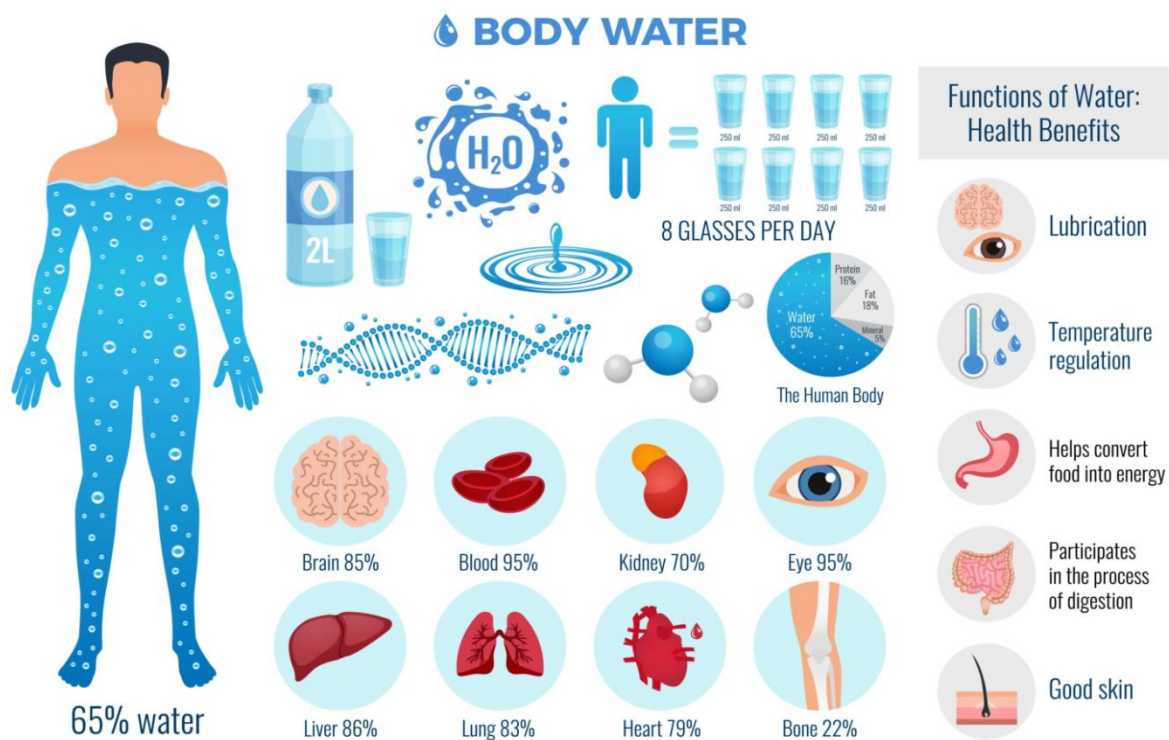
### Main Sources of Water

Water is one of the natural resources, which is widely used for various purposes such as drinking, washing, bathing, cleaning, cooking, irrigation, and other industrial and domestic uses.

**Our earth is covered with 97% of water. But only 1% of water is available for use which is fresh water**

### Importance of Water in Human Life

Water is vital for human life. It keeps our bodies hydrated, helps in digestion, and supports overall bodily functions like circulation and temperature regulation. Water also aids in flushing out toxins and is essential for the health of our cells and organs. Without water, survival is impossible.



### Importance of Clean Water

Clean water is dynamic for human life. It is essential for drinking, cooking, and personal hygiene, helping to prevent diseases and maintain overall health.

Access to clean water ensures safe sanitation and supports daily activities, making it a fundamental resource for a healthy and sustainable life.



**Drinking**



**Cooking**



**Personal Hygiene**

## Average Water Consumption per Head

1. **Drinking Water:** Amount used for personal hydration.
2. **Cooking:** Water used in food preparation.
3. **Personal Hygiene:** Water used for bathing, showering, brushing teeth, and hand washing.
4. **Cleaning:** Water for washing dishes, utensils, and cookware.
5. **Laundry:** Water required for washing clothes and linens.
6. **Household Cleaning:** Water used for mopping floors, cleaning surfaces, and general housekeeping.
7. **Toilet Flushing:** Water used for flushing toilets.
8. **Gardening:** Water applied to maintain and nurture plants and lawns.



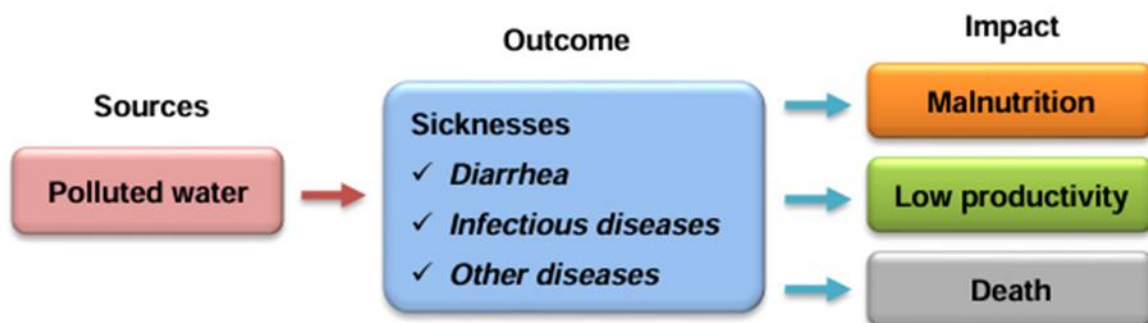
## Average water consumption per person per day in India



**The standard norms for domestic water usage prescribed by Central Public Health & environment Engineering organization (CPHEEO)**

## Effect of Unsafe Water

- ✓ **Poor quality** water can make you sick.
- ✓ **Poor quantity** (Amount) of water will not clean your surroundings and your body, so hygiene suffers.
- ✓ **Illness:** Unsafe water can lead to diseases like diarrhea, cholera, and typhoid.
- ✓ **Child Mortality:** Contaminated water is a leading cause of death among children.
- ✓ **Malnutrition:** Waterborne diseases can worsen nutrition by causing sickness.
- ✓ **Economic Burden:** Medical expenses and lost work time increase due to water-related illnesses



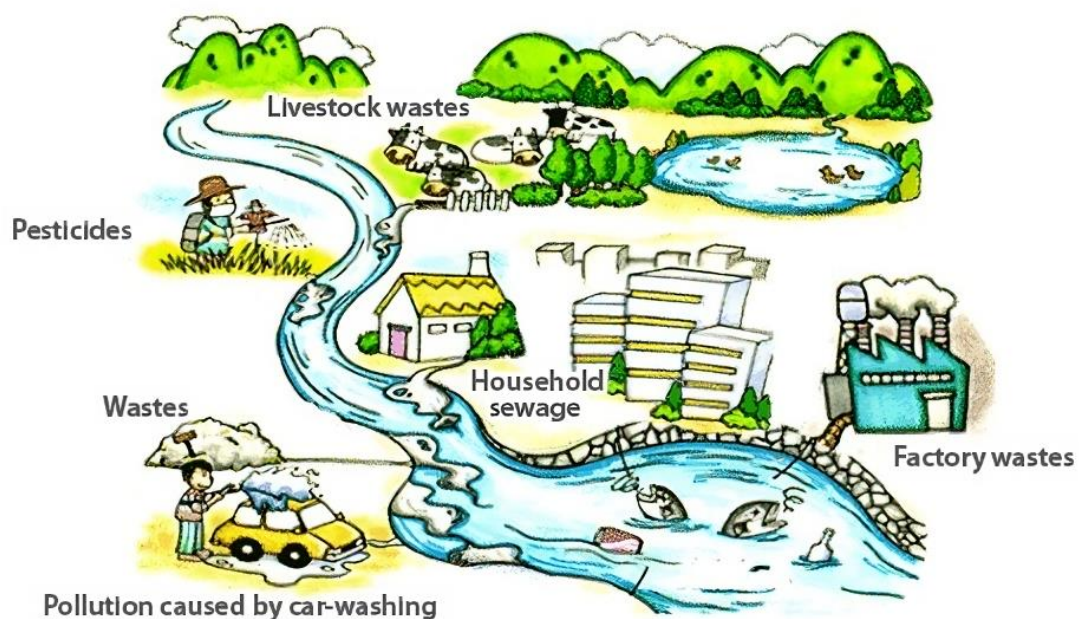


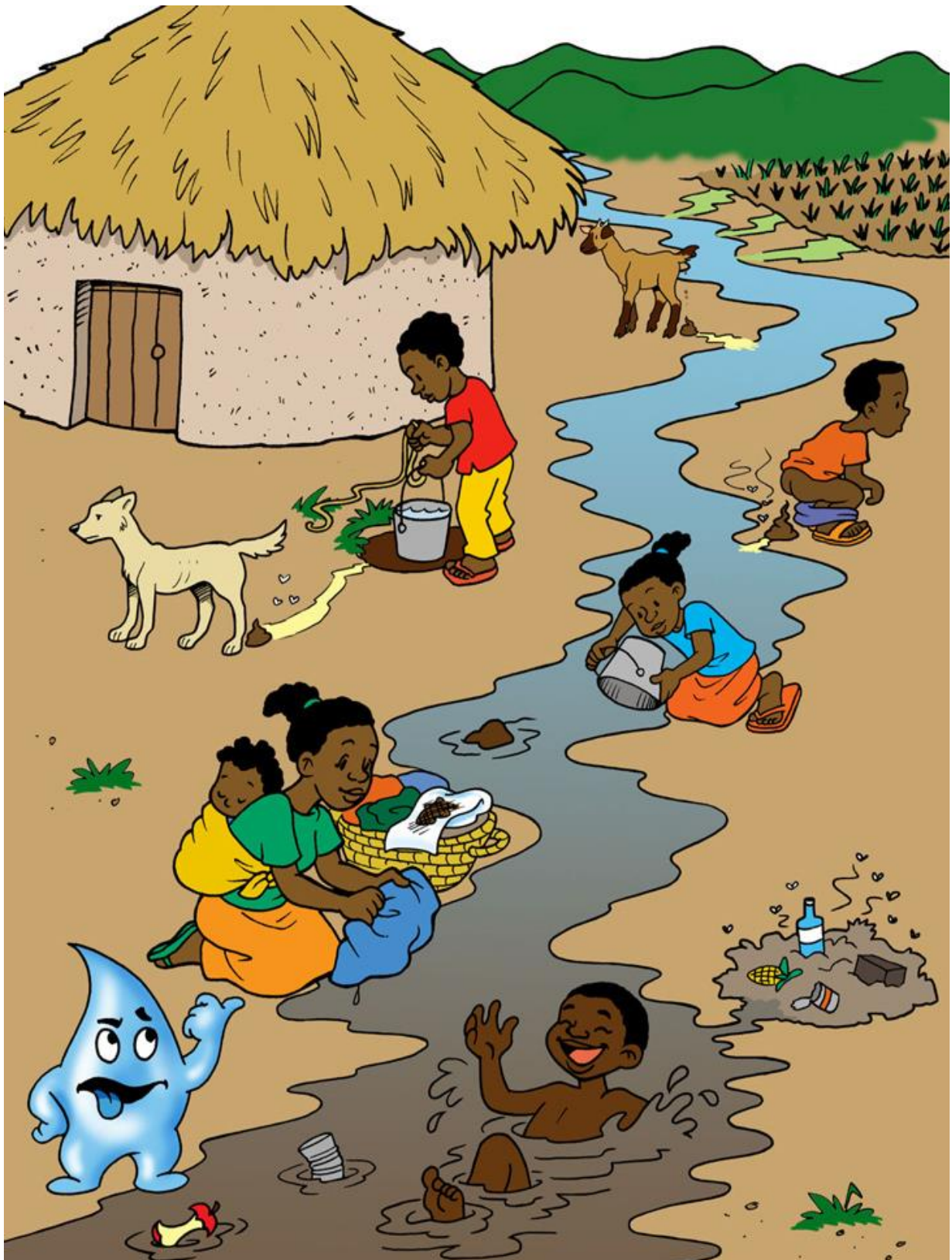
## Sources of Water Contamination

- ✓ Defecating in the river
- ✓ Dirty and contaminated water seeping into broken and leaking pipes in the distribution system
- ✓ Animals roaming and defecating in the river
- ✓ Throwing household rubbish into the river
- ✓ Washing dirty utensils, dirty clothing and swimming up stream
- ✓ Sanitary facilities (toilets) built near or over the river
- ✓ Solid waste like old cars, bicycles and batteries disposed in the river
- ✓ Fuel (petrol, oil, diesel) leakage into the river
- ✓ Chemicals used by farmers, mines and industry flowing into the river

### Examples of Source Water Contamination

Below are examples of potential sources of contamination for surface water supplies.







## How to Keep Water Clean

- ✓ Always use a clean container to keep all household water - clean water containers properly with (hot) water and soap.
- ✓ Fill water containers straight from the tap.
- ✓ Use a proper lid to cover containers to stop mosquitos breeding and dirt from entering.
- ✓ Keep water container at appropriate (cool, dry) place to avoid contamination by dust, animals and children.
- ✓ Do not keep stored water for a long time in the house.
- ✓ Boil and filter the water before consuming



## 6.3 Sanitation

### Sanitation

Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and faeces. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal

### Importance of Sanitation

- ✓ It promote health
- ✓ It prevents disease transmission
- ✓ It eliminates breeding places of insects and rodents that may be carrier of diseases
- ✓ It improves the quality of life

### Type of Sanitation

- ✓ Excreta management system,
- ✓ Solid waste management system,
- ✓ Wastewater management system,
- ✓ Drainage system.



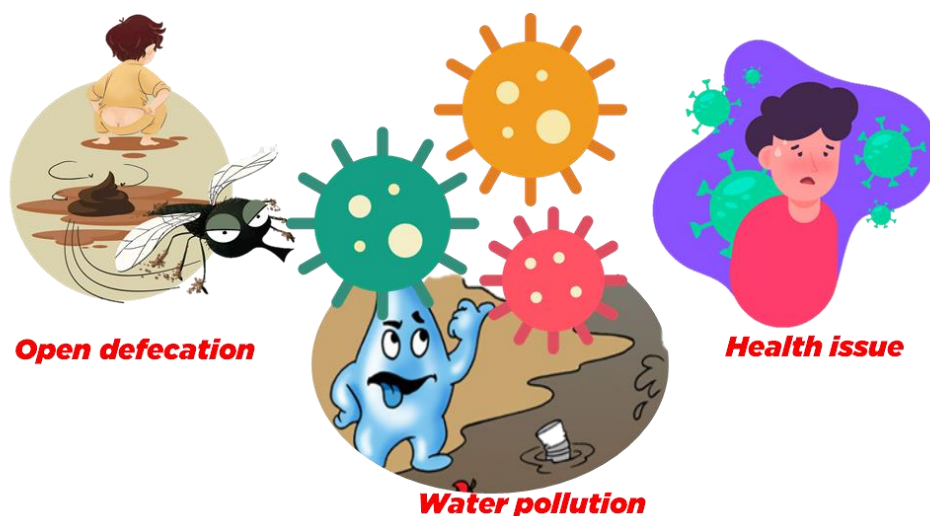
### Contextual Types Sanitation

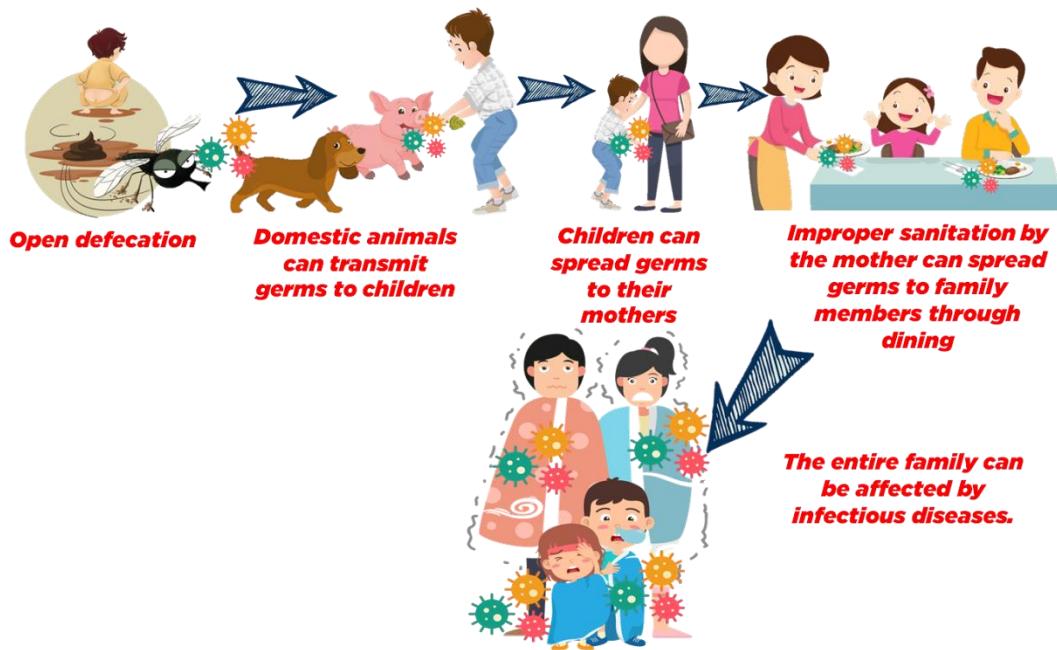
- **Open Defecation:** The practice of defecating in open spaces rather than in a designated toilet. This is often due to a lack of access to sanitation facilities and is a significant public health issue.
- **Public Toilets:** Using shared or public restroom facilities, which can range from well-maintained restrooms to basic pit latrines.
- **Home Toilets:** Defecating in private or household toilets, which can vary from advanced flush systems to simple pit latrines.
- **Portable Toilets:** Using temporary or mobile facilities, such as those found at events, construction sites, or campsites.



## Effect of Open Defecation

- **Health Hazards:** Leads to the spread of infectious diseases like cholera, diarrhoea, and typhoid, posing significant health risks to communities.
- **Child Mortality:** Contributes to high rates of child mortality, particularly from preventable diseases like diarrhoea.
- **Environmental Degradation:** Causes pollution of water bodies and soil, leading to environmental damage and unsafe drinking water.
- **Social Stigma and Inequality:** Exacerbates social inequalities and increases vulnerability to harassment and violence, particularly for women and girls.
- **Economic Loss:** Results in increased healthcare costs, reduced productivity, and hampers economic growth, particularly in affected communities



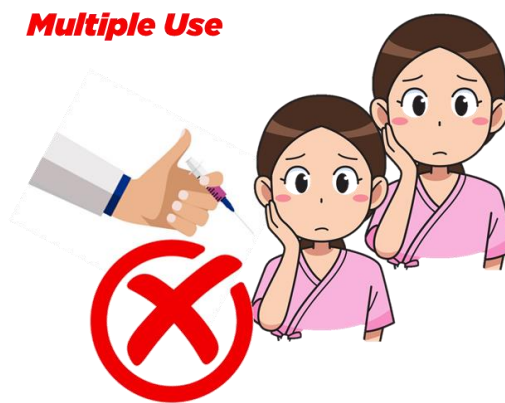
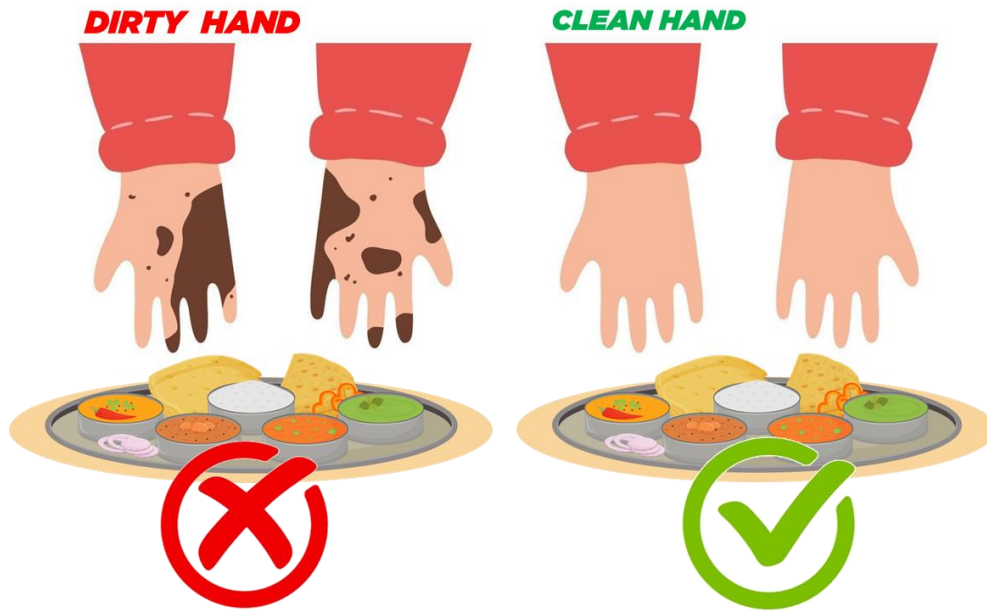


## Improper Sanitation Practices

- ✓ Usage of contaminated or unfiltered water for drinking and cooking.
- ✓ Defecating and urinating in an open field like a forest, river, etc.
- ✓ Living beside sewage or garbage disposal field.
- ✓ Not cleaning the kitchen before and after meals.
- ✓ Not washing hands before eating.
- ✓ Usage of the same syringe, which was used many times.
- ✓ Engaging with patients with contaminated diseases and not sanitizing after.
- ✓ Not following basic hygiene protocols in day-to-day life.








## Health Effects of Improper Sanitation

- **diarrhoea:** Commonly caused by contaminated water and food due to poor sanitation.
- **Cholera:** A severe bacterial infection from unsafe water and inadequate hygiene.
- **Typhoid Fever:** Spread through contaminated food and water in unsanitary conditions.
- **Hepatitis A:** A viral infection linked to poor hygiene and contaminated food.
- **Intestinal Worms:** Result from exposure to soil contaminated with human faeces.
- **Trachoma:** An eye infection caused by poor sanitation and hygiene.

 <p><b>Improper Sanitation</b></p>	<p><b>Worm Infection</b></p> <p><b>Roundworm</b> <b>Whipworm</b> <b>Pinworm</b> <b>Hook worm</b> <b>Blood fluke</b></p>	<p><b>Signs of Illness</b></p> <p><i>Constant hunger</i> <i>Swollen belly</i> <i>Itching around the anus</i> <i>Poor sleep</i> <i>Tiredness</i> <i>Frequent watery stools</i> <i>Dehydration</i> <i>Cramp</i> <i>Fever</i> <i>Weakness</i> <i>Diarrhea with blood and mucus</i></p>	<p><b>Diseases</b></p> <p><b>Diarrhea</b> <b>Dysentery</b> <b>Cholera</b> <b>Typhoid</b> <b>Giardia</b></p>
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## 6.4 Hygiene

### Hygiene

Hygiene is crucial for preventing the spread of diseases and maintaining overall health. Good hygiene practices, such as regular handwashing, proper food handling, and maintaining cleanliness, reduce the risk of infections. These practices also promote well-being, enhance quality of life, and protect vulnerable populations, including children and the elderly.

### Type of Hygiene

- ✓ Personal hygiene.
- ✓ Environmental Hygiene.
- ✓ Domestic hygiene.

**Personal Hygiene:** Practices related to maintaining cleanliness of the body, such as regular bathing, brushing teeth, and grooming.

**Environmental Hygiene:** Involves keeping living and working spaces clean and safe, including proper waste disposal and surface cleaning.

**Domestic Hygiene:** Focuses on cleanliness within the home, including sanitation of household items and regular cleaning of living areas.

## 6.4.1 Personal Hygiene

Personal hygiene involves daily practices that keep the body clean and healthy. Key habits include regular hand washing, bathing, oral care, and clean grooming. These practices prevent the spread of germs, reduce the risk of infections, and contribute to overall well-being. Good personal hygiene is essential for maintaining health and social interactions.



### *Personal Hygiene*

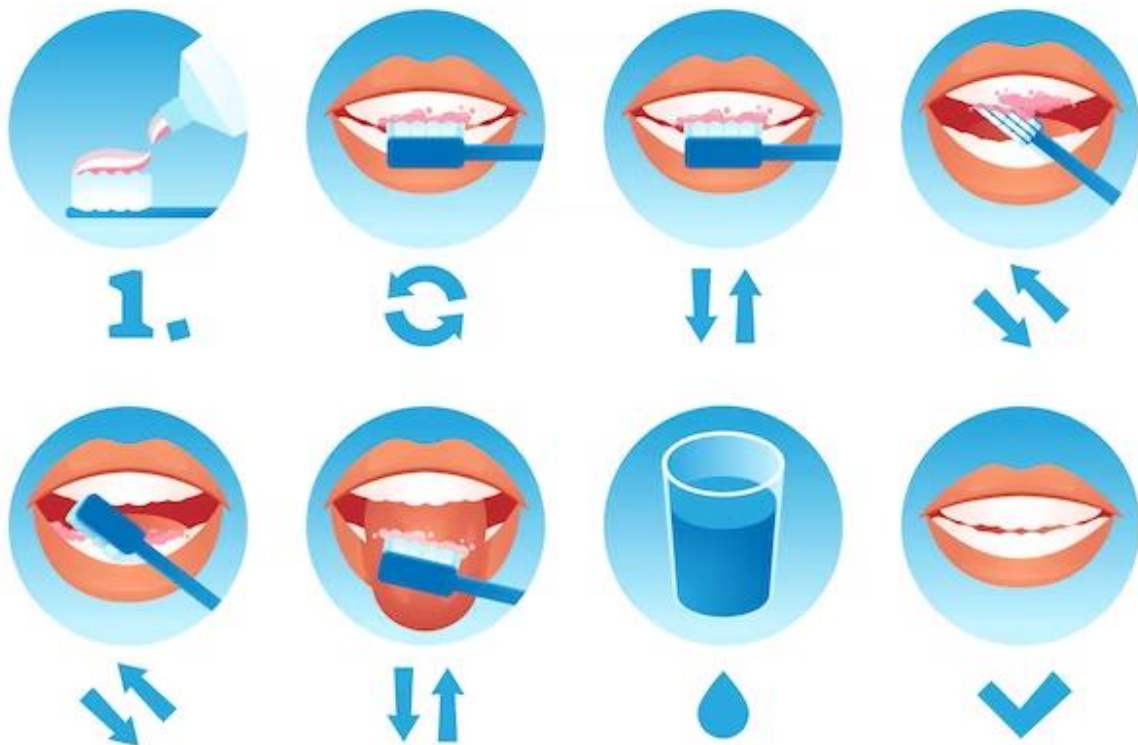


## Brush

Brushing is essential for maintaining oral health. It helps to:

- ✓ **Remove Plaque:** Brushing removes plaque, a sticky film of bacteria that can lead to tooth decay and gum disease.
- ✓ **Prevent Cavities:** Regular brushing helps prevent the formation of cavities by removing food particles and bacteria.
- ✓ **Maintain Fresh Breath:** Brushing reduces bad breath caused by food particles and bacteria.
- ✓ **Protect Gum Health:** It prevents gum disease by cleaning along the gum line and reducing inflammation.
- ✓ **Enhance Overall Health:** Good oral hygiene is linked to overall health, reducing the risk of systemic conditions like heart disease.

## HOW TO BRUSH YOUR TEETH

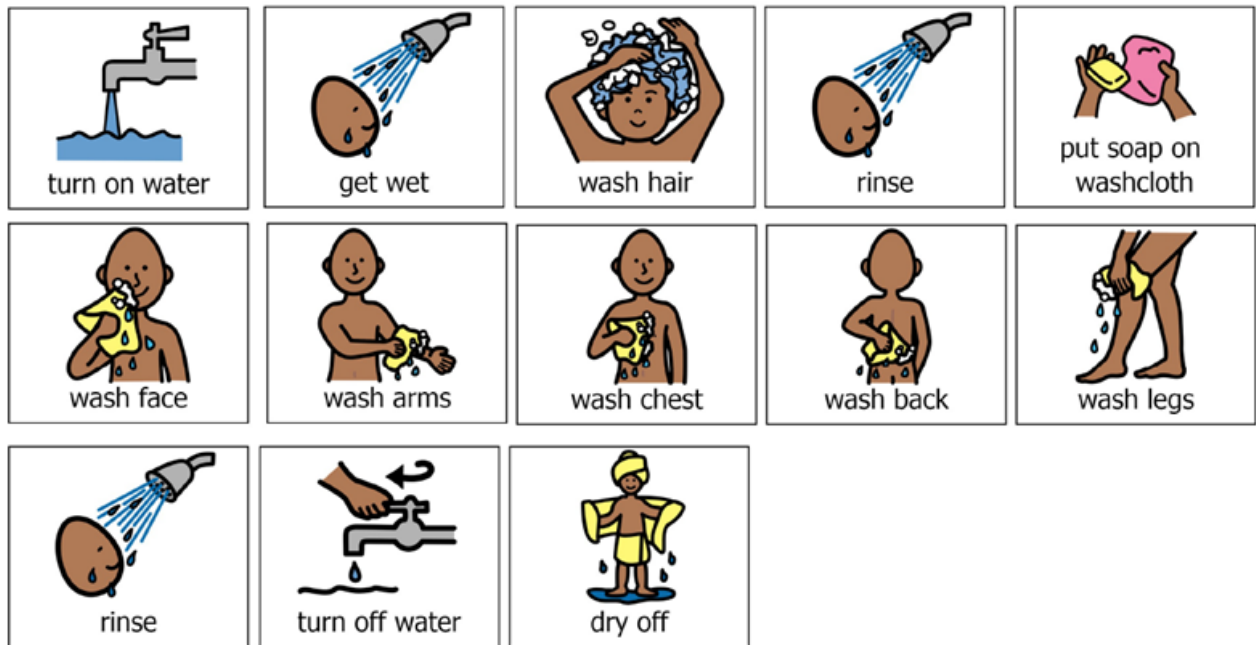


### Bath

Bathing is important for overall health and hygiene because it:

- ✓ **Removes Dirt and Sweat:** Bathing cleanses the skin of dirt, sweat, and oils, helping to prevent skin infections and unpleasant odours.
- ✓ **Prevents Skin Conditions:** Regular bathing helps to prevent conditions such as acne, fungal infections, and dermatitis by keeping the skin clean.
- ✓ **Promotes Relaxation:** A bath can be a relaxing experience that reduces stress and soothes sore muscles.
- ✓ **Improves Circulation:** Warm baths can enhance blood circulation and promote overall well-being.
- ✓ **Supports Mental Health:** Bathing can contribute to a sense of cleanliness and comfort, which can positively affect mental health and self-esteem.





## Face and Hand Wash

Washing the face and hands is crucial for maintaining health and hygiene due to the following reasons:

- ✓ **Prevents Spread of Germs:** Regular hand washing removes germs and bacteria, reducing the risk of illnesses and infections. Washing the face helps eliminate germs and dirt that can cause skin issues.
- ✓ **Reduces Risk of Infections:** Hand washing prevents the spread of respiratory infections, gastrointestinal diseases, and other illnesses. Facial washing helps prevent acne, dermatitis, and other skin infections.
- ✓ **Maintains Cleanliness:** Washing the face and hands helps keep these areas free from impurities, which contributes to overall cleanliness and personal hygiene.
- ✓ **Protects Health:** Proper hand washing before meals or after using the restroom is crucial for preventing foodborne illnesses and maintaining general health.
- ✓ **Enhances Skin Health:** Washing the face helps remove excess oils and impurities, which can improve skin health and appearance.





## Haircut

Haircuts are important for several reasons:

1. **Maintains Hair Health:** Regular haircuts remove split ends and prevent further damage, promoting healthier hair growth.
2. **Improves Appearance:** A well-maintained haircut enhances overall appearance and can boost self-esteem and confidence.
3. **Reduces Tangling:** Shorter or properly styled hair is less prone to tangling and breakage, making it easier to manage.
4. **Hygiene:** Regular haircuts help maintain scalp hygiene by removing excess oil and dead skin cells.
5. **Professionalism:** In many settings, a neat and well-groomed hairstyle is important for maintaining a professional appearance.



## Regular Toilet

Regular use of the toilet is important for several reasons:

1. **Prevents Health Issues:** Regular bowel movements help prevent constipation and related digestive problems.
2. **Reduces Risk of Infection:** Consistent and proper toilet use reduces the risk of urinary tract infections and other related conditions.
3. **Promotes Comfort:** Regular toilet use helps maintain comfort and avoid discomfort associated with holding in waste.
4. **Maintains Hygiene:** Proper and regular use of the toilet, combined with good hygiene practices, helps prevent the spread of germs and infections.
5. **Supports Healthy Digestion:** Regular bowel movements are a sign of a healthy digestive system, contributing to overall well-being.

## Toilet Time

Go to toilet

Close door

Lid up

Trousers & pants down

Sit down

Feet on stool

Choose

Use timer

Fidget toy

Read book

Toilet roll

Wipes

Pam separuh untuk buang air kecil

Pam penuh untuk buang air besar

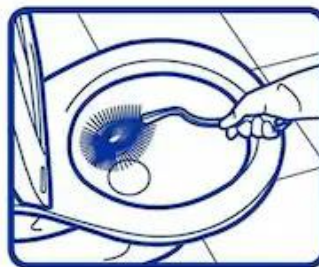




Apply under rim  
& around sides



Wait 5 minutes



Scrub & flush

## Cloth Washing

Washing clothes regularly is important for several reasons:

1. **Maintains Hygiene:** Regular washing removes sweat, dirt, bacteria, and dead skin cells, keeping clothes clean and hygienic.
2. **Prevents Odours:** Washing eliminates unpleasant odours caused by sweat and bacteria build up in fabrics.
3. **Prevents Skin Infections:** Clean clothes reduce the risk of skin infections and irritations caused by bacteria and allergens.
4. **Preserves Fabric Quality:** Regular washing helps maintain the quality and appearance of clothes, preventing stains and fabric degradation.

5. **Enhances Appearance:** Clean, well-maintained clothing contributes to a neat and polished appearance, boosting confidence and social interactions.

### ***Cloth Wash by Hand***



### ***Cloth Wash using Machine***



## Vessel Washing

Washing vessels after food is important for several reasons:

1. **Prevents Bacterial Growth:** Cleaning dishes removes food particles that can harbour bacteria and lead to contamination.
2. **Maintains Hygiene:** Properly washed utensils and dishes ensure that the next meal is prepared and served in a clean environment, reducing the risk of foodborne illnesses.
3. **Prevents Odours:** Washing dishes immediately helps prevent unpleasant odours from leftover food and residue.
4. **Prevents Pests:** Clean dishes and utensils discourage pests like ants, cockroaches, and rodents from being attracted to leftover food scraps.
5. **Preserves Dishware:** Regular cleaning prevents staining, corrosion, and damage to utensils and dishes, extending their lifespan.



### Wash Dishes



## Cutting Nails

Regular nail cutting is important for several reasons:

1. **Prevents Infections:** Trimming nails regularly reduces the risk of nail infections, such as fungal infections, and prevents dirt and bacteria from accumulating under the nails.
2. **Reduces Injury Risk:** Short nails are less likely to break or cause accidental scratches, reducing the risk of injury to oneself and others.
3. **Enhances Hygiene:** Keeping nails short and clean promotes good hygiene and prevents the spread of germs.
4. **Prevents Ingrown Nails:** Regular trimming helps prevent painful ingrown nails, which can lead to infections.
5. **Improves Appearance:** Well-maintained nails contribute to a neat and polished appearance, enhancing overall grooming.



## Wearing Mask

Wearing a mask is important for several reasons:

1. **Prevents Spread of Germs:** Masks help block respiratory droplets that can carry viruses and bacteria, reducing the spread of infectious diseases like COVID-19.
2. **Protects Others:** Wearing a mask is especially important in protecting others, particularly those who are vulnerable, from potential infection.
3. **Reduces Inhalation of Particles:** Masks can filter out harmful particles, pollutants, and allergens from the air, protecting the wearer's respiratory health.
4. **Minimizes Asymptomatic Spread:** People who are asymptomatic or pre-symptomatic can unknowingly spread germs; masks help reduce this risk.



5. **Promotes Public Health:** Wearing masks in crowded or public spaces is a crucial measure in controlling outbreaks and protecting community health.



## 6.4.2 Environmental Hygiene

Environmental hygiene refers to the practices and measures taken to maintain a clean and healthy environment, both indoors and outdoors. This includes activities like proper waste disposal, maintaining clean water sources, controlling pests, and ensuring that living and working spaces are free from pollutants and contaminants. The goal of environmental hygiene is to prevent the spread of diseases, protect public health, and enhance the quality of life by creating a safe and healthy environment.

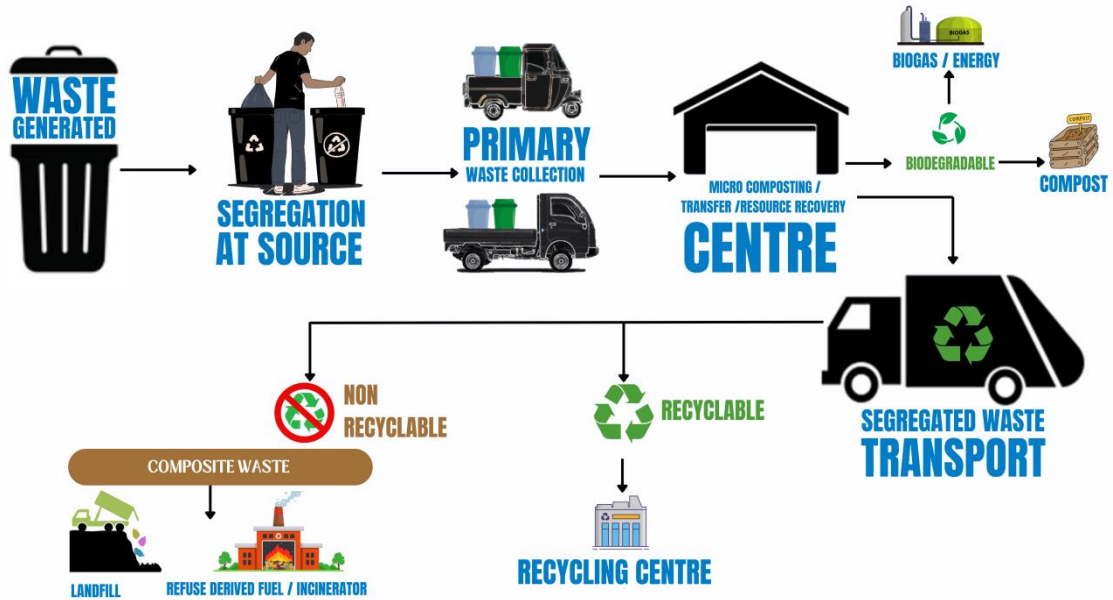
Environmental hygiene is crucial for several reasons:

1. **Prevents Disease:** Maintaining clean surroundings reduces the spread of infectious diseases by minimizing exposure to harmful bacteria, viruses, and pests.
2. **Promotes Public Health:** Clean environments contribute to the overall health and well-being of the community, reducing the burden on healthcare systems.
3. **Protects Water and Air Quality:** Proper waste disposal and sanitation practices help prevent pollution, safeguarding water sources and air quality.
4. **Reduces Pests:** Keeping the environment clean deters pests such as rodents and insects, which can spread diseases and cause damage.
5. **Enhances Quality of Life:** A clean environment promotes a healthier and more pleasant living space, improving the quality of life for everyone.

### ***Waste Disposal***



## Solid Waste Management



## Domestic Sewage Management





## 6.4.3 Domestic Hygiene

Domestic hygiene refers to the practices and routines performed at home to maintain cleanliness and prevent the spread of germs and diseases. This includes activities such as regular cleaning of living spaces, proper waste disposal, disinfecting surfaces, washing dishes, laundering clothes and linens, and maintaining personal hygiene. Good domestic hygiene ensures a healthy living environment, reduces the risk of infections, and promotes overall well-being for household members.

Domestic hygiene is important for several reasons:

1. **Prevents Illness:** Regular cleaning and disinfecting reduce the risk of infections and diseases by eliminating harmful germs and bacteria from the home.
2. **Maintains a Healthy Environment:** A clean home promotes physical health and contributes to mental well-being, reducing stress and creating a comfortable living space.
3. **Reduces Allergens:** Proper cleaning helps minimize dust, mould, and other allergens, improving air quality and preventing respiratory issues.
4. **Prevents Pests:** Good domestic hygiene deters pests like rodents and insects, which can carry diseases and cause damage to the home.
5. **Enhances Quality of Life:** A tidy and clean home fosters a sense of order and tranquillity, contributing to a better overall quality of life for all household members.





## **Domestic Cleaning Kit**



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 7

# Occupational Health & Safety



**SAFETY  
FIRST**

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# Chapter 7: Occupational Health & Safety

**Occupational Health and Safety (OHS) is essential for protecting workers from injuries, illnesses, and accidents in the workplace. It promotes a safe and healthy work environment, increases productivity, reduces healthcare costs, and ensures compliance with legal standards, benefiting both employees and employers.**

## Occupational Health and Safety Literacy for Recycle Guardians includes:



### Status of Occupational Health Safety

- ✓ Understanding of risk and safety mitigation
- ✓ Importance of Health and safety



### Challenges and risk in Recycle Guardian' Occupation

- ✓ Understanding of challenges and risks in waste collection



### Health and Safety Guidelines for Waste Pickers

- ✓ Understanding of Health and safety
- ✓ importance of safety equipment

## 7.1 Occupational Health & Safety

*Occupational Health and safety is all about preventing or mitigating any accidents or incidents at your workplace, that may result in injury. The overall goal of your health and safety is to create a safe working environment and to reduce the risk of accidents, injuries and fatalities.*

Recycle Guardians play an essential role in India's waste management system. They are individuals who collect and segregate recyclable materials from waste to earn a livelihood. While their work is crucial for recycling and environmental sustainability, Recycle Guardians face numerous challenges and hardships in their daily lives. By engaging in waste-picking, Recycle Guardians expose

themselves to various health hazards. They come into contact with toxic substances, sharp objects, and bio hazardous materials, putting them at risk of infections, respiratory issues, and skin diseases. The absence of proper protective gear exacerbates these health risks.



## Current Occupational Status of Recycle Guardian

1. **Exposure to Hazardous Materials:** Recycle Guardians frequently handle toxic waste, chemicals, and sharp objects without protective gear.
2. **Lack of Protective Equipment:** Most Recycle Guardians lack access to gloves, masks, and other safety gear, increasing their risk of injury and illness.
3. **Injury Rates:** High rates of cuts, punctures, and other injuries are common due to unsafe working conditions.
4. **Health Risks:** Exposure to harmful substances often leads to respiratory problems, skin diseases, and other health issues.
5. **Poor Access to Healthcare:** Many Recycle Guardians have limited or no access to medical care, exacerbating the impact of injuries and illnesses.
6. **Inadequate Sanitation:** Poor hygiene conditions at work contribute to the spread of infections and diseases among Recycle Guardian.
7. **Long Working Hours:** Recycle Guardian often work long hours in harsh environments, leading to fatigue and physical strain.
8. **Low Income:** Despite the health risks, Recycle Guardian earn very low wages, which affects their ability to afford healthcare and proper nutrition.

9. **Child Labour:** Children involved in waste picking are particularly vulnerable to health risks due to their age and lack of protective measures.
10. **Psychosocial Stress:** Recycle Guardian often experience social stigma, stress, and mental health issues due to the nature of their work.
11. **Limited Legal Protection:** Recycle Guardian usually work in the informal sector, which lacks legal protections and labour rights.



***Current Status of Recycle Guardian***

## 7.2 Challenges and Risk in Recycle Guardians' Occupation

### Occupational Challenges

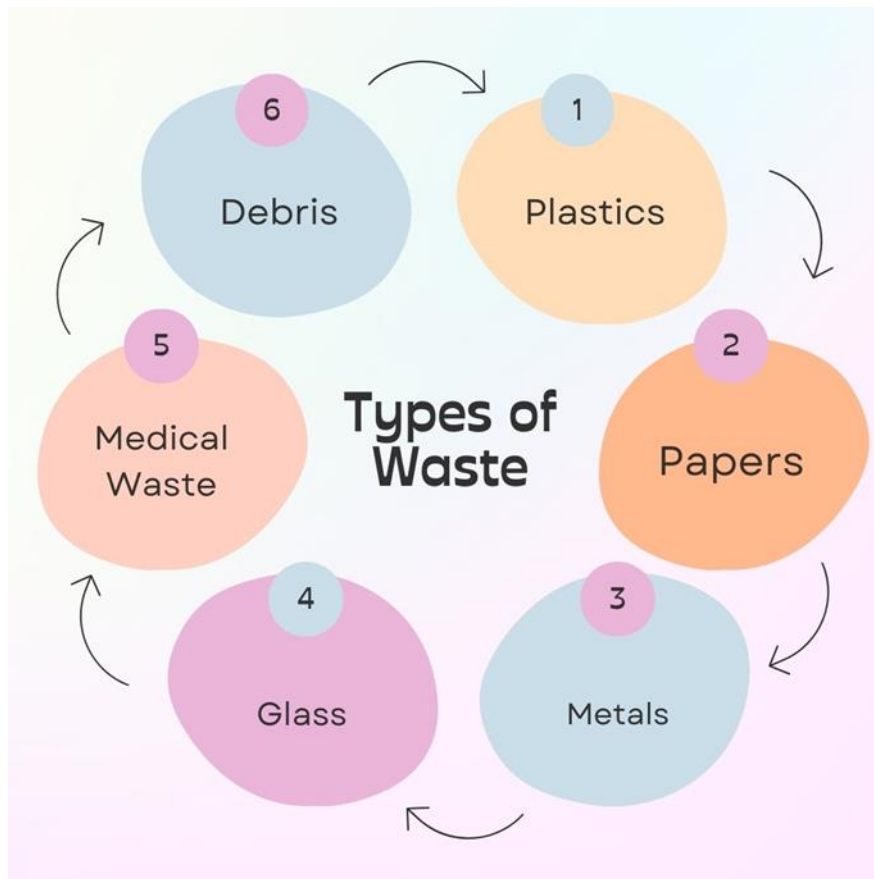
- ✓ Recycle Guardians work in the polluted and unhealthy environment, searching certain recyclable items out of hazardous waste dumped by people.
- ✓ Garbage collecting activities can take place in a variety of locations, including railway stations, roadsides, hospitals, and even open dumps.
- ✓ Recycle Guardians pick up all kinds of garbage with bare hands without any safety equipment. Sometimes, while collecting waste from the

garbage dumps they come in contact with waste which are toxic, corrosive, flammable, explosive, etc.

- ✓ Bio- Medical waste, such as needles, syringes, old medicines and soiled bandages etc. are very dangerous to the Recycle Guardians.
- ✓ Recycle Guardians are frequently exposed to poisonous materials, contaminated wastes, and sharp-edged things, which pose a threat of injury and disease.
- ✓ Recycle Guardians have respiratory problems such as sore throat, high prevalence of chronic obstructive pulmonary disease (COPD), coughing, asthma and loss of breathing.
- ✓ Work-related cancer, circulatory disease, cardiovascular disease, infectious disease, and occupational hazards are among the causes of their death.

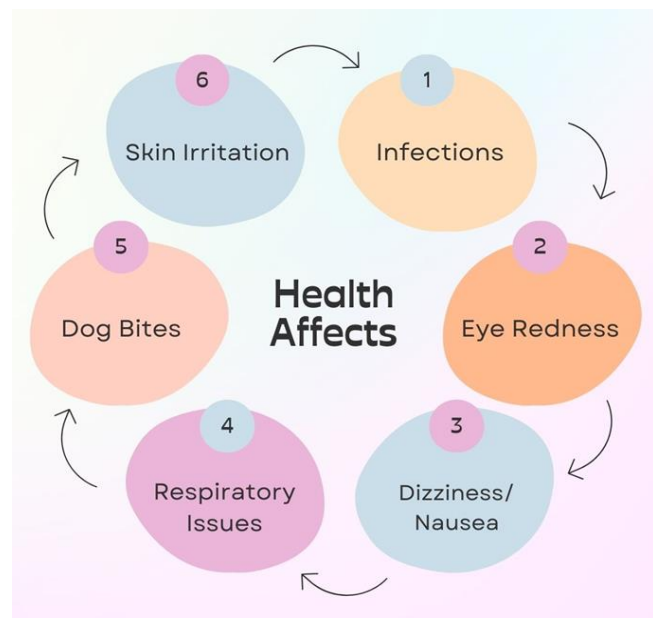






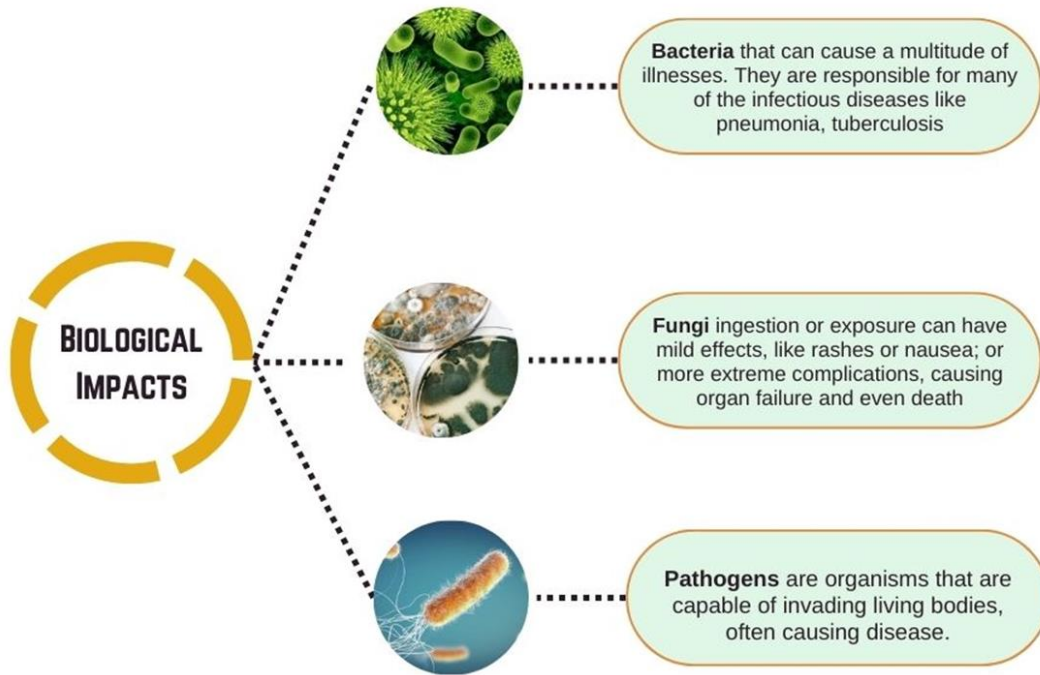
## Health Risk

- ✓ Injuries from sharp objects, hazardous materials and animal attack
- ✓ Respiratory issues from dust and fumes
- ✓ Skin infections from contaminated waste
- ✓ Vulnerability to diseases
- ✓ Musculoskeletal disorders from heavy lifting
- ✓ Microbial infections
- ✓ Mental health stress





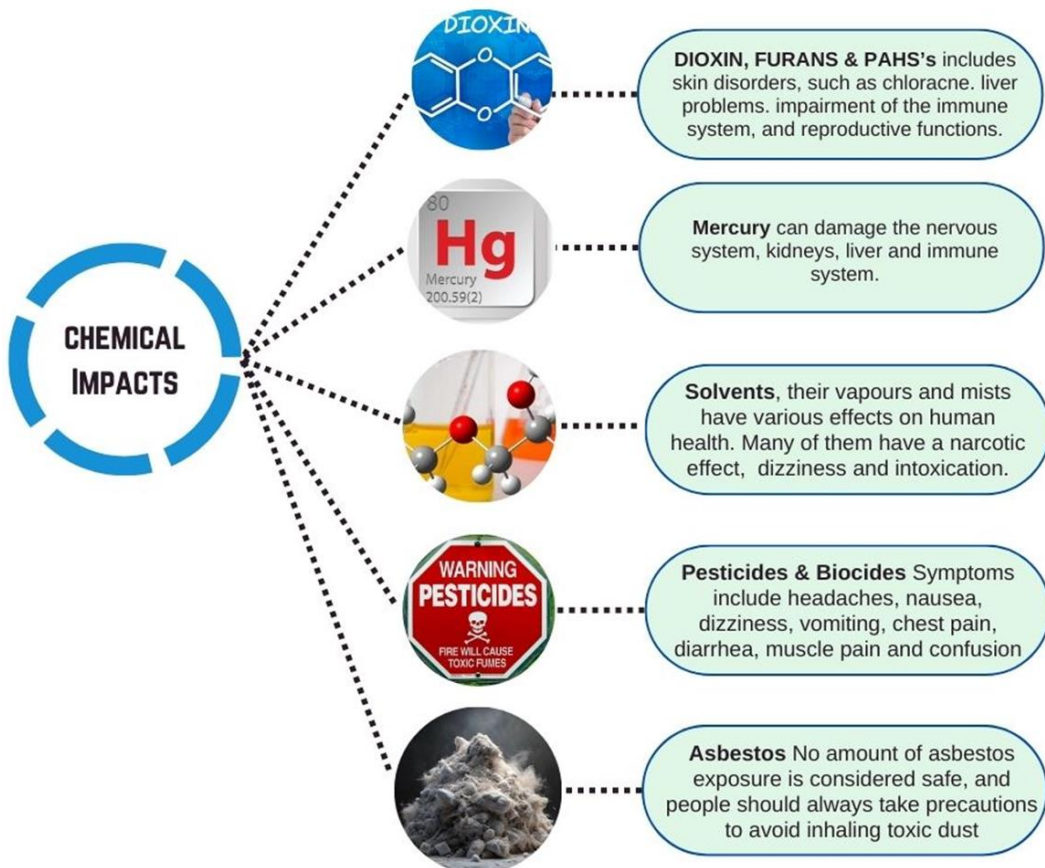
**“70% of Recycle Guardians handle discarded sanitary pads mixed with household waste; high risk of infection”**

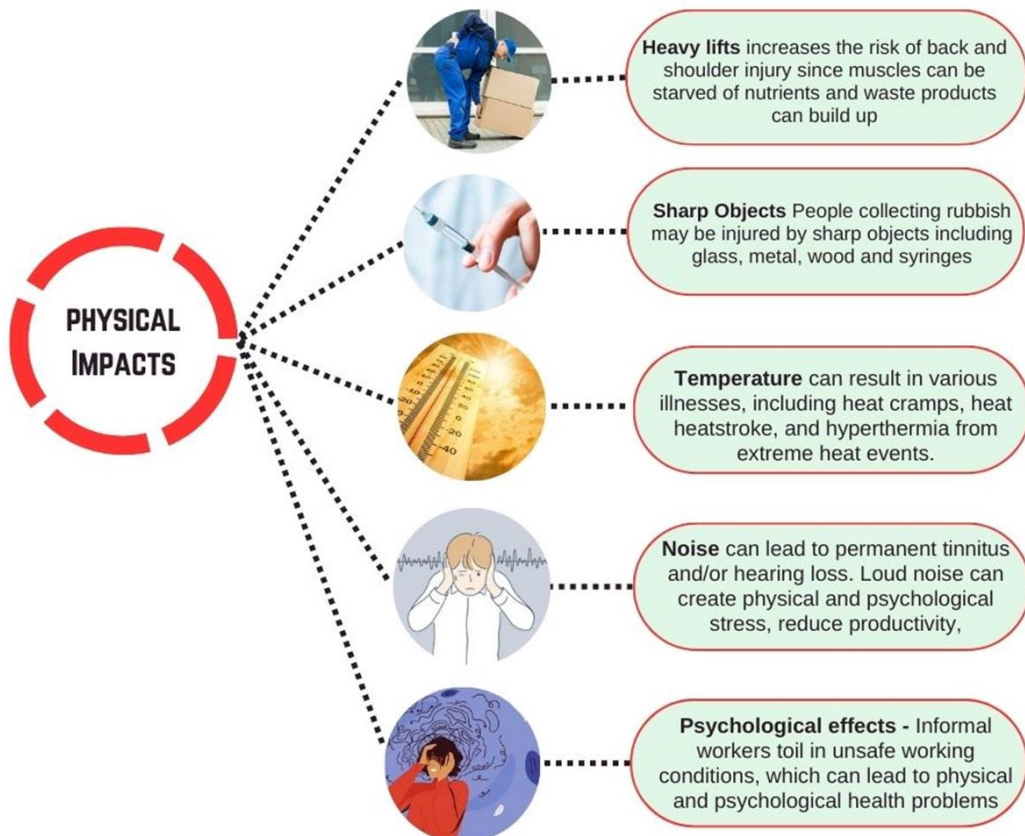


**Ways of Exposure**

**Inhalation of dust and aerosols**

**Direct contact (cuts, mouth, eyes)**





**Find the Difference**



**Formal Sanitary Worker**



**Informal Recycle Guardian**

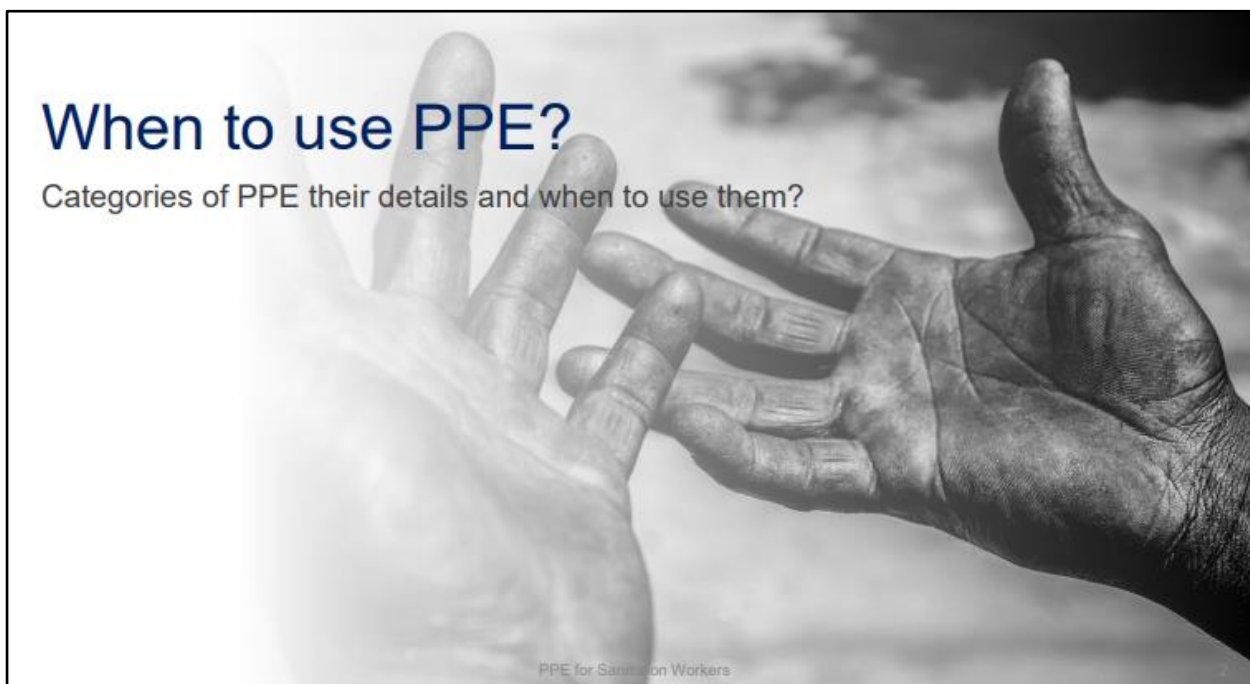


## 7.3 Health and Safety Guidelines for Recycle Guardian

### Importance of Personal Protective Equipment (PPE)

- ✓ Protection against injuries: The use of PPE by workers should be mandatory.
- ✓ Protection of body and clothes: The contamination of clothes is significant because most waste pickers wear the same clothes at work and at home.
- ✓ Respiratory tract protection: Bacteria in and around dump sites are very mobile, particularly when attached to fine particulate matter blown by the wind.
- ✓ Use of waste-sorting tools so that workers don't have to use their hands.
- ✓ Immunization against life-threatening diseases, such as tetanus, meningitis, and hepatitis.

### What is Personal Protective Equipment (PPE)?





**Hat**



**Spectacle**



**Face Mask**



**High Visibility Jacket**



**Cotton Gloves**



**Shoe**



# Typical protection equipment for...

**1 Gloves and gumboots for hands and feet**

- Chemicals
- Infection and pathogens
- Sharp objects

**2 Skin protection with Coveralls, barrier cream**

- Contact with sludge
- Temperature Extremes
- Near machinery and tools

**3 Masks and respirators**

- Fumes and bad smells
- Biohazard - dead animals and medical waste
- Dust

**4 Safety goggles or shield for eyes and face**

- Fumes
- Splash
- Machine sparks or particles



**5 Helmet for head**



Falling objects      Slipping



**6 Ear protection**



Loud noise from machinery



**7 Fluorescent vest**



Visibility and identification



**8 Safety harness and tripod**



Fall arrest system

## PPE protects you but only if you use it!



**✗ I think PPE is uncomfortable to wear**

**✗ I can work faster when I don't wear PPE**

**✗ I don't need to wear it...**

**✗ PPE is not needed for quick jobs**

**✗ I think wearing PPE makes me look silly**

## Prepare work areas

Always respect local public health and lockdown orders.

Provide **soap** and **water** so that workers can frequently wash their hands.



Frequently clean (with **70% alcohol** or **1% bleach**) objects that are used often, like banisters, tables, bathrooms, door handles, personal safety equipment and cushions and handles in vehicles.



Inform workers that collected and sorted material can be contaminated with the virus. Recent studies show that the **virus can survive hours and up to days on materials** such as aluminium or paper. Treat collected materials as though they are contaminated.



Ensure work spaces are **properly ventilated**.



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 8

# Eco-friendly Recyclable Waste Management

**RECYCLE**





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# Chapter 8: Eco-friendly Recyclable Waste Management

**Eco-friendly recyclable waste management is crucial for reducing environmental pollution and conserving natural resources. It helps minimize landfill waste, lowers carbon emissions, and promotes the sustainable use of materials. By recycling, we contribute to a cleaner environment, conserve energy, and support the creation of green jobs and industries**

Eco-friendly recyclable waste management Techniques for Recycle Guardians includes:



### What is Recyclable

- ✓ Understanding of recyclable waste
- ✓ Importance of recycling



### Eco-friendly Recyclable Waste Management Techniques

- ✓ Understandings of collection area, waste handling on transport, waste compacting technique

## 8.1 Recyclable Waste Management

Recycling is the process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products. Recycling provides many benefits to our environment. By recycling our materials, we create a healthier planet for ourselves and future generations.

# WHAT IS **RECYCLING**?



**Recycling** is a process in which discarded materials, such as paper, plastic, glass, and metal, are collected and transformed to be reused in the manufacturing of new products.

This process helps reduce the amount of waste that ends up in landfills or polluting the environment, thus contributing to the conservation of natural resources and the reduction of pollution.

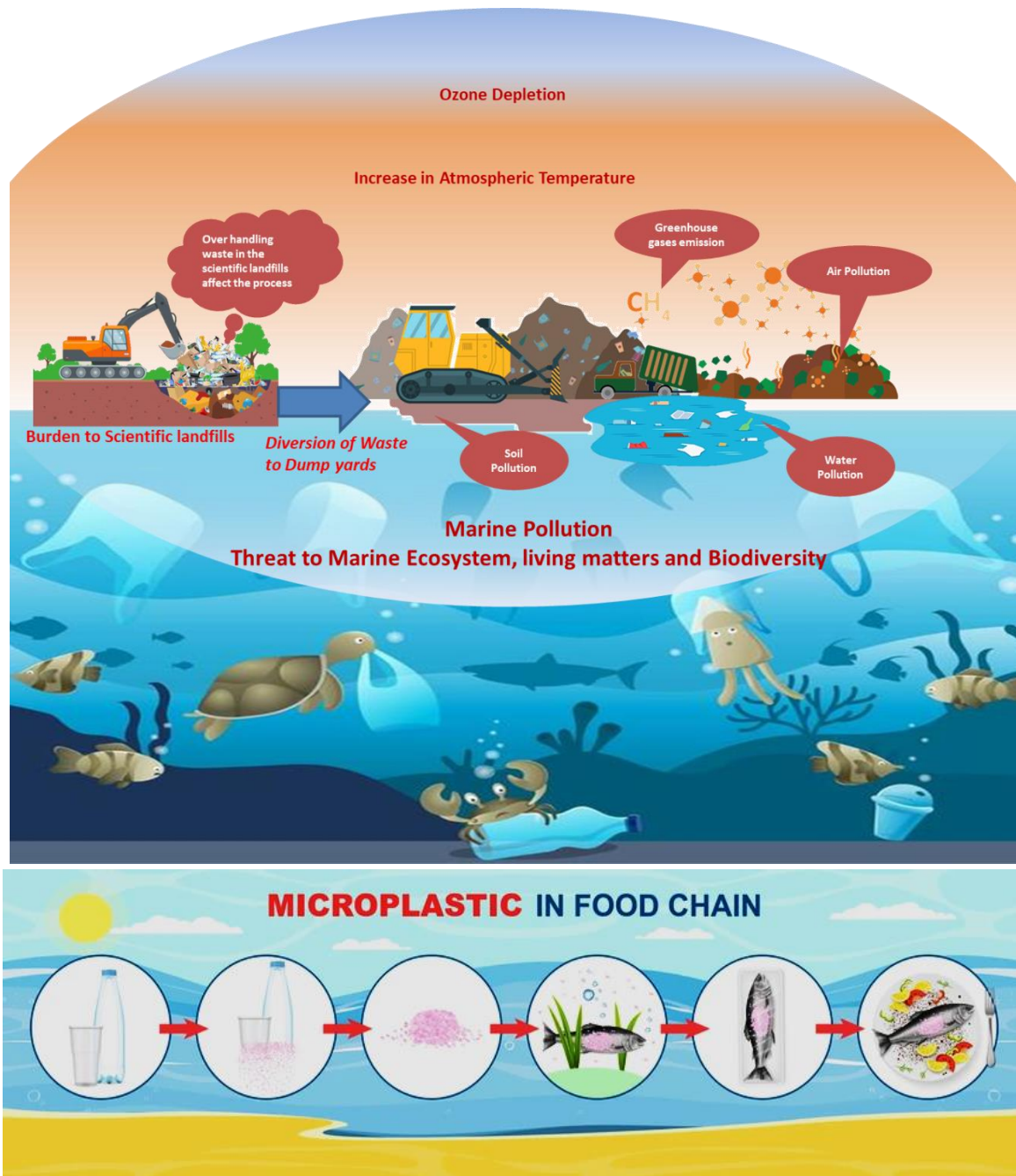
Recycling is a sustainable and responsible action that we can all take to care for our planet and promote a cleaner and healthier future for future generations.

## Importance of Recyclable Waste Management

Recyclable waste management is vital for preserving our environment and resources. It reduces the strain on landfills, curtails pollution of air, water, and soil, and decreases greenhouse gas emissions. By managing waste responsibly, we help conserve natural resources, reduce energy consumption, and protect ecosystems, including marine life. Effective recycling also supports a circular economy, where materials are reused and repurposed, and minimizing waste and fostering sustainable development. Overall, recyclable waste management plays a vital role in promoting a healthier planet for current and future generations.

**Recyclable waste management is essential as it addresses several critical environmental issues:**

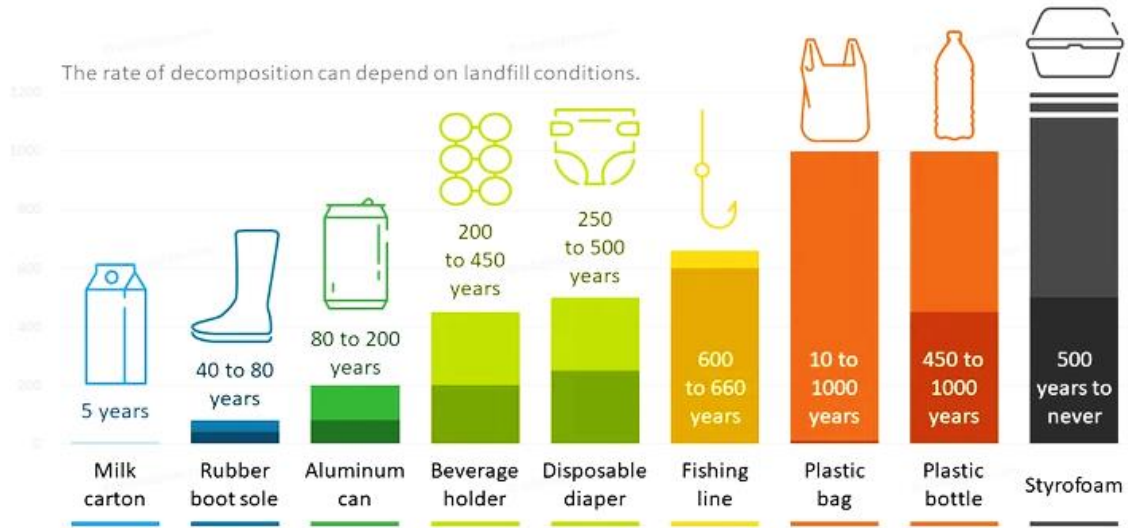
- ✓ Burden to Scientific Landfills
- ✓ Diversion of Waste to Dump yards
- ✓ Increased Air, Water and Soil Pollution
- ✓ Greenhouse gases emission
- ✓ Ozone Depletion
- ✓ Increase in Atmospheric Temperature
- ✓ Marine Pollution
- ✓ Threat to Marine Ecosystem, living matters and Biodiversity



## Waste Decomposition Time

Waste decomposition time varies depending on the material. Organic waste like food scraps can take weeks to months to decompose, while paper takes 2-6 weeks. Plastic can take hundreds to thousands of years, and glass may never fully decompose. Managing waste properly helps reduce environmental impact.





# How Long Does it Last?

Have you ever thought of how long it takes for your trash to decompose? Minimize your trash and recycle.

Different materials decompose at different rates. How long does it take for these common types of trash to break down?





## 8.2 Eco-friendly Recyclable waste Management Techniques

### Storage of Recyclables

Baling is an essential method for storing waste as it compresses materials into compact, manageable units, reducing the space needed for storage and transportation. This process helps in maintaining cleaner and more organized storage areas, preventing waste from spreading or becoming a hazard. Additionally, baling makes recycling and disposal processes more efficient, saving time, resources, and costs associated with waste management.



**Not to expose to sun and rain which will reduce economic value and increase threat to environment and community?**



**Bale, pack and store inside the roof**



## Use Manual Baler Machine to Minimize the Volume and Increase the Weight



## Use Wire Extractor Tool and Avoid Burning to Extract Copper Wire



## Visit to Waste Generator Spots, Not Landfills

Visiting waste generator spots, rather than landfills, is important because it helps identify the source and type of waste being produced, allowing for better



waste management strategies. This approach encourages waste reduction at the source, promotes recycling and segregation practices, and helps in educating waste generators about sustainable practices. It also reduces the burden on landfills and minimizes environmental impact by addressing waste issues directly where they originate.



**Landfill**



**Apartments**



**Super Markets & Shops**



**MCC and RRP**



## Use Vehicle to Transport Recyclables

Using a vehicle to transport recyclables, rather than walking, is important for several reasons:

1. **Efficiency:** Vehicles can carry larger quantities of recyclables, reducing the number of trips needed and saving time.
2. **Convenience:** It makes transporting recyclables less physically demanding, especially for larger or heavier loads.
3. **Cost-Effectiveness:** Reduces the time and labour costs associated with manual transport.
4. **Improved Safety:** Minimizes the risk of injury or strain that can come from carrying heavy loads.
5. **Broader Reach:** Allows for the collection of recyclables from multiple locations in a single trip, improving overall efficiency in recycling programs.



*Transport by Walk*



*Transport by Vehicle*





## Handle Recyclable with PPEs

Handling recyclables with personal protective equipment (PPE) is important for several reasons:

1. **Safety:** PPE protects against sharp objects, hazardous materials, and potential contaminants, reducing the risk of injury or exposure to harmful substances.
2. **Health Protection:** It helps prevent skin infections, respiratory issues, and other health problems that can arise from contact with certain recyclable materials.
3. **Compliance:** Using PPE ensures adherence to safety regulations and industry standards, which is essential for maintaining a safe working environment.
4. **Increased Efficiency:** Proper PPE can improve worker confidence and focus, leading to more efficient handling and processing of recyclables.
5. **Prevention of Cross-Contamination:** PPE helps prevent the spread of contaminants from recyclables to other areas or individuals.



**Handle Recyclables with Bare Hand**



**Handle Recyclables with PPEs**



## Individual Exercise

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## Group Exercise

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## Assessment

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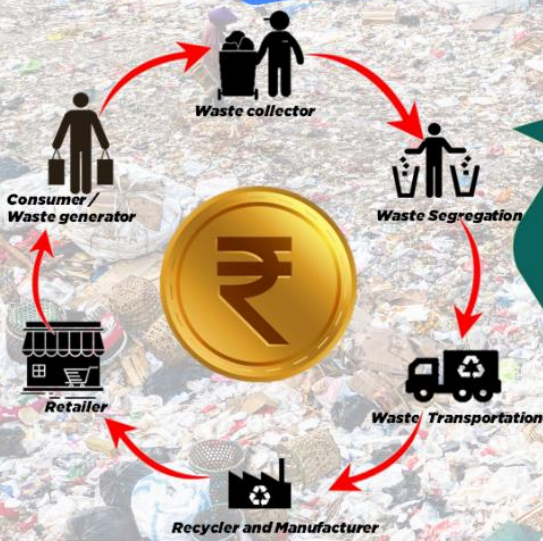
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# Chapter 9

# Sorting of Recyclables & Its Value Chain



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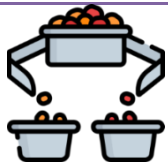
# Chapter 9: Sorting of Recyclables & Its Value Chain

**Sorting recyclables is crucial in the value and supply chain as it ensures that materials like plastic, metal, and paper are effectively separated for recycling. This improves the quality and efficiency of recycled products, reduces waste, and supports resource conservation. Proper sorting also enhances the supply chain by providing high-quality materials to manufacturers, promoting a sustainable circular economy.**

Sorting of recyclables Literacy for Recycle Guardians includes:



**Importance of Sorting  
Waste Sorting Points (Locations)**



**Sorting Operations**

- ✓ Understanding of Sorting operation
- ✓ Type of sorting mechanism
- ✓ Waste Vs. sorting type



**Key Skills of Sorting of Recyclables**

- ✓ Understanding of safety awareness
- ✓ Value of Recyclables



**Recyclable Supply and Value Chain**

- ✓ Understanding of recyclable waste supply chain
- ✓ Importance of market value of recyclables



**Waste to Recycled Product**

- ✓ Understanding of recyclable waste to possible recycled product



**Plastic Waste Recycling Value Chain**

- ✓ Understanding of plastic waste – legal frame
- ✓ Understanding of Plastic waste category in the recyclable value chain

# 9.1 Importance of Sorting and Waste Sorting Points

The term 'sorting' indicates separation and storage of individual constituents of waste material. In this chapter, the term 'sorting' is used synonymously with 'separation' and 'segregation'.

- **Reduces Landfill Waste:** Sorting ensures recyclable materials don't end up in landfills, conserving space and reducing environmental impact.
- **Conserves Resources:** Recyclable materials can be processed and reused, preserving natural resources like trees, water, and minerals.
- **Lowers Pollution:** Proper sorting reduces pollution by minimizing the need for raw material extraction and processing.
- **Saves Energy:** Recycling typically requires less energy than producing new products from raw materials, reducing overall energy consumption.
- **Supports Sustainability:** Effective waste sorting promotes a circular economy, where materials are continually reused, contributing to long-term environmental sustainability.

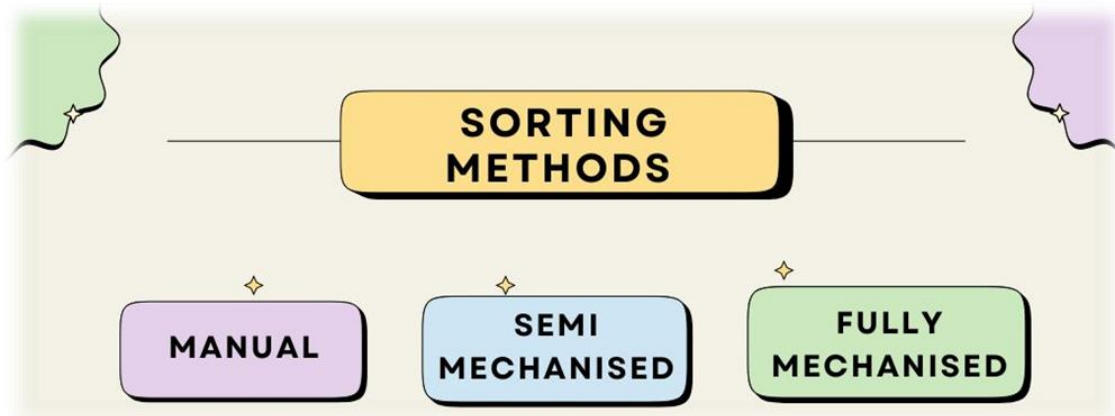
There are various stages at which sorting can take place in the waste stream. These can be identified as the following:

- ✓ Households
- ✓ Street bins
- ✓ Transfer stations or centralized sorting facilities
- ✓ Waste processing units
- ✓ Scientific Landfills
- ✓ Dump yards





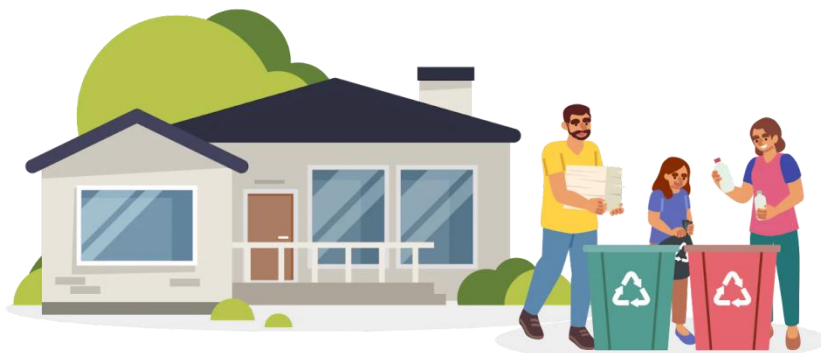
## 9.2 Sorting Methods



<i>Manual Sorting</i>	<i>Semi Mechanized Sorting</i>	<i>Fully mechanised Sorting</i>
		

Types of waste sorting operations include:

1. **Source Sorting:** Waste is sorted at the point of origin (e.g., homes, offices) into different categories like organic, recyclable, and non-recyclable waste.



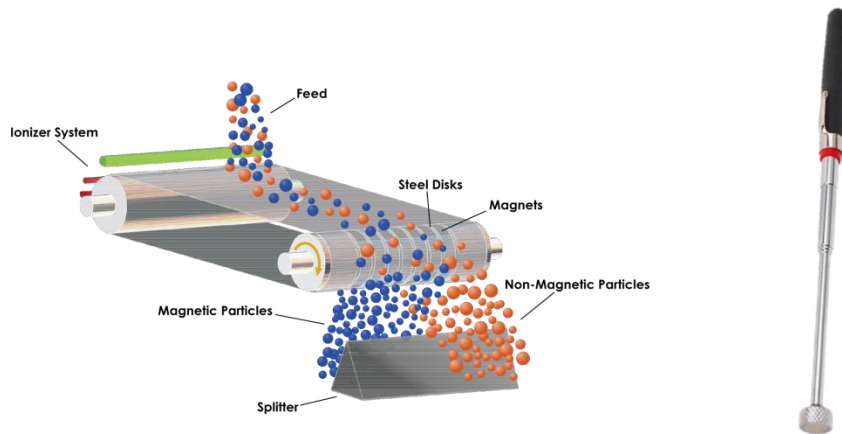
2. **Manual Sorting:** Workers physically separate waste items on sorting lines, often at recycling facilities, to ensure proper categorization.



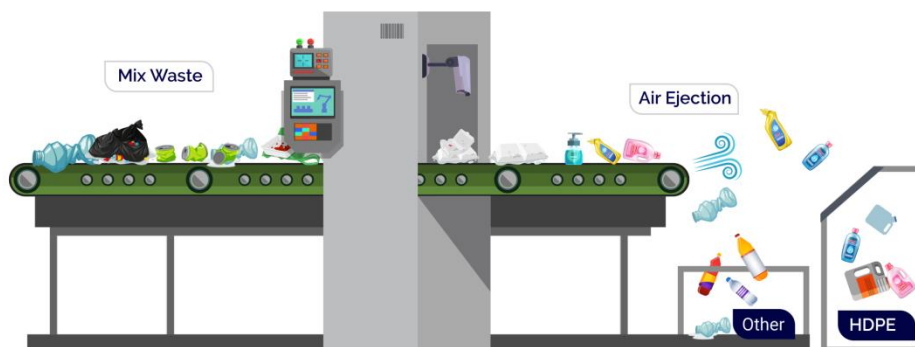
3. **Mechanical Sorting:** Machines such as conveyor belts, shredders, and magnets are used to automatically sort waste based on size, weight, and material type.



4. **Magnetic Separation:** Magnetic fields are used to separate ferrous metals (like iron and steel) from other waste materials.



5. **Air flow Classification:** Light materials like plastics are separated from heavier waste using air streams in a process known as air classification.



6. **Optical Sorting:** Advanced sensors detect specific materials (like plastics or paper) and use air jets to separate them from the waste stream.



These operations can be used individually or in combination to achieve efficient waste management and recycling.

## 9.3 Key Skills of Sorting Recyclables

Key skills for sorting recyclables include safety awareness to prevent injuries, material identification to accurately separate items, and understanding the value of materials to maximize recycling efficiency. These skills ensure that the sorting process is both effective and safe, contributing to the overall success of recycling efforts.

### Aware of Dangerous Symbols in the Recyclables before Sorting



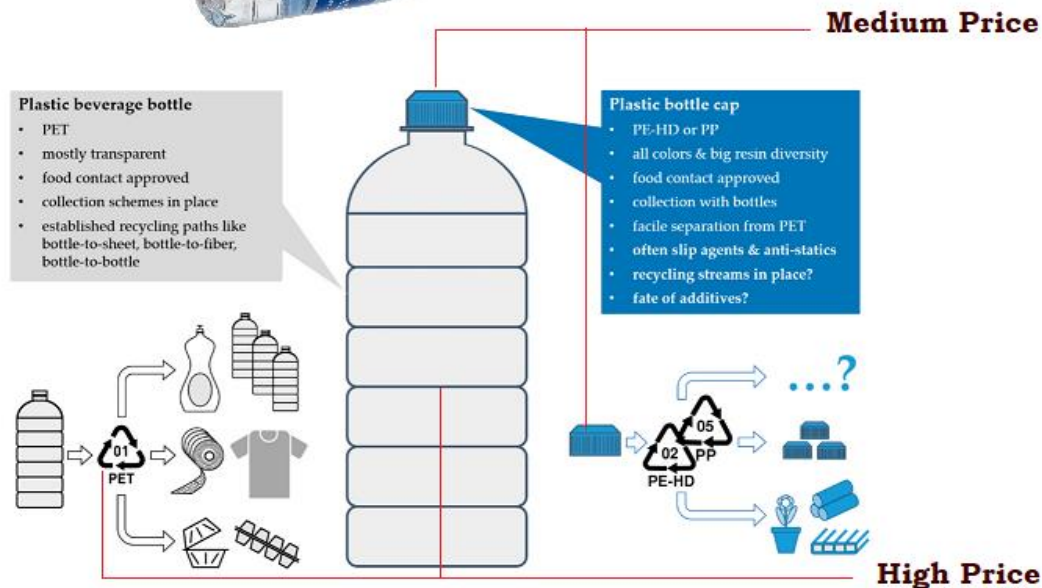
*See the container and notice the hazard symbol if any.  
In case of hazard symbol, check whether it is empty or with load.  
If it is filled with load, better not to take risk.*



## Awareness on Different Plastics through Its Code

	<b>PET</b>	Water bottles, condiment containers		Easy to recycle
	<b>HDPE</b>	Milk jugs, shampoo bottles		Easy to recycle
	<b>PVC</b>	Pipes, plastic wrap		Hard to recycle
	<b>LDPE</b>	Grocery bags & wrappers		Can be recycled
	<b>PP</b>	Yogurt & sour cream containers		Can be recycled
	<b>PS</b>	Takeout food boxes, coffee cups		Hard to recycle
	<b>0</b>	Everything else, like nylon, acrylic, & fiberglass		Hard to recycle

## Sorting Based on Chemical Composition



Component	Chemical composition	% by weight	Comments
Caps	Polypropylene	2.5	Caps used in bottled water
	HDPE	2.5	Caps used in bottled soft drinks
Labels	Polypropylene	0.5	Used in bottled soft drinks
	Paper	0.5	Used in bottled water
Bottle	PET	94	Body of the PET bottle













## Prioritize High Value Recyclables

Recyclables	Recyclability	Value
 <p><b>Newspaper</b></p>	★★★★★	★★★
 <p><b>Book</b></p>	★★★★★	★★
 <p><b>Iron</b></p>	★★★★★	★★★★
 <p><b>Carton</b></p>	★★★★★	★★★★
 <p><b>PET Plastic</b></p>	★★★★★	★★★★
 <p><b>HDPE Plastic</b></p>	★★★★★	★★★★
 <p><b>PVC Plastic</b></p>	★	★

Recyclables	Recyclability	Value
 <p><b>LDPE Plastic</b></p>	★	★
 <p><b>PP Plastic</b></p>	★★★★	★★
 <p><b>PS Plastic</b></p>	★	★
 <p><b>Other plastic</b></p>	★★	★★
 <p><b>Electronic Waste Phone (Smart Phone 5in+)</b></p>	★★★★	★★★★
 <p><b>Phone (Keypad/touch)</b></p>	★★★★	★★★



Recyclables	Recyclability	Value
 <p><b>Tin</b></p>		
 <p><b>Brass</b></p>		
 <p><b>Copper</b></p>		
 <p><b>Stainless Steel</b></p>		
 <p><b>Electric wire</b></p>		
 <p><b>Aluminium</b></p>		
 <p><b>Liquor Bottle</b></p>		
 <p><b>Clothes</b></p>		

 <p><b>Newspaper</b> Rs 14/kg</p>	 <p><b>Books</b> Rs 13/kg</p>	 <p><b>Gatta</b> Rs 7/kg</p>	 <p><b>Magazine</b> Rs 13/kg</p>	 <p><b>A4 Paper</b> Rs 13/kg</p>	 <p><b>Plastic</b> Rs 12/kg</p>
 <p><b>Iron</b> Rs 30/kg</p>	 <p><b>Steel</b> Rs 45/kg</p>	 <p><b>Aluminium</b> Rs 140/kg</p>	 <p><b>Copper</b> Rs 570/kg</p>	 <p><b>Brass</b> Rs 400/kg</p>	 <p><b>Keypad Phone</b> Rs 10/Piece</p>

**★ High Value Recyclables**

**Easy to recycle will have high value**



**Carton Boxes**



**Aluminium package material**



**News Papers**

**Can be recycled will have average value**



**Milk Cover**



**Shampoo Bottle**

***Hard to recycle will have low value***



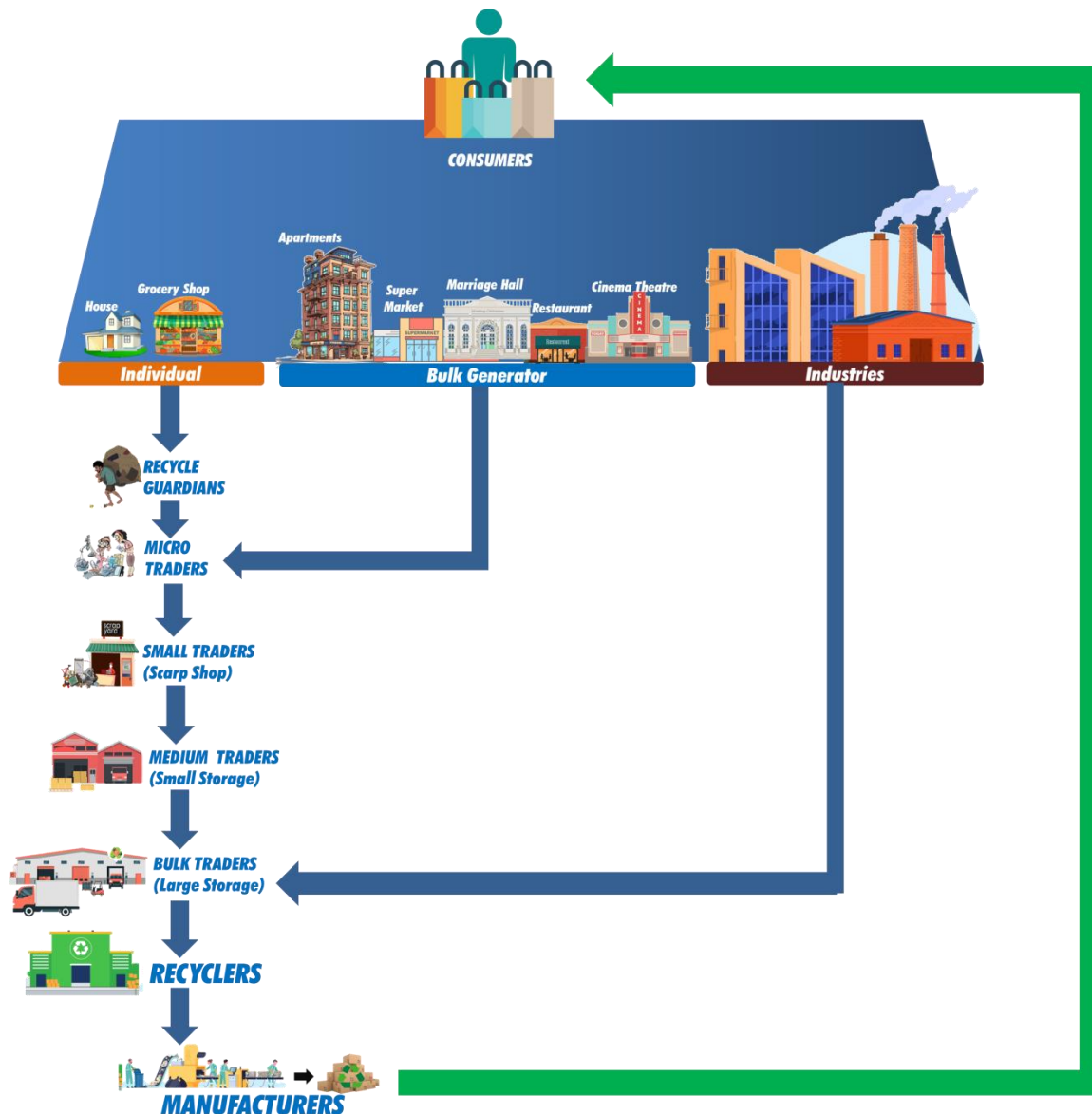
***Cloth waste***



***Liquor Bottle***

## **9.4 Recyclable Supply and Value Chain**

The recyclable value chain involves a series of steps from waste collection to the production of new products. It begins with the collection of waste materials from households, businesses, and industries, followed by segregation into types like plastics, metals, paper, and glass. These sorted materials are then transported to recycling facilities, where they undergo processing, such as cleaning, shredding, or melting, to prepare them for reuse. The processed materials are used in manufacturing to create new products, which are then distributed and sold in the market. Consumers purchase and use these recycled products, completing the cycle. This value chain is essential for reducing waste, conserving natural resources, and minimizing environmental impact.



## Importance of the Recyclable Value Chain

- **Reduces Waste:** Minimizes the amount of waste sent to landfills and incinerators.
- **Conserves Resources:** Saves natural resources by reusing materials like metals, plastics, and paper.
- **Energy Efficiency:** Requires less energy compared to producing new products from raw materials.
- **Economic Benefits:** Creates jobs and generates economic opportunities in the recycling industry.
- **Environmental Protection:** Reduces pollution, greenhouse gas emissions, and environmental degradation.



































- **Promotes Sustainability:** Encourages responsible consumption and supports a circular economy.

## Importance of Knowing Market Value of Recyclables

- **Informed Decisions:** Helps businesses and individuals make cost-effective choices in waste management and recycling efforts.
- **Maximizes Profits:** Enables recyclers to sell materials at the best price, increasing profitability.
- **Resource Allocation:** Guides investment in recycling infrastructure and operations based on market demand.
- **Waste Reduction:** Encourages the diversion of high-value materials from landfills, promoting sustainability.
- **Environmental Impact:** Supports environmental conservation by identifying which materials are most valuable and worth recycling.

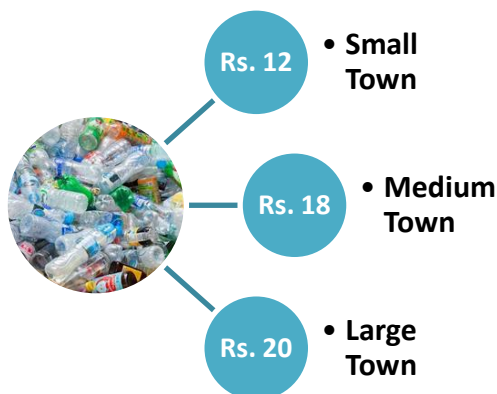
## Price Offered by Various E-commerce Traders for Recyclables

 <p><b>Newspaper</b> Rs 14/kg</p> <p>Recently Newspaper Price is Dropped</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Books</b> Rs 13/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Gatta</b> Rs 7/kg</p> <p>Minimum 50Kg Required</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Magazine</b> Rs 13/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>A4 Paper</b> Rs 13/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Plastic</b> Rs 12/kg</p> <p><a href="#">BOOK NOW</a> </p>
 <p><b>Iron</b> Rs 30/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Steel</b> Rs 45/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Aluminium</b> Rs 140/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Copper</b> Rs 570/kg</p> <p><a href="#">BOOK NOW</a> </p>	 <p><b>Brass</b> Rs 400/kg</p> <p><a href="#">BOOK NOW</a> </p>	

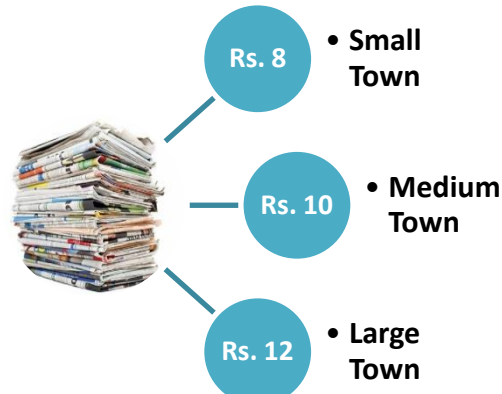
 <b>RS 14/KG</b> OFFICE PAPER (A3/A4)	 <b>RS 13/KG</b> NEWSPAPER **MARKET RATES DROPPED RECENTLY	 <b>RS 10/KG</b> COPIES/BOOKS **MARKET RATES DROPPED RECENTLY	 <b>RS 8/KG</b> CARDBOARD **TO GET QUOTE FOR BULK QTY. CALL AT +91-8595358613	 <b>RS 10/KG</b> PLASTIC
 <b>RS 27/KG</b> IRON **TO GET QUOTE FOR BULK QTY. CALL AT +91-8595358613	 <b>RS 37/KG</b> STEEL UTENSILS	 <b>RS 105/KG</b> ALUMINIUM	 <b>RS 305/KG</b> BRASS	 <b>RS 425/KG</b> COPPER

## Price Variation at Scrap Shops located in Different Towns

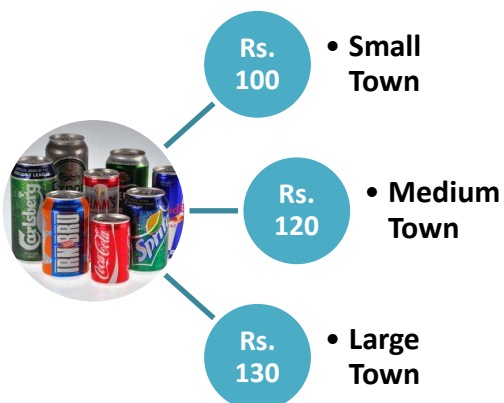
### PET Bottle Waste Price per Kg



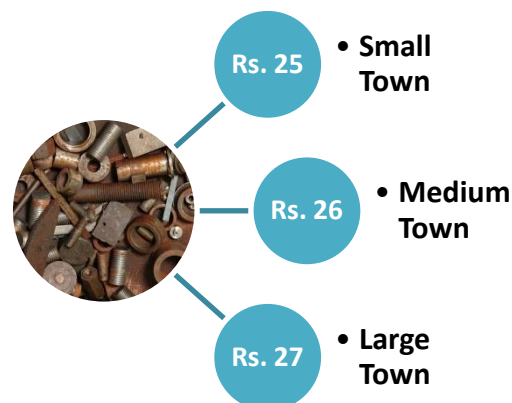
### Paper Waste Price per Kg



### Aluminum Waste Price per Kg

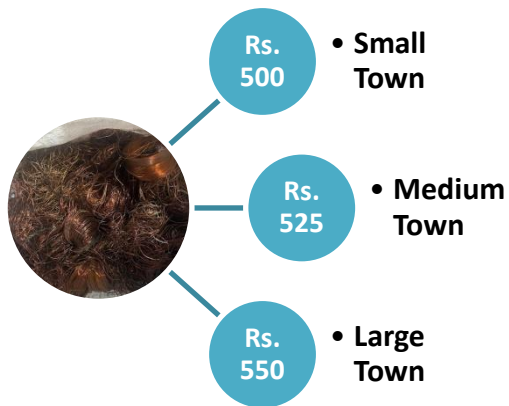


### Iron Waste Price per Kg

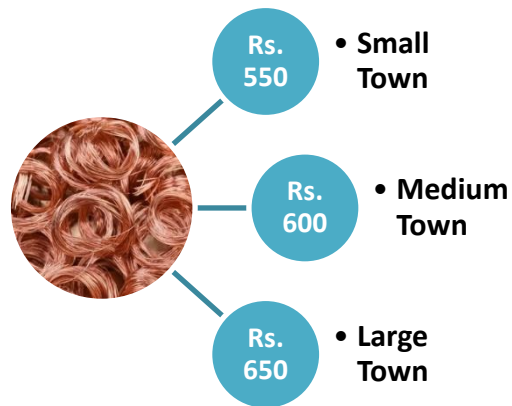


# Copper Wire Waste Price Variation at Scrap Shops located in Different Towns (Burnt vs. Unburnt)

**Burnt Copper Wire Waste Price per Kg**



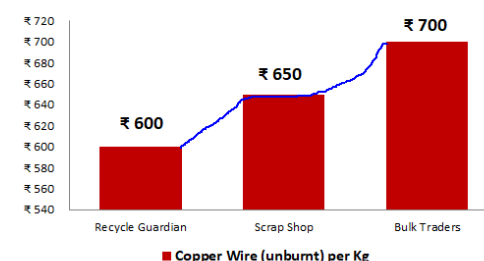
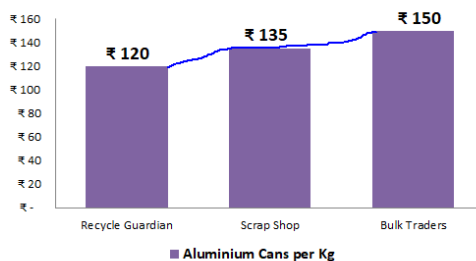
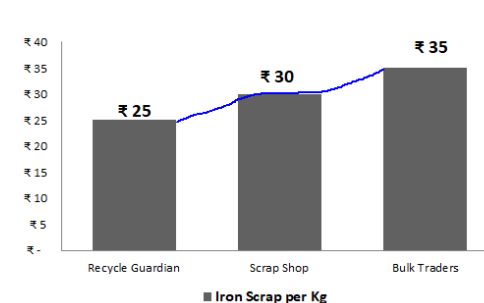
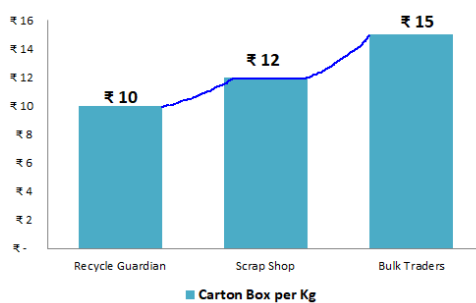
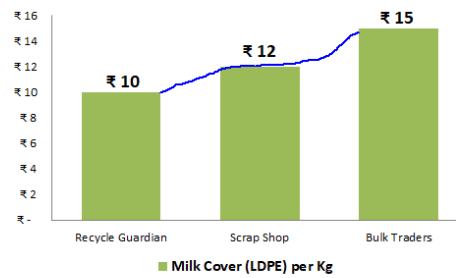
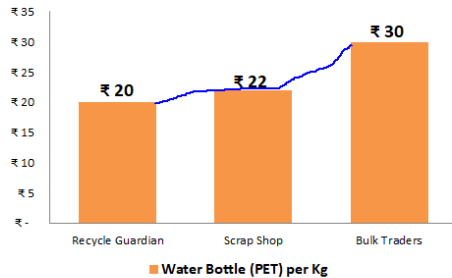
**Unburnt Copper Wire Waste Price per Kg**



Do not burn wires to extract copper to get good price



# Supply Chain Pricing of Recyclable Waste in Various Stages



## Check the Value of Recyclable

1. <https://trashman.co.in/pricelist.html>
2. [https://www.recycleinme.com/scrapresources/detailedprice?psct=1&cat=South%20Indian%20Scrap%20Prices&subcat=HMS%20\(South%20Tamil%20Nadu\)](https://www.recycleinme.com/scrapresources/detailedprice?psct=1&cat=South%20Indian%20Scrap%20Prices&subcat=HMS%20(South%20Tamil%20Nadu))
3. <https://www.tradeindia.com/chennai/recycled-granules-city-187278.html>
4. <https://scrapc.com/news/south-india-daily-scrap-prices/>
5. [https://www.scrapmonster.com/companies/scrap-metal-recycling/region/india/tamil-nadu/397#google\\_vignette](https://www.scrapmonster.com/companies/scrap-metal-recycling/region/india/tamil-nadu/397#google_vignette)



## 9.5 Waste to Recycled Product

The products listed below are only a few of the many products that can contain recycled material. It is important to remember that each municipal recycling program is different, so not all of these materials are necessarily accepted where you live. Feel free to contact us if you have any questions.



**Newspaper**



**Magazine**



**Note book & Office paper**



**Cardboard**



**Steel/Tin**



**Aluminum Cans**



**PET #1 plastic**

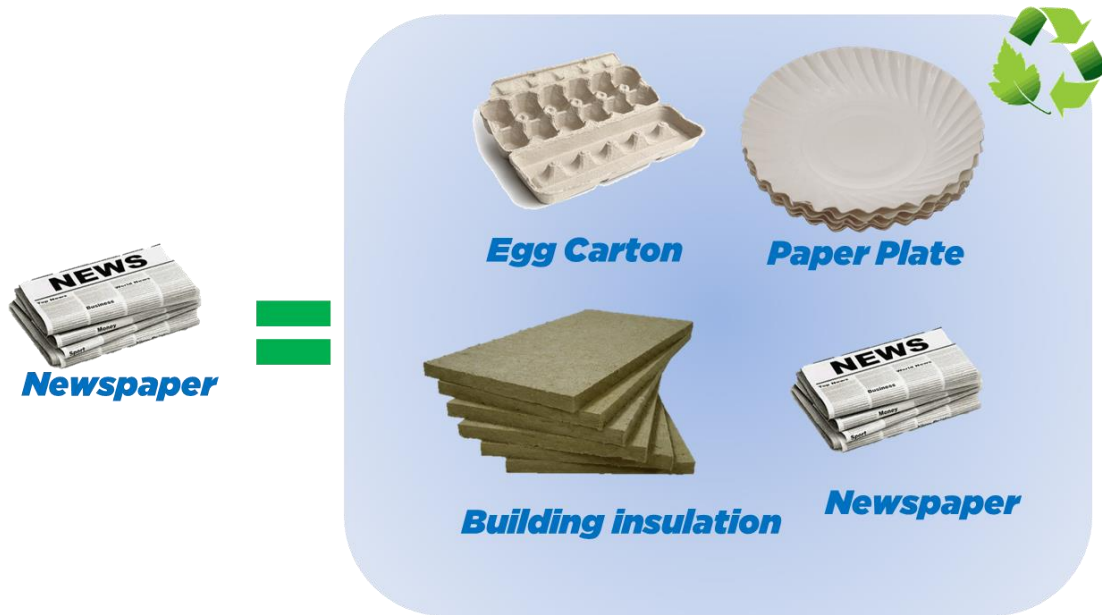


**HDPE #2 plastic**



**Glass Jar**

### Products Made from Recycled Newspaper



### Products Made from Recycled Magazines



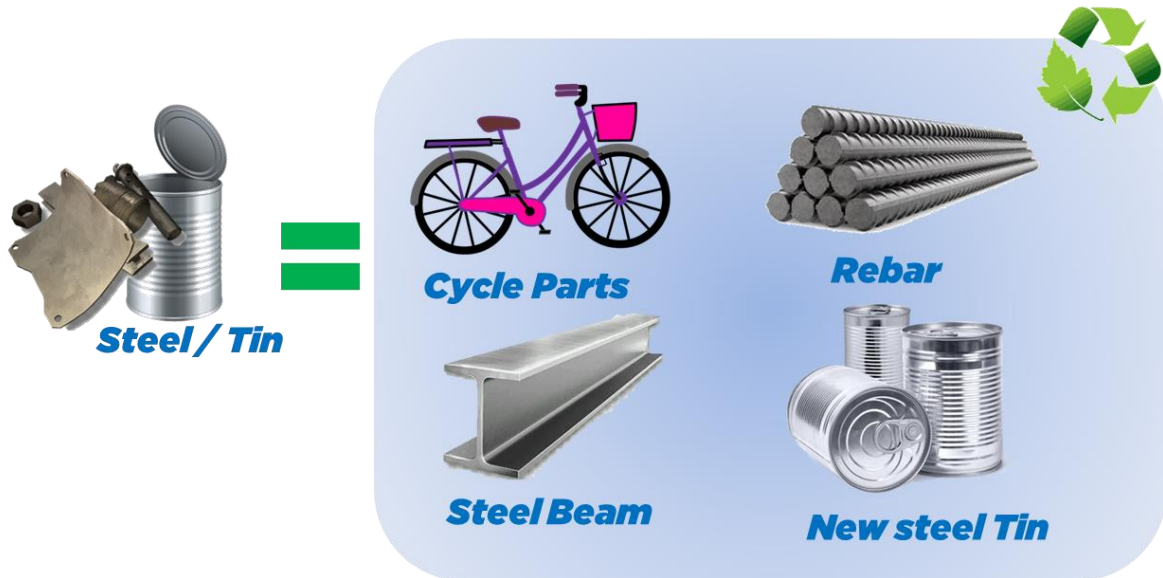
### Products Made from Recycled Notebook and Office Paper



### Products Made from Recycled Corrugated Cardboard



### Products Made from Recycled Steel / Tin Cans



### Products Made from Recycled Aluminum Cans



### Products Made from Recycled Glass



### Products Made from Recycled #1 Plastics



### Products Made from Recycled #2 Plastics





# 9.6 Plastic Waste Recycling Value Chain

## Plastic Waste Management Rules

Summary of the year-wise changes in the **Plastic Waste Management Rules** in India:

### 2011: Plastic Waste (Management and Handling) Rules

- **Introduction:** The first comprehensive rules for plastic waste management were introduced.
- **Focus:** Proper management, recycling, and handling of plastic waste.
- **Ban on:** Plastic carry bags below 40 microns in thickness.

### 2016: Plastic Waste Management Rules

- **Expanded Scope:** Extended the applicability of the rules to urban and rural areas.
- **Increased Thickness:** Ban on plastic carry bags below 50 microns.
- **Extended Producer Responsibility (EPR):** Producers, importers, and brand owners were required to manage the plastic waste generated by their products.
- **Phasing Out:** Targeted the phasing out of non-recyclable and multi-layered plastic by 2018.
- **User Fees:** Introduced for plastic carry bags in local bodies.

### 2018: Amendments to Plastic Waste Management Rules

- **Multi-layered Packaging:** Allowed for usage if the waste could be processed through existing technologies.
- **Revised Definitions:** Clarified definitions for terms like “brand owner,” “waste picker,” and “multi-layered plastic.”
- **EPR Compliance:** Reiterated the responsibilities of producers in managing waste, with a focus on traceability.

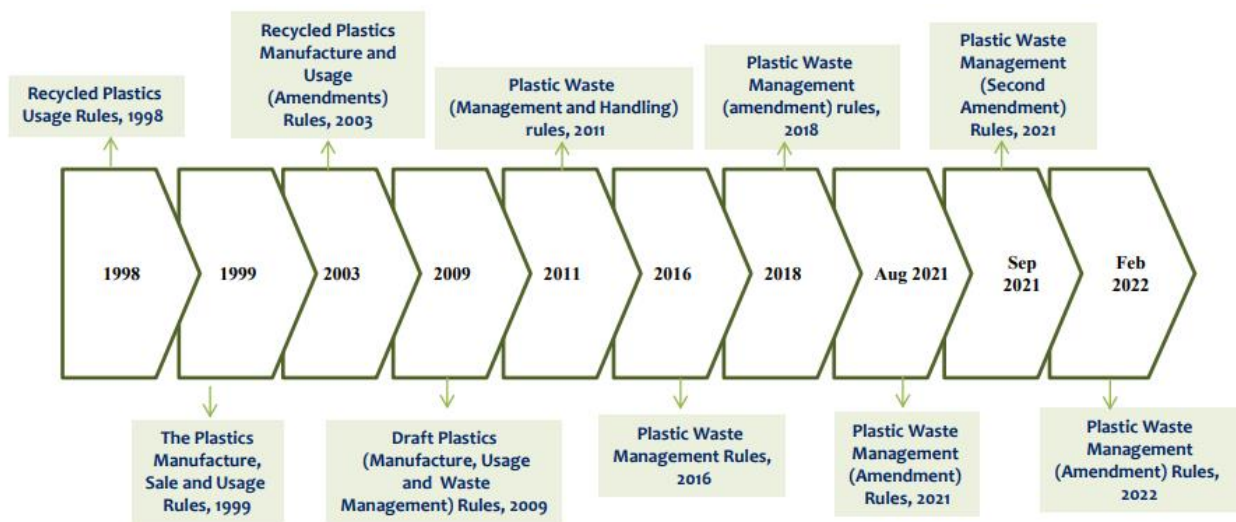
## 2021: Plastic Waste Management (Amendment) Rules

- **Ban on Single-Use Plastics:** Phased ban on specific single-use plastic items like straws, cutlery, and polystyrene from July 2022.
- **EPR Guidelines:** Strengthened guidelines for the implementation of EPR with more stringent accountability for PIBOs.
- **Increased Thickness Requirement:** Increased minimum thickness of plastic carry bags from 50 microns to 75 microns (effective September 2021) and to 120 microns from December 2022.
- **Centralized Registration:** PIBOs required registering with the Central Pollution Control Board (CPCB) for compliance with EPR norms.






## 2022 and Beyond:

- **Implementation Focus:** Emphasis on stricter enforcement of the existing rules, particularly the ban on single-use plastics and EPR compliance.
- **Sustainable Alternatives:** Promoted the use of biodegradable and compostable alternatives to plastic.

These changes reflect India's ongoing efforts to tighten plastic waste management, reduce environmental impact, and promote sustainability.



## Type of Plastic Waste

 PETE	<p>i.e. PET bottles for soft drinks. It is relatively safe. You should not refill PET bottles as the risk of additives leakage increase.</p>
 HDPE	<p>i.e. plastic containers and pipes. It is considered safe and is easy to recycle.</p>
 V	<p>i.e. sewage pipes and synthetic window frames. It is to be avoided. In the manufacturing process the toxic dioxin is released and softeners are often added.</p>
 LDPE	<p>i.e. soft plastics such as cling film, plastic drycleaner covers, carry bags. It is considered safe.</p>
 PP	<p>i.e. plastic furniture, jerry cans, car parts, bottle tops. It is considered safe.</p>
 PS	<p>i.e. disposable cups, meat trays, packaging for electronics. It is to be avoided because of possible leakage of styrene.</p>
 OTHER	<p>Code 7 is a miscellaneous category that nobody can do anything with.</p>

Resin Code	Material Name	Common Items	Weight Range (kg)
1	PETE / PET Polyethylene Terephthalate	தண்ணீர், சோடா, குளிர் பானங்கள் வரும் பாட்டில்கள்	5-10 வருடங்கள்
2	HDPE High-Density Polyethylene	பால் கேள், டீட்டர்ஜென்ட், பழுச்சாறு பாட்டில்கள்	100 வருடங்கள்
3	PVC Polyvinyl Chloride	உணவை மூட உதவுபவை, சமையல் என்வெஸம் பாக்கெட் மற்றும் பாட்டில்கள்	மக்கும் தன்மை கிடையாது
4	LDPE Low-Density Polyethylene	மளிகைப் பொற்டுகள், அழுத்திப் பிழியக்கூடிய பாட்டில்கள், உணவை மூடும் கவர், கவர்	500 - 1000 வருடங்கள்
5	PP Polypropylene	தயிர் கப், ஊக்கட் கப், (cloudy design), மந்தி, கெட்ச் அப், திரப் பாட்டில்கள், ஸ்ட்ரா.	500 - 1000 வருடங்கள்
6	PS Polystyrene	தண்ணீர் கப், மருந்து பாட்டில்கள், மின்னென்க்கு ஸ்வீட்ச்	50 வருடங்கள்
7	OTHER Miscellaneous plastics	கண்ணாடி, சீடி, கணினி பகுதிகள், பேபி பாட்டில்கள்	மக்கும் தன்மை கிடையாது

குறைந்த மூலமான சினைட்டிக் என்சுகள் - 2, 4, 5  
 குறைந்த மூலமான சினைட்டிக் மூலமுறை மட்டுமே பயன்படுத்தக்கூடியது - 1  
 மிகவும் மூலமான சினைட்டிக் என்சுகள் - 3, 6, 7

RESIN CODE	COMMON ITEMS	RECYCLABILITY
<b>1</b> PET Polyethylene Terephthalate	Soda Bottles, Water Bottles, Salad Dressing, Food Packaging	In most states all bottles can be recycled curbside. However, food packaging depends on the city and recycler
<b>2</b> HDPE High-Density Polyethylene	Milk Containers, Cosmetics, Shampoo, Plastic Bags, Trash Bins	In many states, HDPE plastics can be recycled curbside. HDPE bags however, can be reclaimed at specific collection sites like supermarkets
<b>3</b> PVC Polyvinyl Chloride	Cleaner Bottles, Kids' Toys, Shower Curtains, Tablecloths	Public Enemy #1 among recyclers. PVC is extremely hard to recycle and is not recommended to be used
<b>4</b> LDPE Low-Density Polyethylene	Bread Bags, Trash Bags, Pill Bottles, Six-Pack Rings, Sauce Bottles	Limited LDPE curbside recycling exists. However, LDPE Films, can be reclaimed at specific collection sites like supermarkets
<b>5</b> PP Polypropylene	Hot Food Containers, Bottle Caps, Straws, Hangers	Depending on color and application, PP can be recycled and has almost the same process as HDPE recycling
<b>6</b> PS Polystyrene (Includes Styrofoam)	Meat Trays, Plastic Cups, Plastic Cutlery, Take-Out Trays	Not easily recycled and if not disposed of properly, styrofoam can be very harmful to the environment
<b>7</b> OTHER (PLA, PC, "other plastics")	Reusable Bottles, Baby Bottles, Bio Plastics, Water Jugs	The additives and fillers used in bio-plastics to make them compostable or biodegradable can clog recycling systems



Polymer Name	POLYETHYLENE TEREPHTHALATE	HIGH-DENSITY POLYETHYLENE	POLYVINYL CHLORIDE	LOW-DENSITY POLYETHYLENE	POLYPROPYLENE	POLYSTYRENE	All other plastics, including acrylic, fiberglass, nylon, polycarbonate, and polylactic acid (a bioplastic)
Resin Identification Code							
Abbreviation	PET or PETE	HDPE	PVC	LDPE	PP	PS	OTHER
Recyclable?	Commonly Recycled	Commonly Recycled	Sometimes Recycled	Sometimes Recycled	Occasionally Recycled	Commonly Recycled (but difficult to do)	Difficult to Recycle
Percentage Recycled Annually							
How Long to Decompose Under Perfect Conditions							Majority of these plastics: <b>never</b> Polylactic acid: <b>6 months</b>

## Single Use Plastic Ban Compliance Related Rules

The [Plastic Waste Management Rules 2016, 2018 and the amendment in 2021](#) focus on single-use plastics. It prohibits identified single use plastic items which have low utility and high littering potential by 2022. It notifies that the manufacture, import, stocking, distribution, sale and use of following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from the 1st July, 2022

- Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration
- Plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packaging films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.

3. In order to stop littering due to light weight plastic carry bags, with effect from 30th September, 2021, the thickness of plastic carry bags has been increased from fifty microns to seventy-five microns and to one hundred and twenty microns with effect from the 31st December, 2022. This will also allow reuse of plastic carry due to increase in thickness.

### Thickness of plastic carry bags



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 10

## Recyclables

## Entrepreneurship





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# Chapter 10: Recyclables Entrepreneurship

**Recyclable entrepreneurship is a business model that focuses on creating economic value from waste materials. It involves transforming discarded or unused items into new, valuable products or resources. This concept not only promotes environmental sustainability by reducing waste and conserving natural resources but also creates economic opportunities, particularly for marginalized communities like recycle guardians.**

## Recyclable Entrepreneurship Training for Recycle Guardians includes:



### Recyclable Entrepreneurship

- ✓ Understanding meaning of Recyclable Entrepreneurship
- ✓ Type of Recyclable Entrepreneurship
- ✓ Characteristics of Recyclables Entrepreneurship
- ✓ Importance of Recyclable Entrepreneurship



### Self-Assessment of Recyclable Entrepreneurship

- ✓ Understandings SWOT. Goal, time management, Financial management



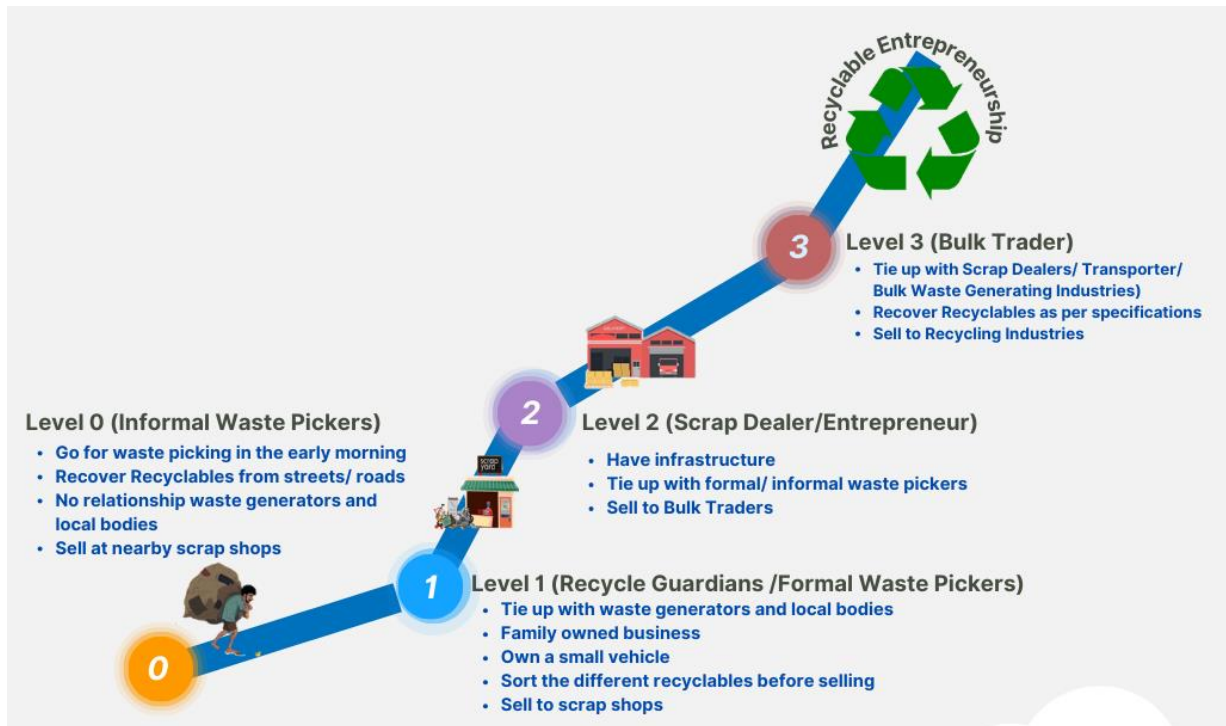
### Tips to Become a Successful Recyclables Entrepreneur

- ✓ Understanding of successful entrepreneur process

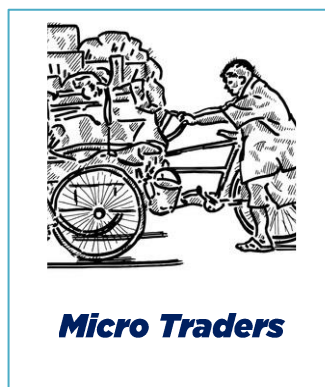
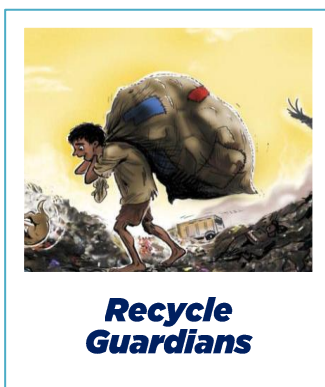
## 10.1 Recyclable Entrepreneurship

A recyclable entrepreneur is an individual who identifies, develops, and manages business opportunities centre around the collection, processing, and transformation of waste materials into valuable products. These entrepreneurs play a critical role in promoting environmental sustainability by reducing waste, conserving resources, and creating economic opportunities through innovative recycling and upcycling processes.

## Aim of Recyclables Entrepreneurship



## Types of Recyclables Entrepreneurs

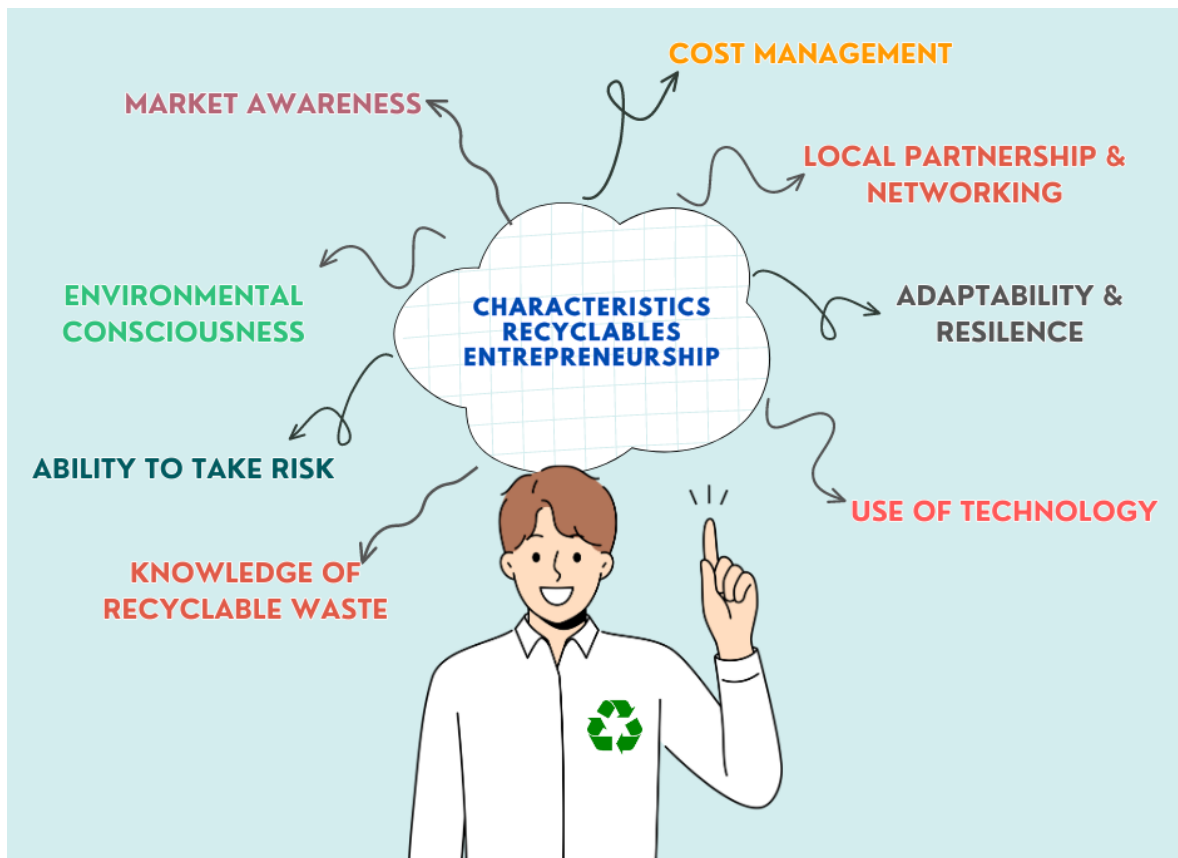


## Importance of Recyclables Entrepreneurship

The Importance of Recyclables Entrepreneurship is vital for fostering sustainable development. It creates employment opportunities, drives economic growth, and improves living conditions. By empowering Recycle Guardians and promoting social inclusion, it supports community development. Additionally, recyclables entrepreneurship plays a key role in waste reduction, resource conservation, and pollution control. It also contributes to climate change mitigation and the preservation of biodiversity, making it essential for a healthier planet.



## Characteristics of Recyclables Entrepreneurship



**Knowledge of Recyclable Waste:** Understanding recyclable materials, their value, and processing methods ensure efficient operations and resource conservation.

**Ability to Take Risk:** Entrepreneurs must navigate market uncertainties, investing in new technologies and strategies to drive growth and innovation.

**Environmental Consciousness:** A commitment to reducing waste and pollution drives sustainable business practices and appeals to eco-conscious consumers.

**Market Awareness:** Staying informed about market trends, demand, and prices enables better decision-making and profitability.

**Cost Management:** Effective management of operational costs ensures business sustainability and competitive pricing in the recyclables market.

**Local Partnership & Networking:** Building strong local relationships opens up opportunities for resource sharing and business growth.



**Logistics Management:** Efficient logistics optimize collection, transportation, and processing, reducing costs and environmental impact.

**Adaptability & Resilience:** Flexibility to adapt to changing industry conditions is crucial for maintaining business continuity and seizing new opportunities.


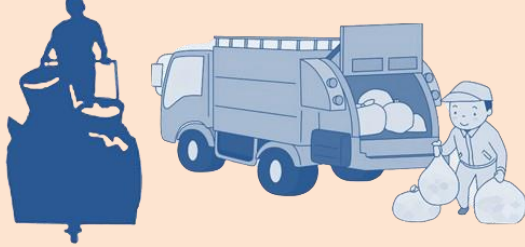
**Use of Technology:** Leveraging technology enhances efficiency, reduces costs, and improves the quality of recycled products.

## 10.2 Self-Assessment of Recyclable Entrepreneurship

Self-assessment in recyclable entrepreneurship involves SWOT analysis for strategic insight, setting clear goals, efficient time management, and effective financial oversight.

1. **Understandings SWOT:** Analyse strengths, weaknesses, opportunities, and threats to gauge business potential and risks effectively.
2. **Goal:** Define clear, achievable objectives to guide strategic decisions and measure business progress.
3. **Time Management:** Prioritize tasks and allocate time efficiently to enhance productivity and meet deadlines.
4. **Financial Management:** Monitor and control financial resources to ensure profitability and sustain business operations

## Imagine Your Life

Standard of living - Now	Standard of living – After 5 Years
	
<b>List down how you are living now</b>	<b>List down how you want to live</b>
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

## Set Your Goal

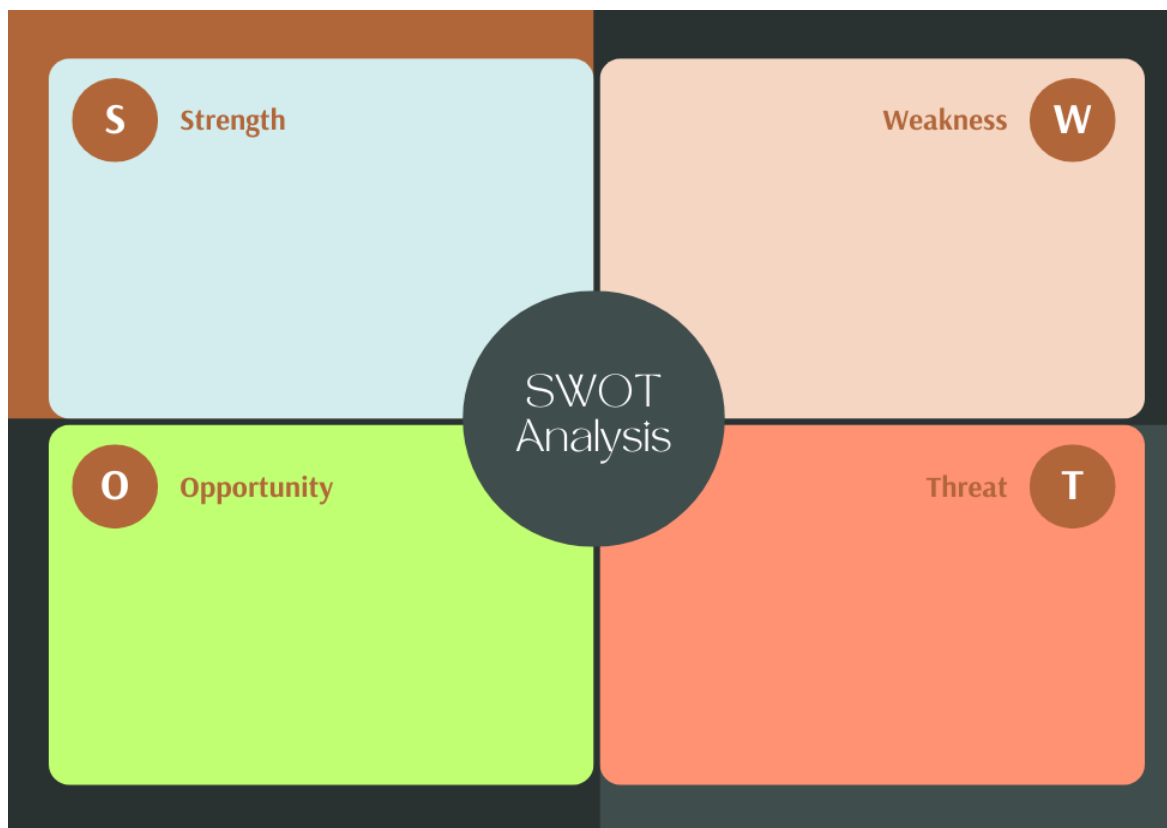
Description	Now	In 1 Year	In 3 Years	In 5 Years	In 10 Years
Earnings from recyclable waste collection					
Expansion of recyclable waste collection					
Additional work other than recyclable waste collection					

Description	Now	In 1 Year	In 3 Years	In 5 Years	In 10 Years
<b>Employment in recyclable waste collection to others</b>					
<b>Settlement of borrowings</b>					
<b>Savings</b>					
<b>House improvement</b>					
<b>Vehicle procurement</b>					
<b>Children education</b>					
<b>Children's marriage</b>					
<b>Medical</b>					

## SWOT Analysis

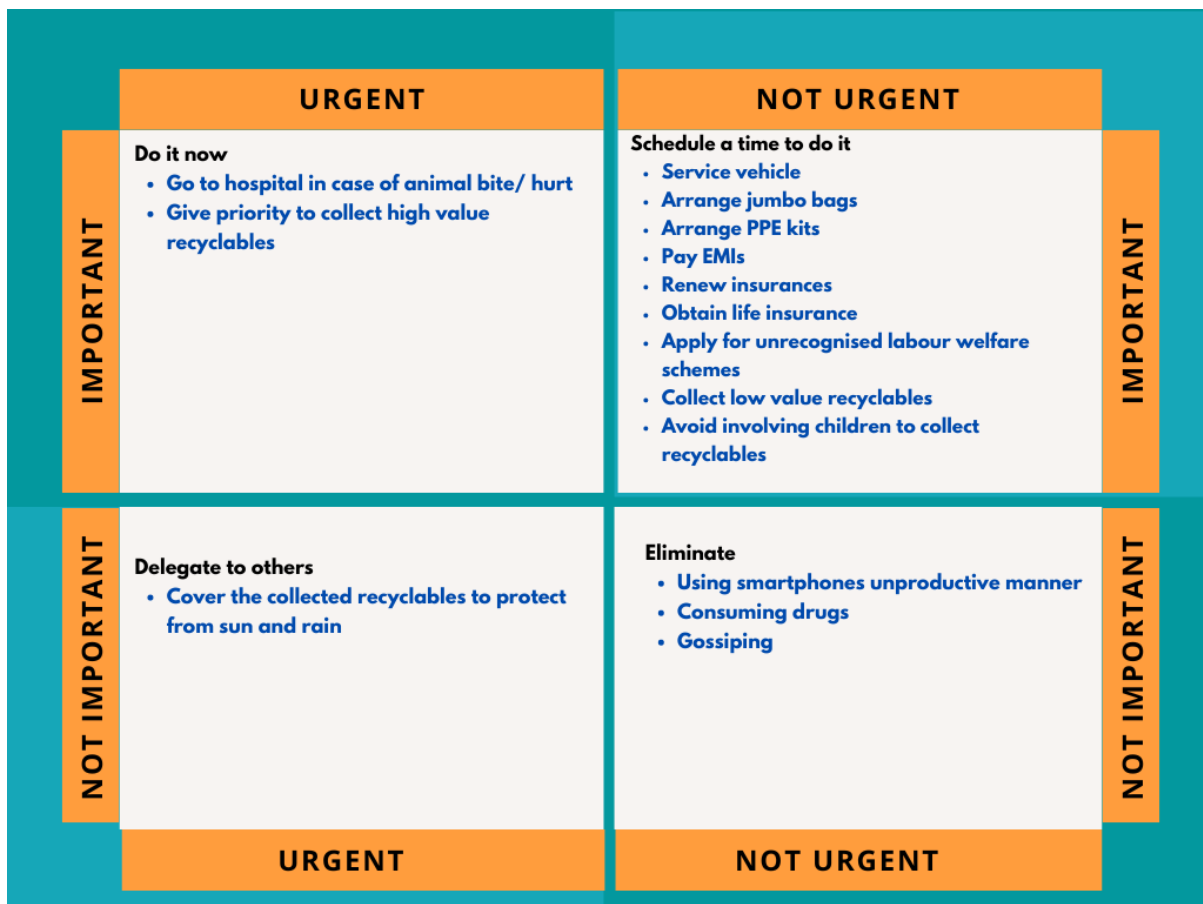
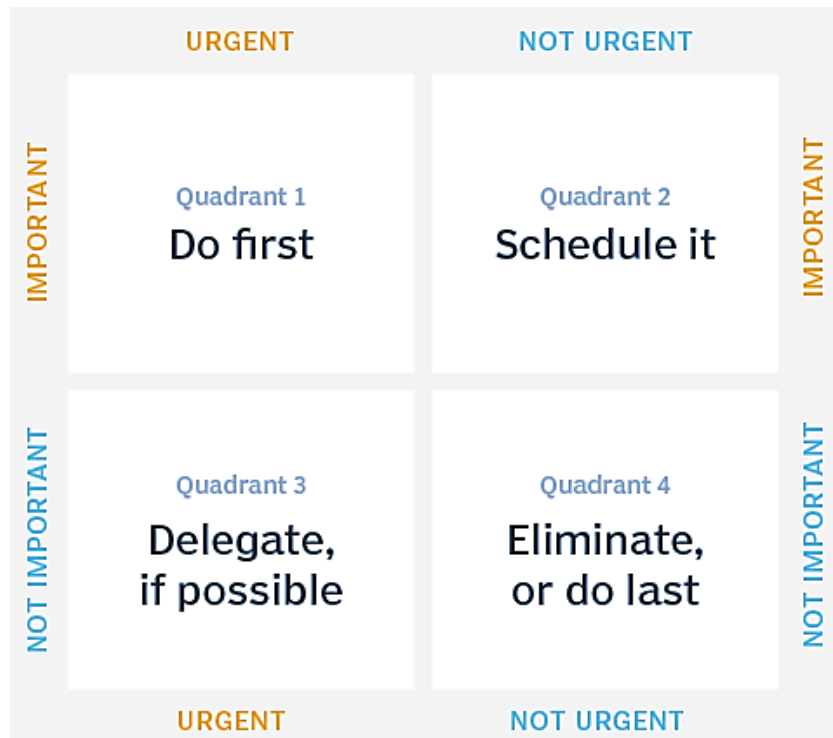


## SWOT Analysis of Yourself





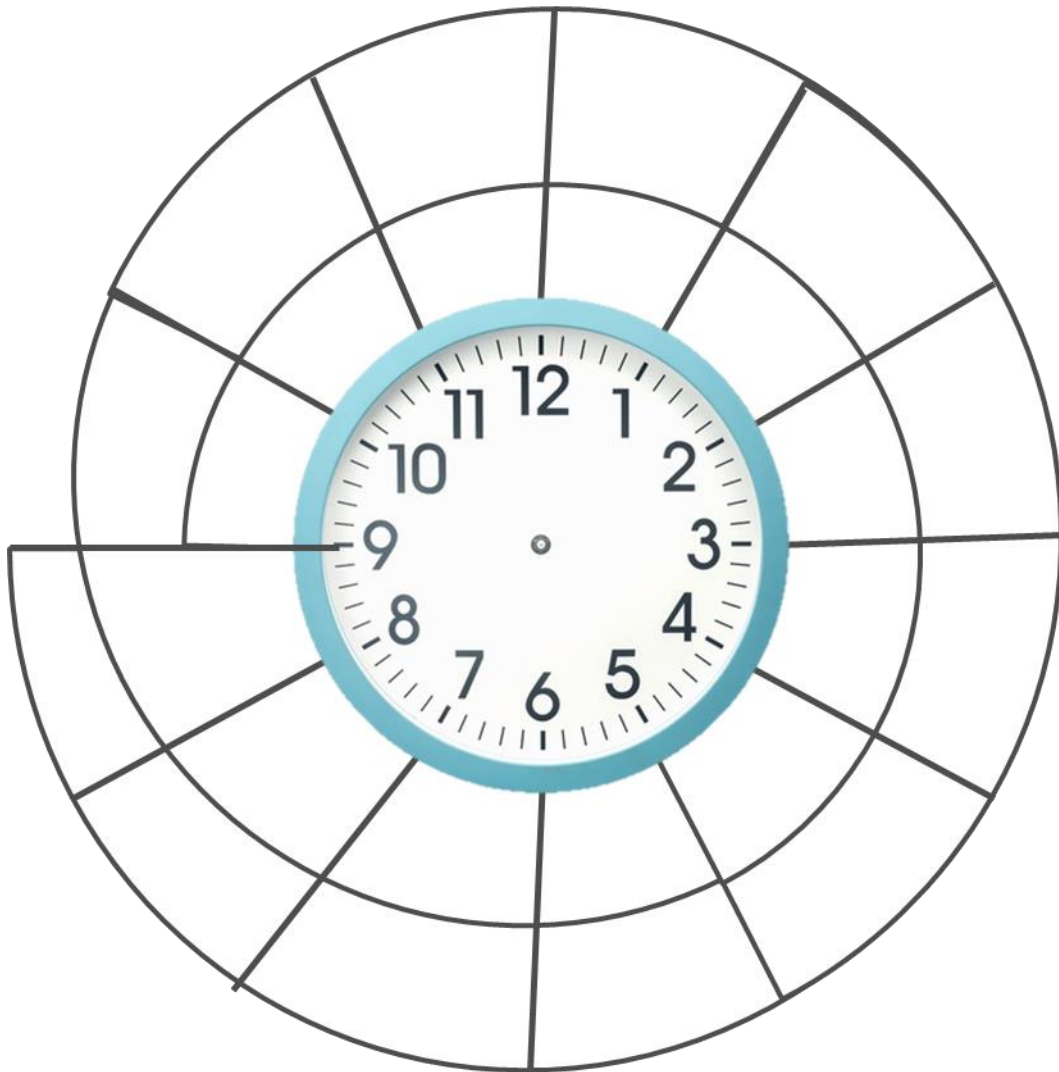
# Time Management



## The Perfect Time Management of Recycle Guardian



## What is Your Time Management?








# Ten Tips to become a Successful Recyclables Entrepreneur


## 1. Conduct a Review

What are the places that you visit often to collect recyclables?



Landfill  
 Household/Apartments  
 Super Markets & Shops  
 MCC and RRP  
 Tourist spot  
 Hotspot  
 Roadside

What type of recyclables that you collect most and its quantity?



Hard Plastics	<input type="text"/>	Kg/day
PET bottle	<input type="text"/>	Kg/day
Iron/Steel	<input type="text"/>	Kg/day
Copper	<input type="text"/>	Kg/day
Cardboard	<input type="text"/>	Kg/day
Glass bottle	<input type="text"/>	Kg/day
Paper	<input type="text"/>	Kg/day
Cork	<input type="text"/>	Kg/day

Hard Plastics

PET bottle

Iron/Steel

Copper

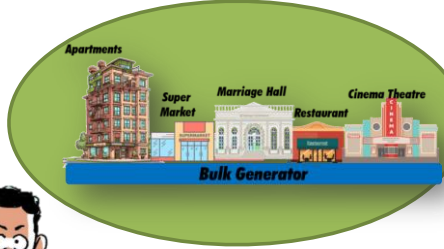
Cardboard

Glass bottle

Paper

Cork

Analyse the rate comparison between different recyclables and know what type of recyclables that you get good rates?



Do you have good rapport with bulk waste generators?



YES   
NO



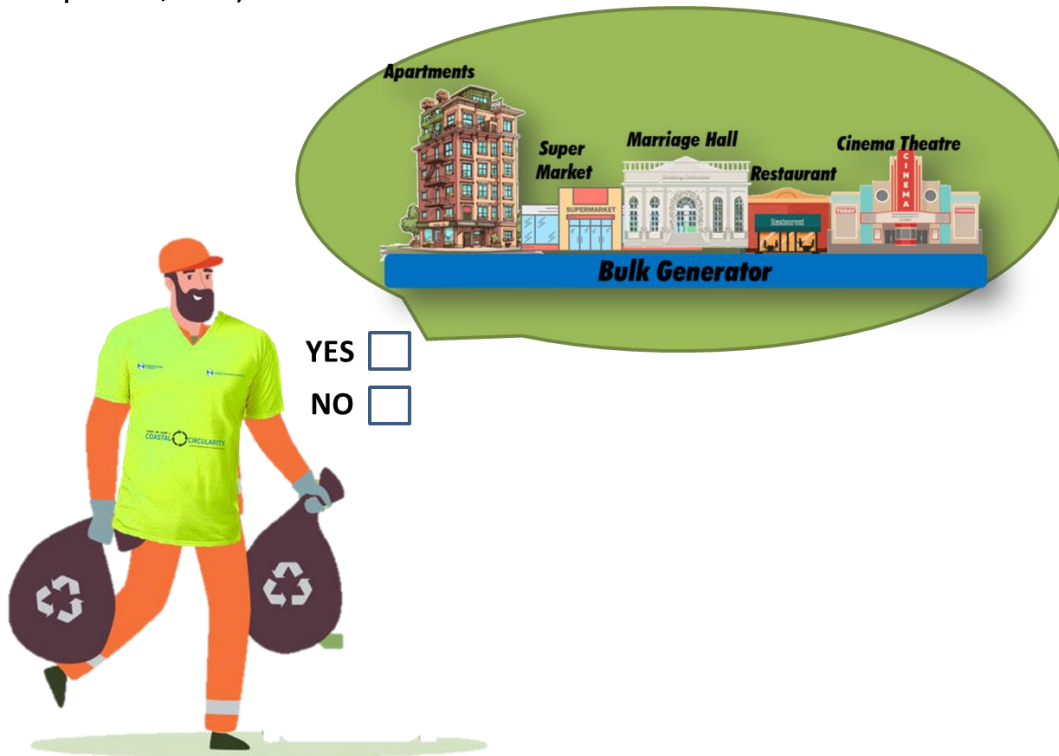


## 2. Networking

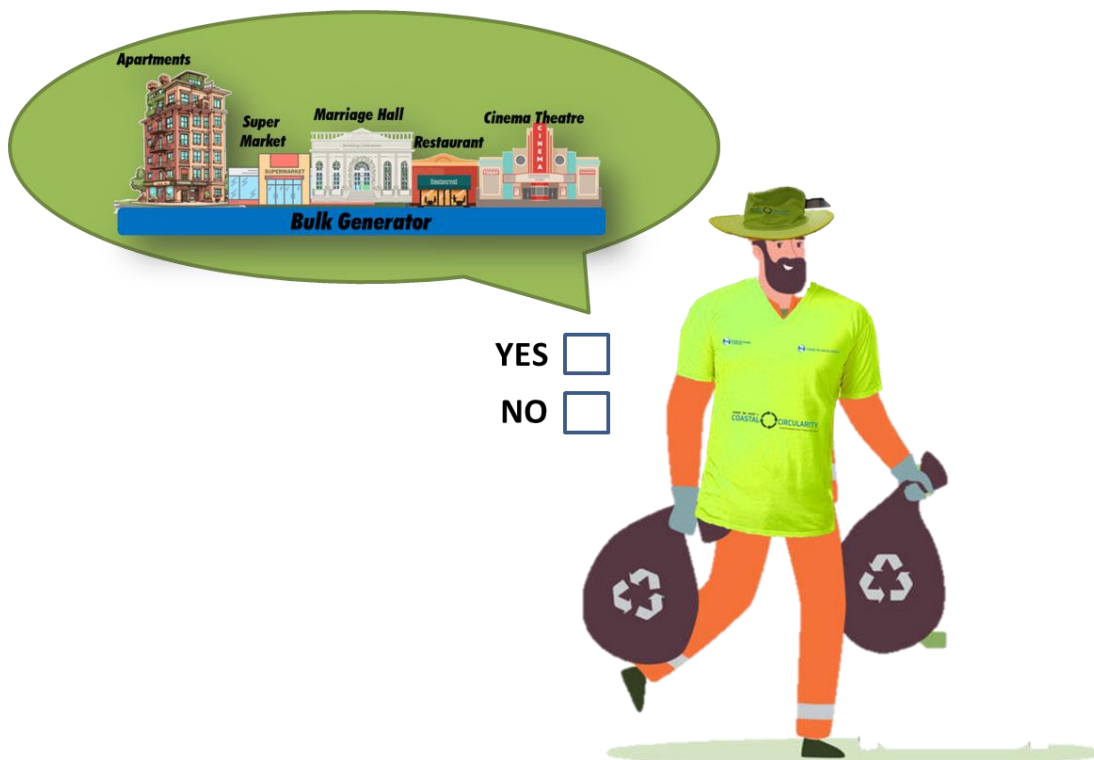
- ✓ Put on nice clothes



- ✓ Approach bulk waste generators (i.e., residential apartments, markets, companies, etc.)



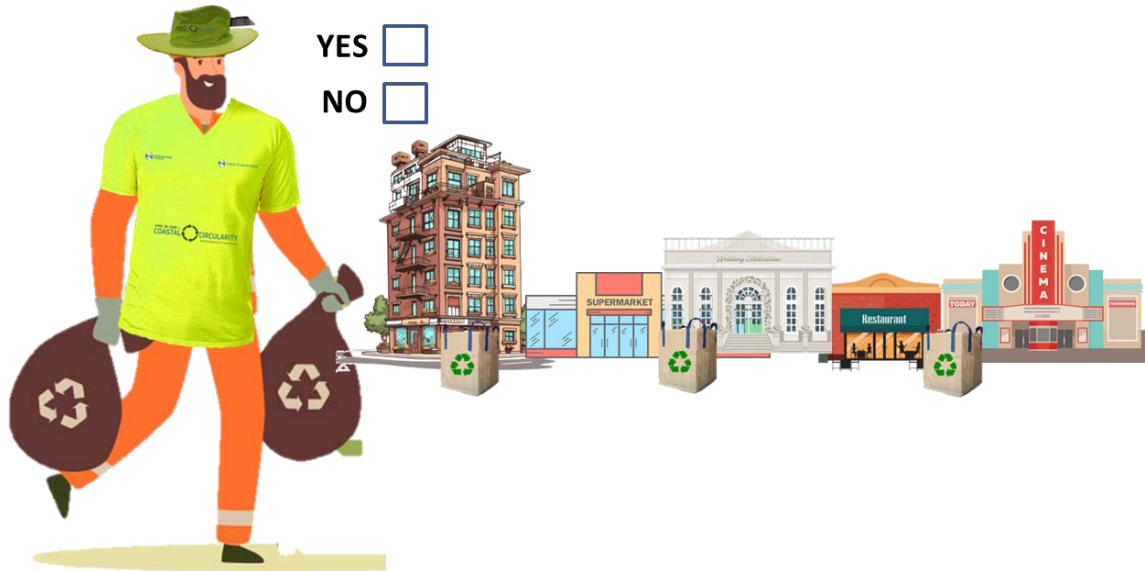
- ✓ Create tie up with them
- ✓ Establish relationship with them





### 3. Set-up Recyclables Storage

- ✓ Identify right location in multi points as per the number of households
- ✓ Fix jumbo bags in the multi locations



- ✓ Procure jumbo bags



## 4. Instruction Boards

### ACCEPTABLE MATERIAL

#### Paper



##### INCLUDE

Newspapers & Inserts, Magazines & Catalogs, Phone Books, Kraft Paper (Brown Paper Bags) and Paper Egg Cartons

**School & Office Paper Such As:** Tablet Paper, White Paper (Lined & Unlined), Computer Paper, Colored Paper, Copy Paper, Scratch Pad Paper, All NCR Paper, Envelopes (With Or Without Windows), Blueprint Paper, Post-It Notes, Fax Paper, Thermo Paper, Adding Machine Paper, Index Cards, Manila File Folders and Glossy Paper

**Junk Mail Such As:** Cards, Envelopes, Letters & Enclosures

**Shredded Paper: Place in clear plastic bag for collection**

**Lightweight Cardboard Such As:** Dry Food Boxes (i.e. Cereal, Cookies, Snacks), Non-Food Boxes (i.e. Medicine, Tissue, Toy & Gift Boxes), Toilet & Paper Towel Tubes and Pizza Boxes (With All Food/Debris Removed)

**Corrugated Cardboard**

##### DO NOT INCLUDE

Hard Cover Books (must be delivered to EcoDrop Utica for recycling), Napkins, Tissues, Wax Paper, Paper Towels, Paper Plates/Cups, Tissue Paper, Carbon Paper, Construction Paper, Binders, Copy Paper Wrapping, Metal Hanging File Folders, Tyvek Shipping Envelopes, Frozen Food & Microwave Cartons, Soda & Beer Cartons or Wax-Coated Corrugated

##### SPECIAL INSTRUCTIONS

Do Not Place Recyclables In Plastic Bags. Please Do Not Bundle Or Tie With String Or Twine. Remove Paper And Plastic Liners. Flatten Cardboard & Stack Undereath Or Next To Your Recycling Container. Shredded Paper Is The Only Exception To Plastic Bag Rule-Place Shredded Paper In Large Clear Bag For Collection

#### Plastic



##### INCLUDE

**Plastic Bottles & Containers (With & Without Recycling Number Code) Such As:** Soda Bottles, Milk & Water Jugs, Mustard & Ketchup Bottles, Baked Goods Containers, Disposable Drink Cups, Soap & Detergent Bottles, Mouthwash Bottles, Salad Dressing Bottles, Peanut Butter Jars

**Beverage Cartons Such As:**

Milk Cartons, Juice Cartons & Juice Boxes

##### DO NOT INCLUDE

Styrofoam, Empty Plastic Bags, Plastic Wrappers & Packaging, Plates & Tableware, Prescription Medicine Bottles, Motor Oil Bottles, Clothes Hangers, Furniture, Needles & Syringes, Six-Pack Holders, Snack Bags, Toys, Straws, Plastic Wrappers/Wrapping, Plexiglass or Pesticides

##### SPECIAL INSTRUCTIONS

Do Not Place Recyclables In Plastic Bags. Please Do Not Bundle Or Tie With String Or Twine. Lids Should Be Left On Containers. Containers Should Be Empty & Rinsed Before Recycling. Squeeze Juice Boxes Until Empty (Reuse Or Throw Away Straws)

#### Metal



##### INCLUDE

**Such As:** Soup Cans, Soda Cans, Deposit Cans, Aluminum Foil Wrap, Foil Plates & Trays, Metal Lids & Aerosol Cans (Empty)

##### DO NOT INCLUDE

Metal/Cardboard Containers (i.e. Cocoa & Motor Oil), Silverware, Small Appliances, Pots & Pans, Pesticides, Chemicals, Gasoline or Paint Cans

##### SPECIAL INSTRUCTIONS

Do Not Place Recyclables In Plastic Bags. Please Do Not Bundle Or Tie With String Or Twine. Aerosol Cans Must Be Empty. Leave Stems & Valves

#### Glass



##### INCLUDE

**Food & Beverage Containers Such As:** Liquor & Wine Bottles, Deposit Bottles and Canning Jars

##### DO NOT INCLUDE

Broken Glass, Drinking Glasses, Ovenware & Ceramics, Window Panes, Mirrors, Dishes, Cups, Plates, Windshields Or Light Bulbs

##### SPECIAL INSTRUCTIONS

Do Not Place Recyclables In Plastic Bags. Please Do Not Bundle Or Tie With String Or Twine. Do Not Break Glass! Labels Do Not Need To Be Removed. Rinse Thoroughly. Remove Lids Before Recycling

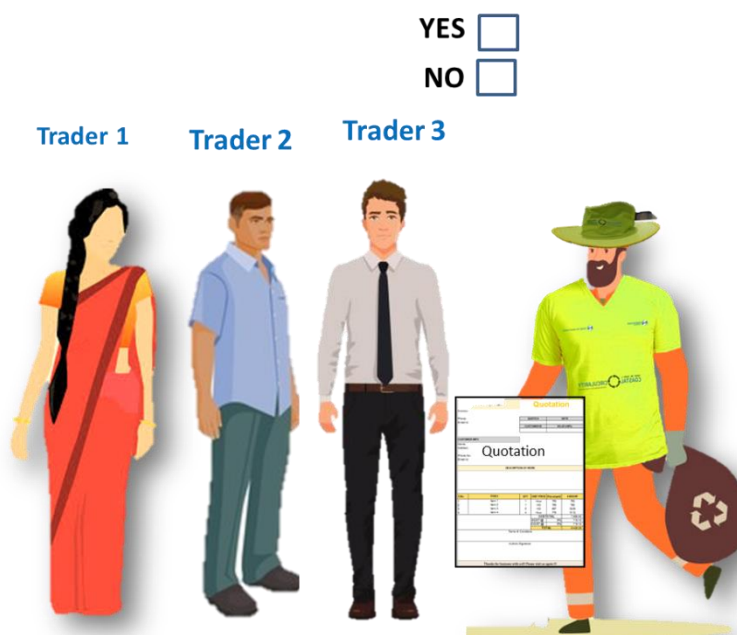
## 5. Communication to Households

- ✓ Visit door to door
- ✓ Inform the residents about segregation of recyclables and dump in jumbo bags kept in multi points



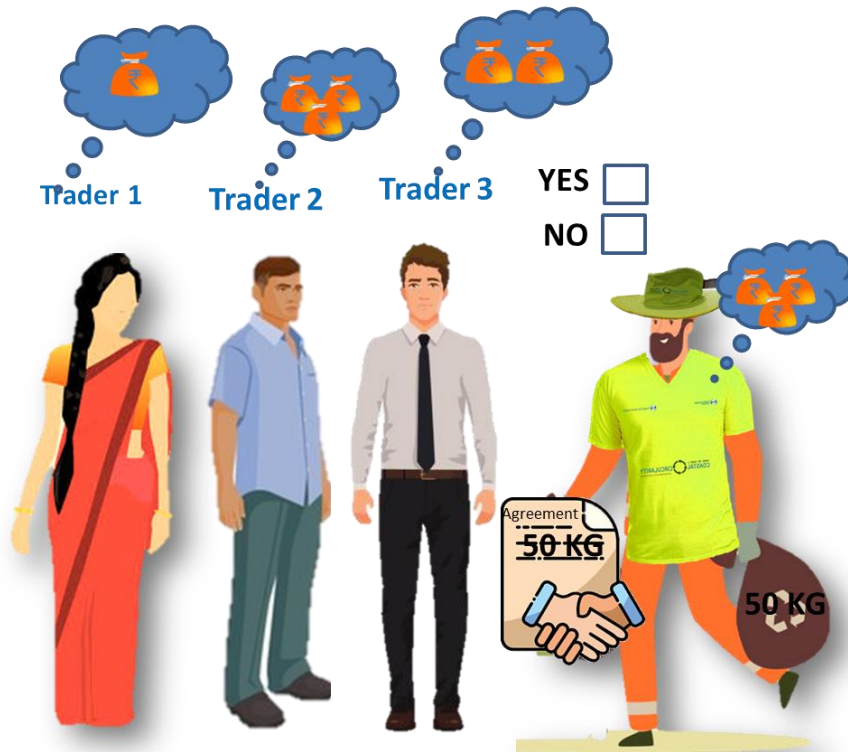
## 6. Tie-up with Small/ Bulk Traders

- ✓ Visit to small and bulk traders

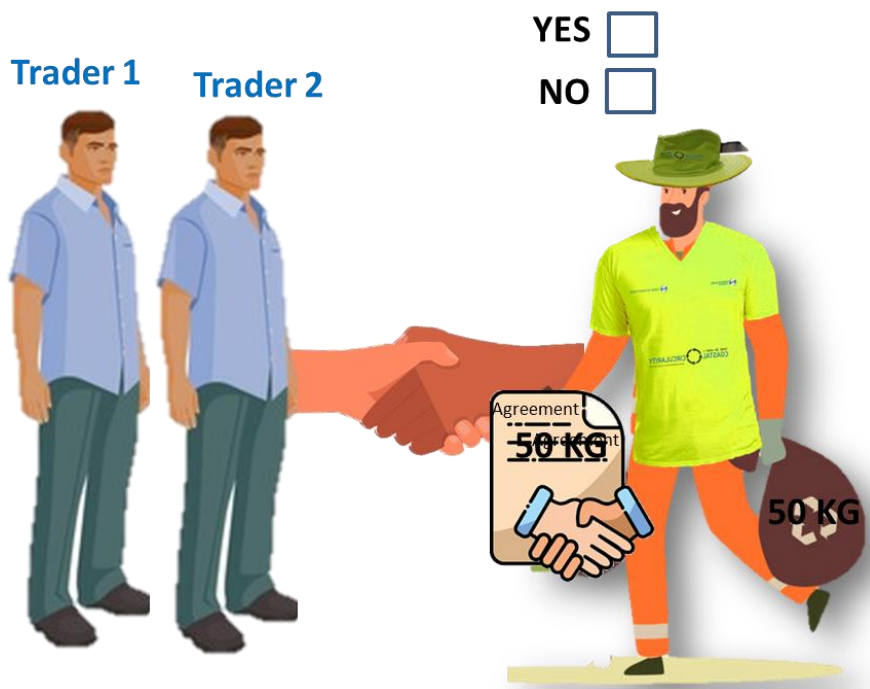




- ✓ Negotiate the rates of different recyclables
- ✓ Commit the supply quantity



- ✓ Prefer the high price offered traders





## 7. Collection, Processing and Transportation

1. Plan and schedule your visit
2. Bale the plastic i.e., PET bottles and other bale-able recyclables
3. Stack in the vehicle
4. Say thanks to residential apartment's representatives
5. Transport the collected recyclables directly to scrap dealers or bulk traders



- ✓ Plan and schedule your visit



YES   
NO



- ✓ Bale the plastic i.e., PET bottles and other bale-able recyclables



YES   
NO



- ✓ Stack in the vehicle



- ✓ Say thanks to residential apartment's representatives
- ✓ Transport the collected recyclables directly to scrap dealers or bulk traders

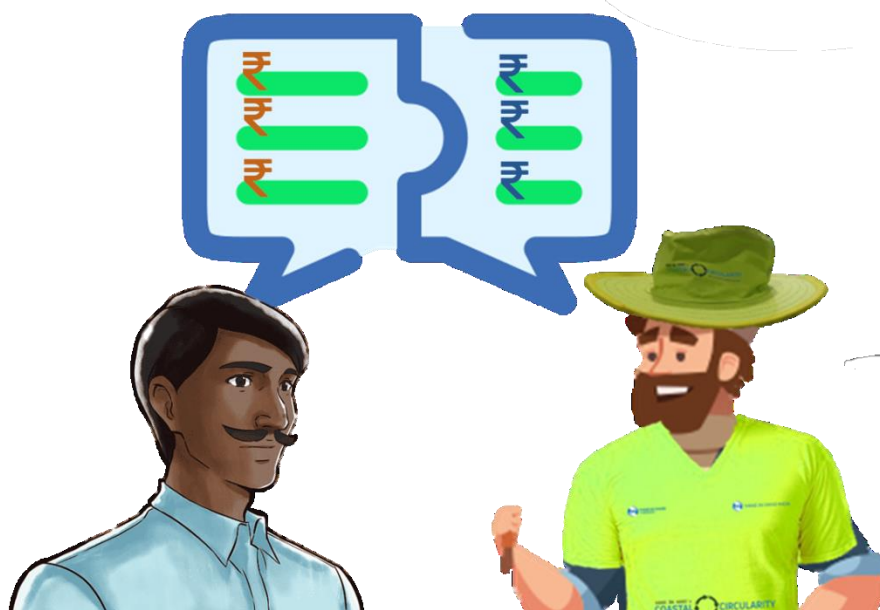


## 8. Sell the Recyclables

- ✓ Know the current market rates of different recyclables before reaching to traders



- ✓ Negotiate the rates of different recyclables



- ✓ Sell the recyclables
- ✓ Collect cash



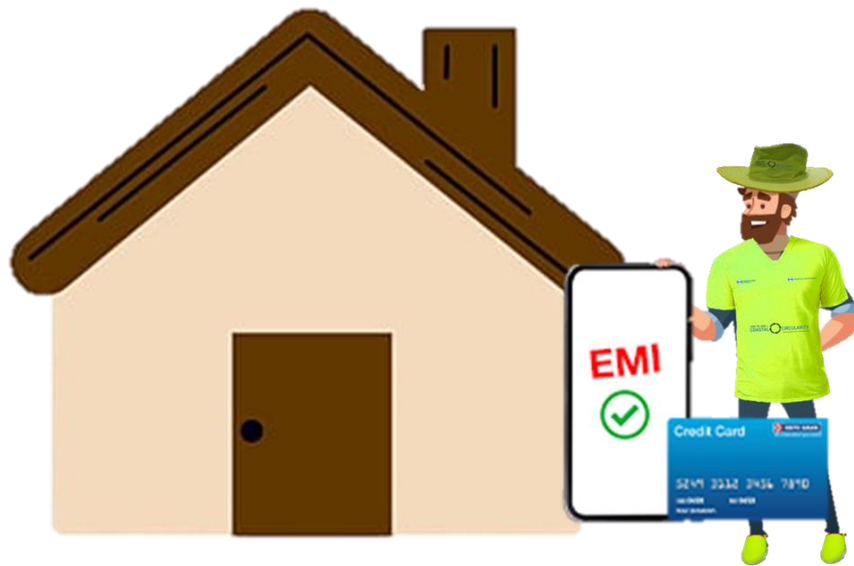
## 9. Manage the Expenses

- ✓ Procure groceries for house





- ✓ Pay loan EMIs



- ✓ Spend for mandate ones i.e., medical, education, vehicle service, jumbo bags purchase, phone recharge, etc.



- ✓ Save the amount



## 10. Expand Your Recyclables Enterprise

- ✓ Purchase additional vehicles based on quantity of recyclables waste



- ✓ Employ manpower to collect recyclables waste



- ✓ Create more tie up with bulk waste generators
- ✓ Create tie up with bulk traders only, not small traders



- ✓ Try to create tie up with recyclers

### RECYCLER



- ✓ Connect with more Recycle Guardians
- ✓ Procure recyclables from Recycle Guardians





- ✓ Sell the recyclables to recyclers directly



## Individual Exercise

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## Group Exercise

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## Assessment

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# Chapter 11

# Positive Impact of Recyclable Waste Management



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# Chapter 11: Positive Impacts of Recyclable Waste Management

**"Positive Impacts of Recyclable Waste Management include reducing environmental pollution, conserving natural resources, and lowering greenhouse gas emissions. Economically, it creates jobs, saves energy, and reduces waste disposal costs. Socially, it promotes community health, raises environmental awareness, and fosters a more sustainable and responsible society."**

## Positive Impacts of Recyclable Waste Management for Recycle Guardians includes:



### Environmental Impact

- ✓ Understanding environmental impacts
- ✓ Resource Conservation
- ✓ Energy savings
- ✓ Prevention of water debris
- ✓ Reduction in Landfill Waste



### Economic Impact

- ✓ Understanding of Economic Impact
- ✓ Income Generation
- ✓ Poverty Alleviation
- ✓ Contribution to Local Economies
- ✓ Resource Efficiency

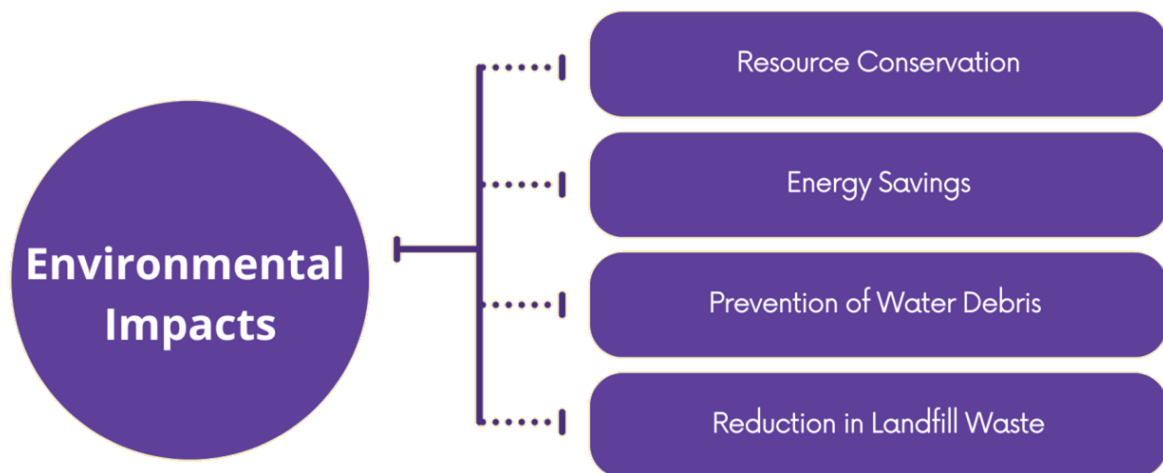


### Social Impact

- ✓ Understanding of Social Impacts
- ✓ Improvement in Public health and Sanitation
- ✓ Reduce municipality expenditure on waste disposal

## 11.1 Environmental Impact

The environmental impact of recyclable waste management includes conserving natural resources, saving energy by reducing the need for raw materials, preventing water pollution by minimizing debris, and reducing the amount of waste sent to landfills. These practices help protect ecosystems and promote a healthier environment.



### Resource Conservation

Waste pickers contribute significantly to recycling efforts by salvaging reusable materials such as paper, plastics, glass, and metals from waste streams. This reduces the demand for virgin resources and lowers energy consumption associated with extraction and processing. For example: Recycling paper reduces the need for virgin wood pulp, which is the primary raw material for paper production. Waste pickers help conserve forests and reduce deforestation, as fewer trees need to be cut down for paper production. Recycling plastic reduces the demand for new plastic resin derived from fossil fuels, conserving energy and natural resources required for plastic production. Recycling glass reduces the need for raw materials such as silica, soda ash, and limestone, which are used in glass manufacturing. Recycling metal saves significant amounts of energy compared to extracting and refining metal ores. Recycling aluminium saves up to 95% of the energy required to produce new aluminium from bauxite ore.

# RESOURCE CONSERVATION

10 PET bottle waste

Raw materials for 9 PET bottle

1 new PET bottle



### MAKING 1 TON OF RECYCLED PAPER

- SAVES 17 TREES**
- SAVES 3 CUBIC YARDS LANDFILL**
- SAVES 7000 GALLONS OF WATER**
- PRODUCES 60 POUNDS LESS AIR POLLUTANTS**

SIMPLE CHOICES CAN MAKE A WORLD OF DIFFERENCE

Recycle your paper and choose recycled

- 1

Recycling Preserves Resources
- 2

Recycling Helps Save Energy
- 3

Recycling Helps Create Green Energy
- 4

Recycling Reduces The Demand Of Raw Materials
- 5

Recycling Increases Life Spans Of Items
- 6

Recycling Is Cost-Effective
- 7

Recycling Provides Economic Security
- 8

Recycling Nurtures Wildlife
- 9

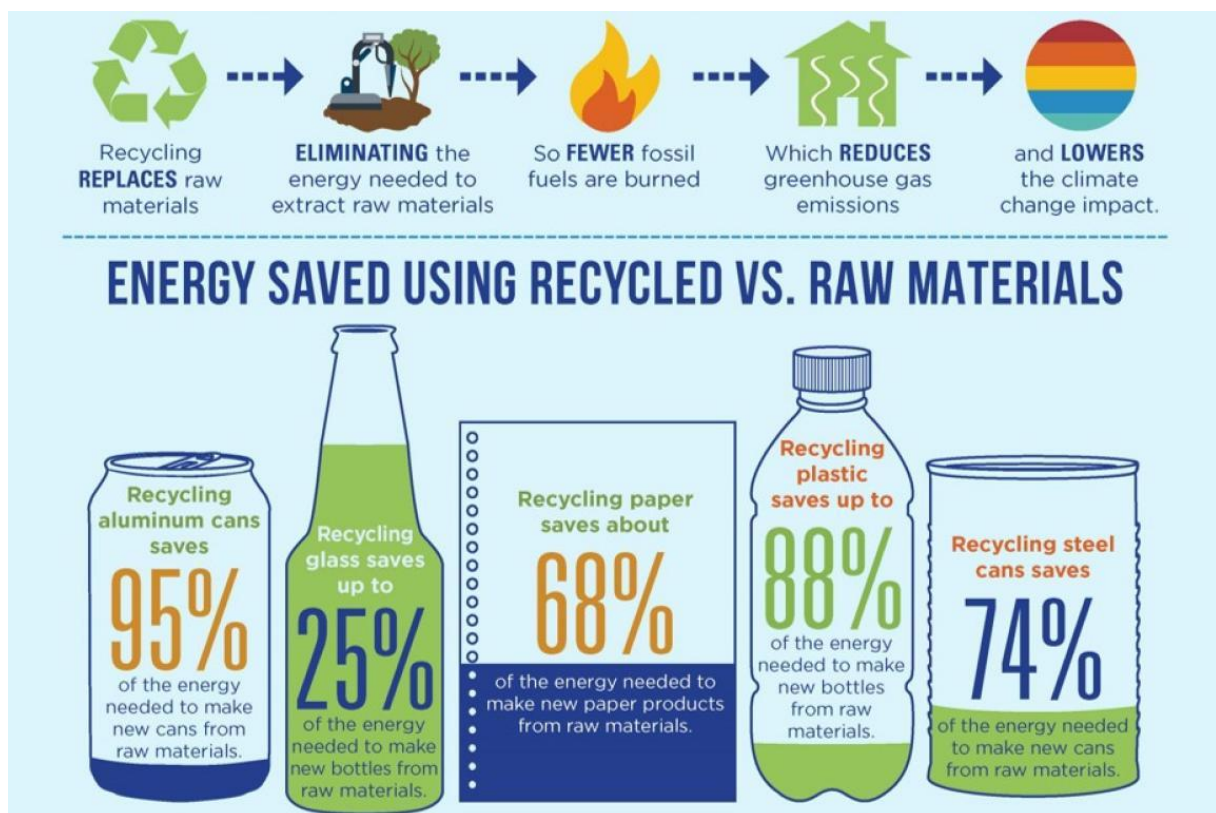
Recycling Reduces The Use Of Landfill Space
- 10

Recycling Reduces Pollution
- 11

Recycling Promises Sustainability

## Energy Savings

The process of recycling materials generally consumes less energy than producing new products from raw materials. For example: Recycling aluminium saves around 95% of the energy compared to producing aluminium from bauxite ore, which involves extensive mining and refining processes. Recycling paper saves up to 70% of the energy compared to manufacturing paper from virgin wood pulp. Recycling plastic saves about 80% of the energy compared to producing new plastic from crude oil. Energy savings through recycling also translate into reduced greenhouse gas emissions and other pollutants associated with extraction, processing, and transportation of raw materials. For instance, recycling paper reduces emissions of carbon dioxide, sulphur dioxide, and nitrogen oxides compared to paper production from virgin pulp.







# RECYCLING SAVES ENERGY

## Social Media Guide for Understanding Recycling Impact

The N.C. Division of Environmental Assistance and Customer Service (DEACS) has developed *Recycling Saves Energy* to help the public understand why recycling is so important. The social media posts below coordinate with the *Recycle Right NC* information campaign materials designed for use by local recycling programs and private recycling collectors.

**Together, we can recycle more and recycle better. #RecycleRightNC**

IMAGE	TEXT FOR FACEBOOK AND TWITTER CAPTION
	<p>Making products from raw materials uses large amounts of energy. It's a one-way street: extraction, production, distribution, consumption and disposal. What a waste! Recycle to use less energy, raw materials and fossil fuels, and reduce greenhouse gas emissions! #RecycleRightNC</p>
	<p>When we recycle, we are part of a circular economy! Buy stuff made with recycled content, buy used, buy less and repurpose, reuse and repair whenever you can! You'll use less energy, raw materials and fossil fuels — reducing greenhouse gas emissions! #RecycleRightNC</p>
	<p>Every time a new product is made from raw materials, large amounts of energy are consumed! Reduce your consumption of new products and packaging: buy recycled or used when you can. #RecycleRightNC</p>
	<p>You CAN never go wrong recycling cans. Give it a rinse and pop it in the recycling: CAN-tastic! #RecycleRightNC</p>
	<p>Recycling bottles is always a safe bet! Don't let it go to waste when you are done with it. Pop it in the recycling bin and know you are doing the right thing. #RecycleRightNC</p>
	<p>Bring that paper back for another life! Recycle it, and know it hasn't gone to waste. Use less paper when you can to save even more energy. Make notepads out of scrap paper, print on both sides, ball it up for packaging and get creative BEFORE you recycle it. #RecycleRightNC</p>
	<p>Recycling bottles is always a safe bet! Don't let it go to waste when you are done with it. Pop it in the recycling bin and know you are doing the right thing. And next time, just say no to that bottle of water: bring your own! #RecycleRightNC</p>
	<p>You CAN never go wrong recycling cans. Give it a rinse and pop it in the recycling: CAN-tastic! #RecycleRightNC</p>



The N.C. Division of Environmental Assistance and Customer Service (DEACS) is a non-regulatory division of N.C. DEQ offering technical and financial assistance to businesses, manufacturers, local governments, institutions, economic developers and citizens in environmental management. For questions, call 1-877-623-6748. [www.recyclenc.org](http://www.recyclenc.org)



## Resource conservation and Energy savings



Recycle Guardian pick recyclable waste



Contributes significantly to recycling efforts by salvaging reusable materials



Contributes to energy savings by producing new products from raw materials

## Prevention of Water Debris

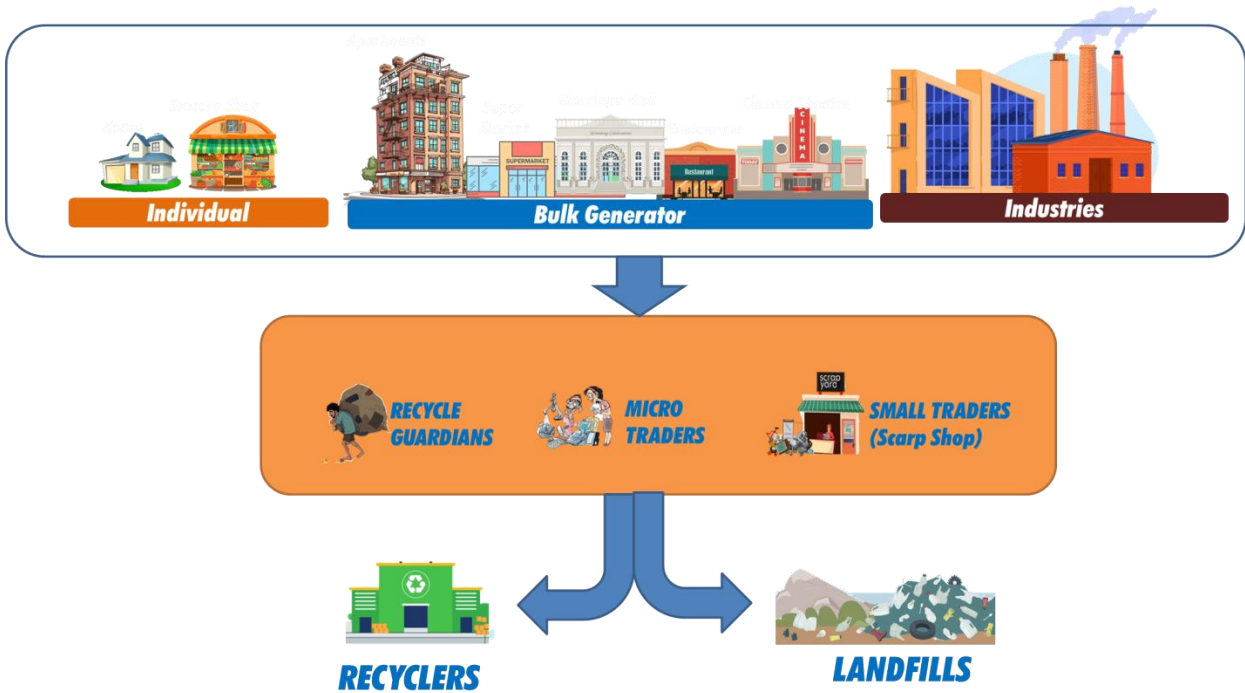
In many urban areas, waste often finds its way into water bodies through improper disposal or inadequate waste management infrastructure. This situation can lead to significant environmental hazards such as water pollution, habitat degradation, and harm to aquatic life. Recycle guardians actively scavenge through waste dumps, landfills, and even urban streets to collect recyclable materials such as plastics, metals, and glass. By doing so, they intercept these materials before they can enter storm drains, rivers, or other water bodies. This process not only reduces the volume of waste that would otherwise pollute water systems but also minimizes the need for new raw material extraction, thus conserving natural resources.



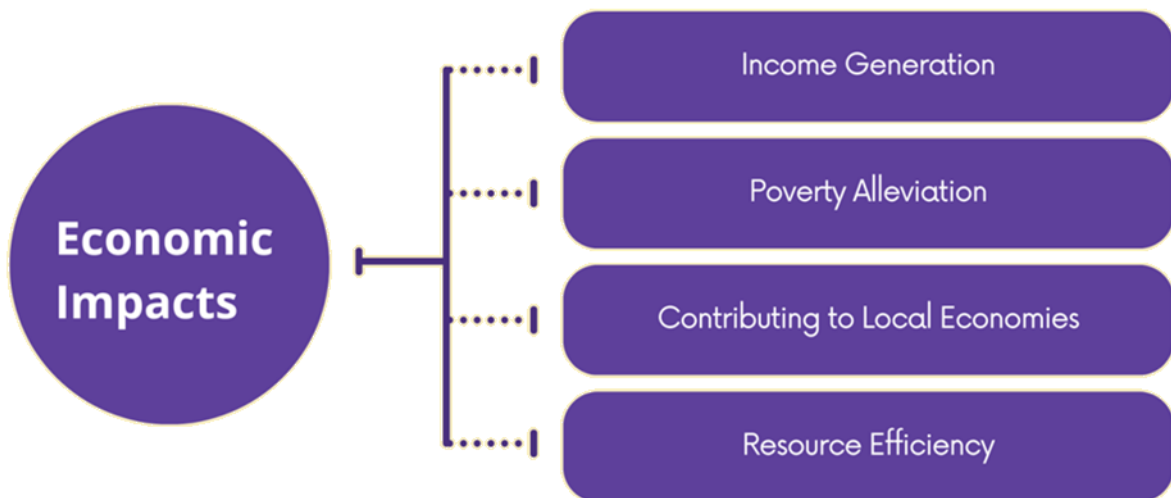


## Reduction in Landfill Waste

By diverting recyclable materials from landfills, waste pickers help extend the lifespan of landfill sites and reduce methane emissions, a potent greenhouse gas produced by decomposing organic waste in landfills. Their efforts not only contribute to environmental sustainability but also support more efficient and economical waste management practices globally.



## 11.2 Economic Impact



### Income Generation

Waste picking provides a source of income for individuals and households who engage in this activity. The income earned from selling recyclable materials such as plastics, metals, and paper can contribute to meeting daily needs and improving overall economic stability.



## Poverty Alleviation

By offering employment opportunities to those with limited formal education or job prospects, waste picking helps alleviate poverty. It provides an alternative to unemployment or underemployment, enabling individuals to support themselves and their families financially.

### Income Generation and Poverty Alleviation



Recycle Guardian pick recyclable waste



Contributes to meeting daily needs and improving overall economic stability.



Enables them to support themselves and their families financially by alleviating poverty

## Contribution to Local Economies

Waste picking contributes to the local economy by creating a market for recyclable materials. This activity fuels a supply chain that involves transportation, sorting, and processing of materials, thus generating additional economic activities and employment opportunities downstream.

## Resource Efficiency

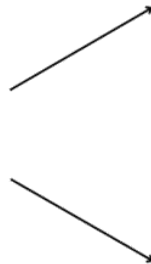
Waste pickers play a role in resource efficiency and conservation by diverting recyclable materials from landfill sites. This reduces the demand for virgin resources and lowers production costs for industries that rely on recycled

materials, thereby potentially contributing to lower overall production costs in certain sectors.

### Contribution to Local Economies and Resource Efficiency



Recycle Guardian pick recyclable waste



Contributes to the local economy by creating a market for recyclable materials



Resource Efficiency

Contributes to reduction in the overall production costs in certain sectors

## 11.3 Social Impact

### Improvement in Public Health and Sanitation

Recycle Guardian minimize the potential for environmental pollution and disease transmission. By collecting materials such as plastics, glass, and metals that would otherwise degrade and release harmful substances into the environment, Recycle Guardian help maintain cleaner surroundings and healthier living conditions for communities. Their efforts contribute to reducing instances of water and soil contamination, which are often exacerbated by improperly managed waste.

## Reduce Municipality Expenditures on Waste Disposal

Recycle Guardians collect recyclable materials from waste streams and landfills and divert significant amounts of reusable resources from ending up in disposal sites. They also contribute to reducing the overall volume of waste that municipalities must handle. By intercepting materials like paper, plastics, glass, and metals before they reach final disposal points, Recycle Guardians effectively decrease the burden on municipal waste management infrastructure. This reduction translates into lower transportation costs, decreased landfill usage, and less pressure on recycling facilities.



**Recycle Guardian pick recyclable waste**



**Improvement in Public health and Sanitation**



**Reduce municipality expenditures on waste disposal**

## Sustainable Waste Management Practices

	Smarter product use and manufacture	<b>R0 Refuse</b>	Make product redundant by abandoning its function or by offering the same function with a radically different product
		<b>R1 Rethink</b>	Make product use more intensive (e.g. by sharing product)
		<b>R2 Reduce</b>	Increase efficiency in product manufacture or use by consuming fewer natural resources and materials
	Extend lifespan of product and its parts	<b>R3 Reuse</b>	Reuse by another consumer of discarded product which is still in good condition and fulfils its original function
		<b>R4 Repair</b>	Repair and maintenance of defective product so it can be used with its original function
		<b>R5 Refurbish</b>	Restore an old product and bring it up to date
		<b>R6 Remanufacture</b>	Use parts of discarded product or its parts in a new product with the same function
	Useful application of materials	<b>R7 Repurpose</b>	Use discarded product or its parts in a new product with a different function
		<b>R8 Recycle</b>	Process materials to obtain the same (high grade) or lower (low grade) quality
<b>R9 Recover</b>		Incineration of material with energy recovery	

Sustainable waste management practices for informal waste pickers are crucial for both environmental conservation and improving their socio-economic conditions.

- 1. Education and Training:** Training should be given on waste segregation, handling hazardous waste, and promoting reuse and recycling. Education empowers waste pickers to handle waste more effectively and safely.
- 2. Access to Protective Gear:** Ensure access to personal protective equipment (PPE) such as gloves, masks, and boots to reduce health risks associated with handling waste.
- 3. Integration into Formal Waste Management Systems:** Integrate Recycle Guardian into municipal waste management systems by providing them with ID cards, access to waste collection points, and fair remuneration for the waste they collect.
- 4. Promotion of Safe Collection Practices:** Encourage safe practices in waste collection, transportation, and sorting to minimize health hazards and environmental pollution.



**5. Support for Organizational Structures:** Facilitate the formation of cooperatives or associations among Recycle Guardians to enhance collective bargaining power, access to resources, and support for advocacy efforts.

**8. Access to Healthcare Services:** Ensure access to healthcare facilities and regular health check-ups to address health issues arising from exposure to waste.

## Individual Exercise

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## Group Exercise

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## Assessment

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HAND IN HAND INDIA



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Hand in Hand India



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