

STRATEGIES FOR THE COUNTRIES WHICH HAVE LOWER RANKS FOR GLOBAL WASTE INDEX (WASTE MANAGEMENT, RECYCLING AND DONATION)

Countries with low rates of recycling and poor methods of waste management face serious environmental and social challenges. However, several strategies exist that can raise the capacity for recycling, waste management, and donation.

Applying a mix of these strategies can work wonders in low recycling rates and poor waste management countries, making rapid progress toward sustainable waste practices and the establishment of a circular economy that is rewarding for the environment and society.

Pollution, resource depletion, and public health risk are some of the negative impacts experienced in countries that have low rates of recycling and waste management. There is a combination of policy interventions, infrastructure development, community engagement, and education in effective strategies for improving recycling and waste management. Key strategies include:

1. Creating Awareness and Education Campaigns

- **Public Education:** Informing citizens about the importance of recycling and the benefits of proper waste disposal can encourage participation. Schools, media, and local communities can be utilized to spread messages about environmental protection.
- **Waste Sorting Programs:** Educating the public on how to separate waste at home, including separating recyclables from non-recyclables, can improve the efficiency of recycling efforts.

Things can be done:

Public Awareness and Education

- **Campaigns:** Run nationwide campaigns to educate citizens about the importance of recycling and waste reduction.
- **School Programs:** Incorporate waste management education into school curricula and work with municipal bodies to engage the waste management, recycling and donation trainings in place. Involving interactive and online games, young people should be attracted to these. At the same time, donation and second hand usage should be introduced to children and young people and promoted to feeling of helping and sharing.
- **Community Workshops:** Conduct workshops to teach people how to segregate and recycle waste at home.

2. Government Policies and Regulations

- **Establishing Regulations:** Governments can introduce policies that require proper waste management, such as mandatory recycling laws, landfill bans, and plastic usage restrictions. For example, bans on single-use plastics and policies incentivizing the use of reusable containers can drive behaviour change.
- **Extended Producer Responsibility (EPR):** This policy makes manufacturers responsible for the end-of-life disposal of their products. It encourages companies to design products that are easier to recycle and manage waste.

Things can be done:

Policy and Legislation

- **Enforce Regulations:** Introduce laws mandating waste segregation, recycling targets, and penalties for non-compliance.
- **Extended Producer Responsibility (EPR):** Require manufacturers to take responsibility for the disposal of their products, incentivizing eco-friendly designs and recycling.
- **Incentives:** Provide tax breaks or subsidies to recycling businesses and waste management initiatives.
- **Ban Single-Use Plastics:** Gradually phase out items like plastic bags and straws to reduce waste generation.

3. Infrastructure Development

- **Waste Collection Systems:** Building or improving waste collection infrastructure is critical. Municipalities should ensure regular waste pickup and provide designated bins for recycling. In rural areas, incentivizing local waste collection may be important.
- **Recycling Centers:** Invest in accessible, well-equipped recycling facilities that can handle a wide variety of materials. These centers can become hubs where citizens drop off recyclables, making the process easier and more efficient.

Things can be done:

Infrastructure Development

- **Collection Systems:** Establish organized waste collection systems, including separate bins for recyclable, non-recyclable, and organic waste.
- **Recycling Facilities:** Invest in state-of-the-art recycling plants and waste-to-energy facilities.
- **Landfill Management:** Upgrade existing landfills to minimize leachate and greenhouse gas emissions.
- **Composting Centers:** Develop community-level composting facilities for organic waste.

4. Incentive Programs

- **Deposit Return Schemes (DRS):** Some countries have implemented deposit return systems where consumers pay a deposit on beverage containers and get it back when they return the empty container. This encourages recycling and reduces litter.

- **Recycling Incentives:** Offering financial rewards, discounts, or points for recycling can motivate individuals and businesses to participate in recycling programs.
- **Tax Breaks for Donors:** Provide tax incentives to companies and individuals who donate items for reuse, such as clothing, furniture, or electronics. This can encourage a culture of donating instead of throwing items away.

Things can be done:

Economic and Market Incentives

- **Deposit Refund Systems:** Implement systems where consumers receive a refund when they return recyclable items like bottles or cans.
 - **Recycling Markets:** Create markets for recycled materials by supporting businesses that produce goods from recycled waste.
- Pay-as-You-Throw (PAYT):** Charge households based on the amount of waste they generate to incentivize reduction and recycling.

5. Corporate Social Responsibility (CSR)

- **Partnerships with Private Companies:** Collaboration between the government and private companies can lead to more sustainable waste management practices. Companies should be encouraged to set up take-back programs for electronics, textiles, or packaging waste.
- **Corporate Donations:** Encourage businesses to donate surplus or unsellable goods to local charities, reducing waste and helping those in need. These efforts can be incentivized through CSR regulations.

6. Donation and Reuse Networks

- **Donation Drives:** Organize national or local donation drives to collect goods that can be reused or repurposed. This reduces waste and supports social causes.
- **Setting up Donation Centers:** Establish donation centers where people can drop off items for reuse or redistribution. These centers can be partnered with local non-profits to manage donations effectively.
- **Online Platforms for Donations:** Launch digital platforms where people can list and donate items to others in need, facilitating donation transactions between individuals or businesses.

Things can be done:

Technological Innovations

- **Digital Platforms:** Use mobile apps to connect waste generators with recyclers.
- **Smart Bins:** Deploy bins equipped with sensors that notify authorities when they are full.
- **Recycling Automation:** Invest in robotic sorting systems to enhance efficiency in recycling plants.

7. Promoting Circular Economy

- **Encouraging Repair and Reuse:** Promote the idea of repairing items rather than discarding them. Establishing repair workshops or facilitating training in repair skills can prevent waste generation and support sustainability.

- **Supporting Local Recycling Initiatives:** Governments can support local businesses that upcycle materials, creating new products from old ones. This encourages a circular economy and reduces the reliance on virgin resources.

Things can be done

Behavioural Nudges

- **Recognition Programs:** Reward households and businesses that demonstrate exemplary waste management practices.
- **Social Norms:** Use peer pressure and community norms to promote recycling.
- **Visual Cues:** Place clear and attractive labels on bins to make segregation easier

8. Community Engagement and Participation

- **Community-Based Waste Management:** Engage communities in waste management through local initiatives like community clean-up drives or shared recycling projects. Encouraging grassroots involvement can ensure better participation and innovation in waste management.
- **Youth Involvement:** Schools and universities can introduce programs and projects on waste management, recycling, and sustainability. Involving youth in the process creates long-term awareness and a new generation of environmental advocates.

Things can be done

Community Engagement

- **Waste Cooperatives:** Support informal waste collectors by integrating them into formal waste management systems.
- **Public-Private Partnerships (PPPs):** Partner with private companies to develop efficient waste management solutions.
- **Local Innovation:** Encourage local communities to develop context-specific solutions, such as waste-to-crafts initiatives.

9. International Support and Collaboration

- **Global Partnerships:** Collaboration with international organizations, such as the United Nations or non-governmental organizations (NGOs), can provide technical expertise, funding, and guidance to improve waste management systems.
- **Knowledge Sharing:** Learn from countries with successful recycling and waste management systems. This could include adapting best practices from countries with established circular economies, such as Sweden or Germany.

Things can be done

- **International Collaboration:** Adopt best practices from countries with high recycling rates, such as Germany or South Korea.
- **Technology Transfer:** Partner with international organizations to gain access to advanced waste management technologies.
- **Funding Support:** Secure grants or loans from global organizations like the World Bank or UNDP for infrastructure development.
- **Learn from Successful Models:** Get in communication with the organizations who has projects and successful action towards recycling, waste segregating and donation. Benefit from their experiences and get support for trainings, activities. Find good models.

10. Waste to Energy (WTE) Programs

- **Energy Recovery from Waste:** Implement WTE technologies that convert non-recyclable waste into energy. This could reduce the burden on landfills and provide an alternative energy source for communities.
- **Biogas Production:** Invest in biogas facilities that convert organic waste into renewable energy, particularly in rural or agricultural areas where waste is abundant.

Things can be done:

- **Target Specific Waste Streams**
- **E-Waste Recycling:** Develop systems to collect and recycle electronic waste.
- **Construction Debris:** Encourage reuse and recycling of construction materials like concrete and steel.
- **Food Waste:** Promote food donation systems and bio-digesters for organic waste.

11. Monitoring and Data Management

- **Baseline Studies:** Conduct assessments to understand the composition and volume of waste.
- **Waste Audits:** Periodically audit waste streams to identify gaps in the system.
- **Data Transparency:** Publish reports on recycling rates and waste management progress to keep stakeholders informed and accountable.

Improving recycling and waste management in countries with low rates is a multi-faceted challenge, but with sustained efforts, these strategies can lead to significant environmental, social, and economic benefits. In today's curricular economy and UN Sustainable Development Goals all nations should act together to live in a better world. To promote higher quality living and a better world, measures should be taken immediately. We aim to be a role-model for schools, NGOs and education sector how to include waste management in their curriculum and how to build a waste management centre in their organisations. This strategy documents gives ideas for the countries and organisations which have lower ranks in waste management, recycling, and donation which is prepared as an output of the SCSF Project.