

Recycling As a Privilege Among Underprivileged Communities

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Abstract

This paper examines the disparity in recycling practices between affluent and underprivileged communities, highlighting how recycling is often perceived as a privilege in poorer neighborhoods within developed nations. Despite the high volume of waste generated globally, only a small fraction is recycled, with significant variations in recycling rates between wealthy and low-income areas. This review explores the socioeconomic, infrastructural, and educational barriers that contribute to these disparities. Key factors include inadequate waste management infrastructure, low public awareness, and socioeconomic constraints such as transient populations and low education levels. The paper also applies the Kuznets curve to understand recycling behaviors in developing nations, emphasizing how economic development initially exacerbates environmental harm but later leads to improved waste management practices. Recommendations include fostering community-based environmental justice programs and adopting circular economy models to enhance recycling rates and environmental sustainability across all communities.

Introduction

According to Mihai et al. (2021), humanity collectively produces 1.3 billion tons of waste annually. Industrial expansion increases the amount of waste each year, creating environmental implications. Most of the waste produced is sent to dumping sites landfills. People recycle only a small portion of the waste, creating a problem given the increase in waste

production. According to Chen and Gao (2021), developed nations have better waste management systems than developing nations. However, there are still challenges in waste management regarding the poorer neighborhoods in developed nations. This review outlines why recycling is often perceived as a privilege in poor neighborhoods in developed nations. There is also an analysis of the application of the Kuznets curve in

understanding recycling behaviors in developing nations and a list of recommendations that would offer possible solutions to the issue of waste management.

Why Recycling Among Low-Income Neighborhoods Is a Privilege

The lack of public awareness regarding recycling in poor neighborhoods makes recycling a privilege for the few. A study based in low-earning neighborhoods in China showed that most people were unaware of the responsibility to recycle (Wang et al., 2020). The questionnaire given to the locals revealed that they thought waste management was the responsibility of the local government rather than themselves. The awareness and understanding of recycling correlate with participation in recycling activities. A separate study also found links between public awareness of the duties of household waste management and the consequences of daily human activities, leading to more pollution in poor neighborhoods (Chen & Gao, 2021). Residents in the areas targeted in the study needed more access to information that would help them learn how to sort, reduce, and recycle waste. Moreover, given their economic status, most need help understanding the benefits of recycling, making it hard to take personal responsibility for ensuring proper waste management and recycling. That is why most respondents revealed that they believed recycling should be the work of the local government rather than themselves.

Poor neighborhoods have low recycling rates because of inferior infrastructure and resources. There are disparities between affluent and poor neighborhoods regarding resources and infrastructure. In the UK, for example, recycling rates fluctuate between 45% and 47% without

hitting the set target of 65% (Wang et al., 2020). There are disparities in recycling rates between the affluent and poorer neighborhoods, reducing the overall recycling rates. One reason for the difference in recycling rates is infrastructure and physical barriers. According to Wang et al. (2020), highly dense regions within the urban centers have poor waste infrastructure, making it hard to recycle as it presents a barrier to recycling rather than an incentive. Other infrastructure components include the distance to the recycling facilities, space, and internal storage capacity (Knickmeyer, 2020). In regions with high travel distances to the recycling facilities, the residents needed to be more responsive to recycling activities, reducing participation rates among the population (Chen & Gao, 2021). The situation differs from affluent neighborhoods in the UK, which have accessible and well-maintained facilities, making recycling convenient for people. The lack of physical infrastructure in specific neighborhoods in developed nations makes recycling a privilege for those who need to make minimal efforts to recycle and a burden for those who are not offered the proper resources.

Socioeconomic barriers also play a role in affecting the recycling rates among poor neighborhoods in developed nations. The level of income within the regions affects factors related to recycling, such as knowledge levels, transient populations, level of education, and awareness of environmental concerns (Wang et al., 2020). Other low-income levels affect employment status, political views, and home ownership. Such factors play an essential role in recycling as they affect the thinking, behaviors, and sense of responsibility in environmental matters. Fotourehchi & Sahinoz (2016) revealed a positive correlation between the level of education and age on recycling outputs.

People with high or medium education levels are more aware of the environmental benefits of recycling than those with lower levels of education. As a result of low income, such neighborhoods have transient populations that cannot maintain recycling habits due to frequent changes in address and bin availability (Chen & Gao, 2021). Thus, people often do not stay in one place long enough to develop recycling habits and make them stick. Therefore, the factor affects recycling among such regions, making it a privilege for the few to have the education, knowledge, resources, and stability to maintain good recycling habits.

How The Kuznets Curve May Apply to Recycling Behaviors in Poorer Countries and Neighborhoods

One of the propositions of the Kuznets curve is that economic development increases environmental harm. Factors that increase harm include increased energy consumption due to industrialization and waste generation (Fotourehchi & Sahinoz, 2016). The Kuznets curve may apply to developing nations since they are beginning to develop and industrialize. However, as nations have become wealthier, they adopt cleaner technologies and policies that reduce the negative impact of the processes on the environment. The curve has four stages: the initial, middle-income trap, turning point, and advanced stages (Aydin et al., 2019). Strategies are in place at each stage to ensure people adopt effective waste management practices.

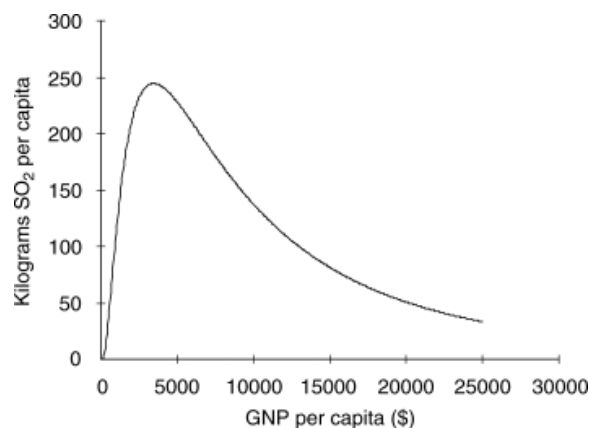


Figure 1: Kuznets curve for sulfur emissions (Fotourehchi & Sahinoz, 2016)

At the onset of economic development, industrialization increases the emission of sulfur, nitrogen, and carbon dioxide emissions. In such cases, recycling is driven by necessity rather than awareness of environmental impact. For most developing nations, the focus is on economic development rather than environmental sustainability (Ponce et al., 2019). Informal recycling sectors can emerge among individuals who collect and sell waste to generate income. One of the strategies at this stage is for the government to incentivize the people and create jobs from waste management and recycling activities in the informal sector. The incentives can include deposit and refund systems to maintain motivation as income rises (Fotourehchi & Sahinoz, 2016). The next stage is the middle-income trap, where, as income rises and peaks, formal waste management becomes necessary as people see and experience the harmful effects of poor waste management on the people and environment around them. Given that the incentive for informal recycling

decreases due to an increase in waste, it necessitates the formal infrastructure by the governments to develop and address the issue before it becomes problematic. The strategies can include policies, training, awareness, and adopting superior technology that reduces harmful toxins (Aydin et al., 2019).

The next stage in the curve is the turning point, where the curve starts declining due to the efforts made to recycle. At this point, the government and other stakeholders have implemented various strategies to ensure increased awareness regarding waste management and recycling among the population. Other methods include training and building capacity to enforce industry waste management protocols (Ponce et al., 2019; De Almeida et al., 2021). Such effort helps to account for the turning point. At the advanced stages, the rates of environmental degradation have declined significantly, as it signifies that developing nations have shifted towards developed nations with highly developed economies and better infrastructure for waste management and recycling. Structural regulations have also been implemented to ensure that people comply and thus engage in recycling (Fotourehchi & Sahinoz, 2016). Education and awareness are available in such places to reinforce each individual's social responsibility in ensuring environmental sustainability.

Solutions And Recommendations: Increasing Recycling Rates in Underprivileged

Communities

Creating community-based environmental justice programs and partnerships is essential to increasing recycling among underprivileged populations. Understanding the community's perception of environmental health benefits is also necessary. This principle lays the foundation for creating a bottom-up approach to addressing environmental justice problems. The strategy is sustainable because it empowers the community to take ownership of the recycling process. It also helps to represent the underprivileged communities within the decision-making bodies since they lack representation, affecting the efficacy of the strategies developed to support such communities (Rickenbacker et al., 2019). The collaboration helps collect data that informs the interventions developed in such places. The stakeholders must tailor the interventions to meet the individual characteristics of the population, capacity, and ability. In doing so, the bottom-up approach effectively increases recycling rates among underprivileged neighborhoods, demystifying the notion that recycling is a privilege.

The second approach, developing the circular economy, would lay the foundation for improved recycling in underprivileged regions. Underprivileged communities face many challenges that pose barriers to recycling and waste management, such as unemployment, low income, poor levels of education, and lack of awareness regarding environmental protection

(De Almeida et al., 2021). The informal waste management initiatives established in developing and low-income regions are ineffective as they threaten public health. Therefore, the circular economy works to address the challenges faced by the population while at the same time promoting environmental protection. Job creation and skills training is a circular economy model that generates employment opportunities from recycling and waste management, empowering people in these regions and creating employment (Mihai et al., 2021; Knickmeyer, 2020). Developing the necessary infrastructure within the areas also plays a role in improving access to recycling opportunities while also empowering the locals. The circular business model ensures that there is reduced waste and that people can access economic empowerment opportunities. It also promotes creativity and innovation among the population, ensuring they find better ways of managing waste. Such a model not only helps improve waste management and recycling but also empowers the people and addresses the barriers to recycling, such as low income, unemployment, lack of infrastructure, and poor environmental protection awareness.

Conclusion

Recycling is a privilege among poor neighborhoods in developed and developing nations. Some common reasons for the disparities are the level of development, income levels, resource endowment, infrastructure,

and, most importantly, the level of knowledge and awareness regarding the issue amongst residents. Leveling the playing field is essential in making recycling accessible to all populations. The Kuznets curve plays a vital role in improving understanding of how pollution and environmental degradation take place in developing nations. It explains why pollution is high at the initial stages of growth due to a focus on economic development and how it becomes a social responsibility and law as people experience its negative impact. There are various strategies that stakeholders can enact across the lifecycle in the Kuznets curve to reduce the adverse impact of industrialization on the environment. Some effective interventions that are crucial to addressing the issue of recycling among underprivileged populations include laying the foundation for developing waste management and recycling practices. Working and collaborating using community-based initiatives helps to educate the communities, which will be vital to the success of any waste management programs. Such programs empower the people and engage them fully in the initiatives. Also, addressing the barriers to recycling using the circular economy empowers people and allows them to create jobs in waste management, which incentivizes them further and will lead to recycling not being seen as a privilege for the rich but rather a standard civic endeavor for all citizens of a nation.

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