

**Social Work Promoting
Community and
Environmental Sustainability:
A Workbook for Global Social
Workers and Educators**

Volume 3

Edited by Michaela Rinkel and Meredith Powers

The International Federation of Social Workers



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Chapter 6: SDG 6: Clean Water and Sanitation

The Role of Social Workers in Promoting Sustainable Waste Management in Developing Countries

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Learning Outcomes:

1. Understand how social work connects with UN Sustainable Development Goals (SDG 6: Clean Water and Sanitation).
2. Identify the actors involved in sustainable waste management in developing countries.
3. Discuss the challenges and the options for successfully managing waste.
4. Describe the role played by social workers in promoting sustainable waste management options in developing countries.

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Editors' Degrowth Critique Summary of SDGs By Meredith Powers & Michaela Rinkel

Please see the Overview Chapter of this [Volume 3](#) of the edited workbook series, *Social Work Promoting Community and Environmental Sustainability*, for a more complete discussion of the ecosocial worldview and the editors' degrowth critique on the growth model, sustainable development and the United Nations' Sustainable Development Goals (SDGs).

This summary is offered not as a critique of the authors' chapter, but as a prompt to consider the chapter content in light of a call to engage in practice ***within and beyond*** the SDG framework.

Social work practice is clearly connected to the UN Sustainable Development Goals (SDGs). As partners with and leaders in many communities where the work related to the SDGs occurs, we must consider our role in promoting community and environmental sustainability, ***within and beyond*** the SDGs. While we need to be versed in the SDG language and concepts and involved in conversations and actions with global partners for the SDGs, we must maintain a critical eye on the limitations of this framework and help shift the conversation towards genuine solutions (i.e. which can be sustained in the long term). We maintain that this shift involves embracing an ecosocial worldview and taking a degrowth approach for transformational alternatives to sustainable development.

Despite the admirable idea to include sustainability (which originates in an ecosocial worldview) with development (which is based on an anthropocentric worldview) to create “sustainable development”, it merely created another model which ultimately is still situated in the anthropogenic, capitalist growth economic paradigm. This growth ideology keeps perpetuating the unsustainable and unjust byproducts of growth, which cannot lead to true sustainability as injustice is inherent in this model.

This volume of the workbook series is thus, an attempt to demonstrate to the profession our relevance to the SDGs, as well as to demonstrate to the world that social work is essential to the realization of sustainability, ***within and beyond*** the SDGs.

Within: What social work brings to the SDGs

Working to eradicate the injustices that stem from poverty, inequality, and oppression is at the core mission of social work and encompasses each of the 17 SDGs. For example, poverty and inequality impacts overall well-being, health, and civic participation, and oppression, affecting both people and planet. When we operate ***within*** the current framework of the SDGs, social work promotes solutions that impact multiple SDGs at once, such as universal social protection systems, fair and ethical employment practices, democratic participation, and sustainable natural resource management.

The social work profession’s unique perspectives and skill sets are sorely needed. These include our emphasis on social justice, empowerment, the strengths perspective, and the person in environment perspective (also known as people as place), along with the approach of using a systems framework. These social work perspectives help to make more evident the power dynamics that exist and highlight the ways they are changed as we work to alleviate injustices related to poverty, inequality, and oppression, often connected to environmental and ecological injustices. Working within the SDG framework which uses the “triple bottom line” of sustainable development (i.e., the advancement of people, profit, and planet) we

can help bring ecological justice to the forefront. However, with an ecosocial lens we can also move beyond sustainable development to shift the conversation and create truly sustainable solutions.

Beyond: Shifting to ecosocial worldview and degrowth

By embracing the ecosocial worldview we can shift the discussion and actions around the SDGs, taking a transformative approach that offers a critical understanding that the “triple bottom line” of sustainable development is not actually possible. Competition and scarcity undergird the growth ideology, where sustainable development is located, and in that model profit will always prevail over the aspirations of meeting the supposed competing needs of people and planet. Ultimately this framework will only serve to further perpetuate ecological injustices and power imbalances.

Degrowth involves localizing solutions and is not only about a shift in economic ideology, but in a revised society that lives cooperation, sharing the abundance, and reciprocity-based relationships among people and the planet. This revisioning necessitates identifying alternative measures of “success” which should not be wedded to mere economic gain. Within the growth ideology, our current indicators are flawed as they only measure limited aspects associated with economic growth and promote solutions which give preference to profit and primarily benefit those with power. Instead, we can adopt non-economically centered indicators of prosperity that are within the ecosocial worldview. These measures determine success within the context of the interdependent well-being of people and planet (e.g., time, relationships, health, etc.). By moving *beyond* sustainable development to degrowth as transformational alternatives, we can open up the opportunities for truly sustainable solutions.

Lesson:

Waste management has become a serious threat to the achievement of social and ecological justice, in developing countries in particular. The history of social work has long been associated with waste management. For instance, pioneering social workers such as Jane Addams was a Garbage Commissioner in Chicago.¹ With this long association with waste management, social work has now recognized the importance of environmental sustainability since the inequalities and unsustainable environments related to climate change and pollutants can largely influence people's health and well-being.² With the rise of living standards and consumerism, waste generation has become not only an acute environmental problem, but also a justice issue.³ The SDG 6 focuses on clean water and sanitation, aspects of global health and well-being that are impacted by waste management practices. Sustainable waste management is a serious environmental challenge in which social work can play an active role as it poses threats to the achievement of many of the Sustainable Development Goals (SDGs)⁴ that countries aspire to achieve by 2030. While waste management is a global challenge, it is more serious in developing countries for a number of reasons. Such reasons include restricted funding for the municipal and local authorities, insufficient integration of various stakeholders of the waste chain, urbanization and growth of population, problems in waste storage and collection, unsupportive regulatory environments, lack of awareness and public entities still proving the role of service provider than being a regulator or contractor.⁵⁻⁶

A successful waste management system requires the engagement of every actor in the economy including citizens, authorities, corporations and regulators.⁶ This is where social workers practicing in developing countries can play an active role by promoting the integration of sustainable waste management into its practice and education in order to realize the SDGs on a global scale. In contributing to sustainable waste management, social workers can make several interventions at multiple practice levels (see Table 1).

Table 1: Intervention Strategies for Sustainable Waste Management

Levels of Practice	Processes	Examples of Strategies
Individual and group building: empowerment	Process by which individuals and groups learn how to perceive and empowered to act upon the contradictions in waste management systems	Assigning a village community to initiate beach conservation activities
Individual and group building: Conflict resolution	Process to direct efforts at reducing grievances and asymmetric power relationships in waste management	Acting as mediators between municipal councils and communities on a landfill site
Community building	Process through which communities respond more effectively to their needs through increased participation and social animation in managing waste	Engaging the communities in finding solutions for waste that is difficult to recycle through participatory peer-to-peer education
Institution building	Process of developing existing social institutions and establishing new institutions to respond to the needs of waste problems	Developing new organizations/social institutions to manage waste in a rural village
Nation building	Process of working with cultural, social and economic institutions within a nation for improved waste management	Fostering links between different national level waste management organizations to find collaborative solutions for the waste management problems

Region building	Process of working with cultural, social and economic institutions within a region for improved waste management	Building an institution that aims to find solutions for the waste management problems at the regional (inter-government) level
Global building	Process of working with cultural, social and economic institutions on a global scale for improved waste management	Developing global standards for waste management such as initiatives to achieve SDG 11 through proper municipal solid waste management

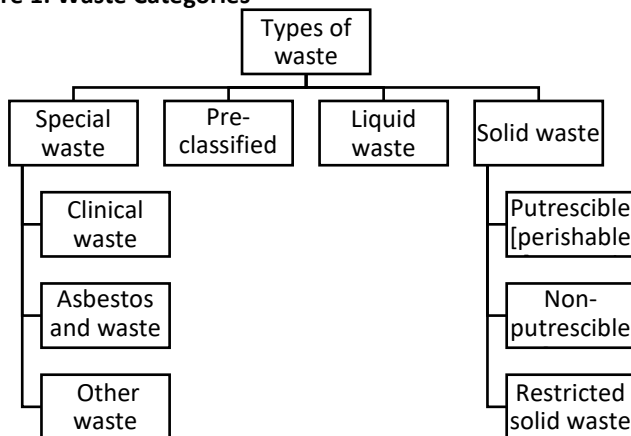
Source: Adapted from Estes⁷ and Gamble⁸

Before initiating any of the above interventions, it is necessary for social workers to gain a sound understanding of sustainable waste management. This chapter next discusses the different types of waste and waste management options available.

Types of Waste

For readers who are not familiar with waste management, the author recommends reading the references provided at the end of the chapter and viewing the five minute video: “Don't Waste Your Waste”, that explains the basics of sustainable waste management in animated form.⁹ If contributing to sustainable waste management, it is necessary for social workers to be able to identify the different types of waste because the appropriate treatment approach largely depends on the type of waste. There are various ways of categorizing waste. In most cases, waste categorization is determined by the national/local authorities and institutions. Despite slight variations, most of these categorization methods have common categories. For instance, New South Wales State in Australia uses the following waste categorization method (see Figure 1).¹⁰

Figure 1: Waste Categories



Source: Martin¹⁰

Waste Management Options

Waste management is the collection, transport, recovery and disposal of waste.¹¹ In managing waste, there are several options to deal with the various types of waste generated. These waste management options are: reduce, reuse, recycling (these three options are widely referred to as the 3Rs), other recovery methods and finally, landfill.^{12,13} The application of these various waste management options requires the engagement and active participation of various social actors. Due to the aforementioned barriers to sustainable waste management in developing countries social workers play an essential role.

Using landfills is the least desirable waste management option as it can have many adverse impacts on the environment and society.¹³⁻¹⁴ The most serious of these adverse impacts is the generation of methane, a gas which is 25 times more potent than carbon dioxide.¹² Built up methane in landfills can even explode posing threats to the surrounding communities. This represents an environmental injustice since these landfills negatively impact the health of the nearby communities. Energy recovery is the burning of waste in incineration

plants to produce energy and heat.^{13,15} Recycling is the reprocessing of waste, either into the same product or a different product.¹² Recycling enables the recovery of materials from waste that would otherwise end up in landfills. The recovery of materials reduces the need to extract virgin materials from the environment.¹⁶ Reuse involves the repeated use of the products or components for the same purpose or for another purpose.¹³ The reuse of products such as clothes and furniture has social, economic and environmental benefits. Prevention of the generation of waste, as the most desirable waste management option, becomes very important given the unprecedented growth of the population and scarcity of natural resources.

Application:

Instructions: Read the following two case studies, and then complete the exercises that follow. They may be done individually, in pairs or in small groups; modify as needed.

Case Study 1: Challenges of Managing Waste in Developing Countries

As discussed in the chapter, waste management has become a major challenge in many developing countries. Due to the improper management of waste, these countries have faced many environmental and social issues.

Please read the following:

- [Garbage Challenges in Developing Countries](#)¹⁷
- [Solid Waste Management in Developing Countries: Status, Perspectives and Capacity Building](#)⁵

Among the issues faced by these communities is the serious health and life threats posed to the communities living near landfill sites.¹⁸ The purpose of the following examples is to highlight the social and environmental repercussions of improper waste management in developing countries by focusing on avoidable disasters arising from the collapse of landfills.

Ghazipur landfill collapse in India

More than fifty metres high, the Ghazipur landfill in the capital city of Delhi, India collapsed in September 2017 after heavy rains. This landfill, that took the lives of two people when it collapsed, was supposed to be shut down more than fifteen years ago. However, due to the unavailability of a suitable facility to manage more than 10,000 tonnes of garbage generated by Delhi every day, dumping at this site continued until it collapsed.

Further readings

- [Ghazipur landfill collapse in Delhi was a tragedy waiting to happen](#)¹⁹
- [Ghazipur landfill collapse: Mere shifting of site won't end air pollution, diseases; scientific disposal only way out](#)²⁰

Meethotamulla landfill collapse in Sri Lanka

More than thirty metres high, the Meethotamulla landfill in the capital city of Colombo, Sri Lanka collapsed in April 2017 killing more than 25 people. After the collapse, the garbage engulfed more than 150 houses leaving many families displaced. For many years, the residents in the area had been protesting against garbage dumping in this site that caused widespread health, environmental and social problems. This landfill was to be shut down many years back, but due to the unavailability of a suitable mechanism and facility to manage the waste generated daily in the capital city of Colombo, dumping of garbage at this site continued for many years until this tragic incident happened.

Further readings

- [Massive rubbish mound collapse kills 16 people including four children in Sri Lanka](#)²¹
- [At least 26 dead in garbage dump collapse in Sri Lanka](#)²²

Exercise 1: Case Study 1 Discussion Questions

Imagine that you are a social worker assigned to work with the victims and local authorities of the Ghazipur and Meethotamulla landfill collapses, post-disaster.

1. Identify the environmental and social problems in the landfill sites in these urban areas of two developing countries.
2. Do you identify any similarities in the two incidents that took place in India and Sri Lanka? Discuss.
3. As a social worker how would you intervene to resolve the social and environmental problems of the residents affected by a landfill? Discuss your answer with reference to various social work options such as empowerment, community building and institutional building. ^{7,8}

Case Study 2: Waste Management System in Taiwan

Taiwan, once known as “Garbage Island”, today provides an impressive example of garbage management by recycling more than 55% of its waste. It is an exemplary story of how a country’s biggest problem has been converted into a thriving industry with the help of many stakeholders.

Rather than collecting garbage on a weekly basis, garbage trucks arrive several times per week blasting music. This music is a signal for people to bring colour coded garbage bags out to the street. In addition, in its capital city of Taipei, people use a digital app to track the location of the moving garbage trucks. There are volunteers and officials on the garbage truck to assist people in sorting their garbage correctly into recyclable bins/bags.

Taiwan uses an effective colour coded bin system that facilitates garbage collection, storage and treatment. For example, there are separate bins for raw food waste and for cooked food waste. While raw food waste is composted and used by farmers as fertilizer, the cooked food is used as food for animals such as pigs.

In order to maintain this system there are several effective mechanisms in place. All households have to buy government certified blue bags for disposing of non-recyclables, thus incentivizing reduction in the personal generation of waste. In addition, the Taiwanese government implements a strict fine system to punish offenders. Surveillance cameras are in place to monitor the offenders. First time offenders are warned, but if an offence is repeated, the video footage is posted publicly as an incentive to follow the rules. Moreover, offenders are charged fines. Sometimes, a part of the fine is offered to the citizens who report the incidents of violations.

Due to the successful implementation of this system for many years, the Taiwanese are now used to a “proper waste management culture” in which every citizen takes responsibility for managing their own waste. In addition, constant awareness programmes and other initiatives that encourage more responsible production and consumption patterns (as outlined in [SDG 12, Responsible Consumption and Production](#)²³) have reduced the per capita waste generation.

Not only has this system helped the government to reduce the problem of waste but it has also created a more liveable society, which is in line with [SDG 11, Sustainable Cities and Communities](#).²⁴ Furthermore, this system has given rise to a booming recycling industry that provides many employment opportunities while bringing in billions of dollars through the extraction and exportation of precious materials from waste.

Further readings

- [Taiwan has one of the world's most efficient recycling systems](#)²⁵
- [Taiwan Has Found A Brilliant Way To Get People To Recycle More](#)²⁶
- [Taiwan's Recycling Success: By the Numbers](#)²⁷

Exercise 2: Case Study 2 Discussion Questions

Imagine that you are a social worker assigned to work with the residents of Taipei, the capital of Taiwan.

1. Discuss the possible social, environmental and economic challenges of improper solid waste management, which Taiwan experienced before the implementation of the waste management system.
2. Describe the different types of municipal waste that can be generated in a country such as Taiwan and various waste management options available for its treatment.
3. Identify the key actors (or stakeholders) involved in Taiwan's waste management system.
4. Discuss the role of the aforementioned stakeholders in the successful implementation of waste management practices.
5. Describe the benefits for developing countries from a sustainable waste management system.
6. Discuss the role of social workers in sustaining a sustainable waste management system in a community.

Summary Notes:

The purpose of the chapter is to highlight how social workers can contribute to the achievement of environmental sustainability by specifically focusing on sustainable waste management. The two case studies provided in the chapter are organized around the last three learning objectives. The first case study highlights the challenges of waste management in developing countries by paying special attention to some of the recent tragedies that occurred as a result of improper waste management in India and Sri Lanka. The second case study shows how Taiwan, a country once plagued with waste now effectively manages waste. These two cases provide polar examples of unsustainable and sustainable waste management. While discussing the questions, the chapter aims to highlight the role of social work as a mechanism to establish and sustain a sustainable waste management system. For readers who are not familiar with waste management, the author recommends reading the references

provided in the chapter and viewing the five minute video: “[Don't Waste Your Waste](#)”, that explains the basics of sustainable waste management in animated form, produced for the Östergötland County Council in Sweden, for the "Waste To Energy" EU project.⁹

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