

[https://doi.org/10.52326/jss.utm.2024.7\(4\).12](https://doi.org/10.52326/jss.utm.2024.7(4).12)  
UDC [305+628.4:005]:352(680)



## GENDER AND SOLID WASTE MANAGEMENT IN SOUTH AFRICAN LOCAL GOVERNMENT: A REFLECTIVE ANALYSIS OF POLICY AND LEGISLATION

Nqobile Sikhosana \*, ORCID: 0000-0001-8106-8709

University of Johannesburg, School of Public Management, Governance and Public Policy, Johannesburg, 2006, South Africa

\* Corresponding author: Nqobile Sikhosana, [nsikhosana2012@gmail.com](mailto:nsikhosana2012@gmail.com)

Received: 12. 01. 2024

Accepted: 12. 28. 2024

**Abstract.** This article examines the extent to which gender dimensions have been entrenched within solid waste management in the South African local government context. The main rationale for the study is that solid waste management policies, legislation and regulations have been crafted in a way that emphasises technical trash disposal, with little or no consideration devoted to the social and economic aspects in households. The findings of a comprehensive examination into how gender influences solid waste management and the relevance of this in tackling service delivery are discussed in this paper. The paper and its supporting research are informed by an ecofeminist approach that claims that gender equality is required for effective management of the environment. Using a qualitative literature review as the basis for research method, findings reveal that numerous policies and regulations exist. The concept of gender remains at the periphery of solid waste management and has not been fully incorporated into policy design. The study recommends a revision of such frameworks to ensure that gender specifics are detailed and guide local governments in mainstreaming gender in solid waste management.

**Keywords:** *Solid-waste management, Gender, Local government, Ecofeminism, South Africa.*

**Rezumat.** Articolul examinează măsura în care dimensiunile de gen au fost înrădăcinate în gestionarea deșeurilor solide în contextul administrației locale din Africa de Sud. Rațiunea principală a studiului este că politicile, legislația și reglementările de gestionare a deșeurilor solide au fost elaborate într-un mod care pune accent pe eliminarea gunoierului tehnic, cu puțină sau deloc atenție dedicată aspectelor sociale și economice din gospodăria. Concluziile unei examinări cuprinzătoare a modului în care genul influențează gestionarea deșeurilor solide și relevanța acestora în abordarea furnizării de servicii sunt discutate în această lucrare. Lucrarea și cercetările sale de sprijin sunt bazate pe o abordare eco-feministă care susține că egalitatea de gen este necesară pentru gestionarea eficientă a mediului. Folosind o analiză calitativă a literaturii de specialitate ca bază pentru metoda de cercetare, rezultatele arată că există numeroase politici și reglementări. Conceptul de gen rămâne la periferia gestionării deșeurilor solide și nu a fost pe deplin încorporat în proiectarea politicilor. Studiul recomandă o revizuire a unor astfel de acte legislative pentru a se asigura că particularitățile de gen

sunt detaliate și să ghideze guvernele locale în integrarea perspectivei de gen în gestionarea deșeurilor solide.

**Cuvinte cheie:** *Managementul deșeurilor solide, Gen, Administrație locală, Ecofeminism, Africa de Sud.*

## 1. Introduction

Solid Waste Management (SWM) has become one of the critical issues that have grasped the attention of policy makers and development practitioners across the globe. Open dumping of solid waste has become a predominant practice in developing countries due to cheaper maintenance and operating costs compared to other alternative solid waste disposal practices, [1]. Every year, the globe generates 2.01 billion tonnes of municipal solid garbage, with at least a third of this waste not being treated in an environmentally sound manner [2, p. 3]. Global trash is anticipated to reach 3.40 billion tonnes by 2050, with low- and middle-income countries experiencing the fastest growth. The way trash is managed has an impact on the environment, vulnerable populations' livelihoods and well-being, citizen-government interactions, and community productivity and cleanliness [3]. Improper solid waste management presents numerous challenges especially those related to public health. Evidence points to the reality that inadequate solid waste management can cause outbreaks of diseases like cholera, diarrhoea, and food poisoning, among others. More so, it creates a favourable breeding environment for the biological vectors that spread these diseases, such as insects, rats, and flies [4].

Since the inception of the Sustainable Development Goals (SDGs), environmental sustainability has been a priority on the world's political and academic agenda. The rationale is that ecological sustainability has an impact on agricultural production, peaceful society, water security, energy security, and human health [5]. Urban pressure is a substantial contributor to environmental deterioration. The majority of the world's population now lives in cities, which has led to a growth in urban trash. Increased urban garbage in various compositions is caused by population growth, municipal expansion, economic development, improved living conditions, and changing urban lifestyles. What can be noted is that the waste that is tossed into the environment and endangers the ecosystem significantly. Solid waste management needs to be substantially evaluated from a variety of interwoven legal, environmental, economic, technical, and social angles [6]. In this case, diverse actors operating in various social areas are involved in solid waste management. Despite all the challenges and implications posed by improper solid waste management, little attention has been paid to the reality that garbage generation and its management are not gender neutral, both in theory and practice. In this regard, this article advances the notion that gender relations are a crucial area that must be taken into account when evaluating the effect of social factors on solid waste management [7]. Academics, feminists and public policy experts have expressed the need for frameworks that enable an understanding of gendered effects and the roles that women and men can play to achieve environmental sustainability [8].

The situation in South Africa is not different from other countries in the globe and the African region. The country is claimed to be 20–30 years behind Europe and other developed countries in terms of waste management and the shift away from landfilling to prevention, reuse, recycling, and recovery. South Africa generated 55 million tonnes of general rubbish in 2017, but only 11% of it was recycled from landfills, according to the 2018 State of Trash Report. These trends have been connected to increases in rubbish generation [9]. Efforts by

South African municipal authorities to handle solid waste have been stymied by a number of problems, including a negative public attitude, limited infrastructure, insufficient technology, and a bad maintenance culture [10].

One of the main impediments to effective and efficient solid waste management in the South African local government set-up is lack of consideration of gender dynamics and persistent inequalities [7]. Research has shown that South Africa is one of the most unequal countries in the globe. South Africa is the world's most unequal country with the highest unemployment rate. At the start of 2022, 45.5% of South Africans were without employment, including those who had given up attempts to find work. For African women, the figure was considerably higher, with more than half (53.7%) unemployed [11]. In this case, the majority of women have turned to waste picking as a source of livelihood. The working assumption of this article is that despite research indicating that gender concerns have an impact on waste views, handling, and management, gender perspectives are rarely considered in waste education policies and initiatives. Women and other disadvantaged groups are consistently underrepresented in decision-making processes for program design and implementation, despite their important role as users and managers of natural resources and waste [12]. The main goal of this article is to explore and analyse the opportunities and obstacles faced by South African women when it comes to environmentally friendly waste management practices. This is imperative because women are culturally familiar waste sources, and they have the ability to champion environmentally friendly practices at local government level. Mapping the gendered characteristics of the management of waste may broaden policy options and promote gender equality in the waste management industry through establishing goals. This can have a ripple effect on other social domains.

## **2. Conceptualisation of Key Terms**

### **2.1. Solid-waste management**

Waste management includes the collection, transportation, treatment, dumping, and regulation of waste materials [13]. The term can alternatively be defined as the procedure of controlling materials produced by people's actions in order to avoid or minimize their negative influence on human well-being and the natural environment [14]. The waste hierarchy's key components are succinctly stated as follows: (a) Waste Prevention: garbage prevention measures include reducing packaging and recycling items and materials. (b) Recycling and composting entails gathering, reprocessing, and recuperating waste materials to create new ones. (c) Disposal. These procedures are used to deal with garbage that cannot be avoided or reused. Modern technology allows for the production of energy by extracting methane from correctly constructed landfills [15].

Evidence points to the reality that municipal solid waste is defined in the framework of local governance as garbage collected by the municipality from households, places of employment, small enterprises, and commercial entities [16].

Municipal solid waste is classified and classified differently in different municipalities around the globe, although it typically includes materials composed of organic and inorganic components. It can be pointed that plastic and paper, rubber products, metals, glassware, electronic waste, inert materials, and other rubbish are all examples of solid garbage [16, p. 1468]. The handling of municipal solid waste has long been a source of conflict municipalities and residents in South Africa.

## 2.2. Gender Roles

The concept of gender roles has captured the attention of feminists and policy makers over the last few decades. Gender roles are shaped by individual, social, and cultural standards, as well as attitudes and views concerning gender. Such roles are formed by connections between individuals and their settings, providing clues on appropriate behaviour for each gender. Gender roles are defined by societal assumptions about sex differences [17]. A synthesis of how gender roles have been conceptualised shows that these roles are the positions that men and women are supposed to have based on their sexual orientation. It is important to stress that this conceptualisation of gender roles has faced some criticisms. Literature has shown that scholarship on gender roles largely relies on a sex-binary understanding of gender, failing to account for the range of identities associated with gender [17]. This is because the restricted perspective contradicts the concept of a gender spectrum that extends beyond the traditional female-male dichotomy. It excludes many people who live outside of this norm.

## 3. Theoretical Framing

The discussion on the nexus between gender and solid waste management is grounded on the tenets of ecofeminism. The theory of ecofeminism is a subset of feminism that considers environmental issues and the connection between women and the ecosystem to be central to its principles and application [18]. The concept of gender has been used to examine how individuals and groups interact with the natural environment. One of the earliest proponents of ecofeminism Françoise d'Eaubonne, is credited for the development of the theory in her book *Le Féminisme ou la Mort*. At the crux of the ecofeminist theory is the proposition that a feminist ecological perspective does not position women in a prominent position of power, but rather calls for an inclusive, participatory culture in which no one grouping has a powerful position. In line with this view, there is evidence that ecofeminism is an ideology that opposes patriarchal assumptions and asserts that women and environment have a strong bond and are inextricably linked [19]. The theory was born when environmental consciousness and feminist consciousness collided. Foster documents that d'Eaubonne claimed, as did many ecofeminists after her, that women, the feminine, and even feminism were critical to reverse environmental deterioration tendencies [20].

Early accounts of the ecofeminist movement document the difference between cultural and social ecofeminism. The former put more emphasis on the historical, biological and experiential links connection women and the environment, with male dominance and authority causing their mutual subjugation [21]. It is prudent to note that cultural ecofeminism was later dogged by criticism from other feminist as the majority of them scoffed at the apparent essentialism implicit in claims for women's special connection with nature based on biologically determined and embodied experiences. Social ecofeminists on the other end of the spectrum, generally concentrated on the social and political ramifications of ecofeminism as opposed to the individual and spiritual, although the political/spiritual binary was denounced by many who discarded both the claim that women are closer to nature and biologically deterministic accounts of maleness and sex relations [22]. Instead, they focused on the emergence of dominant culture and its relationship to nature as the product of patriarchal logic represented in the duality of nature and reason.

In the context of gender and waste management, ecofeminism provides some imperative and innovative ideology that can be used to champion the interests of the

previously disadvantaged women because the theory examines the link between women and nature without allowing one to dominate. Women are thought to be more attuned to nature than men, to have higher skills and understanding about nature, and to have strong ecological consciousness [23, 24]. Women are also seen as capable of being leaders in dealing with environmental issues, such as ecologically responsible garbage management. This is grounded on the feminist view that women are also more capable of implementing an ecological revolution to address numerous environmental issues through the communities they build. Thus, ecofeminism provides a philosophical orientation that can be used to encourage women to take an active role in environmental management activities such as solid waste management in order to reap economic benefits without damaging the environment.

#### **4. Mapping the gender and waste management nexus: Evidence from practice**

Gender issues in trash management have gained prominence in recent years, indicating that garbage generation and treatment are not gender neutral. The United Nations Environment Programme points out the reality that gender inequality, duties, and roles significantly impact waste management in various social and economic systems [8]. This emphasises that there is a symbiotic relationship between gender and waste management. Stereotypical gender roles in the waste management sector in many countries in the African continent stem from societal attitudes towards men and women. Gender inequities and norms are prevalent in waste management across the value chain, reflecting existing socioeconomic patterns [8].

Although the waste management practices of each country are connected to broader gender relations and policies, the sector's portrayal in terms of gender is shaped by specific actors and assumptions. In the informal waste economy, research demonstrates that women are often restricted to lower-income tasks such as waste picking, sweeping, and waste separation, while men are able to assume positions of higher authority, such as buying and reselling recyclables [25, 26]. When informal or voluntary waste-related activities are formalized and compensation is provided, men often take on these roles, thus displacing women [8]. In the formal waste economy, women are typically excluded from higher-income positions, decision-making roles, and policymaking positions [27], indicating that gender norms and opportunities significantly influence people's choices for their livelihoods within this sector [26].

Studies have indicated that resource recycling behaviours are influenced by gender factors [29], [29]. It has been observed that a higher proportion of females engage in pro-environmental activities related to resource recycling and waste sorting, as compared to males [29]. Several investigations conducted among elementary school students in China have revealed that girls exhibit superior environmental behaviours compared to boys. Women are more inclined than men to participate in green consumption activities [30]. Similarly, some scholars have identified that women display greater willingness to recycle resources such as glass and plastic [31]. While certain studies have reported no significant association between gender and resource recycling, it is imperative to explore the impact of gender on waste recycling behaviours. A closer scrutiny in many countries in the Sub-Saharan region demonstrates that, regardless of evidence that women play a leading role in household and community waste management, the upper-level administrative positions are held by men. The main consequences of this are the less considerations of a gender dimension in crafting

local government legislation and regulations. In such situation women are likely to be involved in informal waste-related household or community activities without and compensation.

Waste management responsibilities, in general, stem from the societal creation of roles, [32]. Many communities' societal norms assign waste management responsibilities to women in both residential and public spaces. Drawing from the Ghanaian experience, evidence demonstrates that in traditional societies, women were largely responsible for all reproductive chores such as cleaning, cooking, childcare, laundry, and SWM [33]. Women handle waste at home in various cultures (e.g., Tanzania, Zambia, Nigeria, India, Vietnam, the Philippines, Mongolia, Nepal, and Indonesia), though more affluent women delegate this chore to domestic workers [34]. Because of conventional gender roles, women's day-to-day efforts to maintain a household are inextricably linked to their surroundings. This integration has resulted in women having insights into their local environment that are often disregarded when executing clean-up programs or regulations, implying that a key element of the problem is being overlooked [35]. Governmental organizations frequently simplify local power dynamics and gender norms, and their environmental initiatives are generally focused on problems relating to males and their wealth [36]. As a result, women are often excluded from decision-making, policy, and the implementation of clean-up programs [35]. When such a critical component is overlooked, the odds of success are greatly lowered, resulting in gender blind policies, legislation and interventions from both governmental and non-profit organizations [35].

Feminist scholarship emphasizes the need for frameworks that consider gendered effects and the responsibilities of men and women in achieving environmental sustainability [8]. In poor nations, waste management practices often prioritize technical components above socioeconomic factors like gender relations. A number of research investigations have shown that waste management is gendered, independent of the theoretical method used. In certain situations, women's understanding of local ecological conditions has yielded far superior outcomes to state garbage management initiatives, opening up novel opportunities in combating against harmful garbage disposal techniques [37, 35]. Women are able to blend components derived from conventional belief systems and knowledge into alternatives in ways that individuals without comparable lived experiences do not, demonstrating that women's indigenous expertise is a treasure that ought to be leveraged in the fight for greater environmental sustainability [35]. Women's engagement is crucial for achieving sustainable development in local communities [38].

## 5. Research Methods

An assessment of the incorporation of gender dynamics in solid waste management policies and legislation in South Africa was achieved through the adoption of a qualitative research method to conduct a literature analysis. Qualitative literature analysis, a type of literature review, involves analysing and synthesizing qualitative research to identify and evaluate relevant information on a specific phenomenon [39]. The main focus of this review is to extract and compare key themes, patterns and findings from the relevant literature. The primary objective of this paper is to gain a deeper understanding of the extent to which gender norms, dimensions and priorities have been integrated into solid waste management policies, legislations and regulations in the context of local government in South Africa. The process of conducting literature analysis in this study involved the following steps:

- Identifying relevant literature through searches of databases, journals and other sources that explore the relationship between gender and waste management in a local government set-up,
- Evaluating the quality and relevance of literature,
- Extracting and comparing key themes, patterns and findings from the literature.
- Synthesis of the literature into a coherent narrative or argument.

Based on the processes above, the study utilised relevant solid waste management documents and legislation. Search words included 'gender', 'waste management', and 'local government'. Findings were also buttressed through the analysis of other relevant publications that specifically explore the nexus between gender and solid waste management in the municipal context. In this regard, relevant publications related to the primary themes of the article were collected from literature databases such as Emerald Insight Journals, Google Scholar, IBSS, and Scopus among many others. All the chosen material was screened using the title, abstract, and full text.

An analytical review was conducted to compare integrated environmental management policies with sector-specific policies related to SWM. As such, the author began by conducting a thorough search of existing solid waste management policy documents in South Africa that were publicly available. Following recovery, the researcher evaluated the documents discovered in order to assess their significance. The policy materials on solid waste management at the national level, as well as in the municipal context were included. Following that, the researcher went over each of the materials picked. A total of six policy documents governing solid waste management at the national level and in the local government sector were discovered and reviewed. After reviewing appropriate legislation papers, the researcher retrieved and/or synthesized gender-related data. The gathered information and important aspects of policy texts were compiled.

**Document Analysis.** The gathered data passed through qualitative interpretation synthesis. The data was analysed and synthesized based on the following questions: i) Did the policy or legislation consider gender in solid waste management? ii) How did the policy or legislation texts treat gender in solid waste management? and, iii) To what extent have policy and legislative frameworks addressed gender norms and priorities in solid waste management? At every stage of assessment, appropriate information was identified and summarized. In order to give a concise description of the analytical findings, significant excerpts from policy documents were included in the synthesis.

## **6. A gendered policy landscape of waste management in South Africa**

A number of statutory instruments have been put in place to regulate waste management in the South African local government context. The national regulatory frameworks are largely grounded on numerous international statutes such as the SDGs, Convention on the Elimination of All Forms of Discrimination Against Women (1979), 2nd World Conference on Women Copenhagen -"Property and Ownership"(1980), 4th World Conference on Women -Beijing "asserted women's rights as human rights"(1995) and New UN Entity for Gender Equality and the Empowerment of Women –or UN Women (2010) among many others. Municipalities across South Africa have drawn all their initiatives from various statutory instruments that seek to advance the interests of women and their involvement in solid waste management. This sub-section therefore provides a reflective analysis of the extent to which a gender dimension has been considered in the regulatory frameworks. Like

in many countries in the Global North, the position of waste within social and economic systems in South Africa is influenced by pre-existing gender inequalities, responsibilities, and roles. This influence is to be expected, as social and institutional structures are shaped by gender norms and other social constraints. It would be illogical to assume that the waste sector exists in isolation from the gender attitudes and perspectives that shape all other socially constructed activities and economic sectors [8].

### **6.1. The Constitution of the South African Republic (108 of 1996)**

The South African Constitution is the highest law in the country. The provisions for gender inclusion in waste management is provided by Section 24 of the Constitution's Bill of Rights which asserts that every person has the right to an environment that does not pose a threat to their health or well-being and that the environment should be safeguarded for future generations through fair and reasonable laws and regulations. Although there is no specific mention of the involvement of women and other socially disadvantaged groups in specific solid waste management practices and initiatives, the Constitution outlines three main objectives where every individual is granted the right to play a role in preventing pollution and ecological degradation, encourage conservation and ensure the sustainable use of natural resources, while also promoting economic and social progress.

### **6.2. National Development Plan (Vision 2030)**

The National Development Plan (NDP) outlines the nation's strategic vision, with the primary goal of reducing income disparities and poverty in South Africa by 2030 through job creation, spatial change, infrastructural improvement, and a sustainable environment [40]. The NDP expressly emphasizes the importance of focusing on gender equality, young people, and individuals living with disabilities as intersecting problems that affect all of its main goals. It presents a waste management strategy that involves investments in consumer education, green product design, recycling infrastructure, and waste-to-energy initiatives, resulting in considerable progress toward a zero-waste society. The NDP is not very clear about the consideration of a gender dimension in waste management practices even though there is an acknowledgement that gender remains a cross-cutting issues which is imperative in environmental sustainability. This entails that explicit inclusion of gender responsive goals and aims is not entrenched within the objectives of the NDP. In line with this Smout opines that in line with environmental sustainability, the gender factors are not included in South Africa's guiding principles for attaining a low carbon economy and long-term sustainability [41].

### **6.3. The National Waste Management Strategy (2020)**

The National Waste Management Strategy, 2020 (NWMS) acknowledges that municipalities still prefer a waste management approach that involves collecting and disposing of waste. The NWMS advocates for the waste management hierarchy and circular economy as fundamental principles for waste management. It also focuses on promoting socio-economic development that is fair, inclusive, sustainable, and environmentally friendly. The strategy aims to address the involvement of vulnerable groups in the informal waste economy and to provide support and resources to women, youth, and people with disabilities in the circular economy. What can also be pointed out is that the NWMS is also geared towards addressing the skills gap in the sector, with specific focus on women, young people and the individuals living with disabilities. In this case, gender is taken into account in various performance measures for essential activities [42]. For instance, one important strategy



within the waste reduction component is to reduce the generation of waste by means of environmentally friendly manufacturing, industrial synergy, and increased producer accountability. NCPG-SA2 aims to give more education and technical assistance to women, youth, and individuals with disabilities. Another intervention aims to enhance waste beneficiation through technical innovation and capacity. This intervention's measures of success focus on increasing the proportion of waste management graduates for women, youth, and individuals with disabilities. The policy statement aims to have 120 new graduates and 20 waste management experts in the public sector, with a focus on women, youth, and individuals with disabilities. Performance metrics for other interventions include funding and employment creation, with a focus on women, adolescents, and those with disabilities [43].

#### **6.4. National Environmental Management: Waste Act (59 of 2008)**

This Act contains a number of waste management standards which include the life-cycle method, manufacturer responsibilities, preventative principle, and polluter pays principle. Equal accessibility to environmental resources, benefits, and goods is required in order to satisfy fundamental human requirements and guarantee the well-being of people. More so, the Act lacks provisions for women and young people to play an important role in environmental management and development, and that their full involvement in these activities should be encouraged. A closer scrutiny of the Act, in relation to gender responsive aims, reveals that the Waste Act has explicit provisions gender dimensions in areas such as waste service standards, institutional and planning matters, and reporting on the implementation of the waste management plans.

#### **6.5. National Domestic Waste Collection Standards (GN 21 of 2011)**

This framework provides the standards that relate to the collection of general waste. What can be noted is that the standards seek to differentiate between garbage collection service levels while highlighting the importance of providing equal garbage pickup services to all houses under the Municipality's jurisdiction [44]. The standards contain essential principles of equity, resource availability and access, and community participation in the design of appropriate garbage collection systems. Whilst these are important aspects in waste management, a closer scrutiny of the domestic waste collection standards points to the reality that they are gender blind as there is no specific role women can play in domestic waste management. This is despite the fact that women can be social capital in the community and have the ability to move the community by actively participating in trash management initiatives [38].

#### **6.6. Model By-Law on Waste Management (2011)**

Each and every municipality is guided by the municipal by-laws that govern waste management. In South Africa, a model by-law for waste management exists. The main objective is to ensure the implementation of section 24 of the Constitution which regulates waste management within a municipality's area of jurisdiction. The municipal by-laws are also meant to establish administrative frameworks that allow the municipality to administer and regulate waste management activities in accordance with the existing laws. The model by-law on waste management clearly outlines that municipalities must ensure that waste is minimised, reused and disposed of in an environmentally sound manner. Whilst the model by-law enforces the "*participation of all municipal residents*" in the promotion of sound waste

management in residential areas, gender is not explicitly specified as one of the guiding principles.

**Case Study: Western Cape Integrated Waste Management Plan (2023-2027).** The Western Cape Government can be regarded as a beacon of infusing gender dimensions in the municipal legislation. Whilst evidence points to various challenges related to entrenching gender dimensions in policy and statutory regulation, the Western Cape Government has made giant strides in this context. One of the cross-cutting issues that have been prioritised in the Western Cape Integrated Waste Management Plan (2023-2027) is the consideration of gender and human rights. In order to advance this objective, a gender gap assessment was undertaken to understand the differences between women and men with regard to their perceptions about waste management, behaviours, needs and preferences. As a result, recommendations were made to inform the current Integrated Waste Management Plan (IWMP). Some of these recommendations included enforcing women participation in decision making; strengthening the organisations led by vulnerable groups in the waste sector; ensuring that the IWMP uses the language that is gender sensitive and the consideration of gender roles and needs. More so, the improvement of employment and network opportunities for women; capacity building initiatives to promote women into leadership positions; gender-responsive budgeting; and identifying projects or outcomes that are gender specific form an integral part of the IWMP. What can also be pointed out is that the Western Cape IWMP is largely influenced by the international statutory instruments to infuse gender norms and needs within its IWMP.

## 7. Findings Synthesis

The purpose of the current study was to look into how gender norms, dimensions and needs have been integrated into functioning solid waste management legislation and regulations in the South African context. The article delves into how regulations and policies have been effectively implemented and enforced from a gender perspective. The findings demonstrate that local governments are regulated by many national legislations and county-level policies and regulations which govern their environmental and solid waste management practices. Nevertheless, a closer scrutiny shows that many current laws and regulations usually lack elements addressing gender problems, which are crucial for successful and sustained solid waste management. This is particularly true given the distinct roles that men, women play in the solid waste management process. Out of 7 policy papers reviewed in this article, only two explicitly address gender issues related to solid waste management. However, the gender issues raised in these policy documents have not been integrated into subsequent regulations and frameworks. In this case, there is no evidence of these components of the policy being implemented on the ground, likely due to a lack of effective policy implementation culture.

The bulk of analysed texts lacked specified policy requirements. Policy writings, on the other hand, typically include wide and broad knowledge. International organizations, protocols, and conventions underline the importance of incorporating gender and life-course policies into environmental management frameworks for sustainable solid waste management. South Africa, as a member to many protocols, statutes, and conventions, is expected to prioritize gender in environmental management policies, particularly solid waste management. The necessity for gender specific solid waste management policies, as well as their efficient execution, derives from the reality that garbage management has a

disproportionate impact on the lives of women and children, especially those from developing and transitioning nations. Women are solely responsible for managing household waste, with the support of their children [45], partially because they are home managers and possibly because women are among the most marginalized groups in various civilizations. The same can be stated about the risks linked with SWM outside the house. In a study conducted in Kenya, recommendations provided advance the notion that policymakers must consider the unique issues of solid waste exposure for women, men, and different life stages [46]. This endeavour aims to protect the health and well-being of vulnerable individuals while also promoting a sustainable solid waste management system.

Evidence demonstrates that at the household level, numerous studies reveal the tendency for women to assume responsibility for the performance and upkeep of various activities, including the management of household waste [7]. In many South African communities, this responsibility also falls upon women in public spaces, thereby placing them at the forefront of community cleanliness. Across many societies, there exists a divergence in the perceptions of waste between men and women, which may consequently impact their preferences for waste management services. These findings emphasize the necessity of considering the social and economic dimensions of households when developing waste management systems that provide services, as well as their interplay with the surrounding neighbourhoods and cities in which they are situated. Regrettably, the involvement of women in policymaking and governance, as well as in the planning and decision-making processes, remains limited in the majority of global contexts.

## **8. Conclusion and Recommendations**

The main aim of this article was to assess the extent to which gender norms, dimensions and needs are entrenched within the policies, legislation and regulations that govern solid waste management in the South African local government context. A review of relevant documents that govern solid waste management reveal that gender remains at the periphery because of the limited details and specifics that guide municipalities on gender mainstreaming in legislation and regulation. Without detailed gender related specifications in solid waste management, municipalities face challenges in terms of implanting solid waste management programmes that speak to the different needs of women. In this regard, the establishment and implementation of policies, legislative frameworks and regulations that disaggregate on the basis of gender remains imperative. Analysed policy documents also revealed a lack of consideration of women in formulating, planning and execution of solid waste management policies despite the reality that they have dominated this industry both at household and community levels. This article, therefore, recommends a revision of solid waste management policies and legislation to detail and be specific on gender specifics and how municipalities must enforce such provisions.

**Conflicts of Interest:** The author declares no conflict of interest.

## **References**

1. Fadhullah, W.; Imran, N.I.N.; Ismail, S.N.S.; Jaafar, M.H.; Abdullah, H. Household solid waste management practices and perceptions among residents in the East Coast of Malaysia. *BMC Public Health* 2022, 22 (1), pp. 1-10.
2. Kaza, S.; Yao, L.; C, Bhada-Tata, P.; Van Woerden, F. *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*. Urban Development, World Bank, Washington, SUA, 2018, 180 p. Available online: <http://hdl.handle.net/10986/30317> (accessed on 05 August 2023).

3. Niklasson, E.; Nordell, V. Integrating gender and environmental issues A case study on gender mainstreaming within the organisation of WIEGO and their waste management projects in Brazil. *Global Studies*. 2021. Available online: <https://www.diva-portal.org/smash/get/diva2:1575377/FULLTEXT01.pdf> (accessed on 05 August 2023).
4. Norsa'adah, B.; Salinah, O.; Naing, N.N.; Sarimah, A. Community health survey of residents living near a solid waste open dumpsite in Sabak, Kelantan, Malaysia. *International Journal of Environmental Research and Public Health* 2020, 17 (1), pp. 1-14.
5. Alhassan, A.; Usman, O.; Ike, G.N.; Sarkodie, S.A. Impact assessment of trade on environmental performance: accounting for the role of government integrity and economic development in 79 countries. *Heliyon* 2020, 6 (9), pp. 1-10.
6. Amoah, J.O.; Britwum, A.O.; Essauw, D.W.; Mensah, J. Solid waste management and gender dynamics: Evidence from rural Ghana. *Research in Globalisation* 2023, 6, pp. 1-8.
7. Poswa, T.T. The Importance of Gender in Waste Management Planning: A Challenge for Solid Waste Managers. Proceedings of the 8th World Congress on Environmental Health, Durban Institute of Technology, South Africa, 22-27 February 2004.
8. United Nations Environment Programme. Global Gender and Environment Outlook, Nairobi: United Nations Environment Programme. 2016. Available online: [https://www.genevaenvironmentnetwork.org/wp-content/uploads/2020/05/gender\\_and\\_environment\\_outlook\\_opt.pdf](https://www.genevaenvironmentnetwork.org/wp-content/uploads/2020/05/gender_and_environment_outlook_opt.pdf) (accessed on 05 February 2024).
9. Godfrey, L.; Oelofse, S. Historical Review of Waste Management and Recycling in South Africa. *Resources* 2017, 6 (57), pp. 1-11.
10. Badoe, C. The challenges of waste management in Ghana: EPA's perspective. 2015. Available online: <https://www.todaygh.com/challenges-waste-management-ghana-epas-perspective/> (accessed on 27 June 2023).
11. Samson, M. Not just recycling the crisis – insights into the production of value from waste reclaimed from a Soweto Garbage Dump. *Historical Materialism* 2017, 25(1), pp. 36-62.
12. Gender and Water Alliance (GWA) and WASTE. No capacity to waste. In: *Training Module Gender and Waste*. GWA, Dieren, The Netherlands, 2010, pp. 1-28.
13. Rasmeni, Z.Z.; Madyira, D. A Review of the Current Municipal Solid Waste Management Practices in Johannesburg City Townships. *Procedia Manufacturing* 2019, 35(1), pp. 1025-1031.
14. Otchere, A. Assessing the Challenges Affecting Solid Waste Management System in the Kumasi Metropolis. *Journal of Arts and Humanities* 2014, 3(2), pp. 50-63.
15. Gumbi, G. Current waste management and minimisation patterns and practices: An exploratory study on the Ekurhuleni Metropolitan Municipality in South, Pretoria: Thesis Submitted in University of South Africa. Available online: <https://core.ac.uk/download/pdf/43177698.pdf> (accessed on 5 June 2023).
16. Nanda, S.; Berruti, F. Thermochemical conversion of plastic waste to fuels: a review. *Environmental Chemistry Letters* 2020, 19, pp. 123–148.
17. Eisend, M. Gender Roles. *Journal of Advertising* 2019, 48(1), pp. 72–80.
18. Zein, L.F.; Setiawan, A. R. General overview of ecofeminism, *L1\*ARS*. 2017, Available online: [https://www.govtwomenscollegeslm8.org/e\\_content/English/II%20M.A.%20ENGLISH/LITERARY%20CRITICISM/UNIT%20-1%20GeneralOverviewofEcofeminism.pdf](https://www.govtwomenscollegeslm8.org/e_content/English/II%20M.A.%20ENGLISH/LITERARY%20CRITICISM/UNIT%20-1%20GeneralOverviewofEcofeminism.pdf) (accessed on 27 July 2024).
19. Vijayaraj, B. A Comprehensive Study of Ecofeminism. *The Anthropologist* 2017, 30 (1), pp. 68-75.
20. Foster, E. Ecofeminism revisited: critical insights on contemporary environmental governance. *Feminist Theory* 2021, 22(2), pp. 190-205.
21. Phillips, M. E. Reconnecting with nature: an ecofeminist view of environmental management. *Geographical Research* 2020, 58(2), pp. 154-166.
22. Plumwood, V. Feminism and Ecofeminism: Beyond the Dualistic Assumptions of Women, Men and Nature. *The Ecologist* 1992, 22 (1), pp. 8-13.
23. Asnani, B. Eco-Feminism. Women as environment conservationist. In: *Agricultural science: Research and reviews*. Manjrankar, V., Mishra, S., Kumari, V., Barate, D.L., Eds.; Bhumi Publishing, Kolhapur, India, 2021, pp. 109-120.
24. Mago, P.; Gunwal I. Role of women in environment conservation. *SSRN Electronic Journal* 2019. Available online: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3581051](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3581051) (accessed on 7 April 2024).
25. Dias, S.M.; Fernandez, L. Waste Pickers: A Gendered Perspective. In: *Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability*. Cela, B., Dankelman, I., Stern, J.; Eds.; United Nations Development Programme (UNDP), New York, SUA, 2012, pp. 153–155.

26. Dias, S.M.; Ogando, A.C. Rethinking gender and waste: exploratory findings from participatory action research in Brazil. *Work Organisation, Labour & Globalisation* 2015, 9(2), pp. 51–63.
27. Nzeadibe, T.C.; Adama, O. Ingrained inequalities? Deconstructing gendered spaces in the informal waste economy of Nigerian cities. *Urban Forum* 2015, 26(2), pp. 113–130.
28. Hand, C. Biology and being green: the effect of prenatal testosterone exposure on pro-environmental consumption behaviour. *Journal of Business Research* 2020, 120, pp. 619-626.
29. Lopez-Bonilla, J.M.; Reyes-Rodriguez, M.D.C.; Lopez-Bonilla, L.M. Interactions and relationships between personal factors in Pro-Environmental golf tourist behaviour: a gender analysis. *Sustainability* 2020, 12 (1), pp. 332.
30. Dietz, T.; Stern, P.C.; Guagnano, G.A. Social structural and social psychological bases of environmental concern. *Environment and Behaviour* 1998, 30(4), pp. 450-471.
31. Abdullah, R.A.; Sadq, Z.M.; Othman, B.; Faeq, D.T. Recycling efficiency and waste minimization through students' behaviour on the university of Leicester campus. *International Journal of Psychosocial Rehabilitation* 2019, 23 (2), pp. 671-688.
32. Chikowore, N. Factors influencing household waste management practices in Zimbabwe. *Journal of Mater Cycles Waste Management* 2021, 23, pp. 386–393.
33. Awumbila, M. Women & Gender Equality in Ghana: A Situational Analysis. In: *Gender Training in Ghana–Politics, Issues & Tools*. Tsikata, D., Ed.; Woeli Publishing Services, Accra, Ghana, 2002, pp. 33-59.
34. Seager, J.; Rucevska, I.; Schoolmeester, T. Gender in the modernisation of waste management: key lessons from fieldwork in Bhutan, Mongolia, and Nepal. *Gender & Development* 2020, 28 (3), pp. 551-569.
35. Dalal, A. What does it take to clean the Ganga? Gendered dimensions of protest and policy perspectives. *Indian journal of gender studies* 2020, 27, pp. 183-204.
36. Hanson, A.M.S. Women's ecological oral histories of recycling and development in coastal Yucatán. Gender, place and culture. *A Journal of Feminist Geography* 2016, 23. pp. 467-483.
37. Bonatti, V. Mobilizing around Motherhood: Successes and Challenges for Women Protesting against Toxic Waste in Campania, Italy. *Capitalism, nature, socialism* 2015, 26, pp. 158- 175.
38. Asteria, D.; Haryanto, J.T. Empowerment key factors in shaping women's awareness of household waste management. *Global Journal of Environmental Science Management* 2021, 7(3), pp. 317-330.
39. Adhabi, E.A.R.; Anozie, C.B. Literature Review for the Type of Interview in Qualitative Research. *International Journal of Education* 2017, 9(3), pp. 86-97.
40. National Planning Commission. National Development Plan-2030. 2012. Available online: <https://www.nationalplanningcommission.org.za/assets/Documents/ndp-2030-our-future-make-it-work.pdf> (accessed on 07 June 2024).
41. Smout, J.A Gendered Lens: Mainstreaming Gender into South Africa's Climate Change Response, Johannesburg. The African Climate Reality Project, South African Institute of International Affairs, and South Durban Community Environmental Alliance, 2020, 82 p.
42. Dixon, N.M.; Skarjune, S.; Mason, R.; Karasik, R.; Virdin, J. Initial Assessment of Gender Considerations in Plastics Policy. Nicholas Institute for Energy, Environment & Sustainability, Durham, Duke University, 2023, pp. 1-18.
43. Forestry, Fisheries and the Environment. National Waste Management Strategy. Cape Town: Republic of South Africa. 2020. Available online: [https://nicholasinstitute.duke.edu/sites/default/files/plasticpolicies/8019\\_N\\_2020\\_National\\_Waste\\_Management\\_Strategy.pdf](https://nicholasinstitute.duke.edu/sites/default/files/plasticpolicies/8019_N_2020_National_Waste_Management_Strategy.pdf) (accessed on 15 June 2024).
44. South African Government. National Environmental Management: Waste Act: National Domestic Waste Collection Standards. 2011. Available online: <https://www.gov.za/documents/national-environmental-management-waste-act-national-domestic-waste-collection-standards-0> (accessed on 11 April 2024).
45. Dutta, J.; Kerketta, A.; Choudhury, M.; Ranga, M.M. Women Warriors of Waste Management. In: *Handbook of Solid Waste Management*; Baskar, C., Ramakrishna, S., Baskar, S., Sharma, R., Chinnappan, A., Sehrawat, R. Eds; Springer, Singapore. 2021, pp 2281–2303.
46. Amugsi, D.A.; Mwangi, J.N.; Haregu, T.N.; Aboderin, I.; Muindi, K.; Mberu, B.U. Solid Waste Management Policies in Urban Africa: Gender and Life-course Considerations in Nairobi and Mombasa. *Urban Africa Risk Knowledge* 2016, 14, pp. 1-26.

**Citation:** Sikhosana, N. Gender and solid waste management in south African local government: a reflective analysis of policy and legislation. *Journal of Social Sciences* 2024, 7 (4), pp. 154-167. [https://doi.org/10.52326/jss.utm.2024.7\(4\).12](https://doi.org/10.52326/jss.utm.2024.7(4).12).

**Publisher's Note:** JSS stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:**© 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Submission of manuscripts:**

[jes@meridian.utm.md](mailto:jes@meridian.utm.md)