

# The Role of Indigenous Taboos in Rural Solid Waste Management in the Dispensation of Sustainability: A Case of Bushbuckridge Local Municipality Communities

Benett Siyabonga Madonsela<sup>1</sup> and Khomotso Semenya<sup>2</sup>

**Keywords**—Taboos, Waste Management, Indigenous Knowledge, Indigenous Waste Management Methods.

**Abstract**— Indigenous communities have long utilized their traditional knowledge systems to enhance their quality of life. For instance, in the absence of formal solid waste management services from the local government, rural communities resort to indigenous philosophies to manage waste. Among the fundamental indigenous philosophies that regulate behaviour, ethics, and relationships with the environment in indigenous communities are social taboos. While the role of taboos in areas such as agriculture and water quality management is well documented, their application to solid waste management remains largely unexplored. This gap is particularly evident given the limited literature documenting the role of social taboos in the discipline of solid waste management. Thus, in response to this viewpoint, the current study aimed to investigate the role of indigenous taboos in the solid waste management practices of rural communities in Bushbuckridge Local Municipality (BLM). To achieve the aim of this study, purposive sampling was combined with ethnographic research methods. To achieve the aim of this study, purposive sampling coupled with ethnographic research methods was utilized. The results revealed that across the communities' social taboos are underutilized in Bushbuckridge's current waste management practices. The social taboos proved to be of no significance in the sustainability frameworks. The finding that taboos are underutilised suggests that, despite being previously culturally significant, they do not currently play a strong role in shaping solid waste management practices in Bushbuckridge Local Municipality. This spells a paradigm shifts in the indigenous knowledge systems that govern indigenous environmental management. There seems to be an emerging culture that disregards social taboos as a means of ensuring environmental sustainability in the indigenous communities of BLM. The declining role of taboos suggests that traditional knowledge systems are losing their regulatory influence over environmental practices. This trend may reflect broader cultural transformations, including the modernisation and urbanisation of rural communities.

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Benett Siyabonga Madonsela<sup>1</sup>, Cape Peninsula University of Technology, corner of Hanover and Tennant Street, Zonnebloem, Cape Town 8000, South Africa

Khomotso Semenya<sup>2</sup>, Leeto-La-Africa Community Engagement Scholarship Project (CU\_1600), Department of Environmental Sciences, College of Agriculture and Environmental Sciences, Florida Park Science Campus, University of South Africa, Private bag X392, Florida 1710, South Africa

## I. INTRODUCTION

Indigenous communities have, since time immemorial, relied on their knowledge systems to navigate through a symbiotic relationship with the natural environment to sustain their livelihoods. These knowledge systems, rooted in collective wisdom, spirituality, and cultural practice, have for centuries provided the basis for environmental consciousness within indigenous communities [1,2]. That is, in the absence of modern technological infrastructure, indigenous philosophies offered coherent systems of regulation and moral conduct, shaping how communities interacted with their environment. Among the most significant of these philosophies are social taboos, which serve as informal yet powerful mechanisms for environmental governance [3]. Social taboos, as integral aspects of Indigenous Knowledge (IK), have historically regulated human behaviour through unwritten codes that prohibit certain actions deemed harmful to the community or the environment. These taboos in contrasts to the Eurocentric beliefs are not just merely superstitious prohibitions, but deeply ethical systems embedded within a cosmology that recognizes the interconnectedness between humans and nature [4]. In this regard, taboos forms part of a broader indigenous environmental ethics that safeguarded forests, rivers, and land resources, ensuring ecological balance and sustainability [5,6]. For instance, taboos against dumping waste near water bodies or sacred sites indirectly served as mechanisms of environmental preservation, reflecting an intuitive understanding of sustainability long before the formalisation of environmental science and sustainability [7,8]

However, with the advent of modernity, urbanisation, and globalization, these traditional systems of ecological governance appear to be at risk of being eroded [9]. The socialisation of Eurocentric ideologies and formal governance structures has gradually eroded indigenous knowledge systems that were once a way of life within indigenous communities. Consequently, the moral and social fabric that upheld taboos as instruments of environmental control has weakened, resulting in behavioural changes that threaten environmental integrity. This phenomenon is particularly

evident in rural communities where modernization coexists with tradition, such as those within the BLM.

Bushbuckridge, located in the Mpumalanga Province of South Africa, represents an exemplary village where the modern phenomenon that espouses traditional and modern environmental management systems is visibly contested. While the municipality continues to face challenges associated with inadequate waste collection services and indiscriminate dumping, the traditional taboos that once guided waste disposal practices are becoming increasingly obsolete [10]. Historically, the indigenous communities of Bushbuckridge viewed life through taboos that encompassed waste handling and disposal restrictions that ensured harmony between human settlements and the environment. Yet, as modernisation accelerates, these taboos are losing their influence, giving rise to unsustainable waste management practices that compromise environmental and public health [11]. It is against this background that the current study sought to investigate the role of indigenous taboos in rural solid waste management within the Bushbuckridge Local Municipality. The study intended to establish whether and to what extent taboos continue to influence contemporary waste management practices. In doing so, the research aims to bridge the existing gap in the literature that has largely overlooked the relationship between social taboos and solid waste management, a domain often dominated by Western scientific paradigms and technical solutions. Understanding the diminishing role of indigenous taboos is critical, not only for appreciating the cultural transformation within rural communities but also for re-evaluating the potential integration of Indigenous Knowledge Systems into modern sustainability frameworks. This study, therefore, positions itself within a discourse that acknowledges the value of traditional environmental governance while questioning its relevance and application in the contemporary dispensation of sustainability.

## II. METHODS

### A. Study area

The present study was conducted under the jurisdiction of Bushbuckridge Local Municipality. The rural villages in Bushbuckridge Local Municipality are under tribal authorities, given that they live on tribal land. The municipality is made up of two former apartheid homeland governments, Lebowa and Gazankulu, which were historically divided according to ethnic groups. The premise is that different ethnicities and language groups with diverse cultural backgrounds in BLM may present diverse indigenous knowledge practices of diaper waste management. The selection of the BLM indigenous communities (Figure 1) in the current study is justified by its prominent cultural diversity status.

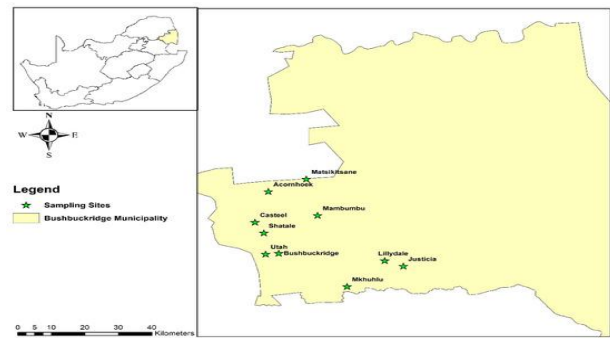


Fig.1: Sampled Indigenous communities of BLM.

### B. Research design

The present study employed a descriptive case study research design to explore the role of indigenous taboos associated with waste management practices in the Indigenous communities of BLM. This approach was selected for its capacity to investigate complex social phenomena within their natural, real-world environment to understand the Indigenous communities' set of socio-cultural factors taboos that influence certain practices of waste management. A detailed publication on this research design and processes has been published elsewhere [7].

### C. Data collection methods

The current study employed focus group discussions with members of Indigenous communities in BLM. This method allowed participants to express their views collectively and engage in dialogue around shared experiences and beliefs related to taboos associated with waste management pathways. Focus group discussions enabled participants to interact on issues of taboos that individual interviews might not have revealed. In addition to FGDs, a structured questionnaire was used as a complementary tool to gather individual-level information on participants' knowledge, attitudes, and practices regarding waste management. The questionnaire provided standardized data that supported the qualitative findings generated through the discussions.

### D. Study population, selection criteria and sampling technique

In the current study, ten community groups were purposively selected to represent case studies within the Bushbuckridge Local Municipality. These included Justicia, Matsikitsane, Shatale, Mambumbu, Lilydale, Bushbuckridge, Mkhuhlu, Acornhoek, Casteel, and Utah. (Figure 1) To this end, Bushbuckridge Local Municipality was used as the gateway to these Indigenous communities by providing the database containing details of all the environmental groups within the jurisdiction of the study area. A detailed publication on this process has been published elsewhere [7].

### E. Data analysis

In this regard, the collected focus group data in the form of audio recording discussions from the community groups were systematically categorised into excerpts. That is, the audio recordings were first transcribed. Subsequently, the data were grouped according to themes. In this regard, the inductive

coding approach was instrumental in realising this process. This helped to discover the themes and patterns of the data as they emerge. The collected data was analysed using IBM SPSS Statistics version 28.0.

#### *F. Validity and Reliability*

To ensure the validity of the content, the focus group questions were developed to align closely with the study's objective, drawing on relevant literature and cultural context. Uniformity in data collection procedures across all focus groups enhanced the reliability of the current study. All sessions were conducted via a standardised discussion guide, and audio recordings were supplemented with comprehensive field notes.

### III. RESULTS AND DISCUSSION

The current study has discovered numerous solid waste management practices which the communities from the Bushbuckridge Local Municipality associate with indigenous knowledge. The practices encompass the extensive activities associated with burning, dumping, backyard pits, composting, sorting and the usage of taboos instruments to facilitate waste management. Across the indigenous communities, the burning practices and backyard pits emerge as the common and convenience methods associated with solid waste management. While in contrasts the waste management practices associated with the taboos practices is not popular in BLM. To this end the study discovered that majority of the communities in BLM knows about taboos in general and their application. For instance, the disposal of diapers in open areas is considered a taboo in BLM. Custodians of Indigenous knowledge have always believed that if diapers are exposed to the sun in open spaces, it could cause illness in the child and make the child vulnerable to witchcraft. This belief reflects a broader cultural understanding of hygiene and child health, embedded within traditional practices. Such taboos serve as informal but effective mechanisms to regulate behaviour, ensuring that waste is managed responsibly and that living environments remain clean. Moreover, another taboo related to solid waste management is the prohibition of sweeping waste at night. In BLM, sweeping waste at night and taking it outside the house is prohibited. Communities uphold this taboo to prevent waste from being carelessly disposed of in inappropriate places, such as in the yard, rather than in designated solid waste disposal sites, such as backyard pits. Sayi [12] corroborates that this taboo encourages individuals to wait until dawn to dispose of waste properly in designated areas. However, in the modern era of globalization, communities indicated that the observance of these taboos has generally declined. It is for this reason, that the rating of taboos in managing solid waste, or their influence on waste management practices, is among the lowest in the Bushbuckridge Local Municipality, as shown in Figure 2.

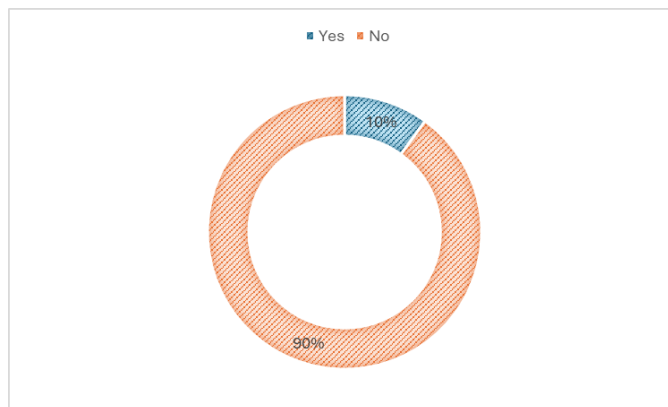


Fig. 2: Rating of the usefulness of taboos in managing solid waste within BLM

According to Figure 2, minority (10%) of the respondents expressed belief in the efficacy of taboos to manage solid waste in BLM, while a whopping (90%) of the respondents have shown no faith in the role of this indigenous instrument to aid in the management of solid waste. There seems to be an emerging culture that disregards social taboos as a means of ensuring environmental sustainability in the indigenous communities of BLM. However, it is important to emphasise that the decline of such taboos has broader implications for Indigenous knowledge and sustainable environmental management. Historically, these taboos served as informal but effective mechanisms to regulate community behaviour, ensuring that waste was managed responsibly, and that environmental hygiene was maintained. They represent a form of traditional knowledge, embedded within cultural beliefs, that guided sustainable practices without the need for formal regulations. It is for this reason that in recent times indiscriminate disposal of diapers have been cited as a concern for indigenous communities [13]. This is evidence that the weakening of these practices has already led to reduced community adherence to proper waste disposal, contributing to environmental degradation and the loss of valuable cultural knowledge. Preserving and integrating these taboos into modern waste management strategies could reinforce responsible environmental behaviour, strengthen community identity, and provide a culturally grounded approach to sustainable waste management in BLM.

### IV. CONCLUSION

The study reveals that while communities in the Bushbuckridge Local Municipality continue to practice various indigenous solid waste management methods the use of taboos as regulatory instruments has significantly declined. Although taboos once played an important role in guiding responsible waste disposal and reinforcing environmental hygiene, only a small fraction of respondents still view them as effective today. There seems to be an emerging culture that disregards social taboos as a means of ensuring environmental sustainability in the indigenous communities of BLM. This decline not only weakens traditional behavioural controls but also contributes to increasing environmental challenges, such as indiscriminate diaper disposal. The findings highlight the

need to support the revival of taboos in the interest of environmental management within the Indigenous communities.

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