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REVIEWED BY
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Midlands State University, Zimbabwe
Rafidah Abd Karim,
MARA University of Technology, Malaysia

*CORRESPONDENCE
Lazarus Chapungu

☑ Ichapungu@gmail.com

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Localization of sustainable development goals among non-teaching staff in higher education: the status quo dynamics at great Zimbabwe university

Isaac Nyambiya¹, Lazarus Chapungu²* and Malebajoa Anicia Maoela²

¹Department of Physics, Geography and Environment Science, Great Zimbabwe University, Masvingo, Zimbabwe, ²Exxaro Chair in Climate and Sustainability Transitions, University of South Africa, Pretoria, South Africa

Introduction: The influence of non-teaching staff on localizing Sustainable Development Goals (SDGs) within universities is underexplored despite its potential significance. This study examines the familiarization with SDGs at Great Zimbabwe University (GZU).

Methods: The triangulation convergence model of the mixed methods research design was adopted as the strategy for inquiry. The study surveyed 70 randomly selected non-teaching staff from diverse departments and key informant interviews were done with purposively selected non-teaching staff. Secondary data sources were obtained from the information department and the university website for additional details on SDG localisation initiatives.

Results: The results indicate that the non-teaching staff members at GZU exhibit a moderate familiarity with SDGs, scoring 42.14%. About 42.86% of the employees had engaged with SDGs documents. Interestingly, respondents perceived the institution as well-prepared for SDGs localization, scoring 62.17%. The overall SDGs localization score is 58.5%, with variations between specific SDGs. In particular, SDG 5 (Gender Equality) scores highest, while SDG 14 (Life below Water) is the least localized. The study identifies several obstacles that hinder non-teaching staff from actively contributing to SDG implementation, such as primarily financial constraints followed by lack of awareness, demotivated employees, insufficient training, and a scarcity of SDG materials. Structural challenges within the institution were also observed.

Discussion: To facilitate the mainstreaming of SDGs issues among non-academic staff activities and initiatives, the study underscores the need for management to play an enabling role and designate focal persons for SDGs to oversee projects' execution. Overall, this research sheds light on the current status of SDGs familiarization in higher learning institutions and offers insights for enhancing the involvement of non-teaching staff in achieving SDG targets.

KEYWORDS

higher education, non-teaching staff, SDGs localization, great Zimbabwe university, sustainable development goals

1 Introduction

Universities globally have been identified as key institutions to successfully implement the SDGs (Adams et al., 2018; Dlouhá et al., 2018; Soini et al., 2018; Kioupi and Voulvoulis, 2020). These higher education institutions (HEIs), by design, are well-positioned to utilize education as a tool to achieve sustainable development, with guidelines formulated since the inception of the Agenda for Sustainable Development (SDSN, 2020). Despite the focus on SDG 4 (Quality Education), little is understood about the direct and indirect contributions of non-teaching staff to the processes within higher learning institutions.

Zimbabwean universities are currently aligning themselves with the new paradigm of Education 5.0, which incorporates innovation and industrialization along with traditional teaching, research, and community engagement (Government of Zimabwe, 2018). Currently, there is a global push, led by the United Nations, for signatory countries to implement the SDGs, seeking comprehensive transformation by 2030 (Spencer, 2021). In Zimbabwe, this aligns with the Vision 2030 policy, embedded in the Transitional Stabilization Plan, National Development Plans, and the overarching Vision 2030, which aims for Upper Middle Income status by 2030 (Government of Zimbabwe, 2020). While Zimbabwe's higher education policy seems to align well with the SDG principles, the addition of innovation and industrialization pillars indicates a dynamic evolution. Higher education institutions are now mandated to generate intellectual property leading to innovations solving societal problems, requiring the active involvement of non-teaching staff. This change is part of a broader effort to move away from an exclusive focus on teaching and blue-sky research, as evidenced by the rebranding of the Ministry of Higher and Tertiary Education to include "science," "innovation," "technology," and "development" (MHTEISTD) since 2018.

Researchers argue that Education 5.0 naturally aligns with sustainability and SDGs through its synergy with business and technology (Alharbi, 2023). This seemingly positions Zimbabwe on a promising development path, as evidenced by the establishment of innovation hubs, industrial parks, and tangible societal contributions from state universities (Government of Zimbabwe, 2020; Cabinet of Zimbabwe, 2023). In particular, during the COVID-19 pandemic, universities actively engaged in manufacturing non-pharmaceutical intervention products, directly addressing SDG 3 (Good Health and Well-being). This initiative has evolved into burgeoning industries post-pandemic, necessitating further capacitation and the establishment of governance structures for sustainability.

Executive-level initiatives, such as creating offices responsible for industrialization and business development, demonstrate a commitment to aligning missions with global development agendas (Great Zimbabwe University, 2021; Harare Institute of Technology, 2021; Chinhoyi University of Technology, 2022). Zimbabwean universities seem to be taking cues from successful institutions in the region, enhancing collaboration, partnerships (SDG 17), and innovation and industrialization (SDG 9) at the highest levels (Nhamo, 2021). A notable event, the GZU-Industry Open Business Forum, underscores the increasing emphasis on collaboration between academia and industry, crucial for financing Education 5.0 and, subsequently, the SDGs (Muzira and Bondai, 2020). However, critics argue against the perceived lack of novelty and inadequate support for academic institutions to incentivize transformative efforts (Keche, 2021).

Universities in Zimbabwe appear to be implementing programs aligned with SDGs and sustainability. However, it is unclear whether these efforts are informed by knowledge of SDGs and a deliberate effort to execute the Agenda for Sustainable Development by non-teaching staff. This paper aims to address three crucial questions: (1) To what extent is non-teaching staff familiar with SDGs? (2) How do non-academic staff perceive the localization of each SDG in the university system? (3) What are the barriers to familiarization and localization of SDGs by non-teaching staff at universities? These questions aim to establish whether SDGs are part of the work ethic and the structure of employees. Without continuous monitoring, there is a risk of assuming progress without ensuring that employees are aware of the existence and the imperative for successful implementation of these crucial tools for national socio-economic development. The success of SDG deployment and execution requires a deliberate, invested approach that is neither ad-hoc nor piecemeal but concerted, methodical, and clearly spells out the intended outcome.

2 Literature review

The symbiotic relationship between the SDGs and the educational system, particularly within universities, is widely recognized as a mutually beneficial relationship (Kestin et al., 2017). Education is acknowledged globally as a crucial sector for achieving the transformation needed to attain SDGs (Didham and Ofei-Manu, 2015). In Zimbabwe, where the leadership has prioritized education as a catalyst for socio-economic transformation since gaining independence in 1980, alignment with the SDGs is a key focus (The World Bank MHTEISTD, 2020). With a literacy rate exceeding 94%, Zimbabwe is well-positioned to disseminate the knowledge associated with the SDGs to its population of about 15.1 million (Garwe and Thondhlana, 2020). Currently, the country has 21 universities, 14 of which are state institutions (Maumbe, 2023) servicing a population of about 15.1 million (ZIMSTAT, 2022).

However, research suggests a potential disconnect between government and implementation partners, such as local authorities, raising questions about the seamless execution of the SDG agenda (Mutambisi and Chavunduka, 2023). Nonetheless, scholarly exploration of Education 5.0 and the university's role in attainment of the SDGs reveals active efforts and infrastructure development, including innovation hubs, indicating progress in certain areas (Simuka and Chinakidzwa, 2022). Studies highlight the active engagement of the higher education sector's active engagement in areas such as climate change education and disaster risk management, indicating a positive momentum (Dzvimbo et al., 2022). However, there are calls for a more prominent role for SDGs in the delivery of content within institutions, underscoring the need to put more emphasis on SDGs since their inception in 2016 (Nhapi and Pinto, 2023).

To intentionally embed SDGs in HEIs, lessons can be drawn from research at UNISA, emphasizing the importance of targeted information packs, a research action plan, and inclusive fora like conferences to articulate implementation issues (Nhamo, 2021). Barriers to successful implementation globally include apathy from leaders in universities and politics, which requires a more serious approach to SDGs (Ávila et al., 2017). Strategic alignment with the organization's vision and mission is crucial to collective transformation through Agenda 2030 (Adams et al., 2018). There has also been an

argument and call for the inclusion of appropriate Indigenous Knowledge Systems (IKS) in the higher education curriculum to help achieve the SDGs. The push for the incorporation of IKS into higher education curricula underscores the need for diverse perspectives (Mapira and Mazambara, 2013). African academics advocate for protecting intellectual property derived from IKS, addressing biopiracy issues, and ensuring that Africa benefits from its heritage (Wynberg, 2023). The Access and Benefits Sharing (ABS) scheme, aligned with the Nagoya Protocol, emerges as a framework that empowers the provider country, especially in the Global South, to support research and achieve the SDGs (Nöske and Zedda, 2020; Knight et al., 2022; Mason et al., 2023).

In Zimbabwe, barriers to achieving Agenda 2030 include limited knowledge and structural inertia within HEIs, reflecting the challenges faced by universities in the United Kingdom (Mhlanga et al., 2022). The economic downturn in Zimbabwe further hampers research and project implementation, with university workers struggling to meet daily needs (Chinyoka and Mutambara, 2020). Economic sanctions restrict grant-supported project funds for government-affiliated state institutions, limiting the leverage of external partnerships in HEIs (Hwami, 2021). The entrepreneurial university model is recognized as a potential solution, providing a cushion against resource scarcity (Kabonga and Zvokuomba, 2021; Masunda et al., 2022). However, the current crisis situation in Zimbabwe sees institutions struggling to sustain operations and externally funded projects (Hwami, 2022). Acknowledging the SDGs as a trillion dollar endeavor, external funding is crucial, but the entrepreneurial university model and active engagement with the SDGs through content delivery remain fundamental to the success of higher education in Zimbabwe (Leal Filho et al., 2019; Nhamo, 2021; Mpofu-hamadziripi et al., 2022; Ndofirepi, 2022). Universities must actively engage with societies to avoid falling behind in this globally significant movement.

2.1 Theoretical framework

The theoretical framework for this study is rooted in an integrative approach, combining elements from Sustainable Development Theory,

Stakeholder Theory, Change Management Theory, Institutional Theory, and the Capability Approach (Figure 1).

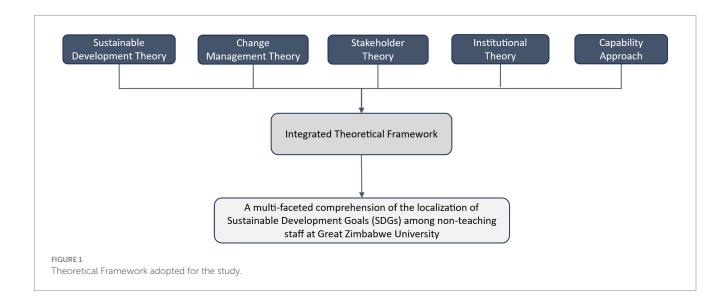
The multi-faceted framework shown in Figure 1 provides a comprehensive lens to examine the localization of Sustainable Development Goals (SDGs) among non-teaching staff at Great Zimbabwe University. The integration of these theories creates a comprehensive theoretical framework for examining the localization of SDGs among non-teaching staff at Great Zimbabwe University. Sustainable Development Theory provides the overarching context, while Stakeholder Theory ensures the inclusion and recognition of non-teaching staff as vital participants. Change Management Theory offers insights into the practical aspects of implementing sustainable changes, and Institutional Theory situates these efforts within the broader institutional and societal context. Finally, the Capability Approach highlights the importance of empowering staff to actively engage in sustainability initiatives.

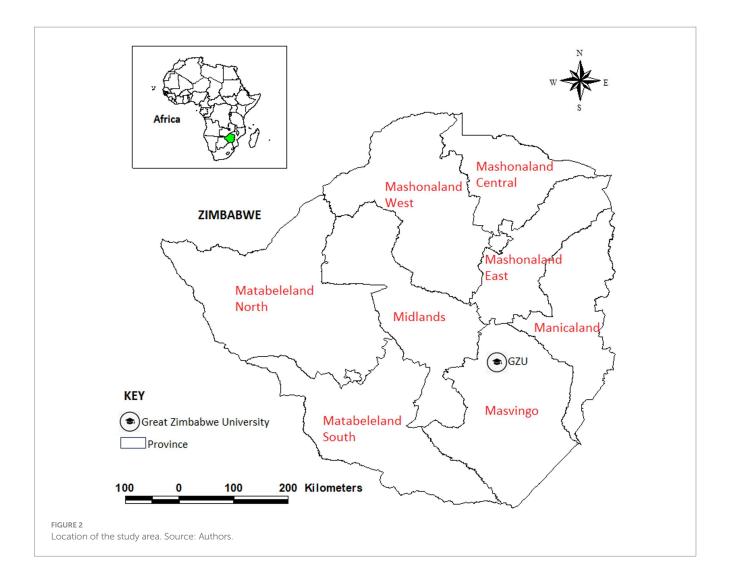
This integrated framework allows for a holistic analysis of the status quo dynamics at Great Zimbabwe University, shedding light on the multifaceted interactions between global sustainability goals, institutional practices, and the roles and capabilities of non-teaching staff. Through this lens, the study aims to provide actionable insights and recommendations for effectively localizing SDGs within higher education institutions.

3 Materials and methods

3.1 Description of study area

The study was carried out at GZU, a state-run university founded in accordance with Great Zimbabwe University Act Chapter 22.24 No.11/2002. Previously known as Masvingo State University, the university was founded as a result of the 1995 Chetsanga report's recommendations, which underlined the necessity for teachers' and technical colleges to be devolved into degree-awarding institutions. The institution was founded in 2000 as a university college of the University of Zimbabwe (GZU, 2023). Figure 2 shows the location of the university.





The institution has seven schools as follows: the Julius Nyerere School of Social Sciences; the School of Natural Sciences; the Robert Mugabe School of Heritage and Education; the Herbert Chitepo School of Law and Business Sciences; the Munhumutapa School of Commerce; the Gary Magadzire School of Agriculture and Engineering; and the Simon Mazorodze School of Medical and Health Sciences.

Based on the H-index (AD Scientific Index, 2023), the university is rated seventh out of the 18 institutions in the nation, with a current student population of 11,175. With the recent establishment of the Center of Excellence in Dryland Agriculture (CEDA), the university collaborates with numerous national and international partners to carry out a research agenda that is in line with the SDGs (Great Zimbabwe University, 2023). This effort is predicted to help communities in the dryland region achieve food security (SDG 2) and increase climate action (SDG 13). The six universities have additional programs that focus on bringing the SDGs closer to the community.

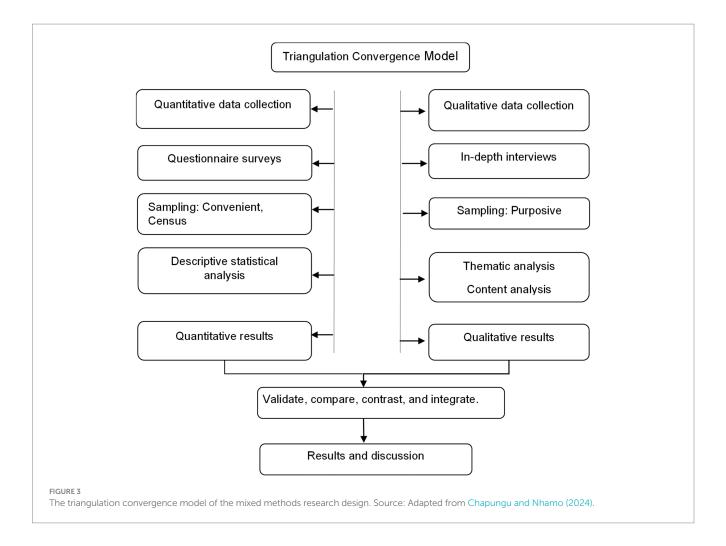
3.2 Research design

The following are the main research questions that this study attempts to answer:

- a. To what extent are non-teaching staff members at GZU familiar with the SDGs?
- b. How much have non-teaching staff members at GZU contributed to the implementation and localization of the SDGs?
- c. What obstacles do non-academic employees encounter when localizing the SDGs? and,
- d. Which obstacles need to be addressed first in order to maximize the SDGs' implementation?

The triangulation and convergence model of the mixed methods research approach's was chosen as the study design in order to address these research questions. The approach, which is presented in Figure 3, employs a range of complimentary data collection and analysis methodologies on the same subject to fully understand the study objectives (Tashakkori and Creswell, 2007).

Prior to data collection, ethical clearances and data collection permission were sought from all relevant institutional gatekeepers. The study's ethical clearance was approved by the ethics committee of the School of Economics and Management Science of University of South Africa under the clearance number: 2021_CRERC_032 (FA). Permission to collect data was obtained from the GZU Vice Chancellor's office.



3.2.1 Questionnaire survey

Data were collected from non-teaching personnel (n = 70) using questionnaires, following the process shown in Figure 2. The questions from multiple verified and peer-reviewed surveys served as the basis for the development of the data collection instrument. It consisted of 52 main and follow-up questions divided into the following sections: Section A comprised of six (6) questions which elicited responses to do with the basic demographic profile of the respondents such as their respective institutions, their positions in your organization, the nature and tenure of their employment, their gender among other variables. Section B had eleven (11) questions which varied in complexity of the answers they required, such as the respondents simply giving a Yes, or No answers. There were four such questions. Other four questions required the participants to respond using an agreement scale of Strongly Agree, Agree, Neutral, Disagree to Strongly Disagree. The question assessing the 'Level of readiness for localization of the SDGs in your institution' was extensive in its nature, as it consisted of 6 sub-questions that evaluated the level of management in place, the existence of policies, funding, projects, partnerships with or without the university to improve the implementation of the SDGs with GZU.

The last question was the Likert Scale (1 (Not a Barrier at All) -10 (A Serious Barrier)) soliciting an understanding of the barriers impeding the implementation of the SDGs in the institution. The question was wide-ranging in probing issues necessary for SDGs

realization such as availability of funding, trained staff, amount of material, library facilities, collaboration models, level of motivation, lack of (SDG) champions, lack of institutional political will and SDGs not being part of the university appraisal system.

The Cronbach's alpha was calculated to assess the internal consistency and validity of each construct in the questionnaire. This alpha is computed as follows:

$$\alpha = \left(\frac{K}{K-1}\right) \left(\frac{S_{y-\sum_{s}2}^2}{S_y^2}\right)$$

Where $\alpha = Cronbach$ alpha.

K = Number of items.

 S^2 = Variance between items.

The Cronbach's alpha values for the non-teaching personnel at GZU were determined to be 0.76 and 0.78 for familiarity with and implementation of the SDGs, respectively. A desired α of 0.7 was found. The constructs were deemed credible and consistent in this particular setting. A pre-loaded mobile device questionnaire was used to administer the survey using the QuestionPro platform. In certain instances, prospective respondents received an electronic link to the survey so that they could participate using their own mobile devices. It took an average of 12 min to complete each survey.

3.2.2 Interviews

Key informant interviews (n=6) were employed in addition to questionnaire surveys to collect qualitative data from top university staff members. The interview guide is in Appendix 2. Authorities from the Vice Chancellor's office (n=1), the Ministry of Higher and Tertiary Education, Science and Technology Development (MHESTD) (n=1), the Zimbabwe Council of Higher and Tertiary Education (ZIMCHE) (n=1) and the faculty directors (3) were among the other important informants in the study. Each interview lasted 45 min on average. The questions used to understand the perceptions of the non-academic staff of the SDGs include the following:

- How would you evaluate familiarity with SDGs among non-academic staff members?
- How would you describe the level of self-driven participation of non-academic staff in activities related to SDGs at your university?
- What challenges would you say are faced by non-academic staff members in implementing SDGs activities?

Both questionnaire and interview-based data sets were supplemented with secondary and archival data sources, including management plans, science bulletins, and annual reports.

3.3 Data analysis

The data was subjected to comprehensive quantitative and qualitative analyses. Thematic analysis, drawing from semistructured interviews and open-ended survey questions, identified central themes following established protocols (Nowell et al., 2017; Lowe et al., 2018; Guest et al., 2020). Braun and Clarke (2006) approach informed the flexible identification and interpretation of complex themes within the dataset. Exclusion criteria involved open-ended survey questions with no content. Textual data was pre-processed, retaining words from six or more survey replies to construct a corpus. Transcription and logical organization were applied to qualitative information from the interviews. For quantitative analysis, exploratory methods evaluated distributions and trends. The Kolmogorov-Smirnov test evaluated data normality for regression analysis, followed by non-parametric tests. Regression analysis explored the relationship between SDGs familiarization and localization/implementation, considering various activities and collaborations in the calculation of SDGs localization scores.

4 Results

4.1 Demographic profile of the respondents

Demographic data were used to interpret trends and dynamics in perceptions toward the status quo of SDGs localization in GZU. For example, the opinions of some individuals regarding the localization of the SDGs were influenced by their position and role within the institution. Table 1 shows the demographic profile of the respondents.

The profile of the respondents shows that the number of males is slightly higher than that of females. This could be explained by the nature of most of the jobs for non-academic staff, which include technicians, artisans and other hard-labor categories. The 35–44 age group had the highest percentage, while permanent staff members were most of the survey participants. Most (58.58%) of the respondents had more than 10 years at the institution.

4.2 Sustainable development goals familiarity among non-teaching staff

The university's status quo on the familiarity with the SDGs among non-academic staff was determined by evaluating some proxy indicators of familiarization, including perceived awareness, having read the 2030 United Nations Agenda for Sustainable Development (AfsD) document, awareness of the Millennium Development Goals (MDGs), having attended at least an event on the SDGs, participation in SDG tasks, knowing whether the institution is implementing the SDGs or not. Figure 4 shows the level of familiarization based on the said proxy indicators.

In Figure 4, 42.86% of the respondents confirmed having read the UN 2030 AfSD document, while 57.14% were familiar with the MDGs. A noteworthy 18.57% attended SDG-related events, and 65.71% claimed awareness of SDGs before the study. Daily involvement with SDG-aligned tasks was reported by 31.43% of non-teaching staff. The institution's average familiarization score among non-academic teaching staff stood at 42.14%. Regarding SDGs localization, 81.43% agreed it should be implemented globally, suggesting a high level of awareness. However, when asked if their institution had implemented SDGs, 55.71% responded either yes (37.14%) or no (18.57%), while others were unsure. This nuanced question aimed to assess familiarity, assuming that the respondents knew about the SDGs. With an average familiarity score of 42.14%, the study examined the institution's readiness to implement the SDGs. Table 2 presents proxy indicators of readiness based on non-teaching staff perceptions, shedding light on the institution's stance.

Table 2 indicates that non-academic staff at GZU generally perceive a high level of readiness for SDGs localization. Approximately 63.19% of the respondents believe there is strong support from top management for the SDGs, suggesting high readiness. When asked about the existence of an institutional policy explicitly referencing the SDGs, 63.73% affirmed, yielding an overall score of 0.66, categorized as "high." All localization proxies scored between 0.60 and 0.66, except for one (in the "medium" category), where 57.74% claimed the availability of funds exclusively for SDGs work. This suggests consistently high readiness across various indicators, with only one aspect falling slightly into the "medium" range.

4.3 Perceptions regarding the implementation of specific SDGs

The study investigated the perceptions of non-teaching staff members about the involvement of institutions with specific SDGs. Respondents were askedto indicate whether there is high, moderate or low engagement with each of the 17 SDGs. The results show that the level of involvement varies across the university, with SDG5 (Gender Equality) being the SDG with which the university is more highly involved while SDG14 (Life Below Water) being the least

TABLE 1 Demographic characteristics of the questionnaire respondents.

Demographic variable	Count	Percentage	Missing values n (%)
Gender			
Males	36	51,43	
Females	34	48,57	
Total	70	100	1 (1,43)
Age		1	
18-24	4	5,71	
25–34	8	11,43	
35–44	33	47,14	
45-54	22	31,43	
55-64	2	2,86	
Above 64	1	1,43	
Total	70	100	0 (0.0)
Employment status			
Permanent	62	88,57	
Part-time	1	1,43	
Temporary full time	6	8,57	
Other	1	1,43	
Total	70	100,00	0 (0.0)
Position		1	
Senior management	4	5,71	
Middle management	8	11,43	
Supervisory	8	11,43	
Office	25	35,71	
General worker	11	15,71	
Other	14	20,00	
Total	70	100,00	2 (2,86)
Years at institution			
1–5	16	22,86	
6–10	13	18,57	
11–15	27	38,57	
15–20	14	20,00	
21+	0	-	
Total	70	100	2 (2,86)

Source: Authors' Survey data.

implemented SDG. Figure 5 shows the engagement score for each SDG as perceived by non-teaching staff.

As shown in Figure 5 the 6 SDGs most highly perceived as being actively implemented at the university include SDG5 (Gender Equality), SDG9 (Industry, Innovation and Infrastructure), SDG4 (Quality Education), SDG3 (Good Health and Well-being), SDG8 (Decent Work and Economic Growth) respectively. The least implemented include SDG14 (Life Below Water), SDG15 (Life on Land), SDG13 (Climate Action), SDG 12 (Responsible Production and Consumption) and SDG11 (Sustainable Cities and Communities), respectively. Figure 6 provides further detail on the distribution of engagement categories for each SDG according to the percentage of respondents.

As shown in Figure 6, surprisingly, SDG1 (No Poverty) has the highest percentage of respondents who claim low engagement. This is followed by SDG2 (Zero Hunger) and SDG8 (Decent Work and Economic Growth), respectively. Regarding high engagement, SDGs 4,5 and 6 and leading, respectively.

4.4 Familiarization and localisation barriers

GZU's non-teaching staff expressed support for the SDGs' implementation. However, they indicated that there are several obstacles to their full engagement with the SDGs. The results show a plethora of barriers ranked as follows: lack of funding, demotivated

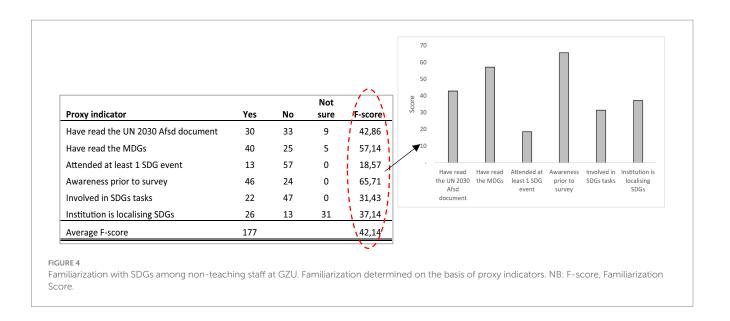
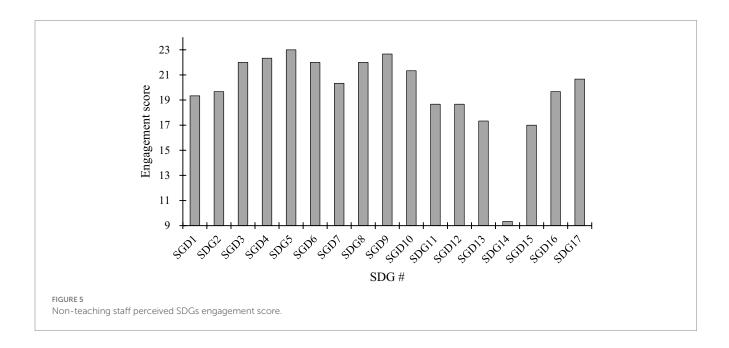
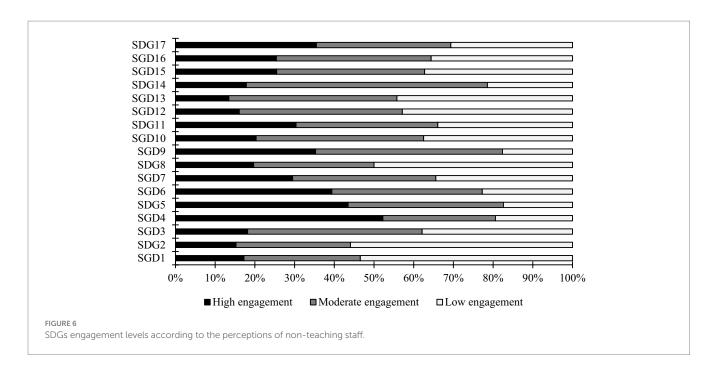
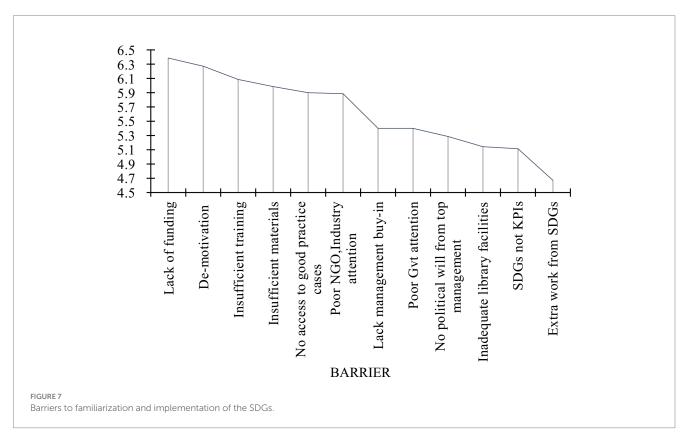


TABLE 2 Perceptions of non-teaching staff regarding SDGs localisation at GZU.

Localisation proxy indicator	Score categories					
	0.0-0.09 (V. Low)	0.2-0.39 (Low)	0.4–059 (Medium)	0.6-0.79 (High)	0.8–1 (Very high)	
There is clear evidence of high-level top management buy-in and championing of SDGs localisation.				0,63		
There is at least one institutional policy explicitly making reference to the SDGs.				0,66		
There is clear and exclusive funding for SDGs related work.			0,58			
There are clear projects on the ground for SDG related work.				0,61		
There are clear internal institutional partnerships to propel the SDGs localisation agenda.				0,60		
There are clear external partnerships to propel the SDGs localisation agenda.				0,65		





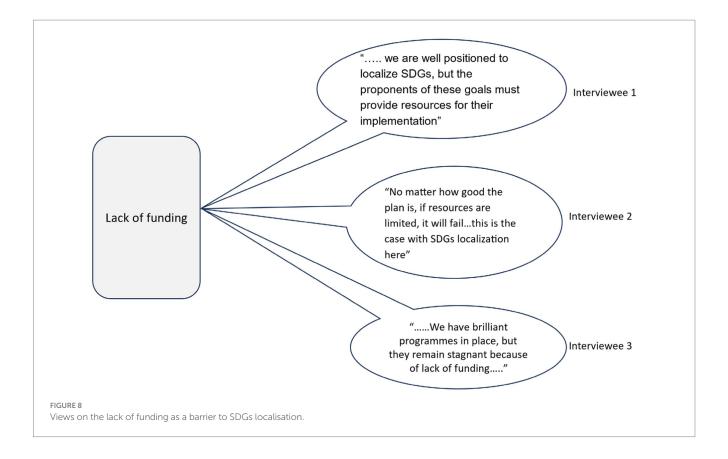


staff, inadequate SDG reading materials, inadequate training, limited access to good practice examples, and inadequate cooperation with NGOs and business. Figure 7 shows the barriers ranked according to the level of significance of the barrier.

As depicted in Figure 7, GZU non-teaching staff perceive lack of funding as the main obstacle to the localization of the SDGs. Additionally, collective views suggest that staff demotivation contributes to the inadequate focus on the implementation of the SDGs, with insufficient training on the SDGs ranked as the third

major challenge. Other challenges, outlined in Figure 6, include insufficient materials for the SDGs, limited access to good practice cases, lack of stakeholder support, management buy-in, government strategy, political will, inadequate library facilities, the SDGs not being part of key performance indicators (KPIs), and the SDGs being considered as additional workload.

Qualitative insights from interviews and open-ended questionnaire responses align with quantitative findings, indicating moderate familiarization with SDGs among non-academic staff. The



general readiness of the institution to implement the SDGs is confirmed as fair. However, challenges affecting the implementation by non-teaching staff, such as funding, training, and exposure to SDGs information, were highlighted. The perspectives of the interviewees were organized into four discernible themes: (i) the need for funding and resources, (ii) the need for awareness, and (iii) the need for structural changes. Figure 8 illustrates the opinions of the interviewees about the funding challenges for the implementation of the SDGs.

The claims made by the three respondents who were chosen for the study indicate that financing is insufficient to carry out projects linked to the SDGs, as Figure 8 illustrates. Interviewee 1 seems to suggest that the institution has what it takes to implement the SDGs, but the money gap is the only obstacle by emphasizing that "we are well positioned to localize the SDGs, but the proponents of these goals must provide resources for their implementation." Interviewee 2 appears to confirm that the institution has a plan and is prepared, but there are not enough resources to carry it out. However, the third interviewee reiterates the previous statement, stating that although the organization has programs that can address the SDGs, financing constraints have kept them on paper.

The respondents also echoed the sentiments that most of the employees lack awareness of the SDGs. Figure 9 presents some selected views, which show lack of awareness of SDGs among the non-teaching staff.

The comments of the interviewees indicate that non-teaching staff members need to learn more about SDGs, as seen in Figure 9. Although some may have read SDG-related material as indicated earlier, more training and awareness building is needed to enhance their capacity to localize the SDGs.

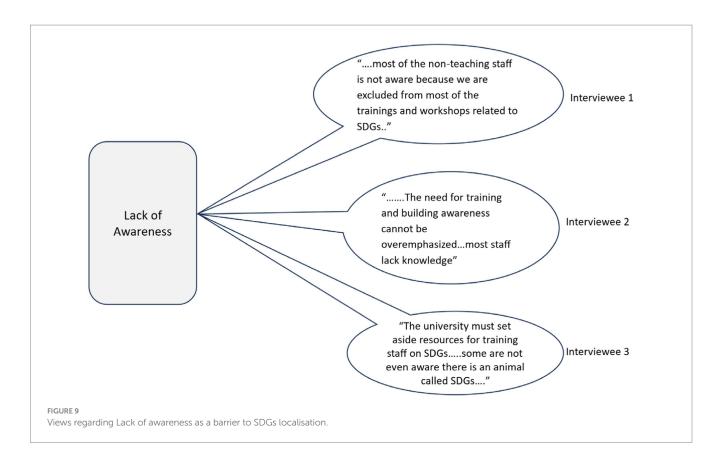
Another theme emerging from the interviews is that structural changes are needed in the university system if the implementation of the SDGs is to be successful. Figure 10 shows some of the precepts from the interviews that confirm this view.

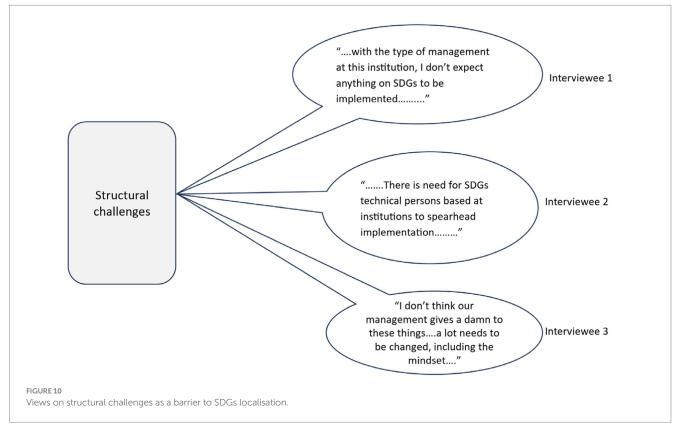
As shown in Figure 10, there are some sentiments that the management needs to change their mindset and refocus on SDGs. There is also a proposal to establish technical persons for the SDGs at the institution, who focus on streamlining activities to ensure that the university localizes the SDGs.

Some questionnaire respondents provided recommendations that point in the same direction as the interview comments. The comments are also put into the same three categories as the themes emerging from the interviews (Box 1). The presentation presents a serious point of consideration and departure for the GZU for meaningful engagement not just with the SDGs as principles for national development but its own workers, who are intricately involved in the execution of this work.

5 Discussion

Sustainable development goals are overarching principles and a framework which is currently being used by nation states to rally their citizenry for national development and international inclusion. The vision has been documented in the UN document "Transforming Our World: The 2030 Agenda for Sustainable Development" which details how signatory countries can frame their own policies and legislation to achieve a common goal of development by 2030. In Zimbabwe, this has found resonance in the government policy of Vision 2030 and the creation of an upper-middle income country by 2030.





For the successful implementation, the HEIs have been flagged as important players which ordinarily have a vested interest in creating and dissemination of knowledge. However, the success of this is dependent on the depth of familiarity, skills and expertise the university employees, including non-teaching staff. Two years after the emergence of the SDGs, the literature on their implementation was

BOX: GZU SDGs response from online survey. Source: Authors

Requirement for Resources and Funding (2)

- · There is need for more resources and expertise for effective implementation.
- · I personally think that the institution can reach greater heights with the proper funding from the government and NGOs.

Requirement for Awareness (11)

- · There is need for awareness initiatives to be done so that everyone is involved people lack the knowledge about some of these things/events.
- · I suggest that the SDGs should be incorporated in part of the modules and be taught and practiced regularly.
- · We need workshops about SDG
- · Fund the project well, have a proper current awareness program and conduct staff and student workshops.
- The institution needs to appraise members of staff on what are SDGs, their purpose and how the institution can be part of them.
- · SDGS should be taken seriously.
- · Lack of knowledge on staff is the major drawback.
- · There is lack of skills on both teaching and non-teaching staff. Facilities and resources are also a challenge.
- · I do not understand anything.
- There is a need for more awareness and active involvement for staff and students.
- · Fair questions that were clearly understood. More examples should be used and should be applied to our daily lives to be understood more clearly.
- For serious engagement our top management should allow non-teaching staff to attend related workshops and seminars, not to restrict to themselves, yet implementation of SDGs on the ground requires non-teaching. Also, awareness should be made to all staff for easy implementation in our communities. Funding for training or awareness should be extended to the lowest people. Thank you for the survey. It is insightful to our top management and political rank and file.

Requirement for Structural Change (4)

- · I think there is a need for new management.
- Institutions must collaborate with government and non-governmental organizations and stick to one thing.
- The institution needs new management as quickly as possible.
- I suggested that the university must look upon to non-teaching staff as their participation is also needed in the organization rather than discrimination of workers' rights.

considered nascent (Leal Filho et al., 2019) and the current study at GZU is one of these efforts intended to increase the body of knowledge on the implementation of the SDGs in HEIs.

Zimbabwe's higher education sector is currently taking advantage of the implementation of Education 5.0 which fortuitously encompasses the very principles of the SDGs. As such, the achievement of both is intricately linked to the other. Education 5.0 can intentionally benefit from tapping the expertise, experience and resource found in the SDG community, while those driving the SDG agenda can opportunistically take advantage of the coincidental policy drive by government to influence and spearhead the implementation of Agenda 2030. As such success is a function of how well these policies, their targets and intended outputs have been accepted, adopted, executed and evaluated by various stakeholders in governments, civic society and the private sector. Higher Education Institutions(HEIs) have been identified as one vehicle through which SDGs knowledge can be imbedded in society through teaching, research, community service and engagement, innovation and even industrialization, the latter of which has come to be known as Education 5.0 in Zimbabwe.

This study revealed that non-teaching staff is privy to the significance of institutionalizing SDGs at all levels. This observation aligns with findings from previous studies (Mawonde and Togo, 2019; Nhamo, 2021; Bacelar-Nicolau et al., 2023; Serem and Ongesa, 2023; Chapungu and Nhamo, 2024) which indicate that university communities, including academic, and non-academic employees and

students, consider SDG localization as an important process at all levels of governance, including tertiary institutions. This metric seems to indicate a high level of familiarity with the SDGs but requires further elucidation. The results of this study have shown that the level of familiarization with the SDGs among non-teaching staff is moderate, with a familiarization score of 42.86%. Familiarization is enabled by access to SDGs information through workshops, library material, SDGs documents and formal training, among other learning channels. However, the level of familiarization is not high due to lack of access to the stated materials and events. This result agrees with observations by Togo and Gandidzanwa (2021), Hariyono and Susantini (2023), which show that efforts to accelerate the implementation of the SDGs at the HEIs are slowed down by lack of access to the necessary resources and knowledge. To reinforce this observation, Mhlanga et al. (2022) pointed out that the implementation of SDGs in higher education, particularly in Zimbabwe, is hindered by a lack of resources. Thus, the lack of different forms of resources is a common barrier in HEIs leading to moderate or low levels of familiarization with SDGs, including among non-teaching staff members (Neary and Osborne, 2018; Veidemane, 2022).

This study has also shown that at the shop floor level, there is critical buy-in from the non-academic members at GZU to implement any programs related to SDGs as long as this is well-articulated. The University can tap into the goodwill and readiness of staff because of a clear symbiotic relationship between Education 5.0 and the content of the SDGs (Strachan et al., 2023). If familiarity

with AfSD is used as a proxy for substantive engagement with the SDGs, the current research shows that approximately 42.03% are aware and have read this document. At the same time, about 37.14% appear to agree that GZU has been involved in the important work of domestication of the SDGs. The participants also reveal that about 55.88% are aware of the MDGs which are precursors to the SDGs. Among the non-academic members of staff, these metrics are moderate and appear to be explained by the lack of awareness, which is exacerbated by the institution's lack of resources, platforms and infrastructures to promote the localization of SDGs, similarly to (El Hajj et al., 2020; Dwivedi et al., 2024).

In response to the enquiry about the participant's knowledge of SDGs before attempting the survey, the study reveals that up to 48.57% of the respondents were aware of the SDGs. There is a discrepancy with the number (42.03%) that had indicated having read the AfSD document. This means that the information on SDGs was obtained from other sources in addition to the AfSD document. Additionally, only 37.14% of the respondents thought that GZU as an institution has made any strides in the domestication of the SDGs. These figures reveal the need for concerted efforts by the GZU to take the agenda for the SDG more seriously, intentionally and systematically. The guidelines for implementing SDGs suggest a number of strategies that HEIs can take which include taking an inventory of any ongoing SDG activities, building institutional strength through ownership, harmonization, execution, and information dissemination (SDSN, 2020). Institutional memory and awareness are important variables that, if not addressed, can become a substantive hindrance (Alarifi et al., 2022).

There is a lack of an intentional programming to publicize and entrench SDGs, hence the call for the installation and equipping of SDG champions within HEIs if any meaningful progress is to be realized (Nhamo, 2021). Researchers recommend that any policies driven from the top regarding the SDGs must be equally matched by deliberate grassroots activities ensuring that both approaches blend in for successful implementation (Machingura and Nicolai, 2018). Support from top leadership is also considered to be a very critical driver for the implementation and success of the SDGs to avoid what research has described as job burnout (Lei and Alam, 2023). This has also been proven to be true in the case of the SDG Indaba, which took more than 2 years to be held at UNISA due to structural changes and lack of alignment within the university administrative structure (Nhamo, 2021).

This study quantitatively demonstrated that the main obstacle to the adoption and achievement of the SDGs is the lack of funding. This is also revealed in the lack of awareness among staff members. This finding supports the conventional wisdom that for SDG related programs to be implemented, resources are needed. If resources are not available, no implementation will occur. Several studies (Mawonde and Togo, 2019; El Hajj et al., 2020; Togo and Gandidzanwa, 2021; Mhlanga et al., 2022; Chapungu and Nhamo, 2024; Dwivedi et al., 2024) have noted that the implementation of SDGs in HEIs has been mainly hampered by lack of funding for activities and programs related to the SDGs. In Zimbabwe, the situation is exacerbated by the macro-economic challenges faced by the country, which infiltrate down to HEIs. However, this conventional thinking can be challenged as significant strides can be achieved without investing significant amounts of resources through low-cost information dissemination tools and methods (Prieto-Egido et al., 2022). For example, information sharing can be achieved through well-crafted daily emails to staff and students. GZU, uniquely positioned in Zimbabwe with a radio broadcasting license, holds a significant advantage in reaching a wide audience within the university and the expansive Masvingo province, including distant places like Chiredzi and Chivi districts, hundreds of kilometers away from the broadcasting center.

The study participants suggested structural changes within the university system for the efficient realization of the SDGs and as such, the need for authentic collaboration with government and industry. This issue is closely associated with the availability and redeployment of financial and other resources. The HEIs should avoid a casual and cavalier approach to the execution of the work associated with the SDGs, as has been observed in many organizations (Heras-Saizarbitoria et al., 2022). This starts with the simple awareness raising within the organizations. Universities are encouraged to see the last decade of the SDGs as an opportunity to realignment activities, including teaching, research, innovation with the global economy (Schantz et al., 2021). As such, the installation and capacitation of SDG champions with the aptitude to mobilize all stakeholders becomes critical and imperative henceforth (Nhamo, 2021; Annan-Aggrey et al., 2022). Researchers are quick to point to the need for competencies which come through awareness in the delivery of content related to SDGs (Filho et al., 2020), and non-academic staff play a pivotal role in augmenting the teaching staff. In resource mobilization and availability of resources that are also critical for SGDs, partnerships for collaboration have been recommended to revamp teaching and research approaches within HEIs (Wright et al., 2022; Kestin et al., 2023; Leal Filho et al., 2023).

6 Conclusion

Designed on a mixed methods research design, this study explored the integration of SDGs at GZU University from the perspective of non-teaching staff. The research was prompted by the limited literature addressing the implementation of SDGs in universities, particularly from the viewpoint of non-teaching staff. Three central questions guided the study: 1. The extent to which non-teaching staff is familiar with SDGs; 2. How non-academic staff perceive the degree of SDG localization within the university system; 3. Barriers hindering the familiarity and localization of SDGs among non-teaching staff. The findings revealed a moderate level of SDG familiarization with the SDGs among non-teaching staff. Some were familiar with relevant SDGs documents, such as the 2030 AfSD document and the Millennium Development Goals, while others had not engaged with these materials and were unfamiliar with the SDGs. Overall, non-teaching staff perceived the university as highly prepared for SDGs implementation, as indicated by an average readiness score. This readiness is evidenced by the presence of policies that improve the implementation of the SDGs and other contributing factors. The study also identified an average level of localization of the SDGs, with a degree of variation across different SDGs.

The study observed several barriers that inhibit the implementation of SDGs among non-teaching staff. The key barriers include lack of funding, demotivation of staff, insufficient training and lack of SDGs materials. Interviews and open-ended questions emphasized these factors and added structural challenges within the institution, pointing to the need for the management to play an enabling role as well as introduce SDGs focus persons to manage the implementation of SDGs initiatives.

Overall, the need to improve the level of engagement with the SDGs at GZU in an all-encompassing manner, involving the non-academic staff, has been observed. Although there is moderate familiarity with the SDGs, there is a large room for improvement, and conscientious effort should be made to align the SDGs with Education 5.0. These two paradigms are complementary and can benefit from a symbiotic alignment. More efforts should be devoted to establishing partnerships that build the technical and financial capacity of the university to implement the SDGs. In all these efforts, the non-teaching staff must be consulted and included, given their pivotal role in the implementation of the SDGs. Furthermore, the study recommends the establishment of an institute that focuses on sustainability issues, a strategy that has been adopted by other universities that are doing well in the localization of SDGs.

6.1 Policy implications

To enhance the integration and implementation of SDGs at GZU, several policy implications arise from this study. Policies should prioritize funding and resources for SDG initiatives, ensuring non-teaching staff have access to necessary materials and training. Policies fostering staff motivation and engagement, including recognition programs and career development opportunities focused on sustainability, can enhance participation. Comprehensive training programs to improve SDG literacy among non-teaching staff are essential, supported by ongoing professional development initiatives. Introducing designated SDG coordinators can streamline efforts, with clear roles and responsibilities. Non-teaching staff should be actively involved in creating and implementing SDG policies. Promoting partnerships with universities and organizations that have successfully implemented SDGs can provide valuable insights, and policies should encourage collaboration and knowledge sharing. Finally, establishing a sustainability institute can serve as a hub for research, education, and community engagement on SDGs, supported by relevant policies.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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Ethics statement

The studies involving humans were approved by University of South Africa's College of Economics and Management Science ethics committee. Clearance number: 2021_CRERC_032 (FA). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

IN: Conceptualization, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft, Writing – review & editing. LC: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing. MA: Validation, Visualization, Writing – review & editing.

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