# ENEMIES OF PROGRESS: PERSPECTIVES ON BARRIERS TO EFFECTIVE UNIVERSITY-COMMUNITY ENGAGEMENT TOWARDS CLIMATE CHANGE ACTION AT NDEJJE UNIVERSITY, UGANDA

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**Abstract:**

Climate change remains a crucial threat to sustainable development, particularly in African contexts that are at more risk of its effects and more vulnerable to its impacts. While Higher Education Institutions (HEIs) in Uganda have made some commendable steps in structuring missions and frameworks for enhancing climate change action, such structures remain scattered in several documents, making it difficult to track, conceptualize, and effectively implement through universities' third mission of community engagement. This paper provides an understanding of barriers to effective university community engagement towards climate change action and effective mainstreaming of climate change in engagement programs. The findings in this paper are based on data generated through document analysis, interviews and focus group discussions with university staff, students and community leaders at and around Ndejje University in Luwero district, Uganda. Data was analysed using Braun and Clarke's (2006) thematic analysis approach with the help of MAXQDA software. The researchers observe various challenges that the implementing units at the case university face. These included institutional constraints, resource-related barriers, COVID-19 and its impacts, myths and misconceptions about climate change. These challenges highlighted the gaps that still exist in many African universities' efforts towards community engagement that need immediate attention. Indeed, these university community engagement barriers decelerate university community engagement efforts towards climate change action in the Ndejje community. It is hoped that these findings may be useful for university management, stakeholders, and other policymakers in finding practical and relevant

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solutions to these established contextualised challenges leading to the effective delivery of community engagement programs and climate change mitigation and adaptation programs.

**Keywords:** university-community engagement, university third mission, barriers, climate change, Uganda

## 1. Introduction

It is increasingly becoming evident that the university's role in today's world has expanded beyond the basic assumption of knowledge production and dissemination. The scope of interest has resulted in a variety of terminologies that define the concept of university social responsibility in various contexts and terminologies. These include community engagement, community outreach programs, civic engagement, public engagement, and society university, as well as stakeholdership (Ali *et al.*, 2021). The role of universities is an exclusive one since the anchoring of a sustainable tomorrow solely lies on their shoulders since the production and dissemination of knowledge and its practice is a chief concern.

Godonoga and Sporn (2023) have indicated that while interest in the social impact of higher education (HE) has increased in recent years, higher education institutions (HEIs) operate in stratified HE systems, where pressures for competitiveness and excellence co-exist with calls for social impact and achieving sustainable development goals (SDGs). Indeed, the university ought to work with communities to contribute to economic, social, and environmental protection knowledge while linking the community's needs at different levels and creating activities aiming at achieving high sustainability (Thanasi-Boçe & Kurtishi-Kastrati, 2022). Remarkably, the authors further argue that the domain of environmental protection involves raising awareness about environmental issues and educating students and communities with proactive behaviour related to environmental safety, such as global pollution, responsible disposal of resources, climate change and global energy consumption. Incorporating into curricula issues and specific academic programs related to preserving the environment contributes to increasing sensitivity to various environmental issues like climate change.

Currently, there is the presence of complex and wicked sustainability challenges like climate change, environmental degradation, and food security. These sustainability challenges are rooted in multiple areas of the complex social, economic, technological, political, cultural, and environmental fabric of human settlements in most African contexts and other parts of the world. To this, Myers and Kent (2008) have opined that it is little wonder that the generation of concrete and effective solutions is beyond the capability of many central and local government institutions. Partnerships and collaboration between academia, industry, government, and civil society are consequently increasingly seen as prerequisites for tackling various sustainability challenges (Talwar *et al.*, 2011). Notably, taking urgent action to combat climate change

is based on the adoption of the United Nations to the Sustainable Development Goals (SDGs) by 2030.

It has been argued by UNESCO (2015, p. 67) that to promote climate change actions, players need to form or strengthen "*partnerships and collaborations*". These could be formed between "*education communities, public organizations, NGOs, local communities, entrepreneurs, etc.*" (Virtenen, 2010). Therefore, effective climate change interventions require local and international support which could be in the form of technical, financial, collective learning, and other kinds of support for the programs. University community engagements towards community-based carbon reduction strategies are one example of action towards achieving sustainability and addressing climate change. Thus, university-community partnerships have the potential to respond to society's most pressing needs through engaged scholarship (Pundt and Heilmann, 2020). This particularly could be through universities moderating between the different actors like NGOs and community members, due to their independent and science-driven perspective. This collaborative approach in which a university is not only the coordinator but, in particular, the moderator, indicates a third mission activity whereby the university outreaches to local communities, organisations, enterprises, and the public to address societal challenges like climate change. Nevertheless, most of the universities show little engagement with environmental issues due to numerous challenges, especially in African contexts where the capacity to deal with global challenges is limited. Thus, this study explored major constraints in the university-community collaborations in the efforts to address climate change at an African University, Ndejje in Uganda.

## 2. Literature Review

### 2.1 Theoretical Framework

This study was guided by *Ubuntu* theory, a deeply held African philosophy with ideals of a community rooted in the interconnectedness of others. In the context of theoretical structuring, *Ubuntu* stresses the collective spirit and the importance of community, engagement, solidarity, caring, reciprocity, and sharing (Tutu, 1999; Mugumbate and Chereni, 2020). This theoretical framing of *Ubuntu* advocates a profound sense of interdependence and emphasizes that our true human potential can only be realized in partnership with others. Thus, ubuntu is an African worldview of societal relations and collaborations. Contemporary research shows that *ubuntu* continues to play an important role in African society. It is regarded as a key cultural strength of communities (Nkosi & Daniels, 2007), a theory of higher education in Africa (Waghid, 2020), an important foundation for resilience among the community (Theron & Phasha, 2015), can shape community responses to disaster (Sapirstein, 2006), a theory of social work (Mugumbate & Chereni, 2020) and as a community engagement transformative undertaking for Higher Education Institutions (Nicolaides and Austin, 2022).

This study used *Ubuntu's* major tenets of interconnectedness, solidarity, reciprocity, harmony, and communalism for guidance on how to engage with research

participants and navigate through the context. Thus, *Ubuntu* principles served as the ontological foundation for exploring university community engagement challenges towards the efforts to address issues of climate change. As Waghid (2020) opines, *Ubuntu* as a philosophy of higher education is an appropriate understanding for enacting substantive change based on the possibility that social responsibility, deliberative engagement, and attentiveness to others and otherness are becoming.

## 2.2 University Third Mission (Community Engagement)

Lately, calls for a re-engagement of the university in helping to tackle the great challenges facing societies and local communities have propelled the third mission to the forefront of policy discussions – this time under the mantra of 'relevance' and 'social impact'. The articulation of a 'third mission' has gained diverse attention since the 1980s as a consequence of global pressure on universities to play a more central role in the knowledge economy (Pinheiro *et al.*, 2015; Venditti *et al.*, 2011). In recent years, there has been increasing pressure on universities to shift from focusing primarily on teaching and performing research to adding an equivocal Third Mission (TM), labeled "*a contribution to society*". The TM is a multidisciplinary, complex, evolving phenomenon linked to the social and economic mission of universities in a broad sense (Compagnucci and Spigarelli, 2020).

Numerous unprecedented challenges, such as the knowledge economy, globalisation, and the financial and environmental crises, are contributing significantly to redesigning and extending the missions of universities (Trencher *et al.*, 2014; Hadidi & Kirby, 2016; Rubens *et al.*, 2017). Implicit to mention is the fact that, historically, there has been the first (conservation and transmission of knowledge through teaching) and second mission (research) performed by universities. Therefore, a plethora of stakeholders in higher education subscribe to the notion that the contemporary university can be compared to a three-legged stool (Rubens *et al.*, 2017), with each leg representing one of three missions—teaching, research, and a third mission.

In Africa, the seeds of the third mission in higher education were sown in the 1960s (Mugabi, 2014). It has been evident that there has been renewed interest in the third mission of universities in Africa since 2000 (Nabaho *et al.*, 2022).

## 2.2 University Community Engagement and Climate Change Action

There is a strong and growing impetus for universities and colleges to ensure that their presence within various communities is productive and transformative (Bowers, 2017). Alongside this positioning, there has been an increasing emphasis on communities' role in facilitating and sustaining carbon reduction practices. University community engagements towards community-based carbon reduction strategies are one example of action towards achieving sustainability and addressing climate change. Thus, university-community partnerships have the potential to respond to society's most pressing needs through engaged scholarship (Pundt & Heilmann, 2020).

There is currently the presence of complex and wicked sustainability challenges like climate change, environmental degradation, peak oil, and food security. These sustainability challenges are rooted in multiple areas of the complex social, economic, technological, political, cultural, and environmental fabric of human settlements in Africa and other parts of the world. Thus, Myers and Kent (2008) have opined that it is little wonder that the generation of concrete and effective solutions is beyond the capability of many central and local government institutions. Partnerships and collaboration between academia, industry, government, and civil society are consequently increasingly seen as prerequisites for tackling various sustainability challenges (Stewart & Alrutz, 2022); Talwar *et al.*, 2011).

Universities face challenges as they implement their programs on climate change in societies. In their study, Koryakina *et al.* (2015) identified two major types of barriers: external, relating mainly to government regulations and funding allocation, and internal, involving organizational characteristics. The study also highlighted some tensions between a growing emphasis on third-mission activities and their institutionalization process within universities in efforts to social efforts towards sustainable development. Essentially, in some African setups, community engagement practices are not commonly followed and not prioritized but, rather, done as an add-on or afterthought (McNair & Ramaley, 2018). This results in limited and very superficial interactions between academics and communities. Thus, this study aimed to explore and establish major constraints in the university-community collaborations in the efforts to address climate change at an African university.

## 3. Methodology

Underpinned by the interpretivism paradigm, the study employed a qualitative approach and a case study design, according to Yin (2012). Drawing on this approach, and as recommended by Creswell and Clark (2018), qualitative research investigates the understanding and interpretation of individuals regarding their social world, which leads to the epistemological position of interpretivism (Alharahsheh & Pius, 2020). In line with the case study design, the data are accounts from specific contexts, which researchers then code for emergent themes, look for connections, and construct higher-order themes (Hancock, Ockleford, & Windridge, 2001). Notably, Yin (2012) opines that a case study design enhances literal replication which may help to yield theoretical constructions that can be replicated across cases of the same contexts. Using this design, the researcher generated data from Ndejje University in Uganda.

### 3.1 Data Collection and Sampling Methods
Data were collected using document review, semi-structured in-depth interviews, and focus group discussions. Document review provided contextual information about the community engagement situation at the case university. The semi-structured, in-depth interviews were subjected to 5 administrators and lecturers of climate change-related

disciplines and 5 community leaders at the case university. One focus group discussion was conducted among 12 undergraduate and postgraduate students offering various programs related to climate change at the case university. This was to ensure sufficient experience and knowledge to contribute to the study. A focus group discussion guide with topics for discussion was used to generate the views and perspectives of the students. Purposive sampling was utilized to choose the study participants. According to Andrade (2021), purposive sampling is a sampling approach based on prior knowledge about a population and the objective of the research study in which the researcher utilizes personal judgment to determine the sample. For both interviews and focus group discussion, a tape recorder was used during data collection, enabling the researchers to transcribe the data for analysis.

### 3.2 Data Analysis Process

Braun and Clarke's (2006) thematic analysis approach was employed to analyse the collected data. The researcher followed six steps in analyzing the qualitative data, as shown in Figure 3.1. The analysis began with a thorough reading of the transcripts to familiarize myself with the data. The researchers then generated initial codes with the help of MAXQDA software. The codes were then categorized to help in searching for themes that were later reviewed and a final list of themes that answer the research questions was agreed on among the researchers. The final themes were then used to write this report. The themes were linked to the specific research question during reporting, and illustrative extracts were presented for each theme to answer the specific research questions.
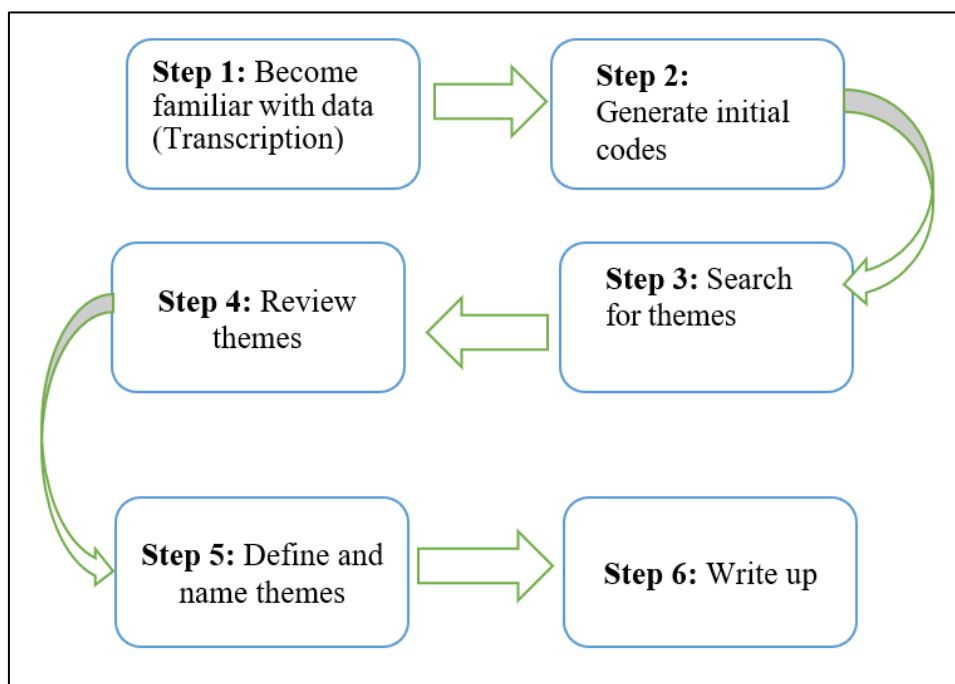


**Figure 3.1:** Braun & Clarke's six-phase thematic framework (Braun & Clarke, 2006)

## 3.3 Ethical Considerations

Armond *et al.* (2021) call upon all researchers to uphold ethical research practices for the production of credible findings. Congruently, the researchers got ethical clearance from the Uganda Christian University Research Ethics Committee (UCUREC) and later a research permit from the Uganda National Council for Science and Technology (UNCST). The researchers then sought permission from the case university where data was generated. Issues of participants' consent, voluntary participation, and confidentiality were ensured during the study. The researchers ensured the privacy and autonomy of participants throughout the research process, as guided by Head (2020).

## 4. Findings and Discussion

| Constraints to engagement programs on climate change action | Institutional constraints |
| --- | --- |
| | Resource related barriers |
| | COVID-19 and its impacts |
| | Unawareness challenges |
| | Local priorities and livelihood concerns |

**Source:** Author.

## 4.1 Institutional Constraints

Findings revealed barriers that stem from institutional weaknesses and inefficiencies within the university management system on engagement programs. Participants noted that there is limited attention and focus on university-community engagement programs by the university administration. Particularly, some of the university staff noted that the university administration is preoccupied with academic and research programs with minimal attention to engagement programs. Even with the available minimal engagement, participants revealed that there is bureaucracy in securing authorisation and support from the university administration. This is so despite Ndejje University being perceived as a fully engaged university grounded in a strong intellectual foundation that relates to its mission dimensions. Furthermore, the community leaders also noted that their voices are not institutionalized at different levels of the university regarding engagement programs. They noted that the planning and budgeting process does not reflect the centrality of public involvement as a core institutional mission. This makes the community members feel that the university does not take seriously their intellectual role. They argued that this kind of unidirectional planning of engagement programs derailed their efforts to collaborate with the university. Some community leaders argued that with the none-involvement of community members in community engagement planning and disregarding input from community members, the university may fall short of understanding local priorities, concerns, and perspectives related to climate change. Some of them noted:

*"…the point I'm noting here is that, community engagement has not been given the required attention, has not been implemented effectively, and has not been coming out clearly".* (NDJ, US2, lines 23-24)

*"…engagement only flows from the top to down, which is unfortunate because we would want also to present our ideas, there is nothing (…..) like a memorandum of understanding or a specific structure that is followed, in my opinion.* (NDJ, CL2, lines 13-16)

As indicated by the participants, community involvement in planning engagement programs regarding climate change action is essential for fostering a sense of ownership and buy-in among local community members. When communities are not actively engaged in the planning process, they may feel disconnected from university-led initiatives and be less likely to support or participate in them, undermining the core Ubuntu values of collectivism and interconnectedness. Hügel and Davies (2020) have clearly indicated that limited community involvement in university community engagement planning can significantly hinder the effectiveness and sustainability of initiatives aimed at addressing societal challenges like climate change. It is paramount to note that African universities ought to prioritise community engagement and the involvement of local community members/leadership in the planning and implementation of engagement programs.

## 4.2 Resource-related Barriers

This category revealed that the lack of sufficient funding hampers the development and sustainability of community engagement programs on climate change action. The university staff complained of budgetary constraints that limit the ability to allocate enough resources to engagement and climate action initiatives, including funding for staff, research, outreach, and infrastructure. Relatedly, participants further reported inadequate human resources that would execute numerous engagement programs. They note that this stems from inadequate financial resources that would ensure the hiring of enough climate change expert staff both at the university and in communities. University staff and students decried the limited time for engagement programs, which hinders the implementation. It was noted that the university staff and students already have demanding schedules filled with learning, teaching, research, and administrative duties, leaving little time for engagement with external communities on climate change issues. This makes it problematic to sustain long-term partnerships and initiatives that require an ongoing commitment to engagement programs and involvement in climate change action, especially within communities. It was noted:

*"…this requires a lot of funding for effective engagement programs with the number of students that we have. Notably, we largely depend on students' tuition and thus resources financial resources are very limited."* (NDJ, US1, lines 28-30)

*"… When it comes to human capacity, unlike the government or public universities, you find that we do not have enough staff, and most of them are part-time, not on a permanent basis, so they teach and go, so engaging them in the community becomes hard."* (NDJ, US2, lines 7-10)

*"Another one is the timeframe. For example, our students or even staff, when they come to the communities, it is always a very short time, and they can come like once a year and don't come back."* (NDJ, CL3, lines 25-27)

The university staff at Ndejje University feel that the institution is underprivileged due to the fact that it is a private institution that receives little or no direct funding from the government. This is common in almost all private universities in the country that find it difficult to hire enough human capital and facilitate their engagement programs on climate change. Du Plooy and Von Moellendorff (2024) reveal that funding for engagement programs at African universities is consistently a huge challenge, especially in the current financial climate. The authors note that outreach programs by the university staff and students are expensive ventures, and there are always limited funds. The university funding is very low, and their support for engagement keeps going down, thus relying on a limited budget. Limited resources also constrain university staff, students, and external stakeholders from translating engagement planning and implementation guidelines to action in numerous communities. The analysis of adaptation actions by Biagini *et al.* (2014) shows that capacity building is very important in enabling adaptation at the local level. Yet, building the capacity of communities demands capacitated human resources in extension delivery.

## 4.3 COVID-19 and Its Impacts

As described by most participants, this theme was one of their main issues. They revealed that the COVID-19 pandemic has had significant impacts on university-community engagement programs focused on climate change action, disrupting traditional modes of collaboration and outreach. University staff noted that with restrictions on in-person gatherings and travel limitations, many university community engagement programs have had to transit to virtual formats or restricted engagements. While this shift enabled some level of continuity, it posed challenges for engagement initiatives that rely heavily on face-to-face interactions, such as fieldwork, community workshops, and public lectures, among others. Correspondingly, the university staff decried restrained funding dues due to the impacts of the pandemic. They noted that since Ndejje University is solely a private institution, it largely depends on the tuition of university students. They revealed that COVID-19 and its impacts have led to reduced numbers of students and the tuition generated. Resultantly, this has prompted universities to reallocate resources and reprioritize activities to address immediate academic and research. As a result, community engagement programs focused on climate change action receive less

attention and support from university administration, potentially leading to a decline in funding and institutional backing. They noted that:

*"…getting the funds during and after COVID-19 has been very hard, especially after because the university was hit hard, being a private institution, they do not have enough money."* (NDJ, US2, lines 22-23)

*"(…) COVID-19 also affected funding and budgeting. I can say there is hardly any funding. The students are now few. And you know we've gone online mostly. So, part of the time it is actually the online part, which is the effect of COVID-19. Engagement in an online era becomes very hard."* (NDJ, US3, lines 21-24)

Overall, COVID-19 has presented significant challenges for university community engagement programs on climate change action. The inability to meet in person and collaborate effectively strains these relationships and later impedes progress on joint climate change projects and initiatives. The economic repercussions of the pandemic have strained university budgets and resources, leading to funding cuts and staff layoffs in some cases. As a result, community engagement programs may face constraints in terms of staffing, funding, and access to essential resources, hindering their ability to carry out climate change action initiatives effectively (Milugo *et al.*, 2023). The trajectory of higher education institutions' engagement and its institutionalisation and valuation both within the university and in the surrounding communities are important factors in understanding the impact of COVID-19 on UCE and the university as an organisation and institution more generally (Cristofoletti & Pinheiro, 2023). Moving forward, universities will need to continue adapting their engagement strategies to navigate ongoing uncertainties and build more resilient and inclusive partnerships for climate change action.

### 4.4 Unawareness Challenges

Participants described a lack of awareness about university-led engagement programs on climate change within the community posing significant challenges to the effectiveness and impact of these initiatives. Some community leaders revealed that most community members are not aware of university engagement mandates and when community members are unaware of engagement programs, they miss out on opportunities to get involved in efforts to address climate change. Some university staff indicated that this could limit the diversity of perspectives, skills, and resources available for tackling environmental challenges and hinder the implementation of comprehensive and inclusive solutions. A related challenge posed by the participants was that some community members resist engagement and adaptation strategies due to limited sensitization and awareness. They argued that low community awareness has resulted in limited visibility and recognition for university-led engagement programs, undermining their credibility, influence, and long-term sustainability. This hinders efforts to mobilize

support, attract funding, and build partnerships with other stakeholders, including local community agencies, non-profit organizations, and community members at large. A participant explained that:

> *"…We have sensitisation concerns because climate change is now within the elite, and the community members completely do not understand what it means and what it looks like."* (NDJ, US2, lines 16-17).

> *"(…) there are some communities that are resistant, and sometimes they are not receptive to our engagement programs. Some are always expectant of financial assistance due to their financial statuses but as I have told you, we also don't have enough. So, at the end of the day, they ignore our programs."* (NDJ, US1, lines 1-3).

As indicated in the excerpt above, some members of the community are skeptical about the reality or existence of the climate change phenomenon. They do not seem to accept that climate change exists. This becomes a serious challenge, impeding the progress on engagement programs and climate change mitigation and adaptation activities. These key findings are consistent with how sensitisation by university staff and students is significant for communities (Andama and Suubi, 2015). The authors argue that sensitisation sessions with staff, students, and the community prove very helpful in raising awareness among the community members as they get more informed about living sustainably. The community gets the ability to work towards environmental sustainability and is keen to participate in activities that encourage sustainability. Hlalele *et al.* (2015) emphasise that student groups, with the support of the staff, ought to be deeply involved in community outreach activities, which are appreciated by the community at large. Particularly, the authors opine that various sustainability programs and projects should be started on and off campus, and various initiatives like tree planting should be scaled up to have a broader reach. Carrying out collaborative sustainability projects in the community around the university encourages the community to take responsibility for the environment and to be aware of their ways of living.

## 4.5 Local Priorities and Livelihood Concerns

This theme put forward that communities have local priorities that hinder effective community engagement with the university to address climate change issues. Some local leaders note that some local communities often face a myriad of pressing issues such as poverty, healthcare, education, and infrastructure development. They revealed that climate change, while important, is not always perceived as an immediate concern compared to these more immediate challenges. As a result, engagement programs focused on climate change struggle to receive sufficient attention and support from community members and leaders. Similarly, community leaders and some university staff reported that poverty among community members exacerbates vulnerability to the

impacts of climate change. Ndejje, as one of the marginalized communities, lacks the resources, infrastructure, and social support networks needed to cope with extreme weather events, natural disasters, and environmental degradation. Addressing poverty concerns may, therefore, take precedence over engaging in proactive climate change mitigation or adaptation efforts. These sentiments were expressed in:

> *"Also, still about finance, most of our community members are poor; they are always too expectant and this makes mobilisation uneasy. When you tell them that there is a program from the university, they expect there is some money. So, when they find that there is nothing, they are demotivated to always go and attend such activities. So, the nature of livelihood for our community members also affects engagement efforts. This is because most don't go there because they can't forfeit their daily work for money to go and attend engagement programs."* (NDJ, CL3, lines 4-9)

Participants argue that the poor living conditions of Ugandans restrict access to resources necessary for adapting to climate change. Poor communities may lack funds to invest in climate-resilient infrastructure, such climate-friendly sources of energy or drought-resistant crops. As noted, poverty also limits access to education and information about climate change mitigation and adaptation strategies as community members focus on earning a living, ignoring university invitations for sensitisation programs on climate change action. This lack of knowledge may hinder communities' ability to adopt sustainable practices or take preventative measures against climate-related risks. Participants attributed this to inadequate community engagement and climate change sensitisation from all key players and strong cultural attachments (that regard climate change as a global south challenge) that create resistance from some communities.

Addressing poverty in Uganda requires comprehensive strategies that consider its interconnectedness with climate change (Turyahebwa, 2014). University-community engagement initiatives that promote economic growth, improve access to education, enhance agricultural resilience, and provide alternative energy sources can help mitigate the adverse effects of poverty on climate change vulnerability. Additionally, policies and programs should prioritize the inclusion of vulnerable communities in decision-making processes and ensure equitable access to resources and opportunities for adaptation and resilience building (Okello, 2019).

## 5. Conclusion

In this study, we establish that barriers related to the institution, resources, unawareness, COVID-19 impacts, and livelihood concerns decelerate university community engagement efforts towards climate change action in Ndejje community. The challenges face both the institution and community members thus hampering the effective

participation of university staff, students, and community members in programs that foster climate change knowledge, adaptation, and mitigation.

Building trust and ensuring that engagement efforts are responsive to the needs and aspirations of the community are key elements in successful university-community collaborations. University community engagement that involves all partners is the glue that can create trust, generate new lines of work, funding, inclusion, income diversification, and keep shared goals as well as expectations visible to both universities and communities. Congruently, addressing these constraints requires a strategic approach that involves leadership buy-in, resource allocation, cultural change, bidirectional planning and implementation of engagement programs at the case universities, and adaptability to technological advancements. Successful engagement programs often involve a continuous effort to overcome these challenges and create a more inclusive and responsive organizational environment. In a nutshell, these findings have implications on institutions in African contexts as the discussed university community engagement barriers provide a basis for reforms to funding mechanisms, changes to academic incentives and reward structures, enhanced institutional support for outreach activities, and efforts to cultivate a culture of innovation, risk-taking, and social responsibility within the academic community.

Government, civil society, and other university and community partners ought to create and avail funding opportunities to both the universities and community-based organisations and associations that aim to achieve income diversification. This can, for instance, be through availing fairly competitive grants for universities, wealth creation programs for community members that can ably enhance university community engagement activities and also scale up community resilience toward drivers of climate change like poverty and food insecurity.

## 5.1 Data Availability
The data used for this study formed a component of a larger PhD project that has been submitted to the School of Education at Moi University-Kenya.

**Conflicts of Interest Statement**

The authors declare that they have no financial or personal interests that could influence the results of this paper.

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**References**

Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), 39-43. Retrieved from https://gajrc.com/media/articles/GAJHSS_23_39-43_VMGJbOK.pdf

Ali, M., Mustapha, I., Osman, S., & Hassan, U. (2021). University social responsibility: A review of conceptual evolution and its thematic analysis. *Journal of Cleaner Production*, *286*, 124931. https://doi.org/10.1016/j.jclepro.2020.124931

Andama, E., & Suubi, U. M. (2015). Mainstreaming Education for Sustainable Development in Teacher Education at Busitema University, Uganda. *Stories! of! Change!*, 127.

Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian journal of psychological medicine*, *43*(1), 86-88. https://doi.org/10.1177/0253717620977000

Armond, A. C. V., Gordijn, B., Lewis, J., Hosseini, M., Bodnár, J. K., Holm, S., & Kakuk, P. (2021). A scoping review of the literature featuring research ethics and research integrity cases. *BMC Medical Ethics*, *22*(1), 50. https://doi.org/10.1186/s12910-021-00620-8

Biagini, B., Bierbaum, R., Stults, M., Dobardzic, S., & McNeeley, S. M. (2014). A typology of adaptation actions: A global look at climate adaptation actions financed through the Global Environment Facility. *Global environmental change*, *25*, 97-108. https://doi.org/10.1016/j.gloenvcha.2014.01.003

Bowers, A. M. (2017). University-community partnership models: Employing organizational management theories of paradox and strategic contradiction. *Journal of Higher Education Outreach and Engagement*, *21*(2), 37-64. Retrieved from https://files.eric.ed.gov/fulltext/EJ1144548.pdf

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Compagnucci, L., & Spigarelli, F. (2020). The third mission of the university: A systematic literature review on potentials and constraints. *Technological Forecasting and Social Change*, *161*, 120284. https://doi.org/10.1016/j.techfore.2020.120284

Creswell, J. W., & Clark, V. L. P. (2018). *Designing and conducting mixed methods research*. Sage publications. Retrieved from https://collegepublishing.sagepub.com/products/designing-and-conducting-mixed-methods-research-3-241842

Cristofoletti, E. C., & Pinheiro, R. (2023). Taking stock: The impacts of the COVID-19 pandemic on University–Community engagement. *Industry and Higher Education*, *37*(2), 251-264. https://doi.org/10.1177/09504222221119927

Godonoga, A., & Sporn, B. (2023). The conceptualisation of socially responsible universities in higher education research: a systematic literature review. *Studies in Higher Education*, *48*(3), 445-459. https://doi.org/10.1080/03075079.2022.2145462

Du Plooy, B., & Von Moellendorff, M. (2024). "Our Theatre is Society": Perceptions and Practices of University-Based African Centres of Excellence Regarding Community Engagement and the Third Mission of Higher Education. *South African Journal of Higher Education*, *38*(2), 99-119. http://dx.doi.org/10.20853/38-2-6088

Hadidi, H. E., & Kirby, D. A. (2016). Universities and innovation in a factor-driven economy: the performance of universities in Egypt. *Industry and Higher Education*, *30*(2), 140-148.

Hancock, B., Ockleford, E., & Windridge, K. (2001). *An introduction to qualitative research*: Trent focus group. Retrieved from https://dl.icdst.org/pdfs/files3/315d0c3a18c9426593c9f5019506a335.pdf

Head, G. (2020). Ethics in educational research: Review boards, ethical issues and researcher development. *European Educational Research Journal*, *19*(1), 72-83. https://doi.org/10.1177/1474904118796315

Hlalele, D., Manicom, D., Preece, J., & Tsotetsi, C. T. (2015). Strategies and outcomes of involving university students in community engagement: An adaptive leadership perspective. *Journal of Higher Education in Africa/Revue de l'enseignement supèrieur en Afrique*, *13*(1-2), 169-192. http://dx.doi.org/10.57054/jhea.v13i1-2.1523

Hügel, S., & Davies, A. R. (2020). Public participation, engagement, and climate change adaptation: A review of the research literature. *Wiley Interdisciplinary Reviews: Climate Change*, *11*(4), https://doi.org/10.1002/wcc.645

Koryakina, T., Sarrico, C. S., & Teixeira, P. N. (2015). Third mission activities: university managers' perceptions on existing barriers. *European Journal of Higher Education*, *5*(3), 316-330. https://doi.org/10.1080/21568235.2015.1044544

McNair, T. B., & Ramaley, J. A. (2018). Equity and inclusion: Expanding the urban ecosystem. *Metropolitan Universities*, *29*(1), 3-10. Retrieved from https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1025&context=pubadmin_fac

Mugabi, H. (2014). *Institutionalisation of the "third mission" of the university: The case of Makerere University*. Tampere University Press. Retrieved from https://trepo.tuni.fi/bitstream/handle/10024/96369/978-951-44-96448.pdf?sequence=1

Mugumbate, J. R., & Chereni, A. (2020). Now, the theory of Ubuntu has its space in social work. *African Journal of Social Work*, *10*(1). Retrieved from https://www.ajol.info/index.php/ajsw/article/view/195112

Myers, N., Kent, J. (2008). *The citizen is willing, but society won't deliver: The problem of institutional roadblocks*. International Institute for Sustainable Development: Winnipeg. Retrieved from https://www.iisd.org/publications/citizen-willing-society-wont-deliver-problem-institutional-roadblocks

Nabaho, L., Turyasingura, W., Twinomuhwezi, I., & Nabukenya, M. (2022). The Third Mission of Universities on the African Continent: Conceptualisation and Operationalisation. *Higher Learning Research Communications*, *12*(1), 4. Retrieved from https://scholarworks.waldenu.edu/hlrc/vol12/iss1/4/

Nicolaides, A., & Austin, A. C. (2022). Community Engagement as an Ubuntu Transformative Undertaking for Higher Education Institutions. *Athens Journal of Philosophy*, Volume 1, Issue 4, Retrieved from https://www.athensjournals.gr/philosophy/2022-1-4-1-Nicolaides.pdf

Nkosi, B., & Daniels, P. (2007). Family strengths: South Africa. *Marriage & Family Review*, *41*(1- 2), 11-26. http://dx.doi.org/10.1300/J002v41n01_02

Okello, J. (2019). Policy implications of social protection initiatives in addressing poverty in Uganda. Retrieved from https://www.researchgate.net/publication/337831858_Policy_implications_of_social_protection_initiatives_in_addressing_poverty_in_Uganda

Pinheiro, R., Langa, P. V., & Pausits, A. (2015). The institutionalization of universities' third mission: Introduction to the special issue. *European Journal of Higher Education*, *5*(3), 227-232. https://doi.org/10.1080/21568235.2015.1044551

Pinheiro, R., Langa, P. V., & Pausits, A. (2015). One and two equals three? The third mission of higher education institutions. *European journal of higher education*, *5*(3), 233-249. https://doi.org/10.1080/21568235.2015.1044552

Pundt, H., & Heilmann, A. (2020). Building collaborative partnerships: an example of a 3rd mission activity in the field of local climate change adaptation. In *Universities as Living Labs for Sustainable Development* (pp. 621-636). Springer, Cham. Retrieved from https://link.springer.com/book/10.1007/978-3-030-15604-6

Rubens, A., Spigarelli, F., Cavicchi, A., & Rinaldi, C. (2017). Universities' third mission and the entrepreneurial university and the challenges they bring to higher education institutions. *Journal of Enterprising Communities: People and Places in the Global Economy*. Retrieved from https://www.emerald.com/insight/content/doi/10.1108/jec-01-2017-0006/full/html

Sapirstein, G. (2006). Social resilience: the forgotten dimension of disaster risk reduction. *Jàmbá: Journal of Disaster Risk Studies*, *1*(1), 54-63. Retrieved from http://dx.doi.org/10.4102/jamba.v1i1.8

Stewart, T., & Alrutz, M. (2022). Meaningful relationships: Cruxes of university-community partnerships for sustainable and happy engagement. *Journal of Community Engagement and Scholarship*, *5*(1). Retrieved from https://jces.ua.edu/articles/10.54656/NYHZ8317

Talwar, S., Wiek, A., & Robinson, J. (2011). User engagement in sustainability research. *Science and Public Policy*, *38*(5), 379-390. http://dx.doi.org/10.3152/030234211X12960315267615

Thanasi-Boçe, M., & Kurtishi-Kastrati, S. (2022). Social responsibility approach among universities' community. *Journal of Enterprising Communities: People and Places in the Global Economy*, *16*(3), 384-401. Retrieved from http://dx.doi.org/10.1108/JEC-11-2020-0193

Theron, L., Liebenberg, L., & Ungar, M. (2015). *Youth resilience and culture*. Springer. [MU]. Retrieved from https://psycnet.apa.org/record/2014-54174-000

Trencher, G., Yarime, M., McCormick, K. B., Doll, C. N., & Kraines, S. B. (2014). Beyond the third mission: Exploring the emerging university function of co-creation for sustainability. *Science and Public Policy*, *41*(2), 151-179. Retrieved from https://doi.org/10.1093/scipol/sct044

Turyahabwa, J. (2014). The role of multinationals in eradicating poverty in Africa: Perspectives from different stakeholders in urban Uganda. *Poverty & Public Policy*, *6*(1), 24-32. https://doi.org/10.1002/pop4.64

Tutu, D. (1999). *No future without forgiveness*. New York: Image. Retrieved from https://philpapers.org/rec/TUTNFW

United Nations Educational Scientific and Cultural Organization (UNESCO) (2015). Putting Climate Change Education into Practice. Paris France: *United Nations Educational Scientific and Cultural Organization.*

Vendetti, M., Reale, E., Leydesdorff, L. (2011). The disclosure of university research for societal demand: a non-market perspective on the "third mission", Retrieved from http://arxiv.org/pdf/1111.5684.pdf

Virtenen A (2010). Learning for Climate Responsibility: Via Consciousness to Action. In: W. L. Filho (Ed.), *Universities and Climate Change*, Berlin Heidelberg: Springer, pp. 231-240. http://dx.doi.org/10.1007/978-3-642-10751-1_19

Waghid, Y. (2020). Towards an Ubuntu philosophy of higher education in Africa. *Studies in Philosophy and Education*, *39*(3), 299-308. https://link.springer.com/article/10.1007/s11217-020-09709-w

Yin, R. K. (2012). *Application of Case Study Research* (3rd ed.). Los Angeles: Sage Publications Inc. Retrieved from https://books.google.ro/books/about/Applications_of_Case_Study_Research.html?id=-1Y2J0sFaWgC&redir_esc=y