



AUTHOR:
Betty C. Mubangizi

AFFILIATION:
¹NRF/SARChI Chair in Sustainable Rural Livelihoods, University of KwaZulu-Natal, Durban, South Africa

CORRESPONDENCE TO:
Betty Mubangizi

EMAIL:
Mubangizib@ukzn.ac.za

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Enhancing rural livelihoods and sustainability through a place-based approach to research

Significance:

This Commentary highlights the transformative potential of place-based research in rural development, demonstrating how a focused approach can yield deeper insights into the complex interplay between local institutions and sustainable livelihoods, ultimately leading to more effective and context-specific solutions.

Introduction

Place-based research delves into the intricacies of specific landscapes viewed as dynamic social-ecological systems, emphasising the interplay between human and natural elements. A place is not merely defined by its territorial boundaries and unique characteristics that set it apart from other regions. A place also serves as a focal point where various social, economic, and political forces intersect, intertwining with numerous biophysical and societal interactions and connections. The significance of place-based sustainability research has been increasingly acknowledged as indispensable in tackling intricate socio-political and ecological dilemmas. Innovations in landscape studies, particularly in sustainable rural livelihoods and communal land governance, underscore the necessity of place-based approaches due to the intricate nature of rural studies. Such an approach allows researchers to engage deeply with specific locales, and to understand the unique social, cultural, institutional and ecological dynamics. This depth of understanding is crucial for developing effective, tailored strategies to address these communities' specific challenges and opportunities.

Focusing research on a specific geographical area offers several advantages, particularly in a climate of declining research funding. By directing resources to a defined region, researchers can maximise the impact and prevent the dilution of efforts, thereby ensuring more substantial outcomes. This approach also fosters a robust research ecosystem by engaging local students, institutions, and mentors, who bring unique insights that enrich the research. Such a strategy can serve as a model for other regions or comparative studies across different geographies, highlighting the global relevance of local insights and demonstrating how region-specific research can contribute to broader, internationally recognised scholarship. This approach can facilitate international collaborations, where localised findings are synthesised to address global challenges, thus enhancing the universal applicability of the research.

In this Commentary, I share the experiences of our research unit in adopting a place-based approach to address critical challenges in rural development, specifically focusing on the institutional dynamics that impact sustainable livelihoods in the broader Alfred Nzo District Municipality. The central problem driving this research is the disconnect between local institutions and sustainable development efforts in rural areas, where conventional top-down approaches often overlook the complex realities of these communities. Our research unit sought to answer critical questions: How do local institutions influence the achievement of sustainable livelihoods? What is the role of network governance in facilitating or impeding these efforts? Additionally, I explore the necessary shifts within universities and the wider science environment to better accommodate and support place-based research. Drawing on examples from the Alfred Nzo District municipalities and network governance studies, this discussion highlights the importance of institutional support and interdisciplinary collaboration in achieving meaningful and sustainable research outcomes.

What is a place-based approach?

A place-based approach (PBA), in the context of a specific research unit, such as a research chair, involves integrating the local cultural, social, ecological, and economic contexts into the research processes and outcomes. According to Beaty et al.¹, PBA emphasises the importance of building solid relationships with the local community and the environment in which the research is conducted, thereby enhancing the societal value of the study. Researchers can achieve more accurate results and improve public trust in the scientific process by deepening relational engagement with a place's social-ecological context and history.

PBA and community-based research (CBR) are both methodologies that emphasise collaboration with local communities, but they differ in scope, focus, and implementation. For Watson et al.², PBA involves mobilising and coordinating local resources, services, and expertise across multiple organisations and sectors to strengthen historically disinvested neighbourhoods' social, structural, physical, and economic conditions. This approach often leverages partnerships with academic institutions to stimulate asset-based community development and address external accountability challenges through CBR efforts.²

In contrast, CBR is a collaborative method in which researchers assist with community-led projects, often with a social justice component. The hallmark of CBR is that the research is not designed and carried out solely by the researcher; instead, community members decide what information is valuable and how to collect it, ensuring that the research is directly relevant to their needs.³ While both approaches emphasise partnership and collaboration, PBA tends to focus more on systemic changes and the coordination of multiple sectors. In contrast, CBR is more about empowering communities to lead the research process. Additionally, CBR in higher education often faces challenges in institutionalisation and visibility compared to other high-impact practices like service learning and undergraduate research, which limits its widespread adoption and the realisation of its full benefits.⁴ Both approaches also emphasise ethical and sustainable community engagement, with mutual aid and reciprocity being critical elements in building trust and ensuring long-term impact.⁵ Participatory action research, a subset of CBR,

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further emphasises reflexivity, accountability, and sensitivity to power dynamics, challenging students and researchers to navigate new ways of working directly with stakeholders and contributing constructively to the community.⁶ Thus, while both PBA and CBR aim to benefit communities, they do so through different mechanisms and scales of intervention.

By embracing a PBA, research units can effectively address the complex socio-ecological challenges that define rural and communal land contexts. This approach enhances the depth and relevance of the research and ensures that limited resources are utilised efficiently, fostering sustainable change and community engagement.

Successful place-based research projects often integrate local cultural, ecological, and educational elements to create meaningful and impactful outcomes. One notable example is the FAIR Island project in French Polynesia, which aims to enhance the reuse of scientific data and promote sustainable development by leveraging the institutional infrastructure of scientific field stations. This project increases awareness of ongoing research and connects it to societal benefits, thereby accelerating place-based research for sustainable development.⁷ Another example is the action research conducted with educators to explore place-based education, where participants actively reflected on their professional work and advocated making 'place' an explicit pedagogical concern. This approach revealed new perspectives on the cultural and ecological life in which learners are embedded, emphasising the importance of place, belonging, and care in educational contexts.⁸ Research in Freetown, Sierra Leone, has shown that leveraging local topographical and institutional resources can strengthen civic infrastructure and build confidence in city-scale institutions. This approach involves using place-based resources to mediate the impact of urban infrastructure developments, although these resources are often fragile and overlooked by city-scale practitioners.⁹ From the preceding examples, it is clear that PBA has produced successful results elsewhere – but why is it important?

The importance of place-based research

The PBA for sustainable rural development involves recognising the diversity of resources within rural areas and enabling local agencies to shape their communities using these resources.¹⁰ This shift from sectorial to territorial focus has benefitted many European rural areas, particularly in Portugal, by unlocking local potential, fostering sustainable practices, and enhancing social and economic well-being.¹⁰ However, some rural communities face challenges, such as demographic imbalances and technical knowledge gaps, that hinder their ability to capitalise on these opportunities.¹⁰ Working together at the interface of different rural development approaches, such as community-based, place-based, and territorial, could enhance collaboration among policymakers, practitioners, and researchers.¹¹

Place-based research approaches for sustainable rural development in Africa have been crucial in addressing the challenges of failed agricultural markets, inappropriate policies, and natural resource degradation in sub-Saharan Africa.¹² Participatory rural appraisal is a significant step forward in designing effective rural development methodologies, as it appreciates the whole picture in rural communities and incorporates local people's perceptions, needs, and understanding.¹³ Agricultural research organisations are pressured to make small-scale farming more market-oriented and profitable, necessitating participatory approaches to marketing and agroenterprise development.¹⁴ Targeted approaches, such as the Enabling Rural Innovation framework, aim to identify different resource management strategies for specific households and communities in under-resourced areas and create balanced investments for sustainable rural livelihoods.¹⁵

PBA to research on sustainable rural livelihoods

A place-based approach was adopted for the research programme, with a focus on local municipalities within the Alfred Nzo District Municipality of the Eastern Cape Province, South Africa. This approach has been particularly emphasised in Matatiele Local Municipality, where extensive research and community engagement have been conducted.

The initial research in Matatiele Local Municipality revealed the intricate civic society and public administration structures. A baseline study using the Social Institutional Network Analysis tool was conducted in three communities within Matatiele, with the findings published in 'Rural livelihoods in South Africa: Mapping the role-players'.¹⁶ Further research explored monitoring and evaluation processes in rural municipalities¹⁷ and the causes and impacts of rural-urban migration¹⁶. These studies have been pivotal in understanding local governance and service delivery challenges in a rural context.

The programme has facilitated master's and doctoral research on various aspects of rural governance, decentralisation, and intergovernmental relations within Alfred Nzo District. These efforts have resulted in numerous publications in accredited journals, reflecting a strong commitment to generating impactful knowledge.

The PBA also involves active participation in local projects and structures. The research programme contributes to projects under the Umzimvubu Catchment Partnership, a consortium of voluntary organisations, public entities, research institutions, and communities focused on nurturing livelihoods in the Umzimvubu River catchment area. This partnership has led to successful research funding applications and ongoing projects funded by the Water Research Commission. Place-based research emphasises a locality's unique social, cultural, and ecological characteristics. In the Umzimvubu Catchment Partnership context, this approach has proven invaluable in understanding the intricate relationships between local and traditional institutions and livelihood activities on communal land.

Engagement with local municipalities through strategic planning and community meetings has strengthened partnerships with various stakeholders, including the Department of Agriculture, Land Reform and Rural Development, the CSIR, the South African National Biodiversity Institute, Ezemvelo KZN Wildlife, Environmental and Rural Solutions, and local municipalities within Alfred Nzo District. These collaborations have provided a unique opportunity to merge academia with practice, enhancing the research impact. There is a structured approach that prioritises regular and inclusive engagement. In this way, the critical voice and participation of the community do not get lost amidst the involvement of multiple stakeholders.¹⁸ Specifically, under the Umzimvubu Catchment Partnership, quarterly meetings are held where community members, local organisations, and research institutions are given a platform to provide input, voice concerns, and receive updates on ongoing research and findings. These meetings serve as a crucial mechanism for maintaining transparency and ensuring that the perspectives of all stakeholders, particularly the local communities, are heard and integrated into the research process. This approach fosters equal involvement and ensures that the research remains grounded in the realities and needs of those it aims to serve.

The PBA has ensured the active participation of local communities, organisations, and institutions in the research programme's activities. This community participation has incorporated local perspectives into the generated knowledge, making the research more relevant and impactful. Furthermore, interdisciplinary research collaboration projects have addressed local rural issues and provided practical solutions that can potentially inform policy and practice.

The programme's research approach, while deeply rooted in local development, is designed to generate insights and methodologies that are applicable on a broader, international scale. By engaging in joint research with host community structures and promoting social responsibility among students, the Research Chair cultivates a model of community-based research that can be adapted and applied to similar contexts globally. The knowledge generated through this PBA is disseminated in international forums, publications, and collaborations, ensuring that the findings contribute to global discussions on sustainable development and rural livelihoods. Moreover, the Research Chair actively seeks to connect local research outcomes with international networks and comparative studies, highlighting how locally grounded research can inform and enhance global strategies, making the work both current and relevant internationally.

The value of a PBA for research units with limited resources

Place-based research emphasises the unique social, cultural, and ecological characteristics of specific locales. In the Umzimvubu Catchment Partnership context, this approach has proven invaluable in understanding the intricate relationships between local and traditional institutions and livelihood activities on communal land. Researchers can develop tailored strategies that address these areas' unique challenges and opportunities by focusing on specific places.

One of the primary benefits of a PBA is the active participation of local communities, organisations, and institutions in the research activities. This community involvement enables the incorporation of local perspectives into the generated knowledge, making the research more relevant and impactful. This approach ensures that efforts are concentrated in a defined geographical area for research units with limited resources, maximising the use of available funds and personnel without spreading resources too thin.

Another significant advantage is the establishment of research collaboration projects between different disciplines and organisations. By focusing on local rural issues and concerns, interdisciplinary research can provide practical solutions directly applicable to the community. This collaborative effort enhances the overall impact of research studies, as seen in the successful applications for funding from the Water Research Commission and the ongoing projects that have emerged from these partnerships.

Moreover, the PBA allows deep immersion into local projects and structures. This immersion fosters a thorough understanding of the local context, which is essential for developing sustainable and effective strategies. It also facilitates building solid relationships with local stakeholders, leading to long-term collaborations and support for future research initiatives.

A PBA is particularly valuable for research units with limited resources, enabling them to target a clearly defined geographical space. This focus ensures that the research addresses the specific needs and characteristics of the area, leading to more meaningful and sustainable outcomes. It also allows researchers to avoid the pitfalls of spreading resources too thin, which can dilute the impact of their work.

In conclusion, the PBA offers a strategic advantage for research units with limited resources by enabling short-term and long-term solutions tailored to local challenges. In the short term, this approach has led to the creation of practical toolkits and policy briefs that provide immediate guidance to local institutions on issues such as sustainable agricultural practices and water management. For instance, the Chair's research has produced toolkits that help local farmers implement climate-resilient farming techniques, which are shared during community workshops and through local government channels.

In the long term, the approach has fostered the development of comprehensive frameworks for sustainable rural development, which are reflected in academic publications and presentations at international conferences. These frameworks are designed to be adaptable to other regions, offering a blueprint for similar challenges elsewhere. Additionally, the ongoing community engagement has led to the development of best practices shared through policy briefs, further influencing regional and national policy. The cumulative effect of these activities ensures that the research addresses immediate local needs and contributes to broader discussions and solutions in the global context.

Challenges of adopting a PBA for research

A PBA is not without challenges; to effectively engage in a PBA to research, researchers must possess proficiency in the local languages. In the context of Matatiele, fluency in both Sesotho and isiXhosa, alongside English, is advantageous, given the prevalence of these languages in the area. Additionally, successful community entry necessitates individuals embedded within the community, possessing established trust and recognition by traditional leaders and municipal

councillors. This embedded presence is crucial for securing community buy-in and facilitating research.¹⁹

Engaging with the community and obtaining consent from key representatives is vital for ethical and practical reasons. These include ensuring access to communities; fostering trust and participation among community members; respecting community protocols, culture, and knowledge; and enhancing accountability to the community. Moreover, the safety of research team members is significantly bolstered when community consent is secured. In deep rural areas, where residents are typically wary of outsiders and unaccustomed to external researchers, gaining the trust of gatekeepers and community members is particularly challenging. Fieldwork experiences in Matatiele underscored the difficulty of achieving this buy-in – a challenge that was mitigated by the invaluable assistance of the Umzimvubu Catchment Partnership. Numerous research institutions have leveraged the Umzimvubu Catchment Partnership as a gateway to conducting research in Matatiele and the Upper Umzimvubu catchment.

Another significant challenge of place-based research is the potential for research fatigue among community members. This issue was highlighted in one of the Umzimvubu Catchment Partnership's quarterly meetings, where participants expressed frustration over the lack of coordination among research institutions, leading to repetitive questioning of respondents. To mitigate this, the Umzimvubu Catchment Partnership proposed the creation of a centralised repository for research reports. This repository would enable institutions to review existing research, thereby preventing redundancy and ensuring that new inquiries build upon previous work rather than duplicating it.

Shifts needed in universities and funding institutions

Place-based research is essential for addressing local sustainability challenges and fostering resilient communities. To effectively support and advance this type of research, universities and funding institutions must adapt their structures and practices. The following recommendations outline the necessary shifts in institutional support, collaboration, funding mechanisms, and research evaluation to enhance the impact and recognition of place-based research initiatives.

1. **Enhancing awareness and support for place-based research:** Universities and funders can be made aware of place-based research's critical role in creating relevant, impactful, and socially responsible scholarship. This awareness can increase support and funding for initiatives prioritising long-term engagements with local contexts, ultimately contributing to more sustainable and equitable academic and community outcomes.
2. **Institutional support:** Universities should provide structural support for place-based research, particularly in remote areas. This support could include funding, administrative assistance, and recognition of place-based projects in academic promotion decisions.
3. **Collaboration and partnerships:** Building strong partnerships with local communities, government agencies, and NGOs is crucial. These partnerships facilitate the exchange of knowledge and resources, ensuring that research is relevant and impactful. The Umzimvubu Catchment Partnership exemplifies how collaborative efforts can enhance place-based sustainability initiatives.
4. **Funding mechanisms:** Funding agencies should prioritise and support transdisciplinary research projects. Such support involves creating grant programmes specifically for transdisciplinary initiatives and ensuring that evaluation criteria recognise transdisciplinary research's unique challenges and contributions.
5. **Research evaluation:** Traditional metrics of academic success, such as publication in high-impact journals, may not fully capture the value of place-based research. Universities could develop new evaluation frameworks to assess such projects' societal impacts, stakeholder engagement, and innovative approaches.



Declarations

I have no competing interests to declare. I used Grammarly and ChatGPT [4.0] to revise and edit writing, summate existing literature and improve readability.

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References

1. Beaty F, Domínguez-Sánchez PS, Nalven KB, Palacios-Abrantes J, Oken KL, Ban NC, et al. Centering relationships to place for more meaningful research and engagement. *Proc Natl Acad Sci USA*. 2024;121(25), e2306991121. <https://doi.org/10.1073/pnas.2306991121>
2. Watson S, Potochnick S, Case A, Cole J, Whitlow C, Langhinrichsen-Rohling J, et al. Can you put down your mission and plug into mine? How place-based initiatives leverage collaborations with academic institutions to enhance their ABCD and CBR potential. *Gateways*. 2023;16(2):1–18. <https://doi.org/10.5130/ijcre.v16i2.8671>
3. Gullion JS, Tilton A. Doing community-based action research. In: *Researching with: A decolonizing approach to community-based action research*. Leiden: Brill; 2020. p. 63–107. https://doi.org/10.1163/9789004424852_004
4. Abell L, Downey D, Pacheco P. Institutionalizing community-based research: A case study of articulated program development. *Metrop Univ*. 2023;34(5): 84–102. <https://doi.org/10.18060/26877>
5. Heilig L, Jones M, Ledbetter L, Neelis A. Cultivating reciprocity through place-based and community-engaged research methods. In: Stephens S, Bartolotta J, editors. *SIGDOC '23: Proceedings of the 41st ACM International Conference on Design of Communication*; 2023 October 26–28; Orlando, FL, USA. New York: Association for Computing Machinery; 2023. p. 252–254. <https://doi.org/10.1145/3615335.3623059>
6. Palka J. Participatory and place-based socioeconomic knowledge generation: An experience in community-based research pedagogy. *Teach Learn Inq*. 2024;12:1–26. <https://doi.org/10.20343/teachlearninqu.12.8>
7. Robinson E, Buys M, Chodacki J, Garzas K, Monfort S, Nancarrow C, et al. FAIR Island: Real-world examples of place-based open science. *GigaScience*. 2023;12, giad004. <https://doi.org/10.1093/gigascience/giad004>
8. Harrison S. Up at the shieling: Place-based action research. *Children Youth Environ*. 2011;21(1):79–100. <https://doi.org/10.1353/cye.2011.0046>
9. Mitchell M. The forest and the city: Interpretative mapping as an aid to urban practice in sub-Saharan Africa. *J Urban Des*. 2018;23(4):558–580. <https://doi.org/10.1080/13574809.2017.1411186>
10. Vasta A, Figueiredo J, Valente LMP, Vihinen H, Nieto-Romero M. Place-based policies for sustainability and rural development: The case of a Portuguese village “spun” in traditional linen. *Soc Sci*. 2019;8(10), Art. #289. <https://doi.org/10.3390/socsci8100289>
11. Akimowicz M, Weeden S, Asleigh GR. Searching for a conceptual nexus? A critical analysis of community, place, and territorial approaches to rural development. *Ann Reg Sci*. 2022;71:9–26. <https://doi.org/10.1007/s00168-022-01125-x>
12. Thornton PK, Stroud A, Hatibu N, Legg C, Ly S, Twomlow S, et al. Site selection to test an integrated approach to agricultural research for development: Combining expert knowledge and participatory geographic information system methods. *Int J Sustain Agric Res*. 2018;4(1):39–60. <https://doi.org/10.1080/14735903.2006.9686008>
13. Binns T, Trevor H, Etienne N. Learning from the people – participatory rural appraisal, geography and rural development in the ‘new’ South Africa. *Appl Geogr*. 1997;17(1):1–9. [https://doi.org/10.1016/S0143-6228\(96\)00024-0](https://doi.org/10.1016/S0143-6228(96)00024-0)
14. Sanginga PC, Best R, Chitsike C, Delve RJ, Kaaria SK, Kirkby RA. Enabling rural innovation in Africa: An approach for integrating farmer participatory research and market orientation for building the assets of rural poor. *Uganda J Agric Sci*. 2014;9:934–949.
15. Ruben R, Pender J, Kuyvenhoven A. Sustainable poverty reduction in less-favoured areas: Problems, options and strategies. In: Ruben R, Pender J, Kuyvenhoven A, editors. *Sustainable poverty reduction in less-favoured areas*. Wallingford, UK: CABI; 2007. p. 1–61. <https://doi.org/10.1079/9781845932770.0000>
16. Mubangizi BC. Rural livelihoods in South Africa: Mapping the role-players. *Adm Public*. 2021;29(4):17–32.
17. Mubangizi BC. Monitoring and evaluation processes critical to service provision in South Africa’s rural-based municipalities. *J Rev Glob Econ*. 2019;8:555–565. <https://doi.org/10.6000/1929-7092.2019.08.48>
18. Snorek JL, Loos JR, Cox M, Shata T, Bowman AQ, Kramer JC, et al. Care-based leadership in a core-periphery network: A South African case study in collaborative watershed governance. *Ecol Soc*. 2022;27(4), Art. #34. <https://doi.org/10.5751/ES-13589-270434>
19. Casale M, Lane T, Sello L, Kuo C, Cluver L. Conducting health survey research in a deep rural South African community: Challenges and adaptive strategies. *Health Res Policy Sys*. 2013;11, Art. #14. <https://doi.org/10.1186/1478-4505-11-14>