

Enhancing Scotland’s resilience to climate change – a blue-green infrastructure inclusivity framework based on community-centred nature-based solutions.

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Introduction

Blue-green infrastructure (BGI) planning in Scotland continues to struggle with inclusive community engagement. Without this, it remains difficult to create co-produced nature-based solutions (NBS) which offer multiple benefits to local communities or build climate resilience.

Through this research, I will explore template principles and a framework which can be used and adapted across Scotland to create more inclusive community engagement within BGI planning settings.

Through an initial literature review, it was identified that perceived transient communities were underrepresented in community engagement. Furthermore, a research gap emerged regarding higher education students (HEI) which informed the beginning of my research project.

Aims and objectives

Thesis aim - Critically examine community engagement for NBS through the development of an inclusivity framework for populations perceived as transient such as students.

- 1. To explore the extent to which perceived transient groups, such as students, are engaged with urban planning strategies, identifying the degree of participation and barriers to inclusive engagement with NBS.
- 2. To survey whether inclusive student community engagement for NBS can improve climate resilience.
- 3. To determine the role digital resources can play in community engagement for NBS planning, identifying what stakeholder-perceived barriers exist.
- 4. To assess the use of social media by local authorities, and different communities, for engagement with NBS.
- 5. To evaluate different digital resources for effectiveness of overcoming barriers to community engagement, and increasing inclusivity, throughout NBS consultation, implementation, and maintenance.
- 6. To assess whether inclusive community engagement can facilitate and encourage greater community co-production of BGI improving public preferences, accountability and sustainability, and improve climate resilience.

Study 1a

Evaluate the extent to which perceived transient groups, such as student populations, are engaged with urban planning strategies, identifying the degree of participation and barriers to inclusive engagement with NBS.

Format and analysis

15 semi-structured interviews with urban planning, community engagement, and higher education institution practitioners were conducted between Sept and Oct 2023 on Microsoft Teams ranging 12 – 59 minutes. Thematic analysis will be used, supported by the Nvivo software.

Objectives

- Identify barriers to community engagement in urban planning.
- Identify groups which are not reached during community engagement within urban planning.
- Determine whether student populations are inclusively engaged in urban planning community consultations relating to nature-based solutions.
- Identify barriers to inclusive student population engagement with NBS planning.

Future

Study 1b

To survey student perspective and experience of place and community engagement with a focus on BGI. (RO 1 and 2)

- HEI student questionnaire across Scotland (100 respondents) using Qualtrics
- Analysis methods being explored

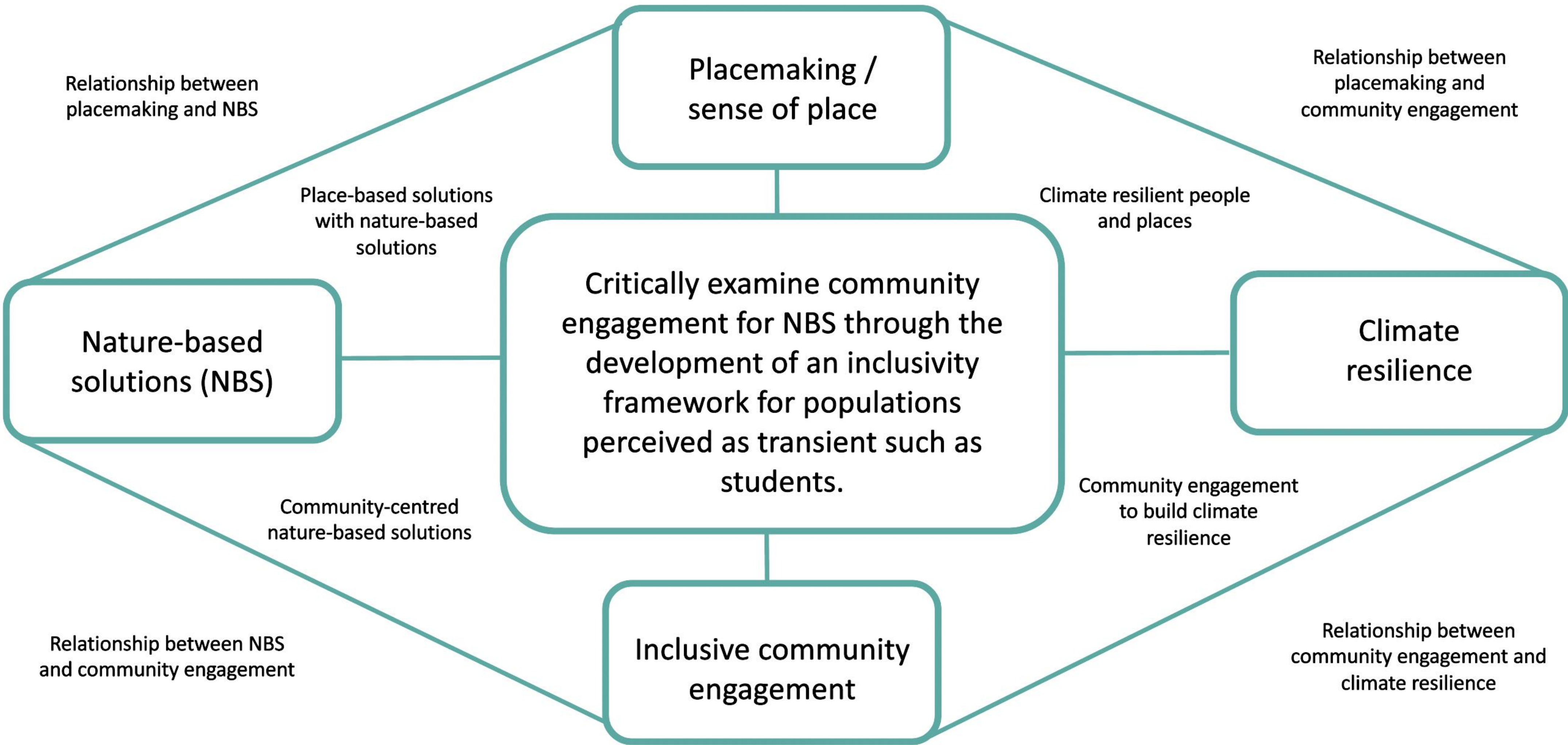
Study 2

To determine inclusive community engagement principals and a framework for perceived transient groups. (RO 3, 4, and 5)

Study 3

To assess whether inclusive community engagement can facilitate and encourage greater community co-production of blue-green infrastructure- improving public preferences, accountability and sustainability, and improve climate resilience. (RO 6)

Conceptual framework



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