

## 20 ADDITIONAL INDICATORS OF SOCIAL JUSTICE AND SOCIAL COHESION

### 20.1 Linking social capital

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**Author/s and affiliations:** Adina Dumitru<sup>1</sup>, Catalina Young<sup>2</sup>, Irina Macsinga<sup>2</sup>

<sup>1</sup> *University of A Coruña, Spain*

<sup>2</sup> *West University of Timisoara, Romania*

Linking social capital	Social Justice and Social Cohesion
<p><b>Description and justification</b></p>	<p>Social capital is largely conceived in terms of the nature, extent, and outcomes of networks and associated norms of reciprocity, thus generally seen as a contributor to individual and group (community, nation) growth, well-being, and progress (<a href="#">Szreter &amp; Woolcock, 2004</a>). Social capital enables individuals to gain access to resources (ideas, information, money, services, and favours) and to have accurate expectations regarding the behaviour of others by virtue of their participation in relationships that are themselves the product of networks of association (<a href="#">Claridge, 2018</a>; <a href="#">Szreter &amp; Woolcock, 2004</a>). Data on linking social capital (LSC) inform on norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society (<a href="#">Claridge, 2018</a>). These relationships are described as 'vertical' and the key feature is differences in social position or power (<a href="#">Claridge, 2018</a>). An example could be relationships between a community-based organisation and government or other funders (<a href="#">Claridge, 2018</a>). Relationships that connect people across explicit 'vertical' power differentials, particularly as it pertains to accessing public and private services that can only be delivered through on-going face-to-face interaction, such as classroom teaching, general practice medicine, and agricultural extension, are central to shaping welfare and well-being (especially in poor communities) (<a href="#">Claridge, 2018</a>). Consequently, LSC has many benefits on collective initiatives like NBS by connecting government officials and specialists (doctors, teachers, etc.) with people in the community, and by opening up economic opportunities to those belonging to less powerful or excluded groups. Nature-based Infrastructure has been linked to the notion of environmental justice across studies that explore the role of supporting urban processes involving equal access to neighborhood green space in fostering social cohesion</p>

	(e.g., bridging social capital) towards the cultural integration of typically-excluded social groups, like elderly, immigrants, persons with disabilities, etc. (i.e., recognition-based justice) ( <a href="#">Ibes, 2015</a> ; <a href="#">Kweon, Sullivan &amp; Wiley, 1998</a> ; <a href="#">Raymond et al., 2017</a> ; <a href="#">Raymond, Gottwald, Kuoppa &amp; Kytta, 2016</a> ; <a href="#">van Der Berg et al., 2017</a> ).
<b>Definition</b>	Social relations with those in authority that can be used to access resources or power ( <a href="#">Claridge, 2018</a> ; <a href="#">Szreter &amp; Woolcock, 2004</a> ).
<b>Strengths and weaknesses</b>	<p>+ reliable indicator of resources that encourage reciprocity and collaboration among people or institutions at different levels of societal power hierarchy</p> <p>+ indicator central to welfare and wellbeing (<a href="#">Claridge, 2018</a>)</p> <p>+ networks and ties with individuals, groups or corporate actors represented in public agencies, schools, business interests, legal institutions and religious/political groups are of paramount importance to economic progress, or to the implementation of initiatives that promote social change and innovation (<a href="#">Claridge, 2018</a>; <a href="#">Szreter &amp; Woolcock, 2004</a>)</p> <p>+ oriented towards inclusiveness, high potential to further trust within community, to ground tolerance and respect, and to inculcate a community sense of safety (<a href="#">Claridge, 2018</a>)</p> <p>- can be put to unhappy purposes—e.g., nepotism, corruption, and suppression (<a href="#">Szreter &amp; Woolcock, 2004</a>)</p> <p>+/- <i>It is important to have an appropriate balance of all types of social capital. Research has found that without linking types of social capital, bonding social capital alone may not be sufficient for community development to occur</i> (<a href="#">Claridge, 2018</a>; <a href="#">Szreter &amp; Woolcock, 2004</a>).</p>
<b>Measurement procedure (P) and tool (T)</b>	<p>☒ P: Scale inventory/Questionnaire (survey procedure, paper-and-pencil administration, computer-based administration)</p> <p>☒ T: Scale consisting of 2 items measuring the presence of LSC type of connections, and respondent's perception of quality of interactions within LSC type of connections (<a href="#">Anucha et al., 2006</a> – item 1 adapted to purposes of current study; item 2 formulated for the purposes of current study)</p>

<b>Scale of measurement</b>	<p>1. Thinking about people you interact with ... (e.g., meetings to define the open-space strategy, interactions in participatory sessions), are some of them of  ...higher social status (coded as [1] yes or [0] no),  ...higher public/political power (coded as [1] yes or [0] no)  ...higher financial capability (coded as [1] yes or [0] no)?</p> <p>2. Thinking about these same people, how would you rate the quality of your collaborative interactions with them?  1 ...2...3...4...5...6...7  extremely dissatisfied (1)... extremely satisfied (7)</p>
<b>Data source</b>	
<b>Required data</b>	<ul style="list-style-type: none"> <li>✓ Essential: NBS characteristics for each city/site, more specifically objectives (short-, medium-, and long-term) and challenges</li> </ul>
<b>Data input type</b>	Quantitative (quantitative and qualitative, if participatory data collection is opted for)
<b>Data collection frequency</b>	Before and after NBS implementation, then aligned with timing of targeted objectives.
<b>Level of expertise required</b>	<ul style="list-style-type: none"> <li>☒ Methodology and data analysis requires high expertise in psycho-social research</li> <li>☒ Quantitative data collection requires no expertise <ul style="list-style-type: none"> <li>○ Basic training needed if participatory data collection is opted for</li> </ul> </li> </ul>
<b>Synergies with other indicators</b>	SC1. Bonding social capital SC2. Bridging social capital SC4.1 Trust in community SC4.2 Solidarity between neighbours SC4.3 Tolerance and respect SC5.1 Perceived safety SC5.2 Actual/real safety SC9 Empowerment: Perceived control and influence over NBS decision-making SC10 Environmental education opportunities SC12 Social desirability

<p><b>Connection with SDGs</b></p>	<p>Goal 1. End poverty in all its forms everywhere          Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture          Goal 3. Ensure healthy lives and promote well-being for all at all ages          Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all          Goal 5. Achieve gender equality and empower all women and girls          Goal 6. Ensure availability and sustainable management of water and sanitation for all          Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all          Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all          Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation          Goal 10. Reduce inequality within and among countries          Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable          Goal 12. Ensure sustainable consumption and production patterns          Goal 13. Take urgent action to combat climate change and its impacts          Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development          Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss          Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels          Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</p>
<p><b>Opportunities for participatory data collection</b></p>	<p>Participatory methods (e.g., collaborative participatory data collection) may be applied to garner community-relevant information on LSC's role in NBS implementation and expansion.</p>
<p><b>Additional information</b></p>	
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