# NATURVATION cities - nature - innovation

# Indicator: Engagement in community

Naturvation challenges: Inclusive and equitable governance SDGs: 16 Reviewer & author: Sara Rocha, Central European University (CEU), Budapest Date: 19.03.2019

## Indicator description

The indicator "promotion of citizen involvement" assesses whether NBS implementation or green space restoration projects have a positive effect on citizens involvement in local green space management processes. Research suggested that public involvement and participatory processes can help citizens in taking ownership over the redevelopment or implementation of projects in the community (6), and such public participatory processes can strengthen community ties and cultivate a community consciousness (2). The indicator can assess the impacts of NBS related to the challenge of "Inclusive and equitable governance" as it is connected to the opportunity and intention of citizens to be involved in NBS implementation projects, via community planning and management related to their green spaces.

Common methods identified in the studied literature to measure this indicator include the use of questionnaires and surveys (e.g. participants' involvement purposes, or information on residents' opinions and perceptions of restoration projects) (2, 4, 6, 7, 9, 12, 13), interviews (e.g. interviews with greenspace visitors) (2, 5, 9, 11, 13), field observations (e.g. photographs of deteriorated UGS, visually based habitat assessment, biological sampling) (2, 4, 5, 6, 13), as well as existing datasets (e.g. United States Census, American Community Survey) (3, 5, 11).

Statement indicators and questions applied to measure participants purposes of being involved in the community regarding maintenance and management of urban green areas include: "To what extent are you willing to engage in the following affairs for this park?" (2), and "Why do residents and activists oppose or support neighbourhood greening? Who takes part in the formal planning processes and who does not?" (5).

#### Indicator scoring

The values given to the indicators were based on selected scientific literature (13 papers), including 12 empirical studies (1-3, 5-13) and 1 modelling study (4).

The proportion of studies that showed positive benefits for an NBS were used as a base for the scoring and distributed between scores ranging from 1 to 5 according to the proportions of positive impacts. Indications of negative impacts were noted here in the score document as a proportion of studies. When data for benefits of an NBS was not present in the literature it was denoted as no values found.

Scores, engagement in community		
Nature-based solution	Score	Proportions of positive /negative impact (number of studies)
Parks and (semi)natural urban green areas	5	1 / 0 (n = 3)
Urban green areas connected to grey infrastructure	4	0.67 / 0 (n = 3)
Blue areas	2	0.33 / 0 (n = 3)
External building greens	1	0 / 0 (n = 3)
Allotments and community gardens	1	0 / 0 (n = 3)
Green areas for water management	4	0.67 / 0 (n = 3)





### References

- (1) Auyeung, D.N., Campbell, L.K., Johnson, M., Sonti, N.F. & Svendsen, E. (2016): Reading the Landscape: Citywide Social Assessment of New York City Parks and Natural Areas in 2013-2014, Social Assessment White Paper No. 2.
- (2) Dewi, O.C., Shanti, L.P., Atmoko, T.U., Napitupulu, A.A. & Anggraeni, M. (2017) Sustainability Assessment on Community Park Revitalization, ASEAN Journal of Community Engagement, I, 1: 83-95.
- (3) Lo, A.Y. (2012) The Encroachment of Value Pragmatism on Pluralism: The Practice of the Valuation of Urban Green Space Using Stated preference Approaches, International Journal of Urban and Regional Research 36: 121-135.