

Indicator: Job creation potential

Naturvation challenges: Economic development and decent employment SDGs: 8 Reviewer & author: Sara Rocha, Central European University (CEU), Budapest Date: 14.12.2018

Indicator description

"Job creation potential" assesses the number of created jobs as a result of the implementation of specific NBS. The indicator can measure the impacts of NBS on the sustainability challenge of "Economic development and decent employment".

The transition to a green economy is projected to lead to a significant increase of new jobs in the future, transforming more traditional "brown jobs" into greener alternatives (1). Research on the potential of a nature-oriented economic scenario has shown that with somewhat small increases in the implementation of nature-based solutions such as green roofs and pocket parks, it can generate multiple socio-economic benefits such as the creation of additional job positions (2).

The job creation potential is measured usually through data collected from existing datasets and surveys (e.g. actual employment figures) (4, 7), although face-to-face interviews can also be used when employee's motivations, needs, skills and acquired knowledge are also under research (3, 7).

Indicator scoring

The values given to the indicators were based on selected scientific literature (7 papers), including 2 empirical studies (1, 3) and 5 meta-analysis (2, 4, 5, 6, 7).

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, job creation potential		
Nature-based solution	Score	Proportions of positive /negative impact (number of studies)
Parks and (semi)natural urban green areas	5	1 / 0 (n = 6)
Urban green areas connected to grey infrastructure	5	1 / 0 (n = 3)
Blue areas	5	1 / 0 (n = 4)
External building greens	5	1 / 0 (n = 2)
Allotments and community gardens	4	0.67 / 0 (n = 3)
Green areas for water management	4	0.67 / 0 (n = 3)

References

- (1) Dieleman, H. (2017) 'Urban agriculture in Mexico City; balancing between ecological, economic, social and symbolic value', *Journal of Cleaner Production*. Elsevier, 163, pp. S156–S163. doi: 10.1016/j.jclepro.2016.01.082.
- (2) EC (2015) Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities. doi: 10.2777/765301.
- (3) Falxa-Raymond, N., Svendsen, E. and Campbell, L. K. (2013) 'From job training to green jobs: A case study of a young adult employment program centered on environmental restoration in New York City, USA', Urban Forestry and Urban Greening. Elsevier GmbH., 12(3), pp. 287– 295. doi: 10.1016/j.ufug.2013.04.003.
- (4) Green Infrastructure North West (2013) *Building natural value for sustainable economic development: The green infrastructure valuation toolkit user guide*. Available at: www.bit.ly/givaluationtoolkit (Accessed: 7 November 2018).
- (5) Raymond, C., Berry, P., Breil, M., Nita, M. R., Kabisch, N., Bel, M. de, Enzi, V., Frantzeskaki, N., Geneletti, D., Cardinaletti, M., Lovinger, L., Basnou, C., Monteiro, A., Robrecht, H., Sgrigna, G., Munari, L. and Calfapietra, C. (2017) An impact evaluation framework to support planning and evaluation of nature-based solutions projects. Wallingford, United Kingdom. Available at: http://www.eklipse-mechanism.eu/apps/Eklipse_data/website/EKLIPSE_Report1-NBS_FINAL_Complete-08022017_LowRes_4Web.pdf.
- (6) Saraev, V. (2012) *Economic benefits of greenspace, Forestry Commission*.
- (7) Xing, Y., Jones, P. and Donnison, I. (2017) 'Characterisation of nature-based solutions for the built environment', Sustainability (Switzerland), 9(1), pp. 1–20. doi: 10.3390/su9010149.