

Natural and Climate Hazards	
<b>Description and justification</b>	Indicators of Flammability sub-criterion will assess the ability of a landscape to burn or ignite, causing fire or combustion.
<b>Definition</b>	Ability of a landscape to burn or ignite, causing fire or combustion.
<b>Strengths and weaknesses</b>	
<b>Measurement procedure and tool</b>	GIS/Survey
<b>Scale of measurement</b>	-
<b>Data source</b>	
<b>Required data</b>	
<b>Data input type</b>	Quantitative
<b>Data collection frequency</b>	
<b>Level of expertise required</b>	High
<b>Synergies with other indicators</b>	
<b>Connection with SDGs</b>	13
<b>Opportunities for participatory data collection</b>	
<b>Additional information</b>	
<b>References</b>	

## 8.29 Community garden area

**Project Name:** Connecting Nature

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Community garden area per capita and within a defined distance (Applied and EO/RS combined)	Green Space Management
<b>Description and justification</b>	<p>Measuring community gardens as part of the greenspace network in cities gives an indicator of a range of factors such as: accessible greenspace provision and preservation, diversity of land use for humans and biodiversity, sustainable use of vacant land, climate regulation (cooling, stormwater, reduced GHG emissions associated with food transportation), food security, physical activity, access to healthy food/fruit and vegetable consumption, community cohesion and empowerment. Ultimately community gardens deliver a social function. Mapping exercises can also be used to identify areas where future community garden (CG) projects should be targeted (i.e., need for CGs).</p> <p>Mapping community garden accessibility in these ways can be used to:</p> <ul style="list-style-type: none"> <li>• Identify deficits and inequalities in relation to community garden access;</li> <li>• Assess changes in access in relation to new projects/sites;</li> <li>• Inform strategic planning decisions in relation to community garden provision;</li> <li>• Assess different types of accessibility;</li> <li>• Set targets in relation to community garden provision and monitor progress towards targets.</li> </ul>
<b>Definition</b>	A measure of per capita garden area per target distance - public community gardens provide active interaction with nature and opportunities for social cohesion.
<b>Strengths and weaknesses</b>	<p><b>Applied methods:</b> Robustness of evidence will be biased by how detailed existing data is on CGs in a city and accuracy of census data. Similarly, the accuracy of distance to CG will vary based on the distance measure used. They can however represent a useful indicator basis for urban planning.</p> <p><b>Earth observation/Remote sensing methods:</b> See Applied above.</p>
<b>Measurement procedure and tool</b>	A variety of methods exist from applied/public participation techniques through to earth observation/remote sensing approaches. For further details on measurement tools and metrics see: Connecting Nature Indicator Metrics Review Env89_Applied
<b>Scale of measurement</b>	<b>Applied methods:</b> typically used at city-scale, but other scales are possible.

	<b>Earth observation/Remote sensing methods:</b> See Applied above.
<b>Data source</b>	
<b>Required data</b>	Required data will depend on selected methods, for further details see applied and earth observation/remote sensing metrics reviews in: Connecting Nature Indicator Metrics Review Env85_Applied
<b>Data input type</b>	Data input types will depend on selected methods, for further details see applied or earth observation/remote sensing metrics reviews in: Connecting Nature Indicator Metrics Review Env85_Applied
<b>Data collection frequency</b>	Data collection frequency will depend on selected methods, for further details see applied or earth observation/remote sensing metrics reviews in: Connecting Nature Indicator Metrics Review Env85_Applied
<b>Level of expertise required</b>	<b>Applied methods:</b> Some mapping/GIS expertise is likely to be needed. <b>Earth observation/Remote sensing methods:</b> See applied above.
<b>Synergies with other indicators</b>	Strong synergies with health and wellbeing indicators and social cohesion indicators in terms of physical activity, bringing together people from different backgrounds, education about nature and healthy food. Also, synergies with other environmental indicators (e.g., biodiversity measures, water regulation and air temperature) and possibly economic indicators if enterprises emerge selling produce.
<b>Connection with SDGs</b>	All SDGs except 5 and 12 : Job and urban agriculture opportunities around greenspace; Urban agriculture opportunities; Links to access to greenspace; Links to environmental education; Possible co-benefits; Links between biodiversity and clean energy (biosolar, biofuel); Job creation; Improved green infrastructure; Social equality in relation to greenspace; Sustainable urban development; Climate change adaptation; Potential co-benefits related to more sustainable water management; Habitat creation; Environmental Justice; Opportunities for collaborative working.
<b>Opportunities for participatory data collection</b>	<b>Applied methods:</b> No specific examples identified during the review but it may be possible to validate CG distribution using a PPGIS type citizen science exercise. <b>Earth observation/Remote sensing methods:</b> See Applied above.
<b>Additional information</b>	
<b>References</b>	<b>Applied methods:</b>

Balfour, R., Allen, J., 2014. Local action on health inequalities: Improving access to green spaces. London, UK

Dennis, M., James, P., 2016. User participation in urban green commons: Exploring the links between access, voluntarism, biodiversity and well being. *Urban For. Urban Green.* 15, 22–31. <https://doi.org/10.1016/j.ufug.2015.11.009>

La Rosa, D. (2014) Accessibility to greenspaces: GIS based indicators for sustainable planning in a dense urban context. *Ecological Indicators*, 42: 122-134.

Jakubowski, B. and Frumkin, H. (2010) Environmental Metrics for Community Health Improvement. *Preventing chronic disease*, 7(4): 1-10.

Senes, G., Fumagalli, N., Ferrario, P.S., Gariboldi, D. and Rovelli, R. (2016) Municipal community gardens in the metropolitan area of Milano: assessment and planning criteria. *Journal of Agricultural Engineering*, XLVII: 509 [82-87].

Speak, A.F., Mizgajski, A. and Borysiak, J. (2015) Allotment gardens and parks: Provision of ecosystem services with an emphasis on biodiversity. *Urban Forestry & Urban Greening*, 14(4): 772-781.

### 8.30 Food production in urban allotments and NBS

**Project Name:** URBAN GreenUP (Grant Agreement no. 730426)

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Food production in urban allotments and NBS	Green Space Management
<b>Description and justification</b>	Production of food in urban orchards (agriculture, eggs, etc.). Measurement of the amount of food produced.
<b>Definition</b>	The production of food will be reported in tonnes/Ha per year.
<b>Strengths and weaknesses</b>	This KPI will require citizens' collaboration, so recovering the data could be difficult.
<b>Measurement procedure and tool</b>	<p>Measurement of the amount of food produced. If it cannot be measured, an estimate of the amount generated will be made.</p> <p>Users will be asked directly using surveys (online and in situ).</p> <p>In the individual orchards, at the end of the summer campaign (September-October), users are asked directly using surveys. The producers might measure (scale) or</p>