Screening tool for the exploratory case study analysis

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Summary

This document represents the CLEARING HOUSE screening tool (D1.5). The screening tool encompasses analytical questions for the guidance of the exploratory case study analysis for T2.1 in the 10 case study cities and regions in China and Europe and identifies responsibilities. The screening tool includes questions on the locality of the case study areas, geography of urban forests in the case studies, governance of urban forests as nature-based solutions (UF-NBS), and strategic objectives in relation to UF-NBS in the cases.

Approval

Date	By
2020-06-24 17:41:00	Dr. Rik DE VREESE (EFI)

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EXECUTIVE SUMMARY

This document represents the CLEARING HOUSE screening tool (D1.5). The screening tool encompasses analytical questions for the guidance of the exploratory case study analysis for T2.1 in the 10 case study cities and regions in China and Europe and identifies responsibilities.

The screening tool includes questions on the locality of the case study areas, geography of urban forests in the case studies, governance of urban forests as nature-based solutions (UF-NBS), and strategic objectives in relation to UF-NBS in the cases.

KEYWORDS

UF-NBS, urban forests, exploratory analysis, screening tool, case study, mapping, urban forests

ABBREVIATIONS

UF-NBS	Urban forests as nature-based solutions
NbS	Nature-based solutions

1 Preface

1.1 Introduction to the CLEARING HOUSE screening tool

This template is the CLEARING HOUSE screening tool (D1.5). It builds on work carried out as part of WP1 to set the foundation for WP2 by providing the guiding questions and the overall structure for the exploratory analysis of the ten CLEARING HOUSE case studies. The CLEARING HOUSE screening tool will be filled by the WP2 focal points of every case study city, based on the information compiled by all partners working on a selected city. The ten documents that will result will be reviewed and commented on by all WP2 partners.

While filling out the screening tool, care should be taken that on the one hand, information should be provided that is specific to each locality to guide the further research work of CLEARING HOUSE at the level of each case study. However, CLEARING HOUSE will also conduct cross-city analysis. Thus, on the other hand, the information provided in the screening tool should also be so 'general' to be understandable outside of the specific case study context, and hence useful for these cross-city comparisons. A balance shall be found by the person responsible for filling the screening tool.

We included an indicative word count for the answers (for reference: one page of single-spaced text is normally about 500 words). This should give an idea of the level of detail required for answers.

Should you have any questions or need for clarification, please do not hesitate contacting Nicola da Schio (ndaschio@vub.be).

1.2   Structure of the CLEARING HOUSE screening tool

The CLEARING HOUSE screening tool follows the structure outlined below (with reference to the sections as numbered in this document). The screening tool encompasses these parts: Part 1 is about introducing the case study locality that is being focused on (without specific reference to urban forests as nature-based solutions, UF-NBS); Part 2 provides information of the current state of UF-NBS in the locality; Part 3 discusses UF-NBS governance, with references to the different relevant scales; Part 4 illustrates the UF-NBS-related strategic objectives for the locality and provides a direction to CLEARING HOUSE work.

1   Introduction to the locality
    1.1   Focus area   (ca. 100 words)
    1.2   Factsheet   (table)
    1.3   Institutional framework and planning system   (ca. 600 words)
    1.4   Experiences with participatory governance and citizen science   (ca. 600 words)
    1.5   Socio-economic profile   (ca. 600 words)

2   Geography of UF-NBS
    2.1   State of (peri)urban forests, green infrastructure and   (ca. 600 words)
        urban greenspace
    2.2   Data collection and mapping of UF-NBS   (map)
    2.3   Projects and initiatives   (table)

3   Government and governance of UF-NBS
    3.1   Policy instruments for enhancement and protection of UF-NBS (ca. 750 words)
    3.2   Experiences with participatory governance & citizen science   (ca. 750 words)
        (focus on UF-NBS)
    3.3   Stakeholder mapping   (table)

4   Strategic objectives in relation to UF-NBS
    4.1   What are UF-NBS related strategic objectives for the locality?   (checkboxes)
    4.2   Detailed information on strategic objectives   (table)
    4.3   Major barriers   (ca. 750 words)
    4.4   Knowledge gaps   (ca. 750 words)

2 Introduction to the locality

2.1 Focus area

The CLEARING HOUSE project takes place in 10 localities in EU and China. These, however, do not necessarily correspond directly to given cities and/or existing administrative units. Some case studies belong to the metropolitan area of the core city and incorporate various municipalities. Therefore, please introduce your locality briefly **(ca. 100 words).**

2.1.1
Please provide here a short introduction of the locality on which the CLEARING HOUSE will focus on (e.g. individual cities, urban areas involving multiple cities, metropolitan area, region, water basin, forest ecosystem, valley...).

Please consider

- Briefly introduce the characteristic of the locality in relation to the neighbouring area and to the rest of the country (e.g. the capital of the country, a medium city in the XXX corridor, one of the poorest cities in the region...)
- Take into consideration complete administrative boundaries: As databases often allow to retrieve values only for complete administrative units, it is better to include whole communes instead of partial includes.
- There is no strict rule regarding the choice of the locality but please consider that it should be something of the size and complexity of a city or socio-ecological system, and in any case broader than an individual park or project.

2.1.2
Map of the locality as defined in question 1.1.1.

2.2 Factsheet

Please provide some key information on the locality.

Please consider

- If a value is not known for the locality itself, please provide a figure for the most suitable unit available and indicate this accordingly. E.g., for a smaller municipality, values could be provided for the corresponding district.
- Include appropriate references.
- Please indicate the year of reference.

2.2.1
Name of the country.

2.2.2
Name of the municipality/municipalities encompassed by the locality.

2.2.3
Please provide the NUTS3 ID(s) (Europe, see https://ec.europa.eu/eurostat/web/nuts/nuts-maps or https://simap.ted.europa.eu/web/simap/nuts) or PAC Code(s) designation(s) for the municipality/municipalities listed above that are encompassed by the locality.

Name of the corresponding unit	*NUTS3 ID (Europe)* *PAC Code (China)*

2.2.4
Key figures

	Value	Reference year
Surface area (km²)		
Total resident population		
Population density		
Population change rate (% per annum)		
Total GDP (EUR)		
GDP per capita (EUR)		

2.2.5
Name of the corresponding ecoregion.

How to find this ecoregion?

- Please use https://ecoregions2017.appspot.com/ to identify the ecoregion of the locality. The app is based on the classification by Dinerstein et al., 2017.

2.2.6

Existing public green space per capita (e.g. public parks, scenic green spaces, in m²/capita).	*Year*

2.2.7

Policy goal for public green space per capita (m²/capita), if applicable.	*To be achieved in year*

2.3   Institutional framework and planning system

Please describe the general features of the locality's institutional framework, e.g. include description of the multiple levels of government, the relation between ministries and agencies, distribution of competences etc. **(ca. 600 words).**

Please consider

- The general features of the planning system in use, for example how it is organized (local, city wide, regional, etc.) and who has responsibility as the statutory planning authority.
- The main planning instruments in use (for example master-planning, neighbourhood planning, sustainability planning, urban planning, land-use planning, planning for real etc.).
- The main organisations and any recent changes within their terms of reference that will affect planning processes over the next 10 years.
- Remember that this is a general introduction, not directly related to UF-NBS.

2.4 Experiences with participatory governance and citizen science

This section seeks to summarize meaningful experiences with participatory governance, citizen science and related methodologies **(ca. 600 words)**.

Please consider

- Which actors are currently involved and how?
- Is citizen participation formal or informal and how strong is the influence on decision making processes?
- Does the municipal government keep or give up some of its decision-making powers?
- Are there particular tasks for which governments involve citizens or other non-state actors (for example, only tasks relating to the maintenance and realisation of a plan, or only tasks relating to discussing the contents or sponsoring of a plan but not for implementing it)?
- Remember that this is a general introduction, not directly related to UF-NBS.

2.5 Socio-economic profile

Further describe the socio-economic context, current trends or challenges related to your locality in addition to the economic figures provided in section 2.2 **(ca. 600 words).**

Consider including

- Circumstances specific to your locality including (spatial) patterns of social inequalities (e.g., (eco-)gentrification, segregation, etc.).
- Qualitative information regarding sectorial contribution to GDP, unemployment, growth rate, GDP per capita, intervention of the state in the economy...
- Demographic variables and their distribution (e.g. age distribution by cohorts, median age, size of households, in- and out-migration, etc.

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3   Geography of UF-NBS

3.1   State of (peri)urban forests, green infrastructure and urban greenspace

This section aims to provide context for the spatial analysis carried out in the CLEARING HOUSE project **(ca. 600 words).**

Please describe the state of (peri)urban forests, green infrastructure and urban greenspace in the case study area. This section aims to give a context to 3.2 and 3.3 below.

Please consider

- How are UF-NBS defined and understood in the city? What is the current state of UF-NBS?
- Please provide an overview based on recent research of the current trends in your locality. What are the main issues at stake?
- Urban green infrastructures include, e.g., (pocket, peri-urban) parks/urban green spaces, etc.
- What are the main issues at stake?
- Are urban forests/urban green infrastructure shrinking or expanding in general? What are the main drivers of change?
- Reflect on the wider ecological, social and economic impacts of urban forests, e.g., regarding biodiversity, recreational potential, provisioning of goods, within and beyond the locality.

3.2 Data collection and mapping of UF-NBS

Please collect and share, as a separate annex, spatial datasets related to the case study locality, which might be relevant for UF-NBS and analysis that can aid inter-city comparability.

These include (but are not limited to)

- Land use map for the region (e.g., land use map for Brussels Capital Region and the Flemish fringe).
- Demographics (e.g., population and socio-economic characteristics for the statistical sectors for the municipalities in the Brussels Capital Region and the Flemish fringe).
- Green areas: all datasets related to forestry, green areas (public or private, e.g., Green Zones BCR), trees (e.g., tree mapping Brussels Capital Region), natural structures (e.g., valleys, waterways, creeks, brooks, ...).
- DEM/DTM (digital elevation model/*digital terrestrial model*).
- Urban spatial structure and built-up or grey infrastructure (e.g., building blocks...).
- Boundaries of existing UF-NBS projects in the case study region (e.g., boundary of the Zonian Forest and réseau écologique for Brussels) …

If possible, do not limit to data to a city's administrative boundary, but extend towards the fringe of this boundary (e.g., Brussels Capital Region and the Flemish fringe surrounding Brussels).

Please share the best level of spatial detail available, and of longest historical record.

Once the data is collected, we will proceed to a European-wide and China-wide mapping of the green network based on imagery analysis, which will not be very detailed (VUB, HUB, CAF-RIF and ZJU to take the lead). In a next step, we can link this large-scale analysis of green structures to the data collected here in this step, which will be more detailed and fine-grained.

For easy reference, please list your datasets here

Please note that data collection is an issue that will probably require multiple loops of interaction, depending on what is possible. A separate discussion will be held in due time to further elaborate on this.

3.3   Projects and initiatives

This section aims to collect information on projects and initiatives related to UF-NBS relevant for the locality.

3.3.1
List of UF-NBS-related projects and initiatives relevant for the locality.

Please consider

- Please use the template developed for WP1.2 and 1.4 to introduce the information about these projects. No additional information should be included here.
- Consider including (top-down) projects supported by the government as well as bottom-up projects and initiatives.
- Ensure that projects that combine grey and green infrastructure (where the green infrastructure element involves trees) are recorded.

3.3.2
Please reflect on the combined impact of the projects and initiatives listed above, and outline areas of conflict **(ca. 300 words).**

4 Government and governance of UF-NBS

4.1 Policy instruments for enhancement and protection of UF-NBS

Please describe the most important legislative and planning instruments for the protection and enhancement of UF that are relevant in your locality **(ca. 750 words).**

Please consider

- Outline the main objectives of each instrument (such as maintaining or increasing quality, restoration, conservation).
- Provide information on evaluation and monitoring (Was evaluation conducted? Was it positive or negative?)
- Include policies with more or less timed ambitions (e.g. increasing tree cover by X % by 2020, or decreasing carbon emissions by 95% by 2050?)
- Relate this information and make reference to the data provided in section 1.3 on institutional frameworks and planning system.

4.2 Experiences with participatory governance and citizen science (focus on UF-NBS)

Please illustrate current experiences with participatory governance, citizen science and related methodologies <u>in respect of UF-NBS</u>. Reflect also on what future ambitions can be attained **(ca. 750 words).**

Please consider

- • You can relate this information and make reference to the data provided in section 2.4

4.3 Stakeholder mapping

On the following page, please provide information on actors/stakeholders relevant to the enhancement, planning, maintenance, implementation of urban green infrastructure, i.e., urban green areas such as parks, but also urban forests and UF-NBS.

Please consider

- This largely builds on WP3 Task T3.1 (local co-design workshops). Please consider exchange with the task's focal point from your city to avoid duplication of effort.

- Include the "official" institutions responsible for green infrastructure, urban forests, and UF-NBS, then include other institutions with no formal responsibilities, but whose responsibilities are likely to affect green infrastructures/UF-NBS in your locality.

- Map additional stakeholders as needed. Ensure that non-governmental actors such as NGOs and private companies are included.

- Briefly explain roles and responsibilities.

- As part of the description of each actor, please include a website as reference.

Stakeholder information

Stakeholder name	Type of stakeholder (public, private, third sector, academia, etc.)	Description and website **(ca. 100 words per actor)**	Role in relation to green infrastructure/UF-NBS **(ca. 100 words per actor)**

5   Strategic objectives in relation to UF-NBS

Please use this part to indicate what are the strategic objective(s) in relation to the locality you provided, and to which objective(s) CLEARING HOUSE can contribute in addressing. This section should be completed also in light of the co-design workshops (WP3, Task T3.1).

5.1   What are UF-NBS related strategic objectives for the locality?

Please tick the appropriate checkboxes or comment below.

☐ Assessment, maintenance or improvement of the quality of life (including attractiveness of place)

☐ Assessment, maintenance or improvement of public/human health and well-being (physical and mental)

☐ Assessment, maintenance or improvement of environmental justice

☐ Nature/Landscape conservation

☐ Assessment, maintenance or improvement of ecosystem health (Ecosystem restoration/rehabilitation)

☐ River catchment restoration

☐ Restoration of post-mining areas

☐ Assessment, maintenance or improvement of ecosystem management

☐ Assessment of technologies for forest management

☐ Assessment, maintenance or improvement of biodiversity

☐ Assessment, maintenance or improvement of forest patterns (spatial distribution of urban forests)

☐ Assessment, maintenance or improvement of forest composition

☐ Hazard mitigation

☐ Climate change adaptation

☐ Sustainability

☐ Assessment, maintenance or improvement of food security/food system resilience (including productivity enhancements)

☐ Assessment, maintenance or improvement of water security/water system resilience

☐ Funding of (UF-)NBS

☐ Governance of (UF-)NBS

☐ Urban/Landscape planning

☐ Cost/Cost-effectiveness

☐ Other (please specify in the box below)

5.2 Detailed information on strategic objectives

From the objectives identified in section 4.1, provide up to three objectives that you consider the as being the most important, and describe them further **(ca. 100 words per objective).**

Objective	Detailed description
O1	
O2	
O3	

5.3   Major barriers

What are the major barriers relating to the progress and implementation of UF-NBS, and to their governance and management? **(ca. 750 words).**

Please consider

- Include barriers specific to the strategic objectives identified in section 5.1, but also think of overall barriers to progress, enhance, and implement UF-NBS in your locality.

5.4   Knowledge gaps

Please identify existing knowledge gaps as research outlook that you think are of relevance **(ca. 750 words).**

BIBLIOGRAPHY

Dinerstein, E., Olson, D., Joshi, A., Vynne, C., Burgess, N.D., Wikramanayake, E., Hahn, N., Palminteri, S., Hedao, P., Noss, R., Hansen, M., Locke, H., Ellis, E.C., Jones, B., Barber, C.V., Hayes, R., Kormos, C., Martin, V., Crist, E., Sechrest, W., Price, L., Baillie, J.E.M., Weeden, D., Suckling, K., Davis, C., Sizer, N., Moore, R., Thau, D., Birch, T., Potapov, P., Turubanova, S., Tyukavina, A., de Souza, N., Pintea, L., Brito, J.C., Llewellyn, O.A., Miller, A.G., Patzelt, A., Ghazanfar, S.A., Timberlake, J., Klöser, H., Shennan-Farpón, Y., Kindt, R., Lillesø, J.B., van Breugel, P., Graudal, L., Voge, M., Al-Shammari, K.F., Saleem, M. (2017). An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. *Bioscience*, 67(6), 534–545.