Terms of Reference: Valuation of ecosystem services for the City of Johannesburg

ICLEI Africa seeks to appoint a service provider to conduct an economic valuation of ecosystem services for the City of Johannesburg as set out in the City's draft Ecosystem Goods and Services Assessment report.

Project Background

The City of Johannesburg (CoJ) has appointed ICLEI Africa to develop an Ecosystem Goods and Services Assessment for the City, to showcase nature’s contribution to sustaining quality of life and well-being in Johannesburg. The benefits of urban nature in the City of Johannesburg are undervalued. For example, the City's rivers are highly degraded and polluted, resulting in a loss of ecosystem function and the capacity to supply services to people (CoJ Environmental Sustainability Strategy, 2019). Their continued degradation will erode social resilience and economic opportunity. But these aspects are not widely understood or appreciated.

The Ecosystem Services Assessment will provide descriptive information about nature's services and the importance of nature in addressing a range of urban issues. For this work to be persuasive, the Assessment requires a component that highlights, and quantifies, as far as possible, the economic value of Johannesburg's ecosystem services. To this end, ICLEI Africa seeks to appoint a service provider to conduct an economic valuation of a subset of Johannesburg's ecosystem services.

Rationale for appointing a service provider

The metropolis of Johannesburg covers an area of 1 645 km² (municipal area). In the 2011 census, the population of Johannesburg was estimated to be 4 434 827 million (STASSA, 2011). The current average annual population growth rate of the City is 3.11% (2019) and the City population is projected to grow to 6.5 million by 2040 according to the World Population Review (http://worldpopulationreview.com/).

Cities in general, and the City of Johannesburg (CoJ) in particular, are faced with the challenges and opportunities associated with urbanisation. With a growing population, and increased disconnect between urban citizens and their natural surroundings, comes growing pressure on the supply of natural resources such as clean water and clean air and pressure to convert
land to settlement and industrial development. At the same time, there is an increasing need for urban environmental amenities and services, as people seek out places for outdoor sport and recreation, social interactions and psychological and spiritual well-being. The City must consider the benefits of urban nature and the potential of ecosystem services to contribute to urban resilience against for example the heat island effect, air pollution and flooding.

Despite wide recognition of the value of nature in urban spaces globally, the contribution of urban ecosystems often does not sufficiently influence urban planning and decision-making. This may in part be due to the fact that nature’s services are not well articulated or marketed and/or that some services are not easily quantified. This Terms of Reference calls for skilled experts in ecosystem services, resource economics and social and ecosystem valuation, to contribute to the CoJ Ecosystems Goods and Services Assessment in a way that helps to partly quantify, and in general, build the case for the value of urban ecosystems, and opportunities for their enhancement, from an economic valuation perspective. The Assessment should encourage an understanding of the value and benefits of urban nature and inspire willingness to invest in urban nature.

**Main requirements and scope of work**

This Terms of Reference is for a service provider to contribute to the high-level economic valuation and refinement of the description of the economic and social contributions of the ecosystems of the City of Johannesburg. This work forms part of the City of Johannesburg’s draft Ecosystems Goods and Services Assessment. The work by the service provider will entail:

1. A valuation of selected aspects of the Assessment focusing on the CoJ ecosystem services and their importance to the CoJ urban environment. The three chapters selected for economic and social and where possible, in-depth and quantified valuation, will probably be: urban trees, green open spaces, and aquatic resources. However, the final selection of the three chapters for in-depth economic valuation focus may be influenced by inputs from the service provider.
2. Assistance with enhancing the text of all draft chapters from an economic contribution and valuation perspective, in relation to ecosystem services.
3. A synthesis chapter on the overall economic value (quantified and otherwise) of CoJ’s ecosystems in the context of the City urban challenges; and,
4. Contribution to the policy recommendations section of the report, from an economic valuation perspective.
5. Participation in and contributions to team meetings to discuss scenarios for enhancing nature’s contribution in the CoJ.
By way of an overview, the ecosystem chapters are as follows:

1. Trees (street trees and other trees embedded in built environments)
2. Open spaces: public & private parks, gardens, cemeteries, roadside vegetation, nature reserves
3. Urban Agriculture
4. Aquatic resources (including riparian areas, wetlands)
5. Ridges and rocky outcrops
6. Grasslands
7. Woodlands and bushveld
8. Important species
9. Retrofitted nature: ‘embedded’ greenery (e.g. indoor gardens & plants; rooftop gardens; vertical Gardens; SUDS).

Each chapter is structured with the main elements being:

- Description of the ecosystem, its extent and its services – in CoJ (includes evidence locally and globally)
- Spatialisation of the ecosystem (and services where possible) in CoJ
- Description of links between ecosystem services and urban issues in CoJ
- Economic value of the ecosystem
- Global challenges and good practice
- Interventions/policy recommendations

Following the appointment of a service provider, a draft version of each chapter will be provided, with sufficient description of the ecosystem service in question, in order for the service provider to provide general inputs on the value of ecosystem services as well as specific inputs to three selected chapters. For the three selected chapters, the service provider should provide more in-depth social and economic valuation of the ecosystem goods and/or services, either by way of quantifying the value or providing other relevant information about ecosystem contributions and value, from an economic perspective. The purpose is for the reader of the report to come away with a heightened awareness of the value (monetary and other) of the ecosystem and its services within an urban setting. If a draft chapter does not provide sufficient or the correct type of basic information to support an economic valuation or comment, then the service provider can advise and assist the ICLEI team as to what information to source.

The work will be primarily desk-top in nature but the service provider will be expected to participate in one or two working sessions to integrate chapter contributions, consider future scenarios of ecosystem enhancement or loss, and comment on the economic implications;
and to refine policy recommendations. For each chapter the economic aspects of the ecosystem goods and service contributions should be highlighted, for example, contribution to cost-savings and replacement costs. Furthermore, particular opportunities with regards returns on the potential enhancement of the ecosystem services should be raised where ever possible.

**Service provider requirements**

The service provider is required to have experience and competencies in all of the following:

- Relevant post-graduate qualifications (minimum Masters) and experience/track record and familiarity with the major relevant methodologies in economic valuation of ecosystem services, and Economics of Ecosystems and Biodiversity (e.g. TEEB methodology) and/or nature-based solutions and/or Ecosystem based Adaptation;
- Understanding of urban ecology in the context of urban sustainability challenges
- Willingness to be flexible as each chapter evolves and new information might arise
- Proficiency in English

Please note that preference may be given to companies based in Cape Town or Gauteng to facilitate ease of management of the contract.

**Deliverables and time frames**

The service period will begin on the date of contract signature, which is estimated to be in December 2019 or early January 2020. We estimate that the end of the contract will be at the end May of 2020.

Once the service provider is selected, but prior to signing a service level agreement, there will be an inception meeting to refine the scope of work, agree to the approach and methodology to be followed, as well as the work plan and payment schedules. The outcomes of this meeting will be incorporated into the service level agreement.
Indicative deliverables and time frames as follows:

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<tr>
<th>Deliverable</th>
<th>Time indication</th>
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<td>1   Inception meeting, clarifying the scope of works, including final selection of the 3 chapters for in-depth, quantified economic valuation.</td>
<td>By the end of January 2020</td>
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<td>2   Provide detailed quantified and qualitative economic contributions, where appropriate, to three selected chapters</td>
<td>By the end of March 2020</td>
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<td>3   Participation in two working sessions to track progress and to participate in scenario discussions</td>
<td>By mid-May 2020; timing to be determined</td>
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<td>4   Consideration of all draft chapters and provide text contributions from an economic perspective</td>
<td>By end of April 2020</td>
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<td>5   Written contributions to Policy recommendations</td>
<td>By end of April 2020</td>
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<td>6   Written contributions to the Synthesis chapter</td>
<td>By mid-May 2020</td>
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**Reporting requirements and management**

- The service provider must supply accurate and comprehensive financial records of project-related expenses, which contribute to a financial report that is submitted with a narrative report to ICLEI AS prior to receiving payments.
- The service provider will report to the Coj-ICLEI core team and primary liaison person will be Dr Ernita van Wyk, who will be responsible for ensuring project implementation.

**Requirements for the proposal**

The following information must be provided in the proposal:

1. Clear description of each of the proposed activities and anticipated outputs, as well as a short explanation of how each activity will be done (methods) and by whom. Elaborate on the approaches to social and economic valuation and quantified and descriptive valuation of urban nature.
2. A detailed work plan and time schedule of activities should be submitted
3. Company profile
4. Short bios of the people who will work on this project, indicating their respective roles and responsibilities.
5. CVs of relevant persons who will work on this project, detailing qualifications, skills, experience and past track record, particularly in relation to the main requirements and skills and competency requirements for the service providers as outlined above.
6. Location of the service provider’s office(s).
7. The company’s BBB-EE Certificate
8. Demonstrated experience: A table or list of relevant projects, including the name, project description, client, monetary value, your role in the overall project and contact details of project reference(s).

9. Detailed budget denominated in Rands (ZAR) and excluding VAT, broken down into:
   - Daily charge out rate for all members of the team for 2020, and structured according to the deliverables as shown in the above table;
   - Expenses associated with the specified activities to be implemented in 2020, including but not limited to printing and stationary;
   - All travel and accommodation expenses: The service provider must budget for travel to reflect two (2) trips to and from Johannesburg (Braamfontein), for the duration of the project;
   - The service provider may include a 10% contingency in the budget breakdown.

The service provider may sub-contract other parties to assist them. Sub-contracted parties must be identified in the proposal and the specific role/s and task/s to be performed by sub-contracted parties must be described.

**Proposal evaluation process**

Functionality is of utmost importance in the evaluation. Budget considerations will include a balance between a clear understanding of the scope and complexity of the task, and affordability. Refer to the list below for an indication of technical evaluation criteria. The overall evaluation scoring will be guided as follows: technical score – out of 70; budget score – out of 20; BEEE score – out of 10.

*List of technical evaluation criteria*

- Service provider qualifications. Indicator: CVs indicating skills, expertise and qualifications
- Relevant experience in the appropriate field/s of study. Indicator: track record / completed projects
- Interpretation of the scope and complexity of the task. Indicator: description of the approach to the tasks and associated methodologies
- Locality of service provider offices

**Closing date for submission of proposals**

Kindly submit your proposal and supporting documents via e-mail to Ernita van Wyk at ernita.van.wyk@iclei.org by 16:00 (SAST) on Friday 20 December 2019. For any queries related to submission please contact us via the email above. Please use the subject line: “Service provider: City of Johannesburg EGSA economic valuation” when submitting your proposal.
NOTE: ICLEI AFRICA RESERVES THE RIGHT NOT TO APPOINT A SERVICE PROVIDER IN RELATION TO THIS TERMS OF REFERENCE. ICLEI AFRICA ALSO RETAINS THE RIGHT TO PROCEED WITH ALL OR PART OF THE WORK.

References

- City of Johannesburg (2019). Environmental Sustainability Strategy and Action Plan For the City of Johannesburg
