Understanding Innovative Initiatives for Governing Food, Water and Energy Nexus in Cities

Green and Blue Infrastructure Questionnaire
IFWEN project
November 3rd, 2020
Data collection

• 111 local governments
  • 82 valid and 29 discarded
    • 27 LAC
    • 27 Asia
    • 28 Africa
Majority of the cases at the city and urban level.
Green space and water bodies were the most popular GBI.
GBI projects have been operating between 3 and 8 years.
The data describes the first stages of the policy cycle.

Which stage(s) of the public policy cycle are you describing?
Policy evaluation stage has the lowest score.

Do you think this case successfully achieved the goal(s) at the stage(s) of the policy cycle that you are describing?  
Strongly agree (2), agree (1), undecided (0), disagree (-1), strongly disagree (-2)
1. Gap between policy formulation and implementation.

Correlations (* p-value < 0.05)

<table>
<thead>
<tr>
<th></th>
<th>Agenda Setting</th>
<th>Formulation</th>
<th>Adoption</th>
<th>Implementation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
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<tr>
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<td><strong>0.3888</strong></td>
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</tr>
</tbody>
</table>
Regions with more low-income countries focus on urban agriculture

- Low income
  - Green space: 0%
  - Urban forest: 0%
  - Street trees: 13%
  - Urban agriculture: 17%
  - Green roofs: 13%
  - Urban wetlands: 19%
  - Water bodies: 16%
  - Other GBI: 21%

- Lower middle income
  - Green space: 0%
  - Urban forest: 13%
  - Street trees: 7%
  - Urban agriculture: 15%
  - Green roofs: 16%
  - Urban wetlands: 22%
  - Water bodies: 16%
  - Other GBI: 27%

- Upper middle income
  - Green space: 0%
  - Urban forest: 13%
  - Street trees: 7%
  - Urban agriculture: 15%
  - Green roofs: 16%
  - Urban wetlands: 22%
  - Water bodies: 16%
  - Other GBI: 27%

- High income
  - Green space: 0%
  - Urban forest: 13%
  - Street trees: 3%
  - Urban agriculture: 16%
  - Green roofs: 19%
  - Urban wetlands: 25%
  - Water bodies: 16%
  - Other GBI: 21%

- Africa
  - Low income: 16%
  - Lower middle income: 27%
  - Upper middle income: 30%
  - High income: 2%

- LAC
  - Low income: 16%
  - Lower middle income: 6%
  - Upper middle income: 16%
  - High income: 2%

- Asia
  - Low income: 16%
  - Lower middle income: 27%
  - Upper middle income: 30%
  - High income: 2%
## Correlations (* p-value < 0.05)

<table>
<thead>
<tr>
<th></th>
<th># of GBIs</th>
<th># of Ecosystem services</th>
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<tbody>
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<tr>
<td># of Ecosystem services</td>
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<tr>
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</table>
2. GBI and their ecosystem services align with regional economic characteristics.
Governance aligns with existing institutional capacity

Leading organizations

- Africa: 48 political organizations, 44 public organizations, 5 for-profit organizations, 4 non-profit organizations, 5 other civil society organizations, 2 informal citizen groups
- LAC: 50 political organizations, 19 public organizations, 8 for-profit organizations, 3 non-profit organizations, 5 other civil society organizations, 2 informal citizen groups
- Asia: 68 political organizations, 5 public organizations, 5 for-profit organizations, 10 non-profit organizations, 5 other civil society organizations, 1 informal citizen group
3. GBI’s main drivers vary by region.
## Correlations (*p-value < 0.05*)

<table>
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<tr>
<th></th>
<th># Nature of the innovation</th>
<th># Type of innovation</th>
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<td>0.3629*</td>
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4. The nature and type of innovation varies by region.
External and two-way knowledge flow is the most common practice with at least three learning mechanisms.
5. High dependency from external sources for policy learning.
Three organizations are typically collaborating in GBI projects.
Most cases involved three jurisdictional levels.
Sectoral diversity is more evenly distributed in Asia.
6. GBI projects involving organizations from different sectors may reach the evaluation stage of the policy cycle.

**Correlations** (*p*-value < 0.05)

<table>
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<th>Sectoral diversity</th>
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Limitations: Self assessment about the quality of the data collection

![Bar chart showing average scores by region (Africa, LAC, Asia) for different parts: General information part, Governance part, Innovation and policy issues part, Knowledge flow and learning mechanisms part. The scores range from 1.01 to 2.21.]
Conclusions

1. Gap between policy formulation and implementation.
2. GBI and their ecosystem services align with regional economic characteristics.
3. GBI’s main drivers vary by region.
4. The nature and type of innovation varies by region.
5. High dependency from external sources for policy learning.
6. GBI projects involving organizations from different sectors may reach the evaluation stage of the policy cycle.
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October 23, 2020