### 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)



Policy score (min -2, max 2)

#### 1. Gap between policy formulation and implementation.



# Regions with more low-income countries focus on urban agriculture



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

	# of GBIs	# of Ecosystem services
# of GBIs	1	
# of Ecosystem services	0.3866*	1
# of Jurisdictions	0.1757	0.0132
# of Initiators	0.01	0.096
# of Participating org	0.0049	-0.0913
# of Leading org	-0.0802	0.1665
# of Nature of innovation	0.0248	0.2842*
# of Type innovation	0.1197	0.1548
# of Policy issues	0.5316*	0.5194*
# of Knowledge flows	0.1671	0.0995
# of Learning mechanisms	0.2332*	0.0151

## 2. GBI and their ecosystem services align with regional economic characteristics.



#### Governance aligns with existing institutional capacity



Leading organizations

#### 3. GBI's main drivers vary by region.



Correlations (\* p-value < 0.05)

	# Nature of the innovation	# Type of innovation
# of Type innovation	0.4994*	1
# of Policy issues	0.2784*	0.3063*
# of Knowledge flows	0.3186*	0.2396*
# of Learning mechanisms	0.3823*	0.3629*

#### 4. The nature and type of innovation varies by region.



#### Nature of innovation



#### Type of innovation

# 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)

	Sectoral
	diversity
Agenda setting	-0.0618
Formulation	0.0712
Adoption	0.2077
Implementation	0.0994
Evaluation	0.4855*

# Limitations: Self assessment about the quality of the data collection



### 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.

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

Green and Blue Infrastructure Questionnaire

**IFWEN** project

October 23, 2020

