

Collaborative Governance in Urban Green and Blue Infrastructure to Improve the Food-Water-Energy Nexus

Innovative Governance of Food-Water-Energy Nexus in Cities

An IFWEN Training Program

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Introduction

Collaborative governance: Linking public engagement with small scale GBI projects to facilitate larger impact.

Recap

Urban Green and Blue Infrastructure (GBI) is an **interconnected network** of natural and semi-natural (urban) areas, **including vegetation and water elements**, as well as other environmental features, **integrated with the built environment...** its key aspects are **connectivity and multifunctionality** to benefit urban populations.



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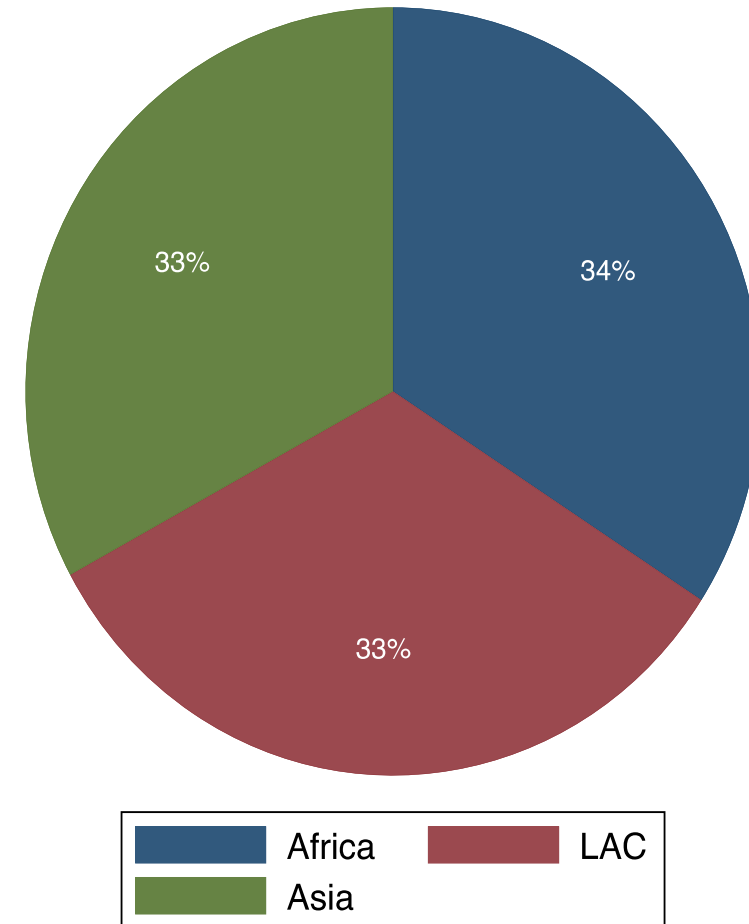
GBI innovation Survey 2020

Object: GBI projects to improve urban sustainability in local governments in developing countries in Asia, Africa, and Latin America and the Caribbean (LAC).

Final sample: 82 local governments across 30 countries, members of transnational municipal networks (TMNs), particularly ICLEI, engaged in climate change and biodiversity protection projects. Information about GBI projects publicly available in websites.

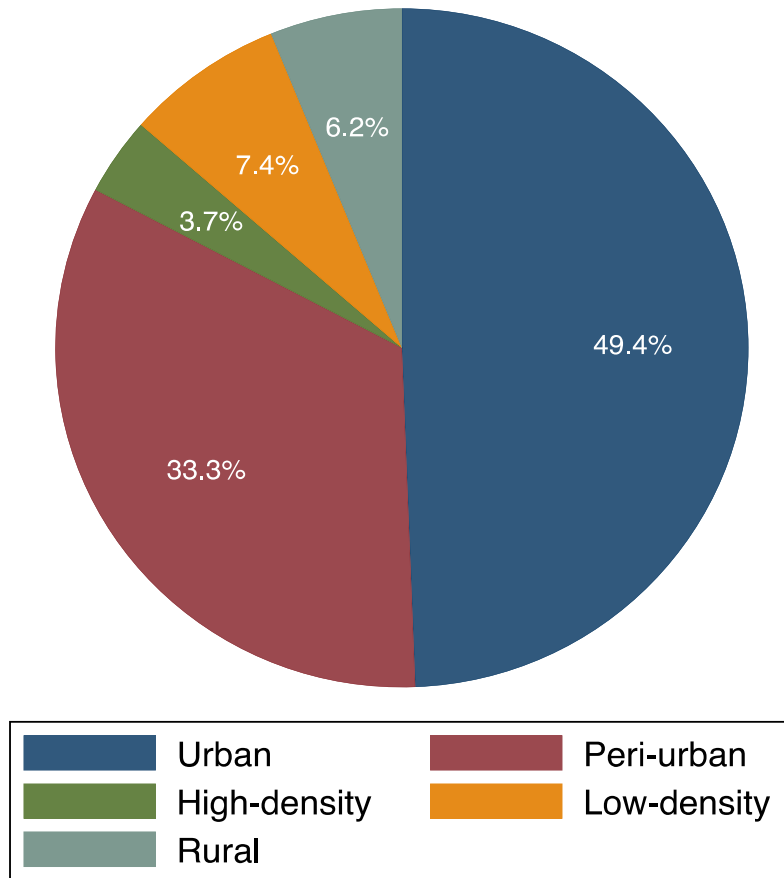
Results: Balanced distribution among regions

Cases by region

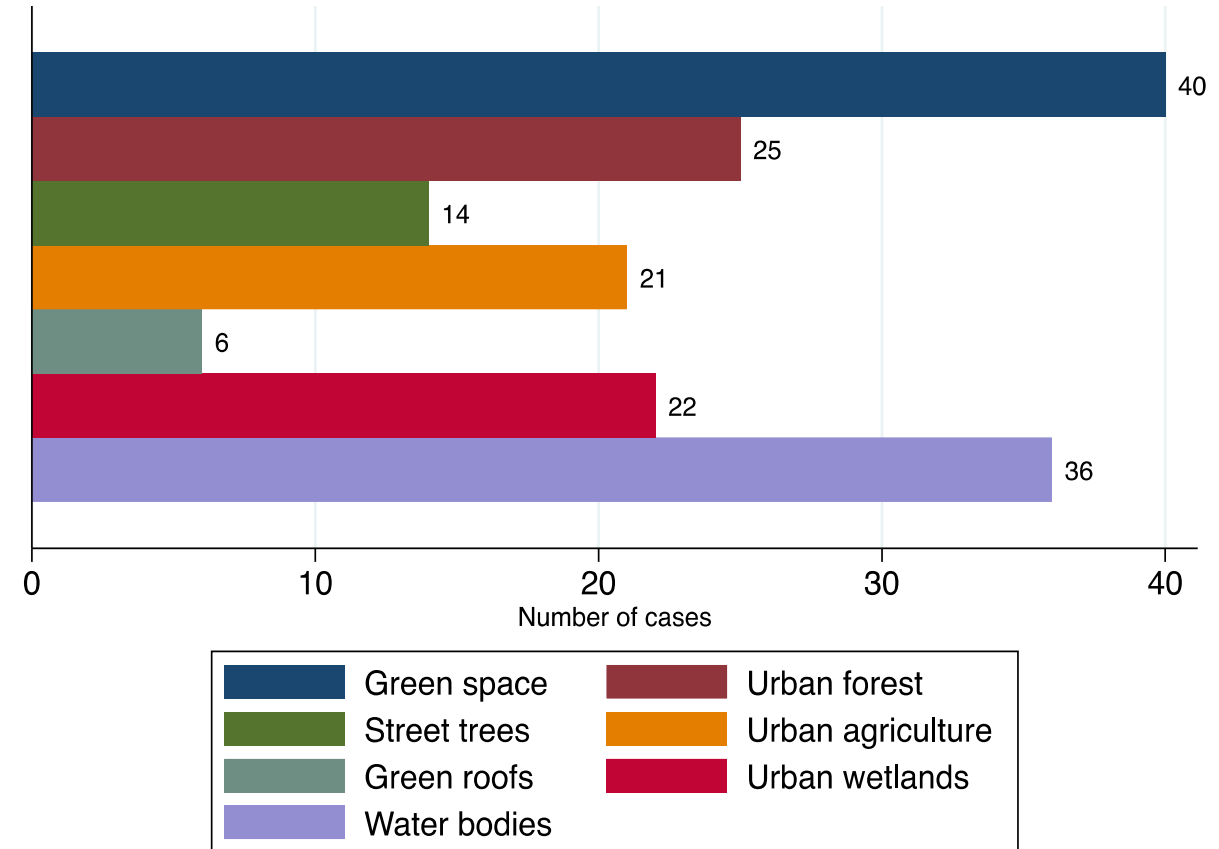


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Cases by territorial typology



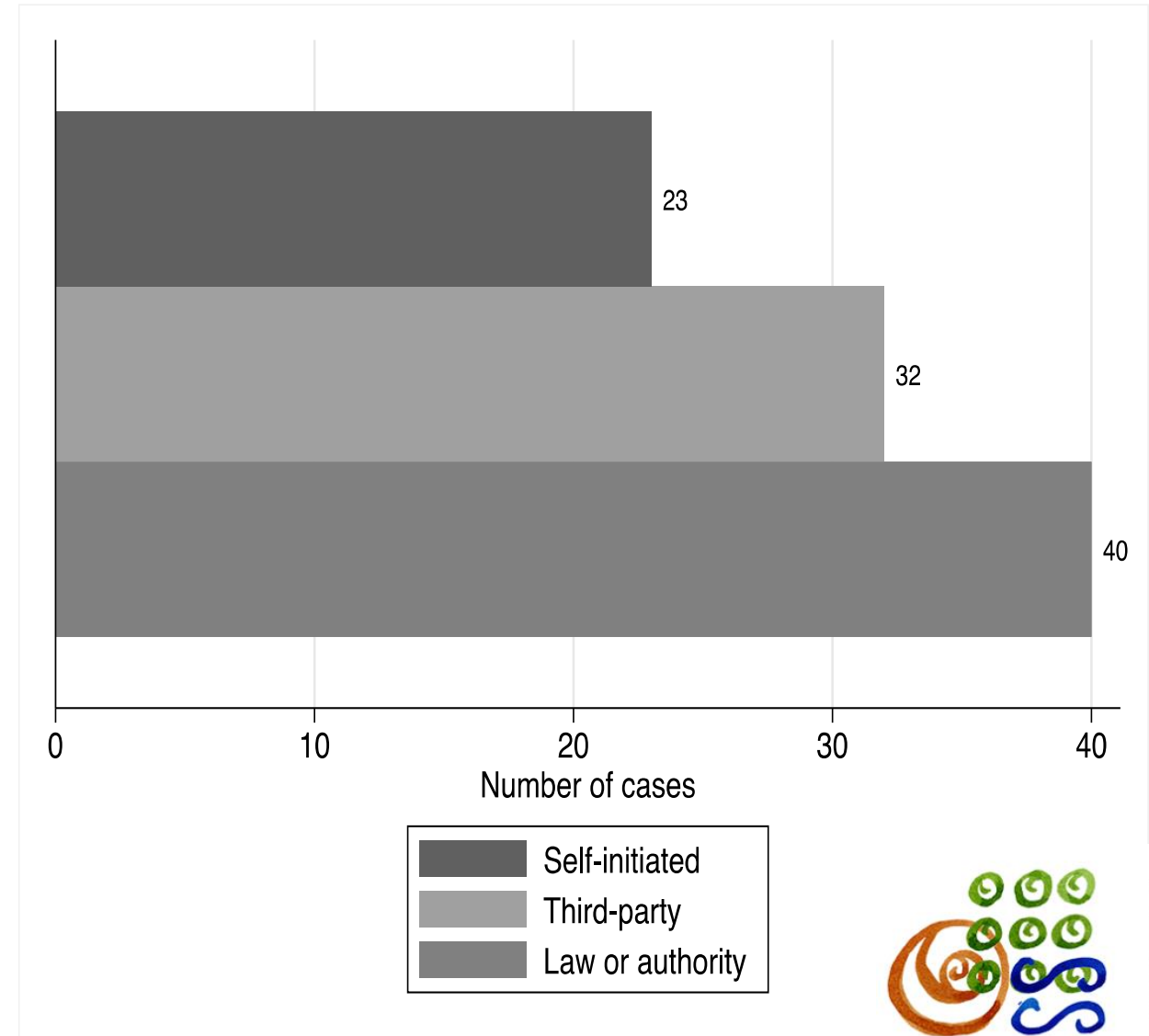
GBI cases



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Drivers for GBI projects

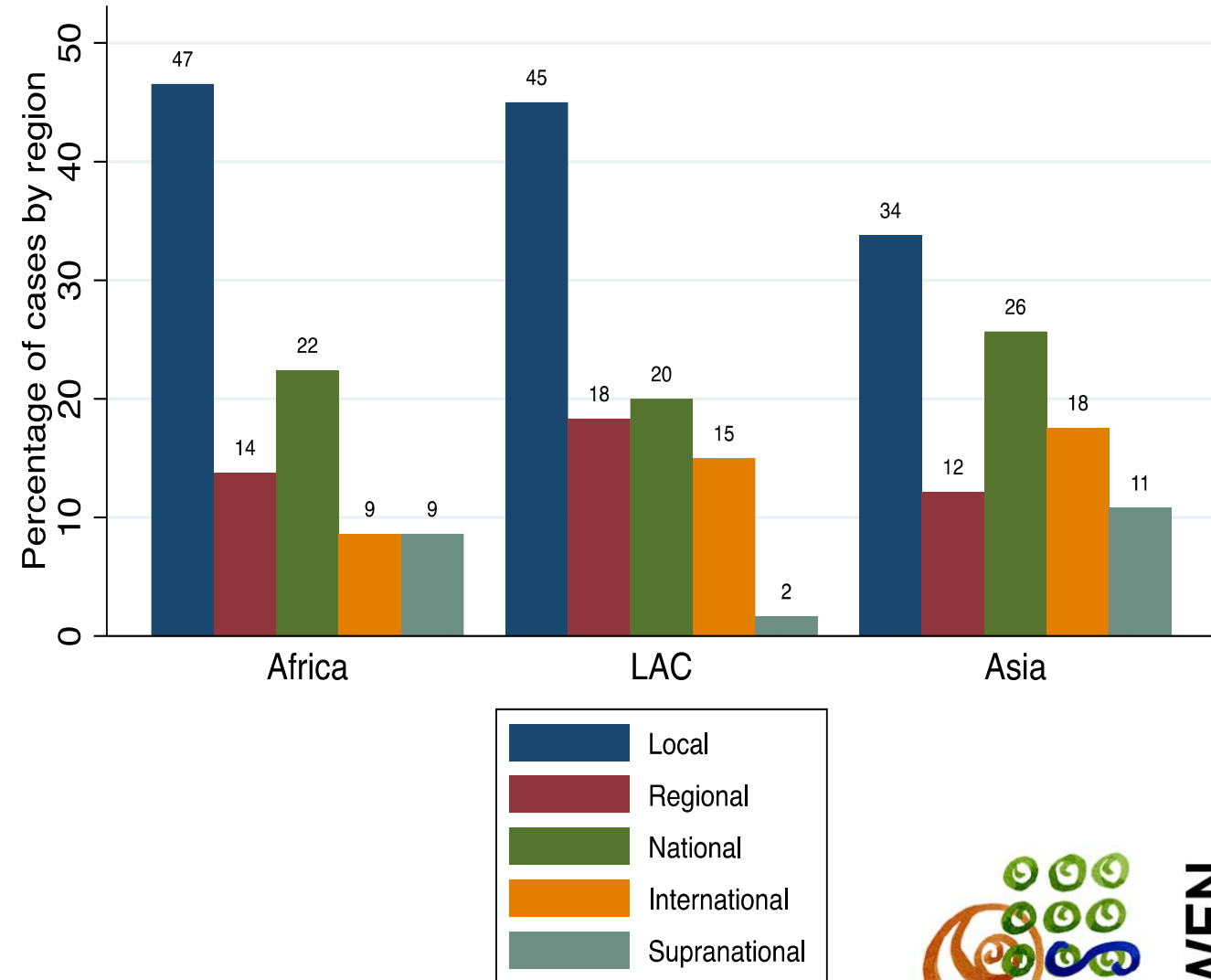
- Law or authority is the most common driver to jump start a collaboration
- GBI projects in LAC were mostly self-initiated
- Most Asian cases were initiated by law or authority
- Third-parties (e.g., NGOs) as well as law and authority were key drivers for the African cases.



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Collaboration per jurisdiction

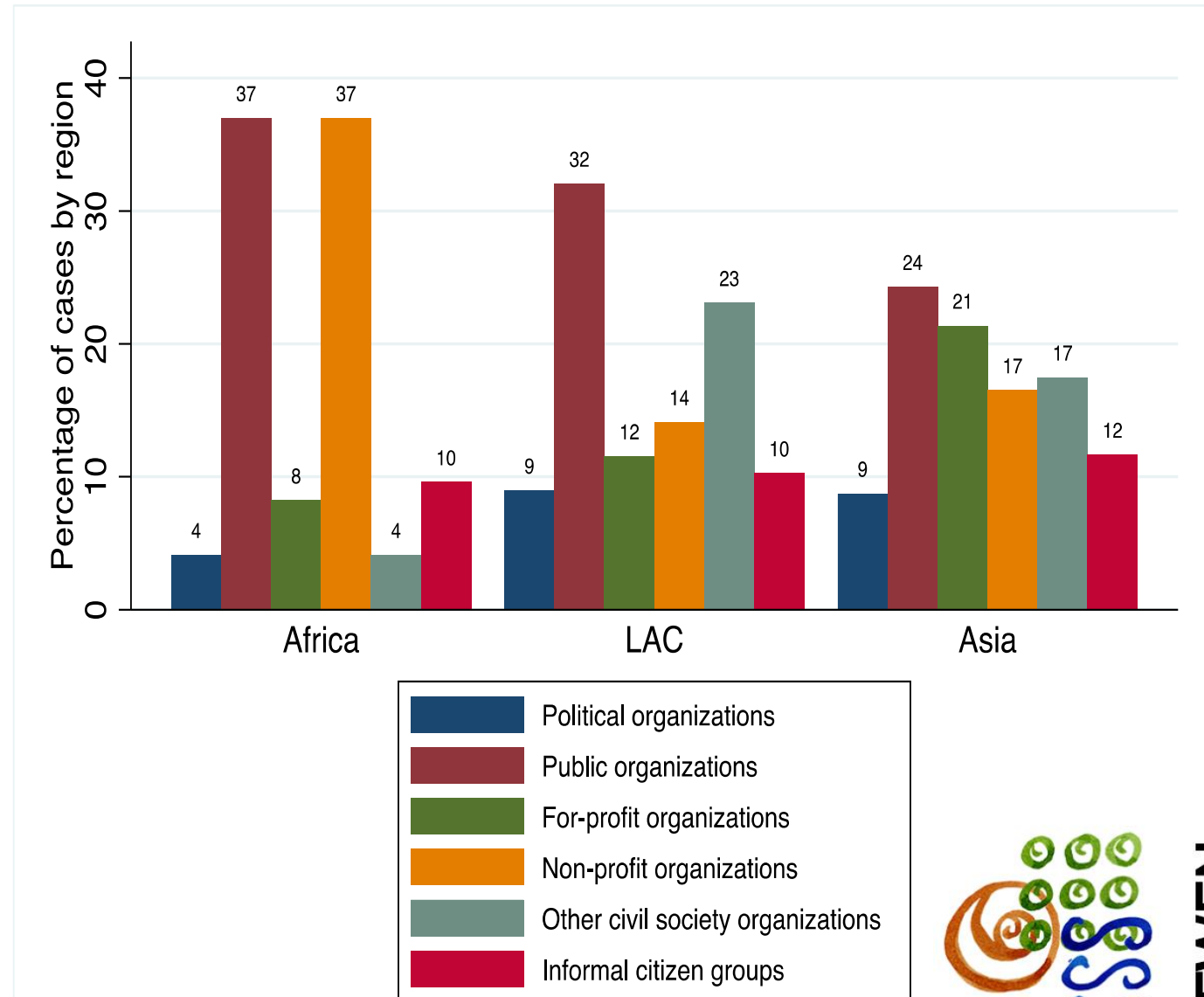
- Most cases include multi-level governance of at least 3 jurisdictions
- **Local government** level predominates in projects in all regions
- The importance of local and national governments in GBI implementation is more evident in **low-income countries**.
- **Supranational participation** is more common in Asian countries and lower-middle income countries.



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Intersectoral collaboration in regions

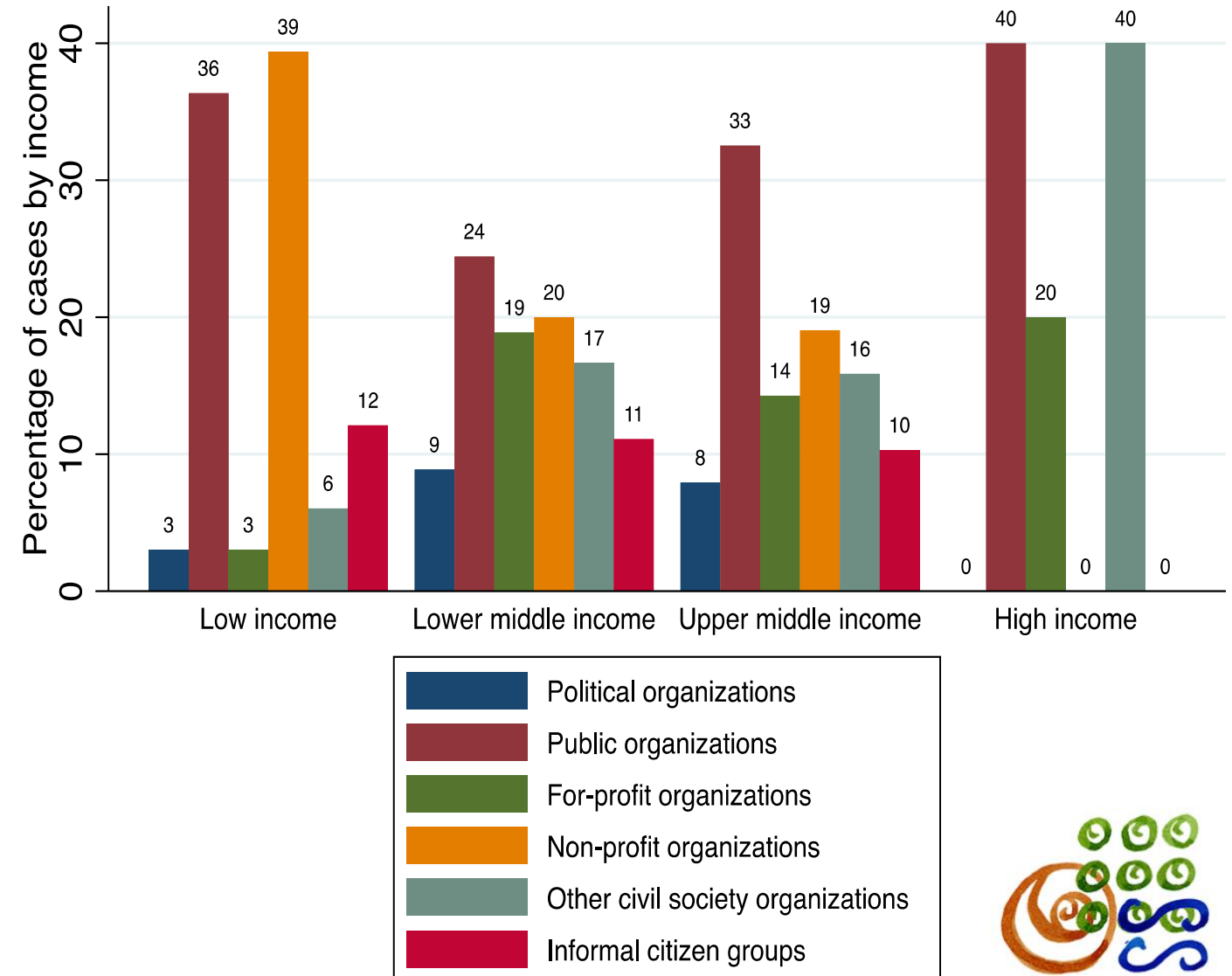
- At least 3 organizations from different sectors are part of collaborative setting
- Public organizations' importance varies by region
- Non-profit organizations and public organizations are equally predominant in African cases
- For-profit organizations are almost as important as public organizations in Asia.



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Intersectoral collaboration per country income

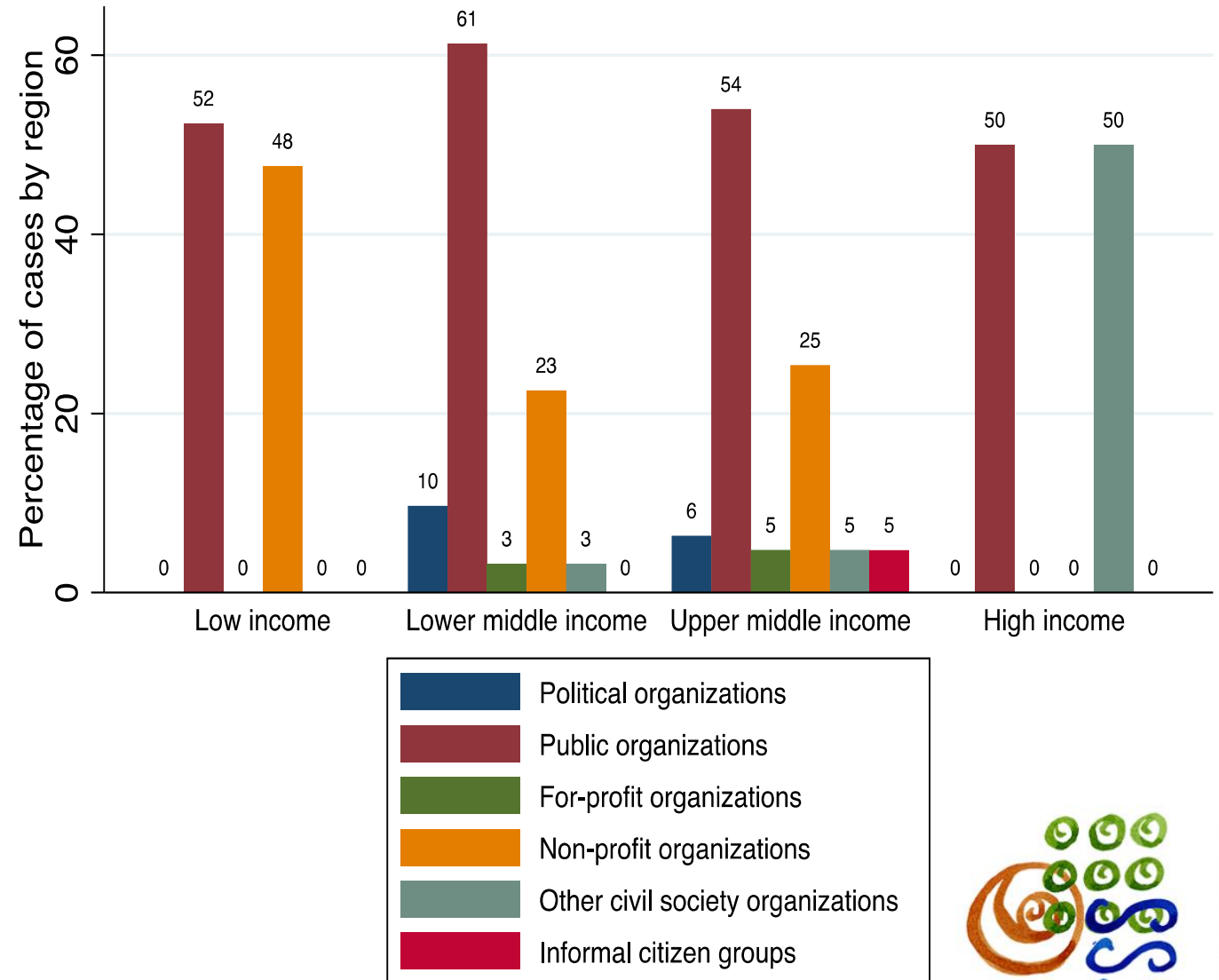
- CSOs and public organizations are equally predominant in high income countries
- Non-profit organizations prevail in low-income countries, whereas public organizations are the least important.
- Informal citizen groups are more present in low-income countries, not at all in high-income countries
- Political organizations are the least mentioned players in all cases per income, not at all in high-income countries



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Leadership role of organizations per income

- The leadership role of public organizations is predominant in all regions
- Non-profits are almost as important in low-income countries, and not at all in high-income countries.
- Informal citizen groups are leaders of GBI initiatives only in upper middle-income countries, and not at all in any other.



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Florianópolis, Brazil

Top-down meets bottom-up

Community vegetable garden in daycare center (NEIM Poeta), 2021.

Source: City of Florianópolis, Cultiva Floripa program.

<http://cultivafloripa.pmf.sc.gov.br>



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Taipei, Taiwan

Paddy field in primary school using harvested rainwater, 2020

Source: Erich Hellmer, in IFWEN case studies series, 2021

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Lilongwe, Malawi

Lingazi River greening,
2020

Source: UNA Rivers Project, ICLEI
AFRICA



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São Paulo, Brazil

Connecting the Dots: peri-urban farming and sustainable agriculture project

Source: São Paulo, Urban Development Municipal Secretariat, 2019

https://ligueospontos.prefeitura.sp.gov.br/midia__trashed/galeria-2/



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THANK YOU!

To all of you attending this session.

To the organizers of this training course.

To the participating cities and their dedicated staff.

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