

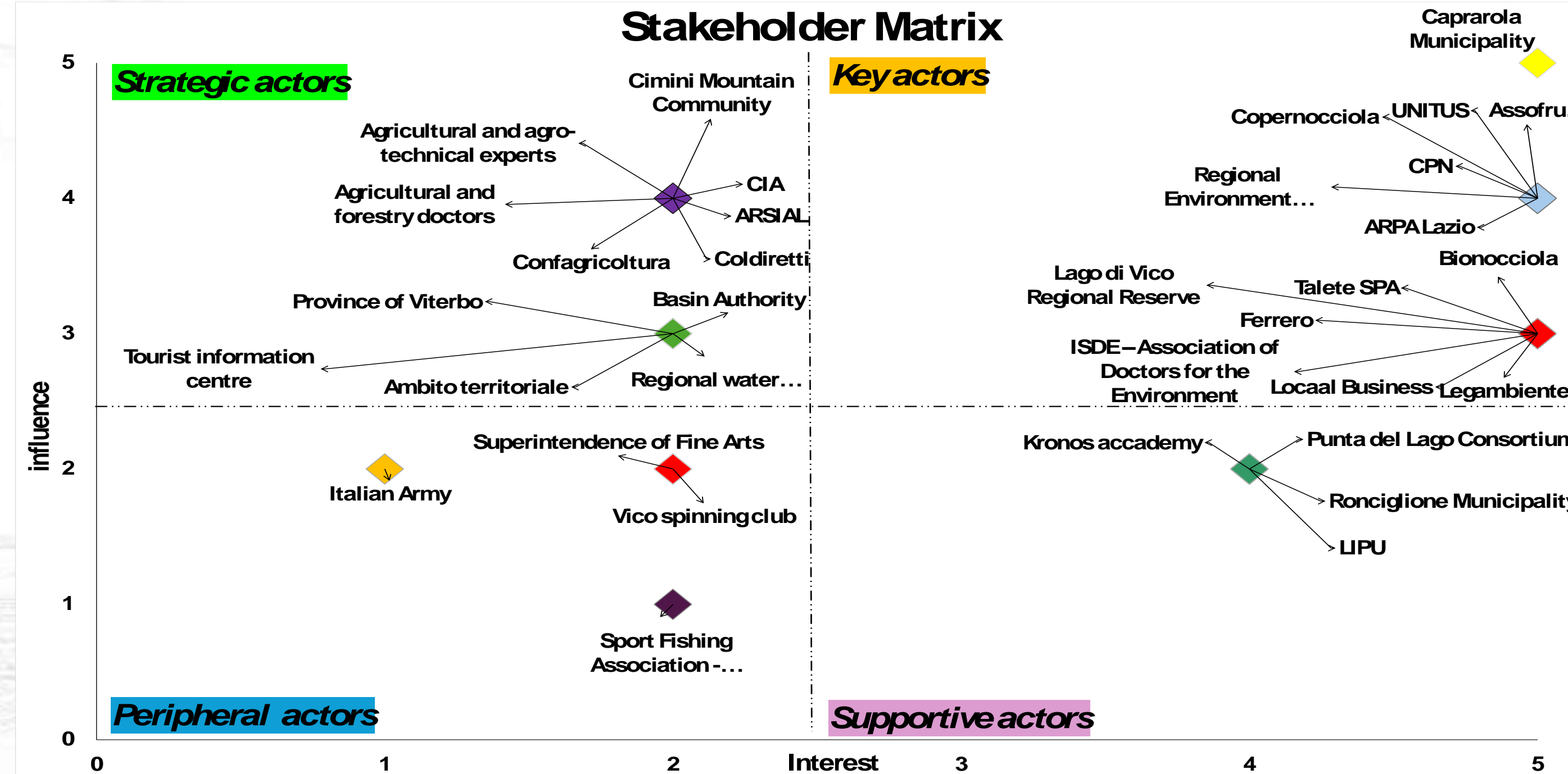
Integrated and Participatory Landscape Protection and Restoration Planning for Water Ecosystems: The Case Study of Lake Vico

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Introduction

Freshwater ecosystems deliver vital ecological, social, and economic services but are increasingly threatened by pollution, climate change, and land-use change. The EuroLake project addresses these challenges through participatory governance and Nature-based Solutions (NBS) implementation, focusing on 3 pilot lakes, including Lake Vico, which is highly vulnerable to nutrient runoff from hazelnut farming. Despite its protected status, Lake Vico suffers from nitrate and phosphorus pollution linked to rainfall and erosion. Within the EuroLakes framework, this study aims to map and analyze stakeholders at Lake Vico, identify engagement gaps, and support strategies for participatory governance and NBS implementation.



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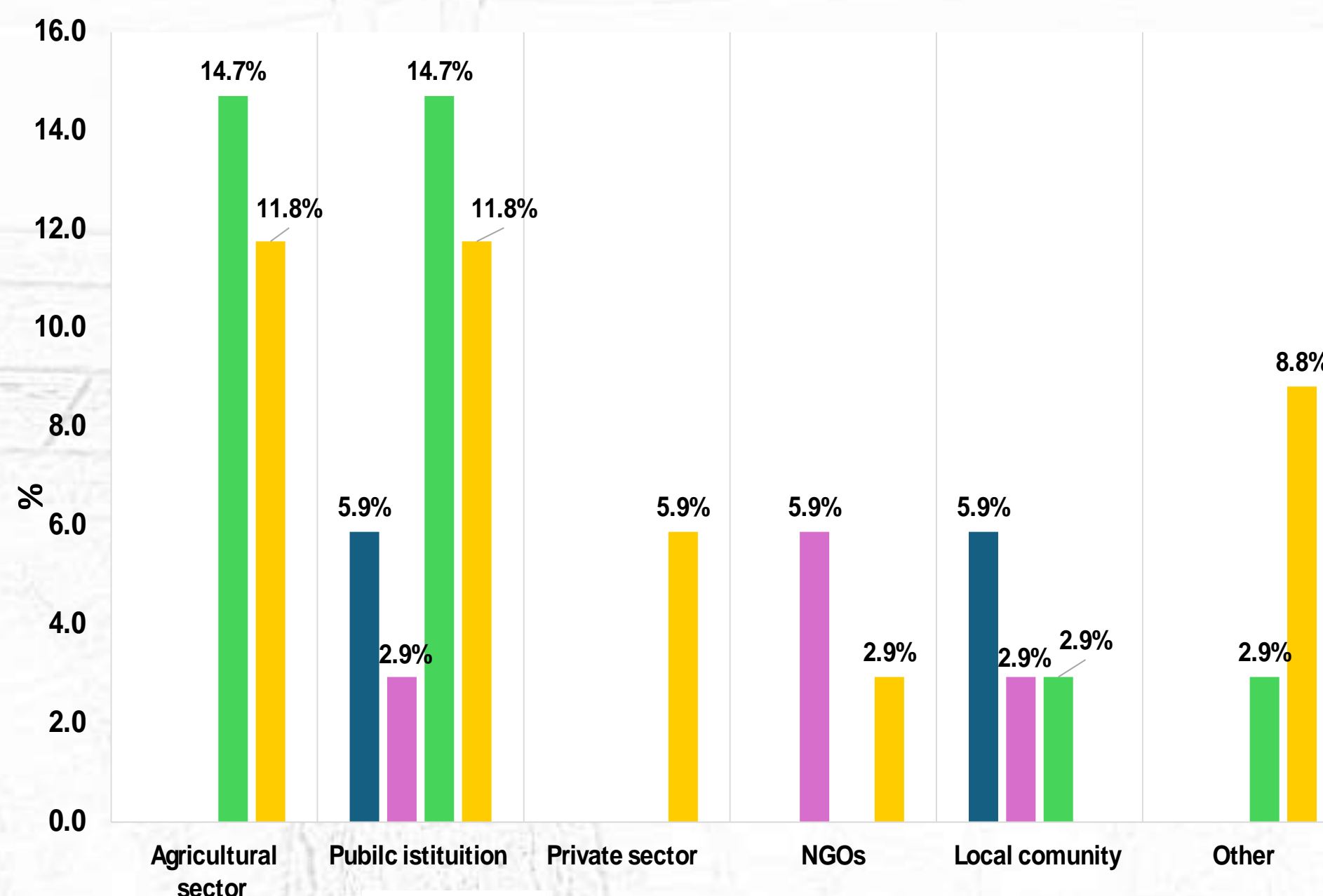
Materials and Methods

To guide restoration, we applied the 4 Returns Framework (4RF), integrating ecological, social, and economic goals through a participatory approach. From January to May 2025, we conducted a stakeholder analysis using the Stakeholder Matrix, rating actors by interest and influence (1–5), classifying them as key (high influence and interest), strategic (high influence, low interest), supportive (low influence high interest), or peripheral (low interest and influence), and grouping them into six sectors (Agriculture, Public Institution, Private Sector, NGOs, Local Communities, Others).

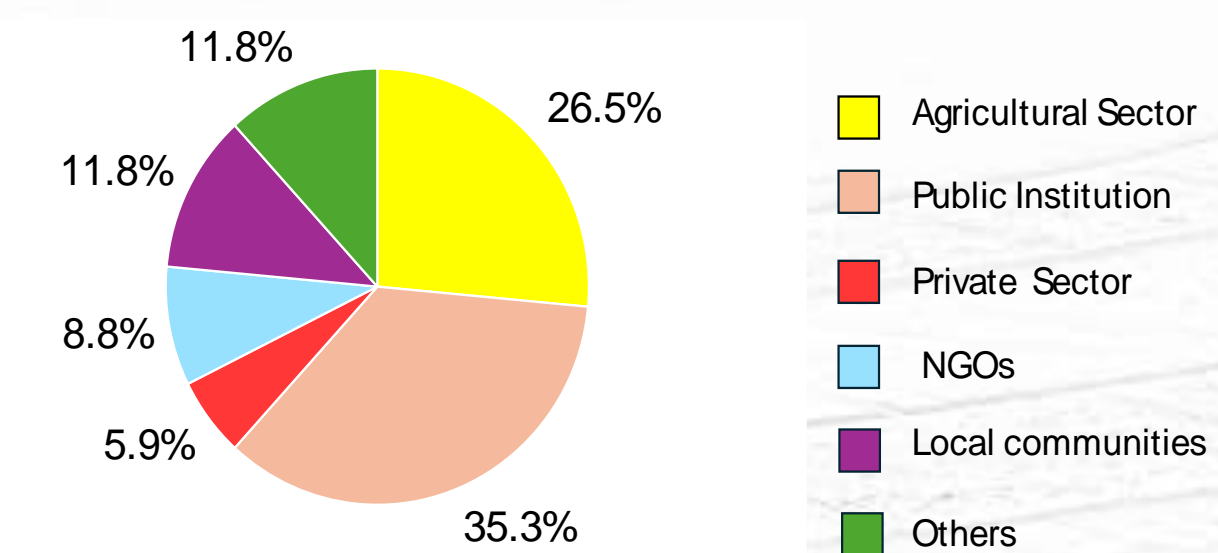
Results and Conclusions

- Agriculture and public institutions are the most influential stakeholders.
- Limited engagement of key agricultural actors could hinder NBS success.
- Inclusion of supportive and peripheral groups is essential to build trust and cohesion.
- The Stakeholder Matrix helps link power with engagement and guide targeted outreach.
- This analysis supports the EuroLake project by aligning ecological goals with local socio-economic needs and enabling effective stakeholder involvement in NBS implementation.

Percentage distribution of stakeholders across sectors and categories of actors



Total percentage of stakeholder for each sector



Total percentage of stakeholder for each categories of actors

