URBAN AND REGIONAL DEVELOPMENT

118 - River and City: Exploring City Reconfiguration & Urban Regeneration Processes From Green Infrastructure to Urban transition-oriented Imaginaries

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] Dipartimento Interateneo di Scienze, Progetto e Politiche del Territorio [P.iva/CF:00518460019]
Supervisor	SERVILLO LORIS ANTONIO - loris.servillo@polito.it
Contact	
Context of the research activity	his Ph.D. research programme delves into the intricate relationship between rivers and cities, with a focus on the transition from green infrastructure to new urban imaginaries. The research aims to explore and understand the potential of rivers as catalysts for new city reconfiguration and urban regeneration processes. The programme adopts an interdisciplinary approach, drawing from fields such as urban planning, human geography, environmental studies, and governance studies. It investigates how rivers can serve as integral components of green infrastructure, contributing to sustainable urban development, climate change mitigation, and improved quality of life for urban residents, as well as how the institutional arrangements and governance processes influence the planning, implementation, and management of river-oriented urban development. Progetto finanziato nell'ambito del PNRR – DM 118/2023 - CUP E14D23001910006
	The relationship between rivers and urban areas entails a multifaceted interaction encompassing various dimensions: functional, cultural, ecological, and institutional. Such a complex relationship offers numerous domains for exploration, investigation, and intervention. Understanding and harnessing the potential of rivers within urban settings require addressing a range of interconnected aspects, each offering distinct opportunities and challenges. This comprehensive approach would allow for a holistic understanding of the river-city nexus and facilitates the development of innovative solutions for urban reconfiguration and regeneration processes. Some of the dimensions can be summarised as such: a. Conservation and Biodiversity: river areas provide habitats for a wide range of plant and animal species, contributing to the conservation of biodiversity. The conservation of these natural environments is becoming increasingly important due to growing concerns about habitat loss and

Objectives	species extinction. b. Ecosystem Services: river areas offer a variety of fundamental ecosystem services. For example, they act as natural sponges, absorbing and filtering rainwater, helping to prevent flooding and improve water quality. Additionally, these areas can contribute to climate regulation, food production, carbon sequestration, and promoting human health and well-being. c. Recreation and Leisure Spaces: river areas and connected parks provide open spaces for recreational activities and leisure time. Riverfront parks, jogging or cycling trails, picnic areas, and outdoor activities provide opportunities for connecting with nature, engaging in physical exercise, and relaxation. These urban green spaces also foster social integration and a sense of community. d. Urban Revitalization: river areas can play a key role in the regeneration and revitalization of cities. The redevelopment of areas along rivers, through waterfront projects or the restoration of river ecosystems, can transform former industrial or abandoned zones into attractive and vibrant public spaces. These interventions contribute to improving quality of life, enhancing the attractiveness of cities, and stimulating local development. In summary, the relationship between cities and rivers involves various dimensions, including functional, cultural, ecological, and institutional aspects. Exploring the potential of rivers in urban settings requires considering multiple domains, each offering unique opportunities for urban reconfiguration and regeneration processes. By addressing conservation, ecosystem services, recreation, and urban revitalization, cities can harness the transformative potential of rivers and create more sustainable, resilient, and livable urban environments for future generations. Within this broader understanding of river-city nexus, the research aims at exploring the role of new urban imaginaries in the ecological-transition societal challenge, envisioning alternative and innovative urban futures that integrate and celebrate the presence of rivers. It focuses on how the unique characteristics and potentials of rivers can inspire and shape new approaches to spatial planning, design of the built and natural environment, and local development dynamics. Furthermore, it explores the roles and responsibilities of various actors, including government agencies, community organizations, private sector entities, and non-profit organizations, in decision-making, resource allocation, and coordination efforts. Specifically, the research seeks to: 1. Explore innovative approaches to city reconfiguration and urban regeneration processes, centered around the integration of rivers as key elements in urban planning and design. 2. Investigate the transition from traditional urban development models to new urban imaginaries that prioritize sustainability, resilience, and the preservation of natural ecosystems. 3. Examine the role of green infrastructure in facilitating this transition and its impact on larger urban transformations, functions, and quality of life. 4. Investigate the governance processes and institutional arrangements necessary to support and enable the integration of rivers in urban planning and regeneration processes. 5. Analyse the social, cultural, and economic dimensions of river-oriented urban development and the potential impacts and challenges associated

	with this transition. The research has a special focus on the city of Turin, but it extends the investigative agenda to other international cases.

Skills and competencies for the development of the activity	1. Relevant Master's degree or equivalent research experience in spatial planning, architecture and landscape studies, human geography, or related fields. 2. Genuine interest in river-city dynamics and blue-green relationship. 3. Research experience and familiarity with qualitative/quantitative methods. 4. Strong analytical and critical thinking skills. 5. Excellent communication and writing skills in English. 6. Ability to collaborate across disciplines. 7. Self-motivated, independent, and effective time management.