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International Knowledge Exchanges in Architecture and Urban Planning

Exemplary cases of greening the curricula across the Euro-Mediterranean region

The UfM Secretariat is co-funded by the EUROPEAN UNION

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"The mediterranean space in Europe", Lola Colin, Eva Tarasco, Ysaline Pero, Mélimed, ENSA Marseille, 2025.

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The UfM Strategic Urban Development Action Plan 2040 provides a comprehensive framework to guide sustainable urban development across the Euro-Mediterranean region. Its main objective is to promote resilient, inclusive, and climate-responsive cities that enhance the quality of life for all citizens. From a political perspective, the Action Plan builds upon the UfM Urban Agenda adopted in 2017 and reflects a collective commitment to strengthening regional stability and prosperity through urban transformation.

A key feature of the Action Plan is its emphasis on implementation mechanisms that foster science–policy interfaces, helping to connect academic research with policy and practice. Within this framework, the Union for the Mediterranean convened, in May 2022, the first meeting of representatives from Schools of Architecture and Urban Planning across the Euro-Mediterranean region.

Since then, several meetings have been hosted by universities across the region to exchange experiences and promote joint research and educational initiatives aimed at reinforcing regional cooperation. These meetings took place at the Middle East Technical University in Ankara, Türkiye (1–2 December 2022); Polis University in Tirana, Albania (18–19 May 2023); Mohammed VI Polytechnic University in Ben Guerir, Morocco (30–31 May 2024); Université Libre de Bruxelles in Belgium (21–22 November 2024); and the Center of Mediterranean Architecture in Chania, Greece (22–23 May 2025).

This report constitutes one of the outcomes of this collaborative process. It is intended to serve as a periodic mapping of regional initiatives, with the aim of encouraging cooperation and knowledge exchange, while also highlighting context-specific approaches that address the challenges faced by cities and regions across Mediterranean countries, in a manner that respects their diverse cultural contexts.

Roger ALBINYANA
Managing Director
European Institute of the Mediterranean (IEMed)

The Mediterranean has been a space of encounter, exchange and shared learning. As our cities confront nowadays unprecedented environmental, social, and spatial challenges, enhancing cooperation in knowledge production becomes more important than ever. Initiatives that connect public institutions, universities, practitioners and local communities across the region play a crucial role in shaping more resilient, inclusive and sustainable urban futures.

The European Institute of the Mediterranean (IEMed) strongly supports such collaborative processes. Since its establishment more than thirty-five years ago, IEMed has worked to promote Euro-Mediterranean dialogue and cooperation by connecting policy communities, academic networks and civil society actors. The experiences presented in this publication demonstrate how knowledge exchange can generate tangible benefits: empowering students and researchers, strengthening local capacities and facilitating innovative solutions rooted in the specific contexts of Mediterranean territories.

In this vein, this report contributes not only to improving educational practices but also to fostering a culture of dialogue and co-creation that is essential for addressing complex urban challenges. In this sense, they represent a concrete example of how higher education can serve as a bridge between research, policy and society.

More importantly, these initiatives align closely with the objectives of the UfM Strategic Urban Development Action Plan 2040, which calls for integrated, climate-responsive and inclusive urban development. Universities and research institutions are uniquely positioned to act as catalysts of this transformation, helping translate global and regional commitments into locally grounded practices.

At a time when cooperation across the Mediterranean is both necessary and urgent, strengthening platforms for shared learning is key. By documenting and disseminating these exemplary cases, this report contributes to expanding a growing community of practice committed to sustainable urban development in the region.

Contents

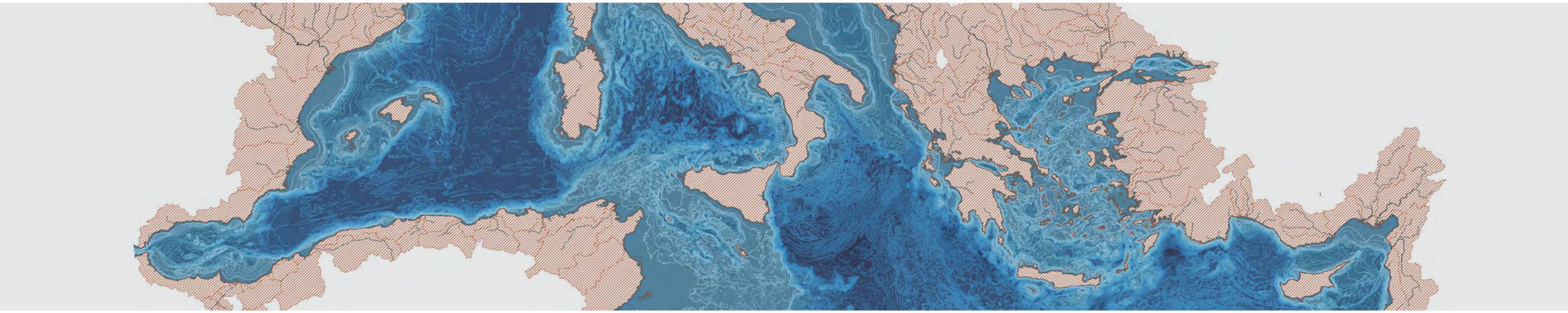
Executive Summary

This report examines university-led international knowledge exchange initiatives in Architecture and Urban Planning across the Euro-Mediterranean region, assessing their contribution to sustainable, resilient, and inclusive urban transformation, in line with the Union for the Mediterranean (UfM) Strategic Urban Development Action Plan 2040. It focuses in particular on how knowledge is produced, exchanged, validated, and translated into educational, social, policy, and territorial impacts.

Knowledge exchange is understood as a collaborative, transdisciplinary process involving academic and non-academic actors to co-produce context-specific solutions and generate social, cultural, and economic value, moving beyond extractive or unidirectional models of knowledge transfer. This definition emphasises open, reciprocal, and context-sensitive forms of collaboration as central to effective knowledge exchange.

The analysis draws on eligible initiatives submitted to a UfM open call in 2025. From these, ten exemplary cases were selected for in-depth assessment using a shared analytical framework informed by knowledge valorisation, open science, and transdisciplinary research. The cases include both collaborative projects and Urban Living Labs, operating across diverse institutional and political contexts in the Euro-Mediterranean region.

The Oasis of Figuig, panoramic view.



Mediterranean catchment basins", Lola Colin, Eva Tarasco, Ysaline Pero, Mélimed, ENSA Marseille, 2025.

Key Findings

The ten selected cases illustrate how these challenges are deeply interconnected within the fragile and complex socio-ecological systems of Mediterranean cities, towns, and rural settlements. They also highlight the pivotal intermediary role of universities as relatively neutral and trusted actors, facilitating dialogue between governments, civil society, and local communities, and translating knowledge across sectors, particularly in contexts of fragmented or contested governance.

Methodologically, knowledge exchange is characterised by iterative processes of co-design and co-production, supported by participatory diagnostics, design studios, workshops, and Urban Living Labs. These approaches foster mutual learning, local ownership, and trust, especially when they incorporate local and indigenous knowledge and engage women, youth, and marginalised groups.

Strengths and Positive Impacts

The educational value of knowledge exchange initiatives is consistently the most robust and systematic outcome. Experiential and place-based learning significantly strengthens student competences, professional skills, and institutional capacity. Academics and students frequently act as knowledge brokers, linking research, design, policy, and implementation. Education emerges as the most durable and scalable form of knowledge valorisation across the cases.

Social and cultural value is also pursued. Participatory approaches support social cohesion, civic engagement, and trust between communities and institutions, while promoting inclusion and equity. Recognition of heritage and local knowledge systems strengthens place-based resilience and cultural continuity.

A further strength lies in the commitment to open dialogue and ethical knowledge co-production. Many initiatives move away from extractive models toward reciprocal and inclusive practices, aligning with UNESCO Open Science principles and UfM priorities on participatory urban governance.

Limitations and Challenges

Despite these strengths, several limitations persist.

Durability remains the most fragile dimension. Many initiatives rely on short-term funding, individual champions, or favourable political conditions. Urban Living Labs, while promising, are particularly vulnerable to governance changes and resource constraints, limiting long-term continuity and institutionalisation.

Economic, institutional, and policy impacts remain comparatively weak and uneven. While indirect benefits are observed, such as improved employability or groundwork for urban regeneration, these outcomes are rarely scaled or embedded in durable governance, financing, or policy frameworks. This gap is reinforced by the limited involvement of non-cognate disciplines, such as economics, public finance, law, health, and political science.

Knowledge validation and dissemination pose a further challenge. While outputs are diverse, formats ensuring academic rigour and wide circulation remain limited. Peer-reviewed journal articles and books represent only a small share of total outputs, constraining cumulative learning, academic recognition, and policy uptake.

Heritage, governance, and community engagement emerge as the most frequent themes, followed by housing, public space, and climate resilience. Less frequently addressed but critical issues include transport, disaster preparedness, and unsustainable urbanisation.

Digital skills and the role of artificial intelligence remain underrepresented across the initiatives analysed. While AI is gaining prominence in academic and professional debates, its limited uptake currently represents an emerging "wild card": it may further constrain continuity if neglected, but also holds potential to enhance educational innovation, policy impact, and scalability if critically integrated.

Finally, **equity and power asymmetries** remain evident. Funding and leadership are predominantly based in Europe, while southern Mediterranean research infrastructures remain under-resourced. Limited South–South cooperation constrains local agenda-setting and risks reproducing hierarchical knowledge relations.

Way Forward

To strengthen the contribution of knowledge exchange to urban transformation, a strategic reorientation is required across four dimensions:

1. **Durability:** Move beyond short-term project funding toward longer-term institutional commitments. Stronger embedding within universities, municipalities, and regional authorities is essential to sustain learning and impact. Funders should therefore support not only the initiation of new initiatives, but also the long-term continuation and evolution of existing ones, recognising their different phases and maximising the value of work already embedded on the ground.
2. **Impact:** Enhance economic and policy impact through deeper institutional and economic embedding. Integrating disciplines such as economics, public finance, law, and political science can support governance reform and sustainable financing models.
3. **Knowledge Validation and Circulation:** Strengthen pathways to translate practice-based knowledge into validated, citable, and accessible formats, including peer-reviewed publications, open-access repositories, and policy briefs.
4. **Equity:** Rebalance leadership, resources, and decision-making power. Targeted investment in southern Mediterranean institutions and stronger South–South cooperation are essential to promote reciprocal and inclusive partnerships.

Given uncertainty about the impacts of digital skills and AI across the four dimensions, further research is needed to monitor and assess their growing role in knowledge exchange, including risks and opportunities.

If these directions are pursued, universities can act as durable bridges between knowledge and society, enabling knowledge exchange to evolve from project-based experimentation into a structural driver of inclusive and resilient urban transformation across the Euro-Mediterranean region.

Knowledge Exchanges in the field of Architecture and Urban Planning across the Mediterranean Region: A Conceptual Framework

GIULIO VERDINI
University of Westminster & ILAUD

Knowledge exchanges are defined, in the context of this research, as collaborative practices involving both academic and non-academic stakeholders with the purpose of generating social and economic value, and creating context-specific, sustainable solutions to common urban challenges in the region.

Given their collaborative nature, knowledge exchanges may enable the effective sharing and practical application of knowledge. This strengthens research impact, deepens community engagement, and ensures that knowledge is not only generated but also used to address real-world challenges (Kreiling & Paunov, 2021)

This report adopts a conceptual framework, presented in more detail in the next session, informed by the latest policy and academic advancements on knowledge valorization (EU, 2022), open science (UNESCO, 2022), and transdisciplinary practices (Hoffmann-Rien et al. 2008). The framework is used to assess past knowledge exchanges practices in the Euro-Mediterranean region.

Through the circulation of a common assessment template, disseminated across the UfM channels during March to June 2025, forty entries were received from different research teams. From these, ten case studies were selected for in-depth analysis, with the aim of distilling key learnings regarding both successful and scalable practices, as well as the limitations and barriers that emerged throughout their implementation.

Background

On 23 May 2022 Union for the Mediterranean (UfM) called for the first meeting of representatives of the Schools of Architecture and Urban Planning of the Euro-Mediterranean Region. Since then, a number of additional meetings were organised in different universities to share experiences, and to build up common research and educational initiatives to strengthen links at the regional level: at the Middle East Technical University in Ankara, Turkey (1-2 December 2022); at the Polis University in Tirana, Albania (18-19 May 2023); at the University Mohammed VI Polytechnic, in Ben Guerir, Morocco (30-31 May 2024); at the Université Libre de Bruxelles, Belgium (21-22 November 2024), at the Center of Mediterranean Architecture in Chania, Greece (22-23 May 2025).

The Mediterranean is a complex, often conflictive, geopolitical entity, which, however, retain deep historic and heritage connections through trade, cultural exchanges, and migrations of people (Braudel, 1977). The discussion therefore was on how to retain this cultural legacy with the imperative to manage in a sustainable way the potentially disruptive challenges of urban transformation, but also the new social, technological, political and climatic challenges faced by the Mediterranean[1].

One the recurring topics of discussion during the UfM meetings is how Universities can create context-specific analytical frameworks and solutions that work locally and take effectively into account the specificity of the cities and regions in the Mediterranean and their cultural roots.

The consensus on the underlying tension between the complexity of the local context and the global forces at stake, led to focus on the mainstream approaches and solutions generally proposed as suitable, but often problematic in their local application. This discussion draws on the concept of 'aspatial globalisation', a global tendency of homogenization of practices and approaches failing to recognize the multiplicities of the spatial diversities of places (Massey, 2005).

The effectiveness of abstract global urban models produced elsewhere, and considered unavoidable for all, is today challenged not only in academic circles, but also in international urban arenas. The latest World Urban Forum in Cairo, held in November 2024, addresses the challenge of sustainable urbanization by focusing on the theme 'It all starts at Home: Local Actions for Sustainable Cities and Communities', suggesting the urgent need to localizing global goals and enhancing the representation of local actors at all levels (WUF, 2024).

The group has advocated therefore for new approaches to understand places differently and then act accordingly, fostering effective local collaborations between universities, city authorities and local stakeholders, and connecting knowledge locally and globally in a more critical way. The UFM Strategic Urban Development Action Plan explicitly states that this can be achieved by establishing and testing innovative partnerships between academic and non academic stakeholders, such as local governments, the private sector and the civil society in 'in real-life, design based, problem-oriented Urban Living Labs that are able to channel tools and knowledge to local stakeholders (citizens, local industry, local NGOs, local governmental bodies, etc.) (Rocco et al., p. 24).

Universities can therefore act as a bridge between academic knowledge and society, testing sustainable local solutions rejecting exogenous models, and informing spatial policies and architectural and urban design interventions. Given the emphasis of the UfM Strategic Urban Development Action Plan on science-policy interfaces and the group's advocacy on the role of Universities as catalysts to achieve meaningful change in the Mediterranean, the focus of this report is on innovative knowledge exchanges in the field of architecture and planning to achieve sustainable, resilient and inclusive urbanization in the region.

The UfM Strategic Urban Development Action Plan

The Union for the Mediterranean (UfM) Strategic Urban Development Action Plan 2040 is a comprehensive framework designed to steer sustainable urban development across the Euro-Mediterranean region. Developed collaboratively by the UfM and its 42 member states, the plan responds to pressing challenges such as rapid urbanization, climate change, socio-economic inequalities, and the need for affordable housing, while safeguarding cultural heritage. Its overarching ambition is to create resilient, inclusive, and climate-adapted cities that improve quality of life for all citizens. Politically, the Action Plan builds on the UfM Urban Agenda adopted in 2017 and reflects a shared commitment to regional stability and prosperity through urban transformation.

It aligns with global frameworks such as the UN 2030 Agenda for Sustainable Development and complements initiatives like the New Urban Agenda and the New European Bauhaus, positioning urban development as a key driver for sustainable growth and social cohesion in a region marked by diversity and complexity.

The plan sets out key objectives and actions across several thematic pillars. First, integrated and sustainable planning is prioritized, promoting science-led, evidence-based approaches at local, national, and regional levels. This includes fostering coordination among national and local authorities, international institutions, and stakeholders to ensure coherent policy frameworks. Second, the plan addresses sustainable and affordable housing, aiming to improve access and affordability through coordinated housing policies, capacity building, and governance mechanisms such as national housing agencies and observatories. Third, climate resilience and sustainability feature prominently, with strategies to enhance urban health through nature-based solutions—such as greening cities and restoring wetlands—and measures to strengthen disaster preparedness and safety.

Additional pillars include capacity building and education, which support training programs for urban professionals and partnerships with universities, including specialized training for conserving World Heritage sites and traditional building skills. The plan also emphasizes citizen engagement and heritage conservation as catalysts for urban regeneration, and promotes port-city cooperation to ensure sustainable transformation of port areas and better integration with their host cities.

A distinctive strength of the Action Plan lies in its implementation mechanisms, which leverage science-policy interfaces to bridge the gap between research and practice. This approach calls for innovative partnerships between academic and non-academic stakeholders, including local governments, private sector actors, and civil society organizations. Central to this vision are Urban Living Labs—real-life, design-based, problem-oriented environments where collaborative experimentation can take place. These labs act as dynamic platforms for co-creation, enabling stakeholders to test solutions in situ and adapt them to local contexts. This participatory model not only accelerates innovation but also empowers communities, strengthens governance, and enhances the legitimacy of urban interventions.

Ultimately, the UfM Strategic Urban Development Action Plan 2040 positions urban development as both a technical and political endeavour requiring multi-level governance, cross-sectoral collaboration, and inclusive engagement of stakeholders and local communities. **By integrating planning, housing, climate resilience, heritage conservation, and capacity building within a coherent regional framework, and by operationalizing these goals through science-policy interfaces and Urban Living Labs, the plan offers a transformative pathway toward sustainable, equitable, and resilient cities across the Mediterranean basin.**

Final presentation of Case Study 3 at the Timimoun Wilaya.

[1] The consensus on the underlying tension between the complexity of the local context and the global forces at stake was reached in Ankara in December 2022, based on the discussion of a white paper titled 'Education & Research for Integrated and Situated Urban Planning & Design' co-authored by Roberto Rocco, Dina Shehayeb and Giulio Verdini.

Working groups for course development for ARUD undergraduate program.

Knowledge-Exchanges in the Field of Architecture and Planning: A Conceptual Framework

The European Commission has recently introduced the notion of knowledge valorisation, defined as "the process of creating social and economic value from knowledge by linking different areas and sectors and by transforming data, know-how and research results into sustainable products, services, solutions and knowledge-based policies that benefit society" (EU, 2022, p. 16). This definition, which moves beyond the narrower notion of knowledge transfer previously associated mainly with commercial purposes, better addresses broader social sustainability concerns by encouraging multi-sectoral and multidisciplinary collaborations.

In a similar vein, UNESCO has recently approved the Recommendation on Open Science, which emphasises the open accessibility of knowledge for all, the inclusive, equitable and sustainable dimensions of knowledge production, and open dialogue with other knowledge systems beyond the academic community (UNESCO, 2022).

This shifting discourse on the nature of knowledge generation has led to promising experimentations in "knowledge co-production" with non-academic stakeholders in the built environment disciplines (Fokdal et al., 2021). This process, which is based on the principle of active collaboration to enable social change, has been labelled transdisciplinary (Hoffmann-Riem et al., 2008).

The idea of co-producing knowledge among both international partners and local stakeholders to create social and economic value, in an open and non-exploitative fashion, suggests a new ethics of collaboration particularly in the context of the Euro-Mediterranean region. It requires acknowledging the historic colonial legacies of the region, and the persisting inequality between the two shores of the Mediterranean. The paradigm of transdisciplinarity suggests mobilising a plurality of voices, pursuing the equality of diverse modes of knowing to resolve complex problems (Woiwode & Bina, 2021).

As a corollary of this, developing a transdisciplinary framework to assess existing knowledge exchanges should consider specific enabling conditions for sustainable and just cooperation and meaningful impact. Exchanges should therefore consider the importance of the co-design and co-production process in place, the human competences and dispositions deployed during the exchange to favour genuine collaborations, and the societal and political context in which the collaboration takes place (Bina et al. 2021). In summary, a conceptual framework that captures the significance of a knowledge exchange process suitable for the Mediterranean region should consider the following aspects:

- **The trans-disciplinary dimension.** This implies to focus on the co-production process deployed, the human competences and skills utilized to bridge different knowledge domains.

- **The open dialogue dimension.** This implies reflecting on the non-exploitative dimension of the exchange, highlighting in which way the production of knowledge has been inclusive, equitable and sustainable.

- **The knowledge valorisation dimension.** This implies understanding how the exchange has helped (or has the potential to) generate value locally and how it has helped tackle urban challenges.

These elements constitute the basis for advancing our understanding of existing knowledge exchanges in the Mediterranean Region. The framework suggests concrete pathways for future, more innovative, non-extractive forms of collaborations, while taking into account the local institutional contexts that could facilitate or hinder the knowledge exchange process.

Chosen examples represented genuine cases of knowledge exchange, led by universities with the active participation of non-academic stakeholders dimension, and balanced geographical and thematic coverage.

An Overview of Cases Presented: Collaborative Research Projects and Urban Living Labs

The case studies submitted selected represents two distinct typologies of knowledge exchanges:

1. **Knowledge Exchanges within Collaborative Projects,** with specific timeframe and funding source, where knowledge exchange and co-production is used as a primary, although not exclusive, method of knowledge production.

2. **Knowledge Exchanges within Urban Living Labs** as participatory, iterative and co-creative platforms designed to bring diverse stakeholders together to test and adapt localized solutions in real contexts.

The final list of cases here presented comprises five Collaborative Projects, and five Urban Living Labs. Collaborative Projects are fixed-term and bounded by funding cycles or ad hoc financial support, typically lasting only for the duration of the project. While they generate valuable evidence and methodologies, continuation beyond the project cycle requires planning and new resources; otherwise, impact may end abruptly. Collaborative projects that embed knowledge exchange offer benefits such as relevance, long-lasting engagement, and capacity building, but face challenges including complex relationship management, high resource demands, and difficulties in evaluating outcomes.

These constraints highlight the need for strategic design to sustain knowledge and partnerships beyond the formal timeframe (Caves and Lueling, 2021). Urban Living Labs, by contrast, are potentially ongoing and adaptive, designed to evolve through continuous experimentation and stakeholder engagement. However, they can be vulnerable to local political priorities, social and governance changes, which may lead to discontinuation despite their long-term potential (Naumann et al., 2018; Nesti, 2017; Palgan et al., 2016). This distinction makes them complementary: research projects provide the knowledge base within a defined scope, while Urban Living Labs embed and refine solutions in practice, sustaining impact when conditions allow.

Case Studies

CASE STUDY N. 1

Climate Resilience Challenges In Mediterranean Coastal Cities: Insights From Tétouan, Venice, And Marseille

LAURENT HODEBERT
Ecole Nationale Supérieure d'Architecture de Marseille
AUDREY LE HÉNAFF
Ecole Nationale Supérieure d'Architecture de Marseille

Collaborative Project

Timeframe: 2020 - ongoing

France
Ecole Nationale Supérieure d'Architecture, ENSA Marseille, France (Coordinator)
AVITEM, The Agency for Sustainable Mediterranean Cities and Territories, Marseilles, France
Métropole Aix-Marseille-Provence, France
Atelier KLIMA, France
Parc Naturel Régional de Camargue, France
Italy
Universitá IUAV di Venezia, Venice, Italy
Belgium
Universitè Libre de Bruxelles (ULB), Belgium
Morocco
Ecole Nationale D'architecture (ENA) de Rabat, Morocco
Agence Urbaine de Tétouan, Morocco

Funding
ERASMUS + funded project

Urban Challenges Tackled
Multidisciplinary coastal resilience frameworks
Culturally grounded design for the Mediterranean
Innovative educational methodologies

Venise_SLR & protections : "Venice, See level rise and protections", Barbara Zu, Amir Zoulim, Mélimed, ENSA Marseille, 2022.

2022 workshop Venise: "Field trip in the lagoon of Venice", IUAV, 2022.

Mélimed is an ERASMUS + funded project that addresses the challenges of building resilient Mediterranean coastal metropolises in responses to climate change through three case studies: the region of Tétouan, the Venice Lagoon and the heart of the Aix-Marseille-Provence metropolis.

The project brings together four architecture and urban design higher education schools around the Mediterranean, all of which share a commitment to understanding and addresses the impact of global warming on the Mediterranean highly urbanised coast.

Although the Mediterranean region is warming faster than the rest of the world, with severe repercussions especially for coastal territories, today architecture schools in the region still lack dedicated training on these issues.

Melimed helped develop innovative teaching methods through a series of workshops designed to generate tailor-made solutions for the region. These solutions are enriched by the cross-fertilisation of skills and methods of an international group of scholars participating in this project.

Melimed 1 and 2 are funded by the EU KA.220 HED Cooperation partnerships in higher education ERASMUS + funding scheme.

The pedagogical approach is structured around three axes, during key moments of intensive knowledge exchange where the respective design practices are shared. First each school conducts design explorations using collaborative cartographic tools, to build a shared understanding of local contexts. Second, this knowledge is confronted with the reality during immersive, and intensive collective workshops in each place. Finally, a "return workshop", held in the following semester, enables students and teachers to exchange, compare and refine their initial hypotheses leading to proposals for resilient projects for these coastal metropolises.

Mélimed.2 is the funded continuation of the initial project. Its goal is to revisit the work accomplished over three years within the framework of the first Mélimed partnership (atlas and design solutions). Cross-fertilisation of practices between students and scholars from the four schools will take place during three on-site workshops, two in Venice and one in Marseille, where students will explore the territories, test earlier hypotheses, and develop new resilient design solutions to climate change. Teachers' seminars will enrich these thematic explorations and help reassess the outputs form the Mélimed 1.

The students' work will further expand these materials through cross-institutional and collaborative productions. The multiplicity of materials targets different audiences, both academic (teachers, students, and even researchers) and professional. This link between the university and the socio-professional sector is conducive to the renewal of design practices while reinforcing students' future employability.

The Trans-Disciplinary Dimension

The process
The initial program was co-designed by ENSAM and AVITEM, following by contributions from the other partners.

The project was structured around a series of progressive international workshops, organised twice a year in different sites of the Mediterranean region. In the first phase, participants developed collaborative cartographic tools to build a shared understanding of each territory. The second phase consisted of intensive on-site immersions, during which these tools and initial analysis were tested and refined. In the final phase, during the 'return' workshop in the following semester, scholars reconvened on-site to exchange visions and consolidate the resilient design solutions tested throughout the process.

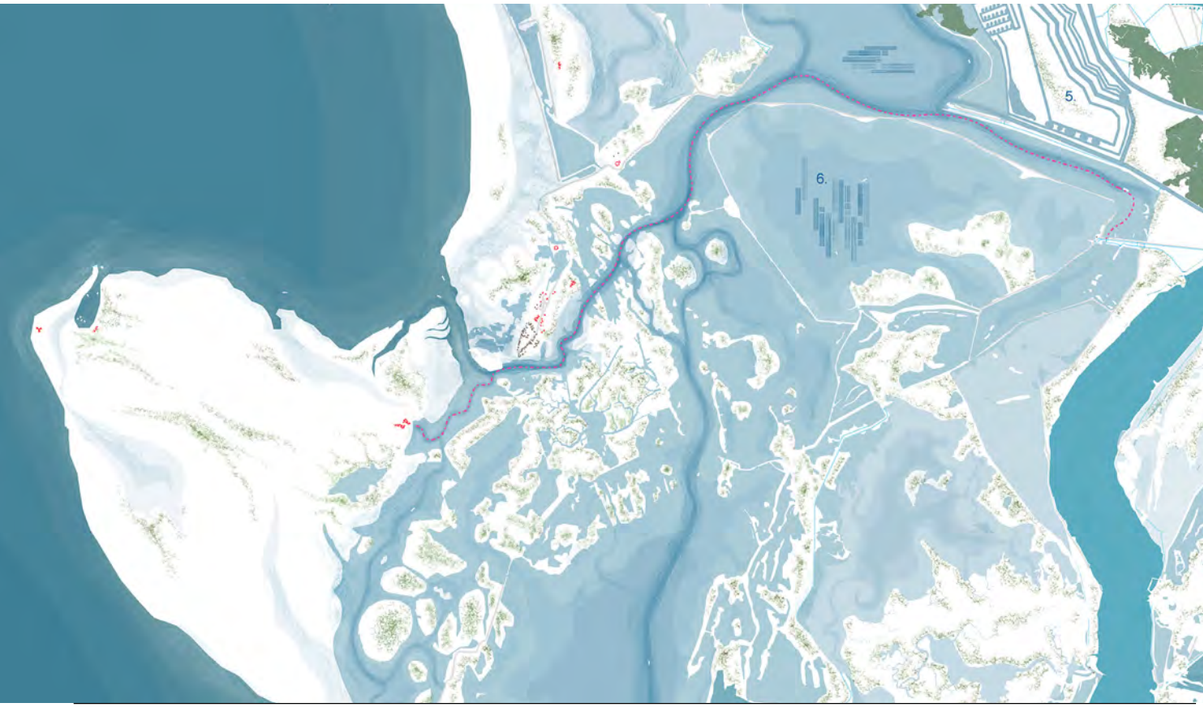
Following this experience, a new EU project was submitted in 2025 focusing on the lagoons of the Mediterranean coast (Lalimed), which has been accepted.

Each partner was responsible for a specific task, and each workshop was hosted and organised by the partner institutions, ensuring contextual relevance. A steering committee was set up to ensure coordination between the partner institutions. It is composed of team leaders from each institution, mainly scholars from ENSAM, ULB, and IUAV, who ensured the educational and scientific quality of the programme.

The production of intellectual outputs (the atlas and project booklets) was coordinated by a lead partner with the participation of the others. This collaborative model facilitated transfer of knowledge and know-how among both students and academic staff, strengthening pedagogical innovation and interdisciplinary capacity across the consortium.

Competences and Skills
A multidisciplinary team of urban planners, architects, researchers, landscape designers was involved in the project. The participating scholars were involved in the project for their in-depth knowledge of the territories object of study, as well as for their analytical perspectives and interpretative framework. The pedagogical model relies on cross-disciplinary and transdisciplinary approaches, requiring the involvements of architecture and urban planning scholars, with the contributions of landscape architects, sociologists, and geographers.

Leadership and coordination were jointly assumed by the main academic partners, ENSAM, ULB, and IUAV, each bringing specific methodological strengths, institutional experience, and thematic expertise. AVITEM played a key role as facilitator for the relations with local stake holders.



The Open Science Dimension

Inclusivity
The activities ensured targeted inclusive teaching methods to encourage debate, discussion and the sharing of experiences; valued students' contributions as an essential part of the programme, integrating them into collective group works; integrated good examples and best practices specific to the students' countries of origin. This pedagogy engages students in cross-analysis and qualitative reflection, improving their awareness and skills based on field experience at the Euro- Mediterranean level.

Equity
A gender equity policy is employed, and there is usually the same amount of male and female students in workshops.

Sustainability
The Mélimed project promotes sustainability in the training of future architects and urban designers, addressing climate change impacts on highly urbanized Mediterranean coasts. Through collaborative, cross-institutional workshops and design exercises, students develop context-specific, resilient solutions that integrate environmental, social, and cultural considerations. By linking academic research with professional practice and fostering knowledge exchange across four Mediterranean schools, Mélimed strengthens capacity for long-term, adaptive urban planning. The project's iterative approach, combining field exploration, immersive workshops, and cross-institutional review, ensures that proposed interventions are both ecologically responsible and socially inclusive, contributing to sustainable coastal urban development.

Changes in practices occurred with the implementation of new teaching programmes, and the update of existing ones to incorporate MELIMED's findings. New Master's programmes have been set up in ENSAM and ENAR as part of the new educational programme.

The attractiveness of Master's programmes increased due to global mobility between partners.

Salin de giraud_ENSAM_2025 : "territorial resilience, the future of a submersible territory, the Giraud salt marshes", Zoé Devoille, Eloise Nardo, Thibault Polguer, ENSAM, 2025.

The Knowledge Valorisation Dimension

- **Educational Value:** The project advanced architectural and urban design education through innovative tools and methods, including an e-studio platform, surveys, and fieldwork during workshops.

- **Economic/Capacity-Building Value:** By linking teaching to the continuing professional development of civil servants, the project enhanced practical skills and professional competencies. This integration of academic training with applied, real-world challenges, builds capacity among both students and professionals, contributing to a more skilled workforce capable of addressing resilience and sustainability in coastal urban environments.

Outputs & Impacts

Outputs

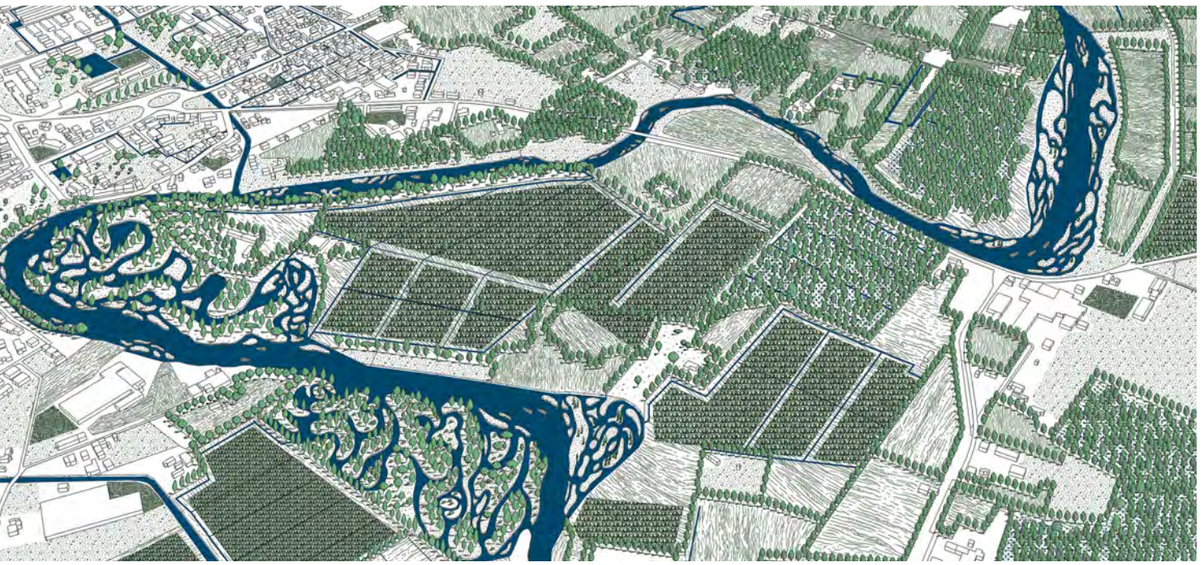
Overall Melimed produced twenty-four intellectual outputs, six training booklets for workshops, four atlases, wiki pages, four training booklets on resilient projects, a Master's guide, three videos, and two exhibitions in Rabat and Marseille. The web platform is the repository of open-source material produced: www.Melimed.eu

Examples of publications:

- "Mélimed, Métropoles du littoral méditerranéen, enjeux climatiques et solutions de résilience 2020-2023".
- "Water scarcity paradoxes towards sustainable landscape construction. Overlapping strategies for the Venice and Marseille territories".
- "La voix des méditerranéens".

Impacts

Practice: the result of MELIMED was incorporated in training programmes of AVITEM, since 2022, targeting the civil society.



ABSORPTION VENISE_IUAV : "Rewilding the Sile river in Veneto", Francesco Finotta, Marco Pantarotto, Martina Quaggiotto, Giancarlo Serman, Jacopo Vianello, IUAV, 2022.

The project unfolds through a sequence of progressive international workshops across Mediterranean sites, culminating in a 'return' workshop where participants reconvene to refine insights and consolidate resilient design solutions developed during earlier phases.

Through design explorations using collaborative cartographic tools, the project employs mapping as a revealing instrument to build a shared understanding of local contexts, culminating in an atlas that synthesizes these insights.

2023 workshop in Camargue - étang de Berre: "Workshop in Camargue - étang de Berre", ENSAM, 2023.

CASE STUDY N. 2

A City Lab for Sustainable Urban Regeneration in Alexandria, Egypt

NEVIN GHARIB
Alexandria University, Egypt
HEBA HATEM
Alexandria University, Egypt

Urban Living Lab

Timeframe: 2019 - ongoing

Egypt
Faculty of Fine Arts, Alexandria University (Co-ordinator)

With academic and non-academic partners from Germany, Jordan, Egypt, Iraq, Sweden.

Funding
Alexandria University
EU Erasmus +
DAAD German

Urban Challenges Tackled
Inclusive and Heritage-sensitive Urban Regeneration
Youth-Centred Civic Engagement
Applied Climate Resilience tools

A City Transformation Lab for Sustainable Urban Regeneration in Alexandria, Egypt.

Regional Representation at the World Urban Forum about "Empowering communities for sustainable urban transformation".

In cities like Alexandria, where large-scale infrastructure modernisation collides with fragile layers of social memory and historic identity, the risk is not only physical deletion but cultural amnesia. As tramways will convert into metro lines and industrial heritage sites fall into neglect, entire urban narratives—of labour, movement, and everyday life—stand on the edge of disappearance.

It is within this tension between development and memory that the City Transformation Lab (CT Lab) emerged in 2019 at Alexandria University: a university-led Urban Living Lab dedicated to safeguarding cultural identity while enabling sustainable urban transformation.

Advanced training for students and young professionals is strengthened through innovative, experiential curricula, inter-university mobility, and joint courses.

The CT Lab combines high-fidelity digital documentation, experiential pedagogy, and community co-production to develop human-centred interventions that protect intangible urban heritage while responding to contemporary urban pressures. The Lab operates as a transdisciplinary nexus where architects, planners, historians, technologists, and community actors collaboratively co-create context-sensitive urban solutions.

Through advanced tools such as Geographic Information Systems (GIS), Virtual Reality (VR), environmental monitoring kits, and 3D digital documentation, Alexandria's historic urban fabric is transformed into a "living classroom," enabling students to engage directly with the city as an evolving laboratory. This pedagogical approach ensures that architectural education moves beyond abstraction, grounding learning in the urgent realities of heritage loss, environmental stress, and social transformation.

The mission of the CT Lab is twofold: to empower a new generation of professionals through immersive, hands-on learning, and to generate applied knowledge that bridges the persistent divide between academic research and real-world urban crises. The Lab facilitates experimentation across multiple domains, from green building assessment to the documentation of "at-risk" heritage assets.

The Trans-Disciplinary Dimension

The process

The working logic of the CT Lab is a participatory, bottom-up collaborative framework that prioritises knowledge valorisation—the strategic translation of academic research into tangible socio-cultural assets and public urban value. Unlike traditional academic structures that confine knowledge production to classrooms and publications, the Lab is built upon Experiential Lab-based Learning.

Students, researchers, practitioners, and local actors are positioned as equal contributors to the production of urban intelligence.

The city itself becomes a site of inquiry, where spatial, social, and historical knowledge is constructed collectively rather than transferred unidirectionally.

This approach enables students and researchers to transition from passive recipients of theory into active co-creators of Alexandria's spatial narrative. Urban interventions are thus rooted in lived experience, local memory, and community negotiation, rather than abstract planning models. In this sense, the city itself becomes both the subject and the medium of learning.

Competences and Skills

The CT Lab's capacity-building strategy is anchored in a dual pedagogical model: Training of Trainers (ToT), Lifelong Learning workshops, and Experiential Lab-based Learning. This combination ensures both the multiplication of expertise and the immediate application of skills to real urban challenges. By adopting this model, the Lab amplifies its impact, enabling advanced digital competencies—such as high-fidelity 3D scanning, spatial data analysis, environmental monitoring, and narrative mapping—to be disseminated across a growing network of faculty members, emerging researchers, and practitioners.

By synthesising narrative maps with archival research, students develop sophisticated spatial storytelling skills, moving beyond technical documentation to capture the intangible socio-cultural memory embedded in urban space. This equips them with critical green and digital competencies, positioning them as mediators between Alexandria's historical identity and its modernised future.

Through this process, the role of the architect is fundamentally reconfigured—from a solitary designer of objects to a collaborative urban strategist capable of simultaneously negotiating the interests of heritage, technology, environment, and community.

The Open Science Dimension

Inclusivity

Through public exhibitions, digital platforms, and narrative mapping initiatives, the CT Lab transforms localised knowledge into shared civic resources. By making hidden histories, everyday practices, and community memories visible and accessible, the Lab expands who can participate in the interpretation of the city. This process generates social value by strengthening collective ownership over urban narratives and fostering a more inclusive public imagination.

Equity

In the context of the Egyptian architectural landscape, the Lab provides a vital platform for youth empowerment and female leadership in high-tech domains traditionally dominated by men. While the undergraduate population at Alexandria University's Faculty of Fine Arts is already 66% female, the CT Lab has successfully accelerated this trend toward professional leadership. The 2025 seasonal schools documented an unprecedented level of female engagement in both workshops (80%) and ToT and LLL (66%). By placing female researchers at the forefront of advanced GIS mapping, VR simulations, and 3D heritage documentation, the Lab is actively challenging traditional gender roles within the Egyptian construction and planning sectors.

Sustainability

Sustainability is embedded in the Lab's methods as an operational strategy, workflows and measurable outcomes for Alexandria's built environment. This strategy applies through: 1) the promotion of resource-efficient urbanism, by prioritising adaptive reuse and community-led spatial interventions that minimise carbon footprints while maximising social utility; 2) Innovation in curricula, by embedding green and digital competencies into the official architecture curriculum; 3. Economic Resilience, by attract diverse funding and secure long-term institutional support.

The summer school exhibition" About the Tram" featured student-led interactive mapping and educational games designed to foster transdisciplinary dialogue with the public.
© Aya Abbas, CT Lab, 2025.

The Lab does not merely preserve heritage; it reactivates it as a social asset that informs contemporary identity, belonging, and urban futures.

The Knowledge Valorisation Dimension

- **Educational Value:** Innovative experiential curricula, inter-university mobility, and digital tools (GIS, VR, online platforms) strengthen applied green and digital competences through learning in real urban contexts.
- **Social Value:** Participatory processes supported by digital tools empower communities, enhance access to information, and foster inclusive dialogue and collective ownership of urban spaces.
- **Cultural and Economic** Value: Community-led interventions integrating local heritage revitalise underused spaces while supporting creative uses and local economic activity.

Outputs & Impacts

Outputs

The Lab produces an annual report of activities. It has attracted 9 research visiting scholars. Scholarly outputs include: scientific posters, research papers, reports, master's thesis.

Impacts

Operating as a primary driver for curriculum modernisation, the Lab facilitated hands-on experience for over 730 students and professionals through 11 specialised environmental and heritage documentation kits. These activities are institutionalised via 4 core courses and +10 Training of Trainers (ToT) sessions, and more than 20 Lifelong Learning (LLL) activities. The activities of teaching and capacity building of the LAB created a strong foundation for future externally funded projects for teaching innovation like Erasmus+ and DAAD.

Practice Public exhibitions on urban heritage and community engagement have strengthened community awareness in local heritage projects. Also, the documentation methods of the lab provide a tested methodology for safeguarding urban memory during rapid infrastructure changes, offering replicable strategies for other cities facing modernisation pressures.

Alexandria's historic tramway corridor during the transition to metro infrastructure.
© National Authority for Tunnels, 2024.

CT Lab integrates urban regeneration, heritage conservation, and environmental design through cross-disciplinary collaboration, embedding sustainability while promoting inclusion, community engagement, and youth-centered, gender-sensitive participation.

By developing small-scale, participatory, and scalable interventions, the Urban Lab shows how universities can pragmatically address urban challenges even in contexts of limited municipal resources, fragmented governance, and socio-economic inequality.

The city as a classroom facilitates knowledge through on-site urban engagement.
© Malak Magdy - CT Lab, 2025.

CASE STUDY N. 3

Timimoun, Algeria: Exploring the Interaction Between Traditional Water Systems, Urban Morphology, and Landscape

PAOLO TARABUSI
École Nationale d'Architecture de Paris-Val-de-Seine

Collaborative Project

Timeframe: 2025

Algeria
Université Alger 1 - Faculté d'Architecture (Co-cordinator)
France
Ecole Nationale Supérieure du paysage de Versailles (Co-cordinator)
Ecole Nationale d'architecture Paris-Val de Seine (Co-cordinator)

Institutional support
FAO, Food and Agriculture Organisation of the United Nation – GIAHS Programme (Globally Important Agricultural Heritage Systems)
Ministère des Affaires Etrangères Algérien
Ministère de la Culture Algérien
Institut National de la Recherche Agronomique d'Algérie
Wilaya Timimoun
Centre Algérien de Patrimoine Culturel Bâti en Terre

Funding
Union for the Mediterranean (UfM)

Urban Challenges Tackled
Sustainable water management
Public-realm regeneration
Integrated oasis landscape planning

Alley of the old town (the Ksar) – earthen buildings and shaded passageways.

Ventilation shaft of a foggara crossing the contemporary town.

At the heart of the Algerian Sahara the oasis of Timimoun has historically served as a strategic stop along the major trans-Saharan caravan routes of Antiquity. This territory was structured around an ingenious underground water management system: the foggaras. Derived from Persian qanats, these draining galleries enabled the development of agriculture and the establishment of sedentary life in an otherwise extreme environment, playing a decisive role in shaping the landscape, structuring social organization, and influencing the cultural identity of the region.

How has the pragmatic logic of the foggara network influenced urban form?

What traces has this system left over the centuries on building placement, the configuration of public spaces, and the organization of agricultural plots?

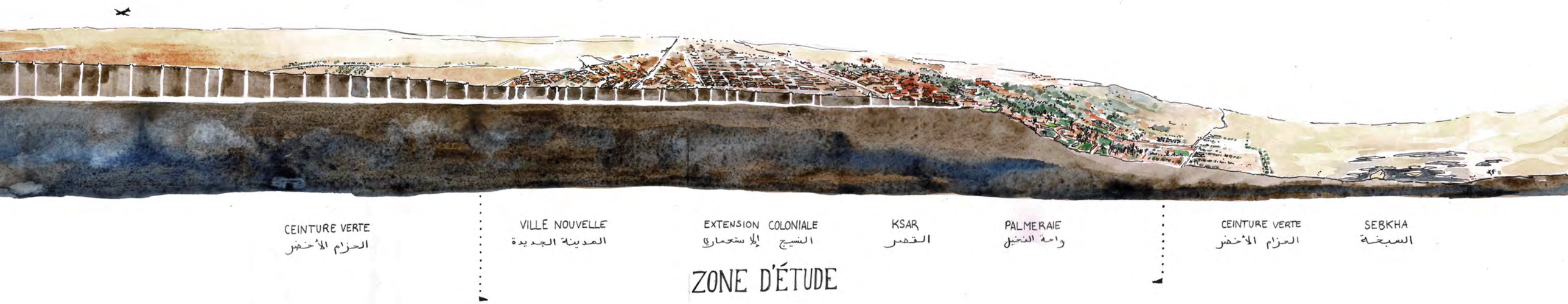
What lessons might this heritage offer for the contemporary improvement of urban districts and the quality of life of their inhabitants?

Building upon this exceptional heritage, a study workshop, initiated and supported by the Union for the Mediterranean, brought together eight Master's students from three institutions in architecture, urban planning, and landscape studies: the University of Algiers 1, ENSA Paris-Val de Seine, and ENSP Versailles.

Prior to the fieldwork, a phase of collaborative research and cartographic analysis between the three universities established the main focus of the workshop: the interactions between the underground hydraulic infrastructure and urban morphology.

To address these questions, the workshop employed a deliberately empirical and observational methodology on site, combining surveying, walking, and freehand drawing. At the conclusion of this one-week immersion, two major documents were produced: a large-scale plan and section illustrating the impact of a selected foggara on the urban fabric. A complementary series of analytical sketches highlighted key sites and representative landscapes encountered during the fieldwork.

Within the constraints of time and available resources, this study proposes an original interpretative framework for a territory that is at once fascinating, complex, and highly fragile—underscoring the urgent necessity of preserving and sustaining it for future generations



Territorial section produced by students during the workshop – underground water-collection network running through the town from the desert to the palm grove.

The Trans-Disciplinary Dimension

The project was proposed by the UfM in collaboration with FAO, with the aim of strengthening the future candidacy of the Timimoun to be recognize as Globally Important Agricultural Heritage Systems.

The process

Prior to the on-site workshop, several video meetings were held in order to identify the main issues and to define the working methodology. A case study was selected in advance, and a detailed schedule was established to ensure efficiency, optimize site visits and travel, and fully benefit from the contributions of the different experts involved.

During the workshop, daily sessions of discussion and collaborative work were organized to review observations and survey results. All documents were produced collectively by the students, directly on-site and by hand, using pre-printed base maps.

The process and the project phases may be outlined in the following points:

- The Co-design phase: The development and co-design phase was carried out in partnership between the UfM and the three academic institutions.
- Co-production phase: The on-site workshop involved experts from local, regional, and governmental institutions.
- Continuation and outcomes: The study resulted in a public presentation and a brochure made available to the UfM. The preparation of the GIAHS candidacy file, which will build upon the study conducted, will be undertaken by the Algerian authorities in coordination with the FAO.

Competences and Skills

To remain as closely grounded as possible in the reality of the site and its political and social context, a wide range of experts and stakeholders were involved. The leadership and facilitation role in coordinating, organizing, and managing the interactions among the various actors was assumed by the UfM. The definition of the academic objectives, as well as the pedagogical guidance and the organization of the student team during the on-site workshop, were jointly carried out by the faculty members of the three universities.

The Open Science Dimension

Inclusivity

Understanding local culture and indigenous know-how, along with their preservation and enhancement, has formed the foundation of the reflection since the very outset. The GIAHS framework, within which the project is situated, highlights ingenious systems that embody both ancestral heritage and resources for the future. Within this framework, the multi-layered reading of the site was grounded in and inclusive of local knowledge and practices.

Equity

The workshop's work, echoing the traditional organization of collective efforts for the construction of underground water collection and distribution systems (the twiza), was deliberately based on a common and collaborative approach. Demonstrating that such practices remain possible today, students from three different schools and from both shores of the Mediterranean worked together on the development, restitution, and presentation of ideas. Free from the imposition of personal egos, this represented a significant moment in the training of a new generation of architects and urban planners, capable of listening and collaborating equitably.

Sustainability

The entire reflection emphasizes the importance of what already exists: its preservation, valorization, and reuse. After longs periods characterized by both excessive destruction and construction, this approach appears, here more than elsewhere, fundamental in terms of resources and means economy.

The workshop concluded with a public presentation of the materials produced by the students to the Wilaya of Timimoun.

Ancient water distributor at the entrance to the palm grove.

The Knowledge Valorisation Dimension

- **Educational value:** This initiative was not only an academic exercise but also a collective human experience, shaped by exchanges of ideas and knowledge among students from both shores of the Mediterranean. The workshop further benefited from the expertise of representatives from the Algerian Ministries of Agriculture, Rural Development, and Culture, whose contributions provided essential contextual insights.
- **Social/Economic value:** In the longer term, this work could contribute to supporting Timimoun's application for recognition under the FAO's GIAHS (Globally Important Agricultural Heritage Systems) program.

Outputs & Impacts

Outputs

Two major documents were produced: a large-scale plan and section illustrating the impact of a selected foggara on the urban fabric: https://ufmsecretariat.org/sustainable-solutions-ufm-workshop-explores-traditional-building-climate-resilience-algeria/

Impacts

Practice: Preliminary discussion to develop a FAO GIAHS (Globally Important Agricultural Heritage Systems) nomination for the site is an anticipated outcome although it is currently under discussion.

Students preparing the presentation at the Wilaya of the work carried out during the workshop.

Sustainable water management addresses declining foggara systems by improving maintenance, safeguarding urban and agricultural supply, and reinforcing environmental quality in fragile oasis settings.

Public-realm regeneration reduces pollution and strengthens neighbourhood connections by activating residual urban voids, enhancing public spaces, and supporting everyday mobility and social cohesion.

Integrated oasis landscape planning reinforces agriculture–settlement linkages by protecting palm-grove continuity, sustaining productive water–soil ecosystems, and maintaining the cultural landscapes that anchor community livelihoods.

CASE STUDY N. 4

Participatory Public Space Design for Inclusive Urban Transformation in Tunis Metropolitan Area, Tunisia

OLFA BEN MEDIEN
Université de Carthage

Collaborative Project

Timeframe: 2023-2025

Tunisia
Université de Carthage, ISTEUB
The municipality of Soukra, Tunis
Germany
Brandenburg University of Technology (BTU Cottbus-Senftenberg), Faculty of Architecture, Civil Engineering and Urban Planning

With academic and non-academic partners from Jordan, Lebanon, Egypt, Iraq, Sudan.

Funding
DAAD Germany with support of the German Federal Foreign Office.

Urban Challenges Tackled
Inclusive public-realm design
Durable Community infrastructures
Participatory culture-focused processes

Volunteer students active in the project's participatory construction site. Photo O.Ben Medien.

Students supporting local livelihoods by purchasing supplies from neighborhood shopkeepers. Photo O.Ben Medien.

The project seeks fostering collaboration between academic institutions, local authorities, civil society, and residents to co-create public spaces that reflect the needs and aspirations of their users: engaging local community in the planning and design process; applying participatory design methods to co-create the garden building local capacity in participatory urban planning and design; promoting social cohesion through collaborative decision-making and implementation.

The participatory public space project in the Borj Louzir neighborhood of Soukra, in Tunis Metropolitan Area, directly involves local communities in the planning and implementation.

Since 2011, Tunisia has experienced a process of decentralization, which has strengthened the capacity of municipalities through training on participatory approaches, sustainability, and inclusive urban development. Internationally funded projects further encouraged adherence to global standards for sustainability, accessibility, and participatory processes. The democratization of the political scene has also fostered a dynamic civil society, particularly in the fields of urban planning, citizenship, and local governance. The proximity and collaboration between universities, civil society, and the Soukra Municipality created a supportive environment for coordination among local stakeholders and, subsequently, international partners. However, longstanding tensions between residents and municipalities posed challenges. Citizens have often been dissatisfied with urban services, and municipalities face budgetary constraints, exacerbated by political crises.

Restoring trust between the community and local authorities was essential to implement the project successfully, ensuring meaningful participation and collective ownership of the public space.

The Soukra workshop and project as a whole aim to produce the following results: design and construction of furniture, benches, and children's play equipment using recycled materials, respecting sustainability principles; landscaping with locally adapted plant species suited to the Tunisian climate; implementation of universal accessibility standards to ensure the garden is inclusive and usable by people of all ages and abilities; strengthened local capacities in participatory urban planning and governance; creation of a tangible, inclusive public space that reflects community needs and fosters social cohesion; enhanced networks and knowledge exchange between academic institutions and local stakeholders, supporting long-term collaboration for urban development initiatives.

The workshop is part of a collaborative project titled: PR-GPS, Power Relations in Local Urban Governance:Participation in Arab Public space.

The Trans-Disciplinary Dimension

The process

The project followed a structured, participatory approach combining co-design, co-production, and implementation phases:

- Pre-workshop phase: Initiated through online preparatory meetings, co-designed by ISTEUB, the Soukra Municipality, and the civil society initiative Bin Idina. Tunisian academics and government officials provided key feedback.
- Participatory diagnosis: Tunisian and international students conducted field surveys, interviews with residents, schoolchildren, parents, shopkeepers, and condominium representatives, and meetings with municipal officials. Lectures on local governance, public spaces, and climatic conditions contextualized the site. This phase identified user needs, regulatory constraints, and the social and urban environment of the site.
- Co-design phase: A 3D model facilitated workshops with diverse user groups (students, schoolchildren, parents, shopkeepers), resulting in a design proposal validated by the municipality.
- Participatory implementation: Students, local artisans, residents, civil society, and municipal representatives collaborated on construction. The garden was inaugurated with a volunteer concert.
- Continuation and outcomes: A report documented the process, evaluated methods, highlighted challenges and lessons, and informed subsequent PR-GPS project phases.

Collaboration with municipal staff and NGOs strengthened governance, project management, and participatory planning skills, enhancing the capacity of local actors to implement and maintain community-led initiatives.

Competences and Skills

Leadership was jointly ensured by university representatives, civil society coordinators, and ISTEUB faculty, who balanced directive and facilitative roles to coordinate diverse stakeholders. The process integrated technical and disciplinary competences across diagnosis, co-design, and implementation phases, combining architectural, urban, landscape, social, and practical skills of facilitators, acting as ' change agents' to foster democratic, context-sensitive solutions.

Students and youth planting locally adapted species during the co-production phase. Photo O.Ben Medien.

The Open Science Dimension

Inclusivity

Inclusivity was ensured through active engagement of diverse user groups, including schoolchildren, mothers accompanying their children, shopkeepers, and local residents. Indigenous and local knowledge informed plant selection and sustainable landscaping, while participatory workshops allowed citizens to co-design furniture, play areas, and greenery. Civil society associations facilitated the involvement of marginalized voices. Mixed groups of Tunisian and international students promoted cross-cultural collaboration, ensuring that multiple perspectives shaped the project. The process also considered accessibility norms, enabling the space to be inclusive for people with reduced mobility.

Equity

Equity was promoted through deliberate inclusion of youth, women, and people with disabilities in all phases of the project. Schoolchildren actively contributed to the co-design workshops, while mothers accompanying their children provided feedback on usability and safety. Accessibility standards ensured participation and access for people with reduced mobility.

Sustainability

Sustainability was integrated across social, environmental, economic, cultural, and institutional dimensions. Socially, the project engaged local residents, youth, and civil society in co-design and implementation. Environmentally, landscaping used local, climate-adapted plants and recycled materials for benches and play structures. Economically, local artisans were employed, supporting community livelihoods. Culturally, the design respected local practices and urban heritage. Institutionally, collaboration between ISTEUB, the Soukra Municipality, and NGOs, strengthened local governance capacity and promoted participatory planning approaches, ensuring the project's long-term impact and replicability.

Local artisans were employed for construction and landscaping, supporting livelihoods and promoting craftsmanship, while the project demonstrated a replicable model for sustainable urban interventions that could inspire future initiatives with economic impact.

The Knowledge Valorisation Dimension

- **Social Value:** Active participation of residents, schoolchildren, mothers, shopkeepers, and civil society fostered social cohesion and a sense of ownership of the public garden, while cross-cultural collaboration between Tunisian and international students and tutors enhanced knowledge sharing and transdisciplinary learning.
- **Educational Value:** The project provided hands-on learning in participatory design, urban planning, and sustainable construction techniques, serving as a practical platform for both local and international students to engage in inclusive urban interventions.
- **Economic Value:** Local artisans were employed for construction and landscaping, supporting livelihoods and promoting craftsmanship.

Outputs & Impacts

Outputs

A key output is the publication of the Participation Guidelines as a book in both English and Arabic, providing practical guidance for participatory local urban governance. A symposium and a one-month exhibition was held in Egypt, and a comprehensive report synthesised project activities, including workshop documentation, stakeholder engagement, and comparative analyses. The project also supported the realisation of a participatory urban interventions in Tunis. Website link.

Impacts

A fully realized public garden with distinct functional zones (playground, garden, resting area), durable benches, shade structures, and selected murals was realised.

Children drawing their perception of the garden in a participatory workshop. Photo O.Ben Medien.

The inter-and transdisciplinary integration of knowledge is facilitated by "change agents," academics who help foster democratic and inclusive processes by incorporating local expertise and mediating between actors.

A 3D model facilitated workshops with diverse user groups (students, schoolchildren, parents, shopkeepers), resulting in a co-designed proposal of public garden validated by the municipality and finally realized.

Local youth using paint to embellish the garden during the participatory construction. Photo O.Ben Medien.

CASE STUDY N. 5

Co-Creating Futures: Learning to Inhabit the Earth in Merzouga, Morocco

ANGELA RUIZ PLAZA
Universidad Europea de Madrid, Spain
AHMED LAAROUSSI
Ecole d'Architecture et de Paysage de Casablanca, Morocco

Urban Living Lab

Timeframe: 2022 - ongoing

Spain
Universidad Europea de Madrid, Spain
Association AMIDDUNAS NGO

Morocco
Ecole d'Architecture et de Paysage de Casablanca – Honoris United Universities, Morocco
Local Government of Merzouga

Urban Challenges Tackled
Climate-adaptive housing and design
Ecological public-realm strategies
Collaborative knowledge integration

Funding
Universidad Europea de Madrid

"Building with earth" workshop.

Students during the workshop.

The central objective of SAHALAB is to integrate ancestral Amazigh knowledge with contemporary architectural and design research, creating a space where students, artists, artisans, and local communities co-produce knowledge. The project combines earth construction workshops, ecological design, and intercultural exchange, reconnecting Amazigh ancestral practices with contemporary research.

The initiative promotes regenerative architecture, climate adaptation, and cultural innovation, empowering participants to co-create sustainable solutions and fostering a translocal network for ecological resilience.

The knowledge exchange process is built around "learning by doing" methodologies that emphasize techno-craftsmanship. Participants engage in collaborative workshops where artisans and artists from the region share traditional skills, such as adobe, rammed earth, and cob construction, while architecture and design students contribute contemporary perspectives on sustainability, prototyping, and ecological innovation. This dialogue creates hybrid forms of practice that merge manual craft with design experimentation.

By engaging students in collaborative projects, the workshops enhance cultural appreciation, challenge stereotypes, and provide the Amazigh with modern tools, fostering empowerment and social equity in a region.

The results include the development of context-sensitive, sustainable building techniques rooted in Berber craftsmanship but reinterpreted for contemporary challenges. The workshops empower students and local participants to integrate ecological design principles into their own professional and community contexts.

Outcomes also include strengthened networks between academia, artisans, and local governance, alongside the creation of a translocal platform for artistic, cultural, and ecological exchange. At a societal level, SAHALAB contributes to preserving cultural identity while promoting ecological resilience in fragile desert regions. At a personal level, it enhances participants' ecological consciousness and professional competences, showing that architecture and design can evolve into practices of deep transformation.

This initiative in the Moroccan Sahara village of Merzouga, empowers the Amazigh by valuing their traditional knowledge while introducing contemporary architectural practices. It promotes mutual learning, bridging cultural gaps and highlighting Amazigh contributions.

The Trans-Disciplinary Dimension

Co-production process

The process was co-designed by AMIDDUNAS together with academic partners (European University of Madrid, Ecole d'Architecture et de Paysage de Casablanca) and local stakeholders in Merzouga. The initial design phases involved joint planning sessions online, aligning academic objectives with community priorities.

Technical competences include sustainable construction techniques, ecological design, and circular economy principles, complemented by artistic skills contributed by local artists and artisans.

The workshops brought together architecture and design students, Amazigh artisans, and local artists, ensuring mutual learning and creativity. Local artisans and community members actively participated, sharing ancestral practices and guiding experimentation with materials and prototypes.

Workshop in Merzouga, Morocco.

The continuation was ensured by documenting results, disseminating them through academic and cultural platforms, and establishing ongoing partnerships between universities and local associations. Concrete implementations included small-scale prototypes of sustainable structures and cultural events integrating design, craft, and ecological awareness.

Competences and Skills

The project is guided by coordinators from Spain and Morocco using a facilitative leadership approach that balances academic frameworks with community knowledge. Multilingual communication in Arabic, Amazigh, Spanish, and English ensures inclusivity and intercultural exchange. Workshops and storytelling circles foster democratic participation and collaborative learning, while structured project phases enable clear management and measurable outcomes. Through mediation between academic research and indigenous knowledge, the project achieves collaborative implementation of prototypes and eco-cultural installations, translating shared learning into tangible results.

The Open Science Dimension

Inclusivity

Inclusivity is achieved through total integration of Amazigh locals and architecture students in all workshops. Workshops occur in local schools, co-led by indigenous elders and students, incorporating traditional Berber building techniques alongside modern design. Citizen science elements are developed via collaborative mapping of sustainable Sahara resources, empowering Amazigh voices and mutual knowledge exchange for equitable community development.

Equity

SAHALAB workshops promote equity by prioritizing youth, particularly teenage girls and children, through inclusive activities like organizing local women's soccer matches with a local team and a girl with disability in it, fostering gender equity. Intergenerational equity is achieved by involving young Amazigh in co-designing projects, ensuring their voices shape outcomes. While disability inclusion is less documented, workshops in local schools engage diverse children, promoting equal participation. These efforts empower marginalized groups, blending traditional and contemporary knowledge to create equitable opportunities for all participants.

Sustainability

Sustainability in the Merzouga workshops is multifaceted. Environmentally, local earth is used for construction alongside biomaterial textiles derived from tea waste, with experimentation on new material recipes using local pigments and spices.

Socially and culturally, the initiatives preserve Amazigh traditions while empowering communities through knowledge sharing. Economically, the use of low-cost local materials supports livelihoods. Intergenerationally, youth involvement ensures long-term continuity. Institutionally, collaborations with schools promote ongoing education, contributing to equitable and eco-friendly development.

Participation of approximately 600 students across 22 editions of the SAHALAB programme since 2022.

The Knowledge Valorisation Dimension

- **Social and economic value:** Community-based workshops and sustainable building practices support local livelihoods through eco-tourism and crafts, while fostering social cohesion, participation, and inclusive development. The continuity of the programme across multiple editions reinforces stable community engagement.
- **Institutional and capacity-building value:** Long-term academic–community partnerships strengthen local and academic capacities, enable knowledge transfer, and create opportunities for future collaborative projects teaching innovation initiatives, and funding applications.

Outputs & Impacts

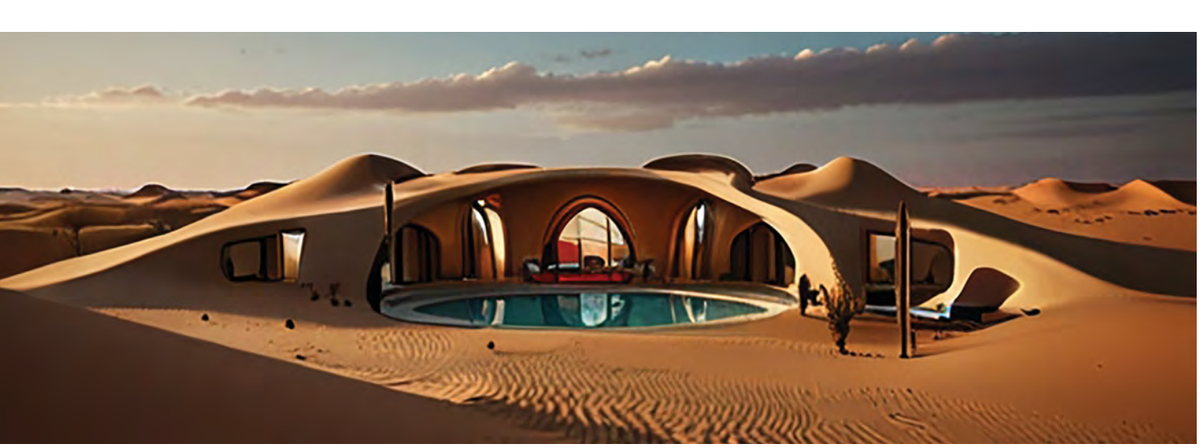
Outputs

The project disseminates its outcomes through a combination of academic, professional, and public-facing formats. Research results are shared through peer-reviewed articles published in Ecohabitar journal and presentations at international conferences on architecture, sustainability, and intercultural dialogue. Public dissemination is strengthened through exhibitions, multimedia storytelling, and active social media engagement via @amiddunas. Project continuity is supported through submitted proposals for further collaboration and funding, with resources and outcomes shared online.

Impacts

Research & Education: The initiative has been recognized as an Educational Innovation Project validated by Universidad Europea de Madrid (UEM) and fosters research projects related to the initiative.

Practice: Construction and testing of small-scale prototypes and material experiments using adobe, rammed earth, cob, and tadelakt, adapted to Saharan climatic conditions. Interventions were co-developed with local Amazigh artisans and included the refurbishment of existing structures and experimental applications. A student-led intervention focused on the modification of palm grove soil to improve local water management and retention, addressing water scarcity in the oasis context through low-tech, context-based strategies.



AI-generated image of a possible artificial oasis in the dunes with solidified sand by bacteria MICP.

Learning-by-doing methodologies that combine Amazigh indigenous knowledge with contemporary architectural research enhance ecological awareness, intercultural understanding, and context-sensitive design skills among students and local participants.

Transdisciplinary, community-embedded practices translate shared knowledge into small-scale sustainable prototypes and cultural events, strengthening social equity, and ensuring the long-term continuation of the project.

Student-led intervention to improve local water management and retention.

CASE STUDY N. 6

Post-Crisis Urban Recovery in Kahramanmaraş, Turkey: Co-Creating Strategies after the 2023 Earthquake

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Mimar Sinan Fine Arts University in Istanbul, Türkiye
ÖMER DEVRIM AKSOYAK
Abdullah Gül Üniversitesi in Kayseri, Türkiye

Urban Living Lab

Timeframe: 2025-ongoing

Türkiye
Abdullah Gül University (Co-Coordinator)
Mimar Sinan Fine Arts University (Co-Coordinator)
Middle East Technical University

UK
University of Westminster

With advisory board partners from China, Spain, Portugal, France, Union for the Mediterranean

Urban Challenges Tackled
Inclusive and participatory governance for resilient post-disaster recovery
Heritage-based livelihoods and place-rooted economic recovery
Data-informed and community-grounded water governance for resilient recovery

Funding
Local industry and the Chamber of Architects in Kahramanmaraş.

Jury Meetings of Undergraduate Design Studios at MSFAU.

Following the 6 February 2023 Kahramanmaraş Earthquake, an international academic initiative was launched to guide resilient urban regeneration beyond the immediate emergency response. Conceived as a long-term effort two years after the disaster, the initiative sought to explore transformative methodologies for in-situ regeneration and heritage conservation, while minimising displacement to new towns. As part of this process, design studios have been organised to developed proposals for neighbourhoods in Kahramanmaraş Municipality.

This initiative culminated in a conference titled "Re-developing Kahramanmaraş: Post-Disaster Urban Reconstruction and Transformation Processes", convened in April 2025 with the support of the National Chamber of Architects of Kahramanmaraş, AGÜ, MSFAU and METU. Diverse perspectives and proposals on the transformative potential of urban planning were presented, addressing both the physical and social dimensions of reconstruction and the urgent needs of building resilient communities.

The event addressed how planning initiative should respond to unprecedented urban crises, bringing together academics, practitioners, municipal experts, local stakeholders.

The objective of this initiative is to translate the momentum generated through meetings, studios, and international events into tangible outcomes. This will be achieved through the preparation and implementation of a series of action plans, involving city residents, the municipality, academics, and national and international experts. The focus of this work is on:

1. Providing a platform for collaboration to co-create resilient neighborhoods.
2. Identifying key pilot areas.
3. Leveraging national and international funding through a broad network of partners.

The methodology relies on multi-layered knowledge-exchange process beginning with the co-design of project briefs in collaboration with local authorities, and informed by annual conferences involving local stakeholders, municipalities, ministries, academics and students. Building on this foundation, architecture and planning students globally develop neighbourhood-scale proposals on post-crisis themes, fostering bottom-up placemaking. An international advisory team, composed of participating academics explores innovative methodologies across contexts, contributing ideas for both post- and pre-disaster planning.

The initiative aims to establish the foundations for forming local and global teams capable of translating proposed approaches into actionable projects. Over time, this work is expected to evolve into an Urban Living lab supported by international collaborations positioning the city and Turkey as pioneers in post-disaster reconstruction. An international scientific committee has been established to guide community-led place-making initiatives.

Conference on Redeveloping Kahramanmaraş: Post-Disaster Urban Reconstruction and Transformation Processes.

The Trans-Disciplinary Dimension

The process
The establishment of an international academic initiative was launched to guide long-term resilient urban regeneration in Kahramanmaraş, two years after the earthquake. after 2 years of the crisis.

The project combined design studio teaching, research, and an international conference, to stimulate stakeholder engagement.

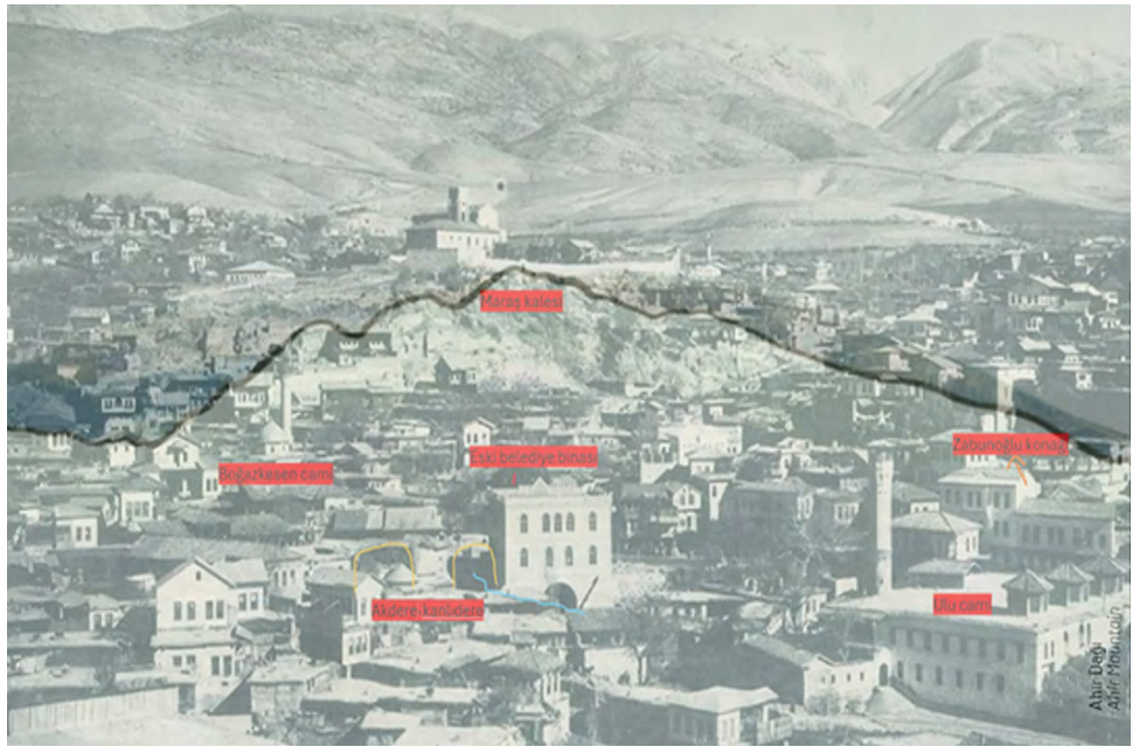
Co-design involved joint preparatory work between AGU and MSFAU, supported by seminars, student exchanges, and planning meetings with the Chamber of Architects of Kahramanmaraş and members of the UfM advisory board. These interactions shaped a common brief aligned with neighbourhoods and themes identified by the 12 February District Municipality.

Co-production focused on studio projects at MSFAU and AGU, where students and tutors developed neighbourhood-scale proposals addressing local priorities. Their work was exhibited and informed conference discussions. The aim was to translate studio insights into strategic directions for urban recovery. To ensure the continuation of the project an international scientific committee was established to maintain dialogue with municipal authorities, coordinate future commemorative activities, and prepare joint outputs, from policy-oriented recommendations to funding applications, to support the training of a new generation of practitioners. As reconstruction expands across the metropolitan area, the committee promotes participatory and informed approaches to guide architectural and planning interventions.

In the city center, the implementation largely followed a top-down, large-scale approach due to the urgency of the situation. However, the political context is now evolving, driven by demands from professional bodies and civil society. Architectural operations should be supervised by a scientific board to ensure broad dissemination and promotion of the work

Competences and Skills
Leadership and coordination were shared among institutional partners, with the Kahramanmaraş Chamber of Architects leading stakeholder engagement and an organizing team from AGU and MSFAU coordinating academic participation in the conference. MSFAU and AGU also provided facilitation and inclusive dialogue, advising on knowledge-sharing formats and mediating between actors through their neutral, nonprofit role.

Historic picture of Kahramanmaraş.



Open Dialogue Dimension

Inclusivity
The conference, which has so far brought together students, academics, architects, and decision-makers, aims to lay the groundwork for future initiatives that seek to develop policies in collaboration with the local population and to reconstruct the habitats they have created in a way that empowers them. This initiative is intended to be carried out as a collaborative effort by a team formed in cooperation with international experts.

Equity
So far, some inner-city and heritage-rich areas have largely been left behind, as efforts have focused on the downtown and newly developed towns.

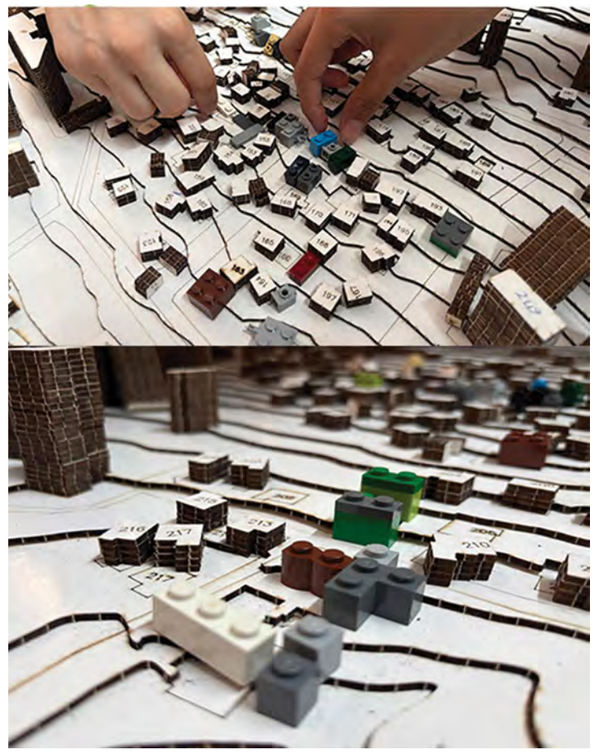
Therefore, addressing the issue of spatial equity through inclusive policies would be a progressive step toward fostering social resilience and equitable development. This can be supported by incorporating student work and bottom-up mechanisms into the decision-making processes for re-creating neighborhoods, both in the city center and in peripheral areas.

Sustainability
The project proposed a comprehensive and sustainable vision for Kahramanmaraş by integrating social, environmental, economic, cultural, and institutional dimensions throughout the city. Emphasizing a long-term vision exercise, it prioritized investments to ensure a coherent strategy aimed at enhancing urban resilience in daily life. The goal is to limit the uncontrolled expansion of new towns and the creation of disconnected communities, favoring instead in-situ regeneration, consolidation of the city center, urban conservation, and related efforts.

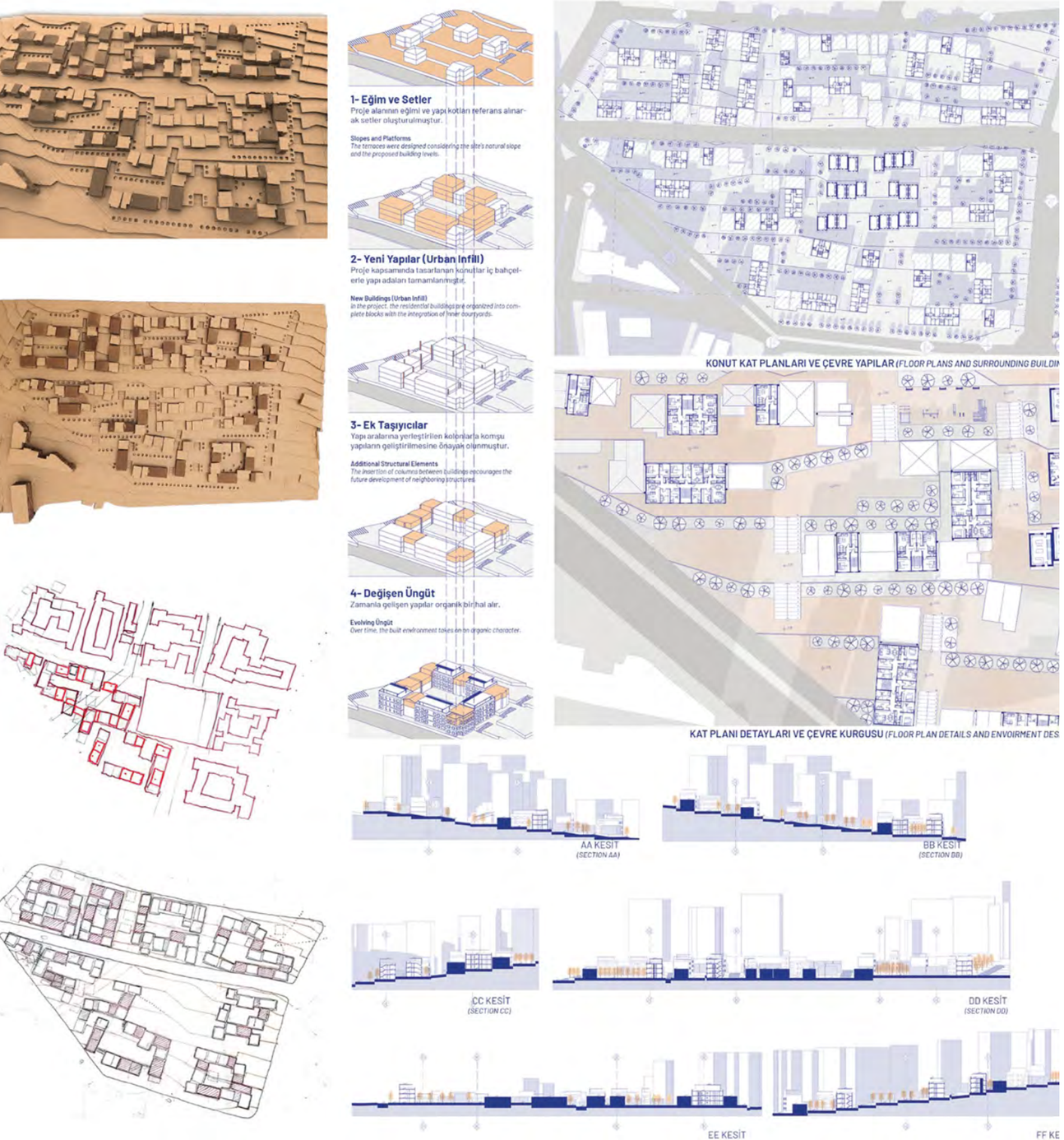
Post-earthquake reconstruction extended beyond damaged areas and central neighborhoods to peripheral and previously neglected regions.

A multidisciplinary team of urban planners, architects, and local development experts from Kahramanmaraş, Istanbul, Ankara, and Kayseri was engaged in the process.

Design Works on Kahramanmaraş Üngüt Quarter. Undergraduate Design Studio led by Güldehan Atay, Department of Architecture – MSFAU.



Project by Burhan Cankurtaran on Kahramanmaraş Ungüt Quarter. Undergraduate Design Studio led by Güldehan Atay, Department of Architecture – MSFAU.



The Knowledge Valorisation Dimension

- **Social value:** The inclusive co-design process aims to strengthen trust between citizens and local authorities by facilitating knowledge exchange between citizens, experts, and local authorities, thereby enabling evidence-informed decision-making at the local level.
- **Educational value:** Foster cross-cultural understanding through the participation of various Anatolian universities. In the longer term, this educational model is intended to be scaled up through international academic partnerships, enhancing the transferability and impact of the knowledge generated.
- **Economic value:** The multi-actor framework supports the uptake of the project outcomes into policy discussions, planning processes and future investment strategies as long term-responses.

Outputs & Impacts

Outputs

Report: Re-Developing Kahramanmaraş: Post-Disaster Urban Reconstruction and Transformation Processes Conference Final Declaration

Articles examining post-disaster urban restructuring and transformation processes in Kahramanmaraş, synthesising insights from the Kahramanmaraş Conference to outline challenges, lessons learned, and a strategic roadmap for resilient urban recovery.

Impacts

Research: A British Council Fund on 'Co-Design of a Curriculum for Resilient Urban Heritage: A UK–Turkey TNE Initiative on Culturally Sensitive Urban Disaster Preparedness' was granted in November 2025, led by the University of Westminster in partnership with Abdullah Gül University and Mimar Sinan Fine Arts University. The grant will provide a platform to develop innovative training for the region, including local participatory workshop, during the period 2026-27.

Practice: An international advisory board was set up in Kahramanmaraş involving staff from University of Westminster, Mimar Sinan Fine Arts University, Abdullah Gül University, Union for the Mediterranean (UfM), University of Lisbon, Middle East Technical University, AURA Istanbul, Architecte Conseil de l'État, France, Tongji University.

Field Visit to the Heritage Site of Kahramanmaraş affected by the earthquake.

An international conference, informed by the design studio work of three participating universities, catalysed a multi-stakeholder public debate on the city's future, creating momentum to shift prevailing top-down governance approaches toward more inclusive, bottom-up and sustainable practices.

The momentum generated by bringing together national and international experts has been strengthened through an international grant that supports the training of a new generation of architects and planners in culturally sensitive, post-disaster reconstruction.

CASE STUDY N. 7

Building Inclusive and Sustainable Resettlement Neighbourhoods in Rabat Region, Morocco

LUDIVINE DAMAY
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GEOFFREY GRULOIS
Université libre de Bruxelles, Belgium
TARIK HARROUD
Institut National d'Aménagement et d'Urbanisme du Maroc, Morocco

Collaborative Project

Timeframe: 2022 - ongoing

Belgium
Université libre de Bruxelles (ULB) (Co-Coordinator)
Université Catholique de Louvain, Site Saint-Louis Bruxelles (UCL)
Haute École Louvain en Hainaut (HELHA)
Echos Communication (Belgian NGO)

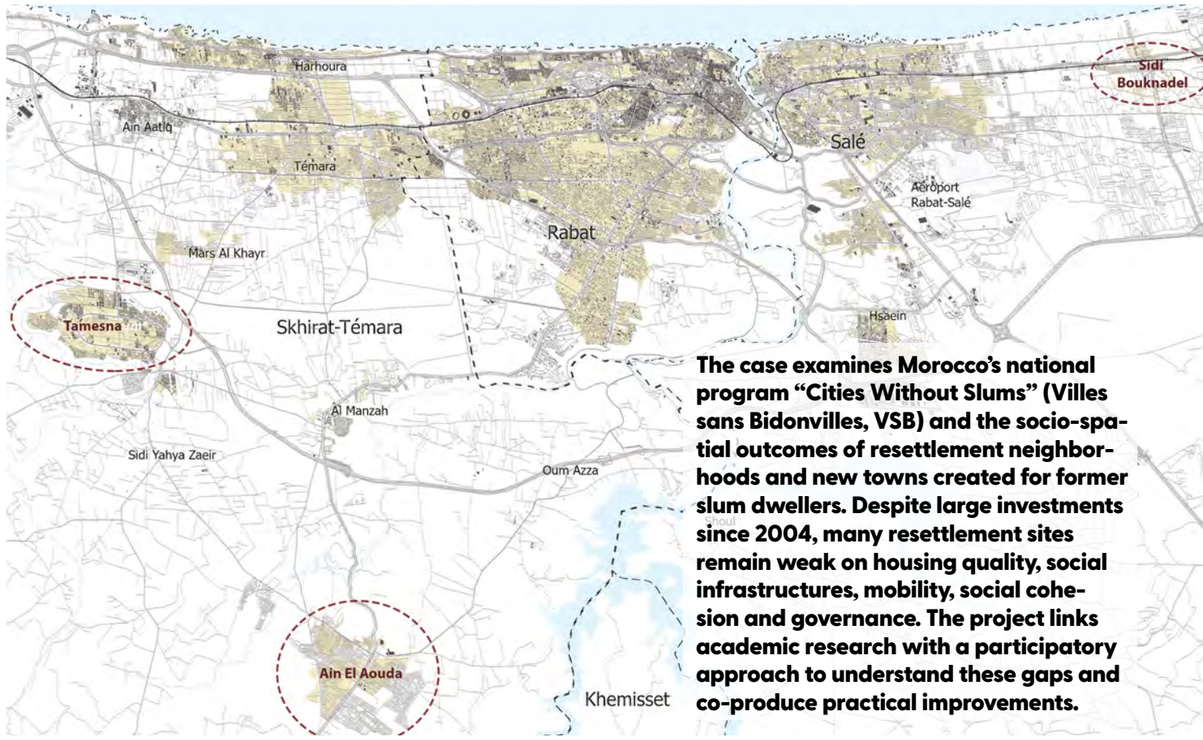
Morocco
Institut National d'Aménagement et d'Urbanisme (INAU), Rabat (Co-Coordinator)
Université Hassan II, Casablanca
Institut National de l'Action Sociale, Tanger (INAS)
Municipalities of: Ain El Aouda, Sidi Bouknadel and Tamesna.
Local civil society associations.

Institutional support
Collaboration with Al Omrane, communes, and local civil society associations facilitates access to data and fieldwork and supports dissemination.

Urban Challenges Tackled
Integrated mobility and housing upgrade
Enhanced public and social infrastructure
Participatory and community-driven governance

Funding
ARES—Académie de Recherche et d'Enseignement Supérieur (Belgium)

Resettlement area in Aint El Aouda (2024). Residents use vacant lots to raise animals, set up bread ovens, and carry out other everyday activities.
Photo by Geoffrey Grulois.



Map of the metropolitan region of Rabat showing the three studied sites: Ain El Aouda and Sidi Bouknadel resettlement areas, and Tamesna new town.
Map by Houda Nkhili.

The case examines Morocco's national program "Cities Without Slums" (Villes sans Bidonvilles, VSB) and the socio-spatial outcomes of resettlement neighborhoods and new towns created for former slum dwellers. Despite large investments since 2004, many resettlement sites remain weak on housing quality, social infrastructures, mobility, social cohesion and governance. The project links academic research with a participatory approach to understand these gaps and co-produce practical improvements.

A Moroccan–Belgian transdisciplinary team integrates architecture, urbanism, and sociology. Methods include ethnographic observation, household and stakeholders' interviews, ethno-architectural surveys, mapping and, and focus groups with residents, associations, municipal administrations, national agencies, and the public operator Al Omrane.

Knowledge exchange runs on two coordinated tracks. The academic track develops three PhD projects and a postdoctoral program to advance research on post-slum integration, housing and social infrastructure design and social life. The participatory track uses workshops with citizen and stakeholders to translate findings into recommendations. This track also uses an experimental project in community social work (with the help of a social community worker) to support grassroots citizen initiatives—such as collective gardens, micro-public space upgrades, or reuse-material furniture—to strengthen appropriation, neighbor relations, and resilience in these resettlement areas

Three contrasting sites located in the metropolitan region of Rabat – Ain El Aouda and Sidi Bouknadel resettlement areas and Tamesna new town - serve as comparative laboratories, selected for differences in location, project typology, and governance.

Objectives are to improve habitability and spatial integration, enhance service and mobility access, foster social cohesion, and enhance governance. Expected results include actionable policy briefs, strengthened inter-institutional coordination and trained early-career researchers in Moroccan institutions. By coupling rigorous inquiry with co-production, the project aims to deliver inclusive, resilient, and sustainable resettlement neighborhoods in Morocco.

The knowledge exchange is structured and iterative. Joint committees gather every four to six months to cross-read results from the different sites. North–South missions at start-up, mid-term, and closure organize study days, field visits to similar projects and a final conference to diffuse lessons beyond the case sites.

Morocco has reduced poverty yet faces persistent territorial inequalities. Rapid urbanization and informal settlements challenge housing quality, service provision and mobility. Since 2004, "Ville Sans Bidonville" programme and new towns construction led to relocating many households but often to peripheral sites with limited social infrastructures, access to jobs and weak governance capacity. Local authorities possess constrained resources; responsibilities fragment across agencies. Civil society and INDH funding are mobilized but participation can be instrumental rather than empowering.

The Trans-Disciplinary Dimension

The process

The project evaluates socio-spatial outcomes of Morocco's Cities Without Slums program and new town policies. Using architecture, urbanism, and sociology, it combines field observation, ethnographic and architectural surveys, mapping, and stakeholder workshops to co-produce recommendations. Our analyses and actions take place on three sites – two resettlement areas in Ain El Aouda and Sidi Bouknadel and Tamesna new town - to improve housing habitability, social infrastructures, mobility, social cohesion, and governance for more inclusive and sustainable resettlement neighborhoods.

Outputs flow back to municipal programs, the Ministry in charge of housing and urban policy, and Al Omrane to inform ongoing resettlement practices within the wider VSB agenda.

The process is structured around three interconnected phases. In the initial co-design phase, INAU, ULB, UCL, Université Hassan II, and HELHA jointly shaped the methodology, combining academic objectives with local priorities. This was followed by a research process grounded in extensive fieldwork, including observation, interviews, ethno-architectural surveys, mapping, document analysis, and community social work, alongside participatory workshops engaging residents, associations, communes, ministries, and Al Omrane. Recommendations were co-written and validated with stakeholders, informing municipal programmes and national agendas. The continuation phase focuses on sustainability through joint committees aligning doctoral research with participatory outputs, seminars in Morocco and Belgium to exchange results, pilot resident-led micro-projects in public space, and preparatory work toward establishing a Social Observatory of Resettlement.

Competences and Skills

The project mobilised interdisciplinary expertise spanning architecture, urbanism, and sociology, supported by shared leadership and coordination between Moroccan and Belgian institutions. Facilitation and mediation capacities enabled effective multi-actor negotiation and conflict management, while strong methodological skills in ethnography, surveys, mapping, and policy analysis underpinned the research. Project management, monitoring, and evaluation ensured structured implementation, complemented by community social work and capacity-building for local actors. Communication activities translated outcomes into policy briefs, study days, conferences, and structured feedback to public administrations, strengthening institutional uptake.

The Open Science Dimension

Inclusivity

Inclusivity is pursued through resident-facing ethnography, mixed focus groups, and coproduction workshops, which brings inhabitants, associations, and institutions into shared analysis and codesign. An experimental project in community social work identifies bottom-up priorities and supports grassroots micro-projects, recognizing local knowledge and skills as valid evidence for action.

Equity

Workshops ensure presence of women, youth, and vulnerable households; schedules and formats adapt to care and work constraints. Gender-focused partners and local centers (e.g., women's promotion centers) help remove participation barriers. Outputs highlight intergenerational needs, accessible public space, and affordable mobility; recommendations target more equitable governance.

Sustainability

The project generates integrated social, environmental, economic, and institutional benefits by strengthening neighbourhood ties and resident stewardship, promoting small-scale greening, and the reuse of materials through micro-projects. It reduces economic burdens by improving connectivity and supporting local livelihoods through a more diverse spatial mix.

The project strengthens collaboration among communes, national ministries, Al Omrane, and residents to address housing quality, connectivity, service access, social infrastructure and social cohesion.

Slums Hammou Alila et Koulas in Rabat, 2014.
Photo by Salma Belkebir.

The Knowledge Valorisation Dimension

- **Urban planning value:** is generated through evidence-based recommendations for ministries, communes, and Al Omrane, complemented by participatory diagnosis methods and transferable toolkits applicable to other contexts.
- **Research value:** is achieved through the training of three PhD candidates and one postdoctoral researcher embedded within Moroccan institutions, strengthening locally grounded academic capacity.
- **Social value:** is created by reinforcing networks among residents, associations, and public actors.

Outputs & Impacts

Outputs

The project produces comparative site reports and socio-spatial analyses that inform targeted policy briefs prepared for MUAT, Al Omrane, and local communes. It also generates open datasets, including maps, ethno-architectural surveys, and interview guides, supporting transparency and reuse. Knowledge exchange is ensured through mid-term study days and a final conference organised with local partners, while a practical toolkit for participatory diagnosis and community micro-projects translates research findings into actionable local interventions.

Doctoral theses and articles on architectural, urbanistic, and sociological findings, among others: «Neighbourhoods and Post Housing Territorial Appropriation(s) in a Peri-Urban Context :The Case of the Attadamoune Neighbourhood in Ain El Aouda, Morocco».
«La fabrique de la ville pour le relogement : cas de la ville nouvelle de Tamesna».

Impacts

Research: Enhanced research capacity at INAU and Université Hassan II through trained PhDs and a postdoc. Transferable methods adopted by partners beyond the two sites.
Practice: Improved coordination between municipal services, Al Omrane, and community actors in case sites (process indicators). Grassroots initiatives implemented in one experimental project neighborhood (Sidi Bouknadel), informing municipal social approaches.

El Amal neighborhood, Tamesna new town (2024). Former slum dwellers have been resettled in apartment blocks organized around new public spaces.
Photos by Geoffrey Grulois.

An international transdisciplinary team integrates architecture, urbanism, and sociology to tackle, from different perspectives, the institutional, social and urban challenges of two resettlement areas near Rabat.

Knowledge exchange operates on two coordinated tracks: an academic track advancing research through PhD and postdoctoral projects on post-slum integration, housing, and social life, and a participatory track engaging citizens and stakeholders via workshops to translate findings into actionable recommendations.

Resettlement area in Sidi Bouknadel Municipality (2024). Vacant lots appropriated by residents for drying laundry.
Photos by Geoffrey Grulois.

CASE STUDY N. 8

Multidisciplinary and People-Centred Architectural Education in Egypt

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Nile University, Egypt
YASMINE HAFEZ
Nile University, Egypt

Technische Universität Wien (TUW), Austria (Project Coordinator)
Nile University (NU), Egypt (Technical Coordinator)
Universitat Politècnica De Catalunya (UPC-ETSAB), Spain
Universität Kassel (KU), Germany
Università di Cagliari (UNICA), Italy
Ain Shams University (ASU), Egypt
Suez Canal University (SCU), Egypt
Alexandria University (AU), Egypt
Housing & Building National Research Centre (HBRC), Egypt
Engineering Consultants Group (ECG), Egypt
Megawra (NGO), Egypt

Collaborative Project

Timeframe: 2017 - ongoing

Urban Challenges Tackled
Sustainable Urban Development
Design for Quality of Life
Architectural and Planning Educational Innovation

Funding
EU funded project
ERASMUS+ KA2 CBHE
The Aga Khan Trust for Culture-Education Programme
Nile University
EMAAR Egypt
UNICA

Group photo – IMPAQT all-partner meeting at Faculty of Fine Arts in Alexandria, Egypt.

Design Studio III exhibition – sponsored by EMAAR.

IMPAQT is an EU-funded project aimed to rethink architectural education in Egypt through a multidisciplinary and people-centred approach. Bringing together ten European and Egyptian partner institutions, the project ambition was to move beyond conventional, form-driven architectural training toward a more socially responsive and context-aware educational model. It led to two major outcomes:

- **The establishment of a 5-year Bachelor of Science in Architecture and Urban Design (ARUD) at Nile University, accredited in 2018, and,**
- **The development of a lifelong learning qualification targeting postgraduate students and professionals.**

The project promoted the integration of Environmental and Social Psychology, Anthropology, Sociology, Urban Planning, Sustainable Development, and ICT-enabled design and analysis tools.

At the core of IMPAQT was the ambition to cultivate architects capable of transforming Egyptian architectural and urban practice.

Beyond EU funding, IMPAQT's impact continued through sustained partnerships, faculty exchange, student mobility, and a follow-up ERASMUS+ project (GET-MED), awarded in 2025.

The resulting curriculum embedded participatory design, stakeholder engagement, impact assessment, and adaptive reuse methodologies across multiple scales, from individual buildings to district-level urban strategies. Learning was grounded in real-life cases, frequently developed in collaboration with industry partners and public-sector actors.

One of IMPAQT's most transformative contributions was the institutionalization of collaborative workshops and knowledge exchanges as core pedagogical tools.

In Alexandria, a Heritage Conservation workshop brought together ARUD undergraduates, postgraduates and practicing professionals. This cross-level and cross-disciplinary setting exposed students to the complexities of heritage intervention in real urban contexts. A community-based design charrette in Historic Cairo, organized with the NGO Built Environment Collective (BEC), exemplified the program's participatory ethos.

Another milestone was the vertical workshop with the SPECTRA Centre of Excellence at the Slovak University of Technology in Bratislava (STU). The workshop marked the beginning of a long-term institutional collaboration: over three years, 13 ARUD students completed semester exchanges in Bratislava through ERASMUS+ mobility agreements.

Studio teaching was reshaped into research-based, multi-scalar investigations carried out in collaboration with local governments and communities across diverse Egyptian contexts, from Alexandria and Port Said to Qena and Aswan. Student work gained national and international visibility through exhibitions, competitions, and study trips abroad.

The Trans-Disciplinary Dimension

The process

In the initial co-design phase, EU partners led the development of core and thematic modules for the new undergraduate ARUD programme, while Lifelong Learning courses for professionals tested content and pedagogy. Egyptian academic partners collaborated in refining materials and led the institutional processes required for national accreditation.

ETSAB in Spain incorporated its findings into ten urban design studios involving 250 students working on Attaba Square, extending IMPAQT's influence internationally.

The co-production phase connected academic and non-academic actors through practicum-oriented activities, including Training of Trainers (ToT) for Egyptian staff, the compilation of real-life case studies from external institutions, and multidisciplinary initiatives addressing national priorities.

The "Technology for the Masses" competition exemplified this outreach strategy. It engaged young professionals and researchers developing technology-driven architectural and urban solutions for Egypt.

Another key initiative was the winter school "Off-Seams," co-funded with the Aga Khan Trust for Culture – Education Programme. Designed to test the IMPAQT educational model in a real-world setting, it brought together 25 participants and international mentors for a 7-day intensive workshop in Downtown Cairo.

Competences and Skills

The project brought together partners with interdisciplinary expertise ranging from building physics, structural design, and ICT to urban planning, landscape architecture, urban design, and environmental psychology. Leadership and overall project management were ensured by TU Wien, while technical coordination was led by NU to ensure effective task alignment and partner contributions. A shared communication platform facilitated coordination and the exchange of materials, complemented by facilitation and mediation efforts that actively engaged industry representatives and professionals in project activities and events. Knowledge exchange among partners was successfully translated into tangible courses and learning activities.

Participatory activities during one of the Training of Teachers (TOT) sessions.

The Open Dialogue Dimension

Inclusivity

The program addressed: 1) Social inclusion by tackling the needs of the poor and marginalized, overcoming spatial segregation, and empowering them; 2) social capitalisation by encouraging people towards cooperating together to achieve common goals, 3) social mobility by empowering people to benefit from opportunities of urbanization in seeking human development, health, wealth, education….

Equity

At the Project level, gender was perfectly balanced throughout the project activities with substantial involvement of women from partner institutions with no gender discrimination of any kind. In terms of outcomes, students in the ARUD programme are now taught to respect all user needs considering differences in age, gender and ability.

Sustainability

Sustainability is achieved by connecting academic programmes with society through lifelong learning courses, events, competitions, and cross-sector exchanges that integrate social, environmental, economic, institutional, and cultural dimensions.

The Intended Learning Outcomes of the program was to shape the mentality of architects towards considering human needs and people's interrelations while adopting participatory processes in design and planning.

The Aga Khan Trust for Culture- Education Programme co-funded the Winter School - Off Seams.

UNICA waivered the tuition of the 4 NU students who went for the semester abroad.

The Knowledge Valorisation Dimension

- **Educational and Capacity-Building Value:** the IMPAQT project strengthened architectural education in Egypt by introducing innovative, multidisciplinary modules across partner institutions. Lifelong Learning graduates developed broader, user-sensitive approaches to architecture and urban design, while early engagement of ARUD undergraduates through workshops, competitions, and the Winter School fostered hands-on learning, peer exchange, and international exposure.
- **Socio-Cultural Value:** By promoting participatory design, stakeholder engagement, and inclusive urban planning, the project enabled local authorities, industry partners, and community organizations to build practical experience in collaborative decision-making and people-centred design. These actors strengthened their capacity to engage communities, address social and cultural needs, and deliver more inclusive urban interventions.
- **Economic value:** Partnerships with industry and public authorities expanded professional networks and generated opportunities for applied projects, competitions, and exhibitions, contributing to sectoral innovation and local economic development.

Dr. Dina Shehayeb, ARUD program director at NU hosted as a guest speaker and juror in Design Studio course at ETSAB, Barcelona, Spain .

Outputs & Impacts

Outputs

The main output of IMPAQT is the creation of a new five-year Undergraduate Programme in Architecture and Urban Design at Nile University, distinguished by its compact structure, innovative pedagogy, and interdisciplinary approach within the Egyptian context.

Impacts

Teaching: Staff exchange among Alexandria University, Suez Canal University, and Nile University has continued beyond the project through part-time teaching, while partnerships with European institutions, such as Kassel University, UNICA, ETSAB, and TU Wien, have supported scientific collaboration, guest teaching, student studios, and staff development.

Research: Application for further research funding was successful leading to a new Erasmus + project titled GET-MED "Grounded Ecological Transition for the Mediterranean." The project introduces an innovative GET approach (Grounded+Ecological+Transition) to pro-green urbanism and climate-sensitive territorial regeneration, tackling key challenges in the Mediterranean.

Practice: Suez Canal University partnered with ECG's University to Work program and HBRC to provide students with practical and research exposure, while Nile University collaborated with EMAAR Misr and the Aga Khan Trust for Culture – Education Programme to support studio teaching, an interactive learning platform, exhibitions, international engagement, and activities such as the Winter School and a study trip to Córdoba.

The qualifications and practical experience gained by students, graduates, and staff improved employability and professional mobility.

Collaborative research and academic exchanges further enhanced professional skills and global perspectives.

Design Studio III exhibition – sponsored by EMAAR.

CASE STUDY N. 9

Fostering Culturally-Sensitive Climate Adaptation for Sustainable Development: A Living Lab in Figuig, Morocco

GIULIO VERDINI
University of Westminster & ILAUD
YOUSSEF EL GANADI
Université Internationale de Rabat

Urban Living Lab

Timeframe: 2021 - ongoing

Italy
ILAUD, The International Laboratory of Architecture and Urban Design (Co-coordinator)
Morocco (hosting)
My African Competition
Municipality of Figuig
Université Internationale de Rabat (Co-coordinator)
UK
University of Westminster
The Netherlands
Wageningen University

The foggara system, a traditional, gravity-fed irrigation infrastructure sustaining oasis agriculture in arid environments.

Urban Challenges Tackled
Water scarcity and climate vulnerability
Social exclusion and inequality
Economic marginality
Cultural and institutional fragmentation

Funding
Municipality of Figuig

Scholars and students visiting the Oasis, June 2022.

The Oasis of Figuig, located in the Oriental Region of Morocco near the border with Algeria, faces critical challenges of sustained livelihood and rural depopulation, aggravated by climate change. Increasing water scarcity, and inefficient water management, may lead to desertification and agricultural production rapid decline. These pressures threaten not only the ecological survival of the oasis but also the socio-economic conditions and the cultural heritage that have sustained it for centuries.

Figuig: The Oasis of the Future is a research- and design-driven initiative launched in 2022 by a team of academics from the International University of Rabat, in collaboration with local and international partners, working alongside the local authorities of Figuig.

The initiative aims to envision and co-design, with local stakeholders, pathways toward a more resilient and sustainable future for this unique oasis settlement.

The project is guided by three main objectives: (1) to develop medium- to long-term scenarios for resilience and sustainability in Figuig, widening the participation of local stakeholders; (2) to translate technical and scientific knowledge on climate adaptation into accessible formats for the civil society; and (3) to identify concrete actions that address both climate adaptation and cultural resilience for sustainable development.

The underlying research found that current development and conservation efforts are often fragmented, outdated, or reliant on extractive models of development. Due to overreliance on scattered external funding and limited decentralization, these approaches have frequently resulted in short-sighted strategies, excluding vulnerable groups. Framing Figuig as a Living Lab enabled the integration of traditional knowledge, local policy dialogue, and community priorities into a structured policy and planning processes. The initiative contributes to local sustainable development broadening the discussion on oasis resilience, climate justice, and participation in arid Mediterranean regions.

Funding for organising a local conference in Oudja and a participatory workshop in Figuig were provided by the Municipality of Figuig. Institutional support has been provided by: Region de l'Oriental, Agence de l'Oriental, Agence Nationale pour le Développement des Zones Oasiennes et de l'Arganier; Ministère de l'Agriculture, de la Pêche maritime, du Développement rural et des Eaux et forêts; Ministère de l'Aménagement du territoire national, de l'Urbanisme, de l'Habitat et de la Politique de la ville.

The Trans-Disciplinary Dimension

The process

The project involved a series of online preparatory meetings and a multi-stakeholder public conference held in Oujda, Morocco, in March 2022 to define the shared objectives of the Urban Living Lab of Figuig. A subsequent field visit led to the identification of key sites and themes that formed the basis for a programme of actions.

Overall, these these actions operationalised the project's strategic objectives through concrete, place-based activities. The Climate Studio, held in June 2022, culminated in a public presentation that outlined a shared vision for the future of the Oasis. A local action plan approved in 2023 was directly linked to key project outcomes, and further municipal fundraising led to obtain a Cities Alliance-funded project on women and water management, completed in 2025.

The project included:

1. **a planning and design charrette, called the Climate Studio, lasting 6 days, engaging 21 students and 6 tutors, as well as local civil society to co-produce visions for the future;**

2. **a series of of community workshops to develop a citizen pact (pacte citoyenne).**

The project unfolded in a supportive environment, enabled by the proactive engagement of the Commune of Figuig, which secured high-level partnerships with the Regional Government and relevant ministries. However, the context remains politically sensitive, and tensions resurfaced after the workshop due to a controversial water privatization proposal, straining relations between local authorities and community associations (2023-2024). These dynamics delayed the continuation of the Urban Living Lab. Only recently local trust improved, paving the way for a potential follow up of the approved action plan through a participatory fashion.

Competences and Skills

The project brought together a multidisciplinary team of Moroccan and European planners, architects, landscape designers, and local development experts, combining the communication, coordination, and community-engagement capacities of My African Competition with ILAUD's neutral facilitation and knowledge-sharing expertise, while the academic tutors supported the design charrette by mediating between students and local communities.

Visit of the Munipality of Figuig and presentation of the Master Plan, March 2022.

The Open Science Dimension

Inclusivity

The overall project prioritised **inclusivity** by integrating local and indigenous knowledge through civil society engagement, particularly during the Climate Studio's exchange with local associations and interviews. Community voices shaped the vision, bridging technical and lived experience. Outcomes included community mapping of water use and visibility of women's social practices. This engagement led to the development of a first draft of a 'Citizen's Pact' or 'Pacte Citoyen'.

Equity

The 'Climate Studio' emphasized **equity** by focusing on intergenerational and gender inclusion through the 'Culture and Inclusion' theme. It highlighted Figuig's community diversity and the empowerment of vulnerable groups. Key outcomes included promoting women's roles via training and support for creative businesses. Youth engagement targeted income, education, and culture to reduce migration. The project also linked equity to sustainable water management and heritage protection, shaping inclusive policies that foster social resilience and equitable development.

Sustainability

The Climate Studio proposed a comprehensive **sustainability** vision for Figuig, integrating social, environmental, economic, cultural, and institutional dimensions through four interconnected narratives. It aims to create an inclusive, resilient, and regenerative oasis balancing tradition and innovation. Emphasizing the need to reduce ineffective public spending on scattered projects, the visioning exercise prioritized investments to ensure a coherent, long-term strategy and minimize resource waste.

The project provided students with an immersive, inter- and transdisciplinary learning experience through the Climate Studio, engaging with real-world challenges, and enhancing facilitation and communication skills. Strengthened cross-cultural understanding due to participation of Moroccan and international students from London and Wageningen.

The Knowledge Valorisation Dimension

- **Social value:** Empowered local associations as key actors in shaping a shared vision, challenging outdated development models and raising awareness of climate challenges. The inclusive co-design process also strengthened trust between citizens and local authorities, though this was later strained by a proposed water privatization.
- **Economic value:** Laid the foundation for future impact through the 2023 Cities Alliance Women and Sustainable Cities programme, promoting women's leadership in water governance.

Outputs & Impacts

Outputs

Academic Publication: *Climate Adaptation and Cultural Resilience. The Case of the Oasis of Figuig, Morocco.*

This publication provides an overview of the work on climate adaptation and cultural resilience in the oasis of Figuig, Morocco, offering interdisciplinary insights and design-based strategies emerging from a collaborative, place-based planning process.

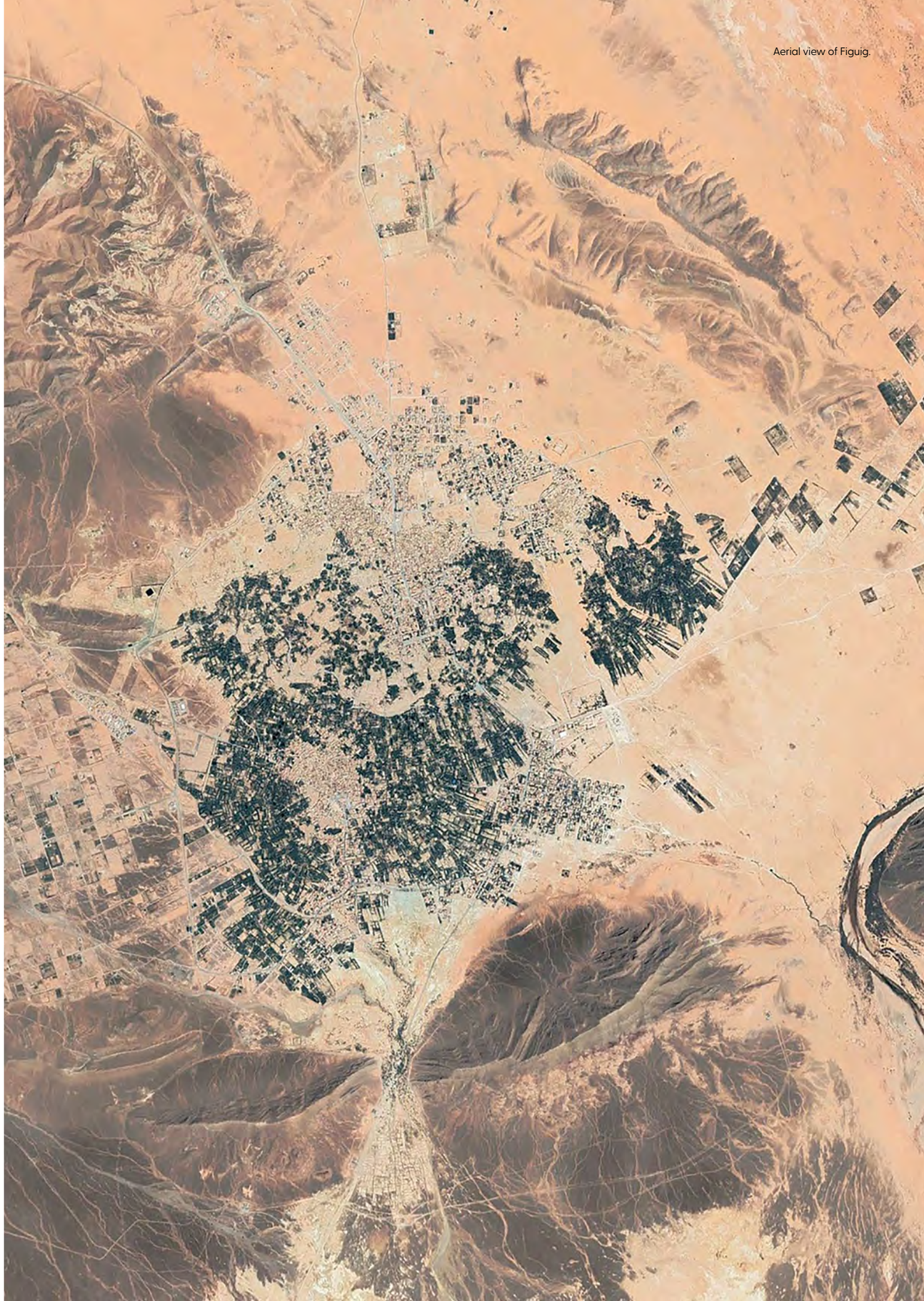
Impacts

Further funded projects: The 2023 Cities Alliance Women and Sustainable Cities programme (poner link) was implemented in collaboration with local governments and women organisations in Figuig (Morocco), Kairouan (Tunisia), and Sebkha (Mauritania). It aimed to empower women in water governance by ensuring they are not just beneficiaries but active decision-makers, equipped with the tools, data, and opportunities to lead, manage, and shape inclusive, sustainable water solutions for their communities.

An abandoned part of the historic Ksar in Figuig.

The Urban Living Lab of Figuig has acted as a catalyst for innovative local governance, enabling a series of participatory actions, from the "Climate Studio' to the citizens" pact.

The visioning exercise carried out during the planning and design charrette helped identify key strategic priorities, including the need to empower women.



Aerial view of Figuig.

CASE STUDY N. 10

Community Design Roghata. A Collaborative Urban Visioning Charrette for Neighborhood Park Enhancement in Tripoli, Libya

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Urban Living Lab

Timeframe: 2024 - 2025

Libya
Department of Architecture and Urban Planning, University of Tripoli, Libya (Coordinator)
Community Leaders (Mezran), Tripoli Libya
Municipality of Tripoli Center (Departments of Community Development and Department of Project Management), Libya
Tripolis Umran Lab, Libya

With partners from the UfM Advisory board

Urban Challenges Tackled
Inclusive public-realm design
Participatory community governance
Sustainable low-cost infrastructure

Funding
Municipality of Tripoli Center, Libya

Overview of Mezran park and mosque.

The Roghata charrette took place within a context of prolonged political turmoil, where fragmented governance, institutional instability, and unclear mandates often undermine coordinated urban development in Tripoli. Despite these structural challenges, the initiative successfully brought together municipal authorities, university actors, and local residents—groups that rarely engage in direct, constructive dialogue.

Immediate outcomes included a shared vision for the park, heightened public awareness, and strengthened community-municipality relations.

The primary goal was to empower residents as key stakeholders in shaping their public space by identifying concerns, proposing solutions, and fostering collaboration between citizens, municipal officials, and design professionals. The charrette, dubbed "roghata" (which loosely means teamwork), aimed to build trust, encourage civic participation, and generate actionable design strategies aligned with community needs.

The methods of Knowledge Exchange employed was based on pre-charrette activities included community surveys and meetings conducted by students and TUL to gather insights and establish rapport. The event itself combined presentations, site tours, and interactive breakout sessions. A parallel children's workshop captured youth perspectives, enriching the design process. Structured small-group discussions enabled direct dialogue between residents and experts, blending local knowledge with technical expertise. Findings were synthesized into recommendations and presented in a plenary session attended by the Mayor, ensuring accountability.

The charrette demonstrated the potential of participatory planning to bridge gaps between communities and institutions. Long-term benefits encompass a replicable model for inclusive urban development in Greater Tripoli, inspiring other municipalities to adopt similar processes.

The active involvement of the Municipality of Tripoli Center, including the Mayor, signaled an unusual opening in local governance for civic engagement. However, historical distrust between citizens and institutions, coupled with overlapping bureaucracies and limited decentralization, hindered effective collaboration. Power imbalances were evident, with residents often excluded from formal decision-making processes. The initiative addressed this by positioning students and faculty as mediators, enabling communication and trust-building across divides.

Roghata comic book.

The Trans-Disciplinary Dimension

Co-production process
The project aimed to empower the community through participatory workshops on safety, recreation, ownership, and responsibility, resulting in a shared vision and a replicable model for inclusive urban development.

The project adopted a structured, participatory approach combining co-design, co-production, and implementation phases to foster collaboration, trust, and sustainable urban development in the Mezran neighborhood of Tripoli.

The Community Design Roghata, held on 25 May 2024 in Tripoli, brought together architecture students from the University of Tripoli, the Municipality of Tripoli Center, and Mezran residents to co-design the neighborhood park.

- Co-design phase began forming a steering committee of residents, youth, professionals, and students. The committee organized the "Roghata" activities, set priorities, and launched a community survey.
- Co-production phase (21–23 May), students and volunteers prepared materials on-site and collaborated with local designers to generate innovative ideas, strengthen trust, and encourage citizen participation despite the complex political context.
- Implementation phase (Community Design Roghata) on 25 May brought together the university, municipality, and residents for site analysis, workshops, and collaborative visioning focused on health, recreation, belonging, and civic responsibility.
- Continuation and outcomes: Subsequently, the municipality allocated funds for park improvements, bridging communication gaps and reflecting community-driven ideas, demonstrating the lasting impact of participatory urban governance in Tripoli.

Competences and Skills
A multidisciplinary team worked together under a shared, facilitative leadership model that bridged academic, institutional, and local knowledge systems. Technical coordination, project management, and stakeholder engagement were led by Tripolis Umran Lab in collaboration with the Municipality of Tripoli Center, ensuring cross-sector alignment and strategic implementation. Faculty and students acted as mediators and change agents, applying participatory methods, event organization, and time management skills to co-produce knowledge and strengthen participatory urban governance.

Building a sense of ownership.

The Open Science Dimension

Inclusivity
Inclusivity was achieved through the active involvement of local residents, including women, elders, and children, in all phases of the process. Community surveys and meetings gathered local knowledge and priorities, integrating these into the design themes. A parallel "children's program in the park" led by students ensured youth perspectives were included, while structured breakout sessions enabled direct dialogue between residents and experts. This citizen-led approach grounded the design in lived experience, blending community insights with professional expertise to ensure relevance and equity in outcomes.

Equity
Roghata promoted equity by ensuring broad representation across age, gender, and social groups. Women and elders participated in community meetings and design sessions, while a dedicated children's program addressed intergenerational equity by including youth voices. The event was held in an accessible public space (Mezran mosque's event hall adjacent to the park), enabling participation of people with limited mobility. Design themes such as safety, recreation, and responsibility reflected diverse concerns, ensuring that proposed solutions addressed the needs of marginalized groups and supported inclusive, community-driven urban development.

Sustainability
Sustainability was embedded in the design of the Mezran neighborhood park by addressing social inclusion, environmental quality, and long-term usability. Community input shaped culturally relevant, low-cost solutions that reflected local needs. Green elements were prioritized to enhance climate resilience and public health. Youth and women's participation fostered social ownership, while collaboration with the Municipality and University ensured institutional support, promoting a sustainable model for community-led public space development in Tripoli.

Foreign missions in Libya, particularly from Italy, the UK, the UN, and the World Bank, have shown growing interest in community-led initiatives, recognizing their potential to be leveraged through future "roghatas" as platforms for knowledge exchange across the Mediterranean.

Children's program.

The Knowledge Valorisation Dimension

- **Social Value:** Strengthened social cohesion by fostering dialogue and collaboration among residents, students, and municipal actors. The participatory process empowered community members, reinforced civic agency, and built a sense of ownership over the neighborhood park.
- **Educational Value:** Provided hands-on learning for architecture and planning students in participatory design and community engagement, while facilitating ongoing knowledge exchange between academia, local government, and residents.
- **Economic Value:** Proposed low-cost, locally adaptable design solutions, laying the groundwork for future community-led improvements and creating potential for local employment in park development and maintenance.

Outputs & Impacts

Outputs

Design outcomes and community feedback were showcased at the Mezran Street Fair. A comic booklet about Roghata is currently under development to document and communicate the process in an accessible format, aiming to foster knowledge exchange with regional and international universities and inspire cross-border academic collaboration.

Following the success of the "Roghata," the Municipality of Al-Khums partnered with the University of Tripoli's Department of Architecture to co-develop Al-Khums Vision 2050.

The outcomes of the Al-Khums Roghata were formally presented on 3/12/2025 to the High Council of State. The meeting sought to communicate community-driven findings to national-level decision-makers and to initiate a constructive dialogue on how participatory planning approaches might be integrated into wider governance structures and policy frameworks,

Impacts

Further international collaborations: Contact has been established with INTBAU-Austria, on possible collaborative work using Pattern Language in the upcoming Roghata and urban design studios.

Breakout sessions.

Roghata functioned as both a design exercise and a political act—demonstrating how participatory approaches can challenge top-down norms and seed more inclusive, accountable urban governance in Libya.

Despite the isolation of the country in recent years, due to the complex geopolitican situation, experiences like Roghata have triggered the interest of international partners paving the way for potential future collaborations.

Learnings

The analysis of the cases provides important lessons on how universities can contribute more effectively to sustainable, resilient, and inclusive urban transformation. The findings highlight both the strengths of existing practices and the structural conditions that currently limit their long-term impact[1].

A first key learning concerns the centrality of process design. Participatory diagnostics, immersive design studios, workshops, and Urban Living Labs proved particularly effective in contexts marked by institutional fragmentation, political instability, or limited administrative capacity. In such settings, universities often act as relatively neutral and trusted intermediaries, facilitating dialogue between public authorities, civil society, and local communities, and translating knowledge across sectors. This intermediary role emerges as a constitutive feature of knowledge exchange, rather than a purely instrumental one.

Second, the findings confirm that educational and social value represent the most robust and consistent impacts of current knowledge exchange practices. Experiential and place-based learning strengthens student competences, professional skills, and institutional capacity, while fostering critical thinking and contextual sensitivity. Academics and students frequently assume the role of knowledge brokers, connecting research, design, policy, and implementation. Participatory approaches also contribute to social cohesion, civic engagement, and trust-building, particularly when they integrate local and indigenous knowledge systems and actively engage women, youth, and other marginalised groups.

However, these strengths are not yet matched by equivalent outcomes in terms of economic, institutional, or policy impact. While several initiatives generate indirect benefits—such as improved employability, professional mobility, or the groundwork for future regeneration—these effects are rarely sustained, scaled, or embedded in durable governance or financing structures. This gap reflects both the limited involvement of non-cognate disciplines (e.g. economics, public finance, law, health, political science) and the difficulty of translating practice-based knowledge into formal policy instruments.

A third critical learning relates to durability and continuity, which emerge as the most fragile dimensions across the cases. Many initiatives remain highly dependent on short-term funding cycles, individual champions, or favourable political conditions. Collaborative projects often conclude with the end of funding, while Urban Living Labs, despite their long-term potential, are particularly vulnerable to governance changes, resource constraints, and shifting institutional priorities.

In this context, the limited integration of digital tools and artificial intelligence across the entries submitted to this report highlights an emerging yet underexplored dimension. While AI is rapidly gaining prominence in both academic and professional debates, its uneven and largely absent uptake within the analysed initiatives positions it as a "wild card" with implications for durability, impact, and education. On the one hand, AI could support the continuity of knowledge exchange by strengthening long-term platforms for architecture and planning through more efficient data analysis, monitoring, scenario-building, documentation, and institutional memory.

On the other hand, AI also holds significant potential to amplify impact, for instance by enabling wider outreach, supporting evidence-based policy formulation, and accelerating the translation of research and design outputs into actionable planning tools. In educational terms, AI may reshape pedagogical practices by enhancing analytical capacities, simulation-based learning, and critical engagement with complex urban data. Balancing a critical, context-aware use of AI with its capacity to enhance learning, durability, scalability, and impact on the ground will therefore be a key challenge for future knowledge exchange initiatives.

Fourth, while funding and agenda-setting is in most initiatives led and financed by institutions based in the Global North, research infrastructures in the southern Mediterranean remain under-resourced, and evidence of South–South cooperation is limited. In parallel, knowledge dissemination practices tend to prioritise formats with restricted circulation and durability, such as exhibitions or workshops, while peer-reviewed publications, open-access outputs, and policy briefs remain marginal. This constrains academic recognition, policy uptake, and cumulative learning, and risks reproducing hierarchical or extractive knowledge relations.

[1] The analysis is based on 28 case studies of knowledge exchange initiatives in the Euro-Mediterranean region, examined through qualitative content analysis to identify twelve recurring categories of urban challenges and broader thematic patterns. From this corpus, ten exemplary cases were selected through maximum-variation purposive sampling to ensure thematic coverage and diversity of scales, and were then analysed comparatively to examine knowledge-exchange processes, methods, impacts, and dissemination outputs.

Way Forward

Addressing these challenges requires a strategic reorientation of knowledge exchange practices along four interconnected dimensions, complemented by a cross-cutting digital and educational transition:

1. Durability must be strengthened by moving beyond project-based funding toward longer-term institutional commitments. Embedding knowledge exchange within universities, municipalities, and regional authorities, supported by stable governance arrangements, can help sustain learning processes and protect initiatives from political volatility. This also requires that funders support not only the initiation of new initiatives, but the continuation and evolution of existing ones, recognising their different phases and building on capacities already established on the ground. In practice, this includes establishing permanent structures (e.g. curricula, Urban Living Labs, steering committees, shared or open-source data platforms) that preserve institutional memory and enable continuity beyond individual funding cycles or project champions.

2. Impact should be enhanced through deeper institutional and economic embedding. Integrating non-cognate disciplines such as economics, public finance, law, public health, and political science can support governance reform, sustainable financing models, and long-term implementation. Closer alignment with local authorities and economic actors can help translate social and cultural value into durable policy and economic outcomes. Such integration is essential to move beyond predominantly educational and social impacts toward sustained policy uptake and implementation at scale.

3. Knowledge validation and circulation require clearer pathways to transform practice-based knowledge into validated, citable, and accessible outputs, including peer-reviewed publications, open-access repositories, and policy-oriented syntheses, strengthening cumulative learning and regional and international uptake. This also implies rebalancing dissemination practices away from short-lived, place-bound formats toward outputs that support long-term visibility, reuse, and policy relevance.

4. Equity must be actively pursued by rebalancing leadership, resources, and decision-making power. Targeted investment in southern Mediterranean institutions, longer-term partnerships, and stronger South–South cooperation are essential to foster reciprocal, inclusive, and non-extractive collaborations. Without such rebalancing, knowledge exchange risks reproducing the structural asymmetries and hierarchical relations identified in the analysis.

Across all four dimensions, the strategic integration of digital skills and artificial intelligence should be treated as a cross-cutting priority. As highlighted in the findings, AI currently represents an underexplored "wild card": it can either further constrain continuity or significantly enhance durability, educational innovation, and impact on the ground. Critically and contextually deployed, AI can support long-term knowledge infrastructures, monitoring, scenario-building, wider outreach, and evidence-based policy formulation, while also reshaping pedagogical practices. Ensuring that digital and AI tools remain grounded in situated knowledge and participatory processes will be central to their constructive contribution.

Under the appropiate conditions, universities can evolve from project-based actors into durable knowledge brokers and institutional partners, enabling knowledge exchange to function as a structural driver of sustainable, resilient, and inclusive urban transformation across the Euro-Mediterranean region.

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This report examines university-led international knowledge exchange initiatives in Architecture and Urban Planning across the Euro-Mediterranean region, assessing their contribution to sustainable, resilient, and inclusive urban transformation, in line with the Union for the Mediterranean (UfM) Strategic Urban Development Action Plan 2040. It focuses in particular on how knowledge is produced, exchanged, validated, and translated into educational, social, policy, and territorial impacts.

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