

**Project title:** Nexus-Driven Open Labs for competitive and inclusive growth in the Mediterranean  
**Acronym:** NEX-LABS



## PARTNERSHIP

- Autonomous University of Barcelona (ES)
- Chamber of Commerce and Industry of the Center (TN)
- Royal Scientific Society- Aqaba Liaison Center (JO)
- Berytech Foundation (LB)
- INNOLABS SRL (IT)
- Academy of Scientific Research and Technology (EG)
- American University of Beirut (LB)
- Centre for promotional services to enterprises –Special Agency of Cagliari Chamber of Commerce (IT)
- Net7 Srl (IT)
- C.I.P Citizens In Power (CY)
- The Jordanian Hashemite Fund for Human Development /Princess Basma Community Development Centre Aqaba (JO)



## PROJECT DESCRIPTION

NEX-LABS targeted territories, characterized by water scarcity/irregular rainfall/population distribution, reflect agriculture as largest user of water (70-90%) while future global warming projections ( $\approx 2^{\circ}\text{C}$ ) involve summer precipitation (-10/-30%) threatening water availability (-2/-15%) and agricultural productivity (-12/-40%). The latent conflict between energy efficiency ( $\approx 60\%$ ) and water production is also increasing energy footprint/m<sup>3</sup> of water used to produce food. The predicted future shortfalls in Water/Energy/Food (WEF) requires a NEXUS approach. In this context, NEX-LABS aims to support the implementation of clean technologies for sustainable and resilient increase of agri-food sector production based on a more efficient use of energy (renewable/solar solutions) and water (wastewater treatment, water harvesting or reuse solutions) in MPC region thanks to the contributions of ICT such as blockchain technology, Internet or the Things (IoT), Artificial Intelligence (AI), Machine Learning and Big Data.

## OBJECTIVE

Contribute to the creation of a sustainable and resilient agro food sector based on NEXUS driven Open Living Labs (NDOLL) approach, thus strengthening technology transfer, cooperation industry-academia, increasing commercialisation opportunities and innovation-driven growth.

## WHAT WILL BE IMPROVED?

SMEs are the backbone of the economy in EU-MPC countries, representing the majority of workforce. However, they are losing competitiveness, leading to a predominance of survivalist companies. NEX-LABS expects to reverse this trend and generate a mid-term impact through NDOLL approach to test, recommend and implement those integrated NEXUS technologies in the agri-food sector, complemented by products, services and programmes to boost linked businesses. Besides, the project will enhance a job bank repository oriented to younger audience's in MPC region to match offer and demand of employments related to the NEXUS technologies.

## WHO WILL BENEFIT?

- 21 public institutions such as ministries and national agencies
- 35 research centers or universities
- 60 SMEs
- 35 entities of the entrepreneurship ecosystem such as companies/ technology transfer organizations/ technological parks/venture capital/business angels
- 35 entities collaborating to the public debate such as communication multipliers/think tanks, civil society organizations
- 20 newly recruited professionals

## EXPECTED ACHIEVEMENTS

- 2 NEXUS- Driven Open Living Labs established
- 4 business ideas benefiting from acceleration grants
- 16 testing and 42 acceleration vouchers allocated
- A summer school celebrated with the participation of 50 entrepreneurs
- 6 spin-offs established with 6 co-patents registered
- A Job bank launched
- 8 Joint Research Contracts signed

## CONTRIBUTION TO POLICY-MAKING

Beyond MPC national or regional Water/Energy/Food (WEF) policy development programs, NEX-LABS contributes to the regional policy development of the Mediterranean Strategy for Sustainable Development 2016-2025 and to the 2030 Sustainable Development Agenda through innovative integrated WEF+ICT technologies to face SDGs 2, 6&7 thanks to NDOLLs approach.

## BUDGET

3.4 M€ (90% EU Contribution)

## DURATION

30 months

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