

**INTEGRATING THE WATER-ENERGY-FOOD-ECOSYSTEM NEXUS (WEFE) APPROACH IN MEDITERRANEAN IRRIGATED AGRICULTURE**  
**Zaragoza (Spain), 6-11 November 2023**

Hour	Monday 6	Tuesday 7	Wednesday 8	Thursday 9	Friday 10
9:00-10:00	<b>Opening</b>	2.1. Reducing the water and energy dependence of Mediterranean irrigated agriculture <b>N. Zapata</b>	2.5 Optimizing nitrogen input and using monitoring networks to reduce nitrate water pollution in irrigated areas <b>D. Isidoro</b>	3.2. Innovative nexus governance approaches: institutional aspects in the Mediterranean <b>I. la Jeunesse</b>	4.3 Ecosystem services accounting <b>M. Lago</b>
10:00-11:00	1.1 The challenging interdependency between WEFE in the light of the SDG <b>G. Bidoglio</b>	2.2. Alternate water resources for Mediterranean agriculture: quality and energy requirements <b>A. Battilani</b>	2.6. Exploratory solutions and trade-offs for the complex relationship between wetlands and irrigated agriculture <b>C. Castañeda</b>		4.4 Practical session Nexus modelling of irrigated agriculture in Greece based on systems thinking and dynamics <b>(to be decided)</b>
<b>Coffee break</b>					
11:30-12:30	1.2. WEFE nexus implementation under climate change: from silo thinking to cross-sectoral risk & benefit sharing <b>G. Bidoglio</b>	2.3 Software, modelling and decision-making tools for building and managing nexus-ready irrigation systems <b>J.M. Moreno</b>	3.1. The nexus policy framework: EU and non-EU policies and strategies, institutional coordination challenges and barriers, and a nexus approach to coordinated WEFE policy development <b>I. la Jeunesse</b>	3.3 Case study The North-Western Sahara Aquifer System: options for nexus policies in a transboundary situation <b>Y. Almulla</b>	4.4 Practical session Nexus modelling of irrigated agriculture in Greece based on systems thinking and dynamics. <b>(to be decided)</b>
12:30-13:30	1.3. Discussion of the situation of the WEFE in participant's countries <b>A. Rhouma, F. Nardi</b>	2.4. Making the most of renewable and grid energy for irrigation pumping requirements <b>(to be decided)</b>		4.1 Assessing WEFE trade-offs across different scales; translating findings into decision support <b>A. Karnib</b>	4.5 Case study Application of the Q-Nexus Web Tool for resilient Mediterranean irrigated agriculture <b>A. Karnib</b>
<b>Lunch break</b>					
15:00-16:00	1.4 Case study: Irrigated agriculture under severe stress: the views of an environmental NGO <b>A. Fernández</b>	2.7 Case study Implementing WEFE nexus and stakeholder engagement for sustainable resource allocation in the Val di Cornia, Italy <b>F. Nardi</b>	3.4 Case study River contracts in Italy: a policy instrument implemented by water users associations to control nitrate pollution <b>A. Battilani</b>	4.2 Sustainability assessment: ecological footprinting and life cycle analysis (LCA) <b>E. López Günn</b>	5. Round table: "Implementing the WEFE nexus in Mediterranean Water Users Associations: constraints, challenges and expected benefits" <b>A. Battilani, A. Karnib, A. Rhouma,</b>
16:00-17:00	1.5. Case study: Irrigated agriculture under severe stress: view of a scientist's and a practitioner's country <b>A. Rhouma, F. Nardi</b>	2.8 Case study "Piano Laghetti": interconnected small NBS providing ES, water storage and energy generation <b>A. Battilani</b>	3.2. Innovative nexus governance approaches: institutional aspects in the Mediterranean <b>I. la Jeunesse</b>	4.6 Practical session Life Cycle Analysis for resilient Mediterranean irrigated agriculture <b>E. López Günn</b>	
17:00-18:00		2.9 Practical session: Implementing the nexus in a solid-set irrigated farm using electricity for pumping in a vulnerable area for nitrate pollution <b>N. Zapata, E. Playán</b>	3.5. Practical session Nexus game: Exploring the Nexus Solutions Tool for optimizing multi-scale energy-water-land system transformations <b>Y. Almulla</b>		
18:00-19:00					

**Saturday 11<sup>th</sup> November:** Technical visit to the Monegros area (**N. Zapata** and **E. Playán**)