BIOTRAILS

Newsletter No.8

July 2025

Funded by the European Union

BIOTRAILS

In this issue:

01 WP5 Leader interview

02 Milestone Achievements

03 Participatory workshop

04 WP3 Meeting in Athens

05 Key Events and Conferences

06 Social Media Highlight

Welcome to another deep dive into the BIOTRAILS project!

In this issue, we highlight the key milestones achieved in the first phase of the project: from the official launch and the development of our communication tools, to the start of pilot activities, fieldwork implementation, and the release of our first digital tools and dashboards. The successful validation of BIOTRAILS methods and results marks a major step forward in our shared path toward transformative change.

You'll also find a special feature on the participatory workshops held in Greece and Peru, which brought together local stakeholders to co-design sustainable solutions in the aquaculture and cocoa value chains.

In the WP Leader Interview section, we spotlight Jan Christian Polanía Giese from adelphi, leader of WP5.

BIOTRAILS also had a strong presence at two key EU cluster events, contributing to discussions on transformative change for biodiversity alongside other Horizon Europe projects.

Finally, we're proud to announce a forthcoming scientific publication in Science of the Total Environment, exploring the Biodiversity-Climate-Society Nexus through a participatory modelling approach applied to the Amazon.

Visit our website for more information about the project!
www.biotrailsproject.eu

Raffaele Giordano

Project Coordinator

BIOTRAILS

01 WP5 Leader interview

The WP leader interviews are going strong!

This issue spotlights
Jan Christian Polanía Giese
from **adelphi**,
the leader of WP5.

Click here to watch the interview
and
subscribe to our You Tube channel!

Check out interviews with other WP leaders!

watch the interview with

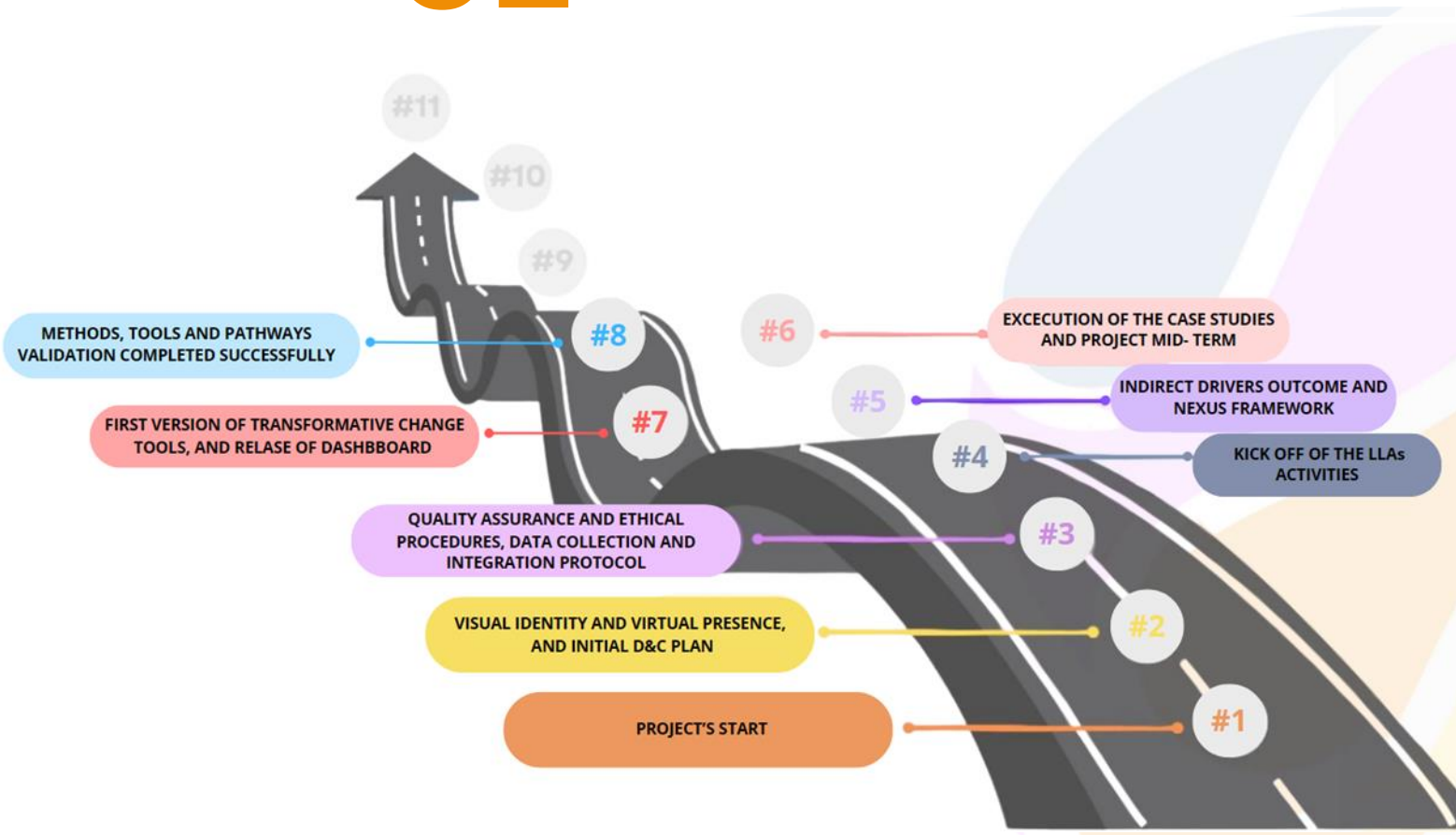
WP3 leader Alessandro Pagano

WP2 leader Ioanna Nydrioti

WP4 leader Christina Papadaskalopoulou

BIOTRAILS

02 Milestone Achievements



The BIOTRAILS project has made key progress toward its goals! Discover the main milestones!

#1 Official launch of the project activities and coordination among partners.

#2 Establishment of the visual identity, website, social media, and initial communication plan (D6.1).

#3 Circulation of handbooks and setup of Quality Assurance procedures and data integration protocols (D3.1).

#4 Start of local engagement and pilot area activities (D2.1).

#5 Delivery of key theoretical outputs supporting project analysis (D3.5).

#6 Fieldwork implementation and submission of project progress summary (D5.1).

#7 First versions of digital tools (D4.1–D4.5).

#8 Successful completion of the validation phase and consolidation of results.

BIOTRAILS

03 Participatory workshop

As part of the BIOTRAILS project, two recent participatory workshops took place in Greece and Peru, marking important progress in the co-design of sustainable solutions across key value chains.

In Greece, the focus was on sustainable aquaculture, with national stakeholders working together to identify priorities and challenges related to marine biodiversity conservation. The workshop highlighted the need to balance fish production with ecosystem protection through innovative governance tools and practices.

Read more

Meanwhile, in the Ucayali region of Peru, local producers, NGOs, authorities, and researchers came together to tackle issues within the cocoa value chain. During the event environmental and social pressures were mapped and shared solutions to promote more resilient, equitable, and biodiversity-friendly practices in the Amazon region were shaped.

Both workshops show the importance of engaging directly with local communities and stakeholders to ensure that ecological transitions are guided along truly sustainable paths.

Read more

BIOTRAILS

04 WP3 Meeting in Athens

On June 24–25, the meeting of Work Package 3 – *Impact of Indirect Drivers and Nexus Framework* - was held in Athens, marking a key moment in the BIOTRAILS project. This gathering provided a valuable opportunity for partners to reflect on progress made so far and to define the next operational steps.

After establishing strong theoretical and modelling foundations for each case study and identifying the main challenges of the Nexus, the consortium is now moving forward with an ambitious goal: to turn this knowledge into concrete, actionable scenarios that can guide public policies and collective actions with real and lasting impact.

In this context, preparations are underway for the third round of stakeholder workshops, designed to test the developed models and explore possible transformation pathways. These workshops will present comparable future scenarios, allowing participants to assess and contrast incremental interventions – gradual improvements to the current system – with transformative interventions, intended to drive systemic change. The goal is not only to assess technical effectiveness but also to foster open dialogue and increase collective awareness around what truly constitutes transformative change.

At the same time, work continues on the development of the project's visualisation tool. This interface will allow users to explore the impacts of interventions along various value chains on the Biodiversity–Climate–Society Nexus, visualise alternative scenarios, and clearly understand the link between individual and collective decisions and systemic outcomes.

Stay tuned for more updates on the next steps of the BIOTRAILS journey!

05 Key Events and Conferences

BIOTRAILS plays key role in EU events on transformative change

BIOTRAILS recently took part in two major EU cluster events focused on transformative change for biodiversity: the EU Biodiversity Partnership Stakeholder Event and the Knowledge & Learning Mechanism Kick-off.
During these events Raffaele Giordano (CNR), presented the project's approaches, tools, and objectives, engaging in dialogue with other Horizon Europe-funded initiatives.
These meetings offered a valuable opportunity to build synergies, exchange knowledge, and contribute to shaping a shared understanding of transformative change in socio-ecological systems.

BIOTRAILS' active participation reaffirms its role as a key contributor within the European network working toward inclusive and sustainable ecological transitions.

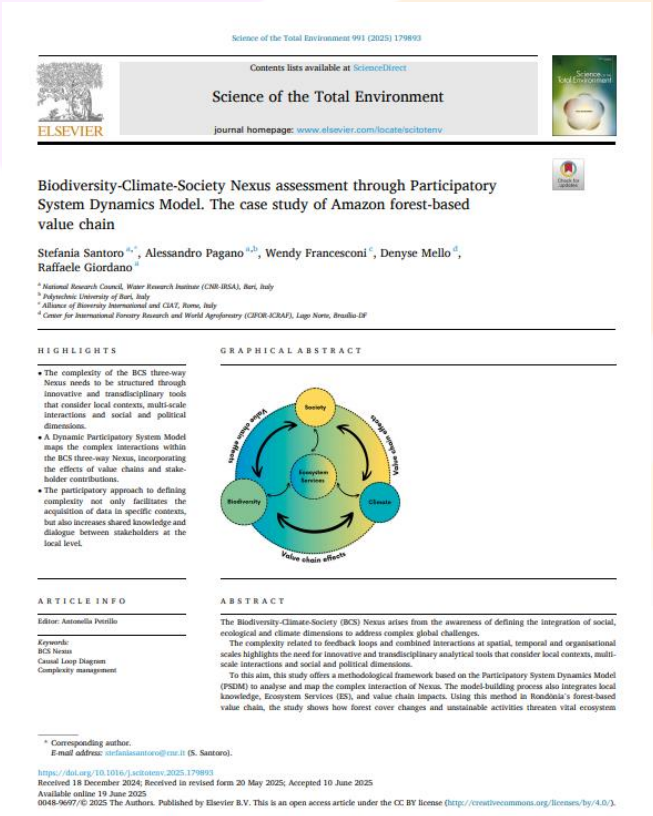
Scientific paper on the Science of Total Environment journal

This article explores the Biodiversity-Climate-Society Nexus through the Participatory System Dynamics Model.

Applied to the forest-based value chain in Rondônia, Brazil, this approach reveals how deforestation and unsustainable practices threaten essential ecosystem services—particularly those relied upon by Indigenous communities.

By involving local populations and stakeholders, the participatory process fostered shared understanding and opened a space for dialogue, helping to identify key barriers and opportunities for transformative change.

[Read more]



Science of the Total Environment 991 (2025) 179893

Contents lists available at ScienceDirect

Science of the Total Environment

journal homepage: www.elsevier.com/locate/scitotenv

Biodiversity-Climate-Society Nexus assessment through Participatory System Dynamics Model. The case study of Amazon forest-based value chain

Stefania Santoro [a,*], Alessandro Pagano [a,b], Wendy Francesconi [c], Denyse Mello [d], Raffaele Giordano [a]

[a] National Research Council, Water Research Institute (CNR-IRSA), Bari, Italy
[b] Polytechnic University of Bari, Italy
[c] Alliance of Bioversity International and CIAT, Rome, Italy
[d] Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF), Lago Norte, Brasília-DF

HIGHLIGHTS

- The complexity of the BCS three-way Nexus needs to be structured through innovative and transdisciplinary tools that consider local contexts, multi-scale interactions and social and political dimensions.
- A Dynamic Participatory System Model maps the complex interactions within the BCS three-way Nexus, incorporating the effects of value chains and stake-holder contributions.
- The participatory approach to defining complexity not only facilitates the acquisition of data in specific contexts, but also increases shared knowledge and dialogue between stakeholders at the local level.

GRAPHICAL ABSTRACT

ARTICLE INFO

Editor: Antonella Petrillo

Keywords:
BCS Nexus
Causal Loop Diagram
Complexity management

ABSTRACT

The Biodiversity-Climate-Society (BCS) Nexus arises from the awareness of defining the integration of social, ecological and climate dimensions to address complex global challenges.
The complexity related to feedback loops and combined interactions at spatial, temporal and organisational scales highlights the need for innovative and transdisciplinary analytical tools that consider local contexts, multi-scale interactions and social and political dimensions.
To this aim, this study offers a methodological framework based on the Participatory System Dynamics Model (PSDM) to analyse and map the complex interaction of Nexus. The model-building process also integrates local knowledge, Ecosystem Services (ES), and value chain impacts. Using this method in Rondônia's forest-based value chain, the study shows how forest cover changes and unstainable activities threaten vital ecosystem

* Corresponding author.
E-mail address: stefaniasantoro@cnr.it (S. Santoro).

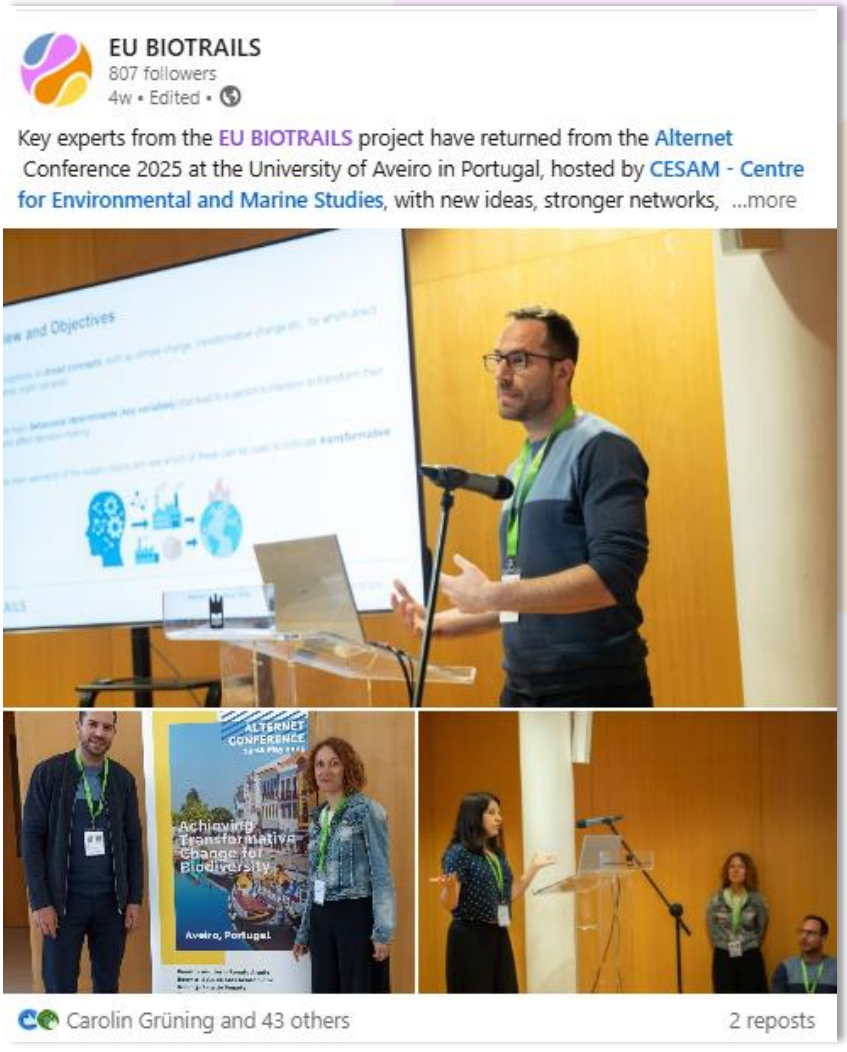
https://doi.org/10.1016/j.scitotenv.2025.179893
Received 18 December 2024; Received in revised form 20 May 2025; Accepted 10 June 2025
Available online 19 June 2025
0048-9697/© 2025 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

06 Social Media Highlight

BIOTRAILS researchers recently returned from the 2025 Alternet Conference at the University of Aveiro, Portugal, hosted by CESAM Centre for Environmental and Marine Studies. The team brought back fresh ideas, stronger connections, and a renewed focus on driving meaningful change for biodiversity.

Key contributions included co-organising a session on “Transdisciplinary Pathways for Addressing the Biodiversity-Climate-Society Nexus”, sharing tools and lessons from global value chains, and engaging with partners around BIOTRAILS’ upcoming Special Issue on pathways for change. Read the full news here.

Want to stay up to date on events like these? Follow us on social media for insights into how BIOTRAILS is bridging science, policy and action: LinkedIn, Facebook and X.



Project Coordinator:
Raffaele Giordano, Senior Scientist
National Research Counsil – Water Research Institute (CNR-IRSA)

Address:
V.Le Francesco de Blasio, 5, 70132 Bari BA

E-mail address:
Raffaele.giordano@cnr.it

For any information, please contact:
info@biotrails.eu

Follow us on social media!

www.biotrailsproject.eu

Funded by
the European Union