



REFOREST

ABSTRACT

7

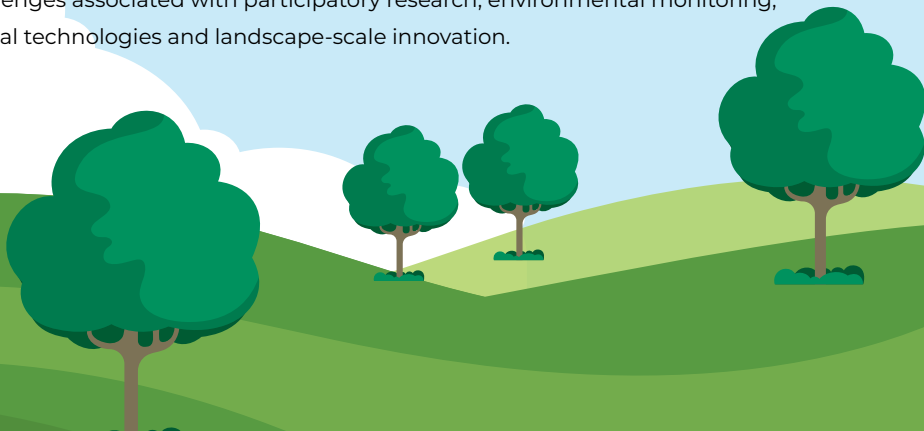
Ethics in agroforestry living labs

Problem:

Agroforestry Living Labs bring together farmers, researchers, advisors, policymakers and businesses to co-design and test innovative solutions. These collaborative approaches generate valuable knowledge but also raise important ethical questions. Who owns the data collected on farms? How should technologies such as drones and artificial intelligence be used responsibly? How should environmental impacts be considered alongside the interests of human participants? While European legislation provides strong safeguards, many projects lack practical mechanisms to identify and manage ethical risks.

Solution:

We developed a dedicated Ethics Protocol that was embedded within its co-creation methodology and Living Lab network. Initially focused on human participants, personal data protection and international research activities, the framework evolved alongside the project to address a wider range of ethical challenges associated with participatory research, environmental monitoring, digital technologies and landscape-scale innovation.



Benefits and Practical Recommendations:

Embed ethics from the beginning. Ethical considerations should be integrated into project design rather than treated as a compliance exercise after activities have begun.

Protect participant rights and data. Clear procedures should be established for informed consent, data collection, storage, sharing and withdrawal from participation.

Assess technologies responsibly. The use of drones, monitoring equipment, digital platforms and artificial intelligence must be evaluated for privacy, transparency, accountability and potential unintended consequences.

Consider environmental impacts alongside human impacts. Ethical responsibility extends beyond project participants to include biodiversity, ecosystems, natural resources and long-term landscape sustainability.

Review ethical risks continuously. As projects evolve, new technologies, partnerships and activities may introduce ethical challenges that require ongoing assessment and adaptation.

Geographical Location:



How to Use the Results:

Researchers, Living Lab coordinators and project managers can use the ReForest Ethics Protocol as a practical framework for managing ethical risks in participatory innovation projects. Before launching activities, identify who may be affected, what data will be collected, how technologies will be used and what environmental impacts may arise. Establish transparent procedures for consent, data management and stakeholder engagement, and revisit these regularly as the project develops.

For farmers and other participants, the framework provides a basis for asking important questions about data ownership, privacy, expected benefits and environmental responsibility. Ethical governance should not be viewed as an administrative requirement but as a foundation for trust, collaboration and long-term innovation.

The ReForest experience demonstrates that successful Living Labs depend on responsible stewardship of people, data, technology and the environment. By integrating ethical considerations throughout the project lifecycle, agroforestry innovation can be both scientifically robust and socially legitimate.



Contemporary Ethical Considerations:

The ReForest Ethics Protocol recognises that ethical challenges continue to evolve alongside technological and societal change. In addition to traditional research ethics, the framework addresses:



Bioethics, including responsible environmental research, stakeholder rights and informed participation.



Environmental ethics, recognising obligations towards biodiversity, ecosystem health and the sustainable management of natural resources.



AI and digital ethics, including transparency, fairness, accountability, privacy, cybersecurity and appropriate human oversight of data-driven decision-making.

By integrating these dimensions within a single framework, ReForest provides a practical model for responsible research and innovation in agroforestry and other landscape-scale sustainability initiatives.

https://eu-cap-network.ec.europa.eu/projects/practice-abstracts/ethics-agroforestry-living-labs_en