DELIVERABLE 6.7

Sustainability and Exploitation Plan Version 1

Main Author

Mäntysaari, Helmi (ICLEI)

Co-authors

Barbano, Francesco (UNIBO) ;

Davids, Peter (TUDO) ; Firus, Katja (DEN) ;

Gerlach, Marcelo Daniel (ICLEI) :

Greiving, Stefan (TUDO) ;

Halbac-Cotoara-Zamfir, Rares (UPT) ;

Krištofová, Lenka (ARR) ; Schindelegger, Arthur (BOKU) ; Slavikova, Lenka (UJEP)

Land4Climate

Disclaimer

This report was written as part of the LAND4CLIMATE project under EC grant agreement 101112781. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

How to quote this document

Mäntysaari, H., et al (2024). Sustainability and Exploitation Plan Version 1 (LAND4CLIMATE Deliverable 6.7)

Sustainability and Exploitation Plan Version 1

Project description

PROJECT TITLE	Utilization of private land for mainstreaming nature-based solution in the systemic transformation towards a climate-resilient Europe
PROJECT ACRONYM	LAND4CLIMATE
GRANT AGREEMENT NO	101112781
INSTRUMENT	INNOVATION ACTION
CALL	HORIZON-MISS-2022-CLIMA-01
STARTING DATE OF PROJECT	SEPTEMBER, 1ST 2023
PROJECT DURATION	48 MONTHS
PROJECT COORDINATORS	PROF. STEFAN GREIVING AND PROF. THOMAS HARTMANN (TUDO)

Document Details

DELIVERABLE TYPE	REPORT	
DELIVERABLE NO		
DELIVERABLE TITLE	Sustainability and Exploitation Plan Version 1	
NAME OF LEAD PARTNER FOR THIS DELIVERABLE	ICLEI	
VERSION	V1.0	
CONTRACTUAL DELIVERY DATE	30.11.2024	
ACTUAL DELIVERY DATE	28.11.2024	
Dissemination level		
PU	Public	X
SEN	Sensitive, only for members of the consortium (including the Commission)	

Revision History

Revision	Date	Description	Author (Organisation)
V0.1	14.11.2024	Version ready	Helmi Mäntysaari (ICLEI)
V0.1	21.11.2024	Quality Control	Rares Halbac-Cotoară-Zamfir (UPT)
V1.0	28.11.2024	Review by the consortium	all
V1.0	28.11.2024	Final Approval	Stefan Greiving, Thomas Hartmann (TUDO)
V1.0	28.11.2024	Submission	David Ellerbrake (TUDO)

Table of Content

List of tables

Abbreviations

EU	European Union
FRR	Frontrunning region
IP	Intellectual Property
NBS	Nature-based Solution
NGO	Non-governmental organization
PPP	Public-Private Partnerships

Executive Summary

The LAND4CLIMATE Sustainability and Exploitation Plan (Version 1) outlines the project's approach to ensuring the long-term value and application of its results, structured across several key sections. The plan explores areas of Exploitation, highlighting pathways to engage diverse stakeholders, including policymakers, landowners, and regional authorities. It contains a section on intellectual property rights guidelines, which outline principles for the protection and responsible use of project outputs, ensuring these results remain accessible while safeguarding innovation. The plan includes, the list of exploitable results, which has a detailed inventory of outcomes with plan to their exploitation. This initial plan will evolve with project insights, with a substantial update in project month 36 to refine these strategies, ensuring the project's impact extends beyond its duration.

Keywords

Exploitation, Sustainability, Intellectual property, Long-term Impact

1. Introduction

The Sustainability and Exploitation Plan (Version 1) for LAND4CLIMATE serves as a plan for ensuring the long-term impact and practical application of the project's results. As specified in the Grant Agreement, this plan, and it's updated version in M36, address the sustainability and exploitation of LAND4CLIMATE outputs, aiming to create concrete opportunities for the use of project outcomes after the project's conclusion.

The first version of the Sustainability and Exploitation Plan is due Month 15 (Deliverable D6.7) and the plan for exploitation efforts will culminate in a updated version by Month 36 (Deliverable D6.8). This document outlines activities designed to reach a variety of audiences interested in applying or adapting results developed by LAND4CLIMATE. These activities include market analysis (in the updated version), consultations within the consortium, and engagements with selected stakeholders. Additionally, the plan establishes management procedures to guide the protection and commercial exploitation of project results, covering aspects such as result disclosure, ownership rights, and intellectual property (IP) management. By defining these principles, the plan ensures that exploitable results are protected and accessible to partners who seek to bring them to market or generate socio-economic value (see chapter 4).

Exploitation is a core element embedded within the LAND4CLIMATE project, achieved through close collaboration with the Front-Runner Regions (FRRs) and replicating regions, where tailored NBS measures and active stakeholder engagement play a central role. The measures developed in the FRRs will serve as models for exploitation by the replicating regions. This targeted approach not only enhances the effectiveness and scalability of project outcomes but also establishes a solid foundation for the broader application and adaptation of LAND4CLIMATE's solutions across these regions.

The Sustainability and Exploitation Plan, therefore, serves as a comprehensive roadmap, aligning the project's goals with practical strategies for widespread impact. This initial version lays the groundwork, while the final version will delve deeper into specific channels and strategies for each partner, ensuring that the project's vision of environmental and social sustainability is effectively realised and shared.

2. Definitions

Distinguishing between communication, dissemination, and exploitation is essential, as effective communication and dissemination lay the groundwork for successful exploitation. To enable the target audience to utilize the project results, they first need awareness of the project and its outcomes. However, this strategy is dedicated solely to the exploitation of results. For more details on the communication and dissemination strategy, please refer to D6.1.

2.1 Communication

Communication is a structured process beginning at the project's start, aimed at raising awareness and sharing the project's activities and outcomes with the general public and diverse stakeholders, including the media. Through strategic and targeted communication efforts, the goal is to engage audiences beyond the project itself, highlighting the societal impact and benefits of EU-funded research. The focus is on promoting both the project and its results, using a two-way communication approach to show how the research addresses societal challenges and uses public funds effectively. (European Commission, 2023).

2.2 Dissemination

Dissemination refers to making the project results openly accessible, primarily targeting those who can apply and build upon these results, such as scientists, policymakers, and industry experts. Through appropriate channels, such as academic publications and conferences, dissemination maximises the project's reach and long-term impact. This process focuses solely on the results themselves, ensuring they are publicly available for further research and practical application, contributing to the collective knowledge base. (European Commission, 2023).

2.3 Exploitation

Exploitation involves actively using project results to create value through further research, product development, or societal applications. This is aimed at a targeted audience, including industry, policymakers, and other end-users who can directly apply the findings to drive innovation or address specific needs. Exploitation can lead to the creation of new standards, products, or policies and is essential for translating research outcomes into tangible societal, economic, or legislative advancements. (European Commission, 2023).

3. Areas of exploitation

This section outlines the process used to develop this deliverable and provides further details on the key areas of exploitation for the LAND4CLIMATE project. It also previews additional measures that will be incorporated in future updates to this plan, expanding the approach to the exploitation of LAND4CLIMATE results.

3.1 Process of creating this deliverable

The Sustainability and Exploitation Plan, Version 1 was developed collaboratively with the entire project consortium, following the guidelines established in the Grant Agreement. The process began with creating a survey for the consortium, focused on identifying and detailing exploitable results within LAND4CLIMATE. This survey invited consortium partners to list each exploitable result, describe its nature, and outline potential pathways for its exploitation. The survey questions can be found in Table 1.

Exploitable result, solution, or product
Target groups
Exploitation routes
Exploitation channels

Table 1. Survey to the project partners about exploitable results.

Using the survey responses, a list of exploitable results was created and considered possible exploitation routes, communication channels, and target audiences for each. The survey also served as an educational tool, helping the consortium understand the importance of continuous consideration of exploitation opportunities throughout the project.

Following the survey, the gathered information was consolidated, and an “owner” was assigned to each result. These owners, typically the partner responsible for the task related to each exploitable result, were then provided with a more detailed template. This template, shown in Table 2, prompted the owners to describe the exploitable result in greater detail and outline specific plans for its future exploitation.

Purpose and Content of exploitable result, solution, or product
Exploitation Routes
Exploitation Channels
Target audiences
Approximate Timeline

Table 2. Template sent to the identified “owners” about each identified exploitable result.

3.2 Exploitation routes

Exploitation routes for exploitable results encompass various ways in which a result, solution, or product can be adopted by others. Knowledge transfer plays a vital role, ensuring that findings and methods are replicated and shared. Academia serves as a significant pathway, where advancements

are furthered through higher education and research, whether through publications or integration into university curricula or lectures. Additionally, participation in future projects, especially within the EU, provides a means to expand on initial findings or develop them further. Commercial exploitation offers potential for new business ventures or consulting opportunities, while informing policy and decision-making ensures that insights contribute to shaping regulations or guiding public sector strategies.

3.3 Target audiences

The target groups for the exploitable results of this project include a range of stakeholders. First, local and regional decision-makers, public agencies, and potentially national policy-makers are key audiences. These groups, along with funding institutions, play a vital role by providing guidelines, legal frameworks, and financial incentives to encourage private landowners to implement innovative and proven nature-based solutions (NBS) on their lands. A second important group consists of various private landowners, either individuals or collective organizations, who could host these NBS measures. Within this category, frontrunning regions that pioneer these solutions and especially the replicating regions, who will be the first ones to exploit some of the results, are highlighted. Additionally, academics and scientific communities are considered essential for advancing the knowledge and evidence base.

TARGET GROUPS
Who will use or further up-take the results of the project? Who will benefit from the results of the project?
Local authorities and private landowners in replicating regions and beyond in continental Europe
Regional and national policy-making and funding authorities
Scientific community in the field of NBS to climate risks

Table 3. Target groups for dissimenation and exploitation from the Grant Agreement

3.4 Market Analysis

As outlined in the Grant Agreement, a market analysis will be conducted for each exploitable result. This analysis will be developed and included in the updated version of this plan, offering insights into market demand, the competitive landscape, and potential adoption challenges. It will enable us to position LAND4CLIMATE's outputs effectively within relevant markets, ensuring that exploitation strategies are realistic and aligned with community needs.

3.5 Working groups

For the updated version of this deliverable, dedicated working groups will be established to further develop and refine the exploitation plan for each exploitable result. These groups will be centred around the designated "owners" of each result, bringing together expertise to ensure effective and impactful exploitation of the results. Through this collaborative approach, the consortium aims to maximize the reach and impact of LAND4CLIMATE's outcomes, aligning each exploitation strategy with broader project goals and target audiences.

4. Intellectual property rights and Data

This includes management procedures for protection and exploitation to provide clear principles and guidelines on the disclosure of results and data with commercial potential, ownership of research results, and identification and protection of IP.

4.1 Principles and guidelines on the disclosure of results and data with commercial potential

All information in whatever form or mode of communication, which is disclosed by a Party to any other Party in connection with the LAND4CLIMATE Project during its implementation and which has been explicitly marked as “confidential” at the time of disclosure, or when disclosed orally has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within 15 calendar days from oral disclosure at the latest as confidential information by the Disclosing Party, is “Confidential Information”.

The Recipient must not to use Confidential Information otherwise than for the purpose for which it was disclosed and not disclose Confidential Information without the prior written consent by the Disclosing Party. It has to be ensured that distribution of Confidential Information internally to their organization by a Recipient shall take place on a strict need-to-know basis; and to return to the Disclosing Party, or destroy, on request all Confidential Information that has been disclosed to the Recipients including all copies thereof and to delete all information stored in a machine-readable form to the extent practically possible.

The Recipient shall be responsible for the fulfilment of the above obligations on the part of its employees or third parties involved in the Project and shall ensure that they remain so obliged, as far as legally possible, during and after the end of the Project and/or after the termination of the contractual relationship with the employee or third party.

The Recipient shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Project as with its own confidential and/or proprietary information, but in no case less than reasonable care. Each Recipient shall promptly inform the relevant Disclosing Party by written notice of any unauthorised disclosure, misappropriation or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

4.2 Ownership of research results

Results are owned by the Party that generates them. In case of joint ownership of Results in this Project, co-owners’ shares of ownership shall be proportional to the intellectual contribution invested in generating that specific Result. The joint owners shall agree on shares of ownership, all protection measures and on the division of related costs in a joint ownership agreement to be negotiated in. Where no joint ownership agreement has yet been concluded or in absence of a joint ownership agreement, each of the joint owners shall be entitled to use the jointly owned Results as follows:

- each of the joint owners shall be entitled to use their jointly owned Results for non-commercial research and teaching activities on a royalty-free basis, and without requiring the prior consent of the other joint owner(s).

- each of the joint owners shall be entitled to otherwise Exploit the jointly owned Results and to grant non-exclusive licenses to third parties (without any right to sub-license), if the other joint owners are given: (a) at least 45 calendar days advance notice; and (b) fair and reasonable compensation.

Notwithstanding letter a), in case the non-exclusive licenses are granted to third parties for commercial purposes, the prior written consent of the joint owners shall be obtained. The joint owners shall agree on all protection measures and the division of related cost in advance.

During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several Parties including but not restricted to publications and presentations, shall be governed by the following provisions. Prior notice of any planned scientific publication including a draft of the proposed publication shall be given to the other Parties at least 30 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement by written notice to the coordinator and to the Party or Parties proposing the dissemination within 15 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted. In case of a non-scientific publication in a newspaper, on social media, no prior notice is required. The Parties are asked to include information on their media activities in their reports.

4.3 Identification and protection of IP

Each Party shall implement its tasks in accordance with the Consortium Plan and shall bear sole responsibility for ensuring that its acts within the Project do not knowingly infringe third party intellectual property rights. Any Access Rights granted exclude any rights to sublicense unless expressly agreed otherwise in writing by all the Parties concerned. The granting of Access Rights may be made conditional on the acceptance of specific conditions aimed at ensuring that these rights will be used only for the intended purpose only for so long as it is necessary for those purposes and that appropriate confidentiality obligations are in place. Access Rights to Results and Background Needed for the performance of the own work of a Party under the Project and Access rights to Results for non-commercial research and for teaching activities shall be granted on a royalty-free basis.

5. List of exploitable results

This section presents the exploitable results of the LAND4CLIMATE project, accompanied by preliminary information on each. Responses were gathered from partners identified as "owners" of these results, using the table 2 question template. The questions addressed aspects such as purpose and content, exploitation channels, exploitation routes, target audiences, and an approximate timeline for the development of each result. While these responses outline actions planned or taken, it is important to note that this information is not final; it reflects the current situation, with many exploittable results still in development or yet to be initiated. More precise details will be included in the updated version of this plan. The partners are at varying stages in the development of these results, which will naturally lead to differences in the level of detail provided in their responses. This variation allows for a more comprehensive view of the project's progress and highlights diverse perspectives on the potential exploitation of each outcome.

Partner responsible	UNIBO
Purpose and Content	The exploitable output of Deliverable 2.5 is a comprehensive methodological framework and suitability map designed to assess the performance and feasibility of Nature-Based Solutions (NBS) across different climate risk scenarios. Mapping will be correlated by a portfolio of best practices and recommendations for correct and sustainable implementation of the NBS. This framework provides quantitative and qualitative indicators for evaluating NBS interventions based on effectiveness, efficiency, and socio-economic sustainability This replicable output could guide decision-makers in identifying appropriate NBS and offer the scientific community a basis for comparative studies.
Exploitation Routes	The results can be integrated into local climate adaptation plans, inform NBS implementtation strategies, and support comparative research on NBS effectiveness. The suitability map and associated best practices portfolio further support targeted decision-making for specific climate risk configurations. Scientific publications, presenting the framework and mapping methodology, provide an additional exploitation route, facilitating uptake and further research in the scientific community.
Exploitation Channels	• **Online Channels**: Dissemination through partners' websites (such as Ente Parco Delta Po website) or project website, social media, and newsletters • **Networks and Platforms**: Leveraging professional networks, academic forums, and climate adaptation conferences to reach target groups, especially decision-makers and researchers.
Target audiences	• **Local and Regional Decision-Makers**: Officials exploring NBS options for climate adaptation in their regions. • **Scientific Communities**: Researchers using the framework for studies and advancing NBS methodologies. • **Front Running Regions** and **replicating regions** • **Project partners**
Approximate Timeline	We expect to conclude the activities related to D2.5 by month 23. The exploitation process will probably begin earlier (Month 20).

Partners responsible	UNIBO, BOKU
Purpose and Content	Practical selection approach on how to decide about data requirements for modelling NBS effects. Set of indicators for each NBS expected for each frontrunning region within the project LAND4CLIMATE and a report reflecting on assessment of co-benefits related to NBS (set of indicators), methodology to assess NBS's social impacts, clustering trade-offs in dependency of NBS type and landscape type (urban, agricultural land, forest, water bodies, coastal, etc.)
Exploitation Routes	Academic routes (in the first place publications) and participation in further (EU) projects with the generated knowledge.
Exploitation Channels	Dissemination via (scientific) conferences. Partner's own channels (media, website, social media platforms), networks (personal and organisation's of partners), final conference, dissemination of research findings via (scientific) conferences.
Target audiences	Local and regional decision makers who are in the process of finding suitable NBS for fostering climate resilience and the scientific community to exploit the findings for further research. Project partners (frontrunning regions) and associated partners (replicating regions); public and private organisation looking to implement NBS measures with various local partners and researchers working on these themes. Topical academic community.
Approximate Timeline	Ongoing development

Partner responsible	ARR
Purpose and Content	The exploitable result encompasses three main components: a peer-to-peer learning event, roundtable discussions, and an internship program for students in front-running. The purpose of these initiatives is to create a collaborative environment where stakeholders can share best practices and experiences related to Nature-Based Solutions (NBS). The learning event will facilitate direct interaction among participants, enabling them to discuss challenges and successes in implementing NBS. The roundtable discussions will focus on strategic planning and policy recommenddations, while the internship program aims to provide students with hands-on experience in real-world projects, thus bridging the gap between academia and practice.
Exploitation Routes	The results will be adopted by various stakeholders, including educational institutions, NGOs, industry professionals, and government agencies. By integrating the outcomes of the learning event and the internship program into their existing curricula and operational frameworks, these entities can enhance their effectiveness in promoting NBS. Additionally, we will engage with replicant regions, which are areas that can benefit from the experiences shared during the events. This engagement will help in tailoring the solutions to local contexts, ensuring that the knowledge gained is not only disseminated but also practically applied.

	Development of Best Practice Guidelines; Replication/knowledge transfer (Toolkits and Replication Guides, Facilitating Knowledge Exchange) ; Academia routes (Research Papers and Case Studies) ; Informing policy/decision making (Policy Development and Advocacy); Informing policy/decision making; Showcasing effectiveness of NBS; Foster collaboration between different stakeholders
Exploitation Channels	To maximize reach and impact, the exploitation channels will include the partners' official websites, social media platforms (such as LinkedIn, Twitter, and Facebook), and newsletters targeting specific audiences. Each partner organization will utilize its network to share results, including industry events and conferences where the findings can be presented. The channels will also include collaborations with professsionnal associations and educational networks that can further promote the results in replicant regions, enhancing visibility and encouraging adoption. Other channels are BML Social Media and Newsletters; Round tables on the implementation of the Water Framework Directive and Floods Directive on national level; Expert groups on Water Directives on EU level.
Target audiences	The target audience encompasses a diverse group, including students interested in environmental sustainability, educators involved in teaching environmental studies, policymakers seeking to implement effective NBS strategies, and professionals working in related sectors. Additionally, stakeholders in replicant regions are a key focus, as they can directly apply the knowledge and experiences shared during the events to their local challenges. This multifaceted audience ensures that the outcomes of the deliverable reach those who can make meaningful changes in their communities and organizations.
Approximate Timeline	The timeline is in accordance with grant of the project. This timeline allows for adequate preparation and ensures that the results are effectively communicated and utilized by the intended audiences.

Partner responsible	UPT, ARR
Purpose and Content	The exploitable result is a comprehensive report that compiles stakeholder feedback on the implementation of Nature-Based Solutions (NBS). This report encapsulates a detailed analysis of good practices, along with the challenges, barriers, opportunities, and any emerging issues or concerns that stakeholders have encountered during the NBS implementation process. The purpose of this report is to provide a reflective and evaluative tool that can be used by policymakers, urban planners, environmental scientists, and other stakeholders involved in NBS projects. The insights contained within the report are intended to guide future NBS initiatives, ensuring that they are more effectively designed and implemented. By learning from direct stakeholder experiences—ranging from successes to obstacles—the report aims to enhance the effectiveness, efficiency, and sustainability of NBS across various contexts. This report serves as a vital resource for understanding the real-world implications of NBS on communities and ecosystems. It offers:

	Good Practices: Detailed examples of what has worked well in NBS projects, providing a blueprint for replicating success in different settings. Challenges and Barriers: Identifies specific difficulties stakeholders faced, offering insights into areas where additional resources or changes in approach might be necessary. Opportunities: Highlights potential areas for growth and additional benefits that NBS can offer, suggesting ways to maximize positive outcomes. Emerging Issues/Concerns: Sheds light on new or unforeseen aspects that could affect future NBS implementations, providing an early warning system for stakeholders to address these issues proactively. By synthesizing this feedback, the report acts as a feedback mechanism, enabling continuous improvement and adaptation of NBS strategies based on stakeholder experiences and environmental feedback.
Exploitation Routes	The report on stakeholder feedback regarding Nature-Based Solutions (NBS) implementtation from the LAND4CLIMATE project has several routes through which the findings can be taken up by various stakeholders: Policy Development: Government agencies and policymakers can utilize the insights from the report to develop new policies or amend existing ones to better support the implementation of NBS. The detailed accounts of challenges and barriers provided in the report can guide regulatory changes that remove impediments and streamline processes for NBS initiatives. Additionally, highlighting successful practices can inform the creation of incentive structures that encourage more widespread adoption of NBS. Educational and Training Programs: Educational institutions and training bodies can incorporate the findings into curricula and professional development programs. This could involve developing case studies based on the report's content or creating modules that address the specific challenges and opportunities identified. Strategic Planning for Environmental Organizations: Non-governmental organizations (NGOs) and environmental advocacy groups can use the report to strategize their advocacy and project implementation efforts. Understanding the barriers and emerging concerns allows these organizations to better tailor their approach to community needs and regulatory landscapes. They can also use the good practices outlined in the report as a model for designing their own projects or for advocacy efforts that promote best practices in environmental management. Community Engagement and Public Awareness: Local governments and community organizers can leverage the opportunities and good practices identified in the report to enhance community engagement. By hosting public forums, workshops, and discussions that explore these aspects, they can raise awareness about the benefits of NBS and encourage community input and participation, thereby fostering a sense of ownership and responsibility towards local environmental issues. Project managers: Project managers and teams currently implementing or planning to implement NBS can use the report as a feedback tool to refine their approaches. By addressing the challenges and barriers identified, they can improve the effective-

	ness of their ongoing projects. For new projects, the insights provided can help in designing more resilient and community-focused NBS initiatives.
Exploitation Channels	The insights and data gathered in the report on stakeholder feedback regarding Nature-Based Solutions (NBS) implementation can be disseminated and utilized through several potential exploitation channels: Academic and Research Publications: Researchers can use the findings to publish papers in academic journals or present them at conferences, contributing to the scholarly discourse on NBS. This helps in advancing the scientific understanding and technical knowledge about effective NBS practices and the challenges they face. Technical Guidelines and Best Practices Manuals: The report can be transformed into a set of technical guidelines or best practices manuals for different stakeholders, such as urban planners, environmental engineers, and landscape architects. These documents can serve as practical guides that help professionals implement NBS more effectively in various settings. Policy Briefs: Policy makers can use the insights from the report to draft policy briefs and white papers that argue for specific changes or enhancements in environmental policies. These documents can influence legislative and regulatory changes that facilitate more effective and widespread adoption of NBS. Workshops and Training Sessions: Organizations could develop workshops and training sessions based on the report's findings. These events can educate stakeholders about the implementation of NBS, discussing both the challenges and the successful strategies that have been identified. Grant Proposals and Funding Applications: Organizations can use the report to support grant proposals and funding applications for NBS projects by demonstrating the need for solutions to the challenges identified. The detailed documentation of stakeholder feedback can enhance the credibility and relevance of funding requests.
Target audiences	The results from the report on stakeholder feedback in the implementation of Nature-Based Solutions (NBS) are aimed at a diverse range of audiences. Government Officials and Policymakers: Local, regional, and national government officials and policymakers are primary audiences. They can use the findings to develop or adjust policies that facilitate the implementation of NBS, incorporating stakeholder feedback to ensure these policies are well-received and effective. Urban and Rural Planners: These professionals are involved in designing and implementing developmental projects that may include NBS. The report provides them with real-world feedback on the practical aspects of implementing these solutions in various landscapes, helping them to design more effective and sustainable urban and rural environments. NGOs: NGOs and other environmental groups can use the report to better understand community perspectives and challenges related to NBS. This understanding can help in crafting more targeted advocacy campaigns and in designing community engagement initiatives that promote ecological sustainability and climate resilience.

	Academic Researchers and Educators: Researchers in environmental science, urban planning, and related fields can delve into the report to build on the existing body of knowledge concerning NBS. Educators can use the findings to inform their teaching, integrating hands-on examples of stakeholder engagement and feedback into their curricula. Local Communities and Landowners: Landowners and local community members are both stakeholders and beneficiaries. They can use the information from the report to understand how NBS could impact them and how they can engage in the planning and implementation process to ensure that their needs and concerns are addressed.
Approximate Timeline	May 2027

Partner responsible	UPT
Purpose and Content	The exploitable result is a series of tailored training modules designed specifically to meet the diverse needs of stakeholders involved in Nature-Based Solutions (NBS) at the local level. The purpose of these training modules is to equip stakeholders with the necessary skills and knowledge to effectively implement and manage NBS. By customizing the training to fit the specific types of NBS and local conditions, the modules ensure that stakeholders are well-prepared to tackle the unique challenges and opportunities presented by NBS projects in their respective areas.
Exploitation Routes	The tailored training modules developed within the LAND4CLIMATE project have the potential to be taken up through several impactful routes: Academia Routes (e.g., publications): The insights and methodologies used in the development of the training modules can be documented and shared through scholarly publications. By publishing articles in peer-reviewed journals and presenting at academic conferences, the underlying research, successes, and challenges of designing and implementing these modules can contribute to the academic discourse on effective NBS implementation. This can foster further research and refinement of educational tools in this area, inspiring other institutions to adapt and implement similar training modules. Participation in Further (EU) Projects: The knowledge and expertise gained from the LAND4CLIMATE project can be leveraged to participate in future EU projects that focus on environmental sustainability, climate resilience, or urban and rural development. The project team can use their experience and the proven effectiveness of the training modules as a basis for collaborations and proposals for new projects, especially those seeking innovative educational and implementation strategies for NBS. Informing Policy/Decision Making:

	The outcomes of the training modules can play a crucial role in informing policy and decision-making processes. By demonstrating the effectiveness of stakeholder education in NBS implementation, the modules can provide policymakers with a model for capacity building that can be incorporated into environmental and urban planning policies. Workshops and seminars can be organized to directly engage with policymakers, showcasing how tailored training can facilitate the broader adoption of NBS and aid in achieving sustainability goals at various governmental levels.
Exploitation Channels	Here are some potential exploitation channels that can extend the impact and utilization of the training modules developed in LAND4CLIMATE project: Universities and Colleges: Collaboration with educational institutions to integrate the training modules into their environmental science or urban planning curricula. This can ensure that upcoming professionals are well-equipped with the latest NBS knowledge and practices. Vocational Training Centers: these training modules can be adapted for vocational training programs that prepare practitioners for roles in landscape design, environmental management, and urban development. Continuous Professional Development Courses: These training modules can be offered as part of continuous professional development courses for professionals in related fields such as urban planners, architects, and environmental consultants. This can help maintain a workforce that is knowledgeable about the latest trends and techniques in NBS. Certification Programs: Another option will be to develop certification programs around the training modules to provide formal recognition of expertise in NBS, which could enhance job prospects and professional credibility. Online courses: Digital platforms can be used to offer the training modules as webinars or part of an online course series. This would make the training accessible to a global audience and facilitate asynchronous learning. Government and Policy Maker Workshops: The training modules can be used to conduct workshops specifically designed for local government officials and policy-makers. These workshops would focus on the practical aspects of implementing NBS, using the training modules to bridge the gap between theory and real-world application. Collaborations with NGOs and Community Organizations: These organizations can help facilitate community-led NBS projects, using these training modules as a tool to empower local action. Publications: Training modules findings and methodologies can be used in public-shing articles in academic journals, scientific magazines, and researchers' blogs.
Target audiences	The target audiences for the training modules developed in environmental and climate resilience projects like LAND4CLIMATE encompass a diverse group of stakeholders, with specific interests and roles in implementing and advocating for NBS, as: Urban Planners and Architect: professionals directly involved in designing and implementing urban projects that can integrate NBS.

	Environmental Scientists and Researchers: academicians and field researchers focusing on environmental studies, sustainability, and climate change. Policy Makers and Government Officials: Local, regional, and national government officials responsible for drafting and implementing policies on land use, environmental protection, and climate adaptation. NGOs staff: people actively acting in different NGOs and community organizations. Educators, Trainers and students: individuals involved in environmental education at various levels, from primary schools to universities. Environmental Consultants and Advisers: consultants who advise cities, businesses, and organizations on environmental strategies.
Approximate Timeline	July 2025 – training modules should be ready for implementation

Partner responsible	ICLEI
Purpose and Content:	The result focuses on developing innovative funding mechanisms for NbS implementation on private land for the Replicating Regions. This includes tools like strategic land leases, and easements to incentivize landowners to adopt NbS solutions while aligning with climate adaptation goals.
Exploitation Routes:	The funding mechanisms will be shared with local and regional authorities for integration into climate adaptation policies. Private landowners will be targeted through landowner associations, promoting the economic benefits of adopting NbS. Knowledge-sharing events and policy dialogues will foster adoption by decision-makers.
Exploitation Channels:	Key channels include regional workshops, peer-to-peer learning events, and online media (project website, newsletters). Policy briefs and webinars will also be distributed to decision-makers and private landowners via platforms such as EURESFO, UrbanbyNature within ICLEI's network.
Target Audiences:	The target audience includes private landowners in replicating regions, local policymakers, and regional environmental agencies particularly from 150 chosen regions of the Mission Adaptation to Climate Change and their peers. Scientific and financial institutions in replicating regions will also benefit from learning about NbS funding tools.
Approximate Timeline	The funding mechanisms are currently in the testing phase in front-running regions. A funding mechanism for the replicating regions for wider exploitation through and landowner engagement is expected to start in Month 29 and be ready by Month 46

Partner responsible	BOKU, ICLEI
Purpose and Content:	The policy guidelines deliver a framework for integrating nature-based solutions (NbS) into regional and national adaptation strategies. These guidelines address the co-benefits of NbS with a focus on private land, such as biodiversity conservation and climate resilience, and suggest mechanisms for policy uptake in vulnerable regions.

Exploitation Routes:	The guidelines will be disseminated to regional policymakers and urban planners, aiming for inclusion in local adaptation plans. Through workshops and policy dialogues, the framework will guide policy changes in replicating regions and beyond.
Exploitation Channels:	Exploitation will occur through policy workshops, webinars, and policy briefs. The LAND4CLIMATE website, newsletters, and social media will further promote the guidelines, while direct outreach to policymakers through ICLEI networks will ensure widespread adoption.
Target Audiences:	The primary audiences are regional and national policymakers, urban planners, and environmental agencies involved in developing and implementing climate adaptation with a focus on private land plans in replicating regions.
Approximate Timeline:	The first policy briefs will be available by Month 28, and 2 policy dialogues will happen in the second part of the project.

Partner responsible	ICLEI
Purpose and Content:	The training programmes aim to enhance the capacity of regional authorities and landowners in implementing and upscaling NbS in replicating regions for climate resilience. These programmes offer both knowledge and technical skills for NbS design and new governance models on private land. Contents for training curricula will be developed based on understanding from the learning need assessment.
Exploitation Routes:	Training will be delivered through on-site workshops, interactive webinars, and e-learning modules. The materials and pre-recording training VDO will be available publicly for regions and communities beyond the project
Exploitation Channels:	The training will be promoted via project partner networks, local government networks, and academic institutions. Online platforms like Climate-Adapt and UrbanbyNature (UbN) will play a key role.
Target Audiences:	The main audiences are local and regional authorities, urban planners, and private landowners. Universities and vocational schools will also be targeted for including NbS in their curricula.
Approximate Timeline	Initial training modules will be rolled out in Year 2, with continuous updates based on participant feedback. Full exploitation will occur in Year 3 through extended training efforts.

Partner responsible	DEN
Purpose and Content	The **overall projects' communication and dissemination strategy** is a strategic and operational guide, written by the communication and dissemination team upon input from all partners through a questionnaire, to coordinate the implementation of LAND4CLIMATE communication and dissemination activities and results at project level. It is aimed at all consortium partners, with a particular focus to those who mainly implement project communication, dissemination and networking. It describes the objectives of the project communication and dissemination, provides key messages and identifies target audiences. It selects communication channels and dissemination tools, associated evaluation methods and key performance indicators (KPIs) as well as timetables, responsibilities and procedures. It also defines the

	visual identity and guidelines for the use of consistent project communication. The communication and dissemination strategy has been developed at the onset of the LAND4CLIMATE project as D6.1 and will be updated twice during the course of the project (D6.2 and D6.3) in order to reflect developments in the project and the evaluation of the effectiveness of the planned communication. The **Demonstration Site Communication Plans** are supporting the FRRs in organising effective local communication activities to increase the visibility of the demonstrators, also in the light of the planned replication in other locations nearby. The plans have been written by the FRR teams under the coordination of the partner in charge of the overall project communication. This guarantees the coherency of plans and the link to the overall project communication and dissemination strategy (see above). The plans are considered living documents, which will be continuously updated and are officially updated in M24 of the project. These plans also outline key stakeholder engagement activities as a way of raising awareness in local communities, gathering support from local partners and decision makers, and sharing knowledge and experience to replicate, expand and scale up these initiatives.
Exploitation Routes	Both the **overall projects' communication and dissemination strategy** as well as the **Demonstration Site Communication Plans** could be replicated by other projects, so could serve as knowledge transfer. This in form of the methodology of how the plans were developed, how tools and activities were planned as well as in the structure of presenting them in the plans. So they can be used in consultancy services as well as in the participation in further (EU) projects. The **Demonstration Site Communication Plans** can serve as an example for the FRR on how to plan their communication of specific activities at local level, so the format can be replicated and used by the local participating partner for showcasing the effectiveness of NBS and for fostering the collaboration between different stakeholders.
Exploitation Channels	For the **overall project level**, mainly partner's own channels, e.g. the organisational website and social media. Or organisations' networks, e.g. including the learnings and structure of the plans in new proposals or in the development of other communication and dissemination strategies. Also the final project conference is an opportunity to present how the strategy and the plan were developed and implemented and how activities were monitored and evaluated. At **FRR level** the plans can be promoted through institutional Social Media and Newsletter, round tables on the implementation of the Water Framework Directive and Floods Directive on national level and in Expert groups on Water Directives on EU level. The plans will also act as a blueprint for the delivery partners to raise awareness and support, and share knowledge, experience and skills with local communities, partners (including replicating regions) and decision makers via knowledge exchange, stakeholder workshops, citizen dialogues, student internships, peer-to-peer learning and round-tables.
Target audiences	For both **overall and local communication and dissemination strategies or plans** other organisations in charge of communication of an EU project and implementing demonstrators (e.g. of NBS measures) with various local partners.

	For the **local communication plans** the local and regional decision-makers and the public administration of the FRR, the LAND4CLIMATE replicating regions as well as frontrunning regions in other projects.
Approximate Timeline	The **overall projects' communication and dissemination strategy** has been developed at in M6 (February 2024) of the LAND4CLIMATE project as D6.1 and is therefore ready. However, it will be updated twice during the course of the project (in M24 (August 2025) and M46 (July 2027)) in order to reflect developments in the project and the evaluation of the effectiveness of the planned communication. Exploitation efforts therefore are already in place (e.g. using the strategy for other proposals) but will continue also after the end of the project. The **Demonstration Site Communication Plans** have been released in a first version in M12 of the project (August 2024) in a preliminary version which can be used as a basis for other plans at FRR level or for presenting it to the replication regions. However, it is expected that the update at M24 (August 2025) will provide a more detailed plan which has a higher quality to be exploited.

Partner responsible	TUDO
Purpose and Content	Review of the land policy instruments and strategies: Analyses of the legitimacy and justice of land policies in the context of landowners and land users as a diverse and heterogeneous group in order to explore the policy delivery gap and the instruments for strategic use of land policies for the mobilisation of private-owned land across the globe. Providing innovative governance and land policy solutions for NbS: Developing serious gaming in order to include different stakeholders' (local actors, private landowners) and their opinions into the decision-making & NbS implementation process.
Exploitation Routes	Publication on "policy instruments and strategies" and publication on the "serious gaming" Partnerships with professional associations, lobbying with politicians and NGOs
Exploitation Channels	Online available deliverables, scientific papers, policy briefs, expert's statements, political hearings, conference presentations Using university channels (website) in order to reach a broader audience
Target audiences	Frontrunning and replicating regions, CLIMATE Adapt, scientific community, academia, politicians, practitioners. We aim to convey key messages and translate complex facts into simple language
Approximate Timeline	Months 22-24

Partner responsible	TUDO

Purpose and Content	Future-oriented local climate adaptation scenarios – front-running regions: Presentation of local climate adaptation scenarios for front-running regions with multi-model ensembles of dynamically downscaled climate projections data coupled with future local developments trends. Climate risk analysis: Analysis of the potential impact of climate-related hazards under various possible future pathways of the front-running regions.
Exploitation Routes	Conducting workshops with & by frontrunning regions
Exploitation Channels	Online available deliverables
Target audiences	Frontrunning regions & replicating regions
Approximate Timeline	Month 13-18

Partner responsible	TUDO
Purpose and Content	Creating a list of no-regret NBS measures based on the frontrunning regions (D1.9) and sharing this in a workshop for replicating regions (D1.10)
Exploitation Routes	Conducting workshops with frontrunning and replicating region regions
Exploitation Channels	Online available deliverables
Target audiences	Frontrunning regions & replicating regions
Approximate Timeline	Month 15-21

Partner responsible	UJEP
Purpose and Content	Assessment methods - assessment interview for selection and justification of case study sites (D3.1.). The result is a file introducing the logic and providing guiding questions for the expert interview or focus group with NBS implementers.
Exploitation Routes	The project partners; Academia routes (academic publication), Thematic education; Replication/knowledge transfer ; Guidelines.
Exploitation Channels	Website, networks. It is an expert output its impacts within broader implementation is limited – it will be presented together with the result (or its application in practice) to show what it can do.
Target audiences	Implementors of NBS, funding agencies or donors that are eager to see and understand what is the value of money they provide.
Approximate Timeline	The deliverable 3.1. will be ready in M18. The results of its implementation will be ready in M28.

Partner responsible	UJEP
Purpose and Content	Academic review of business models, lessons learnt, shared good practices around the globe to be implemented elsewhere.
Exploitation Routes	Academia routes; Commercial routes; Networks
Exploitation Channels	Website, social media, discussion on workshops.
Target audiences	Implementors of NBS, property owners, regulators, funding agencies.
Approximate Timeline	The deliverable 3.1. will be ready in M22. The results of its implementation will be ready in M23.

Partner responsible	CEUS (Support UPT)
Purpose and Content	In Euskirchen, the primary exploitable results from LAND4CLIMATE project's various nature-based solution (NBS) measures - including the cultivation of Miscanthus, creation of tiny forests, Climate Parks, hedges, orchard meadows, and inner-city greenery - are enhanced environmental resilience and ecosystem services. These measures collectively aim to address multiple climate risks through natural and sustainable interventions in both urban and rural settings. Climate Risk Mitigation: Each of the NBS measures is designed to mitigate specific climate-related risks such as heavy rainfall, heatwaves, soil erosion, and drought. For example, Miscanthus planting on agricultural lands helps in water retention and reduces runoff, while tiny forests and Climate Parks in urban areas provide cooling effects and reduce heat island intensity. Biodiversity Enhancement: These measures contribute to increased biodiversity by providing diverse habitats for a variety of species. For instance, orchard meadows support a wide range of insects, birds, and small mammals, and hedges can house over 7000 different animal species. Carbon Sequestration: Fast-growing crops like Miscanthus can sequester significant amounts of CO2, thus contributing to climate change mitigation efforts. Socio-economic Benefits: Apart from ecological benefits, these measures also offer socio-economic advantages such as providing raw materials for building and packaging, enhancing property values, and improving recreational spaces for community well-being. The suite of NBS measures implemented in Euskirchen, Germany, under LAND4CLIMATE project serves as a comprehensive approach to tackling various environmental and climate-related challenges. The cultivation of Miscanthus, for example, is particularly beneficial on sloping lands where it can prevent soil erosion and manage water flow during heavy rains. Tiny forests and Climate Parks create dense, green spaces that cool urban areas, reduce runoff, and offer new recreational and educational opportunities for local communities. These measures are multifunc-

	tional, addressing several problems simultaneously while promoting sustainable land use and community engagement. Each initiative is designed to be replicable and scalable, providing a model for similar implementations in other regions.
Exploitation Routes	The results from the LAND4CLIMATE project's various nature-based solution (NBS) measures have the potential to be adopted and adapted by multiple stakeholders in different contexts: Local Governments and Regional Planners: Local and regional authorities can integrate the successful strategies from the LAND4CLIMATE project into urban planning and land management policies. By incorporating NBS into regulatory frameworks, local governments can ensure that new developments and landscape rehabilitations include sustainable practices that mitigate climate risks. Public investment in similar projects can also be justified by the demonstrated success of measures like tiny forests and Miscanthus planting, showcasing their benefits in terms of flood control, heat mitigation, and biodiversity. Agricultural Sector: Farmers and agricultural organizations may adopt practices such as Miscanthus cultivation due to its benefits in soil health and its potential as a cash crop with diverse applications. Extension services and agricultural cooperatives can facilitate the spread of this knowledge through training programs and pilot projects that demonstrate the economic and environmental benefits of such practices. Environmental NGOs and Community Groups: Non-governmental organizations focusing on environmental conservation and community development can use these projects as models for community-led initiatives. These groups can facilitate funding, provide expertise, and help mobilize community action for establishing similar NBS measures, enhancing local engagement and ownership of conservation efforts. Private Sector and Entrepreneurs: Businesses, especially in the construction, landscaping, and bio-material sectors, can leverage the products and methods developed from NBS measures. For example, using Miscanthus for building materials or packaging provides a sustainable alternative to fossil-based products, tapping into growing markets for green products. Companies may partner with project leaders to scale up production or improve the materials' properties for commercial use. Educational Institutions and Researchers: Academics and researchers can study the impacts and efficiencies of different NBS measures implemented in the project to further refine and optimize these solutions. Universities can incorporate findings into their curricula, promoting a new generation of environmental scientists and engineers trained in NBS approaches. Replicating Regions: Other regions and countries looking for tested solutions to environmental challenges can replicate the successful NBS measures from the LAND4CLIMATE project. International development agencies can support the transfer of these technologies and practices to regions facing similar climatic and ecological challenges, adapting them to local conditions. Public and Community Spaces: Urban and community planners can adopt tiny forests and Climate Parks as standard features in public and community spaces.

	These areas not only enhance urban biodiversity and manage climate risks but also serve as valuable educational and recreational resources for city dwellers.
Exploitation Channels	Several potential exploitation channels, allowing for broader application and replication across various sectors and regions are: Policy Development and Advocacy: The results can be used to influence local, regional, and national policies by demonstrating the effectiveness of NBS in addressing climate risks and enhancing biodiversity. Policymakers can integrate these practices into environmental, agricultural, and urban development regulations, ensuring sustainable growth and climate resilience. Educational Programs and Curriculum Integration: Educational institutions can incorporate the project's findings and methodologies into their curricula, offering courses that focus on sustainable land management, urban planning, and climate resilience. Workshops, seminars, and field trips based on these NBS can also be organized to educate students and professionals about the practical applications of these solutions. Community Engagement and Outreach: Local communities can be engaged through outreach programs that explain the benefits and maintenance of NBS like tiny forests and Miscanthus planting. These programs can encourage community participation in similar projects, enhancing public understanding and support for sustainable practices. Public-Private Partnerships: Collaborations between the public sector and private companies can facilitate the commercialization and broader application of NBS. For example, the biomass produced from Miscanthus can be used in the production of eco-friendly materials, engaging businesses in the construction, packaging, and energy sectors. Technology Transfer and Commercialization: Techniques and processes developed from the project, such as efficient planting methods or novel uses of perennial crops for environmental management, can be patented and licensed to companies or startups that specialize in ecological products and services. Professional Networks and Associations: Engaging with professional networks and associations related to urban planning, agriculture, and environmental conservation can help disseminate the project's results and encourage the adoption of NBS among professionals. These networks can facilitate knowledge exchange, collaboration, and advocacy for sustainable practices.
Target audiences	The target audience is broad and diverse, encompassing various groups with a stake in environmental management, sustainable development, and climate adaptation: Local and Regional Government Officials: These are policymakers and administrators who can use the project results to inform urban planning and environmental policy. They are key in integrating NBS into land use planning, flood management strategies, and biodiversity conservation efforts. Environmental Planners and Urban Developers: Professionals in these fields are directly involved in designing and implementing landscape and urban space projects.

	They can apply the practical aspects of NBS to enhance urban resilience, manage stormwater, and improve public spaces. Farmers and Agricultural Stakeholders: This group includes individual farmers, agricultural cooperatives, and agribusinesses that can benefit from adopting practices like Miscanthus cultivation to improve soil health, manage water resources, and diversify income sources. Academic Researchers and Students: Researchers in environmental science, ecology, hydrology, and related fields can delve deeper into the methodologies and outcomes of the project, using the data and results to support further research and innovation in NBS. Students can learn cutting-edge, practical applications of climate adaptation strategies through these case studies, preparing the next generation of environmental professionals. Non-Governmental Organizations: NGOs focused on environmental conservation, sustainable development, and community engagement can use the results to advocate for NBS, implement community projects, and educate the public about the benefits of such approaches.
Approximate Timeline	September 2025 – October 2026

Partner responsible	KLM (Support UPT)
Purpose and Content	The exploitable result from the "Revitalization of the floodplain in Krasna Lipa" within the LAND4CLIMATE project is the comprehensive restoration and sustainable management of the floodplain ecosystem. This project has led to the creation of a robust flood management system that incorporates both natural and engineered features to optimize water flow and enhance habitat quality. The primary purpose of revitalizing the floodplain in Krasna Lipa is to: Mitigate Flooding: Reduce the risk and impact of flooding in the area by restoring the floodplain's natural ability to absorb and slowly release floodwaters. Enhance Biodiversity: Increase the diversity of plant and animal life in the area by creating a more varied and suitable habitat. Improve Ecosystem Services: Enhance the quality of water, improve soil health, and increase carbon sequestration capabilities through natural processes. The revitalized floodplain in Krasna Lipa features a series of strategically designed interventions that work synergistically to control floodwaters and improve ecological health. This includes the re-establishment of native vegetation, recontouring of land to guide water flow, and installation of features like wetlands and buffer zones that filter pollutants and provide wildlife habitats. This integrated approach not only addresses the immediate concerns related to flooding but also contributes to long-term environmental sustainability and resilience against climate change impacts.

Exploitation Routes	The outcomes of the revitalization of the floodplain in Krasna Lipa, as part of the LAND4CLIMATE project, present valuable implications for various stakeholders. Here's how these results might be embraced by different groups: Local Residents: Local residents stand to benefit directly from the floodplain revitalization through enhanced flood protection, which can lead to reduced property damage and increased safety during flood events. Additionally, the improved natural environment may enhance the quality of life through better air quality and more recreational spaces. Engagement efforts such as community meetings and informational brochures can help educate residents on the benefits and maintenance of the floodplain. Visitors: Visitors to the area, such as tourists or eco-tourism enthusiasts, can enjoy a richer experience due to the increased biodiversity and aesthetic enhancements of the floodplain. Informational tours, eco-trails, and visitor centers can provide insights into the ecological importance of floodplain systems and the specific interventions made in Krasna Lipa, thereby promoting ecological tourism and local businesses. Private Landowners: Private landowners in the vicinity of the revitalized floodplain may notice an increase in property values due to the enhanced environment and reduced flood risks. Moreover, they can adopt similar sustainable land management practices on their properties. Workshops, demonstration projects, and incentive programs can help in spreading the adoption of these practices, showing landowners the practical benefits and techniques of NBS. Replicating Region: Staré Křečany: Staré Křečany, as a replicating region, can leverage the successful implementation strategies and outcomes from Krasna Lipa to address similar ecological and flood management challenges in their area. Collaborative projects and exchange programs between the two regions can facilitate the transfer of knowledge and experiences, with detailed project documentation and joint training sessions providing the necessary foundation for replication. Local and Regional Decision-Makers: Decision-makers such as local government officials and regional planners can use the success story of Krasna Lipa as a model for NBS implementation in other regions facing similar challenges. Policy frameworks, funding allocations, and strategic planning sessions can be informed by the tangible results seen in Krasna Lipa, promoting broader adoption of similar projects across the region.
Exploitation Channels	To effectively disseminate and leverage the results of the revitalization project in Krasna Lipa from the LAND4CLIMATE project, various exploitation channels can be utilized: Policy and Regulation Integration: Incorporating the successful practices and outcomes from the project into local, regional, and national policy frameworks serves as a primary exploitation channel. Decision-makers can use the results to inform and enhance policies related to land use, water management, and environmental protection, thereby facilitating the broader adoption of nature-based solutions. Educational and Outreach Programs: Developing targeted educational programs and outreach campaigns can help raise awareness about the benefits of floodplain revitalization. These programs could target schools, community groups, and the general public and include workshops, guided tours of the revitalized areas, and

	educational materials that highlight the ecological and community benefits of the project. Public-Private Partnerships: Forging partnerships with private entities, such as real estate developers, agricultural cooperatives, and environmental organizations, can drive the practical application and funding of similar projects. These partnerships might focus on developing sustainable land use practices that incorporate floodplain management and biodiversity conservation. Technical Guides and Toolkits: Producing comprehensive technical guides and toolkits that detail the methodologies, technologies, and best practices developed during the project can provide valuable resources for other regions and stakeholders looking to implement similar projects. These resources can be distributed through professional networks, industry conferences, and online platforms. Academic and Scientific Publications: Publishing detailed case studies and research findings in academic journals and at conferences can help establish the scientific validity and replicability of the floodplain revitalization efforts. These publications can reach a global audience of academics, practitioners, and policymakers, inspiring further research and application. Digital and Social Media Campaigns: Utilizing digital platforms and social media to share updates, success stories, and informational content about the project can reach a broad audience quickly. Replication Workshops and Seminars: Organizing workshops and seminars for other regions interested in replicating the project can directly transfer knowledge and experience. These events can be platforms for detailed discussions on project planning, challenges, best practices, and lessons learned.
Target audiences	The target audience for the results from the revitalization of the floodplain in Krasna Lipa encompasses a diverse range of stakeholders, each with specific interests and potential impacts from the project: Government and Policy Makers: This group includes local, regional, and national government officials and policymakers responsible for environmental, land use, and water management policies. They can utilize the project outcomes to inform and refine policy frameworks and regulations, ensuring that sustainable practices are integrated into broader developmental plans. Their involvement is crucial for securing funding, legislative support, and for the scaling of similar projects across other regions. Environmental Planners and Engineers: Professionals in urban planning, civil engineering, and landscape architecture who focus on integrating ecological and hydrological functions into urban and rural environments. They are interested in applying practical knowledge from the project to design and implement similar sustainable infrastructure projects that enhance ecological functions and community resilience. Academic Researchers and Students: Academics and students in environmental sciences, ecology, hydrology, and related fields who are interested in the latest research and practical applications of nature-based solutions. They use case studies from the project to support their own research, teachings, and learning, contributing to the academic discourse on sustainable land management.

	Local Communities and Residents: Local residents and community groups directly affected by changes in the floodplain areas, such as farmers, homeowners, and local businesses. They benefit from enhanced environmental quality, reduced flood risk, and potentially increased land values. Engaging this group is essential for fostering community support, ensuring the longevity and maintenance of the project. Environmental NGOs and Advocacy Groups: Non-governmental organizations focused on conservation, climate action, and sustainable development. These groups can leverage project results to advocate for more widespread adoption of nature-based solutions, engage in community outreach, and secure funding or partnerships for future projects. Private Landowners: Landowners in and around the project area who may adopt similar practices on their properties. The project outcomes can demonstrate the economic and ecological benefits of sustainable land management, encouraging more private stakeholders to invest in or support nature-based solutions.
Approximate Timeline	September 2025 – October 2026

Partner responsible	NPCS (Support UPT)
Purpose and Content	Exploitable Results: Private Land Revitalization: The transformation of private land through nature-based interventions that restore ecosystem functions and enhance biodiversity. Drainage Removal: The re-naturalization of water flow in landscapes to restore natural hydrological processes and improve water quality. Springs Renewal: The restoration of natural springs to increase water availability and quality, supporting both local biodiversity and community water needs. Conference on Practice: A knowledge-sharing event that brings together experts, practitioners, and stakeholders to discuss successful practices and innovations in land and water management. Leaflet Publication: Informative materials designed to educate the public on the importance and methods of sustainable land and water management. Children Teachings: Educational programs targeted at young students to foster awareness and understanding of environmental conservation from an early age. Purpose of these exploitable results: Enhancing Ecosystem Services: The revitalization and restoration efforts aim to enhance ecosystem services such as pollination, water regulation, and soil fertility. This leads to more resilient ecological systems that can better withstand and adapt to climate change. Educational Outreach: The conference and publications serve to disseminate knowledge and best practices widely, ensuring that the lessons learned from the

	project reach a broad audience. This facilitates the replication of successful strategies in other regions and promotes a unified approach to environmental management. Community Engagement and Capacity Building: By involving children and the general public, the project builds long-term capacity for environmental stewardship, ensuring that future generations are equipped with the knowledge and skills to continue and expand upon current efforts. The LAND4CLIMATE project's focus on revitalizing private land, removing outdated drainage systems, and renewing springs leads to directly measurable improvements in land health and water quality. The conferences and educational materials produced under this project not only share these results but also provide a blueprint for replication, fostering a wider understanding and adoption of these practices. The educational initiatives specifically aimed at children are designed to instill a sense of responsibility and curiosity about the natural world, encouraging early engagement with environmental issues. Collectively, these results contribute to a more informed and proactive approach to environmental management and conservation.
Exploitation Routes	The results from the LAND4CLIMATE project can be effectively taken up by various groups, each leveraging the outcomes to further their respective goals in environmental management and education. Landowners: Landowners can utilize the project's practices and results to enhance the resilience and productivity of their properties. By implementing strategies such as private land revitalization and springs renewal, they can increase biodiversity, improve water quality, and potentially increase land value. The project can facilitate workshops, create detailed guides, and offer consultations to help landowners understand and implement these changes effectively. Municipalities: Municipal governments can adopt the project's findings to inform urban and rural planning efforts. By integrating the successful NBS from the project, such as drainage removal and floodplain management, municipalities can enhance flood resilience and manage urban heat islands more effectively. The project might offer tailored seminars and planning tools to help integrate these practices into municipal policies and operations, fostering sustainable urban development. Scientists, urban planners, engineers: This group, including environmental scientists, urban planners, and engineers, can apply the project's results to their work in developing new projects or refining existing ones. The project can contribute to professional development through conferences, specialized publications, and continuous learning courses that provide in-depth analysis of the project's methodologies and outcomes. Professional associations could also play a role in disseminating this information among their members. School Children: Educational initiatives within the project can significantly impact young minds, making school children a vital audience for disseminating knowledge about sustainable practices and the importance of biodiversity. The project can develop educational modules, interactive activities, and field trips that align with school curricula, helping children understand the science behind the project and the importance of active participation in sustainability efforts.

Exploitation Channels	The potential exploitation channels for the results from the LAND4CLIMATE project encompass a variety of methods to ensure the knowledge and practices developed reach and benefit a wide audience. Educational Outreach Programs: Leveraging educational institutions to embed the project's findings into curriculums can have long-term benefits. Workshops, guest lectures, and project-based learning modules can be developed in collaboration with schools and universities to teach students about the project's nature-based solutions (NBS). This can also extend to adult education and professional development courses for those in relevant fields. Technical Guidance and Consulting Services: Creating a consultancy wing or partnering with existing environmental consultancies to provide expert advice and implementation support for NBS can facilitate direct application of project outcomes. This can include site assessments, design services, and maintenance plans for entities interested in adopting similar initiatives. Policy Advocacy and Public Campaigns: Working with environmental NGOs and advocacy groups to push for policy changes based on the project's results can lead to wider adoption of NBS. Public campaigns can raise awareness about the benefits of NBS and pressure policymakers to support and fund these initiatives. Online Platforms: Developing online platforms that offer resources, project templates, and interactive tools can help disseminate the knowledge gained. These platforms can provide access to project data, guides on implementing NBS, and forums for discussing issues and solutions. Academic Publications: Publishing detailed findings in academic journals, trade publications, and conference proceedings ensures that the professional community and academic scholars recognize and can build upon the project's work. This also helps in establishing the project's methodologies as standard practices.
Target audiences	The results of the LAND4CLIMATE project are relevant to a diverse array of audiences, each with distinct interests and potential benefits from the project's outcomes. Environmental Policy Makers: These include local, regional, and national government officials who can integrate the project's findings into policy frameworks. This group is crucial for translating scientific research into actionable policies that can be implemented on a broad scale. Urban Planners and Landscape Architects: Professionals in urban development, landscape architecture, and related fields can apply the project's NBS directly in their work. This includes designing urban spaces that utilize NBS for stormwater management, heat reduction, and biodiversity enhancement. Environmental Scientists and Researchers: Academics and researchers who focus on climate resilience, biodiversity, and sustainable land use can further the scientific base started by the LAND4CLIMATE project. They can use the data and methodologies developed to support their own research, contribute to academic literature, and develop new projects that build on the LAND4CLIMATE findings.

	Non-Governmental Organizations (NGOs): Environmental and community-focused NGOs can use the project results to support their conservation efforts, community outreach, and educational programs. These organizations often serve as bridges between the scientific community and the general public, translating complex concepts into actionable community projects. Local Communities and Landowners: Individuals and communities directly affected by issues like flooding, erosion, and biodiversity loss can apply the project's solutions to improve their local environment. Engaging with these groups through workshops, pilot projects, and community programs can help them understand and advocate for NBS in their areas. Educators and Students: The educational materials and programs developed from the project can be used in schools, universities, and professional training courses. Educators and students in environmental sciences, urban planning, and related fields can gain practical insights and skills that are directly applicable to modern challenges in sustainability and climate adaptation.
Approximate Timeline	July 2025 – training modules should be ready for implementation

Partner responsible	BGLD, NPCS (Support UPT)
Purpose and Content	The exploitable result within the LAND4CLIMATE project for the Lafnitz catchment is the implementation of a comprehensive set of Nature-Based Solutions (NBS) designed to enhance ecosystem resilience and functionality. This includes the restoration of natural water retention areas, reforestation efforts, and the creation of green infrastructure that supports biodiversity and improves water quality. The purpose of these NBS implementations is to mitigate environmental risks such as flooding and erosion, improve water management, and enhance biodiversity in the Lafnitz catchment area. These measures aim to create a more resilient ecological landscape that can better withstand the impacts of climate change and provide sustained benefits to local communities and ecosystems. The NBS in the Lafnitz catchment encompass a series of strategic interventions aimed at restoring and enhancing the natural landscape's ability to manage water and support diverse biological communities. By rehabilitating natural functions and structures, these solutions collectively work to stabilize the local climate, improve air and water quality, and increase the area's resilience to climatic extremes, providing both environmental and socio-economic benefits.
Exploitation Routes	Considering the exploitable results of implementing Nature-Based Solutions (NBS) in the Lafnitz catchment as part of the LAND4CLIMATE project, the uptake by various stakeholders can be outlined as follows: Local and Regional Decision-Makers: Local and regional decision-makers, including municipal and regional governments, play a crucial role in the adoption and scaling of NBS. They can integrate the successful strategies from the Lafnitz catchment into regional planning and development policies. By witnessing the benefits such as

	reduced flood risks and enhanced biodiversity, these decision-makers may implement similar NBS in other areas, promoting sustainable land use and climate resilience practices. Additionally, policy adjustments and funding allocations can be influenced by the demonstrated successes, leading to broader regulatory support for NBS. Private Landowners: Private landowners directly benefit from the implementation of NBS by experiencing improvements in land value, biodiversity, and ecosystem services such as enhanced soil quality and water regulation. The success stories from the Lafnitz catchment can encourage landowners to adopt similar practices, especially if incentivized through grants, tax breaks, or technical support from local governments or environmental NGOs. Engagement strategies such as workshops and field visits to the project sites can further facilitate understanding and adoption. Project Partners: Project partners involved in the LAND4CLIMATE project, can use the successful implementation of NBS as case studies or models for future projects. These partners can disseminate findings, tools, and methodologies developed during the project through academic publications, industry reports, conferences, and digital platforms. This dissemination helps in replicating successful NBS in other regions and contexts, broadening the impact beyond the initial project scope. Frontrunning and Replicating Regions: Frontrunning regions that are pioneers in implementing NBS can serve as benchmarks and provide valuable lessons for replicating regions. These regions can exchange knowledge through inter-regional networks, workshops, and joint initiatives. Success in frontrunning areas like the Lafnitz catchment can inspire confidence and provide practical blueprints for other regions considering similar ecological challenges and solutions. Replicating regions can adapt the NBS to fit local conditions with guidance from the experiences and data provided by the frontrunning regions.
Exploitation Channels	To maximize the impact and adoption of the results from projects like the implementation of Nature-Based Solutions (NBS) in the Lafnitz catchment of the LAND4CLIMATE project, several exploitation channels can be employed: Policy Integration: Integrating the successful practices and outcomes of NBS into local, regional, and national policy frameworks can serve as a primary channel for exploitation. By working with government agencies and legislative bodies, project outcomes can influence policy decisions, leading to the integration of sustainable practices in environmental, agricultural, and urban development regulations. Educational Programs and Workshops: Developing educational programs and workshops targeting stakeholders such as landowners, farmers, urban planners, and students can help disseminate knowledge and skills related to NBS. These educational initiatives can include hands-on training, field trips to demonstration sites, and interactive seminars that provide participants with the tools and understanding necessary to implement and maintain NBS. Public-Private Partnerships (PPPs): Forming partnerships with private companies, especially those in the agriculture, real estate, and construction industries, can facilitate the practical application of NBS. These partnerships can lead to the development of new business models that incorporate NBS for risk management, such as in the insurance industry, or in creating greener infrastructures.

	Community Engagement Initiatives: Engaging directly with local communities through forums, town hall meetings, and social media can help raise awareness and foster community support for NBS projects. Community involvement is crucial for the sustained success and acceptance of such initiatives, particularly when changes to land use or new practices are involved. Technical Manuals and Toolkits: Producing comprehensive technical manuals and toolkits that detail the processes, benefits, and maintenance of NBS can serve as valuable resources for various stakeholders interested in adopting similar strategies. These resources can be distributed through academic and industry conferences, as well as made available online for broader access. Digital Platforms and Applications: Developing digital platforms and mobile applications that provide easy access to information, monitoring, and management tools can enhance the visibility and usability of NBS. Such technologies can offer real-time data, best practices, community forums, and even remote consultancy services to assist stakeholders in implementing and managing NBS effectively. Scientific Publications and Case Studies: Publishing detailed case studies and research findings in scientific journals and popular media can help establish the credibility and visibility of NBS projects. These publications can reach a global audience, inspiring similar initiatives worldwide and providing a robust evidence base for the effectiveness of NBS in various contexts.
Target audiences	The target audience for the results from Nature-Based Solutions (NBS) projects, such as those implemented in the Lafnitz catchment of the LAND4CLIMATE project, spans a diverse range of stakeholders. Each group has distinct characteristics and reasons for their interest in NBS: Government and Policy Makers: This group includes local, regional, and national government officials and policymakers who are responsible for making and enforcing laws related to land use, environmental protection, urban planning, and climate adaptation. They can use the project results to inform and develop more effective policies and regulations that promote the use of NBS for sustainability and climate resilience. Engaging with this audience is crucial for securing institutional backing and resources necessary for large-scale implementation. Environmental and Planning Agencies: Officials and staff within environmental and planning agencies can leverage NBS project results to guide land management and development planning. These professionals are typically involved in balancing growth with environmental sustainability and are instrumental in applying the research findings to practical, real-world applications to mitigate impacts on ecosystems. Academic and Research Institutions: Researchers and academics can delve into the scientific and technical aspects of the project results. They play a key role in furthering the study of NBS, evaluating their effectiveness, and developing new methodologies based on the project outcomes. This audience is vital for peer review and the advancement of knowledge within the field. Industry Professionals: This includes architects, developers, urban planners, and businesses in sectors like agriculture, construction, and real estate who can integrate NBS into their projects and designs. For them, NBS can offer innovative solutions to

	regulatory requirements, market demands for sustainability, and opportunities for differentiation in competitive markets. Local Communities and Landowners: Local residents and landowners are directly impacted by the implementation of NBS in their areas. They can benefit from improved environmental conditions, enhanced property values, and potential economic opportunities arising from eco-tourism and community-based conservation projects. Engaging this group is essential for gaining local support and ensuring the long-term success and maintenance of NBS. Non-Governmental Organizations (NGOs): NGOs focused on environmental conservation, community development, and climate change are important disseminators and advocates of NBS. They can use the results to support advocacy campaigns, engage in community outreach, and facilitate partnerships between different stakeholder groups.
Approximate Timeline	September 2025 – October 2026

Partner responsible	DELTAPO (Support UPT)
Purpose and Content	The primary exploitable results from the LAND4CLIMATE project's three specific nature-based solutions (NBS) are: Restored Coastal Dunes: The restoration of dunes serves as a natural barrier against coastal erosion and flooding, thereby protecting coastal landscapes and infrastructures. Deep-rooted Vegetation on River Embankments: Planting deep-rooted vegetation helps stabilize riverbanks, reducing erosion and enhancing the structural integrity of river embankments. Halophyte Plantings: These salt-tolerant plants are used to combat the effects of drought and prevent saltwater intrusion into freshwater systems, crucial for maintaining agricultural productivity and ecosystem balance in coastal and estuarine environments. Each NBS is designed to address specific environmental challenges: Dune restoration mitigates the impact of coastal erosion and flooding. Deep-rooted vegetation on riverbanks aims to prevent soil erosion and stabilize river embankments. Halophytes are planted to manage drought conditions and reduce salt-water intrusion, which are critical in preserving freshwater resources and soil quality. These solutions also contribute to biodiversity, improve water and soil quality, and increase the resilience of ecosystems to climate change and human activities. The three NBS measures implemented as part of the LAND4CLIMATE project collectively contribute to a holistic approach to managing environmental risks associated with water bodies—from coastal areas to riverbanks. The restoration of

	coastal dunes not only prevents erosion but also provides habitats for diverse species, enhancing ecological diversity. Planting deep-rooted vegetation on river embankments secures the soil and reduces sedimentation, preserving water quality and aquatic habitats. Halophytes offer a unique solution to improve agricultural resilience in salt-affected areas, turning previously marginal lands into productive ones and helping to sequester carbon. These measures are designed to be sustainable, cost-effective, and replicable, making them ideal for adaptation strategies in similar environments worldwide.
Exploitation Routes	The nature-based solutions (NBS) implemented in the LAND4CLIMATE project have the potential to be adopted by a variety of stakeholders due to their demonstrable benefits in addressing environmental risks and enhancing ecosystem resilience. These results might be embraced by different groups, as it follows: Local and Regional Decision-Makers: Local and regional authorities can integrate the successful strategies from the LAND4CLIMATE project into urban planning and environmental policy. By incorporating NBS into regulatory frameworks, they ensure that new developments and landscape rehabilitations include sustainable practices that mitigate climate risks. Public Agencies: Environmental, water management, and land use agencies can use these NBS projects as templates for managing public lands and watersheds. Private Landowners: Landowners in coastal or riparian zones can adopt similar NBS on their properties to reduce risks associated with erosion, flooding, and saltwater intrusion. The direct benefits—such as improved land stability and potential increases in land value—can serve as strong incentives. Demonstrations and success stories can be shared through local workshops, field visits, or through cooperative extensions to encourage adoption. Front Running Regions: Regions that are pioneers in implementing innovative environmental solutions can use the LAND4CLIMATE project's outcomes to further enhance their leadership and expertise in sustainable land management. These regions can serve as demonstration sites, offering practical examples and best practices that can be observed and emulated by other regions. Frontrunning regions might develop partnerships with research institutions to track the long-term impacts and benefits of these NBS, thereby refining and adapting strategies over time. Replicating Regions: Regions that replicate successful strategies benefit from the groundwork laid by frontrunners. They can adapt the NBS to local conditions with the advantage of lessons learned from initial implementations. Replicating regions can engage in active knowledge exchange through regional networks, conferences, and shared digital platforms to discuss challenges and successes in adopting these NBS.
Exploitation Channels	Here are several potential channels through which the project results can be effectively utilized: Policy Integration: Incorporating the results and methodologies of NBS into local, regional, and national policy frameworks can drive broader adoption and ensure that future developments consider sustainability and resilience. Policymakers can use these results to draft new regulations or amend existing ones to promote NBS in both urban and rural planning efforts.

	Community-based Projects: Local communities, especially those directly impacted by issues like erosion and flooding, can adopt NBS through community-driven projects. These projects can be facilitated by NGOs or local governments and can include community gardens, restoration of local wetlands, and community-led monitoring of local ecosystems. Educational Programs and Workshops: Developing educational programs that incorporate lessons from the LAND4CLIMATE project can help spread awareness and knowledge about NBS. These programs can target schools, local community groups, and professional development courses for engineers, urban planners, and environmental scientists. Public-Private Partnerships: Engaging with private sector stakeholders such as real estate developers, agriculture cooperatives, and tourism operators can help fund and expand the implementation of NBS. Technical Consultancy Services: Organizations involved in the LAND4CLIMATE project can offer consultancy services to other regions or countries looking to implement similar NBS. This can include planning, implementation support, and impact assessment services, helping to transfer knowledge and experience gained from the project. Research and Development: Continuing research on the effectiveness and optimization of NBS can lead to better techniques and more innovative solutions. This research can be published in academic journals, presented at conferences, and patented if new technologies or methodologies are developed.
Target audiences	The results from the LAND4CLIMATE project's implementation of nature-based solutions (NBS) have a diverse target audience, spanning multiple sectors and levels of governance. Local and Regional Government Officials: These are key decision-makers who can leverage NBS to enhance urban and rural planning. They are responsible for integrating sustainable practices into development plans and can use the project results to justify investments in green infrastructure, update zoning laws, and improve climate resilience policies. Urban Planners and Landscape Architects: Professionals in urban development and landscape design can directly apply NBS to current and future projects. They need practical, proven examples of how integrating ecological considerations can benefit community welfare, enhance biodiversity, and increase the aesthetic and economic value of developments. Environmental NGOs: NGOs play a crucial role in advocacy, education, and the implementation of sustainability projects. They can use the outcomes of the LAND4CLIMATE project to promote ecological conservation, engage communities in sustainability initiatives, and push for stronger environmental protections at all levels of government. Farmers and Agricultural Sector Stakeholders: This group can adopt NBS such as planting deep-rooted vegetation or using halophytes to improve soil health, manage

	water, and increase crop resilience against climate variability. They benefit directly from practices that enhance productivity and sustainability on agricultural lands. Academia and Research Institutions: Researchers and students can delve into the data and methodologies used in the LAND4CLIMATE project to advance the science of NBS, develop new technologies, and refine existing ones. Policy Advisors and Consultants: Experts who provide advice on policy and strategy to governments and businesses can use the insights gained from the LAND4CLIMATE project to shape effective environmental policies and business strategies that prioritize sustainability.
Approximate Timeline	September 2025 – October 2026

Partner responsible	ARR (Support UPT)
Purpose and Content	The primary exploitable result of this initiative within the LAND4CLIMATE project is the comprehensive implementation of Nature-Based Solutions (NBS) across diversified landscapes such as forests, agricultural lands, and urbanized areas. These NBS are designed to be multifunctional, addressing both flood reduction and drought resistance, thus providing a resilient infrastructure that integrates ecological, hydrological, and societal benefits. The purpose of these nature-based solutions is to create a landscape that is resilient to the dual challenges of floods and droughts. By integrating these solutions into various land uses, the project seeks to: Enhance the ecological health of the Roňava River Catchment. Increase the landscape's resistance to climatic extremes, thereby reducing the vulnerability of local communities and ecosystems. Promote sustainable land management practices that ensure long-term resilience and biodiversity conservation. The implementation strategy includes identifying suitable locations for NBS that optimize ecological functionality and climatic resilience. By doing so, the project creates a robust framework for mitigating flash floods and addressing water scarcity. This proactive approach not only preserves the landscape's ecological integrity but also ensures it can sustain and adapt to future environmental challenges. The deployment of NBS aims to foster a landscape that not only withstands climatic extremities but also thrives, ensuring both human and ecological well-being in the Roňava River Catchment.
Exploitation Routes	The results from the LAND4CLIMATE project's implementation of Nature-Based Solutions (NBS) offer substantial benefits that can be leveraged by various stakeholders. Local and Regional Decision-Makers: Local and regional decision-makers can integrate the NBS strategies into urban planning and regional development policies. By incorporating these sustainable practices into zoning laws, land use planning, and flood management strategies, they can significantly enhance the resilience of their

	communities. These decision-makers might organize forums and workshops to educate stakeholders about the benefits of NBS and to encourage their broader adoption. Public Agencies and National Policy-Makers: These bodies can utilize the successful deployment of NBS to draft and amend national environmental and climate adaptation policies. Public agencies could establish pilot projects as benchmarks for national rollouts, while policy-makers might consider revising national funding frameworks to support NBS initiatives, thereby promoting sustainable land management practices across different regions. Private Landowners: Private landowners can adopt NBS on their properties to enhance land value, manage water resources more efficiently, and reduce risks related to climate extremes. Incentives such as tax breaks, subsidies, or technical support from government programs can encourage more landowners to participate in these initiatives. Project Partners: Partners within the project can leverage the results to refine their methodologies and to showcase the effectiveness of NBS in grant applications and at conferences. This can help attract additional funding and partnerships, and also serve as case studies or models for similar future projects. Frontrunning and Replicating Regions: Frontrunning regions can serve as live demonstrations of successful NBS implementation, providing valuable insights and learnings that can be replicated in other areas. These regions can host study visits, create detailed reports on their experiences, and mentor replicating regions that are looking to implement similar strategies.
Exploitation Channels	The successful outcomes of the LAND4CLIMATE project's Nature-Based Solutions (NBS) offer various exploitation channels, ensuring that the project's innovations and strategies are disseminated and adopted widely across different sectors and regions. Policy Integration: NBS outcomes can be integrated into local and national environmental, urban planning, and climate adaptation policies. Workshops and policy briefs targeted at decision-makers can help translate these outcomes into actionable policies. Educational Programs: Incorporating NBS into educational curriculums at universities and schools to educate the next generation of environmental scientists, urban planners, and policymakers. Developing certification programs and continuing education courses for professionals in relevant fields to update their knowledge and skills in implementing NBS. Community Engagement: Organizing community engagement initiatives to raise awareness about the benefits of NBS and to foster community-led projects. Encouraging community participation in monitoring and maintaining NBS applications to boost local engagement and data collection. Public-Private Partnerships: Forming partnerships with private companies to fund and expand NBS projects, leveraging private investment for public good. Research and Development: Using the data and outcomes as a basis for further scientific research in environmental sciences, hydrology, and climate resilience. Partnering

	with universities and research institutions to explore new dimensions and improvements in NBS applications.
Target audiences	The target audiences for the outcomes of the LAND4CLIMATE project's Nature-Based Solutions (NBS) are diverse, encompassing various stakeholders who can benefit from and contribute to the widespread adoption of sustainable practices. Government Officials and Policy Makers: These officials can use the project's findings to inform and enhance public policy, urban planning, and environmental regulations. They are crucial for integrating NBS into legal frameworks and public policy, ensuring that sustainable practices are supported by the government. Urban and Environmental Planners: Professionals in urban planning, landscape architecture, and environmental management who are directly involved in designing and implementing urban and rural development projects. They can apply NBS to create more resilient and sustainable environments, utilizing the project's outcomes to innovate in their project designs. Academic Researchers and Educators: Scholars and educators who can further the scientific research surrounding NBS and teach new generations about sustainable practices. They can use the project's results to develop new research projects, enhance academic curricula, and publish scholarly articles. Non-Governmental Organizations (NGOs): NGOs focused on environmental conservation, community development, and climate change advocacy. They can leverage the project's results to support their initiatives, engage in community projects, and influence policy through advocacy. Local Communities and Landowners: Individuals and communities directly impacted by climate change and environmental degradation. These groups can participate in and benefit from local NBS projects that enhance their living conditions and local environment.
Approximate Timeline	July 2025 – training modules should be ready for implementation

Partner responsible	BWBA (Support UPT)
Purpose and Content	The exploitable result from the implementation of NBS measures in the Upper Timiș river catchment within the LAND4CLIMATE project includes an integrated system of green infrastructure designed to manage water flow and enhance ecological stability. This system comprises newly created wetlands, reforested areas, and riparian buffers that collectively reduce flood risks, enhance biodiversity, and improve the microclimate of the region. The purpose of this integrated green infrastructure system is multifaceted: Flood Reduction: By enhancing natural water absorption and retention capabilities through features like wetlands and permeable landscapes, the system aims to mitigate the impact and frequency of flooding, protecting local communities and ecosystems.

	Habitat Creation and Biodiversity Enhancement: The system provides vital habitats for local and migratory wildlife, promoting ecological diversity and stability. This contributes to the resilience of the local ecosystem against climate change and habitat fragmentation. Hydrological Connectivity: Connecting new areas to the river system helps in maintaining the natural hydrological cycles, supporting aquatic life and improving water quality. Microclimate Improvement: The presence of vegetated areas and water bodies can moderate local temperatures, reduce heat stress in urban areas, and contribute to overall climate resilience. The system of green infrastructure in the Upper Timiș river catchment serves as a practical and sustainable approach to address environmental and climate-related challenges. It consists of strategically placed natural elements that work in harmony to provide essential ecosystem services such as flood mitigation, habitat provision, and climate moderation. This solution not only benefits the environmental health of the region but also supports the wellbeing of its communities by creating more livable and resilient landscapes.
Exploitation Routes	The above mentioned results and methodologies can be adapted and adopted by various stakeholders. Here's how these results might be taken up by different groups: Front-Running Regions: Front-running regions, those which pioneer the adoption of innovative solutions like NBS, can utilize the successful strategies and results from the Upper Timiș river catchment as models. By showcasing the benefits such as flood reduction and biodiversity enhancement, these regions can set benchmarks and offer practical insights for similar ecological and geographical contexts. Engagements through workshops, conferences, and publications can disseminate knowledge, encouraging other regions to adopt similar practices. Replicating Regions: Replicating regions can learn from the successes and challenges faced by the Upper Timiș project. Tailored adaptation of the NBS measures to suit local conditions can be facilitated through active knowledge exchange platforms like webinars, joint research projects, or inter-regional cooperation agreements. These regions can implement adjusted versions of the strategies to address specific local environmental issues, guided by the detailed documentation and evaluation reports provided by the front-running implementations. BWBA (Partner Project): As a partner project, BWBA can integrate the outcomes from the Upper Timiș initiative into its own framework, leveraging the established methodologies and results to enhance its project deliverables. Collaborative efforts might include sharing technical expertise, co-developing further NBS measures, and even joint funding applications to scale the impacts. This cooperation not only enriches the project outcomes but also broadens the scope of applicability across different project sites. Private Landowners: Private landowners play a crucial role in the success of NBS, especially in regions where significant portions of land are privately owned. The demonstrable benefits from the Upper Timiș project, like enhanced land value and ecosystem services, can incentivize landowners to participate in or initiate similar NBS projects. Engagement strategies may include financial incentives, recognition pro-

	grams, and support services like technical advice and monitoring tools to facilitate the adoption and maintenance of NBS on private lands.
Exploitation Channels	To maximize the impact and adoption of the results from projects like the implementtation of Nature-Based Solutions (NBS) in the Upper Timiș river catchment as part of the LAND4CLIMATE project, several exploitation channels can be employed: Policy Integration: Integrating the successful practices and outcomes of NBS into local, regional, and national policy frameworks can serve as a primary channel for exploittation. By working with government agencies and legislative bodies, project outcomes can influence policy decisions, leading to the integration of sustainable practices in environmental, agricultural, and urban development regulations. Educational Programs and Workshops: Developing educational programs and workshops targeting stakeholders such as landowners, farmers, urban planners, and students can help disseminate knowledge and skills related to NBS. These educational initiatives can include hands-on training, field trips to demonstration sites, and interactive seminars that provide participants with the tools and understanding necessary to implement and maintain NBS. Public-Private Partnerships (PPPs): Forming partnerships with private companies, especially those in the agriculture, real estate, and construction industries, can facilitate the practical application of NBS. These partnerships can lead to the development of new business models that incorporate NBS for risk management, such as in the insurance industry, or in creating greener infrastructures. Technical Manuals and Toolkits: Producing comprehensive technical manuals and toolkits that detail the processes, benefits, and maintenance of NBS can serve as valuable resources for various stakeholders interested in adopting similar strategies. These resources can be distributed through academic and industry conferences, as well as made available online for broader access. Digital Platforms and Applications: Developing digital platforms and mobile applications that provide easy access to information, monitoring, and management tools can enhance the visibility and usability of NBS. Such technologies can offer real-time data, best practices, community forums, and even remote consultancy services to assist stakeholders in implementing and managing NBS effectively. Scientific Publications and Case Studies: Publishing detailed case studies and research findings in scientific journals and popular media can help establish the credibility and visibility of NBS projects. These publications can reach a global audience, inspiring similar initiatives worldwide and providing a robust evidence base for the effectiveness of NBS in various contexts.
Target audiences	The target audience for the results from Nature-Based Solutions (NBS) projects, such as those implemented in the Upper Timiș river catchment within the LAND4CLIMATE project, spans a diverse range of stakeholders. Each group has distinct characteristics and reasons for their interest in NBS: Government and Policy Makers: This group includes local, regional, and national government officials and policymakers who are responsible for making and enforcing laws related to land use, environmental protection, urban planning, and climate adaptation. They can use the project results to inform and develop more effective policies and

	regulations that promote the use of NBS for sustainability and climate resilience. Engaging with this audience is crucial for securing institutional backing and resources necessary for large-scale implementation. Environmental and Planning Agencies: Officials and staff within environmental and planning agencies can leverage NBS project results to guide land management and development planning. These professionals are typically involved in balancing growth with environmental sustainability and are instrumental in applying the research findings to practical, real-world applications to mitigate impacts on ecosystems. Academic and Research Institutions: Researchers and academics can delve into the scientific and technical aspects of the project results. They play a key role in furthering the study of NBS, evaluating their effectiveness, and developing new methodologies based on the project outcomes. This audience is vital for peer review and the advancement of knowledge within the field. Industry Professionals: This includes architects, developers, urban planners, and businessses in sectors like agriculture, construction, and real estate who can integrate NBS into their projects and designs. For them, NBS can offer innovative solutions to regulatory requirements, market demands for sustainability, and opportunities for differentiation in competitive markets. Local Communities and Landowners: Local residents and landowners are directly impacted by the implementation of NBS in their areas. They can benefit from improved environmental conditions, enhanced property values, and potential economic opportunities arising from eco-tourism and community-based conservation projects. Engaging this group is essential for gaining local support and ensuring the long-term success and maintenance of NBS. Non-Governmental Organizations (NGOs): NGOs focused on environmental conservation, community development, and climate change are important disseminators and advocates of NBS. They can use the results to support advocacy campaigns, engage in community outreach, and facilitate partnerships between different stakeholder groups.
Approximate Timeline	September 2025 – October 2026

6. Conclusions

This initial version of the Sustainability and Exploitation Plan establishes a foundation for maximizing the LAND4CLIMATE project's impact and ensuring its outputs have lasting value. By outlining key strategies for engaging diverse stakeholders—such as policymakers, private landowners, and local communities—this deliverable sets the stage for widespread application and adaptation of project results. This plan will be revisited and expanded in Month 36, incorporating updated insights and refined approaches to further strengthen the pathways for sustainability and exploitation across different contexts.

References

Dorato, S., Firus, K., et al (2023). Communication and Dissemination Strategy – first version (LAND4CLIMATE Deliverable 6.1)

Dorato, S., Firus, K., Giorgi, S., (Eds.) (2024). D6.5 – Demonstration sites communication plans (LAND4CLIMATE Deliverable 6.5)

European Commission: European Research Executive Agency, Communication, dissemination & exploitation what is the difference and why they all matter, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2848/289075

Grant Agreement No. 101112781

Greiving, S, Hartmann, T. (2024). Data Management Plan (LAND4CLIMATE Deliverable 7.3)

Land4Climate

https://land4climate.eu/

Funded by
the European Union