



Habitat Restoration Plan Development

2026



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Executive Summary	4
1. Strategic and Policy Context for Habitat Restoration in Kosovo	5
1.1 European benchmark for restoration planning	5
1.2 National Biodiversity Strategy and Action Plan (2011–2020)	6
1.3 The report “Importance of Habitat Restoration”	7
1.3.2 Habitat restoration as a response to biodiversity loss and climate change	7
1.3.3 Multi-dimensional habitat restoration benefits	8
1.3.4 The role of communities and capacity building in habitat restoration	8
1.3.5 Lessons learned from selected case studies on habitat restoration and implementation	8
1.3.6 Co-production of scientific and local knowledge	9
2. Restoration strategy: priority ecosystems and intervention framework	10
2.1 Priority ecosystems	10
2.2 Proposed restoration framework	11
2.3 Key implementation risks and mitigation measures	13
3. Riparian Buffer	14
3.1 Base and rationale for riparian restoration in Kosovo	14
3.2 Riparian Buffer Restoration Framework	15
3.2.1 Site selection	15
3.2.2 Site assessment	16
3.2.3 Restoration decision framework	16
3.2.4 Passive restoration pathway	17
3.2.5 Active restoration pathway	17
3.2.4 Monitoring and Indicators	18
3.2.5 Governance and implementation model	19
4. Meadow landscapes	19
4.1 Meadows in Kosovo: baseline, trends and strategic significance	21
4.1.1 Extent and recent trends in meadow/pasture area	21
4.1.2 Protected areas context and why it matters for meadow restoration priorities	21
4.2 Rationale for meadow restoration: ecological, socio-economic and climate resilience	22
4.2.1 Biodiversity, habitat integrity and connectivity	22
4.2.2 Pollinators and agricultural productivity insurance	22
4.2.3 Soil organic carbon, sequestration potential and soil health outcomes	23
4.2.4 Water regulation, erosion control and disaster-risk reduction	23
4.2.5 Livelihoods, agriculture, tourism and cultural values	24
4.2.6 Threats and drivers of meadow degradation in Kosovo	24
4.3 Meadow landscape restoration framework	24
4.3.1 Site selection	25
4.3.2 Site Assessment	25
4.3.3 Restoration Decision Framework	26
4.3.4 Passive restoration pathway	26
4.3.5 Active restoration pathway	27
4.3.6 Monitoring and Indicators	27
4.3.7 Governance and Stakeholders	28

4.4 Alternative meadow systems: beyond traditional land-use	28
4.4.1 Alternative meadow restoration framework	29
4.4.1 Site selection	29
4.4.2 Site assessment	30
4.4.3 Active restoration pathway	30
4.4.4 Monitoring and Indicators	30
4.4.5 Governance and Stakeholders	31
5. Integrating biodiversity within productive landscapes	32
5.1 Restoration framework for biodiversity in productive landscapes	33
5.1.1 Site selection	33
5.1.2 Site assessment	34
5.1.3 Active restoration pathway	34
5.1.4 Monitoring and Indicators	35
5.1.5 Governance and Stakeholders	35
6. Conclusion	37

Executive Summary

This document aims to develop the Habitat Restoration Plan for Kosovo, conceived as a guiding document that supports ecological regeneration, improves ecosystem functions, and strengthens a sustainable approach to managing degraded habitats. The plan establishes a methodological and practical basis for identifying, assessing, and planning restoration interventions in selected ecosystems.

The document builds on previous analysis and research carried out by EC Ma Ndryshe and adopts a holistic understanding of biodiversity, considering species, habitats, and the wider territorial conditions that sustain them as interconnected. In this sense, restoration is approached not only through the protection of individual species, but also through the improvement, reconfiguration, and long-term management of habitats that support broader ecological relationships.

Based on this approach, the plan focuses on three priority ecosystem types: riparian buffers, meadow landscapes (including rural and urban systems), and biodiversity zones within productive agricultural land. These ecosystems are widely present across Kosovo, already partially functional but often degraded, and offer strong potential for scalable and measurable restoration. For each, a dedicated restoration framework is proposed, structured through common phases including site selection, assessment, implementation pathways, monitoring, and governance.

A key finding from Kosovo's existing biodiversity strategies and related planning documents is the absence of sufficiently developed biodiversity indicators, as well as limited frameworks for restoration planning and monitoring. This creates an important gap in the country's ability to guide, assess, and evaluate restoration efforts, while highlighting the need for practical and adaptable restoration models.

In this context, the Habitat Restoration Plan is positioned not only as a planning instrument, but also as a framework for learning and institutional development. The proposed interventions are intended to restore ecological functions, improve habitat conditions, and generate knowledge for future replication and policy development, contributing to a more coherent national restoration agenda.

The process underpinning the document is based on the review of existing documentation, the use of data provided by EC Ma Ndryshe, and ecological and territorial assessments grounded in the logic of the targeted ecosystems. Methodologically, the work is structured through interconnected phases, including baseline analysis, ecosystem identification, stakeholder consultation, and the definition of objectives, monitoring mechanisms, and implementation directions.

Habitat Restoration Plan Development

1. Strategic and Policy Context for Habitat Restoration in Kosovo

This chapter establishes the strategic baseline for a Habitat Restoration Plan for Kosovo by synthesising three core reference documents: the EU Nature Restoration Regulation, Kosovo's Strategy and Action Plan for Biodiversity 2011–2020, and the report *Research and Documentation of the Importance of Habitat Restoration* published by EC Ma Ndryshe within the framework of the project *Research, Assessment, and Development of Documents on Biodiversity, the Impact of Climate Change on Biodiversity, Habitat Restoration, and Long-Term Habitat Management*.

It also incorporates findings from two public meetings on river basin management organised by EC Ma Ndryshe, which brought forward concrete concerns that both align with and deepen the strategic and documentary findings discussed here. The meetings were held within the framework of the project *Biodiversity Conservation and Adaptation to Climate Change*, funded by the Embassy of Sweden in Prishtina through the project *Empowering Environmental Civil Society Organisations in Kosovo*, implemented by the Community Development Fund (CDF), and included institutional representatives, environmental organisations, local communities, academics, and media actors.

In addition, the chapter draws on fieldwork activities carried out during the project, including meetings with stakeholders, experts, and local actors from the target areas.

1.1 European benchmark for restoration planning

The EU Nature Restoration Regulation is presented by the European Commission as the first continent-wide, comprehensive restoration law of its kind, combining a long-term overarching objective with binding targets for specific habitats and species groupings.¹

Two features are especially relevant for Kosovo as a benchmark (even where the regulation is not legally binding domestically). First, it anchors restoration in measurable outcomes and timebound delivery: measures should cover at least 20% of EU land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050. Second, it formalises restoration planning as a governance task: EU countries are expected to submit National Restoration Plans by September 2026 and are required to monitor and report progress, with the European Environment Agency contributing technical reporting on progress.

Under this framework, restoration is understood as an active process of improving the condition of degraded ecosystems so that their structure, functions, and capacity to support biodiversity are progressively recovered. In this sense, the EU approach provides not only targets and planning obligations, but also a clear conceptual

¹ European Commission, "Nature Restoration Regulation," https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-regulation_en.

direction: restoration is treated as a practical response to ecosystem degradation, distinct from protection alone and oriented toward long-term ecological recovery.

For Kosovo, the relevance of this framework lies in the principles it offers for structuring a restoration approach from the outset. These include, first, an emphasis on ecological recovery rather than general environmental ambition; second, the use of measurable and time-bound objectives; third, the need to base restoration on assessment, monitoring, and scientific evidence; fourth, the recognition that restoration measures must be adapted to different ecosystem types and conditions; and fifth, the understanding of restoration as a long-term process requiring implementation, follow-up, and revision over time.

Beyond the regulation itself, some EU Member States and supporting institutions have translated this framework into more operational models, including distinctions between passive recovery, assisted restoration, and more intensive reconstruction, as well as phased processes of assessment, design, implementation, monitoring, and post-implementation management. These operational models are not set out in the Regulation in the same terms, but they are useful as implementation-oriented interpretations of the broader EU restoration framework.

1.2 National Biodiversity Strategy and Action Plan (2011–2020)

The National Biodiversity Strategy and Action Plan (2011–2020) represents Kosovo's main strategic document in the field of biodiversity protection. It was developed by the Ministry of Environment and Spatial Planning, in cooperation with the Kosovo Environmental Protection Agency, and adopted as a guiding framework for integrating biodiversity into sectoral policies and institutional planning at the national level.

The strategy sets out long-term objectives for biodiversity conservation, the protection of natural habitats, and the sustainable use of natural resources. Its principal aims include halting biodiversity loss, improving the status of threatened species and habitats, strengthening institutional capacities for nature management, and increasing public awareness of the importance of biodiversity.

In its assessment of threats, the strategy clearly identifies the main pressures affecting ecosystems in Kosovo, including habitat degradation and fragmentation, the uncontrolled use of natural resources, land-use change, pollution, and the growing impacts of climate change. Habitat loss is highlighted as one of the most critical factors undermining ecological functioning and the long-term conservation of biodiversity.

However, despite its strategic importance, the document also reveals a number of structural limitations when considered in relation to current restoration needs. The strategy is primarily oriented toward protection and regulatory measures, while the active restoration of degraded habitats is addressed only in broad terms and without clearly defined operational mechanisms. In addition, the implementation period of the strategy (2011–2020) has already expired, and there is a lack of updated

assessments reflecting recent ecological changes, climate pressures, and territorial transformations.

Another important limitation concerns the lack of consolidated biodiversity databases and up-to-date monitoring systems for habitats, species, and ecological conditions across the territory. This significantly constrains evidence-based planning, prioritization, and evaluation, and makes it more difficult to identify where intervention is most urgently needed and how ecological change should be measured over time.

A further gap lies in the limited presence of legally binding instruments that would translate biodiversity objectives into enforceable and measurable obligations. While the strategy establishes an important policy direction, its provisions do not in themselves create a sufficiently strong operational framework for restoration, implementation, monitoring, and long-term accountability.

At the same time, this gap points to an important opportunity. One of the most valuable contributions of future restoration efforts in Kosovo could be the development of biodiversity indicators, which are currently absent or insufficiently developed in a systematic and territorially applicable way. Restoration projects could serve not only to improve ecological conditions on the ground, but also as a basis for establishing and testing indicators for habitat quality, ecological connectivity, species presence, and ecosystem functionality. In this sense, restoration would not only support biodiversity recovery, but also help build the technical and institutional foundations for a more robust system of biodiversity monitoring and environmental governance in Kosovo.

1.3 The report “Importance of Habitat Restoration”

The 2025 EC Ma Ndryshe report Importance of Habitat Restoration identifies habitat restoration as a strategic framework for addressing environmental challenges in Kosovo. It treats restoration as an integrated process, combining spatial planning, environmental policy and active community participation. Restoration is framed not as a one-off technical fix but as a long-term, adaptive endeavour to strengthen ecological integrity and social well-being under changing climate conditions. The report is based on interdisciplinary research and case-study analysis (Danube Delta, Iberian lynx, LIFE El Hito) to derive lessons for potential restoration projects in Kosovo.

1.3.2 Habitat restoration as a response to biodiversity loss and climate change

The report emphasises that biodiversity loss and climate change are linked challenges that habitat restoration jointly addresses. Restored wetlands, forests and riparian zones sequester carbon, regulate water flows and buffer extreme weather, thereby directly mitigating climate impacts. At the same time, reconnecting fragmented habitats increases resilience: ecological corridors and improved habitat quality help species adapt to shifting conditions. Importantly, the international policy context now mandates restoration, for example the UN Decade on Ecosystem Restoration (2021–2030) and the new EU Nature Restoration Law set binding

targets to rehabilitate degraded ecosystems. Aligning Kosovo's approach with these frameworks provides a clear reference for structuring restoration efforts and ensures consistency with established international practices.

1.3.3 Multi-dimensional habitat restoration benefits

Habitat restoration delivers multi-dimensional benefits (ecological, social and economic) that reinforce each other. Ecologically, it recovers degraded functions: reinstating natural vegetation and hydrological regimes revives ecosystem processes, improves biodiversity and enhances system resilience. For example, restored floodplains and riparian forests help stabilise soils and maintain baseflows, reducing flood and drought risk. Socially, restored habitats provide clean water, healthier ecosystems and public green spaces. Communities gain from reduced pollution and new recreational or educational opportunities, which build local support for conservation. Economically, restoration is an investment: natural infrastructure cuts costs (e.g. flood damage) and boosts livelihoods. Together, these benefits make restoration a catalyst for climate adaptation in Kosovo.

1.3.4 The role of communities and capacity building in habitat restoration

Successful habitat restoration requires active community involvement and the development of local capacities. Technical interventions alone are often insufficient, while participatory approaches support long-term stewardship and adaptive management.

Integrating local ecological knowledge with scientific methods improves the relevance and effectiveness of interventions. Capacity building, including training in monitoring and maintenance, ensures the sustainability of restoration efforts.

Overall, restoration should be approached as a collaborative process, with community engagement embedded from the outset.

1.3.5 Lessons learned from selected case studies on habitat restoration and implementation

Three European case studies illustrate diverse restoration approaches and lessons. The Danube Delta project (Romania/Ukraine) is a basin-scale intervention: it reconnected channels and floodplains, reintroduced keystone species (e.g. beavers, grazing cattle) and involved local communities in wetland management. It showed that large-scale hydrological restoration can boost both biodiversity and local economies (through fisheries and ecotourism) when governance is coordinated (Danube Delta Biosphere Reserve Authority, EU funding, cross-border cooperation). The Iberian lynx project (Spain/Portugal) is species-focused: it reintroduced the flagship lynx alongside prey recovery and habitat corridors. Its success depended on extensive habitat restoration, genetic management and multi-decade institutional support (LIFE funding, national programs). This demonstrates that species-led initiatives work best when embedded in broad ecosystem recovery and cross-border collaboration. The LIFE El Hito project (Cuenca, Spain) combined habitat restoration with negotiated land use: through purchase agreements and stewardship contracts with farmers, salt pans and lagoons were restored. It highlights that aligning ecological goals with landowners' interests (via co-financing, agriculture-environment

measures and EU LIFE grants) enables restoration in working landscapes. Common lessons from all cases are clear: scale up restoration beyond isolated plots, adopt adaptive management (monitoring and feedback), involve diverse stakeholders, and link restoration to economic incentives (e.g. eco-tourism, sustainable farming) and supportive policies. In summary, Kosovo’s plan should prioritise landscape-scale targets (not only individual sites), build cross-sector partnerships, and secure multi-source financing to translate ambition into action

Case Study	Scale	Main Intervention	Governance / Finance	Transferable Lesson
Danube Delta	Basin-scale (Danube floodplain)	Hydrological restoration (reconnected channels, wetland rewetting) and keystone species reintroduction	Managed by Danube Delta Biosphere Reserve (RO), multi-country coordination; EU funds (LIFE, Natura 2000) plus NGO support	Large-scale, process-focused restoration can yield ecosystem and economic gains when combined with community engagement and ecotourism
Iberian Lynx	Regional (Iberian Highlands)	Species-led recovery (lynx reintroduction, prey restoration, habitat corridors)	Coordinated Spain–Portugal effort; long-term LIFE and national conservation funding	Flagship species programmes succeed only when embedded in broader habitat and prey restoration with sustained institutional support
LIFE EI Hito	Local (Cuenca basin, Spain)	Wetland restoration via negotiated land-use (wetland creation, agro-environment schemes)	EU LIFE project with co-financing; stakeholder agreements with farmers	Integrating restoration with local land uses (through stewardship contracts) creates multi-benefit outcomes in working landscapes

Sources: The above synthesis is drawn from EC Ma Ndryshe’s Importance of Habitat Restoration report (2025) and its case studies, supplemented by restoration literature on ecosystem services and EU restoration policy.

1.3.6 Co-production of scientific and local knowledge

Stakeholder consultations in Kosovo’s river basins revealed acute pressures that restoration must address. These include chronic pollution (dumping of construction and municipal waste), unregulated gravel mining that destabilises riverbeds, and

insufficient sewage treatment leading to degraded water quality. Hydropower dams and diversions have fragmented aquatic habitats, contributing to declines in fish (trout, eel) and wetland biodiversity. Climate stressors (more frequent floods and droughts) are further exacerbated by degraded river systems.

Any restoration approach related to water systems should therefore take these pressures into account, ensuring that interventions respond directly to the underlying causes of degradation rather than addressing symptoms alone.

Notably, some river corridors show signs of natural recovery: pioneering willows and shrubs are recolonising former extraction sites, indicating that passive regeneration can occur if protected. However, local understanding of these processes remains limited, and such regrowth is often perceived as neglect. The plan must therefore combine active restoration with awareness-raising and education.

2. Restoration strategy: priority ecosystems and intervention framework

2.1 Priority ecosystems

Based on the analysis in the previous chapter, which highlights habitat degradation, fragmented governance, and the absence of operational restoration frameworks in Kosovo, this plan prioritises meadows (including urban meadows), riparian areas, and biodiversity zones within farming landscapes. The focus is not on the formal designation of restoration targets, but on identifying a coherent and scalable restoration geography. These ecosystems are selected because they are already partly biodiverse, spatially distributed across the territory, and suitable for incremental restoration, while representing the most immediate overlap between ecological need, implementation feasibility, and territorial relevance.

They are not formally protected areas, but often exist as transitional or “in-between” zones across the territory. These systems connect different land uses, support multiple species groups, and enable phased, scalable restoration. While frequently under-recognised in legal and planning frameworks, they hold significant potential to restore ecological functions, improve habitat quality, and strengthen connectivity between ecosystems, agricultural land, settlements, and water systems.

More specifically, these ecosystems are prioritised for the following reasons:

Meadows (rural and urban): Low-intensity grasslands are key for pollinators and soil health. Restoring flower-rich meadows provides forage, nesting sites and habitat for insects, birds and other wildlife, while also connecting crop lands and wild areas. Urban meadows extend these benefits into urban areas. Both rural and urban meadows thus link biodiversity goals with everyday land use and are relatively easy, low-cost places to begin restoration.

Riparian areas: Riverbanks and floodplains have huge impact functions and naturally

connect landscapes. Healthy riparian buffers stabilise banks, improve water quality and regulate floods while linking mountain, agricultural and lowland habitats. These zones are under heavy pressure (pollution, gravel mining, dams), but even modest restoration (planting native vegetation, removing barriers) yields multiple benefits: cleaner water, reduced erosion, wildlife habitat and cooler microclimates. Because rivers form linear corridors, protecting and restoring them creates wide landscape connectivity.

Farmland biodiversity areas: Remnant habitat patches on farms, like hedgerows, field margins, small wetlands and similar features are also prioritised. These features extend natural refuges into working landscapes and boost ecosystem services (pollination, pest control, soil retention). In practical terms they are also relatively low-cost and can be scaled up through agrienvironment incentives, benefiting both biodiversity and farm resilience. This focused set of ecosystems allows the restoration plan to start where interventions are most effective and feasible, while laying the groundwork for expanding biodiversity and climate resilience across Kosovo.

Within these ecosystems, restoration is guided by two complementary logics: no-harm zones and connectivity zones. No-harm zones refer to areas where ecological value persists and where the priority is to prevent further degradation while supporting recovery. Connectivity zones refer to areas that can extend, buffer, or reconnect existing ecological assets across the landscape. In this context, meadows, urban meadows, riparian corridors, and biodiversity areas within farming sites are prioritised as suitable landscapes within which these logics can be applied.

Methodologically, the plan adopts a multispecies approach, linking restoration actions to indicator species and ecological relationships. This enables restoration sites to function not only as areas of intervention, but also as prototypes that generate data, methods, and knowledge for future scaling and institutional development.

To support implementation, the prioritised ecosystems can be sequenced according to feasibility, scale, and expected timeframes. While all three ecosystem types are important, their role differs in the first phase of restoration.

Phase 1 priority (short-term, pilot implementation):

Meadow landscapes and biodiversity zones within productive agricultural land are prioritised for initial implementation. These systems can be restored at smaller scales, require fewer institutional dependencies, and allow for rapid testing of restoration methods and monitoring approaches.

Phase 2 priority (medium to long-term implementation):

Riparian buffer restoration is prioritised as a second phase due to its larger territorial scale, higher dependency on inter-institutional coordination, and the need to address complex pressures such as wastewater, hydromorphology, and land-use conflicts. Pilot interventions can begin early, but full implementation requires longer-term coordination.

2.2 Proposed restoration framework

These three ecosystems operate at different spatial and temporal scales. River systems function at a larger territorial scale and are characterised by dynamic processes, requiring restoration interventions that are coordinated over longer timeframes. In contrast, meadow ecosystems and biodiversity areas within agricultural landscapes can be implemented and tested at smaller scales and within shorter timeframes. This makes them suitable for more immediate interventions and pilot applications.

Nevertheless, the restoration frameworks developed in this plan follow a consistent methodological structure applied across all selected ecosystems. The framework is organised into a sequence of interconnected phases, moving from site identification to long-term governance and scaling.

Site selection

Restoration begins with the identification of priority sites based on ecological relevance, level of degradation, feasibility of intervention, and potential for demonstration and replication. Selection criteria typically include pressure intensity, biodiversity value, land tenure conditions, and opportunities for co-financing or alignment with existing programmes.

Site assessment

Selected sites undergo a baseline assessment to establish ecological and territorial conditions. This includes mapping of habitats, identification of degradation drivers, evaluation of soil and water conditions, and analysis of land use and ownership. The assessment ensures that restoration actions respond to both ecological needs and practical constraints.

Restoration decision framework

Based on site assessment, a structured decision process is applied to define the appropriate restoration pathway. This includes:

- identification and mitigation of ongoing pressures,
- evaluation of natural regeneration potential,
- selection between passive and active restoration approaches,
- definition of site-specific intervention strategies.

This ensures that interventions are proportional to the level of degradation and aligned with ecological recovery potential.

Passive restoration pathway

Where ecosystems retain sufficient recovery capacity, restoration focuses on protection and management rather than direct intervention. Measures may include removal of pressures, controlled grazing or mowing, and support for natural

regeneration processes. Passive restoration is prioritised where it can achieve results efficiently and at lower cost.

Active restoration pathway

Where degradation is more severe or natural recovery is limited, targeted interventions are implemented. These may include vegetation re-establishment, soil stabilisation, removal of invasive species, hydrological adjustments, or installation of structural elements. Active restoration is designed to re-establish ecological functions and accelerate recovery processes.

Monitoring and indicators

All restoration interventions are accompanied by monitoring systems based on a limited set of measurable indicators. These typically include vegetation condition, biodiversity presence, structural habitat features, and relevant environmental parameters such as soil or water quality. Monitoring is designed to be practical and repeatable, enabling annual evaluation and adaptive management.

Governance and stakeholders

Restoration is implemented through a multi-actor governance model involving public institutions, municipalities, landowners, NGOs, and scientific partners. Roles and responsibilities are defined for implementation, maintenance, monitoring, and enforcement. Stakeholder engagement is integrated throughout the process to ensure feasibility and long-term sustainability.

Phasing and scaling

The framework follows a phased approach:

- pilot phase, focusing on testing methods and generating initial results,
- scale-up phase, expanding successful interventions across additional sites,
- mainstreaming phase, integrating restoration into policy, planning, and funding mechanisms.

2.3 Key implementation risks and mitigation measures

Implementation of habitat restoration in Kosovo faces several contextual risks that can affect planning and delivery. The main risks and mitigation directions are summarised below:

Institutional and governance turnover

Frequent changes within ministries and municipal administrations can interrupt implementation or delay decision-making.

Mitigation: Establish clear inter-institutional agreements and maintain continuity through local partnerships and NGO involvement.

Limited technical and financial capacity

Restoration requires ecological expertise, monitoring skills, and stable funding that are still developing in Kosovo.

Mitigation: Pair national teams with technical advisors, use pilot projects for training, and link funding to measurable outcomes.

Land ownership and tenure conflicts

Ambiguous property rights, fragmented parcels, and unclear communal land management can constrain site access.

Mitigation: Prioritise sites on public or clearly titled land and integrate land-use mediation early in project preparation.

Community engagement and maintenance

Limited awareness and capacity at the municipal or community level can weaken long-term stewardship.

Mitigation: Build local ownership through participatory design, clear maintenance roles, and awareness campaigns.

The following chapters provide further rationale and outline the potential habitat restoration plan for these ecosystems.

3. Riparian Buffer

This chapter proposes a high-level, implementable riparian restoration programme built around the 0–150 m “Riparian buffer” unit and its two operational sub-zones (0–50 m critical edge; 50–150 m protective buffer). The approach is grounded in (i) synthesis of stakeholder pressures and governance constraints, and (ii) prior field research published by EC Ma Ndryshe, which demonstrates that aquatic insect biodiversity and dispersal patterns are tightly concentrated near the river edge and decline sharply beyond roughly 100–150 m, with rare/endemic taxa often constrained to the first tens of metres.

The rationale for riparian restoration in Kosovo is threefold: (1) water quality and public health pressures are repeatedly linked to untreated/insufficiently treated wastewater and waste inputs into rivers, including in Kosovo’s own water reporting and broader water-security assessments; (2) hydromorphological degradation (e.g., gravel extraction, channelisation, hard armouring) undermines habitat complexity, bank stability, and floodplain function; and (3) climate risk (droughts/flooding) is magnified when rivers and buffers are simplified and disconnected, while vegetated corridors support moderation, storage, filtering, and ecological resilience.²

² Ministry of Environment, Spatial Planning and Infrastructure and Kosovo Environmental Protection Agency, *The State of Water in Kosovo 2020* (Prishtina: Government of Kosovo, 2020).

A phased intervention plan is recommended: Pilot (Year 1–2), Scale-up (Year 3–5), Mainstreaming (Year 5+), using 6–8 work packages that can be procured and monitored consistently across sites.

3.1 Base and rationale for riparian restoration in Kosovo

Kosovo's official reporting recognises that surface water quality often deteriorates near settlements due to wastewater discharges and waste dumping, and the water balance/knowledge base remains incomplete, making targeted restoration and monitoring a practical way to build evidence while improving conditions.

From a water-security perspective, World Bank analyses identify pollution, untreated sewage disposal, and limited surface-water monitoring as major constraints in Kosovo's water sector, reinforcing the logic that riparian restoration must be paired with at least minimal catchment coordination on wastewater and runoff.³

The internal stakeholder consultation synthesis adds operational specificity: recurring issues include river pollution from demolition and inert waste, as well as municipal waste; incomplete sewerage systems and partially functioning wastewater treatment infrastructure; gaps in pesticide residue management; and the impacts of gravel extraction and quarrying on riverbeds and banks. Additional pressures arise from hydropower developments and dams, which disrupt aquatic habitats, alongside increasing drought and flooding events that directly relate to the buffering role of riparian and wetland systems.

These pressures are further intensified by climate change, particularly rising water temperatures, which reduce oxygen levels and stress aquatic species, as well as broader shifts in climatic zones, where temperature regimes move upward in elevation and latitude, altering habitat conditions and species distributions.

The field research is especially valuable because it provides a Kosovo-specific ecological mechanism for why the riparian belt matters: aquatic insects (including EPT groups often used as bioindicators) have aquatic larval stages and terrestrial adult stages, so their population dynamics depend on cool/oxygenated water, intact emergence strips at the bank, and continuous riparian vegetation for shade, moisture, and dispersal. Empirical transects using UV light traps show the highest abundance/richness close to the river and sharp declines further away, supporting the 0–150 m unit as both ecologically defensible and practically measurable.

This local evidence aligns with broader synthesis: riparian buffer strips are widely described as multi-purpose measures that filter runoff, stabilise banks, and provide habitat/connectivity.

3.2 Riparian Buffer Restoration Framework

The approach is based on a clear spatial definition, phased implementation, and adaptive management over time.

³ World Bank, *Water Security Outlook for Kosovo* (Washington, DC: World Bank, 2018).

3.2.1 Site selection

To keep the programme defensible and scalable, the proposal is to select pilots using criteria that reflect risk, feasibility, and demonstration value:

- Pressure intensity & reversibility: presence of gravel extraction scars, bank instability, clear vegetation loss, uncontrolled access, visible waste inputs; preference for sites where stopping harm is feasible within 12–18 months.
- Biodiversity sensitivity: proximity to high-value habitats or evidence of sensitive taxa/conditions (e.g., cool headwater systems, protected areas context, or field-research-identified hotspots).
- Feasibility & land control: municipal/public land availability, cooperative landowners, and fewer title conflicts within the 0–150 m corridor.
- Co-financing readiness: opportunities to align with wastewater/sewerage or flood-risk budgets and donor pipelines.

Based on this assessment, pilot river reaches are selected using defined criteria, focusing on areas where restoration is both urgently needed and feasible.

3.2.2 Site assessment

The restoration process begins with the definition of the 0–150 m riparian buffer as the primary planning unit. This establishes a consistent spatial framework for analysis and intervention.

The riparian buffer is treated as a corridor system: the management unit is the land within 150 m of the water's edge, divided into:

- 0–50 m (critical edge): strict protection of emergence/bank processes; interventions are small-footprint, high-sensitivity.
- 50–150 m (protective buffer): the main zone for re-vegetation, runoff filtration measures, access management, and corridor continuity.

Research shows that different ecological functions require different buffer widths. Narrower buffers can provide basic functions, such as filtering pollutants and reducing surface runoff. However, wider buffers are necessary to sustain more complex ecological processes, including habitat provision, species movement, and overall biodiversity support. For this reason, a 150 m buffer can be understood as a defensible “multi-function width,” capable of supporting a broader range of ecological functions, especially in contexts where biodiversity objectives are a key priority.

Building on this, a baseline assessment is carried out, including corridor mapping, identification of key ecological and territorial pressures, and an understanding of land tenure conditions. This step ensures that interventions are grounded in both ecological realities and practical constraints.

3.2.3 Restoration decision framework

The restoration process follows a structured sequence of steps:

- Initial definition: Definition of the 0–150 m riparian buffer as the primary planning unit.
- Assessment: Baseline assessment including mapping, pressure identification, and land tenure understanding.
- Site selection: Selection of pilot reaches based on urgency and feasibility.
- Planning: Development of detailed work packages, including technical designs and procurement specifications required for implementation.
- Implementation: The next phase involves the implementation of pilot interventions, combining quick-win measures (such as waste removal or access control), targeted engineering solutions (e.g. bank stabilization), and revegetation efforts.
- Monitoring: Following implementation, a monitoring phase is established, tracking indicators such as water quality, riparian corridor condition, and biodiversity responses, particularly through macroinvertebrates and EPT taxa, which are sensitive indicators of ecological health.
- Evaluation and adaptation: The results of monitoring inform an evaluation and adaptation phase, where restoration approaches, technical standards, and governance mechanisms are refined based on observed outcomes.
- Scaling: Successful approaches are then scaled up to additional river reaches and municipalities, allowing the restoration model to expand territorially.
- Mainstreaming: Finally, the process moves toward mainstreaming, where riparian restoration is embedded into planning and governance systems through mechanisms such as setback regulations, long-term maintenance structures, enforcement frameworks, and sustainable financing.

Phasing: Pilot, Scale-Up and Mainstreaming

The proposed programme would have to be staged so that early investments generate templates, evidence, and acceptance before large-scale rollout:

Pilot phase (Year 1–2): pilot reaches; produce baseline maps, quick risk reduction, demonstration works, and a monitoring protocol.

Scale-up phase (Year 3–5): replicate the work-package model across additional municipalities/catchments.

Mainstreaming (Year 5+): embed riparian corridor rules into spatial planning, agricultural conditionality/incentives, and routine water management.

3.2.4 Passive restoration pathway

Assisted natural regeneration. Where pioneer woody species (e.g., willows) are already colonising disturbed banks, they should be protected and a succession process should be guided rather than clearing; expert input emphasises the stabilisation and succession role of pioneer riparian species, supporting a lower-cost, high-return strategy in suitable reaches.

3.2.5 Active restoration pathway

The proposed technical options by sub-zone, including stone-based measures:

1. Sub-zone 0–50 m: critical edge (protect and repair)

The primary objective is to stop active harm and restore the emergence strip and stable bank function with minimal footprint.

Recommended options:

- Access exclusion and controlled crossings: Direct bank disturbance is disproportionately damaging in this strip. The evidence base consistently identifies bank erosion and direct pollution as primary pressures that riparian buffers help to mitigate.
- Soft engineering for bank repair: Use nature-based bank stabilisation methods, relying on vegetation and natural materials where hydraulic conditions allow. These approaches support both structural stability and the establishment of riparian vegetation.
- Stone-based measures (pilot application): Explore the targeted use of stone in selected locations to support bank stabilisation and enhance habitat complexity.

These measures should be tested where additional structural support is needed, while avoiding continuous hard interventions along the corridor. Excessive use of hard bank stabilisation can simplify habitats, reduce vegetation and natural features, and shift erosion pressures downstream.

All proposed measures should be designed and implemented with input from ecological experts, ensuring context-specific and ecologically sound interventions.

2. Sub-zone 50–150 m: Protective Buffer - Restore and Connect

The primary objective is to rebuild filtration capacity, restore shade and microclimatic conditions, and enhance ecological connectivity, while reducing runoff pressures.

Recommended options:

- Multi-layer buffer planting. Establish grass–shrub–tree mosaics aligned to site moisture gradients; European adaptation guidance explicitly frames riparian buffers as permanent natural/semi-natural vegetation strips between bankfull water and intensive land uses.
- Runoff interception and “edge-of-field” measures. Where agriculture borders the corridor, prioritise vegetated filter strips, reduced pesticide/fertiliser risk planning near water, and small retention features at runoff entry points (implemented as part of catchment coordination).
- Access management and recreational design. Formalise paths/viewpoints to reduce trampling; concentrate access where banks can tolerate it.
- Connectivity-first vegetation continuity. Field research indicates adult dispersal and life-cycle success depend on continuous riparian vegetation providing

shade and moisture; this supports continuous “green ribbon” corridors especially through peri-urban reaches.

In-channel measures (apply where suitable, not everywhere)

- Boulder clusters / riffle-pool support. Guidance notes correct placement is critical (e.g. avoid placing stones where they could increase flooding; place them so they do not cause erosion).
- Large wood placement (Medium). Widely used to improve habitat complexity; should be anchored/stabilised appropriately and designed to avoid hazard to bridges and flood conveyance.

3.2.4 Monitoring and Indicators

Aligned with the riparian corridor logic and adapted to Kosovo’s implementation capacity:

- Riparian corridor condition: Periodic assessment of vegetation continuity and structure across the 0–150 m buffer. Record presence of continuous vegetation cover, gaps in the corridor, and condition of the 0–50 m critical edge. Particular attention should be given to bank stability, erosion signs, and recovery of the emergence strip.
- Water quality and pressures: Monitor basic water quality indicators (e.g. visible pollution, turbidity proxies where data is limited) and identify ongoing pressures such as wastewater discharge, runoff inputs, and sediment disturbance. Observations should be linked to upstream and catchment-level activities.
- Biodiversity indicators (aquatic and riparian): Use macroinvertebrates, particularly EPT taxa (Ephemeroptera, Plecoptera, Trichoptera), as key indicators of ecological health. Sampling should be conducted periodically (e.g. once or twice per year) in collaboration with experts or institutions. Complement with simple observations of riparian fauna and vegetation recovery.
- Vegetation establishment and function: Track success of re-vegetation in the 50–150 m buffer, including survival of planted species, regeneration of native vegetation, and development of multi-layer structure (grass–shrub–tree). Monitor shade provision and continuity of the “green corridor.”
- Structural interventions performance: Evaluate performance of implemented measures such as bank stabilisation (bioengineering or stone-based), boulder placements, and large wood structures. Check for stability, unintended erosion, or hydraulic impacts.
- Access and disturbance control: Monitor effectiveness of access management (fencing, designated paths, crossings). Record signs of trampling, livestock intrusion, or illegal activities (e.g. dumping, gravel extraction).

3.2.5 Governance and implementation model

Riparian buffer restoration requires a coordinated, multi-actor governance model, structured around pilot implementation and gradual scaling. Proposed actors:

- Riparian restoration task group (per pilot area): Establish a local task group including municipalities, water and environmental inspectorates, landowners and farmers, civil society organisations, and a scientific partner. This group is responsible for implementation oversight, access rules, maintenance coordination, and monitoring/reporting.
- Municipalities: Lead local coordination, integrate restoration into spatial planning, and support enforcement of access and land-use rules.
- Inspectorates (environment and water): Ensure compliance with regulations (e.g. pollution control, extraction restrictions, buffer protection).
- Landowners and farmers: Key actors in managing land within the 50–150 m buffer (if area in farming land); involved in access agreements, planting, and maintenance.
- NGOs and civil society: Facilitate stakeholder engagement, awareness, and pilot implementation support. Building trust and linking local actors with broader institutional frameworks.
- Scientific and academic partners: Provide technical input (e.g. bioengineering design, biodiversity monitoring, EPT identification) and support evaluation.

4. Meadow landscapes

Meadows and pastures are a dominant component of Kosovo's agricultural land base. Official agricultural statistics show ~217,000 ha of meadows, pastures and common land, representing ~52% of utilised agricultural area in recent years.⁴ This is not a marginal habitat: it is a nationwide land system that directly links biodiversity, livelihoods, water security, and soil health.

In parallel to improving the condition and management of traditional rural meadows, Kosovo can also expand meadow-like habitats beyond what is currently classified as “meadow” in land-use statistics. This means treating meadow restoration as a landscape network objective, not only an agricultural land category: creating additional flower-rich patches and corridors in peri-urban and urban public land can strengthen ecological connectivity and provide “ecological infrastructure” for pollinators and other species that depend on distributed habitat resources.

Properly managing meadows in Kosovo is ecologically important. Kosovo's own biodiversity planning documents emphasise both high biodiversity value (in mountain landscapes and protected areas) and critical gaps in inventories and biodiversity indicators, which constrains evidence-based management.⁵ Restoring meadow condition and connectivity is a practical way to reverse habitat degradation while generating multiple ecosystem service co-benefits (pollination, erosion control, water regulation and soil carbon).⁶

⁴ Kosovo Agency of Statistics, *Agricultural Holdings Survey 2021* (Prishtina: Government of Kosovo, 2021).

⁵ Ministry of Environment and Spatial Planning, *Strategy and Action Plan for Biodiversity 2011–2020* (Prishtina: Government of Kosovo, 2011).

⁶ European Environment Agency, *Solutions for Restoring Europe's Agricultural Ecosystems*, published October 22, 2024,

The socio-economic rationale in Kosovo is equally consequential. Kosovo's Economic Reform Programme (ERP) characterises agriculture as contributing ~7.5% of GDP while employing ~23% of the workforce, including seasonal agricultural labour, and notes that meadows/pastures/common land make up the majority of agricultural land use.⁷ Meadow restoration, when designed around viable grazing/mowing systems and local tenure realities (especially common land), can reduce land degradation risks, strengthen pastoral value chains, and support nature-based tourism opportunities in mountain regions.

In practice, this means applying multiple approaches together: restore and sustain large rural meadow systems (grazing/mowing governance) while also creating smaller pollinator-focused meadow nodes on suitable public/municipal land where this can deliver fast ecosystem service gains and public engagement.

While Kosovo has important protected areas, the State of Nature reporting documents major capacity and planning shortfalls (e.g., missing management plans, insufficient inspectors, illegal activities, unrestrained resource use and infrastructure pressures).⁸ Meadow restoration is therefore also a governance opportunity: it provides a measurable, place-based programme through which Kosovo can strengthen implementation capacity.

4.1 Meadows in Kosovo: baseline, trends and strategic significance

Kosovo's agricultural statistics distinguish meadows, pastures and common land within permanent grassland categories. In the Agricultural Holdings Survey, "common land" is described as agricultural land owned by a public authority (state/municipality) where people may exercise collective rights, typically shared with others.⁹ This matters for restoration because governance instruments (grazing rights, enforcement, incentives, collective action) differ substantially between private hay meadows and communal grazing lands.

4.1.1 Extent and recent trends in meadow/pasture area

Official data from Kosovo's agricultural reporting show that meadows and pastures (including common land) have been remarkably stable but with a slight decline in recent years.

<https://www.eea.europa.eu/en/analysis/publications/solutions-for-restoring-europes-agricultural-ecosystems>.

⁷ Government of Kosovo, *Economic Reform Programme (ERP) 2022–2024* (Prishtina: Government of Kosovo, 2022).

⁸ Ministry of Environment, Spatial Planning and Infrastructure, *State of Nature Report 2018–2021* (Prishtina: Government of Kosovo, 2023).

⁹ Kosovo Agency of Statistics, *Agricultural Holdings Survey 2021* (Prishtina: Government of Kosovo, 2022).

Table A: Meadows and pastures (incl. common land) over time (official agricultural reporting) ¹⁰

Year	Meadows & pastures (ha)	Total utilised agricultural area (ha)	Share of UAA (%)	Net change vs. previous year (ha)
2018	218,152	420,606	51.87	—
2019	217,932	420,674	51.82	-220
2020	217,102	420,748	51.59	-830
2021	217,107	420,351	51.65	+5
2022	216,998	420,482	51.60	-109

Interpretation: the 2018–2022 net change is -1,154 ha (~-0.5%). This does not by itself indicate ecological condition; it mainly shows that the land base exists and can be targeted at scale.

4.1.2 Protected areas context and why it matters for meadow restoration priorities

Kosovo's State of Nature Report (2018–2021) identifies 248 protected areas covering approximately 126,000 ha (11.55% of the territory), with the majority located within the Sharri and Bjeshkët e Nemuna National Parks. While these areas concentrate some of the country's highest biodiversity values, meadow ecosystems located in their proximity play a critical role in extending and connecting these protected landscapes. Rather than functioning as isolated units, protected areas can be understood as cores within a wider ecological network, where meadows act as connective tissues, supporting species movement, buffering external pressures, and enhancing ecological continuity. As semi-natural habitats, their restoration offers a strategic opportunity to strengthen landscape connectivity and reinforce the functional coherence of Kosovo's protected area network.

4.2 Rationale for meadow restoration: ecological, socio-economic and climate resilience

4.2.1 Biodiversity, habitat integrity and connectivity

Kosovo's biodiversity planning documents stress both richness and uncertainty: they cite ~2,800–3,000 species of vascular plants, but explicitly note that a full flora inventory is missing and that Kosovo lacks key national biodiversity indicators and a Red Book of fauna. ¹¹This has a direct implication: restoring meadow systems should be paired with systematic monitoring because otherwise benefits cannot be credibly demonstrated or targeted.

¹⁰ Ministry of Agriculture, Forestry and Rural Development, *Kosovo Green Report 2023* (Prishtina: Government of Kosovo, 2023).

¹¹ Ministry of Environment and Spatial Planning, *Strategy and Action Plan for Biodiversity 2011–2020* (Prishtina: Government of Kosovo, 2011).

Semi-natural meadows and traditionally managed grasslands are globally recognised as biodiversity-rich systems that depend on continued management (mowing and/or grazing). Where these regimes disappear, succession to shrub/forest can rapidly reduce open-habitat biodiversity and also degrade pollinator habitat.¹² Kosovo's biodiversity action planning explicitly links population movement and changing land use to expansion of forest vegetation over former grazing areas and associated negative impacts from reduction of natural grassland habitat.¹³

Habitat connectivity is a critical rationale because meadow patches can function as corridors or stepping-stones between forest edges, riparian zones and mountain habitats. In practice, connectivity objectives are best operationalised through (i) mapped networks of meadow patches and (ii) management agreements that prevent conversion and maintain heterogeneous mowing/grazing patterns at landscape scale.¹⁴

4.2.2 Pollinators and agricultural productivity insurance

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services assessment on pollinators describes animal pollination as a vital regulating ecosystem service and emphasises the importance of “ecological infrastructure” (including patches of semi-natural habitat) distributed throughout agricultural landscapes to provide nesting and floral resources.¹⁵

For Kosovo, even where pollinator datasets are limited, this provides a clear risk-management logic: retaining and restoring flower-rich meadows strengthens pollination services and reduces concentration risk from simplified landscapes. European assessments specifically identify loss of semi-natural grasslands (through urban development or abandonment leading to afforestation) as a major driver of pollinator habitat loss.¹⁶

4.2.3 Soil organic carbon, sequestration potential and soil health outcomes

Grassland soils are globally recognised as significant carbon stores and offer meaningful opportunities for carbon sequestration when degradation is reversed through improved management. Scientific literature highlights that restoring

¹² European Environment Agency, *Protecting and Restoring Europe's Wild Pollinators and Their Habitats*, published June 18, 2025, <https://www.eea.europa.eu/en/analysis/publications/protecting-and-restoring-europes-wild-pollinators-and-their-habitats>.

¹³ Ministry of Agriculture, Forestry and Rural Development, *Kosovo Green Report 2023* (Prishtina: Government of Kosovo, 2023).

¹⁴ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *Summary for Policymakers of the Assessment Report on Pollinators, Pollination and Food Production* (Bonn: IPBES, 2016).

¹⁵ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *Summary for Policymakers of the Assessment Report on Pollinators, Pollination and Food Production* (Bonn: IPBES, 2016).

¹⁶ European Environment Agency, *Protecting and Restoring Europe's Wild Pollinators and Their Habitats*, published June 18, 2025, <https://www.eea.europa.eu/en/analysis/publications/protecting-and-restoring-europes-wild-pollinators-and-their-habitats>.

grasslands, particularly through biodiversity recovery and better land management, can contribute substantially to climate mitigation, positioning grassland restoration as a viable nature-based solution.

For planning purposes, the most operationally relevant framework is provided by the Intergovernmental Panel on Climate Change (IPCC), which defines reference soil organic carbon (SOC) stocks and identifies how these stocks change under different management conditions. This framework allows for the estimation of potential carbon gains when grasslands transition from degraded to improved states. While such estimates are indicative and should not replace field-based measurements, they offer a transparent and standardised basis for planning, as well as for monitoring, reporting, and verification systems.

Applied to meadow restoration, this logic suggests that improving degraded grasslands through better management, such as controlled grazing, reseeding, or reduced disturbance, can lead to a gradual recovery of soil carbon over time. The magnitude of this recovery depends on local soil and climatic conditions, as well as on the intensity and type of management interventions.

Beyond carbon sequestration, meadow restoration plays a critical role in improving overall soil health. Restored meadows typically exhibit higher soil organic matter, improved soil structure, enhanced water infiltration, and reduced vulnerability to erosion. These benefits are particularly significant when compared to degraded or compacted grazing systems, where soil functions are often impaired.¹⁷

4.2.4 Water regulation, erosion control and disaster-risk reduction

Permanent grassland can reduce soil loss and flood risk relative to arable land, although outcomes depend on slope, soil and management (e.g., compaction under overgrazing). Studies find that permanent grassland mitigates soil loss and flood better than arable land, while also highlighting that grasslands can still experience damaging erosion processes depending on management.

Nature-based soil and water measures using vegetative cover (including grass barriers and contour vegetation) are recognised in applied guidance as practical erosion and runoff control interventions during heavy rainfall events. In Kosovo's context, where erosion, floods, droughts and wildfire exposure are expected to grow under climate change, meadow restoration is therefore a risk-reduction measure, not only a biodiversity action.

4.2.5 Livelihoods, agriculture, tourism and cultural values

Kosovo's ERP frames agriculture as economically and socially significant (GDP contribution and high employment share).

¹⁷ Intergovernmental Panel on Climate Change. "Grassland." In *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4: Agriculture, Forestry and Other Land Use*. Geneva: IPCC, 2019.

Pastoral landscapes also carry cultural-and-product identity value. For example, applied value-chain work on regional pastoral products identifies traditional pastoral cheese production linked to mountain grazing systems (with concerns about succession and intergenerational continuity). At a wider scale, the United Nations Educational, Scientific and Cultural Organization¹⁸ recognition of transhumance as intangible cultural heritage underscores that seasonal livestock mobility is not merely an economic practice but also cultural knowledge tied to landscape stewardship.

Nature-based tourism is a material opportunity as well. Maintaining scenic, biodiverse meadow landscapes is part of protecting this economic asset.

4.2.6 Threats and drivers of meadow degradation in Kosovo

Land-use change and infrastructure expansion represent primary drivers of meadow degradation in Kosovo, with recent land-cover data indicating ongoing conversion of pasture to cropland and built areas. At the same time, abandonment of traditional practices such as mowing and grazing leads to shrub encroachment and gradual transition to forest, resulting in the loss of species-rich open habitats. Climate-related stressors, including increasing droughts, floods, and wildfires, further exacerbate meadow vulnerability. In this context, appropriate grazing management can play a mitigating role, particularly in reducing fire risk through biomass control.

Collectively, these pressures contribute to fragmentation and degradation of meadow ecosystems, highlighting the need for integrated restoration approaches that combine habitat rehabilitation with effective land-use regulation

4.3 Meadow landscape restoration framework

Restoration of rural meadows follows international best practice of structured phases: assessment, planning, implementation, monitoring and adaptation. Global guidance (FAO/SER/IUCN standards) emphasizes steps for all restoration projects. In Kosovo's context, many meadows are common land, so the plan must combine ecological actions with governance: clarify grazing rights, and rebuild traditional mowing/grazing systems. The strategic goal is twofold: restore large meadow systems and strengthen an ecological network across the landscape. In practice, this means each meadow site is treated individually but also as part of a connected matrix.

4.3.1 Site selection

Proposed site selection criteria:

- Ecological importance: Prioritise meadows that enhance connectivity and biodiversity. For example, choose sites adjacent to protected areas or existing

¹⁸ European Environment Agency, *Protecting and Restoring Europe's Wild Pollinators and Their Habitats*, published June 18, 2025, <https://www.eea.europa.eu/en/analysis/publications/protecting-and-restoring-europes-wild-pollinators-and-their-habitats>.

high-quality grasslands. Sites on riverbanks or ridges can act as important corridors for pollinators and wildlife.

- **Threat level:** Consider urgency of action. Meadows under imminent threat (e.g. planned conversion or heavy invasion) may be ranked high priority if feasible to address. However, balance urgency with achievability.
- **Feasibility:** Give preference to sites with clear land tenure and cooperative owners. Community pastures with organised grazing committees or private lands with supportive farmers are easier to manage. Avoid sites that are extremely fragmented, remote, or embroiled in land disputes.
- **Resource accessibility:** Assess logistics and resources needed. Readily accessible sites (good roads, near settlements) reduce costs. Large, contiguous meadows can be more cost-effective to restore. Note any need for special equipment (e.g. for steep terrain).
- **Co-benefits:** Include socio-economic factors. Sites that provide quick benefits (e.g. improved fodder supply) or have tourism/recreational value can gain community support. Also consider alignment with national and donor priorities (e.g. EU Green Agenda targets) to leverage funding.

Prioritisation can use a simple scoring matrix combining these criteria. Early efforts should target high-value/high-feasibility meadows to demonstrate success and build momentum for wider restoration.

4.3.2 Site Assessment

Before any action, conduct a baseline survey and site prioritization:

- **Vegetation and habitat:** Record existing plant species, cover (%) of grasses vs. forbs, bare soil, shrub/woody encroachment. Note presence of key meadow species.
- **Soil and water:** Test soil nutrients (especially N, P, organic matter) and compaction. Map hydrology/drainage; identify erosion or drought issues.
- **Invasive and weeds:** Map any invasive plants or aggressive natives (brambles, young saplings). Estimate their coverage.
- **Land use and tenure:** Document current and recent use (grazing intensity, mowing history, fertilizer inputs). Clarify ownership and grazing rights (private vs. community pasture). Engage with land users (farmers, herders, local authorities) to understand constraints.
- **Accessibility and conflict:** Identify any factors that could hinder restoration (e.g. needed access routes, security issues, pesticide use nearby).

4.3.3 Restoration Decision Framework

A step-based decision flow to determine actions for the site. The proposed process follows a structured sequence:

1. Initial assessment: Compile survey data and identify all active degradation drivers (illegal grazing, land conversion, fire, debris dumping, etc.).
2. Threat mitigation: Address and eliminate all identified drivers before proceeding. Actions may include reinforcing fences, resolving grazing conflicts, removing unauthorized infrastructure, and enforcing land-use controls. Restoration should only proceed once pressures are effectively managed.
3. Recovery potential assessment: Evaluate the likelihood of natural regeneration within a 3–5 year timeframe, based on seedbank presence, remnant vegetation, soil condition, and overall site integrity.
4. Passive restoration pathway: Where recovery potential is high, implement passive restoration measures focused on protection and management. This includes controlled grazing (appropriate stocking levels and timing), delayed or reduced mowing, and avoidance of disturbance. Clearly define and document the intended management regime.
5. Active restoration pathway: Where recovery potential is low, implement a targeted active restoration package. This may include seeding or hay transfer, removal of woody encroachment, control of invasive species, and soil stabilization or repair measures.
6. Monitoring and adaptive management: Following implementation, establish a continuous monitoring cycle. Track ecological indicators (vegetation composition, structure, fauna) and adjust management practices annually. Interventions should be refined based on observed responses, including repeated invasive control, supplementary seeding, or adjustments to grazing and mowing regimes.

4.3.4 Passive restoration pathway

In Kosovo, meadow degradation is generally not driven by overgrazing but more often by abandonment, weak management, and governance gaps. As a result, passive restoration is not simply minimal intervention, but involves re-establishing basic management conditions that allow ecological processes to function again.

- Controlled grazing: Reintroduce low-intensity grazing regimes with adjusted stocking rates and seasonal timing, avoiding key periods such as flowering and seed set.
- Adaptive mowing: Implement delayed and reduced mowing frequency to allow vegetation to complete reproductive cycles and maintain habitat structure.
- Site protection: Repair or install fencing and clearly define pasture boundaries to prevent uncontrolled access and disturbance.
- Basic maintenance: Ensure regular inspection of infrastructure (fences, access points) and maintain functional site conditions.
- Monitoring: Conduct periodic site checks to track vegetation recovery and compliance with management regimes, allowing adjustments where needed.

4.3.5 Active restoration pathway

When sites need direct intervention, the proposal is to apply the following:

- Shrub/brush clearing: Remove encroaching woody plants to restore open grassland. Timing: Late winter (Jan–Feb) before regrowth.
- Weed control: Eliminate invasive or aggressive weeds before reseeding. Timing: Spring or autumn when weeds are actively growing.. May require repeat visits.
- Ground preparation: Lightly prepare soil to receive seed (avoid heavy tillage). Timing: Early spring or after the first rains in autumn.
- Seeding/hay transfer: Introduce a diverse native seed mix (grasses + forbs) of local provenance. Timing: Early spring or late autumn (on moist ground).
- Supplementary planting: For extremely degraded spots plant nursery-grown plugs of native meadow species. Timing: Spring or autumn.

4.3.6 Monitoring and Indicators

The monitoring scheme proposes focusing on a limited set of robust and measurable indicators, assessed through simple methods:

- Plant community: Annually conduct fixed transect or quadrat surveys at mid-summer. Measure species richness of native forbs and grasses, and percent cover of key species. Protocol: record species cover within a 1×1 m quadrats every 10 m. Threshold: If forb species richness is declining or bare ground >20%, trigger management review.
- Flower cover continuity: Monthly check of flower abundance (e.g. visual estimate or photos). Ensure at least 3 months of continuous bloom through the season (to support pollinators). Gaps may indicate the need to adjust mowing.
- Pollinators and fauna: Twice per growing season, conduct a 10-minute pollinator count along the same 50 m transect (count bees, butterflies). Optionally use pan traps in summer. A significant drop from baseline counts can signal habitat issues.
- Structural features: Note percentage shrub cover. Shrub encroachment suggests disturbance regimes (grazing/mowing) need adjustment.
- Management compliance: Keep records of grazing dates, livestock numbers and mowing dates.

Data from each site should be reviewed yearly. Adaptive action is triggered by threshold breaches (e.g. invasive cover more than 10% of area, would mean to re-clear; seeded species less than 50% establishment, would mean to reseed).

4.3.7 Governance and Stakeholders

Restoring meadows requires coordinated action among multiple actors. Proposed participants include:

- Ministry of Agriculture, Forestry and Rural Development (MBPZhR): Leads policy development and funding allocation (e.g. agri-environment grants). MBPZhR could integrate meadow restoration into national land management strategies.
- Municipal governments: Enforce local land-use regulations and support implementation. Municipalities can facilitate agreements on common pastures and ensure restoration projects align with local planning.
- Farmers and herders: Primary managers of meadow land. Their on-the-ground knowledge is crucial for tailoring practices (e.g. adapting transhumance routes).
- Environmental NGOs: The proposed role is to bridge between authorities and land users, and can run pilot projects, community trainings, and advocacy around the project.
- Research and education institutions: Universities and agricultural institutes can contribute monitoring expertise and help develop best practices (e.g. local seed mix trials, monitoring protocols).
- International partners: Donor agencies and international conservation networks can offer funding, technical guidance and training opportunities.

4.4 Alternative meadow systems: beyond traditional land-use

In addition to restoring existing meadow ecosystems, a Kosovo meadow strategy can be strengthened by deliberately extending meadow-like habitats beyond areas currently classified as “meadows” in official land-use categories. This is especially relevant where the objective is not only to maintain agricultural grasslands, but to rebuild ecological function and connectivity at landscape scale, particularly for pollinators and other taxa that depend on a distributed “ecological infrastructure” of feeding and nesting resources.

Traditional rural meadow restoration is typically a management-and-governance problem first (grazing/mowing regimes, tenure, enforcement, common land coordination), with ecological recovery following from stable stewardship. By contrast, meadow-like habitats in peri-urban and urban settings are usually created or enhanced, often on land that is not currently managed as meadow (lawns, vacant plots, roadside verges, utility corridors, park margins, institutional grounds). The intervention logic therefore shifts from “restore a degraded meadow” to “convert low ecological-function green space into high-function habitat”, using design, maintenance planning, and local stewardship arrangements.

Creating meadow-like habitats outside official meadow categories can deliver several strategic benefits that complement rural restoration:

First, it can increase habitat availability in places where fragmentation pressure is highest, including along infrastructure and settlement edges, thereby improving connectivity between biodiversity cores and the wider matrix.

Second, it can deliver visible, near-term outcomes (flower cover, pollinator activity, community co-benefits), which builds public support and helps build municipal

capacity for nature-based solutions in a context where broader planning and indicator gaps exist.

Third, it can act as a practical “pilot platform” for testing seed mixes, mowing calendars, indicator species monitoring, and community stewardship models before scaling similar approaches into peri-urban agricultural fringes.

4.4.1 Alternative meadow restoration framework

4.4.1 Site selection

Proposed site selection criteria:

- Ecological function: Prioritise sites that can act as stepping-stones or connectors (e.g. park edges, river corridors, road verges linking green areas).
- Land availability: Focus on publicly owned or easily accessible land (municipal plots, institutional land, residual spaces near infrastructure).
- Conflict level: Select sites with low competing uses (low recreation pressure, no planned development, minimal safety constraints).
- Environmental suitability: Avoid sites exposed to pesticide drift, heavy pollution, or repeated disturbance.
- Feasibility and maintenance capacity: Prioritise sites where long-term maintenance responsibilities can be clearly assigned.
- Visibility and demonstration value: Include pilot sites in visible areas (parks, schools) to support awareness and replication.

A pragmatic way to operationalise this track is to identify site types where ecological uplift is high and trade-offs are manageable:

- Municipal / publicly owned vacant land and underused plots (including “residual” parcels near infrastructure): high flexibility and strong potential for pilots and demonstration sites.
- Urban park margins and low-use lawns: conversion of biologically simplified grass into flower-rich mosaic areas, while keeping recreation “cores” as short-mown spaces to maintain social acceptance.
- Road verges, roundabouts, and utility corridors: linear habitat that can function as stepping-stone corridors if mowing regimes are adjusted and pesticide use is avoided.
- Institutional land (schools, universities, hospitals): high education value, easier stewardship agreements.
- Peri-urban transition belts (settlement edges): can link urban nodes to rural meadow systems and support wider connectivity ambitions.

4.4.2 Site assessment

Before implementation, conduct a baseline assessment:

- Vegetation and ground condition: Identify existing grass cover, weeds, bare soil, and compaction.

- Soil condition: Assess fertility and disturbance level (urban soils are often nutrient-rich and compacted).
- Weed pressure: Identify dominant invasive or aggressive species.
- Land use and maintenance regime: Document mowing frequency, pesticide use, irrigation, and current management contracts.
- Constraints: Identify safety requirements (visibility, access), infrastructure limits, and social use patterns.

4.4.3 Active restoration pathway

In urban and peri-urban contexts, these areas are typically not existing meadow land-use systems, but rather lawns, vacant plots, or managed green spaces. As a result, restoration does not follow a passive pathway, and interventions are inherently active from the outset.

- Site preparation: Remove existing turf or vegetation; reduce nutrient levels if necessary.
- Soil preparation: Light disturbance to create suitable seedbed conditions.
- Seeding: Apply native, regionally appropriate seed mixes prioritising seasonal flowering continuity.
- Supplementary planting: Introduce plugs or species-rich patches in key areas.
- Weed control: Manage invasive species during establishment phase (especially year one).
- Year one focuses on establishment; stable meadow structure typically develops from year two onward.

4.4.4 Monitoring and Indicators

The monitoring scheme focuses on a limited set of robust and measurable indicators, adapted to urban and peri-urban meadow creation, and assessed through simple, repeatable methods:

1. Vegetation composition and establishment:
Conduct annual surveys (preferably mid-summer) using fixed transects or 1×1 m quadrats placed at regular intervals. Record presence of target species, overall species richness, and percent cover of grasses, forbs, invasive species, and bare soil.
2. Flowering continuity:
Monitor flowering periods monthly through visual assessment or photo documentation. Ensure continuity of flowering across the season to support pollinators. Gaps in flowering periods can inform adjustments in mowing timing or species composition.
3. Pollinator activity:
Twice per growing season, conduct a 10-minute pollinator count along a fixed transect (e.g. 50 m), recording bees, butterflies, and other visible pollinators. Where feasible, simple methods such as pan traps can be used to complement observations.

4. Structural diversity:
Record variation in vegetation height, presence of uncut refuge areas, and overall structural heterogeneity, as indicators of habitat quality.
5. Maintenance compliance:
Maintain records of mowing dates, frequency, and pesticide use. Verify that management aligns with defined biodiversity-oriented maintenance regimes.

4.4.5 Governance and Stakeholders

Given the diversity of land ownership and use, governance should be site-specific and partnership-based:

- Municipal parks and public land:
Managed by municipal departments (parks/environment) with clearly defined biodiversity-oriented maintenance contracts.
Example: Municipality and NGO partnership, where the NGO supports design, monitoring, training, and advocacy
- Schools and institutional land:
Co-managed through educational or sustainability programmes.
Example: School and NGO collaboration, where students participate in maintenance and monitoring.
- Road verges and utility corridors:
Managed by infrastructure authorities with adapted mowing specifications.
Example: Municipality or utility company, contractor, and NGO, with revised maintenance guidelines.
- Vacant or transitional land:
Temporary stewardship models.
Example: Municipality, local community groups, and NGOs managing pilot meadow sites.
- Peri-urban transition zones:
Coordinated with broader planning.
Example: Municipality, NGO, and regional planning (Ministry) bodies to ensure connectivity with rural systems.

Across all typologies, governance should ensure:

- Clear responsibility for maintenance (who manages, when, how)
- Integration of biodiversity targets into service contracts
- Community engagement and visibility

In Kosovo's context, where enforcement and planning capacity constraints are documented, starting with a limited number of well-designed pilot sites can be an effective capacity-building pathway: it forces clarity on responsibilities (who mows, when, with what performance standards), generates measurable monitoring data, and creates replicable templates for scale-up.

5. Integrating biodiversity within productive landscapes

Integrating “biodiversity zones” into farming sites is both a restoration intervention and a governance instrument: it restores ecological function inside agricultural landscapes while also creating a concrete, measurable policy mechanism that can be tied to farm support, certification, and land-management practices. This approach is increasingly used across Europe because biodiversity loss is tightly linked to agricultural simplification (loss of semi-natural features, intensive inputs, and habitat fragmentation), while farm resilience depends on ecosystem services that those features support (pollination, natural pest control, water filtration, erosion reduction).

¹⁹

Within the Nature Restoration Regulation in the European Union, agricultural ecosystems are explicitly treated as a restoration domain. Member States must put in place measures aiming to achieve an increasing national trend in at least two out of three indicators: grassland butterfly index, soil organic carbon in cropland mineral soils, and the share of agricultural land with “high-diversity landscape features.”²⁰

This is especially relevant for Kosovo as a “prototype logic”: even without a national restoration plan, Kosovo can begin restoration through practical on-farm biodiversity zones while simultaneously building the monitoring baseline that its policies recognise as missing.

Kosovo’s own agriculture policy direction already points toward this need. The Strategy for Agriculture and Rural Development 2022–2028 notes that direct payments are not linked to environmental conditionality and that agri-environment measures are not yet in place; it also proposes designing simplified GAEC-style standards and increasing farmer awareness through advisory systems.²¹ In other words, the policy logic for conditionality exists as an aspiration, but a concrete, habitat-based mechanism is still missing. Biodiversity zones embedded within farms are a practical way to operationalise that gap: they create a visible “minimum ecological infrastructure” on farms and can be scaled through payments, guidance, and eventually regulation.

A second strategic link is organic farming development. Kosovo’s organic agriculture remains small (reported as around 0.4% of cultivated agricultural area in recent sector assessments), and the organic policy framework focuses on alignment with earlier EU organic regulations and administrative instructions for implementation.

¹⁹ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *Summary for Policymakers of the Assessment Report on Pollinators, Pollination and Food Production* (Bonn: IPBES, 2016).

²⁰ Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869, *Official Journal of the European Union*, L series, 29 July 2024.

²¹ Ministry of Agriculture, Forestry and Rural Development, *Strategy for Agriculture and Rural Development 2022–2028* (Prishtina: Government of Kosovo, 2022).

²²This makes it particularly timely to introduce biodiversity zones as a differentiating “next step”: not as a barrier for farmers, but as a structured restoration pathway that strengthens both ecological credibility and market positioning.

5.1 Restoration framework for biodiversity in productive landscapes

In a restoration-plan context, a “biodiversity zone within farming” could be defined as a mapped, managed part of the farm that is primarily dedicated to ecological function rather than production, and that increases habitat continuity, structural diversity, and the availability of resources for multiple species groups (pollinators, birds, amphibians, soil biota).

A robust operational definition is provided by the Nature Restoration Regulation’s indicator “share of agricultural land with high-diversity landscape features.” The Regulation lists typical features such as buffer strips, hedgerows, individual trees or tree rows, field margins, patches, ditches, streams, small wetlands, terraces, stonewalls, small ponds and cultural features.²³ Importantly, the Regulation also specifies a quality logic: to count as a high-diversity landscape feature, these areas should not be under productive agricultural use (unless such use is necessary for biodiversity preservation) and should not receive fertiliser or pesticide treatment, with limited exceptions. This kind of definition is useful for Kosovo because it is both ecologically meaningful and measurable (it can be mapped and audited).

Parallel to site selection, restoration must follow a clear governance framework. In the case of agricultural landscapes, interventions are likely to take place on privately owned land, requiring the active collaboration of farmers. While implementation occurs at the farm level, broader ecological targets, such as increases in indicator species (e.g. farmland birds), should remain the responsibility of public institutions. In this context, the role of the restoration project is to develop and test models that align farm-level practices with these wider environmental objectives. Non-governmental organisations can play a key role in facilitating this process, supporting coordination between stakeholders, and promoting the adoption of effective approaches.

5.1.1 Site selection

Biodiversity zones should be selected based on a combination of ecological function, feasibility, and integration within farm systems:

- Connectivity value: Prioritise areas that can function as corridors or stepping stones (field edges, tracks, riparian strips).
- Low opportunity cost: Focus on areas with limited productive value (parcel edges, wet corners, erosion-prone strips, drainage lines).

²² Ministry of Agriculture, Forestry and Rural Development, *The National Organic Action Plan of the Republic of Kosovo (NOAP) 2023–2026* (Pristina: Government of Kosovo, 2023)

²³ Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869, *Official Journal of the European Union*, L series, 29 July 2024.

- Risk-reduction function: Include areas adjacent to watercourses or slopes where buffers can reduce erosion and pollution.
- Feasibility: Select areas that can be implemented without major disruption to farm operations.
- Alignment with farm structure: Ensure selected zones integrate with existing land patterns and management practices.

These criteria allow biodiversity zones to be introduced with minimal conflict and high ecological return.

5.1.2 Site assessment

Before implementation, assess site-specific conditions:

- Land characteristics: Identify parcel edges, wet areas, drainage lines, and unused patches suitable for biodiversity zones.
- Current management: Document cropping patterns, chemical inputs (fertiliser, pesticides), and disturbance regimes.
- Soil and hydrology: Identify erosion risks, compaction, and water dynamics.
- Existing ecological elements: Record presence of trees, shrubs, margins, or semi-natural features already contributing to biodiversity.

This assessment ensures that biodiversity zones are properly located and adapted to existing farm conditions.

5.1.3 Active restoration pathway

The proposed active restoration steps:

- Site preparation and delimitation: Identify and clearly mark biodiversity zone areas (e.g. parcel edges, buffer strips, patches). Remove existing intensive land-use where necessary (cropping, frequent mowing). Avoid areas with high chemical exposure or continuous disturbance.
- Weed and disturbance control: Reduce invasive or aggressive species prior to establishment. This may include mechanical removal or repeated cutting. Ensure that pesticide use is avoided within designated zones.
- Soil preparation: Prepare the soil lightly to create suitable conditions for establishment, avoiding deep tillage. In nutrient-rich soils, consider measures to reduce fertility where necessary to favour diverse plant communities.
- Establishment of biodiversity features (typology-based): Introduce biodiversity zones using at least one, or a combination of typologies adapted to the site:
- Linear features such as flower-rich field margins, grass strips, hedgerows, shrub/tree lines, and edge corridors along parcels and tracks.
- Water-linked buffers including vegetated strips along streams, drainage lines, small wetlands, and ponds.
- Patch habitats such as fallows, orchard margins with understorey planting, unmanaged corners, and vegetation islands.

- Tree-based systems such as agroforestry strips and scattered tree elements providing habitat and microclimate functions.
- Seeding and planting: Apply native, locally adapted seed mixes prioritising flowering continuity across the season. Where needed, complement with planting of shrubs, trees, or herbaceous species. Timing should align with favourable seasonal conditions (early spring or autumn).
- Establishment phase management: During the first year, prioritise establishment through basic maintenance (e.g. weed control, protection from disturbance). Avoid intensive mowing or chemical inputs. Stable structure and ecological function typically develop from the second year onward.
- Implementation approach: Apply simple, standardised templates combining multiple elements (e.g. margins + buffer + patch habitat) to ensure continuity of ecological resources and reduce fragmentation. Select combinations based on farm structure and feasibility, allowing flexibility while maintaining consistent ecological objectives.

Given the variability between agricultural land, including differences in soils, management practices, and microclimatic conditions, this list should be considered as an indicative starting point. Implementation should be guided in close collaboration with farmers, whose knowledge of local conditions is essential for adapting measures to each specific context.

5.1.4 Monitoring and Indicators

Monitoring should be credible and affordable:

- Spatial indicator: Share of agricultural land with high-diversity landscape features (mapped and measured as % of utilised agricultural area).
- Vegetation and habitat quality: Presence and condition of biodiversity features (margins, hedgerows, buffers, patches), including vegetation structure and continuity.
- Pollinator function: Periodic transects and flower-cover assessments to evaluate pollinator activity and resource availability.
- Soil and climate-related indicators: Track soil organic carbon trends or proxy indicators related to soil health and ecosystem function.
- Bird presence: observation of farmland bird species as indicators of ecological condition.

5.1.5 Governance and Stakeholders

Implementation should follow a multi-level governance model:

- Farmers: Primary implementers responsible for establishing and maintaining biodiversity zones within their land.
- NGOs and development organisations: Facilitate pilot projects, farmer engagement, and training, and help bridge between institutions and land users.

Habitat Restoration Plan Development

- Advisory services: Provide technical guidance, templates, and on-farm support for design and management. This could be part of relevant NGO responsibilities.
- Ministry of Agriculture, Forestry and Rural Development (MBPZhR): Integrates biodiversity zones into agricultural policy, including simplified conditionality standards, funding schemes, and advisory systems.

A staged implementation model is recommended:

1. Stage 1: Pilot low-conflict, high-impact zones (edges, buffers, wet areas).
2. Stage 2: Introduce standardised farm-level templates.
3. Stage 3: Integrate into policy and advisory systems (conditionality standards).
4. Stage 4: Develop market and certification incentives.

6. Conclusion

This restoration plan proposes a focused and practical restoration approach for Kosovo, centred on three priority ecosystem types: riparian buffers, meadow landscapes, and biodiversity zones within productive agricultural land. These ecosystems are prioritised because they are widely distributed across the territory, already retain partial ecological function, and offer strong potential for restoration that is both feasible and scalable under current institutional conditions.

For riparian buffers, the plan proposes restoration along a 0–150 m corridor framework, with differentiated intervention according to sub-zones. The priority is to reduce ongoing pressures on river systems, including pollution, erosion, uncontrolled access, wastewater impacts, and hydromorphological degradation. Proposed measures include protection of natural regeneration, vegetation recovery, access control, runoff filtration, selective bank stabilisation, and targeted in-channel habitat improvements where appropriate. Given the territorial and dynamic nature of river systems, this is the ecosystem that requires the longest timeframe and the most phased implementation.

For meadow landscapes, the plan proposes a restoration framework focused on improving the ecological condition, management, and connectivity of existing meadow systems. The priority is to address abandonment, weak grazing and mowing regimes, shrub encroachment, and fragmentation. Depending on site conditions, the plan proposes either passive restoration through improved management and pressure removal, or active restoration through clearing, reseeding, invasive control, and soil repair. Meadow restoration is intended both to improve biodiversity and to support wider benefits related to pollinators, soil health, water regulation, and rural livelihoods.

For alternative meadow systems beyond traditional land-use, especially in urban and peri-urban areas, the plan proposes the creation of meadow-like habitats in publicly managed or underused spaces such as lawns, road verges, park margins, institutional land, and vacant plots. The priority here is to expand ecological connectivity, create visible pilot projects, and provide distributed habitat for pollinators and other species. These interventions are smaller in scale and can be implemented and tested within shorter timeframes.

For biodiversity zones within productive agricultural land, the plan proposes the integration of non-productive but ecologically functional areas within farms, such as field margins, hedgerows, buffers, patches, wet areas, and small landscape features. The priority is to strengthen biodiversity and ecosystem services directly within agricultural landscapes, while also creating a practical and measurable governance mechanism that can later be linked to agricultural support, advisory systems, and future policy instruments. Because these interventions take place largely on private land, collaboration with farmers is essential, and implementation should be adapted to the specific conditions of each farm.

Across all three ecosystem types, the plan proposes a consistent methodological structure based on site selection, site assessment, restoration decision-making, implementation pathways, monitoring, and governance. At the same time, the ecosystems differ in scale and implementation timeframe. Riparian restoration requires a broader territorial perspective and longer-term coordination, while meadow restoration and biodiversity zones in agricultural land are more suitable for shorter-term pilots and testing.

A central priority of the plan is therefore not only to restore habitats, but also to establish practical restoration models that Kosovo can test, adapt, and scale over time. In this sense, the proposed sites should be understood as both restoration areas and learning sites, helping to build the monitoring systems, biodiversity indicators, institutional coordination, and governance mechanisms that are currently missing or underdeveloped.

Overall, the plan proposes a restoration agenda for Kosovo that is concrete, phased, and ecosystem-specific. It begins with ecosystems where intervention is both urgently needed and realistically achievable, while creating a basis for future expansion into a broader national restoration framework.

About EC

EC Ma Ndryshe is a community-based organization, established in 2006, committed to sustainable development through an inclusive approach.

EC's activism envisions a Kosovo where democratic governance is participatory, transparent, and accountable, ensuring that institutions, communities, and stakeholders work together towards sustainable development.

This vision promotes inclusive decision-making, stronger policies, and greater public participation, ensuring that sustainability is an integral part of governance at both local and national levels.

Through better institutional coordination, evidence-based policymaking, and citizen engagement, EC's work aims to bridge the gap between communities and institutions, ensuring that good governance leads to tangible and lasting change.

Vision statement

"Empowering a resilient and inclusive Kosovo, where communities actively shape sustainable, digitalized, and conscientious institutions."

Mission statement

"EC Ma Ndryshe supports democratic governance and sustainable development in Kosovo by fostering sustainable socioeconomic, cultural, and green growth through digital education, environmental stewardship, community mobilization, advocacy for participatory public decision-making, and the cultivation of strategic partnerships."