



Biodiversity, Ecosystems, and Nature Conservation Helped and Enhanced by Sports

# Biodiversity assessment tool for sport

How to use manual



# 1. Introduction

The BENCHES biodiversity assessment tool for sport has been developed as a key output of the Erasmus+ Sport BENCHES project, co-funded by the European Union, with the aim of driving the transition of the sports sector towards biodiversity and ecosystem protection by fostering the adoption of environmental management tools among sports organizations and integrating them into operations during competitions. The BENCHES tool represents the first public biodiversity assessment tool for sport, and it was developed using a multidisciplinary and comprehensive methodology, resulting in a flexible instrument to evaluate impacts on biodiversity by sports organisations – including international and national sports federations as well as local sports clubs – and event organisers.

The BENCHES tool helps sports organisations and event organisers identify, measure, and mitigate their biodiversity impacts across the entire value chain and different ecosystems, and it is designed for easy use by practitioners without specialist knowledge.

The BENCHES tool is structured around four independent axes of analysis, each of which can be applied individually or in combination, allowing sports organisations and event organisers to tailor their assessment to the dimensions more pertinent to their activities and responsibilities.

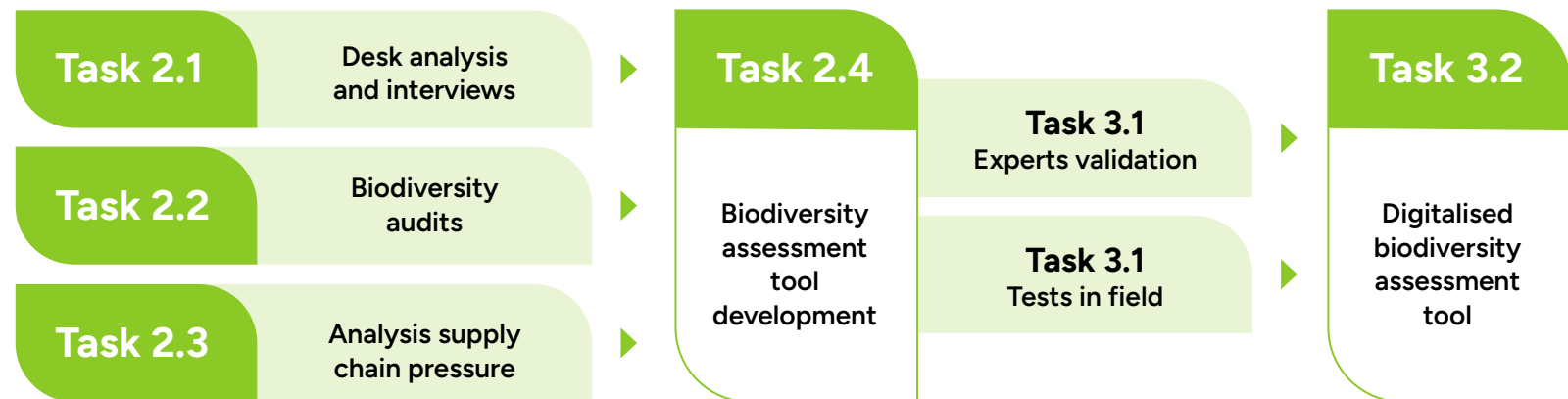
- **Axis 1** assesses biodiversity management within sports organisations.
- **Axis 2** assesses biodiversity management within sports facilities.
- **Axis 3** assesses biodiversity management by event organisers.
- **Axis 4** assesses biodiversity pressures of sporting events.

The tool incorporates a context analysis to adapt the assessment of axes 2, 3, and 4 based on proximity to protected natural areas or key biodiversity areas. Axes 3 and 4 are further tailored to the specific ecosystem where the event occurs – whether terrestrial (summer or winter), aquatic (ocean, sea, river, lake), or urban – through the inclusion of dedicated assessment questions. Moreover, the evaluation extends across the entire supply chain, addressing both sports organisations (axis 1) and event organisers (axis 3).

# 2.1 Methodological Roadmap

The BENCHES tool is based on a highly transdisciplinary methodological approach, which integrates methods from social sciences (e.g., economics and sustainability management studies) with environmental sciences and ecology. To evaluate the impacts of sports on biodiversity, a diverse range of approaches has been adopted, addressing the issue from multiple perspectives while aligning with the tool's innovative scope and specific focus on biodiversity.

To support its broad adoption, the BENCHES tool has been developed based on insights drawn from a wide range of sports and natural ecosystems. These includes aquatic ecosystems – ranging from sea and ocean (sailing) to rivers and lakes (canoeing and kayaking) – terrestrial ecosystems - including mountain and forests in both summer (mountain running) and winter (biathlon) seasons - and urban ecosystems (football). Additionally, to ensure concrete applicability and support sports organisations in assessing their impacts on biodiversity across the entire value chain, international (World Sailing, Word Athletics, The International Biathlon Union) and national (Italian Canoe & Kayak Federation) sports federations, local sports clubs (Benfica), and related event organisers, have provided valuable insights into the relationship between sports and biodiversity across these various ecosystems.



## 2.1 Methodological Roadmap

### Desk analysis

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The desk analysis provided a state-of-the-art review of key existing methods – including tools, frameworks or guidelines, and databases – for assessing business pressures on biodiversity.

**Click here** to discover the results of the analysis and the inputs considered in the development of the tool.

### On-site visits

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The on-site visits provided insights into the interactions between sporting events and biodiversity through direct observation of activities and interviews with event organisations. Additionally, environmental sustainability documents from sports organisations and event organisers were reviewed to gain insights into existing practices, policies, and commitments.

**Click here** to discover the results of the on-site visits and the inputs considered in the development of the tool.

### Supply chain biodiversity management analysis

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The supply chain biodiversity management analysis focused on both sports organisations and event organisers associated

with them. It involved desk analysis of supply chain management documents and procedures, as well as semi-structured interviews with purchasing departments.

**Click here** to discover the results of the supply chain analysis and the inputs considered in the development of the tool.

### Expert validation

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Interviews with experts supported a first revision of the tool and contributed to its validation. Using a predefined evaluation protocol, the experts were asked to provide feedback on the tool's content, structure, and underlying methodology through semi-quantitative or qualitative assessment methods. Additionally, they were asked to confirm whether specific quality criteria had been met.

### Tests in field

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Partner sports organisations and related sporting event organisers tested the BENCHES tool in its first reviewed version, adopting it in practice and providing feedback through a dedicated evaluation protocol.

**Click here** to discover the results of the validation process and the inputs considered in the development of the tool.

## 2.2. Key Insights for the development of the assessment tool

Based on the findings from the activities carried out, the BENCHES biodiversity assessment tool for sport has been developed with key characteristics designed to meet identified needs, overcome potential weaknesses, and fill gaps observed in existing tools. Specifically, it addresses the need to emphasise biodiversity over broader sustainability issues, while ensuring wide applicability across the sports sector, including the entire value chain and various natural and urban ecosystems.

## 2.2. Key Insights for the development of the assessment tool

### Five environmental pressures framework

Especially after the publication of the Millennium Ecosystem Assessment (MEA) in 2005, both grey and scientific literature have increasingly focused on the five environmental pressures framework as a means of evaluating biodiversity impacts. However, the strong emphasis on the five environmental pressures, particularly climate change and pollution, may shift the scope and focus of the tool, which is specifically designed to assess pressures on biodiversity rather than broader sustainability practices. Thus, while the BENCHES tool has integrated the five environmental pressures into its overall structure, it does so by going beyond the original framework and integrating specific biodiversity considerations.

### Multidimensionality of the sports sector

Complexity and multidimensionality are inherent in the sports sector. Comprehensive biodiversity management has been considered at both the organisational level (including corporate and supply chain aspects) and on-site level (i.e., the management of sports facilities and sporting events). Thus, the BENCHES tool encompasses four independent axes of analysis, enabling different stakeholders to implement the assessment effectively.

### Supply chain management

Supply chain approaches to assess their impacts on biodiversity can vary depending on the entities responsible for the procurement activities (e.g., national and international sports federations, local sports clubs, municipalities, local agencies) and the context in which they are applied (i.e., organisational or event levels). To effectively implement biodiversity management at supply chain level, the BENCHES tool focuses on biodiversity-specific certifications and requirements, as well as a list of products and goods with high biodiversity risk, drawing on international references such as the European Union Deforestation-free Products Regulation (EUDR) and the Convention of International Trade of Endangered Species of wild fauna and flora (CITES).

## 2.2. Key Insights for the development of the assessment tool

### Context analysis

The proximity of sports facilities and events to natural areas can significantly influence the extent of their impacts on biodiversity. To address this aspect, the BENCHES tool incorporates a context analysis, which allows for a more informed assessment and a deeper understanding of the relevance of the impacting activities. This analysis is further enhanced through the use of georeferenced databases, which help identify nearby relevant natural areas. The selected databases are the World Database on Protected Areas (WDPA) and the World Database of Key Biodiversity Areas (KBAs).

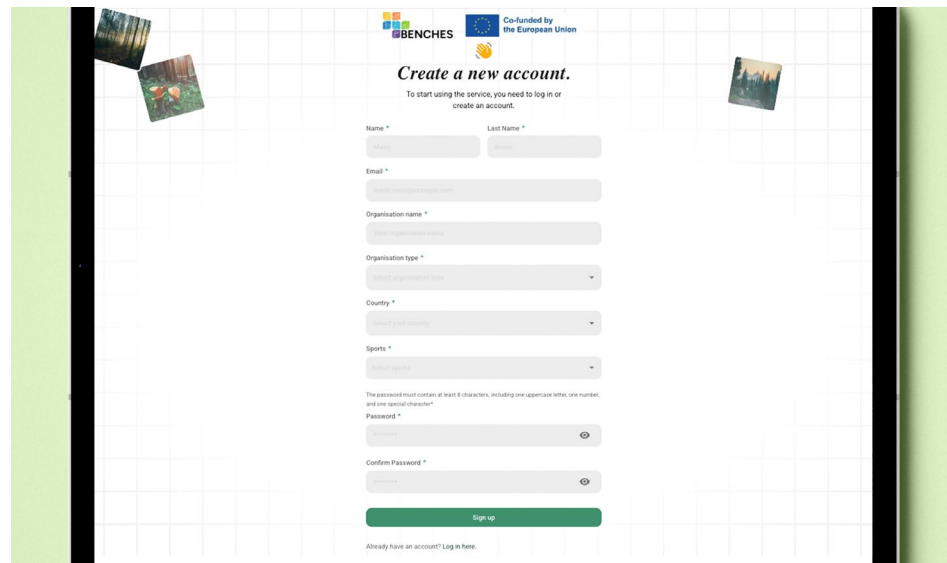
### Quality Criteria

With the aim of achieving widespread adoption and positioning the tool as a standard for sports organisations, whether they are just beginning or have already integrated biodiversity protection into their environmental strategies, the following quality criteria were considered during the development process:

- **Clarity:** the tool is designed to prevent misunderstanding or any form of personal interpretation.
- **Objectivity:** the results of the assessment are not influenced by personal feelings, backgrounds, or knowledge.
- **Robustness:** the criteria upon which the tool is based are relevant and reliable.
- **Long-term validity:** the criteria adopted in the tool can be applied for several years, requiring only minor adaptations to align with current policies and developments.
- **Versatility:** the tool is applicable to different natural ecosystems, including urban biodiversity, and to various sports.
- **Independence and comparability:** the tool can be applied independently by different stakeholders and the results of the assessment can be consistently compared across users.
- **Ease of application:** the tool requires minimal effort in terms of time and economic resources.
- **Scalability:** the tool can be expanded to include any sport and ecosystem, and users can enhance their assessment results over time.

# 3. How to use the BENCHES biodiversity assessment tool for sport

## Create an account



Include your name, surname, email account, and organisation name.

Indicated whether you are an international sport federation, national sport federation, sport club, event organiser or other entity.

Select the country where you are based.

Select the sport(s) you are involved in by choosing among Olympic sports or sports related to international federations officially recognised by the IOC.

Choose and confirm a password for your account.

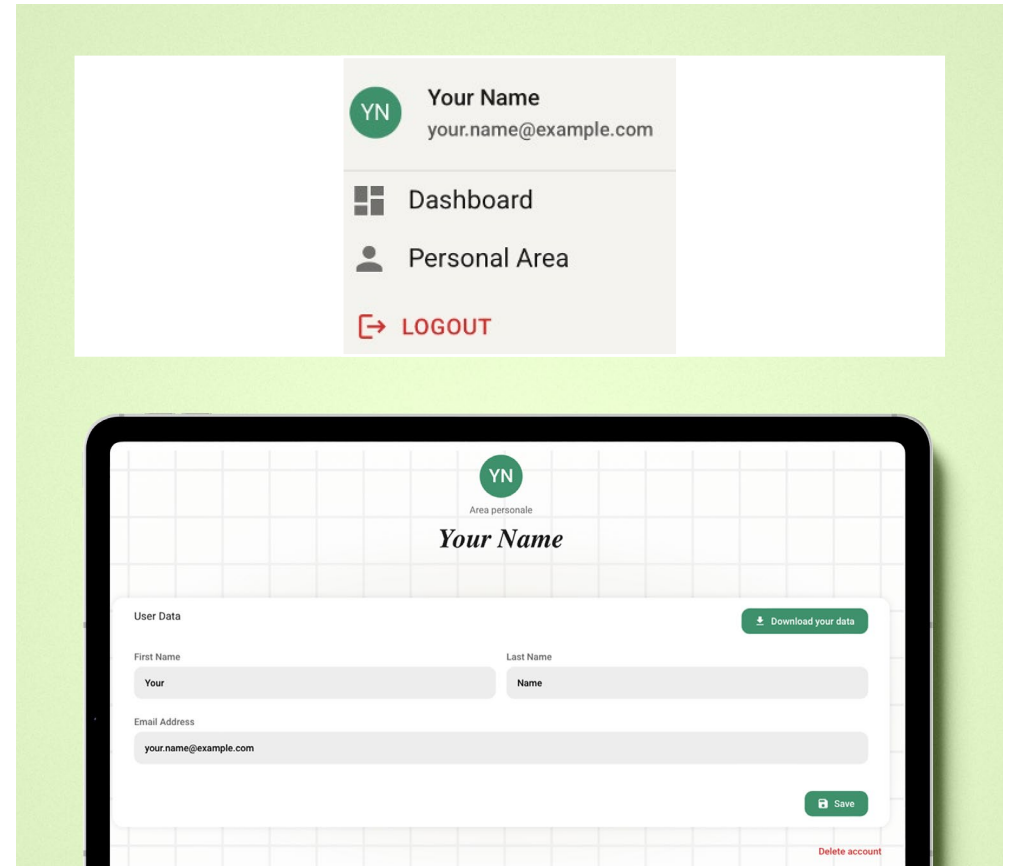
**Sign up and start your assessment!**

## 3. How to use the BENCHES biodiversity assessment tool for sport

### Your profile

You can view your profile at the top right of the webpage, access your dashboard and personal area, or log out if you wish.

In your personal area, you can change your account name, download your data, or delete your account.



### 3. How to use the BENCHES biodiversity assessment tool for sport

The BENCHES biodiversity assessment tool for sport is meant to be used periodically, to monitor your progress and support continuous improvement. Event organisers are encouraged to use the tool both during the planning phase, to minimise potential impacts, and immediately after the event, to assess its actual impact.

If you wish, you can download a preview of the questions from the homepage.

Follow the four main steps:

- 1. Profiling:** Specify the sport, the ecosystem, and the focus of your assessment. If you want to assess the impact on biodiversity of your facility or event, indicate its location in the context analysis.
- 2. Biodiversity assessment:** Based on the selected evaluation axes, you can assess your biodiversity management practices through a series of KPIs.
- 3. Results:** The results of the assessment will be graphically displayed as percentage of the maximum achievable score, with each axis having its own distinct maximum score. The results will be represented both for individual axis evaluations and as an aggregated score derived

from multiple axes. The Average Biodiversity Score represents the overall percentage of biodiversity management performance across all evaluated axes. The Quality Score measures the completeness and reliability of the data you provided, accounting for skipped or “not applicable” responses.

- 4. Improvements opportunities:** Based on the results of your assessment, you will gain an understanding of improvement opportunities in biodiversity management.

You can download a PDF containing your results and identified improvement opportunities.

Your assessments will be recorded in the evaluation history on the first page.

You will be able to:

- View past results for completed assessments
- Resume **pending assessments**

If you are an international federation, you will be able to view the results achieved by national federations and clubs in your sports. Similarly, national federations can view the results of their affiliated sports clubs.



# BENCHES

