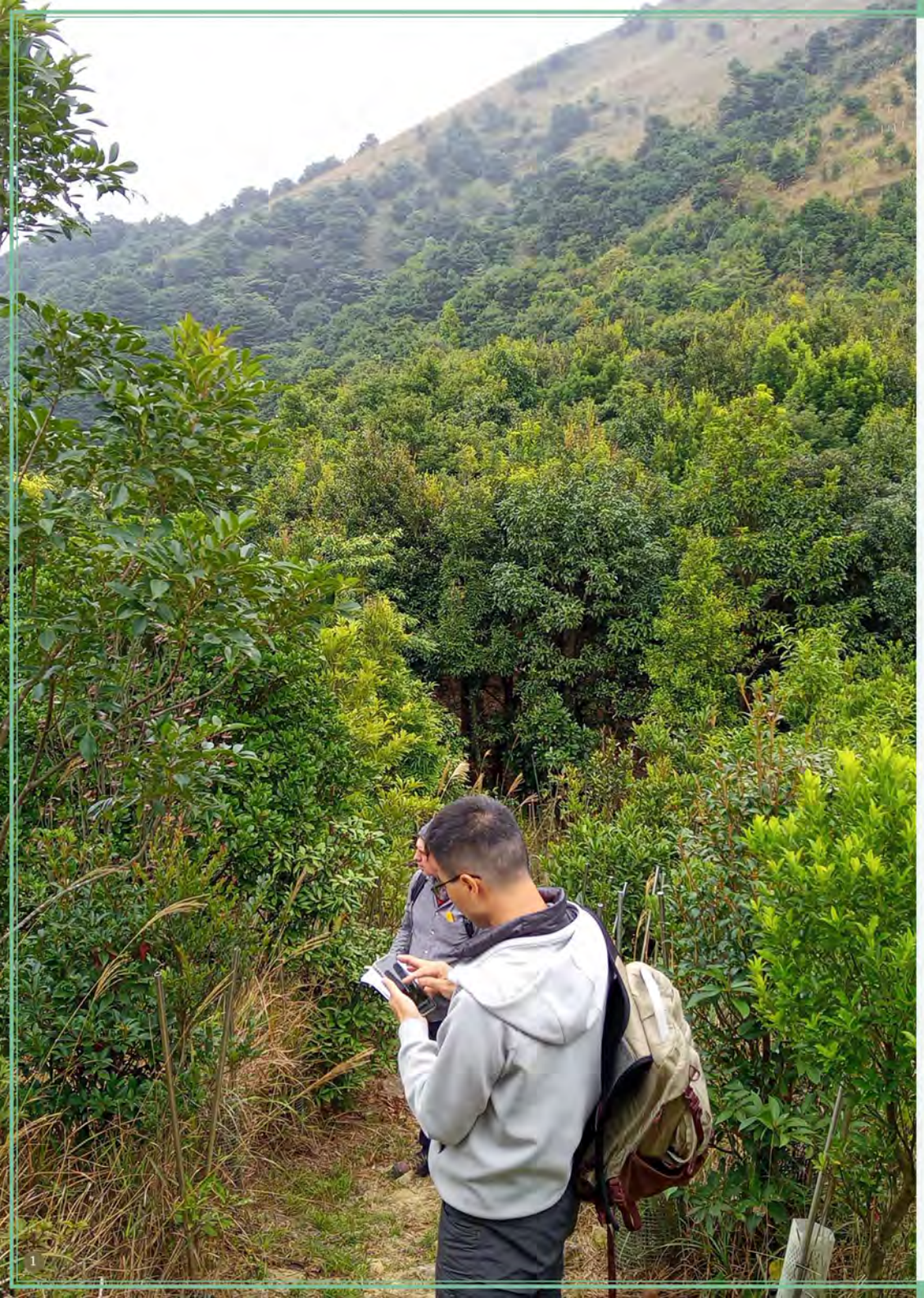
The Global Biodiversity Standard

Promoting the Protection, Enhancement and Restoration of Biodiversity

Introduction to the Assessment Methodology



The Global Biodiversity Standard (TGBS) provides a global standard for nature-based solutions, to drive positive outcomes for ecosystems and the communities that rely on them. TGBS is a scientifically rigorous standard that measures uplift in biodiversity, using a global framework with a local assessment. Developed by a coalition of biodiversity experts, which supports the goals of the Global Biodiversity Framework, TGBS provides assurance that tree planting, habitat restoration and agroforestry practices are protecting, enhancing and restoring biodiversity.

QUALITY ECOSYSTEMS

Improves the quality of tree planting, land management and ecosystem restoration projects by implementing a more rigorous assessment system that requires evidence of biodiversity uplift.

BEST PRACTICES

Promotes best practice for projects or practitioners by upholding positive actions such as the incorporation and conservation of native species and reduction of land degradation in land management projects, including nature-based solutions to climate change.

BUSINESS INCENTIVES

Incentivisation for businesses to ensure that projects they promote and support meet the standard and have been certified.

Dr. Éliane Ubalijoro,
CEO of the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF)

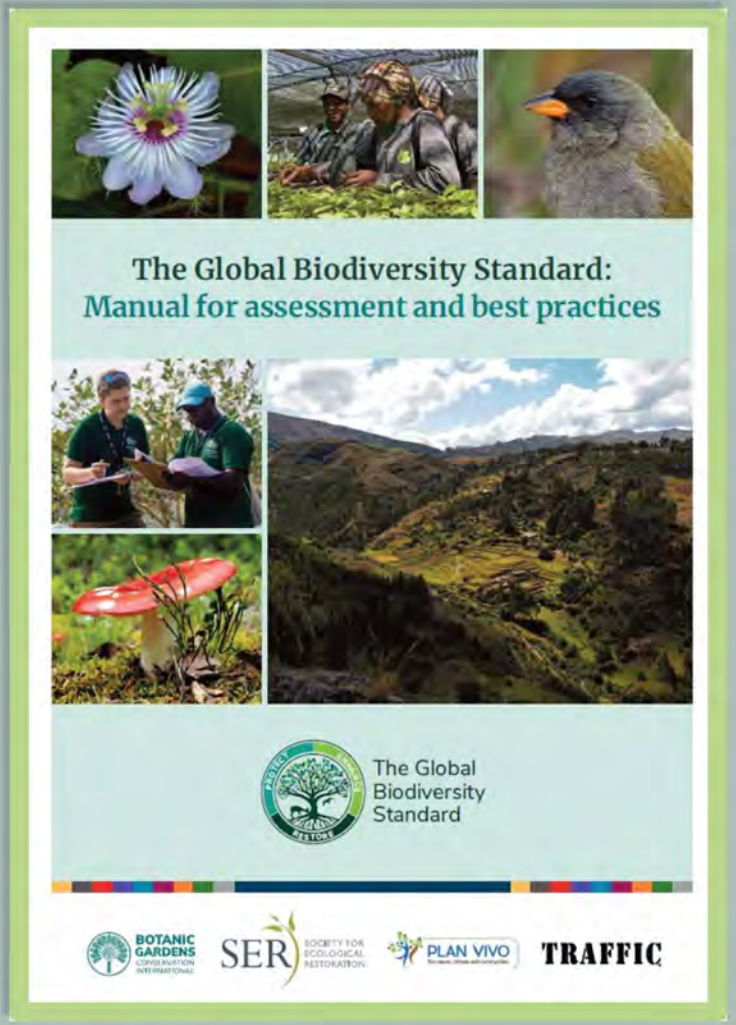
"CIFOR-ICRAF is committed to sharing knowledge that empowers smallholder farmers to plant trees for optimal results. As an enthusiastic supporter of the TGBS, CIFOR-ICRAF is proud to have contributed to the methodologies outlined in the manual. Together, we are shaping a future where trees drive positive transformation, embodying our shared commitment to a sustainable, resilient and just world."

Dr. Grethel Aguilar,
Director General of IUCN

"IUCN welcomes the TGBS as a tool to assess the impacts of tree planting and other nature-based initiatives on biodiversity and ecosystem integrity, providing assurance to financiers and policymakers, as well as assistance to practitioners. IUCN hosts the Bonn Challenge Secretariat, which records and tracks progress against a target of 350 million hectares of land pledged for FLR by 2030."

Dr. David Cooper,
Former Executive Secretary of the UN Convention on Biological Diversity

"The TGBS is one of several tools that are compatible with the Convention on Biological Diversity's Global Biodiversity Framework (GBF). Target 1 of the GBF calls for participatory effective management of biodiversity and ecological integrity, and Targets 2 and 11 call for restoration to repair damage already caused. Target 4 calls for urgent management action to halt human-induced extinction, and Targets 5 and 9 seek to ensure that the use, harvesting and trade of wild species is sustainable. The Global Biodiversity Standard will help to deliver on all of these targets."



Read the full specifications of the Standard. Download the Manual here!

biodiversitystandard.org/our-method

ASSESSMENT PROCESS

THE 8 TGBS CRITERIA & FOUR SECTIONS OF ASSESSMENT

ECOSYSTEM INTEGRITY

Adapted from SER Standards and assessed using two frameworks:

- The Ecological Recovery Wheel (ERW)
- The Ecosystem Integrity Five-star System

1 Select appropriate areas and enhance biodiversity

4 Aim to maintain biodiversity recovery through ecosystem restoration

5 Promote biodiversity and adaptive capacity

6 Prioritise the use of native, threatened and rare species

7 Avoid and reduce invasive or potentially invasive species

LEVEL OF PROTECTION

5-star Level of Protection ratings adapted from IUCN Protected Area Categories, IUCN Red List of Ecosystems, & Other Effective Area-based Conservation Measures (OECM)

2 Enhance protection of existing habitats and biodiversity

SOCIAL ENGAGEMENT AND BENEFITS DISTRIBUTION

Developed by Plan Vivo and TRAFFIC, based on the SER Social Benefits Wheel

3 Protect, restore & manage biodiversity in consultation and partnership with local communities

MONITORING, EVALUATION & ADAPTIVE MANAGEMENT

Robust Monitoring, Evaluation and Adaptive Management List adapted from the Information Sharing Framework (ISF) and the UN Decade Standards of Practice

8 Implement robust monitoring, evaluation and adaptive management of biodiversity

Assessed for Baseline and Current conditions at each site (for a project with multiple sites)

1 Select appropriate areas and enhance biodiversity

4 Aim to maintain biodiversity recovery through ecosystem restoration

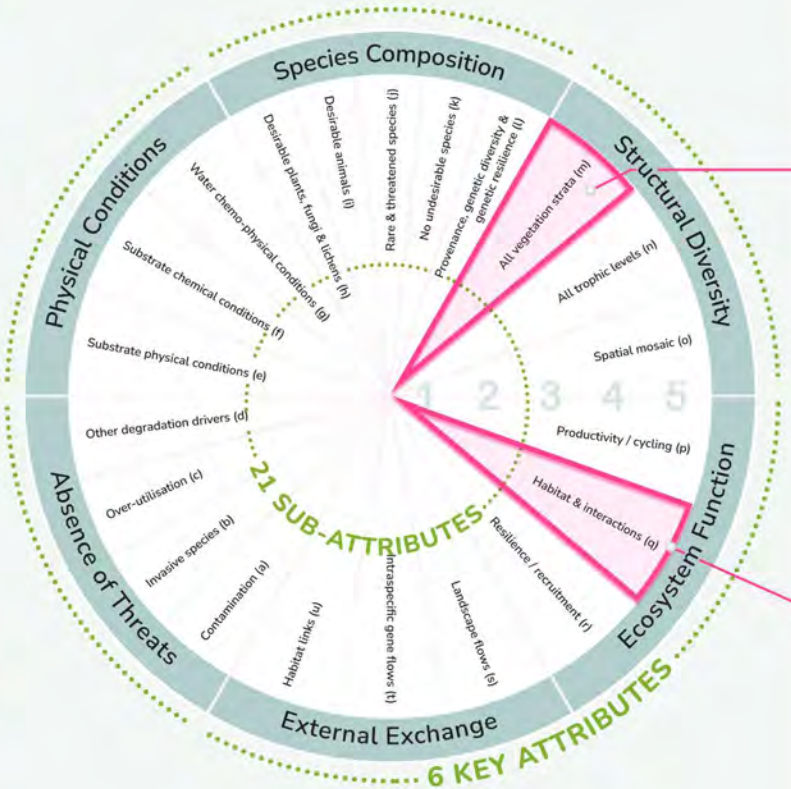
5 Promote biodiversity and adaptive capacity

6 Prioritise the use of native, threatened and rare species

7 Avoid and reduce invasive or potentially invasive species

FRAMEWORK 1 - THE ECOLOGICAL RECOVERY WHEEL

Adapted from SER



Each sub-attribute (a to u) is given a **star rating** for **Baseline** and **Current** conditions, according to the Ecological Integrity Five-star System, where 5 stars represents the **Reference Model** conditions

FRAMEWORK 2 - THE FIVE-STAR SYSTEM

Adapted from SER

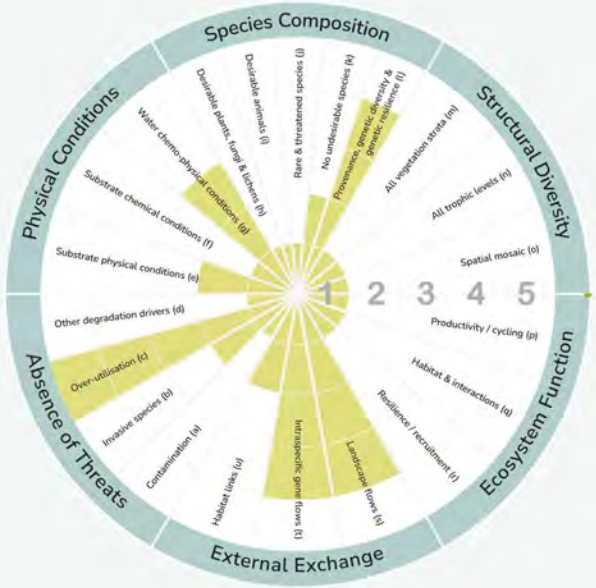
Examples of how the five-star system table is used to assign rating for sub-attributes

Ref.	ATTRIBUTE	SUB-ATTRIBUTE	ZERO STARS	ONE STAR ★	TWO STARS ★★	THREE STARS ★★★	FOUR STARS ★★★★	FIVE STARS ★★★★★
(m)	Structural diversity	**All vegetation strata**	No stratum of the reference present, with little to no resemblance in terms of the number, structure, growth form and complexity of strata present.	At least one stratum of the reference present throughout the site (e.g., canopy, ground cover) but is dissimilar to the reference.	Multiple strata of the reference present and remain at low similarity levels relative to the reference but capable of supporting some biota of the reference.	>50% of the strata of the reference present within the intermediate range of the reference and capable of supporting growth and development of many characteristic native biota.	All strata of the reference present, within a high range of the reference and suitable for ongoing growth and recruitment of most characteristic native biota.	All strata of the reference present and highly similar to that of the reference. Further complexity able to self-organise to highly resemble the reference. No inappropriate strata unrelated to the reference present.
(q)	Ecosystem function	**Habitat and interactions**	Habitat provision is absent or severely limited in its presence and functions when compared to the reference.	Habitat provision at a very foundational stage only, compared to the reference.	Low numbers and levels of habitat provision relative to the reference are present.	Intermediate numbers of habitat provision relative to the reference are present.	Substantial levels of habitat provision relative to the reference are present.	Habitat provisions are present with a high similarity to the reference and show evidence of being sustained.

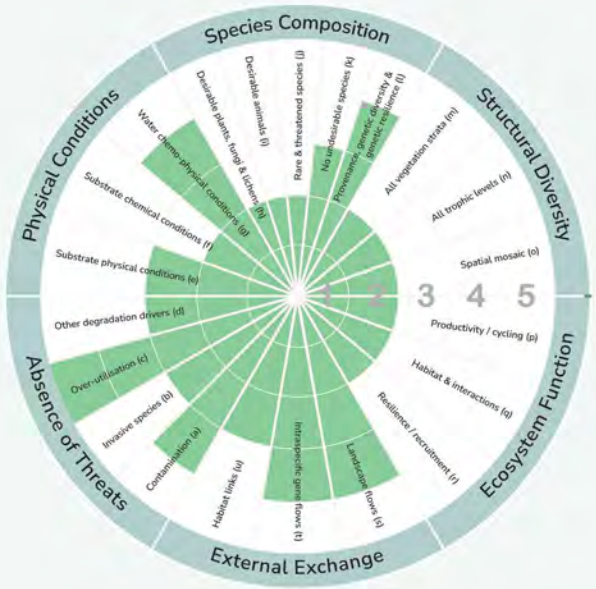
[Appendix F of the Manual of TGBS]

EXAMPLES OF COMPLETED RATINGS

BASELINE CONDITIONS RATING -
Project start



CURRENT CONDITIONS RATING -
At the time of assessment



METHODS OF ASSESSMENT

BASELINE - *the condition of a site at the beginning of the restoration process*

- Project's baseline studies & records
- Surveys of proxy sites (similar condition as baseline)
- Discussions and interview with stakeholders
- Remote sensing & historical data

CURRENT - *the state of a site while the Assessment is being conducted*

- Project's implementation & monitoring records
- Rapid biodiversity surveys
- Discussions and interview with stakeholders
- Direct observation & evidence
- Automated devices
- Remote sensing, mapping

REFERENCE MODEL - *referring to specific real-world native ecosystems and the attributes obtained from multiple modern analogs or reference sites*

- Reference site survey information & remote sensing
- Historical archives
- Indigenous and local ecological knowledge
- Consultation with stakeholders
- Scientific studies

For The Global Biodiversity Standard, assessing ecosystem integrity entails comparing the **current state of an ecosystem** to both a **baseline** condition and a **reference** model. The **baseline represents the ecosystem's starting point** or pre-project condition, whereas the **reference model represents the condition the ecosystem would be in had degradation or conversion not occurred**, and against which restoration is measured. *The star rating of the reference model is five, for all sub-attributes.*

ASSESSING LEVEL OF PROTECTION [CRITERION 2]

Assessed for Baseline and Current conditions at each site (for a project with multiple sites)

2 Enhance protection of existing habitats and biodiversity

1 **Legal Protection** of the site for biodiversity

Legal documentation needed as evidence to verify protection status

YES **NO**

2 **Management Activities** to halt degradation and enhance ecosystem recovery

PERCENTAGE OF SUFFICIENT MANAGEMENT ACTIVITIES

Rating given for the BASELINE and CURRENT conditions, as per the categories in Appendix G of the Manual of TGBS

ASSESSMENT OF LONG-TERM SUSTAINABILITY OF MANAGEMENT ACTIVITIES

- *Sufficient to halt degradation*
- *Sufficient to enhance biodiversity recovery*
- *Consistent with sustainable long-term biodiversity conservation objectives*

(a) Evidence of sustainable soil and water management

- Watershed management
- Soil erosion control
- Management of wetland hydrology

(b) Evidence of sustainable vegetation cover & ecosystem structure management

- Restrictions on ecosystem conversion or destruction
- Sustainable management practices in productive landscapes
- Maintenance of natural disturbance regimes
- Fire management, including site preparation
- Protection from overexploitation and overuse
- Protection from uncharacteristic fire
- Prescribed burning
- Grazing management

(c) Evidence of control of invasive species management

- Species control (physical / mechanical)
- Species control (biological)
- Post-control measures
- Re-invasion monitoring and prevention measures
- Species control (organic or non-synthetic chemical)
- Species control (synthetic chemical)
- Management of secondary invasives
- Other control of invasive species

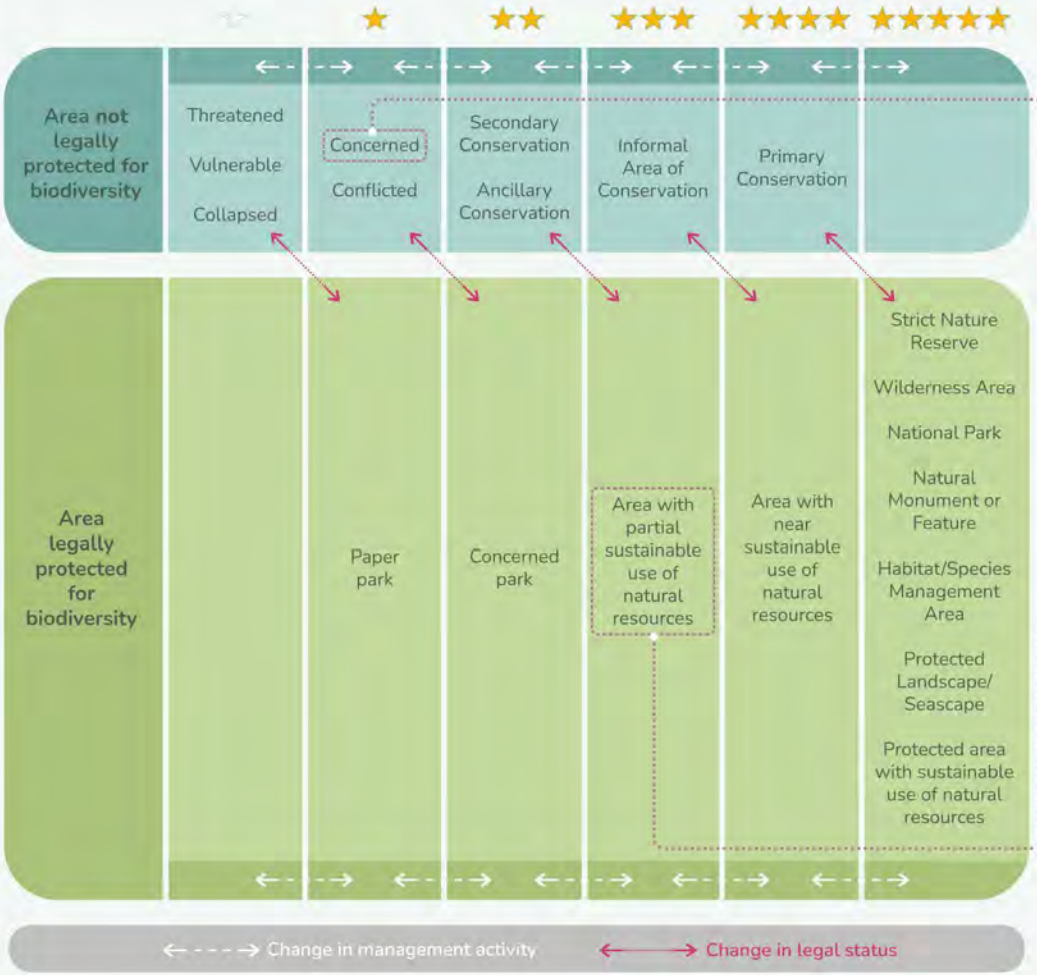
- Sufficient level
- Insufficient level
- Not applicable

% sustainable management activities

$$= 100 \times \left(\frac{\text{number of sufficient management activities}}{\text{number of applicable management activities}} \right)$$

[Appendix B of the Manual of TGBS (B.7)]

TABLE OF CATEGORIES



Visualisation of the Five-star Ratings for the Level of Protection [Criterion 2] of a site (Section 5.6 of the Manual of TGBS)

The level of protection can change according to changes in management activities (white arrows) or because of a change in legal status (pink arrows).

LEVEL OF PROTECTION FIVE STAR RATING TABLE

Modified and adapted from IUCN Protected Area Categories, OECM and IUCN RLE

Examples from Appendix G of the Manual of TGBS

Category	Description	Source	Star rating	Legal protection for biodiversity	Percentage of management activities sufficient for long-term sustainable conservation objectives
Concerned	Conservation objectives are stated but not implemented or met, with only 25-49% of management activities consistent with sustainable long-term conservation objectives.	Inspired by IUCN RLE	1 star	No	25-49%
Area with partial sustainable use of natural resources	Legally protected but despite management efforts to conserve the ecosystem and maintain associated cultural values, only 50-74% of management activities are consistent with sustainable long-term conservation objectives.	-	3 stars	Yes	50-74%

This table outlines the details of five-star rating for the level of protection used to assess Criterion 2 of TGBS.

[Appendix G of the Manual of TGBS]

ASSESSING STAKEHOLDER ENGAGEMENT AND SOCIAL BENEFITS [CRITERION 3]

Assessed at a project level (even for a project with multiple sites), rather than with individual ratings for Baseline and Current conditions as with Ecosystem Integrity and Level of Protection

3 Protect, restore & manage biodiversity in consultation and partnership with local communities

Four attributes:

1. Stakeholder Engagement
2. Benefits Distribution
3. Knowledge Enrichment
4. Sustainable Economies

Developed by Plan Vivo and TRAFFIC, based on

The SER Social Benefits Wheel

STAKEHOLDER ENGAGEMENT AND SOCIAL BENEFITS SCORING

Scoring each attribute of Criterion 3

1. Stakeholder engagement *Max 4 points*	+1 point	+1 point	+1 point	+1 point
	Stakeholders are identified and made aware of the project and rationale.	Stakeholders are identified and made aware of the project and rationale. A grievance mechanism exists and is accessible to stakeholders.	Primary stakeholders are involved and support the project throughout its development. Involvement increases from the start of implementation.	Secondary stakeholders are involved and support the project throughout its development. Involvement increases from the start of implementation.
2. Benefits distribution *Max 3 points*	+1 point	+1 point	+1 point	
	Capacity increased through knowledge uptake, use and skills development.	Benefits and opportunities are equitably distributed *(at least two of the bullet points or similar).*	There is improved community well-being *(at least two of the bullet points or similar).*	
3. Knowledge enrichment *Max 1.5 points*	+0.5 point	+0.5 point	+0.5 point	
	Inclusion of local or indigenous knowledge in project development.	Inclusion of conservation best practice in project development.	Project contributes to the scientific community and wider knowledge.	
4. Sustainable economies *Max 1.5 points*	+0.5 point	+0.5 point	+0.5 point	
	There is increased employment.	There is improvement to local supply chains and the local economy.	There is inclusion of sustainable business and employment models.	

The total available points, as with any other criterion, is 10 points.

[Appendix H of the Manual of TGBS]

ASSESSING MONITORING, EVALUATION & ADAPTIVE MANAGEMENT [CRITERION 8]

Assessed at a project level (even for a project with multiple sites), rather than with individual ratings for Baseline and Current conditions as with Ecosystem Integrity and Level of Protection

Assessed in five parts

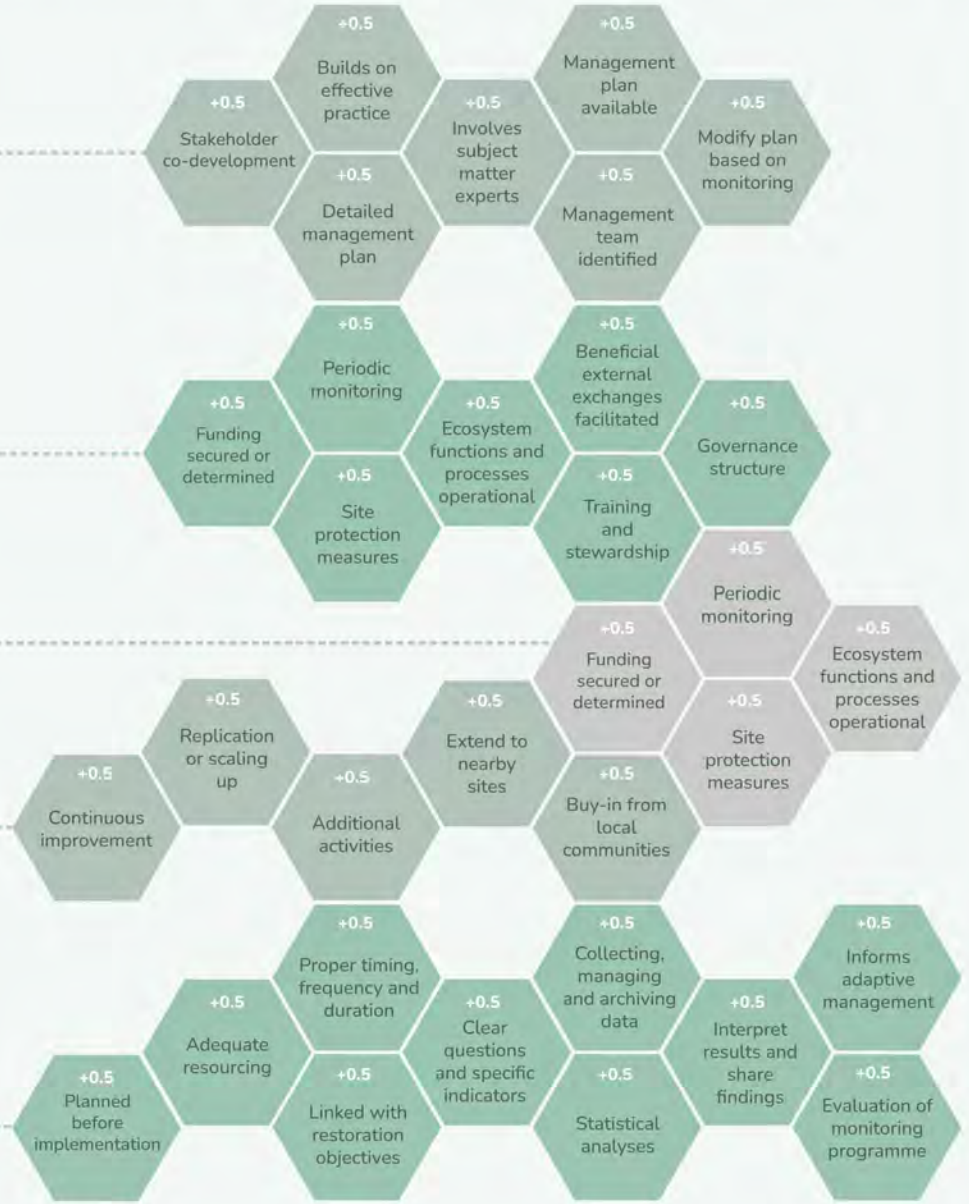
8 Implement robust monitoring, evaluation and adaptive management of biodiversity

The Robust Monitoring, Evaluation and Adaptive Management List adapted from the Information Sharing Framework (ISF) and the UN Decade Standards of Practice

1. Ongoing Management Planning — Max. 2 points
2. Long-term Resourcing — Max. 2 points
3. Adaptive Management — Max. 1.5 points
4. Continuous Improvement — Max. 1.5 points
5. Monitoring and Evaluation — Max. 3 points

The total available points, as with any other criterion, is 10 points

MONITORING, EVALUATION & ADAPTIVE MANAGEMENT SCORING

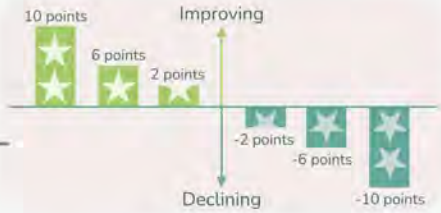


[Appendix B of the Manual of TGBS (B.9)]

SCORING PROCESS OF TGBS FOR THE 8 CRITERIA

ECOSYSTEM INTEGRITY
[CRITERIA 1,4,5,6,7]

The change in Star-ratings from Baseline to Current conditions give the score for each sub-attribute of the Ecological Recovery Wheel.



LEVEL OF PROTECTION
[CRITERION 2]

The change in Star-ratings from Baseline to Current conditions give the score for Level of Protection.

STAKEHOLDER ENGAGEMENT AND SOCIAL BENEFITS
[CRITERION 3]

Points are added for each of the four sections with a maximum score of 10 points (negative not possible).

MONITORING, EVALUATION AND ADAPTIVE MANAGEMENT
[CRITERION 8]

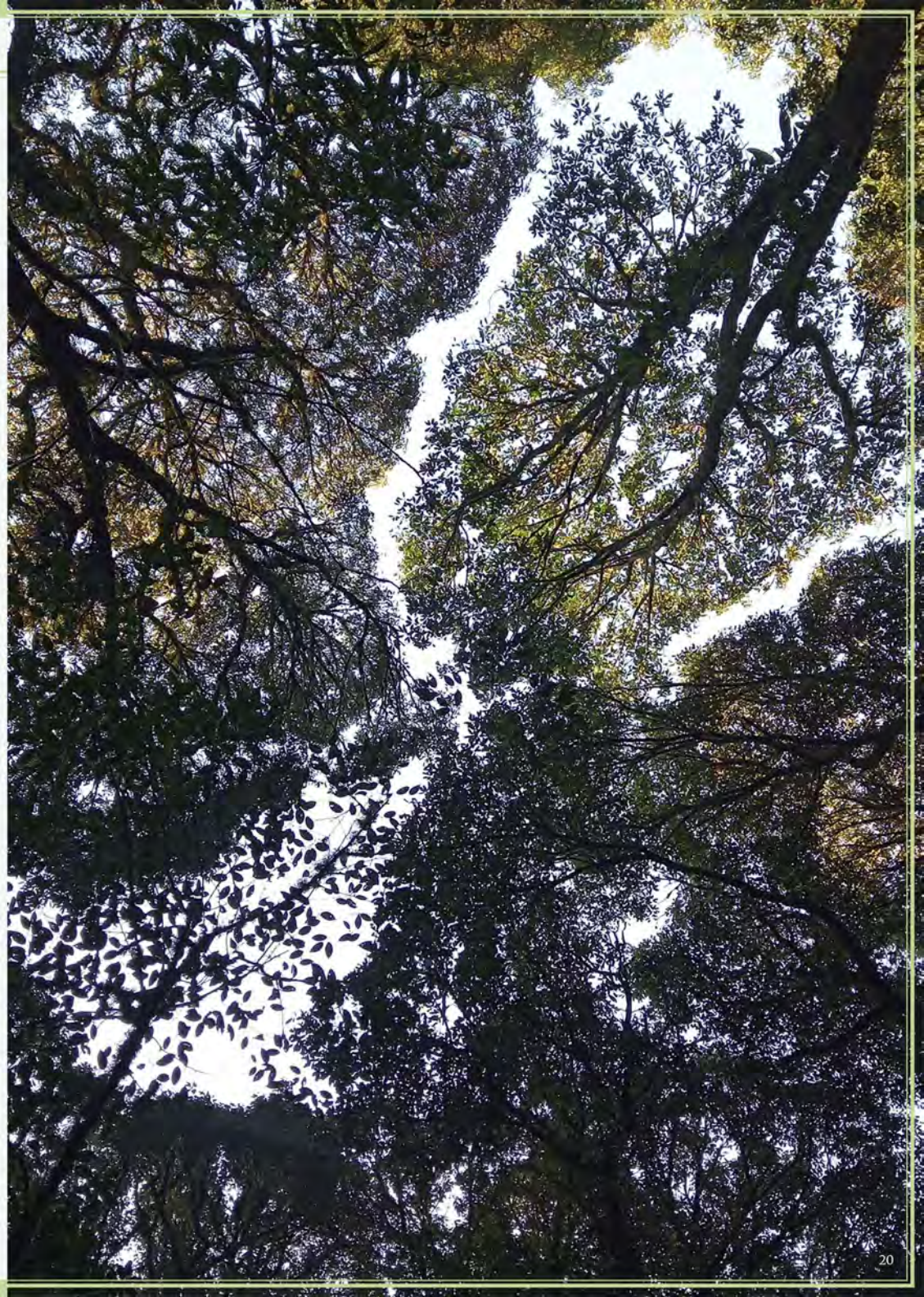
Points are added for each of the five sections with a maximum score of 10 points (negative not possible).

TGBS SCORING SUMMARY

The final score of TGBS is the average of the 8 criteria scores.

Criterion 1	Average point score of sub-attributes for Key Attributes ↓ Average point score of Key Attributes
Criterion 2	Baseline to current (-10, -5, 0, 5, 10)
Criterion 3	Score (0 to 10)
Criterion 4	Average of 6 sub-attributes: $\frac{(h+i+j+m+n+o)}{6}$
Criterion 5	Average of 2 sub-attributes: $\frac{(b+k)}{2}$
Criterion 6	Average of 2 sub-attributes: $\frac{(h+j)}{2}$
Criterion 7	Average of 2 sub-attributes: $\frac{(l+t)}{2}$
Criterion 8	Score (0 to 10)

[Section 6.2 of the Manual of TGBS]



CERTIFICATION TIERS OF TGBS

Early stage projects

(<10 years)

Planning phase

The Global Biodiversity Standard Certified Plan

Projects that are in the **planning stage** are able to apply for certification of their plans as a TGBS certified plan.

- Projects with plans that show **how they will reach the threshold for full TGBS certification.**
- Certified Plan status granted for five years, after which projects will apply for pre-certification or full certification
- Implementation timeline must be followed; annual reviews of implementation activities
- Mentoring available to improve plans to ensure projects meet threshold of a certified plan.

Implementation phase

The Global Biodiversity Standard Pre-certification

Projects that have started within the last 10 years and are yet to achieve positive biodiversity outcomes are able to apply for a pre-certification.

- Criterion 2: *no negative score*
- Criteria 1, 4, 5, 6, 7: *≥ 2 out of 10*
- Criterion 3: *≥ 5 out of 10*
- Criterion 8: *≥ 5 out of 10*

Projects >10 years are not eligible for pre-certification. Pre-certification under the TGBS granted for a period of five years, after which projects will have to renew their application.

Certification for uplift in biodiversity from baseline to current conditions

Tiering based on scoring thresholds

Projects will be granted certification under the TGBS for a period of five years, after which projects will have to renew their application.

The Global Biodiversity Standard

Awarded to projects that:
- Attain a **minimum overall score of 5 out of 10**, and
- **Do not score negative points** under any criteria.

The Global Biodiversity Standard Advanced

Awarded to projects that:
- Attain a **minimum overall score of 7 out of 10**
- Do not score negative points under any criteria, and
- Score a **minimum of 5 out of 10** across **at least six criteria.**

The Global Biodiversity Standard Premium

Awarded to projects that:
- Attain a **minimum overall score of 9 out of 10**
- Do not score negative points under any criteria, and
- Score a **minimum of 5 out of 10 across all criteria.**

[Section 1.7 of the Manual of TGBS]

Download this booklet here!

Find out more here:
www.biodiversitystandard.org

The Global Biodiversity Standard

TGBS Secretariat
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Download the Manual of TGBS here!
biodiversitystandard.org/our-method